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Paving the way for an information society
- A chronological study of ICT via the Swedish government

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Master Thesis in Communication

Abstract

The rapid increase of new communicative tools have in a way started to transform our world to an information based society. New technologies can help to promote a world where ideas, information and opinions can flow between people and different echelons in society. The political sphere has taken notice of this, and strategies focused on implementation of new information and communication technologies (ICT) have been initiated. This thesis will strive to understand ICT definitions and ICT strategies via the Swedish government. In order to examine this, a chronological study will be conducted. By studying government documentation published between 2000 and 2013, an overview of ICT definitions and implementation strategies will hopefully be achieved.

ICT has been a key component of both national and international efforts during the studied time period. The overall aim of Swedish ICT policies, has been to create an information society where all citizens are able to participate. Enhancing ICT infrastructure, as well as promoting knowledge and skills among users, have been important focus areas. Even though the aim of Swedish ICT policies have been an idealistic effort to create an information society for all individuals, some obstacles still remain.

Keywords: ICT, information, communication, technology, Sweden, government, information society

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"These things will make possible, a world in which we can be in instant contact with each other, wherever we may be. Where we can contact our friends anywhere on earth, even if we don't know their actual physical location. It will be possible in that age, perhaps only fifty years from now, for a man to conduct his business from Tahiti or Bali, just as well as he could from London. In fact, if it proves worthwhile, almost any executive skill, any administrative skill even any physical skill, could be made independent of distance"

-Arthur C. Clarke on the subject of future communications
(BBC Horizon 1964)

1. Introduction

This research aims to analyse the field of information- and communication technology (ICT) from the viewpoint of the Swedish government. The study will focus on the post millennial period and provide an overview of the subject. This is done by categorizing and analysing government bills and written communication which discusses ICT definitions, usage and implementation strategies.

1.1 Research questions

This thesis will consist of one main research question, followed by one sub-question:
Main question: How is ICT defined and ICT policies potentially sought to be implemented in key documentation from the Swedish government between the years 2000 and 2013?
Sub-question: Is it possible to see potential developments of definitions and methods of ICT policy implementation in the same time span?

1.2 Hypothesis

Previous research have shown that government implementation strategies have not had the effect as originally intended, noting a gap between ICT strategies and practical implementation in society. It might be possible to see similar issues in this research as well, as some obstacles might still be present. Maybe the visions are too broad and therefore lack a clear sense of practical and efficient implementation? The matter of ICT implementation can be seen as a process that takes time and effort and maybe this will be reflected as well. I expect that ICT will be seen as a powerful tool that has a multitude of different uses and will most certainly be considered a vital part of many different areas of Swedish society.

1.3 Background of the study

The reason why this subject was chosen, is mainly due to a previous assignment written in the Master in Communication program at Gothenburg university. That assignment was the final written paper in the course *Intercultural communication 3*, in the second year of the program. In that paper I decided to analyse the matter of intercultural awareness and intercultural communication from the viewpoint of the Swedish government. I became aware that many other political factors could be analysed from this perspective as well. These could provide us with valuable insights into how our government and our chosen representatives value different communicative factors in our society.

Initially, one must ask why this chosen subject is relevant. What possible insights could it provide, and what might we learn from them? I would argue that a study like this one could provide us with useful insight into how certain political factors are both defined and sought to be implemented by our chosen representatives. Since the Swedish democracy could be characterized by a high degree of representation (Bäck & Larsson, 2006: p.79-81), we should pay attention to how our politicians work with issues that play a key part in our society. This is also tied to political beliefs, since analysing key factors via the government's viewpoint allow us to critically evaluate them according to our own political beliefs, thus promoting democratic transparency and democratic participation.

2. Background

On the previous page, a fascinating prediction made half a century ago accurately described our present time period. One can wonder how Mr Clarke would see our world after 50 years of rapid technological advancement, especially in the field of communications. During the last century we have been witnesses to a number of different developments that have changed the nature of human communication and the exchange of information. When Mr Clarke said the previous quote, the world was still using mostly the radio, TV and telephone when communicating or acquiring information. They allowed people to receive and send information to others, without many of the restrictions that had inhibited the communicative process before. People were no longer dependent on time and space when communicating and sending/receiving information. These new tools provided us with new windows to the world, which gave us access to information that previously were unobtainable (Rogers, 1986: p.2).

But perhaps one of the most important factors in the changing nature of human communication is the rapid rise of computers and in turn the Internet. In 1964 the computer was just in its infancy, but the potential of it had already begun to be seen. During the past five decades, there has been a huge increase in the use of computer technologies and this have naturally made an impact on our society. Just imagine a day without using a computer to write an essay, searching for an important web-page online, or using your phone/computer to stay in touch with friends and relatives. It is easy to see that we have grown quite dependent on our computers and use of the Internet. In two studies conducted by *Statistiska centralbyrån* (SCB), Sweden's main statistic agency, we get a quick overview of the development during the past decade: According to their found data, in September 2001, 80% of the Swedish population had access to a computer in their home (SCB, 2002: p.4). In a more recent study from 2012 that number had risen to 94% (SCB, 2013: p.11). Internet use has also increased during the past decade: In 2001, approximately 70% of the Swedish population had access to the Internet at home (SCB, 2002: p.5). Not surprisingly, this number had increased to approximately 94% in 2012 (SCB, 2013: p.11).

In today´s world, due to our many technological achievements, we have a multitude of ways of acquiring information and communicating with other people. In a study made by the International Telecommunication Union (ITU) in 2012, there have been both an overall increase in use of communication technologies as well as a diversification of the tools used. This increase in use and its diversification is not only exclusive to the developed world, but according to their study, a global phenomena (ITU, 2012: p.1). These new information and communication technologies (ICT) have had many different effects on our world: They have become powerful tools in promoting a democratic society characterized by social interaction as well as a force for development and transforming countries to *knowledge based societies* (ITU, 2012: p.15). ICT could also be studied in how we interact with each other on both a social and linguistic basis: According to Hutchby, new communicative devices have created multiple ways of conversing and interacting with other people (Hutchby, 2001: p.1). The language we use, for example in chats, could be seen as very different from the language used in emails in the latter parts of the last century.

It is clear that there have been many interesting developments in information- and communication technologies during the past decades. The question one might ask is how this development is taken into consideration both by the Swedish population as well as by the political system. Since the upper branches of our society often play a key role in both agenda setting of key issues and in implementation of certain political initiatives, an understanding of their motives and agendas is often required. This is also interesting since *some* of the research that will be mentioned, argues that the policy work in Sweden regarding ICT, has *not* had the intended effects as originally intended.

2.1 Key terminology

Before approaching the main theoretical background to this paper, it is important to mention some of the key definitions and considerations regarding terminology. These terms are important to clarify, as they will play a large part in the study.

Clarifying communication

In this paper, communication will mean a process where participants interactively share information with each other, using different expressions and mediums. This process is also dependent on the environment where it takes place and the purpose of the process itself. This process contains many other different factors such as intentions, coding/decoding, verbal/nonverbal cues, nature of sender-receiver, among *many* other things. (See Rogers, 1986: p. 199, Craig, 2006: p. 38-41, Allwood, 2002: p. 2, Allwood, 2001: p.3 for more information).

Linguistic differences

In most English texts, technology is used almost exclusively, but in the Swedish language two words are used instead: *Teknik* and *Teknologi*. The word *teknik* symbolises tools and equipment used by people, while *teknologi* symbolises the knowledge and science of them (Lunell, 2011: p. 19). What this ultimately means, is that some consideration of different use of words in the studied documentation has to be taken into account.

A <u>very</u> short summary of the Swedish political system

In *very* broad terms, the Swedish political system is divided in two major parts: The legislative part, the *riksdag* ("parliament") and the executive part the *regering* ("government"). Representatives in the parliament are chosen every four years and is the key force in the creation of a government. The government's role is to govern the nation and implement decisions taken by the parliament. The government may also put forward proposals to the parliament in the form of government bills[1].

What is a government bill and written communications?

In short, government bills are proposals for changes in legislation submitted to the parliament from the government. Written communications are documents that are not tied to any changes in legislation but are instead used by the government as a way of discussing important topics or as reports of the government's work in key areas[2].

2.2 Theoretical background

The changing nature of ICT

Information and communication technologies are in a way in constant development; new technologies are constructed and implemented and this in turn makes the relationship between us and our tools more dynamic. When the mobile phone was in its infancy, it was a tool for communication for a select few. Now it has evolved into a tool for almost anyone and its use has evolved to incorporate almost every single communicative and informational aspect of everyday life. In a recent study by the International telecommunication union this development was rather distinct. They noted that traditional mobile-phone services, such as phone conversation and sms, have gradually been replaced by new web-based services, which in turn influences investments, pricing, availability etc. (ITU, 2012: p.1). This development can be seen in the line chart on the following page, where the development is summarized on a global level. Notice the growth of mobile phone subscriptions that severely outnumber other communicative technologies.

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1 http://www.government.se/sb/d/2856 Retrieved: February 25th 2014
2 http://www.riksdagen.se/en/Documents-and-laws/Government-bills-and-written-communications/
   Retrieved: February 25th 2014

Chart 1.1: Global ICT developments, 2001-2011
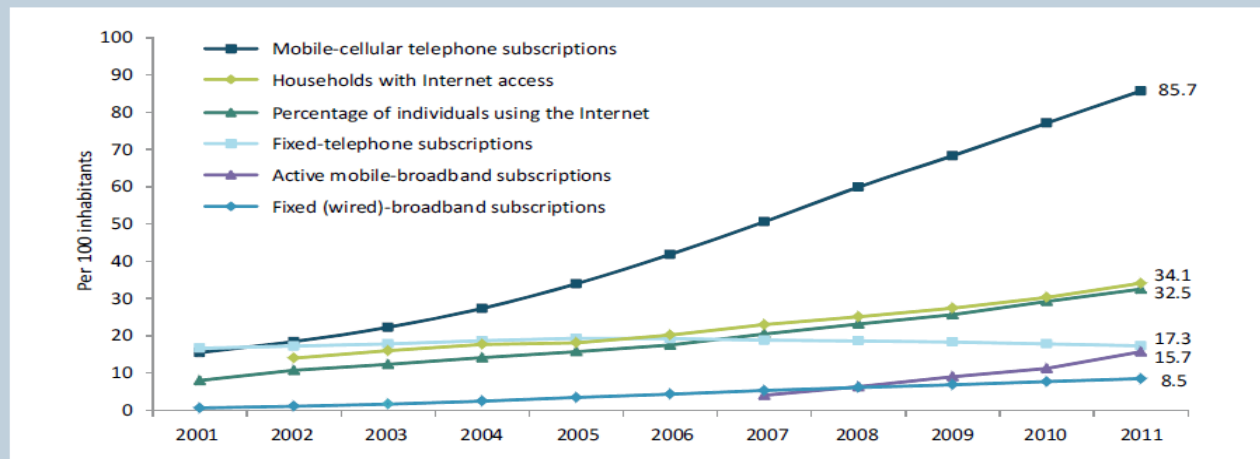
Source: ITU World Telecommunication/ICT Indicators database.
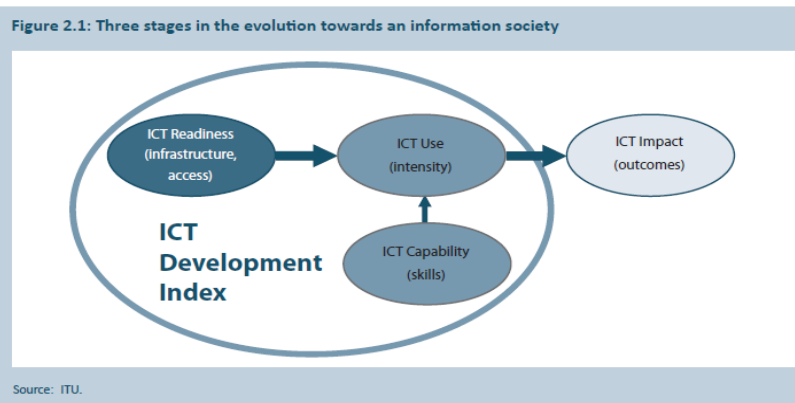
(ITU, 2012: p. 1)

With this diagram in mind, it is easy to see that use of ICT in the world, has increased dramatically in recent years. One key discussion point is how ICT is used, integrated and evaluated in our current world. The question that therefore comes to mind, when analysing our relationship to ICT, is how the dynamic development is formed, i.e. what the driving force of development are: *Are our society the driving force for ICT development or is ICT the driving force for changing us*? When studying how ICT is both implemented, used and developed it is difficult to specify a single driving factor. *Rather*, some researchers point to the need to view it as a process of interaction between many different factors of society.

A more concrete account of the issue comes from the International Telecommunication Union: According to them, direct ICT development is mainly due to three main factors: ICT readiness, ICT intensity and ICT impact (ITU, 2012: p.15). There must exist an ICT infrastructure which can enable effective ICT use. Some countries have not yet reached an effective infrastructure with high speed Internet access and full mobile-phone coverage and therefore lack the fundamental cornerstone of ICT. Intensity refers to how ICT is used and the level of knowledge and experience in countries and their population. Certain countries lack fundamental knowledge of how to use new technologies properly and technologies can therefore not reach their full potential. Finally, impact refers to the actual practical results of ICT use and how it is characterized in different countries.

Figure 2.1: Three stages in the evolution towards an information society

Source: ITU.

(ITU, 2012 p. 16)

Other researchers take a more analytical stance towards our relationship towards technology and ICT: Lunell (2011) focus on the matter of technology itself and argues that use of technology, in particular computer technology, should not be seen as isolated from from us: He means that in a way, society shapes technology and technology shapes society (Lunell, 2011: p. 20). Regarding driving forces of new technology he argues that three main forces are at work: Individuals/organisations, technology itself and societal factors. Individuals and organisations represents inventors, entrepreneurs and investors who create new tools for us to use. Also technology itself can "give rise" to new technologies on a more abstract level; old technology can enable the invention on other tools and so on. Finally factors of society are important: Cultural, ideological and moral factors of society are often key driving forces (or inhibitors) of technological development (Lunell, 2011: p. 25-28). He also adds that there is *never one* isolated force at work, instead technological development and implementation should be seen as a combination of a multitude of factors that often work and interact with each other (Lunell, 2011: p. 28-29).

Hutchby (2001) also discusses some of the views on the relationship between society and technology. A common view on technology is that it is causing new forms of social characteristics in humans, what many would call a *deterministic* view. Other focus more on the *social shaping* of technology, meaning that it is the social that forms the technological (Hutchby, 2001, p: 14-16). Hutchby analyses the different viewpoints and ultimately proposes that we instead should see technology through their *affordance*. By viewing different communication technologies as enabling as well as preventing different communicative methods and practices, we can get a greater understanding of the issue. We are in a way bound to what possibilities are available via different kinds of technology. The social constructivist approach can thus become unaware of technology´s shaping of our social structure (Hutchby, 2001: p. 193). Finally the notion of interrelation is addressed as key in this discussion: We are not totally dictated by technology, but we decide what to do with technology, especially since some technology allow (or afford) different uses or prevent others (Hutchby, 2001: p. 206).

More specific discussions regarding ICT can be found in Lin (2003). Here the author defines ICT as social tools for transference, manipulation, storage and retrieval of human symbols. Further, six different factors that contributes in the adoption of different technologies are mentioned: System factors, technology factors, audience factors, social factors, use factors and adoption factors. These factors can often work in cooperation with each other, enabling development on a greater level, similar to Lunell's view. Interconnectedness is key; for example audience- and social factors may influence perspectives on technology on both objective and subjective levels; for example perception on usability, ease of use and versatility by the general populace. This means that research intended to analyse the issue of ICT, needs to see that in society many different aspects are at work. Researchers should therefore take an integrated and interdisciplinary approach, in order to get a clear grasp of our current situation (Lin, 2003: p. 345-362).

Another explicit discussion on ICT can be found in Leu et al. (2004). Here, the definitions are a bit more broad than Lin (2003), but still maintain the notion of interconnectedness of different factors. This particular study focus on the matter on *literacy* in relation to ICT development and use. According to the study, there are three clear social forces at work in today's world: Economic competition based on effective ICT utilization, rapid emergence of the Internet for information and communication as well as public government policies initiated to ensure effective use and understanding of new technologies (Leu et al., 2004: p.1575). When researching ICT and literacies in the educational sector, Leu et al. argue that many students who graduate will have been subjected to different communicative and educational tools throughout their education period, which in turn creates new demands of literacy and competence (Leu et al., 2004: p.1571).

We can therefore see that in order to fully understand how technology and ICT are developing and ultimately become implemented into society, we should try to study the issue on a broad level. No matter what stance we take when viewing our relationship to technology, it is *not* a simple subject. Instead, it is multifaceted, complex and open for interpretation. Since this research will study documentation intended for many different areas of society, this potential diversity can hopefully be found in the data as well.

The relationship between ICT and politics

"The new White house website is just one small step, towards bringing government more fully into the information age. We have barely begun to understand how information technology will change our lives. But those of us in government have a responsibility to use these new tools to expand the reach of democracy and giver more people a chance to live their dreams. I'll see you online at whitehouse.gov, and thanks for logging on"

-Bill Clinton, former 42nd president of the USA,regarding the launch of the new government website
(Weekly web address to the nation, July 8th 2000. Courtesy of William J. Clinton Presidential Library)

The relationship between the political sphere, and the government in particular, to ICT is both complicated as well as multi layered. In the previous section of this chapter it can be concluded that the overall use of both old and new information and communication technologies, has both increased and diversified during the last decade. This development is not occurring in a vacuum, as different instances in a society are almost always influenced by each other. Citizens are more active in using new technologies and this has been noted by different governments in many different ways. ICT implementation have many different political benefits, such as enhancing democracy, allowing for personal development and maintaining a highly educated and competitive population. According to both Olsson (2006) and Hall & Löfgren (2004), the political sphere often has a key role to play in the implementation of ICT. Even though Olsson's analysis is based on the nature of ICT in Sweden, he argues that overall, the political sphere plays a key role in the implementation of ICT in a given society via many different means such as tax-discounts and financial support (Olsson, 2006: p. 614). Hall & Löfgren also note that ICT has been an important issue by decision-makers all over the world and this has resulted in a multitude of both national and international efforts. This has according to them given rise to a new field of study, namely the *ICT field* (Hall & Löfgren, 2004: p. 149).

To understand the relationship between ICT and a country's political system we should focus our analysis on both national and international aspects. Starting with a national focus we should ask ourselves why a government would seek to implement ICT policies in a society and what effects this potential implementation might have. Ebrahim and Irani (2005) argue that a government that specializes in new technologies for information and communication can reap a multitude of positive effects: It is vital for creating and maintaining a modern public sector, promoting interaction between citizens and business, reducing cost and providing information (Ebrahim & Irani: 2005, p. 590). These *"e-government"* policies can enable politicians, agencies and citizens to effectively communicate and share information, thus helping to increase effectiveness, public participation and transparency. These different types of e-government strategies can often work in unison and may create positive synergy effects in a given society. However, the authors state that development of new ICT strategies can be a complex process: Adoption of new information and communication technologies in a society may take more time than anticipated and might also require drastic changes in organisational infrastructures. They further specify certain barriers that might prevent effective adoption of e-government: There might exist a lack of effective IT-infrastructure that prevent effective utilization of new technologies. New technologies might also demand too much resources and funding. Threats to security and privacy can also be a factor as well as a lack of proper IT-skills and organisational issues (Ebrahim & Irani, 2005, p: 602-603).

Another vital part of the relationship between ICT and the political sphere is the notion of transparency. In Bannister & Connolly (2012) the matter of transparency is discussed as a matter tied to both accountability of politicians as well as involvement by the citizens. New technologies in information and communication have allowed for a greater insight into public administration by citizens. Discussions, procedures and decisions can often be available for the public via new tools. Even though these procedures can be complicated, new tools can help citizens to better understand how the system works, as well as "where" in the system one is situated. They further argue that ICT and its use in the societal structure, is important to acknowledge. ICT has contributed and enabled some of the structural change in society, but it is *not* as significant as many would believe. The question if these changes would occur if ICT was absent is however still an open question according to the authors (Bannister & Connolly, 2012: p. 16-21).

A more specific example of the use of ICT in relation to transparency is the use of new social communication channels such as different social networks. Even though social network is primarily used in everyday social relationships, new possible channels of political discussion have opened: The rise of Facebook and Twitter have allowed politicians and voters to more effectively communicate and discuss matter of politics. In fact it has almost become a norm where politicians are often required to be active in social media as it has become an important arena for discussing politics (Enli & Skogerbø, 2013: p.770). This can also be compared to the previous notion of new technologies as a promoter of an enhanced democracy and a more transparent society, discussed by Bannister & Connelly (2012). Even though it may be discussed if these new channels are driving forces for structural and political changes, its influence and democratic potential can not be ignored.

A government that focuses on utilizing ICT and see the potential in its implementation, does not only benefit from an increase in transparency as well as citizen participation. These two aspects can together increase the overall trust a government radiates towards its citizen's. Trust is according to Kurivan et al. (2010), not simple to understand, especially in relation to ICT and the political sphere. Instead we should critically view the process and try to understand how different strategies of implementation can have different ramifications, both positive and negative. They further argue that these issues play their different roles in the gradual implementation of various initiatives by different government branches (Kurivan et.al., 2010: p. 219). The matter of transparency and accountability in relation to ICT is also mentioned by Pina et al., who argue that ICT might promote, not only the previous mentioned categories (trust and transparency), but might enhance the linkage between different people and organizations, thus promoting effecting sharing of information and knowledge (Pina et al., 2007: p. 585).

Moving from a national to an international level, we can study other implications of ICT in a given country. Since the overall majority of the nations of the world are interconnected with each other, ICT can once again play a role in both international relations as well as international competitive aspects. According to Leu et al. (2010) a nation that focuses on ICT can become more competitive on the world stage, especially since both political- and market forces are often tied between nations. Governments are therefore aware of global economic competition and the need to have a population that can become competitive on the global arena. Thus, new ICT initiatives have been initiated to better prepare citizens for changes in ICT skills and knowledge (Leu et.al, 2004: p. 1579). It is however important to note that these implementations can often take time: The implementation and possible outcomes of ICT policies is often *not* a simple process. Ebrahim & Irani (2005) argues that the process of implementation is not straightforward and is never done in a limited specific time frame. This means that many government organisations are still in the early development phases of implementation, where intended goals of ICT still lies somewhat far away from present day (Ebrahim & Irani, 2005: p. 590).

Also, Pina et al. argues that even though the Internet has opened up a lot of possibilities for citizens, it has *not* yet reached its full potential as a way for consultation and discussion between citizens and politicians (Pina et al., 2007: p. 600). Finally Leu et.al point to the fact that new literacies (for computer technologies) have had difficulties in integrating themselves into the American education system as "old" reading and writing systems are often preferred (Leu et.al, 2004: p. 1606-1607). This is also important to have in mind, as the intended time frame of the study *might* not be sufficient for potential ICT policies to reach their full intended effects in Swedish society.

The Swedish example
Now that the notion of ICT in society as well as its connection to the political sphere have been mentioned, it is time to focus on the core of this research paper: *The role of ICT in Sweden in particular.* Sweden is seen by many researchers as a highly computerized and technological nation. In a study by the International telecommunication union in 2012, Sweden was ranked second (trailing to South Korea) in a global ICT development index comparison. In this study many different factors were taken into consideration to create a summary of the situation both globally as well as nationally. According to the study, Sweden has taken many steps in the adoption of ICT: Over 90% of the country's population has access to a computer as well as the Internet and successful broad band policies have contributed to safe and affordable Internet services (ITU, 2012: p.20).

Another interesting notion comes from Pina et.al. (2006): When studying government web-sites in a country comparison, Sweden together with France and Austria scored high, meaning that the studied web sites provided not only information, but had taken steps to incorporate citizen-politician dialogue as well as enabling as many citizens as possible to take part in the process (Pina et.al, 2006: p. 596).

As discussed in the previous section, regarding the possible benefits of ICT implementation, there are several reasons why a government would seek to promote ICT integration via different means. With the knowledge of the importance of political agendas and strategies of implementation of ICT in Sweden, one must also ask what the benefits of an ICT approach could have on a society and its population. The positive benefits of ICT implementation in society cover many different aspects. Olsson et al. (2003) argues that the Swedish government has through *social demand,* sought to promote integration of ICT in order to enhance democracy in the country. Olsson further states that the Swedish political system has played a large role in the introduction of an ICT perspective in our country (Olsson et.al, 2003: p. 347). Hall & Löfgren also see that many of these (in their view) idealistic visions of the future often include visions of a better society where ICT enable us to do great things (Hall & Löfgren, 2004: p. 154).

Some research argue that the starting point of the modern Swedish ICT policy work, was when the government bill *Ett informationssamhälle för alla* ("An information society for all") was published in the spring of 2000. Hall & Löfgren argue that this government bill clearly signals that Sweden will aim to take the lead in the ICT field (Hall & Löfgren, 2004: 156). Olsson agrees with this statement and says that this bill served as a guideline for coming ICT policies (Olsson, 2006: p. 613). Olsson et al. also argue that this bill is one of the most important documents for modern Swedish ICT policy work (Olsson et al., 2003: p. 347). These research articles take a critical approach to the intentions and aims of the new Swedish ICT policy. This document did not only play a large role in the establishing of modern ICT policies, it will also be the starting point of this particular research. This aspect of this research paper will be discussed further in the next chapter.

The overall positive opinion of Sweden's relationship with ICT is however in stark contrast to some research that will contribute to this research paper. In particular Hall & Löfgren (2004), Olsson et al. (2003) and Olsson (2006) are rather sceptical to the political initiatives in Sweden. Hall & Löfgren's article *"The rise and decline of a visionary policy: Swedish ICT-policy in retrospect"* analyses the development to a large extent and are highly sceptical to the work that have been done. They state that ICT implementation in Sweden has not gone as smoothly as originally intended: It is clear that there exist a gap between theory and practice, where a gap between visions and outcomes can be studied. For example, certain policies might have implementation issues and have different effects in society that were not initially anticipated, which in turn could hamper the entire process. They argue that even though there have been several initiatives by the government in ICT, the results are still not seen. ICT is defined as a topic that has been an issue for a small group in the country, who have tried to put ICT on the national agenda, but unfortunately in vain (Hall & Löfgren, 2004, p. 164).

It is further stated that ICT has been on the agenda during the recent decades. They note that following recent declines in the ICT industry together with the global recession, this have led to a general loss of interest in ICT by politicians. This have in turn postponed or cancelled several initiatives intended at improving the use and availability of ICT. They further argue that there might exist a lack of focus in the policy setting procedure. Their analysis points to the issue of realistic expectation of a future society and how visions are adopted into policies. This ultimately means that Swedish ICT policies are "everywhere and at the same time nowhere" (Hall & Löfgren, 2004: p. 158). Direct measures have been problematic, and instead the focus shifts to other actors in the country. Instead of direct support and initiatives such as legislation, politicians now favour dialogue and visionary policies instead (Hall & Löfgren, 2004: p, 150 & 158). The notion of shifting responsibility from the government to other actors in society is also agreed upon by Olsson (2006). He argues that in many cases the government is unaware of actual ICT use by the population and generally tends to shift responsibility to other actors in society, such as the citizens themselves. In order to create effective ICT policies, politicians need to be aware of the practical use of new information and communication technologies among citizens. His research points to the fact that visions of creating a democratic society via extensive ICT use does not correlate to practical ICT use by citizens. In fact, citizens might instead use new ICT tools for more pressing issue in their every day life, such as paying bills or socializing with friends (Olsson, 2006, p. 622-623).

In Olsson et al. (2003) several obstacles have surfaced on the road to implementing ICT in Swedish society: Economic barriers (asymmetry in access to available technology), lack of user skill (know-how of use of ICT), reading/writing skills (linguistic differences due to both social and medical factors) and and a gap between the visions of ICT and the users perception of its use in their lives (Olsson et al., 2003: p.358-359). These obstacles should according to the author not be discouraging, but instead be acknowledged in order to improve the overall situation. It is vital to view ICT as a civic tool and to do this the government must address how these types of obstacles can be handled. It is also important to identify what kind of support will be required in order to enhance the overall ICT use among citizens (Olsson et al., 2003, p. 358). Hall & Löfgren (2004) also identifies several concrete obstacles that have hampered the overall process: There have been a continuous decline in interest in ICT related issues following a recession in the ICT industry, a general lack of ability to proper administrate effective ICT work as well as a general vagueness in overall policy work (Hall & Löfgren, 2004: p. 162-164). They state however, that through continuous construction of these visions of a future society, a conceptual view on both directions of ICT policies and the aims of them can be created. In that sense, it can be viewed as a way to create a common identity towards a future society. Even though many obstacles remain, these are, according to the authors, far from obscure (Hall & Löfgren, 2004: p. 164).

Even though there are some scepticism towards the implementation of ICT policies in Sweden, it can be said that the country has have a good foundation to use. As already stated in the beginning of this section, Sweden has a well developed technology competence which has grown during the last decade. Olsson (2006) acknowledges this issue: He argues that even though Sweden's ICT policy visions have failed to reach their original goals in creating a new type of society where ICT can become a major force for social interactions and political expression, there are factors that work in their favour. He mentions that one of these factors is the overall positive perceptions on technology. In general, he says, Swedes are rather friendly towards new technology (Olsson, 2006, p. 624).

It is however extremely important to note that these three research papers were written many years ago and the world today has changed. Even though the authors are sceptical to the situation, we in the year 2014 can compare their views with the views of the International telecommunication union (2012) which ranked Sweden at number two in the entire world when it came to ICT usage and implementation. It is important to have this difference in mind when analysing the documentation as it provides us with a background of the issue at hand.

Apart from the general discussion whether ICT implementation has been successful or not in Sweden, there have also been other developments regarding ICT that should be taken into consideration if we are to understand how the government seek to implement ICT policies. These two aspects are not unique to Sweden but they could play a part in government documentation: The first aspect is the notion of the "technological gap". On the 2nd of March 2014 there was an interesting article[3] in the Swedish newspaper Göteborgsposten (GP) which dealt with this matter. It seemed that, as the world adopted more and more new technologies in both communication and information, some people were directly and indirectly left behind. In particular the older generations often felt that the new technologies either were to complicated or not useful at all.

This asymmetry in usage is also noted by Olsson et al. as he notes that 71% of 25-34 years old had access to Internet compared to 51% for 55-64 year old (Olsson et al., 2003, p. 349). As a response to the first article, the current IT-minister Anna-Karin Hatt, stated that even though the government has put a lot of effort and funds on the issue she can still see that there is room for improvement, especially since the aim of the government is that every Swedish citizen should be able to participate[4]. This gap is also noted by SCB:s study of Internet use in 2012, noting that men tends to use Internet to a larger extent than women and that younger citizens tends to use the Internet to a larger extent than individuals between 65-74 (SCB, 2013, p. 13 & 35). It is therefore clear that some previous research notes that a technological gap exist between different groups in Swedish society. The question is how (and if) this gap is addressed in government documents and what strategies can be employed in order to handle this situation.

Another recent development that is tied to the usage of ICT is the rise of "cyber-bullying". With the rise of computerized communication the more negative aspects of social life has moved from the the outside to the living room. According to a recent study by the Swedish anti bullying group Friends in association with Symantec, approximately 45% of Sweden's youth had been subjected to abuse via either computers or mobile phones (Friends nätrapport, 2013: p. 3). Also, both children as well as adults thought that these new technologies made it easier to abuse than face-to-face. This development might not play a huge part in this research, but it could be useful to have in mind when reading the documentation.

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3   http://www.gp.se/nyheter/goteborg/1.2295587-en-miljon-kan-inte-lasa-det-har-   Retrieved: March 2nd 2014
4   http://www.gp.se/nyheter/goteborg/1.2295591-hatt-fler-aldre-ska-bli-digitala   Retrieved: March 2nd 2014

3. Method

As mentioned previously in section 1, I have previously conducted a similar study where the focus lay in intercultural viewpoints within political documents. When I conducted the previously mentioned research, I discovered that the Swedish parliament's website provides an excellent search engine for all the political documentation that is required for the study. Since documentation such as government bills and written communications are available to the public, it is a rather simple process of obtaining them. By entering certain key words and phrases (in Swedish of course) the search engine on the website scans all its documents and provides you with the relevant documents. The documents can then be downloaded to a computer in a PDF-format and can then be read and analysed easily. For example one can enter the phrase ICT and the engine scans all documents that either deals with the subject or mentions it in any way. Previously, I mentioned that this research will strive to study and analyse government bills and written communications written by the Swedish government. This means that the documentation written by the members of the Swedish parliament will *not* be a part of study. The main reason why I will not include the Swedish parliament in the study is that this would make the research too overwhelming. There are 349 members of parliament and the potential mass of documentation can therefore risk becoming too great. This is also due to the fact that the documentation from the parliament is *not* the focus of this study, which focuses on the Swedish government. As of January the 29th 2014, there were a total of 83059 documents and proposals from members of parliament published on the website of the Swedish parliament. In contrast, the documentation from the government, both written communications and government bills, were a more manageable 8941. It is therefore reasonable to argue that focusing on the documentation from the government is the most optimal option.

Another important factor to consider is *what* kind of documentation that should be analysed. As already stated in the previous chapter, the term government document actually consists of two different parts: Government bills and written communications. This research paper will include *both* kinds of documents. This means that this paper will provide information from legislative as well as non-legislative documentation. This is intended, to give the overall paper more depth and hopefully achieve a greater understanding of ICT in Sweden. The great amount of documentation might become problematic as it can be difficult to effectively analyse them all for the time available. This issue is important to have in mind and will be discussed later in this chapter.

A study also needs a clear starting point as well as a clearly defined end point. These two poles must be adapted both to the matter of making the research manageable as well as (and perhaps most importantly) connected in some way to previous research. As mentioned previously, I argued that this research paper's starting point should be the year 2000 (Mach 28th to be exact). This date has some importance of the development of ICT in Sweden: On this date the government bill *Ett informationsamhälle för alla* ("An information society for all") was handed in to the Swedish parliament from the government. According Olsson et al. (2003), Hall & Löfgren (2004) and Olsson (2006), this documents marked a key turning point in the development of ICT in Sweden. With this starting point, this research paper will span roughly 13 years and 8 months (March 28th 2000 until December 31st 2013).

Another useful benefit by using this starting point, is that it provides us with data from different sets of governments. In the year 2000, when the study begins, we had a social democratic government which remained in office until the election in September 2006. After that election they were replaced by the laissez-faire influenced liberal-right *Alliansen* ("Alliance"), who remained in office after the 2010 election, which is now the current mandate period. This *could* hopefully provide us with potential differences regarding ICT definitions and implementation strategies.

3.1 Search parameters
Chronological parameters
The first parameter I will establish is the time period of the selected data. The day the government bill *Ett informationsamhälle för alla* ("An information society for all") was handed in to the parliament for consideration will be the starting point (March 28th 2000). The study will then analyse the relevant documents until the 31st of December 2013. This end date has been set to this date as the course in which this paper was written in started in January 2014. In every single document there will be a marked date which shows when it was handed in for consideration by our parliament. It is this date that will determine if a document will be included or not.

Terminological parameters
When searching for the relevant documents to be used in the study there was initially a need to use the correct terminology when scanning the database on the website. The terminology needs to both correspond with the initial aim of the research as well as providing the researcher with a manageable amount of data that can be sufficient given the scope and time frame of the study. *However*, at the initial phases of this study an interesting language difference turned up: In the English language the term communication technology can often mean two different things in Swedish, as discussed in the previous chapter: *kommunikationsteknologi* and *kommunikationsteknik*. Some of the relevant documents uses either one of the terms and some use them both. This meant that I had to use both terms when scanning for documents. This was also transferred to when using the term information communication technology. This time I used both the term *informations- och kommunikationsteknik* as well as the phrase *informations- och kommunikationsteknologi* in the search process: *In summary* these are the *exact* phrases used when acquiring the documentation on the website:

- Kommunikationsteknik
- Kommunikationsteknologi
- Informations- och kommunikationsteknik
- Informations- och kommunikationsteknologi

I have chosen *not* to exclusively use the term information technology as I intend to focus on the communicative aspect of the issue. *However* information technology will be analysed if it is mentioned either in the term information- and communication technology or if it is part of the specific text that deals with communication technology. This indirectly means that documents that mention only information technology (IT) have *not* been included. This is due to two main reasons: First, I need to keep the research focused on the communicative aspects of the issue. Secondly, since IT is used to a larger extent, the scope of the research can risk becoming overwhelming. A quick scan on the same website showed that the term "IT" had nearly three times as many documents as ICT.

When scanning the website for the required documentation this is the results:
- The term *Kommunikationsteknik* yielded **222** hits where **133** met the requirements described earlier.
- The term *Kommunikationsteknologi* yielded **64** hits where **37** met the requirements described earlier.
- The term *Informations- och kommunikationsteknik* yielded **216** hits where **128** met the requirements described above.
- The term *Informations- och kommunikationsteknologi* yielded **63** hits where **36** met the requirements described above.

This meant that in total *161* documents mentioned ICT or communication technology in some way, during the time period described earlier. There will be a complete list in the end of this document that mentions the name of all documents and which terminology were used in them. The document search was done on the 6th and 7th of March 2013.

3.2 Method of analysis

With the relevant documents gathered by the previously mentioned method, it is important to clarify how the systematization and analysis will proceed. At this point in the study the great mass of data needs to be organized in a way to make it easier to understand, and ultimately draw conclusions from. First, there is need of an effective strategy when reading the vast amounts of texts that is part of the study. Most of the documentation is available in a PDF-format on the Swedish parliament's own website and downloading them is an easy task. With the file, one can then use the built-in search engine in a suitable PDF-reader, to find the text passages which will be studied. This means that large amounts of texts can quickly be analysed and compared with each other. It turned out that many documents in the early years of the study were *not* available as a separate document, instead they were published directly on the website. These texts had to be downloaded into a word processor and then converted into a PDF-file. This meant that these documents where not as "pretty" as the other documents and were more difficult to effectively read. In the appendix section, the documents that required this process, will be marked with an asterisk (*). When scanning the documentation I used, several different key words were used to find useful data:

- First, I used the two terms *informations- och kommunikationsteknik* and *informations- och kommunikationsteknologi*
- I then moved on to use the terms *kommunikationsteknik* and *kommunikationsteknologi*
- Then I searched the documents for only the words *teknik* and *teknologi.* In many cases the word *teknik* could be used in the text when indirectly discussing ICT
- Finally, I used the term *kommunikation* trying to find sections dealing with the matter using only this word, were terms such as digital communication or computer communication might be used instead

After this search was done, the text sections that was relevant was then further analysed. This however, meant that I had to decide what to include and what to exclude since it is difficult to mention every single discussion point of the issues at hand. This meant that I was forced to make certain decisions, and focus on the most relevant sections where the matter was discussed most in-depth. Also, a lot of focus is on the documentation as a whole, as documentations often have aims and goals in themselves that are tied to possible ICT integrations etc. Primarily, I have studied different parts of the documents that discussed ICT in some way since it is nearly impossible to read every document from beginning to end. Using the scanning process described above, these sections and chapters were discovered, read and analysed more in-depth. Also some chapters dealt with ICT to a large extent while others only mentioned in briefly. The sections that discussed ICT to a large extent or had ICT as a major topic were also studied more closely. With this strategy in mind, the research can then move forward trying to synthesize a result which can be tied to the intentions and aims of this particular study. Each and every document will go through the same kind of scrutiny. This part is done in two major steps: *The first step* of the analysis focuses on finding actual definitions and potential strategies of ICT implementations in Sweden. The different years will be categorised individually and the documentation studied will each be summarized in each section. No document will be left out, even if they only make brief mentioning of ICT. This is done so that I can minimise any subjective judgement whether a document is "useful" or not. I will provide the reader with a quick overview of what the document says, since the overall aim of this research is mostly to describe the situation broadly, as there are neither time or space available for in-depth descriptions.

The second step focuses on finding potential developments of ICT in Sweden during the studied years. This will build on the previous section but it will add a chronological layer to the data. With the different definitions and strategies mentioned in different documentation during different years, I will now try to study a potential development of the issue. This section could be the most problematic, due to the fact that it can be difficult to see any developments at all.

3.3 The matter of translation

There is however one important factor that has to be taken into consideration and discussed: That factor is the difficult process of translation. Since most political documents are written in Swedish, it could be difficult to incorporate them into this paper that is written in English. There are *three* major difficulties in keeping the original Swedish in a paper in English: *First*, it could alienate some of the readers that don't have Swedish as a first or second language. *Second*, it could be a bit jarring for the reader if the text switches between two different languages at regular intervals. *Third,* it could make the study less connected to the research society that primarily uses English in its written texts, especially since previous research for this study, is almost exclusively written in English.

In order to minimize any possible misunderstandings when making translation from Swedish to English, I will try to minimize using direct quotes from the studied documentation. Instead, the text will aim to *summarize* the main findings from the documentation. In the document list at the end of this research paper, direct web links can be used if the reader is studying this text on a computer. These links will take them to the exact place on the website where the document is published. This will allow the reader, who is familiar in Swedish, to look at the original text and study them for themselves. This will in turn enable the process of criticism, as it allows the reader to compare the original documents with the summaries created in this paper.

3.4 Limitations

In this section I will briefly discuss some of the methodology issues that might create issues as the research proceeds. Hopefully these issues can be handled and will hopefully not affect the results in any major negative way.

Perhaps the greatest limitation in this entire research paper is the matter of reliability, i.e. how I have tackled any possible mistakes that could erupt during the process. The issue of reliability is directly linked to several choices made in this research: The amount of data, translations as well as the basic human characteristic of missing things can all contribute to this. Since I have done this research paper almost alone, there is of course a risk of making basic human mistakes. This is also why I have supplied the links to the document themselves on the Swedish parliament's website. This will allow readers to (if they want) get their own opinion of the subject, which might very well not be the same as mine. It is also problematic that the documentation were read, studied and analysed by myself. In order to make a correct and relevant analysis, it could have been important to have a second researcher. This person could help with the coding as well as helping to discuss the findings which can be a great benefit for this paper. This is also related to the amount of documentation studied. As mentioned earlier the data gathering yielded a great amount of data and a second person could be a valuable help in this regard. Unfortunately, this scenario did not occur, since I made this research paper myself, with some help from university personnel.

Another issue that turned up when writing this document is that there is a possible difference in terminology. Many different documents uses different terms to describe the nature of ICT in the country. Some documents might use IT, while others use ICT. There might be discussions of ICT without using that exact words, instead using terms such as telecommunication or digital communication. What this ultimately means, is that it is possible that some documentation might be missed. My intention will be to try and gather all these different terms to a single discussion on the nature of ICT. This can of course be seen as a rather arbitrary solution, where I use different terminology to describe different aspects of society. But due to time- and space constraints for this research, this was the optimal solution. Making descriptions of every single term used in every single documentation could easily double the size of this research paper, making it difficult to be done in time. Also the very nature of the this paper is to provide some general tendencies and

common themes of ICT and not go into extreme detail of every single discussion point of ICT by the Swedish government.

The question that comes to mind is therefore : *Is there any way to confirm that these are all the documents that fit the research?* My short answer to that would be: Not likely. Due to the extreme amount of texts that were used in the study, there is no way of guaranteeing that some were missed. Even though a lot of documents were discovered using these search words, this does not mean that *all* documentation dealing with ICT in any way is included. There might very well be a possibility that some documents discusses ICT without using the exact word itself. And since the word(s) were not used in the document they could not be "discovered" by the search engine. For example terms such as computer communication, electronic communication etc. are some examples of this. There is also a possibility that there are faults in the search engine itself, which might miss key documentation due to technological errors. With this in mind, it is therefore extremely important to know that readers should treat this paper as *showing tendencies* of ICT and not as a perfect representation of ICT and its possible development.

Another drawback with the study is the choice of *when* in time the span of the study and its analysis will begin. As mentioned earlier, the study intend to focus on 2000 and forward, but this ultimately means that some documents will be placed outside of the study. These documents could be extremely important, but since they were published before 2000 they can not be part of the study. Perhaps this is unavoidable as any research must start (and end) somewhere in time, as it can not incorporate every document in history. Given more time, the scope could expand to include more.

There is also an issue with understanding (and drawing conclusions) of the chosen documents. As the focus is solely on the contents of the texts, we might require the input of the authors (i.e. politicians) to fully understand the goals and intentions of proposed legislation and written communications. This would however require deeper analysis such as interviews with the authors. This would, according to me, make the intended research way to broad and difficult to conduct. Most importantly, interviews are not part of the overall aim of the research. We also, only get an understanding of the documents themselves. The issue at hand is that not all propositions are accepted by the parliament. Some are rejected while others are accepted while some alteration may take place. This could be an issue as we don't get an insight into which documents are ratified by the Swedish parliament. In order to know this we must follow-up on all propositions and discover what was decided. This is however not a part of this study, as the focus lies in the intentions of the documentation itself. But it is important to have this in mind when drawing potential conclusions.

4. Results

In this chapter, the main findings in this research paper will be mentioned. The chapter will be structured as follows: First, a summary of the findings will be structured. Here, general ICT definitions and possible ICT policies during the studied time span will be mentioned. This will help the reader to get an overview of the main definitions and potential developments in the study. Certain important policies, strategies and documentation will also be mentioned here. After this part, a summary of each year will follow. These summaries will in turn consist of two parts: A short summary, mentioning some important documents, policies or developments regarding ICT as well as a summary of the studied documents that were published during that year.

4.1 Summary of research

First of all, it is vital to get a quick overview of the overall distribution of documentation in this study. On the following pages, two separate tables will describe where certain documentation originated from, which can help us understand in which areas ICT was commonly referred to.

It is initially important to provide a brief overview of the number of studied documents and their overall distribution. Of the *161* documents studied in this paper, *113* were government bills and *48* were written communication. It is clear that government bills were the major type of government document which discussed ICT. This is perhaps not too surprising, as ICT was a common part of the annual budget proposition which contributed to a large part of the total amount of government bills.

In the *first* table I have gathered all the "regular" documentation during the years. This means all the documentation except any documentation tied to any budget-propositions (this also excludes some documentation from the spring-budget) as well as any appendixes to the documents themselves. I have further divided the table into different sections depending on which ministry the document originated from. This will hopefully help us grasp in which areas of society ICT was most discussed:

	Ministry of foreign affairs	Ministry of justice	Ministry of enterpr-ise	Ministry of finance	Cabinet office	Ministry of health and social affairs	Ministry of education	Ministry of culture	Ministry of the envir-onment	Ministry of defence	Ministry of integration and equality	Ministry of employm ent
2000		1	1	1			2					
2001	3	3	1				2	1				
2002	3	1	2	2	1	2	1		1			
2003	4	2		3		2		1				
2004	2		1						1	1		
2005	1	3	1	1	1	1	1*	1*	1**			
2006	1					4	1*	1*				
2007		1		1	2***							
2008			1	1								
2009		1			2			1			2****	
2010	2	2		2	1		1		1	1		
2011	2	2	2		1							1*****
2012	2		3	2	1		1					
2013	2	3	1		1	1	1					
Total →	22	19	13	12	11	10	10	5	4	2	2	1

* Both ministries were combined to one single ministry (until 2007).
** Ministry of the environment was called "The ministry of environment and construction" during this time
***After 2007, the responsibility of the annual EU report was given to the cabinet office (Statsrådsberedningen), where it previously was the the responsibility of the foreign ministry
**** This ministry was operational between 2007 and 2011
***** Ministry of employment was reinstated in 2007 after being defunct since 1998

It is clear that ICT is most dominant in documentation originating from the ministry of foreign affairs and the ministry of justice. This can be related to the fact that many documents focused on the matter of international help and cooperation between Sweden and other countries. In many cases these document argued that Sweden often had a highly developed ICT sector and could therefore help other countries to effectively develop their own. It is also important to note that in many cases, the document's discussion of ICT was often tied to many different subjects, not necessarily the focus areas of the ministries, as many texts often discussed ICT in a wide manner.

In the *second* table we can get a more clear overview of the distribution of documentation in different areas of the budget proposition in different years. The table will *not* include any appendixes to the budget, as the focus lies in the primary documentation. The numbers on the top row corresponds to a specific part of the annual budget proposition. Number 5 for example, represents budget document number 5 (International cooperation). There is a summary below the table which provides the names for the different parts of the budget proposition.

	1	2	5	6	7	9	16	19	22	24	Total ↓
2000					X		X	X			3
2001							X				1
2002					X		X		X		3
2003		X					X				2
2004				X		X					2
2005		X				X				X	3
2006					X	X					2
2007		X				X			X		3
2008						X	X			X	3
2009	X					X	X		X	X	5
2010			X		X	X	X		X		5
2011		X	X	X			X				4
2012				X	X		X				3
2013											0
Total →	1	3	2	3	5	7	10	1	4	3	

1: *Rikets styrelse* ("Nation's guidance/guidelines")
2: *Samhällsekonomi och finansförvaltning* ("National economics and financial management")
5: *Internationell samverkan* ("International cooperation")
6: *Försvar och samhällets krisberedskap* ("Defence and crisis readiness")
7: *Internationellt bistånd* ("International aid")
9: *Hälsovård, sjukvård och social omsorg* ("Healthcare and social care")
16: *Utbildning och universitetsforskning* ("Education and university research")
19: *Regional utjämning och utveckling* ("Regional equalisation and development")
22: *Kommunikationer* ("Communications")
24: *Näringsliv* ("Trade and industry")

Here we can see an interesting difference to the previous table (where the ministry of foreign affairs and the ministry of justice focused most on ICT): In this table ICT seems to be more commonly referred to in budget documents related to education, health care and international aid. One glaring thing that stands out in this table is the absence of any documentation from the budget proposition in the year 2013. Possible reasons for this will be discussed later in this paper.

With these two tables in mind, one must therefore ask how the *definitions* and *implementation strategies* of ICT has developed over the years of the study. *First* we should study any developments of definitions of ICT, in order to grasp how the different governments defined the issue. A grasp of definitions is important as it allows us to further understand possible strategies of implementation, that will be studied later on in this text. Even though there were *some* variations in definitions of ICT, they were not enough to (according to my opinion) conclude whether they were simple variations or if they represented actual developments that were due to some external or internal factors in the political sphere. It is however clear that ICT is a multifaceted term that is by the government in many different areas of society.

Development of ICT definitions

When studying the linguistic characteristics of ICT one can see minor variations during the years of study. This particular issue focuses on if the documents used the Swedish word *teknik* or *teknologi*. Since the two words represents different aspects of technology in the Swedish language, it is useful to study potential variations in its use. It became clear that most documents preferred the word *teknik* instead of *teknologi* by a large margin. If this was due to specific and intentional reasons of grammatical correctness or due to careless use of words is however difficult to conclude. Also, both words were used throughout the entirety of the study, which makes it difficult to see if there were any actual developments of linguistic definitions. We can further see that most documents used *three different* concrete ICT definitions:

- **IT** (information technology) was defined as the information systems that were used to convey information between people. It also meant systems that allowed people to communicate both with the state itself as well as with other citizens.
- **CT** (communication technology) not surprisingly, focused on the communicative aspect of technology. Here systems, tools and technologies used when people communicated with each other were mentioned and were often seen as directly dependent on a well developed IT infrastructure. In fact, IT and CT were often discussed in conjunction with each other. Also communication technologies were also often described *indirectly*, as electronic communication, digital communication, telecommunication etc.
- **ICT** (information- and communication technology) was often explicitly described as a combination of information and communication and was often tied to specific areas in society. Some documents also use the abbreviation IT to describe ICT while others specifically saw difference in terminology between IT and ICT. If this is due to intentional or unintentional reasons remains unanswered in this study.

With these three different categories in mind, it is once again difficult to effectively conclude if there were any developments in definitions: These three categorises were used by different documents during all the years of the study and some documents used them all.

When studying in-depth definitions of ICT, we can see some major themes that were more or less consistent during the entirety of the research period: ICT was primarily defined both as a cause for change in society as well as something that can grow and function due to societal influence: For example Sweden's highly developed ICT infrastructure was seen as creating positive effects for citizens, allowing them to further express their opinions and sharing them with others, thus enhancing the democratic structure and transparency of Swedish society. This meant that ICT positively changed how Swedish society, and its citizens, function both nationally and internationally. However, ICT use was often considered dependent on societal factors in order to function properly; for example developing an ICT infrastructure or enhancing knowledge on how to use the technologies properly. The two parts of this dual relationship are important to understand, if we want to get a clear view how the government intends to further utilize ICT in society.

Finally IT, CT and ICT were all seen as important tools for many different aspects of society and these also remained more or less the same during the studied time period. These kind of technologies were seen as useful in society as whole as well as in the different sectors it consist of. Often these part were functioning in conjunction with each other and ICT could be seen as providing positive synergy effects that enhances all aspects of society. For example, correct use of technology among teachers could not only enhance the quality of education but also help students participate more and becoming a more competitive workforce. This could ultimately help Sweden maintain a strong position in the global ICT sector. Here specific initiatives by the government, or agencies under them, were often seen as key in reaching these intended effects.

With this in mind there were however one clear development of ICT definitions. However, this is *not* due to the fact that the definition changed, but more due to the fact that it was only discussed during the beginning of this study: Namely on the nature of the ICT sector in Sweden. In several documents in the early years of this study, especially economical appendixes to different budget propositions (both spring and autumn) the current situation in the ICT sector was widely discussed. Following the so called "*IT-bubble*" in the late 90:s, the sector experienced several negative developments which in turn hampered economic growth both in Sweden and abroad. Since a large part of Swedish export was ICT related products, the decline hampered Sweden to a large extent.

As the situation stabilised after a few years, the description of the ICT decline shrunk to a minimum, where later texts only briefly mentioned the situation in the beginning of the millennium.

Development of ICT policies and implementation strategies

Where definitions of ICT remained more or less the same, actual ICT developments were easier to find. During the studied time period, several initiatives, strategies, goals and aims have been structured in order to further reap the benefits of ICT and the positive effects it may bring. The different governments have seen strong potential in ICT and argued that integration of it is necessary for Sweden to remain competitive in the world. ICT initiatives were often aimed at increasing availability, safety and infrastructure as well as promote competence in using them in an optimal fashion. Perhaps one of the most distinct focus point found in the documentation in this research, is the notion of the creation of *an information society for all.* During the studied years, this ideal was referenced to many times and considered the main aim of the Swedish ICT policy. It is therefore interesting to follow how the original document *Ett informationssamhälle för alla* was referenced in documents following it, as well as its eventual evolution: In 2005 the proposition *Från IT-politik för samhället till politik för IT-samhället* some of the strategies of the ICT policies were changed. The overall aim of creating an IT society for all remained as the main goal, but the bill in 2005 changed some of the strategies and milestones. The multitude of aims in the first document were shortened to three aims that should serve as the focus of the future work: *Quality, sustainable development* and *accessibility*. These three aims (together with other aspects) served as a future reference point of ICT strategies. For example, sustainable development focused on utilizing ICT to create better conditions for economical growth for the entire country, while at the same time striving to safeguard the environment. In a way it was argued that this made the overall strategies more focused and easier to comprehend,study and ultimately follow up on.

Also, the notion of creating an information society for all, was maintained even after the election in 2006 where the social democratic government was replaced by the liberal-right *Alliansen* ("Alliance"). Document before and after the election maintained that the overarching aim of the Swedish ICT policies is to create an information society where all people can participate regardless of physical, economical or geographical limitations. Some variations were present, such as the role of the market when striving for this goal. Both the social democratic government as well as the liberal-right *Alliansen* pointed to the notion that the market should be the major factor in the development of ICT infrastructure. The government's role is mainly to provide a good environment for the market to function, as well as seeking ways to make infrastructure available to all regions in Sweden, even remote ones. The state-run monetary support system for broadband development was however changed after the change in government. If one studies the budget-proposition area 22 (Communications) after 2006, the new government changes some of the structure of the support system, which was in action until the end of 2007. Even though the new government initiates several strategies and support systems, a state-run support system for IT-infrastructure was not seen as a viable option. However in 2010 the government once again stresses the need for major spending of ICT development in remote regions. If this development would occur if the social democratic government had remained in office is however difficult to predict.

One other interesting development regarding this issue can also be found in the annual EU-reports: When addressing some of the recent discussions of ICT in the European union, the Swedish Alliance (current government) mentions many times that the exclusive role of the market in ICT development must be maintained. The current government saw that certain initiatives could hamper market powers, which were considered the main driving force in ICT development.

One other aspect that was rather consistent in all the years of the study was that it was often stated that the current ICT situation in the country as well as our ability to use technology were among the most developed in the world. The practical implications of this is that Sweden therefore had a competitive edge in global relations and actions were often directed to maintain this edge: During the years of study this had implications both on a national and international level: Nationally the well developed ICT utilization could be seen as important for enhancing democracy, transparency, quality of life and a free exchange of ideas. This required a continued effort made clear in the aim to create an information society for all. On an international level several documents, such as the annual EU reports or proposition in international relations and cooperation, noted that the developed ICT sector in Sweden had many practical implications: Several documents maintained the notion that Sweden was ranked high in ICT development and should therefore use this position to actively assist regions that are developing their own sectors. These actions were related to both initiatives by Sweden itself as well to cooperative efforts via international organisations such as the EU.

Some documentation discussed the issue of ICT development more in depth, and some even saw problems in implementation, noting for example that several uses of ICT in public administration had several shortcomings. Also some discussion of the *asymmetry* of ICT use could be found in some documentation, especially related to age and gender. A constant effort of the Swedish ICT policy during the years of the study was to include all citizens in the effort. Special attention were often given to specific groups in society that often couldn't take part in the development. Here elderly people or the disabled were often seen as most important to focus on as ICT integration in their lives could help improve their every day life and their life quality. Some documentation pointed on several occasions out that in particular elderly people and the disabled had not perhaps been integrated in the information society as they should have, noting that further effort to include them as well as educating them in technology use were vital. One question that comes to mind is therefore: *How far we have come in reaching an information society for all?* This question will be discussed more in the last chapters of this study, as it is more of a discussion point.

Important documents
Here follows a list of some of the more important documents that were published during the studied years. Some documents introduced new aspects related to ICT, while others became a point of reference or contained important evaluations of ICT policies in Sweden. Readers of this paper could look into these documents to get valuable information regarding ICT development in Sweden.

- *Ett informationssamhälle för alla* ("An information society for all") written in March 2000, became both the starting point of this paper as well as a framework for ICT policies in Sweden. The aims, strategies and methods were often referred to by other documents during the study.

- *Från IT-politik för samhället till politik för IT-samhället* ("From IT politics for society to politics for the IT society") written in June 2005, provides changes in ICT policies constructed in the previous document. A simplification of methods and aims are described in order to create a more effective process that is easier to evaluate and develop.

- "*Sveriges handlingsplan för tillväxt och sysselsättning*" (Sweden's action plan for growth and employment) written in October 2005, describes how ICT can play a part in the promotion of growth and employment. This document is constructed with the new aims of Swedish ICT policy in mind. The follow-up reports, written in 2007 and 2009 are also important as they follow-up on certain strategies that had been initiated.

- *Riksrevisionens granskning av IT inom statsförvaltningen och statliga IT-projekt*" ("The Swedish national audit office's examination of IT in government administration and state IT-projects") written in May 2011 provides a critical evaluation by the audit office towards certain ICT related projects. The audit office sees several shortcomings in different areas and provides some suggestions for improvement to the government.

- The annual EU-reports should also be mentioned. Since they were studied in almost all of the relevant years, they can provide us with an understanding of the development of ICT on an international level. It also provides us with information on how our government played a role in different work areas regarding ICT.

- Certain budget-propositions are also important to mention. Area 9 (Health-care) and area 16 (Education) discussed ICT to the largest extents. Just as the annual EU-report, these kind of documentation can provide us with an understanding of ICT development. This will be seen in the coming text, as these two areas often mentioned different initiatives regarding ICT.

Important ICT projects

During the years of the study, several strategic projects have been in effect. Each of these have been tied to IT, CT and ICT in some way. Some important examples are:

- The *ITIS project* (IT in schools), which was in use during the first years of the study. It was mainly aimed at helping teachers use new technologies in schools in order to enhance the quality of education. When the project was over after 2002, it was deemed a success.

- The integration of ICT into *distance education* in Sweden was also an important initiative during the studied time period. ICT was here seen as a useful tool for overcoming geographical and physical limitations in the education system as it allowed for greater flexibility for students. The initiative itself was restructured several times and had several different names.

- The *eHealth project* was related to the integration of ICT into the health care sector both on a national and an international level in the European union. This was used to enhance effective care services in the member states as well as to ensure effective communication between them. A national effort for eHealth was also constructed later in the study and shared similar goals and aims.

- *eEurope and i2010,* were international cooperation regarding ICT in the EU. Initiatives were focused both on the member states themselves as well as the need for cooperation. According to the different governments, Sweden played a large role in this development.

- *Teknikdelegationen* ("Technology delegation"), was given responsibility to help promote ICT education programs, especially for female students in the later years of the study. Here the government saw an asymmetrical distribution between men and women and action was deemed necessary via for example monetary support.

4.2: 2000

- Number of studied documents: 8
- Government bills: 7   Written communications: 1

Summary

During the year 2000, the government bill *Ett informationssamhälle för alla* ("An information society for all"), was published. This document is perhaps the most important text studied in this paper as it became a guideline for future ICT policies in the country. One interesting aspect of this paper is that there is a short discussion on the matter of terminology. This document stresses the distinction between the Swedish words *teknik* and *teknologi*, something that many other documents did not do. The main aim of the process of ICT integration is to make Sweden the first information society for all. This is deemed important, since ICT is seen as something that has dozens of different positive benefits in society. To do this, the government has created *eight* aims that will form the basis of the entire effort. ICT will be used to: Increase growth, increase employment, promote regional development, enhance democracy, increase quality of life, encourage diversity, creating an effective public administration and promote sustainable development. These eight aims will be made possible via *three* priorities: Promoting trust in IT, increasing competence in its use and increasing access to new technologies. Actions will be taken, such as, integrating ICT in the educational sector, promote ICT research and focus on international cooperation.

The matter of ICT in the educational sector is also discussed in other documents. In *En förnyad lärarutbildning* ("A renewed teacher education") as well as *budget area 16*, several aspects of ICT integration are discussed. The ITIS project (IT in schools) is described in both documents. It is an initiative aimed at integrating technology into the Swedish education system. ICT is deemed very important for the sector and will yield many positive results in the near future. Utilization of ICT in distance education is also deemed as important by the documents, as well as in *budget area 19*. Thus, the DISTUM project is aimed at providing students with technological tools for communication and information. This will allow for greater flexibility for students, as geographical and physical limitations become less influential in education.

Summary of studied documentation

Ett informationssamhälle för alla ("An information society for all") is the first document studied in this paper. This document describes the main aims and strategies for ICT implementation in the country, which will serve as a foundation for future initiatives.

In the government bill *En förnyad lärarutbildning* ("A renewed teacher education"), ICT is described as an important tool for teachers, and can be used to further encourage public participation and a create a productive and analytical population. Here, some current projects are mentioned such as ITIS ("IT in schools") and promotion of distance education via new ICT tools.

The government bill *Forskning och förnyelse* ("Research and innovation") proposes new aims for current research in Sweden. IT and ICT are seen as vital research areas and will receive further funding. Sweden is also described as a nation that has a highly developed technological sector.

The government bill *Beskattning av utländska nyckelpersoner* ("Taxation of foreign key individuals/persons of interest") argues that foreign individuals with specialization in ICT, could be a potential target of tax reduction in order to make Sweden a more viable place for foreign experts.

The written communication *Lägesrapport i fråga om den ekonomiska brottsligheten* ("Progress report regarding economic/financial crime") discusses the matter of economic crime and its relation to ICT. International cooperation is seen as key, especially within the European Union.

Annual EU-report
Will not be studied this year, as the document was published *before* the starting date of this study.

Annual budget
In area 7, the government discusses the the role of communication technology as a promoter of regional development and as a useful tool for exchange of ideas. It is seen as an enabler of communication as well as a enhancer of education, knowledge, development and democracy.

In area 16, the issue is also discussed extensively. Here, the current government mentions the ITIS initiative, promoting computerized communication between universities, encouraging distance education via new technologies and the need for international cooperation.

In area 19, ICT is mentioned in several instances. Much focus is on the matter of information technologies (IT) and its importance in society and the need for an effective IT-infrastructure. ICT is described as a tool used for the implementation of effective distance learning in the country.

4.3: 2001
- Number of studied documents: 12
- Government bills: 9   Written communications: 3

Summary
During 2001, the notion of integrating ICT into the educational sector continues. The government bills *Vuxnas lärande och utvecklingen av vuxenutbildningen* ("Adult's learning and the development of adult education"), *Den öppna högskolan* ("The open university/college") and *budget area 16* discusses the current situation in the country. New demands in ICT competence means that citizens require skills in effective ICT use. The continuation of the ITIS project is seen as important in this regard as it can help teachers and students to effectively utilize new tools in the educational process. The DISTUM project will also continue, but will be restructured and change its name to "The net university". This new project will continue to promote effective distance education via ICT tools.

The matter of ICT use in the judicial sector is also widely discussed during this year. ICT is argued to be a new and valuable component of our current judicial system. Several documents, acknowledges that new information and communication technologies can be used in court proceedings and has a multitude of different benefits.

Finally, several documents discusses the matter of ICT in its relation to foreign cooperation. In *Nordiskt samarbete 2000* ("Nordic cooperation 2001"), ICT is seen as a way to make the region more competitive, while the annual EU-report ties this to the European level. The EU report also describes several new initiatives that will shape European ICT policies in the coming years.

Summary of studied documentation
The first document studied in 2001, is the government bill *Vuxnas lärande och utvecklingen av vuxenutbildningen* ("Adult's learning and the development of adult education"). Here, ICT tools are seen as useful for enhancing the educational process and making it more flexible.

The written communication *Nordiskt samarbete 2000* ("Nordic cooperation 2000") describes new strategies in order to make the Nordic region more competitive. Cooperation will focus on many aspects, one of them being efforts regarding the use of ICT.

The government bill *Radio och TV i allmänhetens tjänst* ("Radio and television in the service of the public") proposes a new structure of guidelines and regulations for parties in Swedish public

service; Swedish Radio (SR) and Swedish Television (SVT). New technologies are described as things that can promote more interaction between audience and media producers. The government states that the covered companies in public service, should actively strive to use these new technologies to enable interaction and public participation.

The government bill *ILO:s konvention och rekommendation om de värsta formerna av barnarbete m.m.* ("ILO's convention and recommendation regarding the worst forms of child labour etc.") shortly states that small and medium size companies in different countries, should have access and receive advice on effective ICT application, in order to promote free and fair employment.

The written communication *Reformeringen av domstolsväsendet- Information och uppföljning av handlingsplanen* ("Reformation of the judicial system- Information and follow-up of the action plan") notes that the judicial system is in need of a common safe solution for communication. Initiatives have been initialized to find out how technology can help the communicative process.

The government bill *Sveriges tillträde till Romstadgan för Internationella brottmålsdomstolen* ("Sweden's admission to the Rome-charter for the International Criminal Court") is a document intended to ratify the new charter for the International Criminal Court in the Hague. It is noted that communication technologies can be utilized if, for example, the accused is disrupting the court.

In the government bill *Partnerskapsavtal mellan Europeiska gemenskapen och dess medlemsstater och staterna i Afrika, Västindien och Stillahavsområdet* ("Partnership agreement between the European union and its member states and the states in Africa, the West-indies and the Pacific area") the matter of ICT is mentioned once as an issue of regulation that the parts of the agreement need to agree upon in order to enhance cooperation.

The government bill *Den öppna högskolan* ("The open university/college") mentions several projects and initiatives regarding education and ICT: International agreements regarding technology and education, incorporating ICT in schools to allow participation by all students as well as encouraging distance education via ICT tools.

The government bill "*Yttrandefrihetsgrundlagen och Internet*" (Freedom of speech- constitution and the Internet) proposes new legislation of freedom of speech due to technological development. Current use of modern communication technologies should therefore lead to changes in legislation as new media outlets should be covered by the same constitutional protections.

Annual EU-report
In this report, several points regarding ICT and the European union are discussed: Strategic aims of ICT implementation (Lisbon-strategy), integrating ICT in industry and education, promoting dialogue via ICT and discussions on the future of ICT in Europe ("eEurope")

Annual budget
In area 16, several of the topics from the previous year are discussed: The ITIS project, promotion of distance education and development of communication networks between universities are mentioned. There is also focus on international cooperation, as well as research initiatives.

In appendix 2, the global economic situation is addressed and related to the situation in Sweden. It is noted that a decline in demand for ICT services has hampered economic development. However, the government states that this can change and notes that a positive development is possible in the sector, but at perhaps at a slower speed.

4.4: 2002

- Number of studied documents: 19
- Government bills: 9   Written communications: 10

Summary

The matter of ICT integration in the educational sector is still an important issue for the government and is discussed in several documents. The ITIS project is still in effect and several documents refer to the project and the benefits it will potentially bring. In the written communication *Sveriges genomförande av EU:s sysselsättningsstrategi* ("Sweden's implementation of the EU's employment strategy") ITIS is seen as an effective way of realizing international agreements on ICT implementation for promoting democracy, productivity and equality. Also the newly formed "net-university" will continue to promote distance education via relevant technologies.

Just as before, the matter of international cooperation in ICT is addressed. Nordic cooperation in ICT is still considered an important area just as on an European level. The *"eEurope"* project is mentioned in several documents, such as the annual EU-report and budget area 22. Budget area 22 notes that there is need for harmonization between Sweden and the EU regarding ICT strategies.

The current situation in the ICT sector is widely discussed this year. The spring- and autumn budget sees that the current decline in the ICT sector has negative effects on Sweden's industry. Even though there have been negative developments in the sector, some positive signs are mentioned. New forms of trade and transactions are also widely discussed. In the government bill *Lag om elektronisk handel och andra informationssamhällets tjänster* ("Legislation regarding electronic trade and other services of the information society") the new development in technology is acknowledged and it is argued that there will most certainly be an increase in electronic trade in the coming years, something that the government will be monitoring. The matter of international boundaries are also noted: In the government bill *Lotterier över Internet m.m.* ("Lotteries over the Internet etc.") new forms of online lotteries require that current legislation can adapt, as traditional trade practices and transactions can take place over national borders.

Summary of studied documentation

The first document published this year is the written communication *Redogörelse för det svenska ordförandeskapet i Europeiska unionens ministerråd första halvåret 2001* ("An account of the Swedish presidency of the council of the European Union during the first half of 2001") describes how the government took steps in improving communication technology systems in order to manage the presidency position.

The written communication *Redogörelse för behandlingen av riksdagens skrivelser till regeringen* ("An account of the treatment of the parliament's communications to the government") discusses several parliamentary decisions which are related to ICT. Communication systems, promoting competitiveness on the mobile-phone market and the importance of IT-security are mentioned.

The written communication *Nordiskt samarbete 2001* ("Nordic cooperation 2001") is similar to the same document published last year, as it provides an insight into the work done in the cooperation of the Nordic region's governments. Just as previous year, the focus of cooperation is among other things, an effort to cooperate in ICT in order to make the Nordic region more competitive.

The government bill *Ändringar i konsumentköplagen* ("Changes in consumer purchase legislation") argues that new communication technologies have allowed citizens access to new distribution systems both within the union and outside. There is, however, need of increased harmonization between different countries.

The government bill *Lag om elektronisk handel och andra informationssamhällets tjänster* ("Legislation regarding electronic trade and other services of the information society") notes that electronic commerce has increased during the last years as different methods for trade are now available. Use of new communication systems for electronic trade might not be common at the moment, but as broad band services become more common this will very likely increase.

The government bill *Lotterier över Internet m.m.* ("Lotteries over the Internet etc.") puts forward new legislation regarding lotteries, as new ways of communication have made their way into the Swedish market, especially via the Internet. This requires that the current legislation adapt to this development since new forms of gambling can take place over national borders.

During 2002, ICT was also discussed in the annual economic *spring proposition*. The current economic situation is discussed, noting a negative development on the global market. One of the reasons is due a deteriorating ICT sector.

In the *first appendix* to the spring proposition, the economic situation in the ICT sector is once again noted. It is mentioned that the recent decline in the ICT sector has affected several different markets such as the American and the European ones. Some positive developments both in Sweden and internationally, is however possible.

The written communication *Redovisning av AP-fondernas verksamhet år 2001* ("An account of the activities by the AP funds during 2001") mentions that companies in the ICT sector have been in economical decline, which in turn affects the current economical situation in the world. This is related to what the text calls an "IT-bubble".

In the written communication *Sveriges genomförande av EU:s sysselsättningsstrategi* ("Sweden's implementation of the EU's employment strategy") the EU strategy, states that member states should focus on ICT implementation, especially in the educational sector. Internet access in schools as well as enhancing knowledge of ICT among teachers, is seen as key. The EU praises Sweden's work, noting effective initiatives in promoting ICT integration and use of technologies.

In the written communication *Utbildning för kunskap och jämlikhet* ("Education for knowledge and equality") ICT is related to what the text calls "flexible learning", where new tools can create new forms of learning. Several projects are mentioned, such as the ITIS project and the continuation of promoting distance education via new technologies.

In the written communication *Uppföljning av äldrepolitiken* ("A follow-up of the elderly politics") it is noted that many elderly people might lack knowledge in utilizing new technologies. The government intends to focus on this issue by helping organisations and individuals in the process of learning how to use these new tools. ICT is also seen as useful when providing good care for elderly people as well as a tool for improving their quality of life.

The written communication *Johannesburg- FN:s världstoppmöte om hållbar utveckling* ("Johannesburg- United nation's world summit regarding sustainable development") describes an action plan that was established at the UN summit. ICT is seen as a useful tool in the creation of cleaner and more efficient industries. The "digital divide" is also addressed, as it is noted that some countries are at a disadvantage, which in turn requires more international cooperation.

Finally, the written communication *Uppföljning av den Nationella handlingsplanen för handikappspolitiken* ("Follow up on the national action plan for the disability politics") states that by promoting the use of ICT, people with disabilities can more easily be a part of society and achieve a better quality of life. Computers and new software are seen as highly useful in this regard.

Annual EU-report
In this year's EU-report, it is once again noted that Sweden currently has a highly developed ICT sector that contributes to productivity and competitiveness. Special attention in the union will be given to integrate ICT in care for people with disabilities, working with the *"eEurope"* initiative, promoting use of ICT in "citizen-to-state" communication, integration of ICT in education as well as an effort to cooperate in promoting safe use of new technologies.

Annual budget
In area 7, ICT is once again seen as effective in enhancing the current social and economical situation in the world. It also acknowledges the possibility of exclusion, as some people might be left out in this development. Further, the text states that there are many uses of ICT: Such as in education and for enhancing democracy and protecting human rights.

In area 16, several of the previously mentioned projects and agencies are discussed again: The ITIS project in Swedish schools, ICT research, distance education via ICT tools and electronic communication systems between universities.

In area 22, it is argued that the focus of Swedish ICT policies are, among other things, to develop an effective IT-infrastructure to create an information society for all. The government aims to take steps to enhance the IT-infrastructure by providing support to regions that are in the early stages of IT development.

In Appendix 2, the matter of the current situation in the ICT sector is once again addressed just like last year. A decline in the American and Swedish markets are linked to a decrease in the ICT sector which in turn have many negative economical effects.

4.5: 2003
- Number of studied documents: 15
- Government bills: 11   Written communications: 4

Summary
During this year, it is important to note that the so called ITIS project (IT in schools) had been completed. In *budget area 16*, it is noted that the process has been successful, providing knowledge of ICT for teachers and students. The government argues that this positive development must continue in order to maintain the current level of competence. Several agencies will be given responsibilities to continue promoting technology in the educational sector.

International cooperation in ICT is also a common theme during this year. Apart from cooperation in the Nordic region, initiatives for cooperation with specific regions were mentioned. The two association agreements published during this years ties this effort to the European level, in which many of Sweden's actions are dependent on. The government bill *"Gemensamt ansvar: Sveriges politik för global utveckling"* (Mutual responsibility: Sweden's politics for global development) is relevant in this regard as it ties ICT to global development and the role Sweden intends to take in this effort. Here, ICT is seen as an important work area, as it is argued that Sweden has extensive competence in its use and implementation.

Summary of studied documentation

The written communication *Nordiskt samarbete 2002* ("Nordic cooperation 2002") gives a detailed account of the work between the governments of the Nordic countries. Several projects and activities, related to ICT, are mentioned: A mapping of the relationship between adults and their use of ICT and an effort to find cooperation strategies for broadband connection and IT-security.

The government bill *EG:s bevisupptagningsförordning* ("EU regulation on the uptake of evidence") goes deep into the matter on communication technologies. Communication technologies (especially video conferences) can be used both by representatives of the court as well as in court proceedings during special circumstances. The government acknowledges the value of this development but notes that not all Swedish courts have the technological tools required at the moment.

The government bill *Vissa frågor inom spelområdet* ("Certain questions in the gambling area") notes that new technology, the Internet in particular, have moved lotteries to an international market. New technologies enable new actors to compete on a global level who can more easily establish a foothold in other countries. This requires an adaptation of current legislation.

The written communication *Redovisning av fördelningen av medel från Allmänna arvsfonden under budgetåret 2002* ("An account of the distribution of funds from the public inheritance fund during the budget year 2002") sees several uses of ICT: It can aid people with disabilities as well as enable Sweden's youth to participate in society.

This year, one appendix to the annual spring-proposition was also studied. The overall decline in the ICT sector is mentioned again and it is argued that this decline has harmed Swedish economy. It is stated that in the beginning of 2002, a small positive economical development in the ICT sector has occurred, but was beginning to show signs of decline later the same year.

In the government bill *Gemensamt ansvar: Sveriges politik för global utveckling* ("Mutual responsibility: Sweden's politics for global development") it is noted that ICT is often key for sustainable development and for encouraging growth and democracy. Sweden should therefore strive to promote this development.

The written communication *Redovisning av AP-fondernas verksamhet 2002* ("An account of the activities in the AP fund 2002") gives a detailed account of the activities in the public pension funds. The current economical situation among companies in the ICT sector is addressed: Although there has been a high demand for stocks in these companies, a decline is in progress.

In the government bill *Associeringsavtalet mellan Europeiska gemenskapen och dess medlemsstater och Republiken Chile* ("Agreement of association between the European union and its member states and the Republic of Chile") ICT is seen as vital for social and economical development as well when transforming a country into an information society. Cooperation should focus on dialogue, cooperation in telecommunication, exchange of ideas in standardisation, spread of new information and communication technologies as well as initiatives for research.

The government bill *Europa-Medelhavsavtalet mellan Europeiska gemenskapen och dess medlemsstater och Libanon* ("European- Mediterranean agreement between the European union and its member states and Lebanon)" mentions that both parties should be aware of ICT and its use in society and acknowledge the benefits it has in economical and social development. Cooperation and dialogue is seen as key in this effort.

In the written communication *Arkitektur, form och design* ("Architecture, form and design"), ICT is only mentioned briefly as a topic of discussion during a recent expert meeting the city of Linköping.

In the government bill *Det nya skatteverket* ("The new tax office") it is noted that new communication technologies have allowed a spread of production geographically but notes that production centres might still be concentrated in clusters.

The government bill *Behandling av personuppgifter inom socialförsäkringens administration* ("Treatment of personal information within the administration of social insurance") mentions that technological development in recent years has changed the overall structure of administration. Not only have administrative tasks become more IT-based, communication between agencies and citizens have increased. This will also demand a consideration of protecting personal integrity.

In the government bill *Sveriges tillträde till Förenta nationernas konvention mot gränsöverskridande organiserad brottslighet* ("Sweden's admission to the United nations convention against transboundary organised crime") ICT is said to have different uses in the process of apprehending and convicting criminals as well as in witness protection.

Annual EU-report

No *direct* references to communications technologies or information- and communication technologies were mentioned in the report this year.

Annual budget

In area 2, ICT is seen as vital for ensuring high quality public administration, an area where Sweden has already come a long way. However a recent investigation into the subject found that elderly people, the disabled and immigrants have not been effectively integrated in the process. Several steps will be taken to ensure that all people can participate in the information society.

In area 16, several points from previous years are discussed: The ITIS project, ICT research, distance education via ICT and electronic communication systems are all mentioned again. International cooperation within the European union is also seen as vital in the effort of integrating ICT in the education sector.

4.6: 2004

- Number of studied documents: 9
- Government bills: 5   Written communications: 4

Summary

During 2004, the matter of ICT integration in Swedish health care, starts to become a matter of discussion in the budget proposition. Several initiatives have been initiated such as: Coordination of national efforts in ICT integration, coordination between states in Europe called "*eHealth*", a strive for greater harmonization of ICT between key agencies and ensuring that all citizens can take part in the development, especially people with disabilities. In order to promote effective utilization of ICT in health care, both national and international efforts are required. Apart from this example, previous aspects of ICT are discussed this year as well, such as international cooperation and ICT's role in administration. The role of ICT in Swedish defence is also mentioned during this year and will return as a topic in some future documentation. Another interesting topic mentioned in the written communication "*En svensk strategi för hållbar utveckling*" (A Swedish strategy for sustainable development) is the matter of the market's role in ICT infrastructure development. Here it is argued that the market should act as a major force in the development and that the state should act to create effective structures for the market to function in, a common view in most coming texts.

Summary of studied documentation

The first document studied in 2004 is the written communication *Redogörelse för verksamheten inom Europarådets ministerkommitté m.m. under år 2003* ("An account of the activities in the European council's minister committee etc. during 2003"). Several issues were discussed, such as a discussion of IT and democracy (eDemocracy) as well as discussions of ICT use in the European education sector.

In the written communication *Nordiskt samarbete 2003* ("Nordic cooperation 2003"), ICT is only mentioned once, when addressing the need for harmonization of regulation in the Nordic area. Use of modern technology can help agencies to acquire correct information over the national borders and can help to achieve a higher level of harmonization.

One appendix to the annual spring-proposition was also studied. In *appendix 1* (Swedish economy) the matter of the current economical situation in the ICT sector is once again addressed: The decline in the ICT sector at the turn of the millennium is seen as a key factor in the economical decline Sweden has experienced, but there as some signs of improvements.

The written communication *En svensk strategi för hållbar utveckling* ("A Swedish strategy for sustainable development") describes the government's overarching aims regarding sustainable development. The government gives a detailed account of the work related to IT-infrastructures and communications. A communication infrastructure is seen as vital in a modern society and it is important to allow all regions in the country to take part in the development. In order to create an information society for all, both market forces and state efforts should be used.

The government bill *Vårt framtida försvar* ("Our future defence") proposes new changes in the structure of the Swedish defence. Here, new ICT tools are seen as useful for the new structure of Swedish defence as it can help to make the army more effective as well aiding international efforts.

The written communication *Regeringens handlingsplan för minskad administration för företagen m.m.* ("The government's action plan for decreased administration for companies") gives a detailed account on how ICT can be an important factor for decreasing administration of Swedish companies. Several issues are discussed, such as the nature of the relationship between electronic communication and Swedish public administration.

Annual EU-report

No *direct* references to communications technologies or information- and communication technologies were mentioned in the report this year.

Annual budget

Area 6, states that as Swedish defence develops, new technologies can improve overall communication and enable better exchange of information. The government also addresses the matter of IT-security and how IT-threats can become a security issue for the country in the future.

Area 9, notes that more administrative and professional activities are now done digitally and it is stated that this will increase in the coming years. Sweden has already come a long way compared to other European countries and ICT is considered to have many possible benefits in health care.

In appendix 2 (Swedish economy), the recent decline in the global economy is once again discussed, noting that the ICT sector, which were in decline 2001-2003, is now recovering.

4.7: 2005

- Number of studied documents: 14
- Government bills: 10   Written communications: 4

Summary

During 2005, the government bill *Från IT-politik för samhället till politik för IT-samhället* ("From IT politics for society to politics for the IT society") was published, which is one of the more important documents in this study. Several major changes in Swedish ICT policies are proposed in this text: According to the document, Sweden has come a long way in ICT development, but there are still things to do. For example, ICT integration in the educational sector has not had the results originally expected. This document will thus simplify the process to make it easier to understand and evaluate. The overall aim is still *to make Sweden an IT-society for all*, but the government now proposes *3 new target goals,* that will replace the 8 aims and 3 areas of focus described in the previously mentioned proposition: 1) *Quality* means that the overall quality of life for citizens will improve due to use of ICT as well as improve their everyday life. 2) ICT will be used to enhance *sustainable development*, where ICT and knowledge of its use, can increase production in both the private and public sector. 3) An *effective and safe accessibility* to ICT will be made possible in all part of the country where the ICT market should play a key role. The written communication *Sveriges handlingsplan för tillväxt och sysselsättning* ("Sweden's action plan for growth and employment") is highly influenced by this document. The three new aims of the Swedish ICT policy is here integrated into Swedish employment policies where ICT will play a large role.

Summary of studied documentation

The first document studied in 2005 is the government bill *Århuskonventionen* ("The Aarhus convention") notes that new technologies, such as email and the Internet have allowed effective communication in the world and is useful for enhancing public participation and democracy. It is still argued that new ICT can create issues when the integrity of individuals might be threatened.

The government bill *Nya regler för dödsförklaring* ("New rules for death declaration") proposes new legislation in death declarations of citizens. A very short section of the document discusses that new communication technologies allows for improved communication among the population.

The government bill *Ny aktiebolagslag* ("New joint-stock company legislation") proposes a modernisation of the older legislation to make it more updated to the current world. Some discussion of ICT is present: For example the use of email is accepted as a tool for communication as well as using video conference equipment (or similar) in the work within companies.

In the separate *appendix* to the previous document ("New joint-stock company legislation") the matter of communication technology is mentioned briefly: In a summary of a final report by the joint-stock company committee, it is mentioned that the new legislation gives more room for use of modern communication technologies, which can encourage more participation by owners.

In the government bill *Forskning för ett bättre liv* ("Research for a better life") the government discusses Vinnova's (innovation agency) work in ICT development, noting the agency's role of spreading knowledge of new technology.

The written communication *Utvecklingen inom den kommunala sektorn* ("Development in the communal sector") discusses the situation in Swedish health care in relation to ICT. New technologies are seen as beneficial both in making processes easier but also as a way to enhance the quality of the care given. The government states that this has a great strategic value in society and will strive to coordinate cooperation in the sector.

In the written communication *Vård i livets slutskede* ("Care in the final stages of life") ICT is seen as a way to meet new demands for available, effective, and high quality care. New tools can provide new routines and ways to work which can provide benefits to citizens, health care personnel and decision makers. The government will therefore take steps to promote this development in Sweden.

The government bill *Från IT-politik för samhället till politik för IT-samhället* ("From IT politics for society to politics for the IT society") proposes new changes in the overall aims and strategies of ICT implementation described in "*Ett informationssamhälle för alla*" in 2000. The previous eight aims of the process will be replaced with three new target goals.

In the written communication *Sveriges handlingsplan för tillväxt och sysselsättning* ("Sweden's action plan for growth and employment") it is mentioned that Sweden aims to further encourage the spread of ICT in the country in order to fully become an sustainable information society for all. Special care will also be given in incorporating technology for people with disabilities.

Annual EU-report
The continued work of integrating ICT into Europe ("*eEurope*"), is still considered an important issue in the union in order to create an information society for all. Other important areas of discussion are integration of ICT into the development aims of the Lisbon-strategy, developing knowledge of ICT use, electronic trade, broadband connectivity and matters of IT-security.

Annual budget
In area 2, the matter of ICT in public administration is once again addressed, similar to the same document in 2003. The government sees the importance of ICT both for the work conducted in agencies as well as for enhancing their coordination an cooperation.

In area 9, ICT use in the health care sector is still widely discussed and evaluated. Continuation of promoting ICT for people with disabilities, international cooperation ("*eHealth*") as well as utilizing ICT to make health care more efficient are all still seen as vital aspects of the process.

Area 24, mentions the current situation of Swedish space communication technology systems. The government also argues that investments in competence can help make Swedish industry more competitive. It is also mentioned that current knowledge of ICT in the nation might be a potential pull factor when attracting foreign investors.

In appendix 2, there is a short analysis of a decline in growth in both the Swedish and Asian markets, due to negative factors in ICT demand. However, the documents speculates that the trend might shift, creating new profitable demands in ICT.

4.8: 2006
- Number of studied documents: 10
- Government bills: 6   Written communications: 4

Summary
During 2006, the intention of integrating ICT in health care continues. In the written communication "*Nationell IT-strategi för vård och omsorg*" (National IT-strategy for health care) a terminological distinction between information technology and communication technology is made and its implication in policies. Both this document, well as in *budget area 9*, the notion of utilizing ICT to improve health-care is seen as vital for a modern society. Improving administration, enhancing quality of care and supplying fast and efficient information to patient are some areas that could benefit from increased use of ICT.

Just as previous years, education is still seen as an area that will benefit from an increased ICT utilization. In the government bill *"Lära, växa,förändra- Regeringens folkbildningsproposition"* (Learn, grow, change- The government's proposition on populace education) and *budget area 16*, new ICT can be beneficial for the sector as a whole. In a process called "flexible learning" the role of new ICT:s are discussed and seen as a way to use new tools to enhance the educational process. It is however noted, that as use of new tools increase, some of the population *can* risk being left out. Several steps will therefore be taken to further incorporate all citizens in the development.

Summary of studied documentation
The first document studied in 2006 is the written communication *Redogörelse för verksamheten inom Europarådets ministerkommitté m.m. Under 2005* ("An account of the activities in the European council's minister committee etc. during 2005") which gives a detailed account of the work done in the committee. Some decisions were taken in order to create discussions of the future of mass media as well as new communication technologies.

In the appendix to the government bill *Anpassning till nya EG-bestämmelser om livsmedel, foder, djurhälsa, djurskydd och växtskydd m.m* ("Adaptation to new EU-directives regarding food, feed, animal health, animal protection and protection of plants etc.") the European parliament has constructed several new directives regarding the agricultural sector. ICT is only mentioned once, as it is seen as a vital qualification for veterinarians working in the field.

The written communication *Nationell IT-strategi för vård och omsorg* ("National IT-strategy for health care") describes some of the aims and strategies for integration of IT into the Swedish health care sector. The overall aim of integrating IT in the health care sector is to enhance care itself as well as providing good service to the population.

The written communication *Uppföljning av den nationella handlingsplanen för handikapps-politiken* ("Follow up on the national action plan for the disability politics") describes some of the work conducted in the national politics for people with disabilities. Several steps has been taken to further utilize ICT for people with disabilities in order to make lives easier for them.

In the government bill *Lära, växa,förändra- Regeringens folkbildningsproposition* ("Learn, grow, change- The government's proposition on populace education") general considerations on projects to promote the learning process of the Swedish population is addressed.

The government bill *Elektroniska kommunikationstjänster m.m. inom psykiatrisk tvångsvård* ("Electronic communication services etc. in psychiatric involuntary treatment") proposes new legislation to allow doctors to confiscate and monitor electronic communication tools, used by the patients. Even though new ICT tools can be a benefit in the rehabilitation process, some consideration of safe use are present as well as a general discussion of personal integrity.

Finally the the written communication *Redovisning av fördelning av medel från Allmänna arvsfonden under budgetåret 2005* ("An account of the distribution of funds from the public inheritance fund during the budget year 2005") describes some monetary support for technologies which can help people with disabilities to achieve a higher quality of life. Also some ICT related projects towards helping youths to participate in political discussions are mentioned.

Annual EU-report
No direct references to communications technologies or information- and communication technologies were mentioned in the report this year.

Annual budget

Area 9, builds on the topics discussed in previous years: The international effort of cooperation in health care (*"eHealth"*), integrating ICT in administration and utilizing ICT in care for people with disabilities are still considered important areas.

Area 16, follows most of the subjects covered previous years: Discussions on electronic communication systems between universities, international cooperation regarding education and ICT, focus on research and a continued promotion of distance education are still present.

In the budget appendix regarding financial plan, taxes and budget additions, it is mentioned that Sweden has a great potential for growth, due to a highly educated work force that has been quick to adapt new technologies. Tax reduction for the development of the IT-infrastructure will continue.

4.9: 2007

- Number of studied documents: 9
- Government bills: 7   Written communications: 2

Summary

One interesting document during 2007, is the written communication *Sveriges handlingsprogram för tillväxt och sysselsättning- Uppföljningsrapport 2007* ("Sweden's action plan for growth and employment- Follow up report 2007"). In this text, the government addresses some of the initiatives regarding employment that have been taken and discusses some future initiatives. The overall structure of aims and goals regarding ICT in the country builds on the new policies established in 2005: The overall aim of *making Sweden an information society for all*, remains, as well as the three side aims of ensuring *quality, sustainable development* and *accessibility* of ICT. Enhancing ICT use, trust in technological systems, knowledge of effective ICT use and increasing ICT availability are still considered important focus areas.

Also, new strategic aims of European ICT policies are described in this year's EU-report. A new overall ICT strategy has been constructed (*"i2010"*), which will replace the older *"eEurope"* program. The focus until 2010, is to create a common European information sector to promote an open and competitive internal market, strengthening innovation and investments in IT-research to promote growth and achieving a European information society where all citizens can participate. This notion is similar to the Swedish aim of creating an information society for all.

Summary of studied documentation

The government bill *Sveriges tillträde till Förenta nationernas konvention mot korruption* ("Sweden's entry to the United nations convention against corruption") proposes that the convention against corruption should be ratified, as current Swedish legislation is in concordance with it. It is noted that the convention's decision to allow the possibility of using communication technology when witnesses testify in courts is applicable in current Swedish legislation.

In the government bill *Ny lagstiftning om offentlig upphandling och upphandling inom områdena vatten, energi, transporter och posttjänster* ("New legislation regarding public procurement in the sectors of water, energy, transports and postal services") new information and communication technologies are seen as new methods for making procurement processes more open and effective.

The written communication *Sveriges handlingsprogram för tillväxt och sysselsättning- Uppföljningsrapport 2007* ("Sweden's action plan for growth and employment- Follow up report 2007") is a direct follow up report of the action plan for growth and employment that was examined in the year 2005.

Annual EU-report

Several developments regarding ICT can be found in this year´s report: There have been investigations of the creation of a common ground regarding regulation of electronic communication and an effort to integrate ICT in trade and civil services. ICT in health care ("*eHealth*") and cooperation in the prevention of IT-crimes are also mentioned.

Annual budget

In area 2, ICT is once again seen as important in state economy and organisation. One important area is the matter of accessibility and quality of public administration. The government has established an investigation on how the sector can adapt to new challenges and demands in society and the potential integration of new information and communication technologies.

Area 9, initially addresses the investigation of IT in the health care sector that was in progress last year. A report from the investigation points to several positive developments in the health care sector. The matter of supporting electronic communication systems for people with disabilities is also discussed and funding will continue.

In area 22, the matter of international roaming in telecommunications is addressed with propositions for change in legislation, in order to protect consumers from high fees when using telecommunication networks abroad. The overall aim of the government is still to provide electronic communication, mostly via the ICT market. The government also acknowledges the use of regional broadband support, which will end after 2007.

In appendix 2, the overall economical situation of the world, as well as Sweden in particular is related to the matter of ICT. The millennial IT-bubble is addressed, noting that the decline in the production industry, especially in the ICT sector, was a key factor in its creation.

In appendix 3, the matter of communication technology is related to the overall spread of income. It is mentioned that extensive knowledge of ICT use could contribute to a higher salary.

4.10: 2008

- Number of studied documents: 6
- Government bills: 5   Written communications: 1

Summary

During this 2008, several initiatives from previous years are mentioned, such as a continuation ICT integration in health care (*eHealth*) as well as international cooperation regarding communication and information (*i2010*). One major change in government policies can however be found this year: In *area 16* of the annual budget, the current situation in the ICT sector is addressed. It is noted that applications for engineering programmes, especially in the ICT sector, have declined during the past decade. To break this trend, the government has established *Teknikdelagionen* ("Technology delegation") to promote interest in these areas for future students. Women and younger citizens are seen as key focus group for this national effort. Monetary support will be given to the delegation to fund their work.

Summary of studied documentation

The government bill *Framtidens resor och transporter* ("Travel and transports of the future") argues that the increase of IT and electronic communication have been possible due to previous efforts on developing an IT-infrastructure. This is seen as providing benefits for citizens but might also become a risk if these systems fails. An effort to create safe and efficient systems are seen as important not only nationally, but also on an international level.

Annual EU-report

The EU report this year, continues with many of the issues discussed previous years, such as cooperation in regulation of telecommunications, IT-security and common ICT systems. The new ICT strategy (*i2010*) is also in effect and new aims of ICT integration have been constructed by the commission. Sweden has, according to the text, played a large part in this effort.

Annual budget

In area 9, ICT is once again related to the health care sector. Several initiatives are mentioned: An effort to standardize the use of technology in the sector, improve ICT channels to citizens, international cooperation in health care (*eHealth*), utilizing ICT for people with disabilities as well as in elderly care.

In area 16, several interesting points are made in the current situation in the ICT sector. It is noted that there have been a decline in applications to ICT programmes in Swedish universities. The government has established a delegation to further investigate and promote these types of programmes.

In area 24, the notion if ICT was discussed very briefly in its relation to important initiatives by the agency of innovation systems (Vinnova). Further monetary investments for the agency are proposed. It is also noted that Sweden can attract foreign investors due to a highly developed ICT sector.

In appendix 4, only a single mentioning of the subject is done. It is noted that the income of high income earners have increased more than low income earners. ICT skills is believed to be one contributing factor, as well as an increase in demand of these type of skills.

4.11: 2009

- Number of studied documents: 11
- Government bills: 8   Written communications: 3

Summary

One interesting document during 2009, is *Budget area 16,* which follows up on the initiatives taken previous years. Primarily the focus lies in an effort to promote application to ICT education programs. With regards to last year, the government now argues that the negative trend in applicants to ICT programs has been halted and are beginning to show sign of recovery. The recently appointed *Teknikdelegationen* ("Technology delegation") will continue its work to promote ICT education programs for future possible applicants, especially female students. In *budget area 22*, the gender issue in ICT programs applicants is also addressed.

The European effort of creating a shared ICT strategy (*i2010)* is discussed again in the annual EU-report. The commission has issued a report of the work done so far, and there are positive signs of development in the member states. Other important points are the regulation process in telecommunications, regulation of the distribution of satellite services in communications as well as an effort to find strategies for IT-safety, where Sweden has played a large role.

Summary of studied documentation

In the government bill *Tid för kultur* ("Time for culture") the role of social media for producers and consumers of culture is acknowledged: For example an emerging Internet culture has enhanced the citizen perspective not only in the area of culture, but in society as a whole. New and available technologies can also enhance the creativity of people, especially younger citizens, who are often more keen to adopt new technologies

The written communication *Sveriges handlingsprogram för tillväxt och sysselsättning-uppföljningsrapport 2009* ("Sweden's action plan for growth and employment- Follow up report 2009") is a direct follow up the the action plan for growth and employment published previously. Several initiatives are mentioned, such as continuation of supporting remote regions in Sweden to gain Internet access, promoting ICT cooperation in the country and promoting ICT in education programmes.

In the written communication *En strategi för ungdomspolitiken* ("A strategy for youth politics") the matter of ICT in its relation to youths is shortly addressed. It is noted that development of new technologies have opened new channels of influence for citizens. This can help promote transparency and citizen participation in democratic processes especially for younger citizens.

The government bill *En politik för det civila samhället* ("Politics for the civilian society") mentions that new information and communication technologies have become important tools for cooperation and social interaction among the population.

The government bill *Grundlagsskydd för digital bio och andra yttrandefrihetsrättsliga frågor* ("Constitutional protection for digital cinema and other issues regarding freedom of speech") proposes that new ways of broadcasting should be covered by the same legislation as the traditional ones, in order to make it accessible for all people, especially people with disabilities.

Annual EU-report
In this annual report the continued work in the union regarding IT and electronic communication is still an important issue as well as the need for harmonization in the union.

Annual budget
Area 1, provides an account of how new ICT has helped the administration of the Swedish monarchy. ICT has also allowed a greater transparency in the country as a whole, where dialogue and communication have become easier and faster thus promoting participation by citizens. It also addresses the "*digital divide*" where some citizens might risk being left out of the ICT development process.

In area 9, the continuation of ICT implementation in the health care sector is still a priority issue. The government intends to apply further resources to help the process: The *eHealth* project, as well as the use of ICT for the disabled and elderly people are discussed this year as well.

Area 16, follows up on the initiatives taken last year, to promote application to ICT education programs. There are at the moment some positive signs and work will continue. Other important issues are continuation of utilizing electronic communication between universities, an increase in funding for ICT research as well as promoting distance education via ICT tools.

In area 22, several initiatives in ICT are discussed: Sweden should have access to efficient ICT tools at a reasonable price and they should be available to all citizens. It is also noted that women are still under represented in ICT education programs and that some groups in society, such as the disabled and the elderly, are at risk of being left out of the digitalisation of the Swedish society. The government will continue to stimulate expansion of the IT-infrastructure, primarily via the market.

Area 24, mentions some of the ICT focused work done by the Swedish innovation agency (Vinnova). The current level of ICT use in the country is also noted, and is deemed an important factor in attracting investors from abroad.

4.12: 2010

- Number of studied documents: 15
- Government bills: 12   Written communications: 3

Summary

During 2010, several documents discussed the nature of monetary transactions and ICT. Documents such as *Betaltjänster* ("Payment services") and *Obehöriga transaktioner med betalinstrument* ("Unauthorized transactions with payment tools") note an increase in new ways of transferring funds. This will in turn require new examinations and focus in order to create a safe and reliable market for both consumers and producers.

Budget area 16, as well as *area 22* still addresses the gender discrepancy regarding ICT. According to area 16, there have been some positive developments in applications to ICT education programs. The government will follow the development in the coming years. Area 22 also mentions that a new aim of the overall ICT policy will be constructed. Instead of pointing to accessibility and security of an ICT infrastructure, the new description will include the needs of users. This is a slight modification to the aims structured in 2005.

In *budget area 9,* a great part of the discussion regarding technology and the health care sector, is the new *national eHealth-program.* The aim is to create practical and visible effects for patients and citizens, where actual benefits are the focus not necessarily technology itself. There will be a construction of information systems and standardisation in terminology which can simplify processes and can help to promote patient security and services in the coming years.

Summary of studied documentation

The first government bill in 2010 *Bäst i klassen* ("Best in class"), proposes new structures of the teaching education program in the country. It is argued that ICT should be considered an educational resource that should permeate the entire educational process of new teachers.

In the written communication *Att möta globala utmaningar* ("Facing global challenges") the issue of Sweden's role in global development is described. The role of ICT is actually seen as something powerful regarding the process, as it helps to create new possibilities for expression and individual freedom. Sweden will take an active part in the effort to allow ICT to enhance knowledge, dialogue and participation. The government will also strive to strengthen freedom of speech via ICT tools.

In the government bill *Obehöriga transaktioner med betalinstrument* ("Unauthorized transactions with payment tools") it is noted that transference of money is often dependent on different communication nets. The document aims to establish that information of communication channels (such as e-mail) of service providers, should be made available for the consumers.

The government bill *Kontroll av produkter med dubbla användningsområden* ("Control of products with dual areas of use") proposes to regulate the trade of products with both civilian and military applications. These products can often be exported via use of different technological tools such as telecommunications and computers.

The government bill *Offentlig förvaltning för demokrati, delaktighet och tillväxt* ("Public administration for democracy, participation and growth") mentions that the technological development during the last decades, especially in the areas of ICT, has led to a shift in the system structure. The government intends to adapt to this development by promoting innovation as well as finding strategies for development and cooperation between key agencies.

The government bill *Betaltjänster* ("Payment services") states that a payment service should be considered a transaction of funds where the payer could employ telecommunication, digital technology or information technology. It is also noted that all information given to the buyer should be adapted to the tools used for communication, which is a requirement for the seller.

The written communication *Samhällets krisberedskap- Stärkt samverkan för ökad säkerhet* ("The crisis readiness in society- Strengthened cooperation for increased security") describes some of the government's strategies for crisis readiness. The special ability of organising support, search and rescue, health care, water purification and supplying ICT tools are mentioned. Also some discussion of international cooperation, harmonization between sectors and IT-security are present.

The government bill *Ett sammanhängande system för geografisk miljöinformation* ("A cohesive system for geographical environment information") proposes that geographical information should be made available to the public via different information and communication technologies. New technologies are related to something called *e-förvaltning* ("e-administration") where new tools are applied to administration and electronic communicative infrastructures.

The government bill *Aktieägares rättigheter* ("The rights of shareholders") states that there should be *no* judicial barriers to prevent the use of ICT:s in meetings of company shareholders.

Annual EU-report
The EU report this year continues the discussion of key points of ICT implementation in the European union. It is noted that after 2010, the union will need a new ICT strategy that will replace the current *i2010-initiative*. The commission has constructed new focus areas which will be discussed and evaluated. There will also be a continuation of implementing ICT into the common European judicial system as well as in the health care sector (*eHealth*).

Annual budget
Area 5 discusses ICT in its relation to issues regarding international relations. Two different issues are discussed: First, how ICT can help Sweden become more "visible" on the global arena. Second, ICT is seen as providing new ways of expression and it is vital to discuss how basic human rights interact with this development. Sweden will assume a leading role in international discussions.

Area 7, once again stresses the significance of a technological approach to foreign aid. Further effort in supporting ICT will yield an increase in entrepreneurship, development, growth and knowledge etc.. ICT can also be used to combat corruption in aid receiving countries.

In area 9, mentions a new *national eHealth-program*, described earlier. The efforts to support electronic communication for the disabled as well as IT in elderly care will also continue.

In area 16, it is noted that application to engineering- and ICT programs have increased. A recent report has been published and the government follows the development with interest. Just as the previous years, the need for electronic communication systems between universities as well as promoting distance education are also addressed.

Area 22, states that Sweden is still at the forefront in ICT use, but women are still under represented in the ICT sector. Focus on the politics will continue to be on improving access to ICT services,enhancing use of technology for companies as well as continue to improve access to safe broadband connections for all regions.

4.13: 2011

- Number of studied documents: 12
- Government bills: 10   Written communications: 2

Summary

One interesting document during this year is the written communication *Riksrevisionens granskning av IT inom statsförvaltningen och statliga IT-projekt* ("The Swedish national audit office's examination of IT in government administration and state IT-projects"). The audit office concludes that correct use of outsourced IT solutions can have positive effects. But there exists several shortcomings in the country, such as lack of knowledge and follow up on important information of proper outsourcing of IT systems. The report mainly focuses on outsourcing in administration as well as an examination on IT projects that have been over budget.

International cooperation and Sweden's role in global cooperation efforts are also in focus. Two separate government bills deals with cooperation between the European union and specific regions in the world (see below). ICT is seen as a valuable component towards cooperation regarding development in the world. In the budget-proposition, specific discussions of Sweden's role can be found: In *area 7*, new technologies can be used to promote democracy, rights for women, health and education, freedom of speech as well as basic human rights. *Area 5* states that Sweden will still play a large part in the effort of discussing how new ICT tools can be integrated in matters regarding human rights and democracy.

In *area 16* the *teknikdelegationen* ("Technology delegation") has issued a report of their work during the past years and the government has studied it. Further support to education programs will continue in order to to maintain a highly educated workforce, especially in matters of ICT competence.

In the EU-report, it is mentioned that the role of ICT in the European union changed during the last year with new strategies, aims and goals. The European commission have created a new *digital agenda for Europe*, which will replace the previous *i2010*-initiative.

Summary of studied documentation

The first government bill in 2011 *Ramavtal mellan Europeiska unionen och dess medlemsstater, å ena sidan, och Republiken Korea, å andra sidan* ("Framework agreement between the EU on one hand and the Republic of Korea on the other") proposes that the parliament ratifies new agreements in cooperation. It is stated that both parties should acknowledge the role of ICT as an enabler of economic and social development.

The government bill *Ramavtal om partnerskap och samarbete mellan Europeiska unionen och dess medlemsstater, å ena sidan, och Republiken Indonesien, å den andra* ("Framework agreement of partnership and cooperation between the EU and its member states on one hand and the Republic of Indonesia on the other") also states that both parties should view ICT as key part of a modern society for economic and social development.

The government bill *Ändringar i Arbetsförmedlingens och Inspektionen för arbetslöshets-försäkringens registerlagar* ("Changes in the registration legislation for the employment agency and agency of unemployment insurance") notes that the development of information technology has created new needs for protecting personal information and integrity. ICT can also be used by agencies to increase administrative effectiveness, something the government will investigate.

The government bill *Medling och förlikning – ökade möjligheter att komma överens* ("Mediation and conciliation- increased possibilities to get along") states that certain new EU directives should *not* in any way prevent the use of modern communication technologies in the mediation process.

The written communication *Riksrevisionens granskning av IT inom statsförvaltningen och statliga IT-projekt* ("The Swedish national audit office's examination of IT in government administration and state IT-projects") provides an examination of IT made by the Swedish national audit office.

In the government bill *Stärkt konsumentkontroll för utvecklad elmarknad och uthålligt energisystem* ("Strengthened consumer control for a developed electric market and sustainable energy systems") ICT is only discussed briefly when discussing so called "*smart grids*" which can provide better information for both consumers and producers.

In the government bill *Enklare avbetalningsköp m.m.* ("Easier hire purchases etc.") the government states that electronic signatures (for example E-legitimisation) could be used in the processes of transactions and that new communication technologies can be used in the transaction processes.

Annual EU-report
In this year's report, new aims of European ICT policies are described and discussed. The continuation of integrating ICT into the European judicial system, cooperation against IT crimes and integration of ICT in health care (*eHealth*) are also mentioned.

Annual budget
In area 5, notes the need for utilizing ICT when marketing Sweden on the global arena. The new role of social media is also mentioned, as well as the need for international cooperation.

In area 6, the role of ICT is tied to several aspects of Swedish defence measures: Such as the need for protection against IT-attacks as well as the need for effective ICT systems in matters of defence.

Area 7, notes that Sweden, as a leading nation in ICT, can aid nations with their development in an effort to reach global development goals. They also note the importance of the emergence of new media which can often make global humanitarian work more efficient.

In area 16, the recent initiative of promoting application to ICT education programmes is discussed. The role of distance education and communication systems for universities are also mentioned.

4.14: 2012
- Number of studied documents: 12
- Government bill: 8   Written communications: 4

Summary
During 2012, two different documents dealt with the matter of Swedish research and how ICT relates to the subject. The government bills *Forskning och innovation* ("Research and innovation") and *Forskning och innovation för ett långsiktigt hållbart energisystem* ("Research and innovation for a long term sustainable energy system") argues that ICT research is an important issue in a modern society. It is noted that the private research sector of ICT has experienced a small decline between 2007 and 2009. However the overall situation of ICT research in the country is still strong.

This year's EU report mentions the new ICT agenda constructed by the European commission called *eGovernment action plan 2011-2015*, which will act as a point of reference for further European ICT policies. The government notes that Sweden has taken an active role in this process.

Summary of studied documentation

The first document studied in 2012 is the government bill *Utlåning till Irland* ("Lending to Ireland") argues that the previous growth in Irish economy was due to many different reasons such as a prioritisation of ICT development in the country.

The government bill *Nya regler om prospekt* ("New rules on prospectus") mentions that effective use of new ICT tools, can increase transparency of processes and make them more effective.

In the written communication *Biståndets resultat- tema demokrati och mänskliga rättigheter* ("The results of international aid- Democracy and human rights") it is stated that Sweden will strive to aid the spread of ICT to strengthen freedom of speech and human rights in developing countries.

In the written communication *Genomförandet av samstämmighetspolitiken för utveckling* ("Implementation of the consensus politics regarding development"), ICT is described as a useful tool for promoting equality between men and women via trade and increased spread of technology.

In the government bill *Forskning och innovation för ett långsiktigt hållbart energisystem* ("Research and innovation for a long term sustainable energy system") the government describes some of the aims and guidelines for the research in the energy sector. Cooperation between key agencies in important areas such as ICT research, is seen as key.

The government bill *Forskning och innovation* ("Research and innovation") goes into great detail regarding the aims of Swedish research and its use in society. Future efforts and investments are needed, especially in health care and space communication technology.

The government bill *Investeringar för ett starkt och hållbart transportsystem* ("Investments for a strong and sustainable transport system") discusses the need for effective use and implementation of electronic communication systems. Some monetary support to remote regions will be structured even though the ICT market will play a part in the effort to spread these new technologies.

In the written communication *Kommunikationsutrustning i fordon* ("Communication equipment in vehicles") the government agues that prohibiting the use of communication equipment when driving is *not* seen as an optimal solution. Focus should instead lie in educating and informing the population in safe use.

Annual EU-report

In this report, the government addresses new changes in the structure of the European ICT strategies. Other important areas of ICT cooperation are among other things a discussion on net-security issues, discussion of the protection of IT infrastructure, net-neutrality and a trans-European telecommunication net. Just as previous year focus lies also in European cooperation in preventing IT-crime as well as the use of ICT in health care (*eHealth*).

Annual budget

Area 6, follows more or less the same structure as last year: It stresses the need for effective communication systems to allow effective coordination and direct actions in cases of emergency as well as addressing the matter of information security and the need for international cooperation.

Area 7, notes the rise of ICT as vital for the process of democratization in the world. Here the recent events in the middle east and north Africa are noted as clear examples of this, as well as the overall increase of use of digital media in the world. Sweden will strive to support ICT initiatives abroad as it can support areas related to human rights, democracy and freedom of speech.

Area 16, states that within cooperation of research within the European union, Sweden has a high participation in areas regarding ICT due to extensive knowledge in the area. Just as previous years, distance education and the electronic communication systems for universities still considered important by the government.

4.15: 2013
- Number of studied documents: 9
- Government bill: 6   Written communications: 3

Summary

During 2013, one interesting issue in society turned up that have been somewhat absent during the previous years: Namely the matter of sexual abuse via use of ICT tools. Even though some documentation may have touched upon the issue briefly, none has been solely dedicated to the issue. The government bills *Stärkt skydd för barn mot sexuella övergrepp* ("A stronger protection for children against sexual abuse") and *En skärpt sexualbrottslagstiftning* ("A tightened sexual crime legislation") analyse both how ICT can be a factor in the criminal act but also how different technologies can be an aid when sentencing perpetrators. For example, it is mentioned that new ways of communicating, such as chat-rooms or social media can often be used as tools for committing these types of crimes. According to *En skärpt sexualbrottslagstiftning* ("A tightened sexual crime legislation"), these new tools must therefore be analysed by for example discussing the issues in schools and including parents in the discussion. Both document share the opinion that certain technologies, such as video conferencing systems, can be extremely useful in courts, as victims of sexual abuse might not be able to be physically present.

Another common topic during 2013 is the matter of international cooperation regarding ICT. These types of association agreements between the European union and a specific region/country have been common during the entire study. These two government bills (see below) sees that the spread of ICT and the exchange of knowledge is of high importance in the world. Standardisation, spread of new technology, research, bridging the "digital divide" as well as cooperating on issues of security and preventing criminal activities, are seen as important areas. Many of these topics and focus areas have been common themes in similar documents before, as well as in overall Swedish ICT policies on an international level.

But perhaps one of the more interesting discoveries during 2013, is the the lack of inclusion of the annual budget-proposition. Reasons for this absence can be many and will be discussed in the latter part in the next chapter.

Summary of studied documentation

The first document studied this year, is the the government bill *En skärpt sexualbrottslagstiftning* ("A tightened sexual crime legislation"). Here, ICT is defined as a potential tool for these types of crimes. The use of ICT in child pornography is also addressed from a legislative standpoint, noting that new ICT:s play a role in this criminal activity as well.

In the government bill *Ramavtal om partnerskap och samarbete mellan Europeiska Unionen och dess medlemsstater, å ena sidan, och Republiken Filippinerna, å andra sidan* ("Framework agreement of partnership and cooperation between the EU and its member states one one hand and the republic of the Philippines on the other") it is argued that both parties should see ICT as a key part in modern life which is vital for both social and economical development.

A similar government bill called *Ramavtal om partnerskap och samarbete mellan Europeiska Unionen och dess medlemsstater, å ena sidan, och Socialistiska republiken Vietnam, å andra sidan* ("Framework agreement of partnership and cooperation between the EU and its member states on one hand and the Socialist Republic of Vietnam on the other") has the same aim as the previous document as a way for the parliament to ratify new EU strategies of cooperation.

In the government bill *Tolkning och översättning i brottmål* ("Interpretation and translation in criminal cases"), communication technologies such as video conferences, phones and the Internet is seen as acceptable when interpreting in a court of law. This should be possible unless physical presence is required.

More focus on ICT this year can be found in the government bill *Intelligenta transportsystem på vägtransportområdet* ("Intelligent transport systems in the road transport area"). The bill discusses the nature of so called "ITS", which is an abbreviation for Intelligent transport system(s). These will fuse electronic communication and information technology. The government sees that this may prove useful to both general effectiveness in the transport sector as well as to the environment as a whole.

The written communication *Riskrevisionens rapport om effektivitet i svensk rymdverksamhet* ("National audit agency's report on efficiency in Swedish space activity") notes that telecommunication via satellites is a key component that requires an effective space infrastructure. With this in mind the government states that a strategy plan for Sweden's activity in space, will be established.

The government bill *Stärkt skydd för barn mot sexuella övergrepp* ("A stronger protection for children against sexual abuse") states that sexual abuse and exploitation should be met by deterrent and proportional punishments, especially the crimes that are conducted via ICT, for example through social media and chat-rooms.

In the written communication *Ett värdigt liv- Äldrepolitisk översikt 2006-2014* ("A worthily life- Elderly political overview 2006-2014") it is stated that ICT can help make the lives of many elderly people easier and strengthen their independence. The text also makes a distinction between IT and ICT, noting the incorporation of a communicative perspective in ICT.

Annual EU-report
In this final EU-report, the government accounts for many of the key issues of ICT mentioned in previous reports during the years of this study: A continuation of promoting net-security, and regulations in telecommunications are addressed. Other important issues are proposed cooperation in ICT between the EU and the USA as well as integration of ICT in education and the health care sector (*eHealth*) .

Annual budget
No *direct* references to communications technologies or ICT, were mentioned in the budget-proposition this year and could therefore not be included in the study.

5. Discussion

In this chapter I will try to discuss some of the major findings in this research and how they may fit into a general scientific discussion on information- and communication technologies. The discussion will also relate to general aspects of previous research on the subject.

First, there is need of a general discussion of *ICT definitions* in the documentation which were examined in this research paper. It is clear that the government retained a rather *idealistic* notion of ICT in society: ICT was described as something that will not only change our society, but also ourselves and the lives we live. These idealistic visions of the future were one criticisms of previous research, as it could be seen as not as connected to actual use and implementation of ICT in Swedish society (Olsson, 2006: p. 623, Hall & Löfgren, 2004: p. 156). One of Olsson's key conclusions in his study was that the original ICT policy described in the early stages of the millennium, was often more idealistic than practical: Policy makers are, according to him , unaware of citizens' everyday lives (Olsson, 2006: p.623). Whether the continued ICT policies have remained too idealistic than practical remains unanswered in this study, but is nonetheless important to discuss. But its clear that ICT was seen as a vital tool for reaching this ideal society.

But perhaps this notion of idealism is a natural effect of how the Swedish political system works: Most government document can't go into detail of every single issue in society, instead some general discussions are perhaps unavoidable. When the government states that Sweden should strive to reach an information society where all citizens can participate, they might have to use very broad definitions and strategies, that many *might* interpret as too vague or idealistic. As seen in several documents, in particular the budget propositions, the government addresses general concerns of the ICT situation and then argued that further responsibilities and practical initiatives should be put on different agencies or interest groups. But since the documentation from these agencies are not a part of this study, we can only get a description of their work from a third party (in this case the government). More research into this issue can further help us understand how idealistic policies can effectively be integrated in Swedish society, and the possible effects this may have on both use and outcomes of ICT integration. A key factor that characterises this idealistic vision of ICT integration in Swedish society is the notion of *e-democracy.* As we have seen in this paper, several instances have occurred where the prefix "e" has been used in nouns, where new forms of governance via ICT are described, a notion shared by Bannister & Connolly: The "e"-prefix has thus been added in discussions on government, democracy, commerce and politics etc. (Bannister & Connolly, 2012: p. 3). This notion of e-democracy, has been a key point both directly and indirectly in the studied documentation. Most documents view this new e-democracy as a vital complement to "regular-" and future democratic procedures. In other words, they will enable new forms of democratic dialogue and participation that previously were more difficult due physical limitations. The notion of a new structure of democracy is, in a way, shaped and dependent on both access and knowledge of new ICT. The issue at hand, is how the ideals of a new society come into play in practice. It can be questioned if citizens actually use these new technologies to enhance the democratic dialogue, or if they instead use new technologies for other, more pressing, things in their lives (which will be discussed in the closing sections of this chapter).

Another important part of *ICT definitions*, is the issue of using different terminology to describe similar societal factors. In the documentation studied for this research paper, several different terminologies were used to both directly and indirectly to describe ICT. Some direct specific mentioning of ICT were found, while others instead used terms like information technology or communication technology. The last term was also further divided into *telecommunication* and *computer communication*, a distinction that is, according to the ITU, common in the ICT service sector (ITU, 2012: p. 128).

Thus, a multitude of different terms were used, in order to cover different areas of society. This created an issue with the research itself: If I had focused *only* on direct quotations mentioning ICT, this paper would not only be much shorter, but also missing some vital discussions of ICT. Since a lot of ICT discussions were indirect (as some documents used other terms to describe it), the analysis thus became broader and covered more factors of society.

Another minor issue of terminology, is the different use of the Swedish words *teknik* and *teknologi*. As previously stated, there is a clear grammatical distinction between these two words in the Swedish language. They are however, often used to describe the same thing in every day speech (Lunell, 2011: p.19). As described in the previous sections, the preferred term in the documentation was the word *teknik*, meaning the actual tools used for information and communication. If the difference in terminology is due to actual intentional terminological differences or just unintentional is however unanswered in this study. To fully understand this issue we should perhaps go deeper into the actual use of the words and compare them to their meaning, or in some way get the opinions of the politicians who wrote the documents. This issue is perhaps not the most important part of ICT, but could still be an interesting point for more extensive linguistic research.

What this means, is that due to the overall complex nature of ICT from a definition stand point, this *might* create issues of understanding and ultimately how ICT is implemented in society. It could be argued that due to a difference in terminology, it can be difficult to get a clear overview of the situation by "regular" citizens. Since there does not exist a single solitary definition of ICT, interested citizens must try to view the issue from different viewpoints. This was a common theme in this paper, as I used several different search words to find the documentation for this research paper. As can be seen in the appendix section of this paper, many papers used different terminology to describe similar developments in society. Since the overall integration of technology are complex and consisting of many different factors that often work in conjunction with each other, a broad viewpoint may be required to understand ICT (Lin, 2003: p. 346-347). Due to the multitude of different ICT definitions, this *might* cause a gap between theory and practice. If there exist different definitions with different interpretations, how can they effectively be integrated into society and yield the benefits described earlier? Maybe this is natural, since difficult and complex issues often require different definitions depending on the aims and methods of implementation. However, one of the conclusive remarks made by Bannister & Connolly in their study, is the importance to maintain a clear terminology both by academics as well as politicians (Bannister & Connolly, 2012: p. 20). Due to the dynamic nature of ICT, there is perhaps need of a continuous discussion of the issue. The tools we use tomorrow might look very different from those we use today, and in order to be able to use and understand them, it could be argued that we should strive to be able to *define* them. Whether the different terminologies have had a negative impact on Swedish ICT policies is however a more complicated question. It is clear that there exist a multitude of terms, but this research paper can not conclude how this has affected overall methods of use and implementation. More research can further analyse the situation and come to a more definitive conclusion.

Most focus in this discussion should perhaps be on actual *ICT implementation* and strategies used in the strive towards the creation of a modern information society. As seen in the previous chapter, we can conclude that the government has in *very broad* terms sought to implement ICT on a few major levels: Efforts to enhance infrastructure, safety, trust and accessibility of ICT as well as different initiatives to improve knowledge and competence in ICT use. These initiatives can be seen as aiming to overcome obstacles, such as those described by Olsson et al. (see chapter 2), which he argued could inhibit future ICT developments. (Olsson et al., 2003: p. 358-359). This focus on the creation of an information society is also very similar to the definition of ICT evolution described by the ITU (ITU, 2012: p. 16).

ICT outcomes are therefore dependent on effective ICT infrastructure, ICT use (intensity) and ICT capabilities (skills). These factors are all, according to the ITU, vital for reaching a modern information society. These aspects of ICT evolution have been seen in most documents in this study, as focus has been on both infrastructure development and an effort to help citizens to utilize new tools for communication and information. This will in turn yield benefits such as improving quality of life for citizens, enabling dialogue and expression and promoting growth and productivity. Regarding ICT infrastructure in Sweden, we can clearly see that there have been a positive development regarding both access and quality. Studies by the ITU and the Swedish statistic agency (SCB) point to the fact that Swedish access to high speed Internet connections, as well as other electronic communication systems, are among the most developed in the world, along with other Nordic countries (SCB, 2013: p.60 & ITU, 2012: p.20). So when *just* focusing on access and quality of ICT tools, the development in the recent decade has been largely positive. This is, according to the ITU, due to successful broad band policies in Sweden (ITU, 2012: p. 20). ICT infrastructure has also been dependent on both support by the state (via monetary support to different regions) as well as private forces in the ICT market. As previously mentioned, the different Swedish governments have in different documentation, consistently seen Sweden as a forerunner in ICT infrastructure and integration.

So its clear that Sweden has access to some of the most technologically advanced tools for information and communication, something the different governments were often keen to point out. The issue at hand is that even though access has increased to almost 100%, some groups in society have not been fully integrated. Two groups in particular are singled out as groups that need more attention: Elderly people and people with disabilities. Recent research by SCB (2013), argues that elderly people are still left largely outside the development, even though there are a small positive development. SCB has also found correlations between high ICT use and education, noting that people with higher education tends to use Internet to a higher extent (SCB, 2013: p. 10-15). In the studied documentation we have seen several initiatives to promote participation in the information society for these groups. Effort focused on ensuring access to new technologies, assisting the learning process and motivating why these new technologies are useful, are seen as key: Our current IT-minister Anna-Carin Hatt, acknowledges that these two groups as currently at a disadvantage. But she points out several initiatives and programs intended to further help these groups take advantage of new technologies[5]. Here education is seen as key, as the tools for information and communication are already available, but the skills and motivations are lacking. One other group, that could be important to mention as well, are immigrants. It was rather clear that the two previous groups were most often mentioned when discussing the digital gap and potential use of ICT. Immigrants were mentioned in certain documents, *but not at the same extent*. This could be important to note as immigrants might encounter both language barriers as well as culture differences which might create problems in social interactions. If there exist technological barriers as well, this might increase the gap even further. This can in turn make it even more difficult to *truly* create an information society for all individuals in our country.

This digital gap becomes an issue if we should see new ICT:s as either *substitutes* or *additions* to our regular activities, such as paying bills, booking flight tickets or participating in a political discussion. Should new ways of communicating and gathering information replace the older ways, or should both methods be available? Our current IT-minister states that new technologies should be seen as additions and not replacements. This is perhaps important as some citizens voluntarily stays outside the information society and it could be problematic if they instead are forced to adapt. In the article mentioned above, some of the older interviewees were reluctant to use these new tools while some adapted and tried to learn how to use them, even if they never had used the Internet before.

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5   http://www.gp.se/nyheter/goteborg/1.2295591-hatt-fler-aldre-ska-bli-digitala March 2nd 2014

Once again the notion of education and training is key, something that many of the studied documents also pointed out. But just as the telephone was ultimately integrated in society after a while, so might new technologies. The challenge of the government is perhaps to bridge potential gaps in our new information society, so that all people can participate whether they use ICT or not. But at the same time technology tends to become obsolete sooner or later, and our new tools are perhaps not any exceptions. So even though it could be problematic if certain groups are excluded, this is is perhaps unavoidable as older technology might not have optimal economical effects and practical uses. Perhaps the role of the government is therefore to monitor technological transitions, to keep negative effects at a minimum and protecting the quality of life for all citizens.

What this ultimately means, is that the government *must* keep a close eye on practical uses and implications of ICT integration, via constant feedback from agencies, citizens and interest groups. But this is problematic, if we study one of Olsson's (2006) conclusions found in his research paper: The government is, according to him, keen to establish idealistic visions of ICT integration and all the positive benefits they will bring. But they often lack proper knowledge of practical ICT use by Swedish citizens, who often define and use ICT in a different manner (Olsson, 2006: p. 622-623). The different Swedish governments have pointed out that ICT should help to promote quality of life for citizens as well as enabling them to become participating democratic citizens. But, perhaps citizens focus on using ICT to assist them in basic every day activities such as paying bills and less on enhancing the democratic structure of the country (similar to Maslow's hierarchy of needs)? Perhaps this ideal vision of citizens using ICT to enhance democracy, is only applicable for a small group in the country, who can allocate the time and effort to the process. Olsson's study saw that many individuals from the so called "working class" often used ICT for many other things, other than living up to idealistic visions of a new information society. SCB also notes that higher educated individuals tend to use ICT to a higher extent than those with lower levels of education (SCB, 2013: p. 10). Future research similar to Olsson (2006), where actual interviews with citizens from different social groups are present, can help us understand how ICT visions come into practical effect as they are applied into society. This paper has only focused on the visions and aims of the government and in order to fully understand the issue of the possible transformation into an information society for all, we must also receive opinions from those who practically use ICT.

If this discussion instead shifts focus to *practical strategies* of ICT implementation found in the documents, several interesting things can be found. These ICT strategies can be related both to previous research as well as to general considerations of a possible creation of an information society for all. In general, we have seen both "*hard*" and "*soft*" strategies for ICT implementation in the country. According to Hall & Löfgren, hard policies are defined as legislation or direct support, while soft policies are defined as dialogues and "governing through visions" (Hall & Löfgren, 2004: p. 150 & 153). In a way, the overall aim of creating an information society for all can be seen as a soft policy that has permeated the entire ICT policy process between 2000 and 2013. Many of the different side aims to this policy have also had these characteristics. However, these aims are often dependent on direct "hard" policies, which often have direct aims and methods in society. Take for example the constant notion of ICT integration in the educational sector. Here, direct measures have been taken to integrate ICT, as different projects and funding efforts have been initiated. It is therefore not too surprising that ICT was mostly mentioned in the educational area of the budget proposition. Just as Leu et al. discusses, education and ICT are often interconnected, as the ability to read and write may become more important in the information age (Leu et al, 2004: p. 1590-1591). Thus, if a government focuses on enhancing ICT use in schools, it can hopefully create a future population which can more effectively use ICT and in turn reap many different benefits. The notion of promoting women in ICT education programs was also an interesting initiative, which directly addressed gender differences regarding ICT use in Swedish society.

Many of the different Swedish ICT policies also focused on the notion of helping other nations in the world to develop their own ICT sectors. Most documentation saw that Sweden, as a high-tech nation, should be a driving force for helping others. Even though this aim might seem positive, it can however be a problem on two different levels. There is a risk that we can become to confident in our ICT use, that we might not see issues and problems as objectively as we might do. Direct measures might therefore come to late and not have the results we originally anticipated. As technological development can be seen as something that is in constant motion, we must constantly evaluate our relationship to it. Secondly, international cooperation can become problematic if we still have the issues of *e-integration*, mentioned earlier. If we have not yet integrated all citizens in our information society, how can we effectively help others to do the same?

An issue that were covered in the beginning of this research paper, which was rather missing in the research was the matter of cyber-bullying. I assumed that the government might not take any direct actions in the matter, instead shifting responsibilities to parties that might have more direct influence on the issue. But this lack of focus on the matter can become a problem in the future, if the trend of online bullying grows. As more and more people use these technologies, the ramifications of its use might not be understood by all users. As technology develops, this might become a larger problem in the future. There is however a possibility that I might have missed it in the documentation, or it could have been covered in documentation that were not part of the study.

One key factor that all these different view points share, is that to some extent it is a political issue. However, political issues tends to be different depending on who's opinion you study and who you ask. In conclusion, we can clearly see that the Swedish governments have played a key part in ICT implementation. It can also be said that even though Sweden is ranked at the top in global ICT implementation, some issues remain, especially in the possible exclusion of some citizens. A mixture of policy making and direct measures have characterised the development and it has permeated most of the different areas of Swedish society. The ideological question that immediately surface is however this: *How much responsibility should and could the government have over ICT implementation?* On the political spectrum there are those that tend to argue that the government should have more direct responsibilities, while others tend to argue that the government should have fewer. Take for example the issue which was discussed earlier: A few people *voluntarily* remained outside the growing information society, especially older citizens. Should this be seen as a failure by the government, or a natural effect of integration of new technologies? How much responsibility should lie in the political sphere and how much on the individual? The matter of political differences is also tied to the relationship between the state and the market in ICT development and integration. Depending on were one stand on the political spectrum, the state and the free market might be given different roles, methods and aims which might affect perceptions of ICT policies.

Ultimately we also must ask: *Have we reached an information society for all yet?* The clear answer to this question is *no*. We have come a long way, but total integration of all citizens has not yet been reached. But the phrasing of the question should perhaps also be discussed: When we mean "all" do we mean "all who want" or "all who should". In other words, how mandatory should inclusion in this new society be? As discussed earlier, new ICT could be seen as either substitutes or additions to traditional information and communication channels in our current society. Even though most of us use them, it can become problematic to exclude individuals who neither wants or knows how to participate. The issue of implementation of new technology against old ways of life is a complex issue and something that requires constant collaborative discussions and evaluation. Once again, this becomes an ideological question of the individual versus the state and this relationship has often been a hot topic in political science. But it is an issue that we citizens, as well as our politicians should be aware of, as it is a vital part of ICT and how we ultimately adapt and use it.

As a final part of this discussion, it is vital to have a short discussion of how we should view the things found in this paper, i.e. *How should we treat the results of this research paper?*

As already stated, perhaps the most glaring issue with this research paper is that it could be seen as a bit to general and not as in-depth as many would perhaps prefer. The fact that some amount of text had to be ignored due to time constraints as well as due to previously described limitations, must be acknowledged. This is perhaps due to an underestimation from my part, as I (perhaps a bit naïvely) assumed that ICT would not be as commonly discussed as it actually was. What this ultimately means is that I had to choose which parts of the text that should be mentioned in the paper and which parts that should be left out. I can therefore assume that many readers will view some of the decisions in this paper as perhaps a bit to *arbitrary*. I acknowledge this view, but my intention has been to try to be as objective as possible during the process. I have therefore provided the reader with the opportunity to create his/her own opinion, as I have provided links to the specific documents at the end of this paper.

Apart from a general discussion of arbitrariness, the matter of issues with the method must also be addressed. Since it is almost guaranteed that I did not include every single document which discussed ICT in any way in this paper, this has to be taken into consideration. Errors in the search engine itself could exclude documents that made *explicit* mentioning of ICT. Other documents could discuss ICT without using the exact term, thus being excluded by the search engine. One prime example of this is the fact that the documentation from the budget-proposition in 2013 was absent in this paper. This was likely due to that no explicit mentioning of either communication technologies or ICT were present. The matter was most likely addressed and discussed, but since it is likely that terms such as "digital communication" or "computer communication" were used instead, the search engine most likely excluded these documents.

What these two aspects of the research (*arbitrariness* and possibility of *exclusion* of documentation) ultimately means, is that we must view the results and conclusions of this paper in a different light. As mentioned previously in this paper, we should view the results and discussion points merely as providing an overview of general tendencies in ICT implementation in Sweden. Due to the two mentioned drawbacks, we can not effectively draw any direct conclusions. This is perhaps not even a possibility, due to the allocated time and scope of this research. The amount of data used in this research and the information they provided can not provide a 100% coverage of ICT in the country. For possible future research, where more time and resources can be allocated, a more conclusive examination of the issue can hopefully be achieved.

It is however easy to see that this research would be difficult to create without access to certain ICT tools for us citizens. By using the Internet and web services, the Swedish democratic system allows citizens not only to access information, but it also allows them to communicate with representatives from the state as well. If these types of documents had not been accessible on-line, this kind of research paper would be more difficult to make. The growth of ICT in Sweden has therefore perhaps allowed this development. This is also interesting, as the documentation in the earlier years of the study were often not available in an "easy- to-download" format, thus complicating the data gathering in the earlier stages of the study. This problem disappeared in the later years of the study. The reasons for this *could* be related to development and new knowledge related to publishing of government document, but this is a mere speculation at this point however.

It could therefore be argued that as democratic citizens in a complex world, we should be aware of these new tools for information and communication. Especially since they allow us to gain knowledge of political issues and promotes transparency and democratic dialogue in our society.

As seen in this paper, this access is however dependent on several societal aspects which both previous research, as well as different government documentation point to. Citizens require *access* to different ICT tools which are dependent on a *safe and efficient* ICT infrastructure. Citizens should also be *informed* that these types of tools exist and what they can contribute both to society and its citizens. However citizens does not only require access, but also *knowledge* in its use as well. As we have seen, certain groups in society are at a disadvantage even today, and the question remains how to fully integrate these individuals into the brave new world of information and communication technologies.

6. Conclusions

In conclusion we could ask ourselves: *What have we learned?* This question is rather difficult to answer, especially since there are so many different factors present. This paper has studied the development of different information and communication technologies via the lens of the different Swedish governments. It is easy to see that ICT is often a multidimensional issue integrated into many different sectors of Swedish society. The paper has described how ICT is defined, but also how it is sought to be integrated in society via both direct and indirect measures. But it is still difficult to say if these measures have been enough: Even though our access to different ICT tools are at an all time high, we have perhaps not truly reached an information society for all. Some groups are still a bit left out and even though the situation has improved, there is still room for improvement.

Future research can therefore hopefully go into greater detail than I have, including a greater amount of documents and variables, in order to create a better understanding of ICT development during the past decade. This research has merely scratched the surface of the nature of ICT in Sweden and provided some general tendencies in its development. By studying data from sources outside the Swedish government, we can potentially receive a wider overview of the issue at hand. A continuation of similar research can follow our ICT use and the development of technology. The tools we use for gathering information and communicating with others are *most certainly* destined to change. *The question is how? And to what?*

Hence we come full circle: In the beginning of this research paper, Mr Arthur C. Clarke predicted a world, 50 years in the future. What would he think of the development that will take place in the coming half a century, up until the year 2064? What can *we* predict of that distant time? What tools will be used and what impact will these technologies have for our way of life and our relationship with other people?

Perhaps uncertainty of the future, is the only thing that is really certain.

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Last updated March 19th 2014

Documents used in the study

Here follows a complete list of the documents that were studied in this research paper. They will be categorized in chronological order from 2000 and forward up until the end of 2013. It is possible for readers who study this paper in a PDF-format (or similar) to click the name of the document and via a web-link reach the specific document on the website of the Swedish parliament. There, the reader can study the documentation and critically compare there own thoughts with those in this paper. Every single document will also have a short summary of which key word(s) were used in the documentation. Some documents only used one or two words, while a few others used them all. In the table below the four different categories are translated into abbreviations that will be used in the list below.

Relevant search term	Abbreviation
Kommunikationsteknik	KT
Kommunikationsteknologi	KTI
Informations- och kommunikationsteknik	IKT
Informations- och kommunikationsteknologi	IKTI

In the following list every single document will have this box under its name. It will indicate to the reader what type of document it is and which terminology was used in them:

Type	Date	KT	KTI	IKT	IKTI
GB= Government bill WC= Written Communication	The date will indicate *when* the document was handed in to the parliament (mentioned in the documentation itself)	The term: Kommunikations-teknik" was used in the document	The term: Kommunikations-teknologi" was used in the document	The term: Informations- och kommunikations-teknik" was used in the document	The term: Informations- och kommunikations-teknologi" was used in the document

If the document was not available in a PDF-format and thus required a conversion into said format, an asterisk (*) will follow after the name of the document. If there is *no* asterisk following the name of the document, the website provided a ready PDF-file for download.

2000

1999/2000:86 Ett informationssamhälle för alla *

Type	Date	KT	KTI	IKT	IKTI
GB	March 28th	X		X	

1999/2000:135 En förnyad lärarutbildning *

Type	Date	KT	KTI	IKT	IKTI
GB	May 25th	X		X	

2000/01:3 Forskning och förnyelse *

Type	Date	KT	KTI	IKT	IKTI
GB	September 7th	X		X	

2000/01:1D13 Budgetpropositionen för 2001 (Area 7) *

Type	Date	KT	KTI	IKT	IKTI
GB	September 20th	X		X	

[2000/01:1D22 Budgetpropositionen för 2001](#) (Area 16) *

Type	Date	KT	KTI	IKT	IKTI
GB	September 20th		X		X

[2000/01:1D25 Budgetpropositionen för 2001](#) (area 19) *

Type	Date	KT	KTI	IKT	IKTI
GB	September 20th	X		X	

[2000/01:12 Beskattning av utländska nyckelpersoner](#) *

Type	Date	KT	KTI	IKT	IKTI
GB	September 21st		X		X

[2000/01:25 Lägesrapport i fråga om den ekonomiska brottsligheten](#)

Type	Date	KT	KTI	IKT	IKTI
WC	October 26th	X		X	

2001

[2000/01:72 Vuxnas lärande och utvecklingen av vuxenutbildningen](#) *

Type	Date	KT	KTI	IKT	IKTI
GB	February 22nd	X	X	X	X

[2000/01:90 Nordiskt samarbete 2000](#)

Type	Date	KT	KTI	IKT	IKTI
WC	March 8th		X		X

[2000/01:94 Radio och TV i allmänhetens tjänst 2002-2005. 2000/01:94](#) *

Type	Date	KT	KTI	IKT	IKTI
GB	March 15th	X		X	

[2000/01:93 ILO:s konvention och rekommendation om de värsta formerna av barnarbete m.m. Prop. 2000/01:93](#) *

Type	Date	KT	KTI	IKT	IKTI
GB	March 20th	X		X	

[2000/01:112 Reformeringen av domstolsväsendet - information och uppföljning av handlingsplanen](#)

Type	Date	KT	KTI	IKT	IKTI
WC	March 22nd	X		X	

[2000/01:122 Sveriges tillträde till Romstadgan för Internationella brottmålsdomstolen](#) *

Type	Date	KT	KTI	IKT	IKTI
GB	April 11th	X		X	

[2001/02:6 Partnerskapsavtal mellan Europeiska gemenskapen och dess medlemsstater och staterna i Afrika, Västindien och Stillahavsområdet Prop. 2001/02:6](#)   *

Type	Date	KT	KTI	IKT	IKTI
GB	September 6th	X		X	

2001/02:15 Den öppna högskolan

Type	Date	KT	KTI	IKT	IKTI
GB	September 6th	X	X	X	X

2001/02:1 Budgetpropositionen för 2002 Utgiftsområde 16 Utbildning och univesitetsforskning

Type	Date	KT	KTI	IKT	IKTI
GB	September 20th	X		X	

2001/02:1 Budgetpropositionen för 2002 Bilaga 2 Svensk ekonomi

Type	Date	KT	KTI	IKT	IKTI
GB	September 20th	X		X	

2001/02:30 Berättelsen om verksamheten i Europeiska unionen under 2000

Type	Date	KT	KTI	IKT	IKTI
WC	October 4th	X	X	X	X

2001/02:74 Yttrandefrihetsgrundlagen och Internet   *

Type	Date	KT	KTI	IKT	IKTI
GB	December 11th	X		X	

2002

2001/02:160 Berättelse om verksamheten i Europeiska unionen under 2001

Type	Date	KT	KTI	IKT	IKTI
WC	February 21st	X	X	X	X

2001/02:105 Redogörelse för det svenska ordförandeskapet i Europeiska unionens ministerråd första halvåret 2001

Type	Date	KT	KTI	IKT	IKTI
WC	February 28th	X		X	

2001/02:75 Redogörelse för behandlingen av riksdagens skrivelser till regeringen

Type	Date	KT	KTI	IKT	IKTI
WC	March 7th	X		X	

2001/02:134 Ändringar i konsumentköplagen

Type	Date	KT	KTI	IKT	IKTI
GB	March 7th	X		X	

2001/02:90 Nordiskt samarbete år 2001

Type	Date	KT	KTI	IKT	IKTI
WC	March 7th		X		X

2001/02:150 Lag om elektronisk handel och andra informationssamhällets tjänster, m.m.

Type	Date	KT	KTI	IKT	IKTI
GB	March 14th	X		X	

2001/02:100 2002 års ekonomiska vårproposition

Type	Date	KT	KTI	IKT	IKTI
GB	March 15th	X		X	

2001/02:100 2002 års ekonomiska vårproposition (Appendix 1)

Type	Date	KT	KTI	IKT	IKTI
GB	April 15th	X		X	

2001/02:153 Lotterier över Internet m.m.

Type	Date	KT	KTI	IKT	IKTI
GB	March 21st	X		X	

2001/02:180 Redovisning av AP-fondernas verksamhet år 2001

Type	Date	KT	KTI	IKT	IKTI
WC	May 23rd		X		X

2001/02:187 Sveriges genomförande av EU:s sysselsättningsstrategi

Type	Date	KT	KTI	IKT	IKTI
WC	May 23rd	X		X	

2001/02:188 Utbildning för kunskap och jämlikhet - regeringens utvecklingsplan för kvalitetsarbetet i förskola, skola och vuxenutbildning

Type	Date	KT	KTI	IKT	IKTI
WC	May 23rd	X		X	

2002/03:1 Budgetpropositionen för 2003 Utgiftsområde 7 Internationellt bistånd

Type	Date	KT	KTI	IKT	IKTI
GB	October 8th		X		X

2002/03:1 Budgetpropositionen för 2003 Utgiftsområde 16 Utbildning och universitetsforskning

Type	Date	KT	KTI	IKT	IKTI
GB	October 8th	X		X	

2002/03:1 Budgetpropositionen för 2003 Utgiftsområde 22 Kommunikationer

Type	Date	KT	KTI	IKT	IKTI
GB	October 8th	X		X	

2002/03:1 Budgetpropositionen för 2003 Bilaga 2 Svensk ekonomi

Type	Date	KT	KTI	IKT	IKTI
GB	October 8th	X		X	

2002/03:30 Uppföljning av den Nationella handlingsplanen för äldrepolitiken

Type	Date	KT	KTI	IKT	IKTI
WC	December 12th	X		X	

2002/03:25 Uppföljning av den Nationella handlingsplanen för handikappolitiken

Type	Date	KT	KTI	IKT	IKTI
WC	December 19th		X		X

2002/03:29 Johannesburg - FN:s världstoppmöte om hållbar utveckling

Type	Date	KT	KTI	IKT	IKTI
WC	December 19th	X		X	

2003

[2002/03:90 Nordiskt samarbete 2002](#)

Type	Date	KT	KTI	IKT	IKTI
WC	March 5th	X		X	

[2002/03:76 EG:s bevisupptagningsförordning](#)

Type	Date	KT	KTI	IKT	IKTI
GB	March 6th	X			

[2002/03:93 Vissa frågor inom spelområdet m.m.](#)

Type	Date	KT	KTI	IKT	IKTI
GB	March 13th	X		X	

[2002/03:125 Redovisning av fördelningen av medel från Allmänna arvfonden under budgetåret 2002](#)

Type	Date	KT	KTI	IKT	IKTI
WC	April 3rd	X		X	

[2002/03:100 Ekonomiska vårpropositionen](#) (Appendix 1)

Type	Date	KT	KTI	IKT	IKTI
GB	April 15th	X		X	

[2002/03:122 Gemensamt ansvar: Sveriges politik för global utveckling](#)

Type	Date	KT	KTI	IKT	IKTI
GB	May 15th	X		X	

[2002/03:91 Associeringsavtalet mellan Europeiska gemenskapen och dess medlemsstater och Republiken Chile Prop. 2002/03:91](#) *

Type	Date	KT	KTI	IKT	IKTI
GB	May 15th	X		X	

[2002/03:130 Redovisning av AP-fondernas verksamhet 2002](#)

Type	Date	KT	KTI	IKT	IKTI
WC	May 15th		X		X

[2002/03:108 Europa-Medelhavsavtalet mellan Europeiska gemenskapen och dess medlemsstater och Libanon Prop. 2002/03:108](#) *

Type	Date	KT	KTI	IKT	IKTI
GB	May 22nd	X		X	

[2002/03:129 Arkitektur, form och design](#)

Type	Date	KT	KTI	IKT	IKTI
WC	May 22nd		X		X

[2002/03:99 Det nya Skatteverket](#)

Type	Date	KT	KTI	IKT	IKTI
GB	May 26th	X		X	

[2002/03:135 Behandling av personuppgifter inom socialförsäkringens administration](#)

Type	Date	KT	KTI	IKT	IKTI
GB	May 28th	X		X	

[2002/03:146 Sveriges tillträde till Förenta nationernas konvention mot gränsöverskridande organiserad brottslighet](#)

Type	Date	KT	KTI	IKT	IKTI
GB	June 18th		X		X

[2003/04:1 Budgetpropositionen för 2004 Utgiftsområde 2 Samhällsekonomi och finansförvaltning](#)

Type	Date	KT	KTI	IKT	IKTI
GB	September 22nd	X		X	

[2003/04:1 Budgetpropositionen för 2004 Utgiftsområde 16 Utbildning och universitetsforskning](#)

Type	Date	KT	KTI	IKT	IKTI
GB	September 22nd	X		X	

2004

[2003/04:81 Redogörelse för verksamheten inom Europarådets ministerkommitté m.m. under år 2003](#)

Type	Date	KT	KTI	IKT	IKTI
WC	March 11th		X		X

[2003/04:90 Nordiskt samarbete 2003](#)

Type	Date	KT	KTI	IKT	IKTI
WC	March 11th	X		X	

[2003/04:100 2004 års ekonomiska vårproposition](#) (Appendix 1)

Type	Date	KT	KTI	IKT	IKTI
GB	April 15th	X		X	

[2003/04:129 En svensk strategi för hållbar utveckling](#)

Type	Date	KT	KTI	IKT	IKTI
WC	April 15th	X		X	

[2004/05:1 Budgetpropositionen för 2005 UTGIFTSOMRÅDE 6](#)

Type	Date	KT	KTI	IKT	IKTI
GB	September 20th	X		X	

[2004/05:1 Budgetpropositionen för 2005 UTGIFTSOMRÅDE 9](#)

Type	Date	KT	KTI	IKT	IKTI
GB	September 20th	X		X	

[2004/05:1 Budgetpropositionen för 2005](#) (Appendix 2 Swedish economy)

Type	Date	KT	KTI	IKT	IKTI
GB	September 20th	X		X	

[2004/05:5 Vårt framtida försvar](#)

Type	Date	KT	KTI	IKT	IKTI
GB	September 23rd	X		X	

[2004/05:48 Regeringens handlingsprogram för minskad administration för företagen m.m.](#)

Type	Date	KT	KTI	IKT	IKTI
WC	December 2nd	X		X	

2005

[2004/05:65 Århuskonventionen](#)

Type	Date	KT	KTI	IKT	IKTI
GB	January 20th	X		X	

[2004/05:88 Nya regler om dödförklaring](#)

Type	Date	KT	KTI	IKT	IKTI
GB	February 21st	X			

[2004/05:60 Berättelse om verksamheten i Europeiska unionen under 2004](#)

Type	Date	KT	KTI	IKT	IKTI
WC	March 10th	X		X	

[2004/05:85 Ny aktiebolagslag](#)

Type	Date	KT	KTI	IKT	IKTI
GB	March 10th	X		X	

[2004/05:85 Ny aktiebolagslag](#) (Appendix)

Type	Date	KT	KTI	IKT	IKTI
GB	March 10th	X		X	

[2004/05:80 Forskning för ett bättre liv](#)

Type	Date	KT	KTI	IKT	IKTI
GB	March 17th	X	X	X	X

[2004/05:102 Utvecklingen inom den kommunala sektorn](#)

Type	Date	KT	KTI	IKT	IKTI
WC	May 12th	X		X	

[2004/05:166 Vård i livets slutskede](#)

Type	Date	KT	KTI	IKT	IKTI
WC	May 26th	X		X	

[2004/05:175 Från IT-politik för samhället till politik för IT-samhället](#)

Type	Date	KT	KTI	IKT	IKTI
GB	June 30th	X		X	

[2005/06:1 Budgetpropositionen för 2006 Utgiftsområde 24 Näringsliv](#)

Type	Date	KT	KTI	IKT	IKTI
GB	September 20th		X		X

2005/06:1 Budgetpropositionen för 2006 Utgiftsområde 9 Hälsovård, sjukvård och social omsorg

Type	Date	KT	KTI	IKT	IKTI
GB	September 20th	X		X	

2005/06:1 Budgetpropositionen för 2006 Bilaga 2 Svensk ekonomi

Type	Date	KT	KTI	IKT	IKTI
GB	September 20th	X		X	

2005/06:1 Budgetpropositionen för 2006   (Area 2)

Type	Date	KT	KTI	IKT	IKTI
GB	September 20th	X		X	

2005/06:23 Sveriges handlingsprogram för tillväxt och sysselsättning

Type	Date	KT	KTI	IKT	IKTI
WC	October 13th	X		X	

2006

2005/06:81 Redogörelse för verksamheten inom Europarådets ministerkommitté m.m. under 2005

Type	Date	KT	KTI	IKT	IKTI
WC	March 9th	X		X	

2005/06:110 Uppföljning av den nationella handlingsplanen för handikappolitiken

Type	Date	KT	KTI	IKT	IKTI
WC	March 16th	X		X	

2005/06:139 Nationell IT-strategi för vård och omsorg

Type	Date	KT	KTI	IKT	IKTI
WC	March 16th	X		X	

2005/06:192 Lära, växa, förändra Regeringens folkbildningsproposition

Type	Date	KT	KTI	IKT	IKTI
GB	March 16th	X	X	X	X

2005/06:128 Anpassning till nya EG-bestämmelser om livsmedel, foder, djurhälsa, djurskydd och växtskydd m.m.
(Appendix)

Type	Date	KT	KTI	IKT	IKTI
GB	March 20th	X		X	

2005/06:195 Elektroniska kommunikationstjänster m.m. inom psykiatrisk tvångsvård

Type	Date	KT	KTI	IKT	IKTI
GB	April 6th	X			

2005/06:175 Redovisning av fördelning av medel från Allmänna arvsfonden under budgetåret 2005

Type	Date	KT	KTI	IKT	IKTI
WC	May 18th	X		X	

2006/07:1 Budgetpropositionen för 2007 Utgiftsområde 9 Hälsovård, sjukvård och social omsorg

Type	Date	KT	KTI	IKT	IKTI
GB	October 16th	X		X	

2006/07:1 Budgetpropositionen för 2007 Utgiftsområde 16 Utbildning och universitetsforskning

Type	Date	KT	KTI	IKT	IKTI
GB	October 16th	X		X	

2006/07:1 Budgetpropositionen för 2007 Förslag till statsbudget för 2007, finansplan, skattefrågor och tilläggsbudget m m

Type	Date	KT	KTI	IKT	IKTI
GB	October 16th	X		X	

2007

2006/07:85 Berättelse om verksamheten i Europeiska unionen under 2006

Type	Date	KT	KTI	IKT	IKTI
WC	March 1st		X		X

2006/07:74 Sveriges tillträde till Förenta nationernas konvention mot korruption

Type	Date	KT	KTI	IKT	IKTI
GB	March 8th		X		X

2006/07:128 Ny lagstiftning om offentlig upphandling och upphandling inom områdena vatten, energi, transporter och posttjänster

Type	Date	KT	KTI	IKT	IKTI
GB	June 7th	X		X	

2007/08:1 Budgetpropositionen för 2008 Utgiftsområde 2 Samhällsekonomi och finansförvaltning

Type	Date	KT	KTI	IKT	IKTI
GB	September 20th	X		X	

2007/08:1 Budgetpropositionen för 2008 Bilaga 3 Inkomstfördelning och ekonomiska drivkrafter

Type	Date	KT	KTI	IKT	IKTI
GB	September 20th	X		X	

2007/08:1 Budgetpropositionen för 2008 Bilaga 2 Svensk ekonomi

Type	Date	KT	KTI	IKT	IKTI
GB	September 20th	X	X	X	X

2007/08:1 Budgetpropositionen för 2008 Utgiftsområde 22 Kommunikationer

Type	Date	KT	KTI	IKT	IKTI
GB	September 20th	X		X	

2007/08:1 Budgetpropositionen för 2008 Utgiftsområde 9 Hälsovård, sjukvård och social omsorg

Type	Date	KT	KTI	IKT	IKTI
GB	September 20th	X		X	

2007/08:23 Sveriges handlingsprogram för tillväxt och sysselsättning - Uppföljningsrapport 2007

Type	Date	KT	KTI	IKT	IKTI
WC	October 18th	X		X	

2008

2007/08:85 Berättelse om verksamheten i Europeiska unionen under 2007

Type	Date	KT	KTI	IKT	IKTI
WC	March 6th	X		X	

2008/09:1 Budgetpropositionen för 2009 (Area 9)

Type	Date	KT	KTI	IKT	IKTI
GB	September 22nd	X		X	

2008/09:1 Budgetpropositionen för 2009 (Area 16)

Type	Date	KT	KTI	IKT	IKTI
GB	September 22nd	X		X	

2008/09:1 Budgetpropositionen för 2009 (Area 24)

Type	Date	KT	KTI	IKT	IKTI
GB	September 22nd	X		X	

2008/09:1 Budgetpropositionen för 2009 (Appendix 4)

Type	Date	KT	KTI	IKT	IKTI
GB	September 22nd	X		X	

2008/09:35 Framtidens resor och transporter - infrastruktur för hållbar tillväxt

Type	Date	KT	KTI	IKT	IKTI
GB	September 25th	X		X	

2009

2008/09:85 Berättelse om verksamheten i Europeiska unionen under 2008

Type	Date	KT	KTI	IKT	IKTI
WC	March 5th	X		X	

2009/10:53 En strategi för ungdomspolitiken

Type	Date	KT	KTI	IKT	IKTI
WC	October 22nd		X		X

2009/10:81 Grundlagsskydd för digital bio och andra yttrandefrihetsrättsliga frågor

Type	Date	KT	KTI	IKT	IKTI
GB	December 8th	X			

2009/10:55 En politik för det civila samhället

Type	Date	KT	KTI	IKT	IKTI
GB	November 26th	X		X	

2009/10:34 Sveriges handlingsprogram för tillväxt och sysselsättning - uppföljningsrapport 2009

Type	Date	KT	KTI	IKT	IKTI
WC	October 15th	X		X	

2009/10:3 Tid för kultur

Type	Date	KT	KTI	IKT	IKTI
GB	September 10th	X		X	

2009/10:1 Budgetpropositionen för 2010 (Area 1)

Type	Date	KT	KTI	IKT	IKTI
GB	September 21st	X		X	

2009/10:1 Budgetpropositionen för 2010 (Area 9)

Type	Date	KT	KTI	IKT	IKTI
GB	September 21st	X		X	

2009/10:1 Budgetpropositionen för 2010 (Area 16)

Type	Date	KT	KTI	IKT	IKTI
GB	September 21st	X		X	

2009/10:1 Budgetpropositionen för 2010 (Area 22)

Type	Date	KT	KTI	IKT	IKTI
GB	September 21st	X		X	

2009/10:1 Budgetpropositionen för 2010 (Area 24)

Type	Date	KT	KTI	IKT	IKTI
GB	September 21st	X		X	

2010

2009/10:89 Bäst i klassen - en ny lärarutbildning

Type	Date	KT	KTI	IKT	IKTI
GB	February 4th	X		X	

2009/10:122 Obehöriga transaktioner med betalningsinstrument

Type	Date	KT	KTI	IKT	IKTI
GB	March 4th	X		X	

2009/10:150 Berättelse om verksamheten i Europeiska unionen under 2009

Type	Date	KT	KTI	IKT	IKTI
WC	March 18th	X		X	

2009/10:175 Offentlig förvaltning för demokrati, delaktighet och tillväxt

Type	Date	KT	KTI	IKT	IKTI
GB	March 18th	X		X	

2009/10:129 Att möta globala utmaningar - skrivelse om samstämmighet för utveckling

Type	Date	KT	KTI	IKT	IKTI
WC	March 18th		X		X

2009/10:205 Kontroll av produkter med dubbla användningsområden

Type	Date	KT	KTI	IKT	IKTI
GB	April 8th	X		X	

[2009/10:124 Samhällets krisberedskap - stärkt samverkan för ökad säkerhet](#)

Type	Date	KT	KTI	IKT	IKTI
WC	April 22nd		X		X

[2009/10:220 Betaltjänster](#)

Type	Date	KT	KTI	IKT	IKTI
GB	May 6th	X		X	

[2009/10:224 Ett sammanhängande system för geografisk miljöinformation](#)

Type	Date	KT	KTI	IKT	IKTI
GB	May 27th	X		X	

[2009/10:247 Aktieägares rättigheter](#)

Type	Date	KT	KTI	IKT	IKTI
GB	September 16th	X		X	

[2010/11:1 Budgetpropositionen för 2011](#) (Area 5)

Type	Date	KT	KTI	IKT	IKTI
GB	October 12th	X		X	

[2010/11:1 Budgetpropositionen för 2011](#) (Area 7)

Type	Date	KT	KTI	IKT	IKTI
GB	October 12th		X		X

[2010/11:1 Budgetpropositionen för 2011 Utgiftsområde 9](#)

Type	Date	KT	KTI	IKT	IKTI
GB	October 12th		X		X

[2010/11:1 Budgetpropositionen för 2011](#) (Area. 16)

Type	Date	KT	KTI	IKT	IKTI
GB	October 12th	X		X	

[2010/11:1 Budgetpropositionen för 2011](#) (Area.22)

Type	Date	KT	KTI	IKT	IKTI
GB	October 12th	X		X	

2011

[2010/11:92 Ramavtal mellan Europeiska unionen och dess medlemsstater, å ena sidan, och Republiken Korea, å andra sidan](#)

Type	Date	KT	KTI	IKT	IKTI
GB	March 10th	X		X	

[2010/11:96 Ändringar i Arbetsförmedlingens och Inspektionen för arbetslöshetsförsäkringens registerlagar](#)

Type	Date	KT	KTI	IKT	IKTI
GB	March 10th	X		X	

[2010/11:88 Ramavtal om partnerskap och samarbete mellan Europeiska unionen och dess medlemsstater, å ena sidan, och Republiken Indonesien, å den andra](#)

Type	Date	KT	KTI	IKT	IKTI
GB	March 10th	X		X	

[2010/11:105 Berättelse om verksamheten i Europeiska unionen under 2010](#)

Type	Date	KT	KTI	IKT	IKTI
WC	March 10th	X		X	

[2010/11:128 Medling och förlikning - ökade möjligheter att komma överens](#)

Type	Date	KT	KTI	IKT	IKTI
GB	April 14th	X		X	

[2010/11:138 Riksrevisionens granskning av it inom statsförvaltningen och statliga it-projekt](#)

Type	Date	KT	KTI	IKT	IKTI
WC	May 12th	X		X	

[2010/11:153 Stärkt konsumentroll för utvecklad elmarknad och uthålligt energisystem](#)

Type	Date	KT	KTI	IKT	IKTI
GB	June 22nd	X		X	

[2011/12:1 Budgetpropositionen för 2012 Utgiftsområde 5](#)

Type	Date	KT	KTI	IKT	IKTI
GB	September 20th	X		X	

[2011/12:1 Budgetpropositionen för 2012 Utgiftsområde 6](#)

Type	Date	KT	KTI	IKT	IKTI
GB	September 20th		X		X

[2011/12:1 Budgetpropositionen för 2012 Utgiftsområde 7](#)

Type	Date	KT	KTI	IKT	IKTI
GB	September 20th		X		X

[2011/12:1 Budgetpropositionen för 2012 Utgiftsområde 16](#)

Type	Date	KT	KTI	IKT	IKTI
GB	September 20th	X		X	

[2011/12:28 Enklare avbetalningsköp m.m.](#)

Type	Date	KT	KTI	IKT	IKTI
GB	November 17th	X		X	

2012

[2011/12:105 Berättelse om verksamheten i Europeiska unionen under 2011](#)

Type	Date	KT	KTI	IKT	IKTI
WC	March 8th		X		X

[2011/12:119 Utlåning till Irland](#)

Type	Date	KT	KTI	IKT	IKTI
GB	March 22nd		X		X

[2011/12:129 Nya regler om prospekt](#)

Type	Date	KT	KTI	IKT	IKTI
GB	April 12th	X		X	

[2011/12:167 Genomförandet av samstämmighetspolitiken för utveckling - fokus: den globala utmaningen ekonomiskt utanförskap](#)

Type	Date	KT	KTI	IKT	IKTI
WC	June 28th		X		

[2011/12:164 Biståndets resultat - tema demokrati och mänskliga rättigheter](#)

Type	Date	KT	KTI	IKT	IKTI
WC	June 28th	X	X	X	X

[2012/13:1 Budgetproposition för 2013 Utgiftsområde 6: Försvar och samhällets krisberedskap](#)

Type	Date	KT	KTI	IKT	IKTI
GB	September 20th		X		X

[2012/13:1 Budgetproposition för 2013 Utgiftsområde 7: Internationellt bistånd](#)

Type	Date	KT	KTI	IKT	IKTI
GB	September 20th		X		X

[2012/13:1 Budgetproposition för 2013 Utgiftsområde 16 Utbildning och universitetsforskning](#)

Type	Date	KT	KTI	IKT	IKTI
GB	September 20th	X		X	

[2012/13:21 Forskning och innovation för ett långsiktigt hållbart Energisystem](#)

Type	Date	KT	KTI	IKT	IKTI
GB	October 11th	X		X	

[2012/13:30 Forskning och innovation](#)

Type	Date	KT	KTI	IKT	IKTI
GB	October 11th	X		X	

[2012/13:25 Investeringar för ett starkt och hållbart transportsystem](#)

Type	Date	KT	KTI	IKT	IKTI
GB	October 12th		X		X

[2012/13:60 Kommunikationsutrustning i fordon](#)

Type	Date	KT	KTI	IKT	IKTI
WC	December 18th	X		X	

2013

2012/13:80 Berättelse om verksamheten i Europeiska unionen under 2012

Type	Date	KT	KTI	IKT	IKTI
WC	March 7th	X	X	X	X

2012/13:106 Ramavtal om partnerskap och samarbete mellan Europeiska unionen och dess medlemsstater, å ena sidan, och Socialistiska republiken Vietnam, å andra sidan

Type	Date	KT	KTI	IKT	IKTI
GB	March 7th	X		X	

2012/13:92 Ramavtal om partnerskap och samarbete mellan Europeiska unionen och dess medlemsstater, å ena sidan, och Republiken Filippinerna, å andra sidan

Type	Date	KT	KTI	IKT	IKTI
GB	March 7th	X		X	

2012/13:111 En skärpt sexualbrottslagstiftning

Type	Date	KT	KTI	IKT	IKTI
GB	March 7th	X		X	

2012/13:132 Tolkning och översättning i brottmål

Type	Date	KT	KTI	IKT	IKTI
GB	March 21st	X		X	

2012/13:138 Intelligenta transportsystem på vägtransportområdet

Type	Date	KT	KTI	IKT	IKTI
GB	March 27th	X		X	

2012/13:145 Riksrevisionens rapport om effektivitet i svensk rymdverksamhet

Type	Date	KT	KTI	IKT	IKTI
WC	June 13th		X		X

2012/13:194 Stärkt skydd för barn mot sexuella övergrepp

Type	Date	KT	KTI	IKT	IKTI
GB	September 12th	X		X	

2013/14:57 Ett värdigt liv - äldrepolitisk översikt 2006-2014

Type	Date	KT	KTI	IKT	IKTI
WC	December 12th	X		X	