

Information Government in Practise: Functional Gains and Legal Perils

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1 Introduction

The development of information and communication technology (ICT) is one of the most significant sources of profound changes in economy, public administration and law. ICT is a general purpose technology which will have wider impacts and create larger scale societal impacts than the invention and taking into use of the electricity. In Finland and in the United States, the use of ICT has improved productivity and enhanced economic growth more than the taking into use of electricity.¹ The revolution seems to be only at its beginning.

In a successful organisation the strategy, organisation and organisation's operating environment including the technology fit optimally together.² Private and governmental organisations are a result of the possibilities and purposes of technology of the day.³ The structures of organisations reflect the needs for social co-ordination and governance of a particular time. Technology creates and shapes these needs of co-ordination and governance and, also creates and limits tools in the social co-ordination. Technology's impact is thus transferred both through the demand and supply sides of the social co-ordination. The ICT has a wide and deep impact to the ways in which individuals and organisations work. The ICT evolution will inevitably also change the structures and processes of government and thereby, fundamentally change some parts of the legislation or, at least, create a challenge to the functionality of the current legislation including constitutional arrangements.⁴

1 Growth of productivity has been the most significant source of welfare during the last 100 years in Finland, *see* chapter 3.1. written by professor Matti Pohjola at the preliminary report of the Growth Project established by the Finnish Prime Minister's Office, *see* Valtioneuvoston kanslia: *Kestävästä kasvusta hyvinvointia ja elämänlaatua, Kasvutyöryhmän väliraportti* (Welfare and Quality of Life from Sustainable Economic Growth – Preliminary Report of the Working Group on Growth), Valtioneuvoston kanslian raporttisarja 1/2010, Helsinki 2010. According to studies made by professor Pohjola the ICT has increased productivity more than the taking into use of electricity. The profound change potential of the ICT follows already from the scale of the productivity impact provided by the ICT, *see* Pohjola M. and Jalava J.: *The roles of electricity and ICT in economic growth: Case Finland*. Explorations in Economic History, Vol. 45 (2008).

2 *See* Roberts, J.: *The Modern Firm, Organizational Design for Performance and Growth*, Oxford University Press, Oxford 2004. On the impact on the ICT and information economy to organisation and to regulation, *see* Cukier Kenneth: *Governance of Information in Globalised Economy, Governance as Gardening. A Report of the 2007 Rueschlikon Conference on Information Policy*. Rueschlikon Conference, 2007.

3 I use here the concept of technology as it is understood in national economics: technology refers to all methods of organising and leading and managing the production process in which outputs of production are transformed into commodities serving individual and public needs.

4 On the impact on the technological development to the Finnish public administrations organisation and the need for further change, *see* Tarkka Helena: *Julkisen hallinnon tuottavuus ja tietojärjestelmien yhteentoimivuus* (Productivity of Public Administration and the Inter-operability of Information Systems), Kansantaloudellinen aikakauskirja, Vol. 106 (1/2010), Helsinki, p. 44 – 51. Tarkka argues that current Finnish Constitution requires in the Government organisational structures which do not enable the full utilisation of possibilities provided by the ICT but lead to administrative silos and problems of inter-operability. The National Audit Office of Finland (NAOF) raised in 2010 the needs to amend both the Constitution and the Act of Parliament on the Government in the future to reply to

The change will extend to some parts of the legal paradigm both in regulation and in the science of law. In short, the rise and revolution of ICT and the rise of the global network society will support the transition towards the so called network paradigm of law. In this network paradigm of law, legal sources do not appear as a pyramid but a network of various and variously legal sources.⁵

The evolution of ICT changes the public administration from the classic bureaucracy to an information government (iGovernment) and information governance of the network society.⁶ The research question in this article is the functional practical gains and legal perils of the emerging iGovernment. My aim is to provide a short overview of the major risks and potential of electronic government and the information government. The research question will be analysed from the perspective of the Finnish administrative law and practise.

The practical problems of electronic government and the emerging iGovernment are approached by studying in addition to the other legal sources in particularly the practise of the Parliamentary Ombudsman and the external audit reports of the National Audit Office of Finland and its Scandinavian counterparts the Swedish National Audit Office and the Office of the Auditor-General of Norway.⁷ As the supreme overseer of legality in Finland, the Parliamentary Ombudsman and as the Government's and state administration's supreme external auditor in accordance with the Constitution and the National Audit Office of Finland (NAOF) have a wide view to the concrete and practical legal and functional problems and possibilities of the iGovernment.⁸

technological and societal developments and to create effective governance structures. See in the NAOF Opinion on the Parliamentary Committee's proposal for the amendments of the Constitution of Finland, Valtiontalouden tarkastusvirasto: *Lausunto perustuslain tarkistamiskomitean mietinnöstä*, VTV dnro 45312010, 5.3.2010, available at "www.vtv.fi/files/2063/lausunto_08032010.pdf" [visited 9.7.2010].

- 5 Ost François et van de Kerchove Michel: *De la pyramide au réseau? Pour une théorie dialectique du droit*. Publications des facultés universitaires Saint-Louis, Bruxelles 2002.
- 6 "Information government" is a term developed in the legal literature to describe a broader view to the information processes, use of the ICT in public management and administration and governance of ICT and information processes, see Mayer-Schönberger V., and Lazer D., *Governance and Information Technology - From Electronic Government to Information Government*, MIT Press 2007. See also Saarenpää Ahti: *Oikeusinformatiikka*. Oikeusjärjestys, osa I, Lapin yliopisto, Rovaniemi 2009.
- 7 The Swedish National Audit Office, Riksräkningen, and the Office of the Auditor-General of Norway, Riksrevisjonen, are according to constitutional laws of Sweden and Norway the state's supreme external auditors, see Sweden's Form of Government (Regeringsformen) chapter 12 §§ 7 , and the Constitution of Norway (Norges grunnlov) § 75 k and Act on the Office of the Auditor General of Norway (lov om Riksrevisjonen av 7 mai 2004 nr. 21).
- 8 National Audit Office of Finland led by the Auditor-General, who is elected by the plenary of the Parliament, is an independent constitutional authority in connection with the Parliament established and regulated by section 90 of the Constitution of Finland. The National Audit Office of Finland carries out external financial, legality and performance audits including audit of ICT systems. NAOF is the legality overseer of the election campaign and political party financing and reports to the Parliament on the findings on its domain of activity. The constitutional task of the National Audit Office is to assure and promote trust to the functioning of democracy, see Government Proposal HE 13/2009 vp. *laiksi ehdokkaan vaalirahoituksesta ja eräksi siihen liittyviksi laeiksi*, sääätämismääräysten perustelut and

2 The Concept of Information Government, the iGovernment

The iGovernment consists of several parts and features and builds on the tradition. Evolving electronic Government, the eGovernment, is a component of a wider iGovernment.⁹ The eGovernment generally refers to the use of ICT in the public administration and in the production of public services.¹⁰ The eGovernment is associated with a change and reform of the public management and services. The eGovernment stands thus for the use of ICT in public administration to improve public services and democratic processes and to improve the efficiency and cost-effectiveness of administration and service delivery.¹¹

In the iGovernment the use of ICT and the impact of the information processes organised in information and communication networks is far deeper than in the previous models of digitalisation of government. This transition is not only conceptual finesse but a change with significant legal and practical implications. The iGovernment requires a certain approach and model in the law and regulation in order to allow law to realise the societal functions we expect from legal order: to assure legal security proactively and effectively co-ordinate social and societal relations in law's domain.

The concept of eGovernment is not as such defined in any general Act of Parliament and although the terms of electronic communication and electronic services are used in law, they enjoy no legal definition.¹² The concept of eGovernment covers (1) providing direct citizen and user services, eServices, (2) electronic internal processes of administration and the information and ICT systems of public administration, eAdministration, (3) electronic means of participation, eDemocracy and (4) the governance of society, societal and social relations and the co-ordination of solving problems therein, the eGovernance.¹³

Government Proposal HE 6/2010 vp. *laeiksi puoluelain, ehdokkaan vaalirahoituksesta annetun lain ja rahankeräyslain muuttamisesta, sääätämisyjärjestysperustelut.*

- 9 The whole concept of information government is a reaction to too narrow and technology-centred approach in the eGovernment discourse.
- 10 European Commission: COM (2003) 567 final. *The Role of eGovernment for Europe's Future*. Communication from the Commission to the Council. The European Commission emphasises the potential of eGovernment in producing change towards a more cost-effective service delivery and better quality public services in its 2010 communication on Europe's Digital Agenda, see European Commission: COM (2010) 245 final, Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, *A Digital Agenda for Europe*, p. 31.
- 11 Schartum D. & Jansen A., *Elektronisk forvaltning og jus* in Schartum Dag Wiese (ed.): *Elektronisk forvaltning i Norden*, Fagbokforlaget, Oslo 2007, 17 – 32, p. 18 – 19. The eGovernment's potential for change is underlined in the European Commission Communication on *Europe's Digital Agenda*, op. cit.
- 12 See Act on Electronic Services and Communication in the Public Sector, laki sähköisestä asioinnista viranomaistoiminnassa (13/2003). The Act does not contain any legal definition of electronic services.
- 13 On the Finnish concept of eGovernment see the Ministry of Finance Report on the Project on Electronic Government and Democracy (SADe), Valtiovarainministeriö: *SADe-hankkeen loppuraportti. Julkisen hallinnon ja julkisen palvelujen sähköisen asioinnin*

The eAdministration, in the context of the Finnish public administration, refers to the electronic internal organisation of administrative processes and procedures, the internal administrative information systems and the interchange of data and information between administrative entities.¹⁴ In the eAdministration, Finland's earlier achievements include the establishment of nation-wide basic registers and the abolition of specific certificates of domicile and their replacement by the electronic interchange of data between administrations.¹⁵

Regrettably, many internal administrative procedures and inter-changes of data still in 2009 and 2010 take place in paper format. In one of its performance audits, the National Audit Office of Finland found out that the exchange of data between the Housing Finance and Development Centre of Finland and the State Treasury concerning government issued housing loans took place in paper format albeit both administrative authorities have digital internal processes.¹⁶ Similarly, many stages in the information processes related to the granting and handling of the agricultural subsidies take place in paper format.¹⁷ Employers still get the tax cards via the employees themselves in a paper format even though tax payers can modify their tax cards through the tax administration's electronic service which is available over the internet.

An additional example which gained public attention is the inter-change of data between the various units of public health care. The electronic databases of the national Social Insurance Institution (Kansaneläkelaitos KELA, Folkpensionsanstalt FPA) and the patient information systems of the unit providing direct treatment service to customer contain information about the permanent illnesses and diagnoses of the citizens and other persons covered by the Finnish social security. During the recent H1N1 epidemic, the influenza vaccination of the population was concentrated to public health care centres run by the local government. The health care centres could neither read data from the registers of Social Insurance Institution with sufficient ease nor from the private sector primary health care providers. Since the persons diagnosed with certain permanent illnesses were defined in the Government Decree on the

kehittämislinjaukset ja palveluiden kehittämissuunnitelma 2009-2012, Valtiovarainministeriön julkaisuja 6/2009, Valtiovarainministeriö 2009, p. 42-43. See also Korhonen Rauno: *Sähköinen asiointi ja viestintä* in *Oikeusjärjestys, osa III, 7. täydennetty painos*, Lapin yliopiston oikeustieteiden tiedekunta 2010, 411-535, p. 413.

14 Korhonen: *Sähköinen asiointi*, op. cit., p. 413.

15 On the basic registers in Finland and on the data protection issues related to them, see Korhonen Rauno: *Perusrekisterit ja henkilötietojen suoja, informaatio-oikeudellinen tutkimus yksityisyyden suojasta yhteiskunnan perusrekisteritietojen käsittelyssä* (Basic Registers and the Protection of Personal Data, a Study of Information Law on the Protection of Privacy in the Processing of Information in the Basic Registers), Lapin yliopisto, Rovaniemi 2003.

16 National Audit Office of Finland: *Government lending to housing production*, National Audit Office of Finland Performance Audit Reports, 205/2010.

17 See Suomela Kaj: *Maatalouden tuki- ja valvontajärjestelmien yksinkertaistaminen, Selvitysmiehen raportti* (The Simplification of the Subsidies and Control Systems in Agriculture, Report of an Inquiry commissioned by the Ministry of Forestry and Agriculture), Maa- ja metsätalousministeriö 2007.

Vaccination Order as a priority group due to the bigger medical risks related to influenza exposure, some local government entities required a separate doctor's certificate on the diagnosis to allow treatment as part of the risk group. This led to several unnecessary consultations in order to obtain a certificate at a moment where the medical services were already under serious stress.¹⁸

The lack of inter-operability and compatibility of the information systems, information processes and structures underlined in the audit findings of the National Audit Office of Finland and further reported by the Audit Committee of the Parliament, led to a Parliament's resolution which presents them as one of the key areas in which the Government is called to act rapidly and swiftly.¹⁹

The main reason for the persistence of paper format is the problems of inter-operability between the various information systems and the use of very different ICT systems in a manner in which the overall transfers of data have not been thought. In the tax card case, the issue is about developing a sufficiently simple but secure authorisation procedure involving the tax payer with reasonable costs.

Different generations of e-Government can be distinguished on the basis of the width and features of the services and functions provided by the ICT systems and on the deepness of the impact of the ICT to the functioning and organisation of the production of public services.²⁰ The deepness of the impact can be measured by assessing how the use of the ICT has changed different layers of the organisation's and the whole public administration's architecture and processes. The maturity of the eGovernment is measured by analysing to which extent the services are tailored to the individual user's need, the number of channels which can be used to access the service and to the capabilities of the service of being in inter-action with the user and the extent into which the service has been integrated with the administration's background processes and other administrative authorities' resources.²¹ We can distinguish four generations

18 This was, for example, the case in the city of Espoo.

19 See Eduskunnan kirjelmä EK 30/2009 vp. – Tarkastusvaliokunnan mietintö *Valtiontalouden tarkastusviraston kertomuksesta eduskunnalle toiminnastaan varainhoitovuodelta 2008, K 15 2009 vp.*, TrVM 5/2009 vp.

20 On the different generations of eGovernment, see Pöysti Tuomas: *Finland's law of e-government in 2006*, in Schartum Dag Wiese (ed.): *Elektronisk forvaltning i Norden*, Fagbokforlaget, Bergen 2007, 99-118, p. 100 – 103.

21 Valtiovarainministeriö: *SADe –hankkeen loppuraportti*, op.cit., p. 43. Finnish Ministry of Finance has developed an assessment model of eServices based on 4 maturity criteria. These criteria are (1) the inter-activity of the service (from reactive to proactive and inter-active service), (2) the significance of the electronic channel to service delivery (stability of the electronic service channel, proportions in the use of traditional vs. electronic service channel), (3) number of service channels available in the service (how well the service has been converted to various service channels and accessibility of the service using various media and tools), and (4) maturity and integration levels of service production (the level of integration between surface for electronic service and the background processes within the authority and between the concerned authorities), see Valtiovarainministeriö: *Julkisen hallinnon sähköisen asioinnin Astra –strategia ja perustelumuiatio*, Valtiovarainministeriön julkaisuja 11a ja 11b/2005, Valtiovarainministeriö 2005. The assessment criteria have since the original publication been updated so that the assessment criteria concerning integration and number of service channels have been combined to a new dimension called networking

of eGovernment. The first generation is the one where the use of electronic means essentially enabled contacting the public authorities. The second generation of eGovernment is focusing on the provision of on-line services in the practical processes of public administration. The third generation seeks adding value to the electronic services by adopting a citizen-centric perspective and multiplying the service-generating channels. The fourth generation of e-Government is to promote and assure trust towards the “production” of public services and enable the cost-effective use of the Government's combined information resources and procedures to the benefit of quality services for citizens, enterprises and other users. This last generation of e-Government does not only concern the digitalisation of existing administrative procedures but rather, the potential of ICT to transfer the whole organisational and operative architecture of public administration.²²

The historical point of departure in eGovernment is the electronic servicing and electronic services. The First Finnish Act of general application in the area, was the Act on the Electronic Communication and the Use of Automatic Information Processing in the General Courts (594/1993), in 1998 the title of the Act was changed to Act on the Electronic Communication in Judicial Matters. In Finland the Ministry of Justice administrative domain and the Courts were the pioneers in the development of the concept of eGovernment.²³ The First general Act on the electronic administration was enacted in 1999 when the Act on the Electronic Services in Administrative Matters (1318/1999) was passed.²⁴ Finland's Freedom of Information Act, the Openness in the Government Activities Act (621/1999) and the Personal Data Act (523/1999) both provide the general legal framework for information law and information infrastructure of the government. The Act on the Electronic Communication in Judicial Matters

and partnerships, see Valtiovarainministeriö: *SADe –palvelu- ja hankeselvitys*, Valtiovarainministeriön julkaisu 3/2010, Valtiovarainministeriö 2010, p. 11-12.

22 See Pöysti: *Finland's law of e-government in 2006*, op.cit., p. 100-103.

23 In the English language the concept of eGovernment covers all branches of government, the legislative, executive and judicial. The tri-partition of government is, additionally, outdated in the light of the emergence of constitutional supervisory authorities and independent regulatory agencies which are not under the executive. Currently we could speak about four-partition of Government with legislative, executive, judicial and supervisory/control branches of government. The supervisory branches of government consist of the constitutional supervisory authorities and other independent authorities with particular remit to promote and defend human and fundamental rights and freedoms and other individual rights. In Finland the independent constitutional supervisory authorities are the supreme legality oversight authorities the Parliamentary Ombudsman (sections 38 and 109 of the Constitution) and Chancellor of Justice (sections 69 and 108 of the Constitution), (joint provisions concerning the supreme legality oversight authorities sections 110-115, 116), and the National Audit Office with the Auditor-General (section 90 of the Constitution) with the remit of supreme external audit of the government and political party and election campaign financing. The Data Protection Ombudsman, the Data Protection Authority, can also be regarded as independent supervisory authorities with the constitutional and fundamental rights and freedoms oversight mandate even though it is not enacted in the Constitution of Finland and even though it operates under the general performance oversight by the Ministry of Justice.

24 Before this Act the use of electronic communication and electronic services was regulated in sector- or application based specific Acts.

and the Act on the Electronic Services in Administrative Matters were repealed and replaced by the Act on the Electronic Service and Communication in the Public Sector (13/2003). This Act seeks to provide a general legal framework for electronic communication and the user/administration interface in electronic services both for the judicial and executive branches of the Government. The Administrative Procedure Act (434/2003) and the Act on the Electronic services and Communication in the Public Sector provide the general procedural regulation and division of risks in the electronic communications. These Acts together with the Openness in the Government Act, Personal Data Act and Act on the International Information Security Obligations (588/2004) and the Electronic Communications Privacy Act (516/2004) establish the legal requirements concerning information, communication and eGovernment infrastructure. They also constitute the core of the practical information law in Finland.

However, many particular services and information processes and use of particular information resources are regulated in sector-specific Acts. One of the difficulties and even legal perils in the law of eGovernment is the fragmentation of the legislative frame of the eGovernment to many Acts which will not constitute a coherent entirety and which do not fully match the strategic needs and visions of implementing the eGovernment in today's technologic infrastructure. This fragmentation is one of the significant legal perils concerning information government. In Finland, the sector-specific Acts do not necessarily follow the general principles of Personal Data Act and modern European data protection legislation. This may give rise to weaknesses at the level of data protection or to the creation of obstacles to seemingly rational activities and false accusation of data protection rules on these obstacles. This risk has already realised in the Finnish specific legislation. The National Audit Office has warned already in the early 1990s about the obscure rules concerning the protection personal data in sector-specific Acts.²⁵ In 2009 and 2010, the Data Protection Authorities are still struggling with this problem.

The Electronic services, eServices provide user's and citizens' front layer of the eGovernment. The eServices today mean the use of public services via multiple electronic and digital channels.²⁶

The first generation of eAdministration consisted mainly of transferring old processes from the paper era in electronic format. The fourth generation implies the creation of an enterprise architecture with information, operative and ICT – architectures enabling an inter-active and networked use of the various government services and the use of common information resources between government authorities and agencies. In the mature eAdministration, the government's background and information processes are integrated with the application layers and processes with which the government communicates with the citizens and other users and partners of eGovernment and eServices.

25 See Valtiontalouden tarkastusvirasto: *Tietosuoja ja viranomaisyhteistyö*, toiminnantarkastuskertomus 8/1998, Valtiontalouden tarkastusvirasto, Helsinki 1998.

26 Korhonen, *Sähköinen asiointi*, op.cit., p. 412 – 413.

In the context of Finnish law, eDemocracy can be understood in a broad or narrow sense. In a narrow sense it can refer to communication with the political authorities.²⁷ In a broader sense, it can be defined as including all means and ways of participation in the public domain as well as the communication with the administrative authorities to realise the right of access to public debate and the participation with administrative authorities stipulated in section 41 of the Administrative Procedure Act of Finland. According to the provisions in section 41 of the Administrative Procedure Act public authorities shall inform publicly about an administrative matter if the decision in the matter can have significant impact on the living conditions, work or environment of other persons than the addressees of the decision and reserve other persons than those directly concerned a possibility to have access to information and express their opinions of the matter. Section 41 in the Administrative Procedure Act is one of the measures which realises the general duty of the public powers to promote possibilities to participation set in section 14 (3) of the Constitution of Finland.

The tasks of the administration and government have enlarged from the execution of legislation to active governance of societal problems and social relations. Max Weber's idea of the administration as a hierarchic rational bureaucracy is today only partly relevant.²⁸ The transition of public administration towards a wider role of societal problem and risk management represents partly a new paradigm of government and governance. It also represents a return to the fluid definition of the borders of administration in the era before the formalistic, classic rule of law and bureaucratic state. The production of information and processing of information have become significant tools of governance. Information steering refers to a method of governance in which society or public administration is steered by the production and dissemination of information.²⁹ Information steering in the public sector usually takes the form of issuing benchmarks or guidelines. Wider societal information steering is often done by requiring a private sector entity to produce and disseminate information about risks and hazards and provide them in a format or in occasion in which the recipients of information could internalise information to their decision-making processes.³⁰

The ICT and information and communication networks provide hitherto unknown possibilities of efficient information steering and governance by information in the execution of laws and in the societal risk management and co-ordination of social inter-action and co-operation. The ICT enables more efficient and targeted production, dissemination and presentation of information. The ICT enables also to embed governance solutions to their working and living

27 Jansen & Schartum, *Elektronisk forvaltning*, op.cit.

28 Mäenpää Olli: *Toimeenpanovallan käytöstä ongelmien hallintaan*, Lakimies 103 (2005), 1065-1085.

29 Report 5/2008 vp. of the Audit Committee of the Finnish Parliament, Tarkastusvaliokunta: *Informaatio-ohjaus sosiaali- ja terveydenhuollossa* (Information Steering in Social and Health Care), Eduskunnan tarkastusvaliokunnan mietintö 5/2008 vp.

30 See Fung, Archon, et. al.: *Full Disclosure. The Perils and Promise of Transparency*. Cambridge University Press 2007.

environment – ubiquitous and smart steering technologies.³¹ In them laws and legal co-ordination and social risk management are written into the code and functioning of information systems.³² The eGovernment includes also societal risk management and co-ordination of social problems and relations, the governance issues, and the development policies related to governance. This aspect of eGovernment is called eGovernance.³³

The eGovernance widens the view beyond the traditional public sector and public private distinction. Governance is not yet received a simple and common definition. Governance may also mean management and co-ordination of societal problems and social interaction without the government and, thus, by private sector and private law means.³⁴

The iGovernment refers to government in the age of the network society in which the primary modes of the functioning of public administration and service production is production and processing of information.³⁵ Administrative procedure is even traditionally an informational process between the parties, usually the administrative authority and the party to whom the decision will be addressed and eventual additional parties.³⁶ The concept of iGovernment makes this basic feature of the administrative procedure increasingly visible and connects the administrative law to certain basic principles of process management and information science: all functional processes include also an information process.³⁷ The Law concerning eGovernment and iGovernment, is

31 Wahlgren Peter: *IT and Legislative Development*, in Wahlgren P. (ed.): *IT Law. Scandinavian Studies in Law*, Vol. 47, Stockholm Institute for Scandinavian Law, Stockholm 2004, 601-618.

32 Wahlgren Peter: *IT and Legislative Development*, op.cit. This leads also to the question to which extend the ICT systems definitions and software code could and even should be regarded as a source of law, see Magnusson-Sjöberg Cecilia: *Rätt rättsinformation i e-Förvaltningen* in Schartum Dag Wiese (ed.): *Elektronisk forvaltning i Norden*, Fagbokforlaget, Bergen 2007, 149-166, p. 157.

33 Korhonen: *Sähköinen asiointi*, op. cit. p. 413.

34 See Ost – van Kerkhove: *De la pyramide au réseau?* op.cit. p. 29-30.

35 The emergence of iGovernment is related to the informationalisation of society and public administration.

36 Pöysti Tuomas: *Tehokkuus, informaatio ja eurooppalaisen oikeusalue*, Forum Iuris, Helsinki 1999, p. 1-25 and p. 295-357.

37 This perspective is fairly evident in the information sciences but may in the practise be a novelty to public managers. In the Finnish public administration the Ministry of Finance working group report on the contents management was among the first public management development documents which strongly advocated definition of information processes and setting up clear responsibilities for their management and development, see Valtiovarainministeriö: *Sujuvaan tiedon kulkuun ja tehokkaaseen tietojen yhteiskäyttöön valtioneuvostossa* (Towards fluid information transfer and efficient, common use of information in the Government), Valtiovarainministeriön työryhmämuistioita, Valtiovarainministeriö, Helsinki 2005. The Working Group report is based on the observation that every operational process includes an information process which should also be defined and managed like the other processes. Content management in the legislative processes and the use of XML / SGML in the management of contents in distributed and scattered organisation networks and data stores and in the integration of data, meta-data and

forward looking and anticipatory. Through legal planning, the law aims at being proactive and provides legal protection by writing the required protection to the design and architecture of the system(s) and to the code of the computer software.³⁸ Legal certainty is, thus, provided through legally steered planning. The data protection law has been the experimental field of this general shift in the focus of the paradigm. General administrative procedure acts, freedom of information acts and eGovernment acts with general scope of application follow the trend set by data protection legislation.³⁹ The rise of the requirement of legal planning of systems and architectures concerns also the application of the general principles of administrative law. This dynamic way in which the general principles of administrative law are used as foundations for requirements for more specific action by public authorities is particularly visible in the practise of the supreme legality overseers, the Parliamentary Ombudsman and the Chancellor of Justice.

The information government provides a dynamic perspective and approach to architecture and infrastructure of government and public administration and to the systematic and substance of administrative law and information law. The information infrastructure and information processes are increasingly regulated by law.⁴⁰ Law and legal tradition go through various historical and paradigmatic

content in the Finnish legislative processes was a subject in the RASKE2 –study performed by the University of Jyväskylä faculty of computer sciences in co-operation with the Parliament and various Government Ministries, on the RASKE2 –project results and the content management and use of meta-data in the legislative processes, see “www.it.jyu.fi/raske” [page visited 5.7.2010] and Nurmeksela, R., Virtanen, M., Lehtinen, A., Järvenpää, M., Salminen, A.: *Suomalaisen lainsäädäntötyön tiedonhallinta. Suuntana semanttinen web* (Information Management in the Finnish Legislative Work. Towards a Semantic Web) Eduskunnan kanslian julkaisu 2/2006, Helsinki 2006. The RASKE2 project took as point of departure the distributed and scattered nature of the information stores and approached content management and integration of contents through the development of XML –standardised meta-data and semantic web. The development of the standardised meta-data and standardised forms of presentation and management of content in the databases is a necessary pre-condition to content management and effective information process management. However, the inter-operability and fluidity of information processes requires a broader and deeper approach to harmonisation and standardisation of processes and architectures. The perspective of information processes is not new to the legal informatics. The issue of information processes belongs, rather, to the classics of Nordic legal informatics. In addition, the Personal Data Act and other laws on the processing of personal data are constructed around a concept of information process.

38 This is one of the core points of the doctoral dissertations of Cecilia Magnusson-Sjöberg and Dag Wiese Schartum, see Magnusson-Sjöberg Cecilia: *Rättsautomation: Särskilt om statsförvaltningens datorisering*, Norstedt, Stockholm 1992 and Schartum Dag Wiese: *Retssikkerhet og systemutvikling i offentlig forvaltning*, Universitetsforlaget, Oslo 1993. See also Magnusson-Sjöberg Cecilia: *Rätt rättsinformation*, op.cit.

39 In Finland the section 18 of the Openness Act contain far-reaching obligations to plan and assess the impacts of public sector information systems. On the rise of legal planning in the context of ICT and law, see Saarenpää Ahti: *E-Government and Good Government: An Impossible Equation in the New Network Society* in Wahlgren Peter (ed.): *IT Law, Scandinavian Studies in Law, Vol. 47*, Stockholm Institute for Scandinavian law, Stockholm University 2004, 245-273.

40 On the juridification of information and information processing see also Saarenpää Ahti: *E-Government and Good Government*, op.cit., and Saarenpää Ahti: *Oikeusinformatiikka*,

transformations from the doctrines of classic rule of law and classic administrative law to the administrative law of the social welfare state to finally reach the law of constitutional state and constitutional governance.⁴¹ The constitutional state and constitutional governance represent paradigmatic changes in which the fundamental rights and freedoms have become higher level rights in the legal order and they define substantive contents and limits of the rule of law.⁴² In constitutional governance, the impact of the fundamental rights and freedoms to relationships between two individuals is significant and legal systems have developed various mechanisms to transfer the requirements and impacts of fundamental rights and freedoms to the relations between private parties. The German doctrine of the “Drittwirkung” of the fundamental rights and freedoms – the horizontal effect of fundamental rights in relations between private parties - is only one of these transmitting mechanisms. The call for such enlargement of the scope of application follows from the case law of the European Court on Human Rights and is highly visible in the domain of the right to private life and its implications to information processing.⁴³

The constitutional state and constitutional governance in the information government means simply rights-friendly information and communication infrastructure, architectures and systems with applications. Information government means here also embedding proactive law to the systems and

op.cit.. On the general principles of ICT law and information law and the meta-rights concerning information and communication infrastructures in the network society, see Pöysti Tuomas: *Verkkoyhteiskunnan viestintäinfrastruktuurin metaoikeudet* in Kulla Heikki (ed.) *Viestintäoikeus*, WSOY Lakitieto, 2002, 35-81.

- 41 This transformation was one of themes in my doctoral dissertation on the relationships between information, economic efficiency and the law in the emerging European Legal Space in the European Union/ European Economic Area, see Pöysti Tuomas: *Tehokkuus, informaatio ja eurooppalainen oikeusalue*, op.cit., in particular p. 333-353. When looking back retroactively I underestimated the convergence of the various legal fields towards information law and ICT law and I was too cautious on accepting the profound ICT technical character of the core legal issues in public administration and how actively the convergence of law would be later pursued by the European Court of Human Rights and European Court of Justice.
- 42 Ahti Saarenpää has frequently used the concept constitutional state to describe the status of the material principles of fundamental rights and freedoms in today's legal network society and legal culture, see among other publications Saarenpää Ahti: *Information and Law in the Constitutional State* in *Lecture Notes in Computer Science*, Volume 3183/2004, Berlin 2004, p. 443-462. The concept has not been used by administrative or constitutional lawyers but, the supremacy of the fundamental rights and freedoms and general principles derived from there is widely recognised as a doctrinal point of departure. There is even a discussion whether the practical application of the supremacy of the fundamental rights and freedoms and limits imposed on legislator have gone too far, see for example Tuori Kaarlo: *Vallanjako –vaiettu oppi*, *Lakimies* 103 (2005), 1021-1049 and Tuori Kaarlo: *Tuomarivaltio – uhka vai myytti* in *Säädöksiä, systematiikkaa vai ihmisoikeuksia*, Acta Universitatis Lappeenrantaensis, Lappeenranta teknillinen yliopisto 2004, 21-41.
- 43 See, for example, the case of *K.U. v. Finland*, no 2872/02, 2 December 2008. On the case see Pöysti Tuomas: *Judgment in the Case of K.U. v. Finland: The European Court of Human Rights requires access to communications data to identify the sender to enable effective criminal prosecution in serious violations of private life*. *Digital Evidence and Electronic Signature Law Review*, Vol. 6 (2009), 33-42.

architectures. The promise is that this may realise many old ideals of deliberative democracy and enable much more substantive and efficient rule of law, the legal peril is that consequences of the weaknesses in the systems, architectures and infrastructures and in the applications included to architecture, becomes even more fundamental and serious risk to the individuals.⁴⁴

The enterprise architecture describes in ICT terminology the structure of operations, processes and services, information, information systems and the services they provide in its entirety. Enterprise architectures are models to describe ICT software and hardware including structures, applications and equipment in the context of organisations business activities. Enterprise architecture models enable a comprehensive approach in the management and development of the ICT as part of the functional development.⁴⁵ Finnish Ministry of Finance, which within the central government is responsible for the development of public sector ICT and information management, has taken into use of a comprehensive enterprise architecture method developed in a project in co-operation with the computer science faculty of the University of Jyväskylä.⁴⁶ The enterprise architecture approach will in the future have also strong legal bases. The Ministry of Finance has, following the call in a resolution of the Parliament on a Report of the Parliament's Audit Committee, drafted a proposal for a new law on ensuring the inter-operability of public sector information systems and to establish a whole-of-government wide group steering of public sector information management.⁴⁷ This new law would make it

44 See Pöysti Tuomas: *A Scandinavian Idea of the Informational Fairness in Law: encounters of Scandinavian and European Freedom of Information and Copyright Law*, in Wahlgren Peter (ed.), *What is Scandinavian Law*, Scandinavian Studies in Law, Vol. 50, Stockholm Institute for Scandinavian Law, University of Stockholm, Stockholm 2007, 221-248.

45 Normative definition of the enterprise architecture and its components in the Finnish public administration is found at the Government Advisory Board for the Public Sector Information Management JUHTA (Julkisen tietohallinnon neuvottelukunta) JHS recommendation *JHS 171*, available at <http://www.jhs-suositukset.fi>.

46 See the documents from a joint research project on the government enterprise architecture by the Ministry of Finance and University of Jyväskylä, for example Valtiovarainministeriö: *Kehittämishankkeiden FEAR-ohjausmalli. Hankealoitteesta tavoiteasetannan kautta kilpailutukseen ja muutosten hallintaan*, Valtiovarainministeriö 2010 (FEAR –steering Model for Development Projects. From Project Initiative via Target Setting to Public Tender and Change Management, Ministry of Finance, 2010), available at “www.vm.fi/vm/fi/04_julkaisut_ja_asiakirjat/03_muut_asiakirjat/20090701Kehitt/FEAR20090630Ohjausmalliv10.pdf” [page visited 6.7.2010]. Research on the government enterprise architectures is part of a wider Finnish Enterprise Architecture Research Project conducted at the Faculty of Computer Science at the Jyväskylä University. See also the Ministry of Finance Memorandum on the experiences on the enterprise architecture work in government, Valtiovarainministeriö: *Kokemuksia kokonaisarkkitehtuuryöstä valtionhallinnossa*, Valtiovarainministeriön julkaisuja 2/2009, Valtiovarainministeriö, Helsinki 2009.

47 See *Parliamentary Communication EK 30/2009* and the *Audit Committee Report TrVM 5/2009 vp. – K 15/2009 Valtiontalouden tarkastusviraston kertomus toiminnastaan varainhoitovuodelta 2008* (The National Audit Office Annual Parliamentary Report for financial year 2008), earlier call to adopt legislation on the information management was expressed in the *Parliamentary Communication EK 11/2008 vp. and Audit Committee Report TrVM 1/2008 vp. – K 6/2008 vp., K 10/2008 vp* (the Government Report on the Final Central Government Accounts for financial year 2007 and the Special Report of the National Audit

obligatory for all public sector entities in Finland to participate and abide to the enterprise architectures established by the Ministry of Finance. The aim is to ensure the interoperability and compatibility of systems and information at the whole of government and thereby create efficiencies and improve the quality of processes and outputs. The proposed law seeks to reply to the Parliament's request that inter-operability and compatibility of information systems and information should be guaranteed as a public good through law and action by public authorities.⁴⁸

Both the OECD and the National Audit Office of Finland have raised the issue whether extensive centralisation of the operational information management and, in particular, the concentration of the issues of operational architecture to the Ministry of Finance, will provide the best possible results. There is a clear case for the centralisation of the strategic leadership of the information society policy and information government policy and of the steering of the requirements on enterprise architecture at the Government to the Ministry of Finance but centralised leadership cannot handle all the operational aspects of information management and Government ministries are not necessarily the best entities to handle the operational management issues.⁴⁹

The enterprise architecture is still an organisation-centred approach to the management of the system of information systems and their use. Even the very concept of enterprise architecture – albeit designed at the level of the whole-of-government - does not any longer fully capture the needs and realities of public administration which is networked with external co-operation partners and citizens and clients and in which also the network-based organisation increases

Office to the Parliament on the Audit of the Government Report on the Final Central Government Accounts). The Parliament's position expressed in Parliamentary Communication 30/2009 was adopted when Parliament was debating and handling the National Audit Office of Finland Annual Report issued by the Auditor-General to the Parliament and the National Audit Office audit reports and testimonies to the Audit Committee of Parliament were widely used by the Audit Committee upon development of the approach to be taken. The author of this article (Tuomas Pöysti) has as the Auditor-General issued the Annual Report and some of the expert opinions referred to. See also the Ministry of Finance draft Government Proposal for legislation on the steering of the public sector information management and on the inter-operability of information systems (the so called memorandum of the government group-wide-IT-management legislation), Valtiovarainministeriö: *Luonnos hallituksen esitykseksi julkisen hallinnon tietohallinnon ohjauksesta ja tietojärjestelmien yhteentoimivuudesta annettavaksi lainsäädännöksi*, valtiovarainministeriö dnro VM 038:03/2009, 9.6.2010, and the Ministry of Finance Working Group Report on the Development of Steering and Inter-operability in the Public Sector Information Management, Valtiovarainministeriö: *Julkisen tietohallinnon ohjauksen ja yhteentoimivuuden kehittäminen*, Valtiovarainministeriö dnro VM038:03/2009, 9.6.2010, available at the "www.vm.fi".

48 See the report of the Parliament's Audit Committee and the Position of the Parliament, *Eduskunnan kirjelmä EK 30/2009 vp. – TrVM 5/2009 vp.*

49 See Organisation for Economic Co-operation and Development OECD, *Public Governance Reviews, Finland – Working Together to Sustain Success*, forthcoming, OECD Publications, Paris 2010, chapter 8, and the Opinion of the National Audit Office of Finland on the Draft Government Proposal on legislation concerning steering of public sector information management and inter-operability, see Valtiontalouden tarkastusvirasto: *Lausunto IT-konserniohjauksen lainsäädäntöryhmän muistiosta*, VTV dnro 31/242/2010.

fluidity of organisation and data/information transfers between administrative entities. A better term would be “network architecture” in which perspective the organisations’ inter-connectedness to others is clearly taken up as an issue of ICT governance.

The enterprise architecture and wider network architecture consists of several components or angles. Enterprise architecture work can be a tool to realise juridical planning duties required in the Personal Data Act and in the Openness Act. Both acts clearly set also requirements to the enterprise architecture and to its sub-components. The role of the architecture work and enterprise architecture with subcomponents will become even more significant when the centralised steering on the basis of the future law on government information management will be taken into use. Despite the good potential of the enterprise architecture approach in the realisation of some of the key requirements of the general principles of information law the connection of the enterprise architecture definitions to law has not been sufficiently emphasised. This may create unnecessary bureaucracy if the juridical planning required in the central Acts of Parliament in information law and government information management and development are done separately. The distance and lack of legal perspective may also create risks to the implementation of the central legal requirements. Some significant components of enterprise and network architectures are:

- information architecture, which describes the structuring, organisation, classification and transmission of data and information. Information architecture provides the basis for the definition of the value chain of information and measurement of the organisation's information capital and creates a systematic tool to analyse the relationships between data and information components and a way to manage information. From the legal perspective the realisation of the protection of personal data and openness in the government activities calls for the writing the legal requirements to the definitions and targets at the level of information architecture. The legal planning duties expressed in the Personal Data Act and in the Openness Act and also in the Central Government Information Security Decree (681/2010) require planning work which can be systematised by the enterprise architecture / information architecture approach.
- technologic architecture which narrows down the available technical solutions and sets guidelines to technical alternatives, standards and structures so that the overall targets of the organisation are optimally served.
- ICT systems architecture, which describes the key ICT systems of the organisations, their expected life span, criticality and the information they produce or require and the relationships different systems have between themselves.
- operational architecture, which describes the core business activities or operative activities implementing strategic objectives of an organisation and the support processes related these core activities. The operational architecture often entails process modelling and process descriptions. The operational architecture is often closely related to assurance of clear responsibilities and accountability. Thus, a good definition of operational architecture is a

management tool to promote good governance and the right to good administration.⁵⁰

The general structure of the information government consists of several layers of applications and processes, notably the (1) front office, (2) middle and information office and (3) back office functions. This tri-partition of functions and processes may help in the definition of enterprise architecture from the whole of government perspective and better attach specific Acts to the various layers and components of information government.⁵¹

Legal risks to the effective realisation of the protection of personal data and assuring access to public information and to the good governance and right to good administration emerge from the disconnects between the various layers and components of the information government and mismatches between various legal requirements set on the individual parts of the information government.

3 The Promise and Legal Perils of the Information Government

3.1 *Improved Productivity*

Finland, together with other Nordic countries, faces devil problems: its population is aging and this creates particular pressures on public sector costs, service demand and eventually shortages on the availability of labour, productivity is low in many key sectors of economy, short and medium term perspectives entail a rather slow economic growth, economy is in the process of structural transformation from the industrial era towards service-driven economy and the public finances are not in the sustainable path.⁵² In addition, there is growing inequality in the welfare of the various parts of the population. Welfare outlooks in different parts of the country are, in particular in Finland, very different.⁵³ Devil character of the Finland's challenges follows from the fact that individually each of these main societal development trends would require a different policy approach. Appearing together, there is no simple and straightforward solution. The general lines for the policy replies are the increased efficiency and productivity of the fairly wide public sector, reform of the social contract underlying the Nordic or Scandinavian social and societal

50 See JUHTA JHS 171, op. cit.

51 See Pöysti: *A Scandinavian Idea of Informational Fairness*, op. cit.

52 Devil problems are complex issues to which there are no simple and easy policy responses, on the concept and nature of devil problems in administrative science and in particular, in health care, see Raisio Harri: *Pirulliset ongelmat terveydenhuollossa – esimerkkeinä Kansallinen terveyshanke ja hoitotakuu –uudistus* in Vakkuri Jarmo (toim.): *Paras mahdollinen julkishallinto, tehokkuuden monet tulkinnat*, Gaudeamus Helsinki University Press, Helsinki 2009, 73-91. Finland's devil problems and economic challenges are described well in a series of international and European and domestic official reports and analyses, see the National Audit Office of Finland: *Special Report to the Parliament on the Audit of the Government Report on the Final Central Government Accounts for 2009*, K 13/2010 vp. See also OECD Economic Surveys, *Finland*, Vol. 2010/4, OECD, Paris 2010.

53 OECD: *Public Governance Review of Finland*, op. cit.

model, reform of taxation to promote better growth and competitiveness and still to provide economic steering models and incentives to a more environmental and eco-efficient life-style, investments to innovation and growth and welfare enhancing technologies accompanied with very strict fiscal discipline and fiscal adjustment in the government finances. In short, improved efficiency and effectiveness and smart solutions are called upon across all sectors of society.⁵⁴ Evidence-based decision-making and systematic application of ICT in the efficiency enhancement are ways to search solutions to these devil challenges of society.⁵⁵

The first and foremost promise of the iGovernment and the earlier versions of eGovernment is that it would provide the conditions and tools to improve the productivity and other aspects of the efficiency of the public administration and public service production. The iGovernment would, in addition, provide practical tools and approach to realise evidence-based policy-making and thereby improve the effectiveness and over-all economic efficiency of public policies and finances. Difference between the eGovernment, which focuses on the digitalisation and reform of the existing public administration and the future iGovernment lies in the broader scope of the iGovernment in incorporating information and information governance in the search for solutions for a wide set of public policy problems. The iGovernment provides, thus, the practical implementation of the perspective opened by the development of the economics of information and economics of knowledge.⁵⁶ In addition, iGovernment provides potential to reform the Nordic social contract towards a more efficient and economic distribution of risks and responsibilities between individuals and the public sector. The Nordic social model is essentially an insurance model in which the public sector provides fairly universal security and services in the case of particular risks.⁵⁷ The iGovernment solutions enable approach, where citizens and other individuals increasingly take care of certain services themselves as self-service and thereby save time and resources of the public sector in the service production. In the future iGovernment solutions may also provide new models of risk internalisation and risk insurance which would improve public sector efficiency and economy.

54 See National Audit Office of Finland: *Annual Parliamentary Report 2009*, K 15/2009 vp.

55 In the Public Governance Review of Finland the OECD argued in favour of the evidence based policy making to improve the overall efficiency and effectiveness of the public policies. There are merits on this argument, however, the advantages of evidence based policy making will be realised only if there are appropriate and systemic conditions for it in place. In addition, the problem in the governmental policy making is not necessarily the lack of information but the over-flow of information and the systemic weaknesses in the governmental machinery to process information and build coherent policy advice on the basis of it in a way which is accessible and appealing to the political decision-makers and the senior executives at the top of administrations.

56 See Stiglitz, Joseph E.: *The Contributions of the Economics of Information to Twentieth Century Economics*. The Quarterly Journal of Economics, Vol. CXV, 2000 p. 1441-1478.

57 See OECD: *Public Governance Review of Finland*, op.cit.

3.2 *Productivity Improvement and Administrative Burden in Tax Matters*

A good example of the productivity improvements brought by the iGovernment and ICT is the Finnish Tax Administration. Tax procedures have been completely redefined and almost completely digitised. The operational architecture of taxation has also been reformed. For example, the tax notification procedures have been reformed. Traditional paper declarations to be presented by the tax payers and accompanied by supporting documents have been replaced by prefilled draft declarations in which information has been collected electronically from the employers and other sources of taxable revenues. Re-filled notification can be rectified and complemented by the tax payer and in most of the cases this can be done in an internet-based service portal.⁵⁸ The general policy principle expressed for example in section 22 of the Act on Taxation Procedure is that only the natural persons and estates of deceased persons are excluded from the compulsory electronic communication and servicing.⁵⁹ The business tax notification and surveillance procedures have been further simplified and standardised by taking into use of a system of tax accounts through which the businesses can calculate and follow-up their regular notifications and payments of tax items like VAT instalments and employer obligations settled through the tax system. The tax account system will be gradually expanded to cover all business taxes and legal persons.⁶⁰ In the introduction of the tax account system, Finland is only following a development initiated much earlier in some other Nordic countries including Sweden.⁶¹ The new law on tax accounts sets digital procedures as the default *modus operandi* for the contacting and communication between tax administration and its clients.

As a result of the various reforms in which the digitalisation and the use of ICT have been major facilitators, the number of civil servants working in the tax administration has between 2000 and 2010 reduced from 6410 persons to 5663 persons even though the role of the national tax administration as the primary tax collection authority has largely remained the same.⁶² During 2009, the number

58 See Act on Taxation Procedure (1558/1995) as it has been amended by various Acts, most significantly Acts No 1079/2005 and No 1145/2005. Act on Taxation Procedure does not cover all forms of taxation. The legislative systematic in Finland is that traditionally nearly every tax Act has contained its own procedural rules. This has meant fragmentation of the procedures and loss of economies of scale in administration.

59 Detailed rules on the tax notifications and on the methods of submitting them to tax authorities are found in the *National Board of Taxation Decision 4/7.1.2010 on the Notification obligations and notes*.

60 See the Act on Tax Accounts (604/2009) and the *Government Proposal for the Act on Tax Account, HE 221/2008 vp.* and the *Parliament's Finance Committee Report VaVM 12/2009*. The general overall objective in the tax account system is to have a tax payer centred customer service system and also to provide conditions for productivity increases in the work of tax administration. With the system the Government seeks a reduction of 180 annual working years at the tax administration.

61 See Government Proposal *HE 221/2008* on the comparison between Finland and Sweden and on the history of introduction of tax account in Finland.

62 Annual Financial Statements and Performance Reports of the Tax administration for financial years 2000 and 2009 compared, see, Verohallinto: *Verohallinnon tilinpäätös vuodelta 2000* and Verohallinto: *Verohallinnon tilinpäätös vuodelta 2009*.

of annual working years in tax administration was 5595 with a reduction of 162 working years compared to the previous year. This has led to the general productivity increase of 4,8 % during 2009. A longer term target is to reduce the number of working years to 5 200 at the end of 2011.⁶³ At the same time, customer satisfaction to tax administration has been slightly improving or remained at good level.⁶⁴

The risk in an ICT-driven iGovernment is that Governments start to over-extensively organise administrative services as self-services. This would cause an increased administrative burden on private parties. The administrative burden to private citizens in tax matters seems to have reduced, or, at least, remained in the past levels. This assessment is mainly an informed guess based on the performance reports of the tax administration and the impression in the general public debate and author's own experiences. There was no systematic measurement of the administrative burden in Finland prior to the European Union's programme for the reduction of administrative burden apart from the World Bank's global Doing Business Indicators.⁶⁵ At the World Bank's Doing Business Indicators the annual time in hours for a standard small and medium sized enterprise needs for the dealing with tax matters and number of annual payments of taxes and the overall tax rate compared to profit is followed and countries are ranked on the bases of results.⁶⁶ Finland's overall position and time used has not weakened but Finland is not at all among the best performing countries concerning the ease of the payment of business taxes, if measured by the World Bank's Doing Business Indicators.⁶⁷

63 See *Verohallinnon tilinpäätös vuodelta 2009*.

64 Tax administration conducts a customer satisfaction survey every 2 years and the satisfaction indexes are part of the performance management and accountability of the tax administration. On the development of customer satisfaction, see *Verohallinnon tilinpäätös vuodelta 2009*, p. 4.

65 The lacks of measurement and indicators is observed also in the Government Proposal for an Act on the Tax Accounts in which the regulatory impact assessment concerning the impact on tax payers' administrative burden is only qualitative reasoning in favour of the reform and the absence of measurements is recognised, see *HE 221/2008 vp*. Finland now has a national programme on the reduction of administrative burden, see Government Decision on the Reduction of Administrative Burden according to which administrative burden shall be reduced 25 % until 2012 compared to the level in year 2006, see *Valtioneuvoston päätös yritysten hallinnollisen taakan vähentämisen toimintaohjelmasta* 12.3.2009. The action programme on the reduction of administrative burden is adopted as a national measure attached to the European Union's programme on the reduction of administrative burden which seeks 25 % reduction of the burden.

66 The Doing Business Indicators is based methodologically on the standard cost model, see *Doing Business 2010*, a co-publication of Palgrave MacMillan, IFC and the World Bank, The World Bank, Washington 2009., p. v – x and Data Notes.

67 See *Doing Business 2010*. See data obtained from the Doing Business Database, available at "www.doingbusiness.org". According to data for year 2010 Finland ranked as 71 in the ease of paying taxes and the hours per year spent was 243 compared to 269 annual hours a in 2006, which is the earliest year for which the data is available. Finland's overall position at the Doing Business Indicators was 16 so the ease of the payment of taxes is not a strength of Finland in the Doing Business indicators. Good benchmark is Denmark whose ranking at the ease of paying taxes in 2010 was 13 and the annual hours spent was 135.

The employer obligations are recognised in the studies on administrative burden as one of the most important sources of administrative burden. Other main sources of administrative burden are financial management and reporting and public procurement. In the domain of employer obligations the most burdening seems to be compulsory insurances and safety at work regulations.⁶⁸ Taxation is a priority area in the reduction of administrative burden recognised in the Finnish Government's Action Programme on the Reduction of Administrative Burden.⁶⁹ The National Audit Office of Finland has also received a complaint in 2010 claiming that some changes and lack of development in some essential information systems have actually increased the administrative burden the paying of tax and employer obligations cause on small and medium sized enterprises.⁷⁰

3.3 *Productivity Improvements and Legal Changes*

Legislative changes have been a significant component of the productivity enhancing reforms in tax administration. Tax procedures legislation favours and in some cases sets the outright requirement for the use of electronic communications. The structures of administrative decisions are fitted to the needs of digitalised mass administration.⁷¹ Electronic communications are also standardised beyond the level set by the general Acts of administrative law, the Administrative Procedure Act and Act on Electronic Service and Communications in the Public Sector.

The tax administration is also an area in which the iGovernment's impact on the reform of organisational structures has become visible. The Tax administration is since a law reform in 2008 a single, nation-wide competent authority and the system of regionally competent tax offices has been abolished.⁷² This enables with the use of ICT transfer of files to units whose personnel has appropriate skills and in which the work load is best permitting fast handling of a file. The nation-wide competence together with ICT-based work allocation and procedures enable more flexible organisation and distribution of work. In addition it enables the creation of the economies of scale and scope by specialization within the administration. The new approach with more fluid organisation raised, however, some constitutional questions. The classic doctrine of competence divides competence to territorial and substantial

68 Studies by the Ministry of Employment and Economy on the administrative burden on enterprises, the study on the costs of employer obligations, see Työ- ja elinkeinoministeriö: *Selvitys yrityksille aiheutuvista hallinnollisista kustannuksista – työnantajavelvoitteet*, Työ- ja elinkeinoministeriön julkaisu 7/2010, Työ- ja elinkeinoministeriö, Helsinki 2010.

69 *Valtioneuvoston periaatepäätös 12.3.2009*, op.cit.

70 Information obtained from the registrar of the National Audit Office of Finland. The author has read the complaint as part of his duties as the Auditor-General of Finland the complaint which is now under investigation and handling in the NAOF complaints services.

71 *See Government Proposal to Administrative Procedure Act, HE 72/2002.*

72 *See Act on Tax Administration (278/2008) and Government Proposal to Act on Tax Administration, HE 148/2007 and the Parliament's Finance Committee Report VaVM 5/2008 and the Opinion of the Parliament's Constitutional Law Committee PeVL 5/2008.*

competence and in addition to the appropriate competence layer in the hierarchy of administration. According to the section 21 of the Constitution of Finland everyone has a right to have his matter to be handled without unreasonable delay in a competent authority. Section entails that the foundations of the public authorities exercising public powers shall be laid down in an Act of Parliament. The Constitutional Law Committee accepted the legislative solution proposed in the new Act on Tax Administration to be sufficient in terms of the requirements of section 21 of the Constitution.⁷³

3.4 *Enlightened Governance and Effective Informational Rights*

The promise of iGovernment is not only in the enhanced productivity or societal policy effectiveness. The Scandinavian Acts on the publicity of government activities and access to official documents have as common background certain ideals of deliberative democracy and enlightened governance.⁷⁴ The Swedish-Finnish legislation concerning openness in the government and access to information, in Finland section 12 of the Constitution and Openness Act and Act on the Publicity of Trials in General Courts (370/2007) and Act on the Publicity of Trials in Administrative Courts (381/2007) incorporate several possible communication strategies and set limits to secrecy and discretionary publicity. Possible communication strategies are: (1) classic publicity as a right of access to documents in which the documents, unless covered in specific cases prescribed by law by secrecy, are public and are given for reading and copies are given on request, (2) the active publicity principle as the information principle in which in addition to the classic publicity principle public authorities actively produce information and publish information and (3) the communication principle in which the public authorities in addition to the active publicity engage in mutual communication with citizens and stakeholders as equal partners.⁷⁵ The ICT and the iGovernment make the implementation of the communication principle realistic in the daily life of public authorities.

There are already several applications which implement the active information production and communication principles both at central and local government levels in Finland. On the dissemination of key legislative information and proceedings, the Parliament's information services have been showing the path. The inclusion to the web-site complete web-casts of the Parliament's plenary sessions is one the recent parliamentary reforms. The Parliament does not yet have any mutual communicative tools to support active

⁷³ See *Opinion of the Parliament's Constitutional Law Committee on the Government Proposal for an Act on Tax Administration, PeVL 5/2008 vp.*

⁷⁴ See Pöysti Tuomas: *A Scandinavian Idea of Informational Fairness*, op.cit. See also section 100 of the Constitution of Norway which is today the finest constitutional formulation of the underlying idea. However, access to public documents and information held by the government is still more limited in countries following the West-Scandinavian tradition (Norway, Denmark) than in the East-Scandinavian tradition of Sweden and Finland.

⁷⁵ On the different communicational strategies in Publicity laws, see Pöysti Tuomas: *ICT and Legal Principles: Sources and Paradigm of Information law*, in Wahlgren P., *IT Law, Scandinavian Studies in Law Volume 47*, Stockholm Institute for Scandinavian Law, Stockholm University 2007, 559-600, p. 571.

communication and the iGovernment methods are not yet widely in use in the internal parliamentary processes. The Parliament is, however, aiming at integrating its systems as fully as possible with the Government's information systems and at using structured documents. This enables smooth legislative and budgetary information processes between the Government and Parliament. A common information system application is the EU-tori information and documents management system for the preparation files to be handled at the Council of the European Union or the Commission and for the consultation of the Finnish Parliament in accordance with the Constitution. In the National Audit Office analyses, it has been recognised as a fairly good example of a well integrated knowledge management and information process solution.

Recent solutions to implement the information principle include a service portal providing access to key societal indicators, “www.findikaattori.fi”, which informs the public but also experts and civil servants on the state of society by providing key societal indicators and graphics. This kind of information services realise the constitutional ideal underlying the Nordic openness legislation and the Nordic model of effective democracy in which the information services of the public authorities shall seek to enhance an informed public debate.⁷⁶ The information services and the iGovernment in general can enhance core democratic values and principles. There already are promising solutions to enhance accountability of the users of public powers and resources. Finland has interesting and promising information services in the service of accountability, in particular the Netra – reporting portal which provides access to official financial and performance data of the central government. However, the technicality of the interface and absence of the similar service concerning local government limit the use of current applications compared to some international benchmarks.⁷⁷

Closely related to the Parliament's information services is the openness of election campaign finances and party financing. Open and fair elections are together with freedom of speech and open public debate, the cornerstones of democracy. To the openness and fairness of elections belongs also the voters' possibility to have information and evaluate the possible commitments and bindings of parties and candidates and, in addition, helps to prevent and fight corruption.⁷⁸ The iGovernment solutions provide possibilities for the online realisation of the openness of political financing. After the Council of Europe Group of Countries against Corruption (GRECO) criticised Finland on its

76 On this see, Pöysti Tuomas: *A Scandinavian Idea of Informational Fairness*, op.cit.

77 Good points of comparison are concerning the reporting of the local government (municipalities) Norway's KOSTRA –system at “www.ssb.no/kostra/” and on the use of citizen-friendly symbols rating the performance of public programmes the U.S. Expect more –pages ExpectMore.gov at “www.whitehouse.gov/omb/expectmore/index.html” [visited 12.7.2010]. Web-site is maintained by the Office of the Management and Budget of the United States and was based on an programme assessments and ratings (PART) initiative during the previous Republican administration. Information does not seem to any longer update very fast on the ExpectMore.gov.

78 See the *Report of the Constitutional Law Committee of the Finnish Parliament*, PeVM 2/2009 vp.

weaknesses related to election campaign and political party financing and after Finland experienced its own political and election financing scandals, the Parliament approved new legislation increasing the transparency of the campaign and party financing. Under the new legislation, the National Audit Office of Finland is the oversight authority concerning the transparency and legality of political party financing and election campaign financing.⁷⁹

The new legislation requires the use of the iGovernment solutions in the enhancement of transparency. The National Audit Office of Finland will launch a web-based service to which donations of 1500 euro and above are to be disclosed on-line and in which also the financial statements of political parties and specific declarations on election campaign finances will be disclosed.⁸⁰ Similarly, there is already a service provided in which individual election candidates voluntary campaign financing plans are available and in which the campaign finance declarations of all presidential candidates and in other elections all those elected as members or substitute members to the European Parliament, Parliament or local councils shall be made available. The new service will enable also multiple search functions.

There is also a debate about the equality of possibilities in terms of media access. In connection with the reform of political and election campaign finances and in order to reflect appropriate reactions to the increased costs of election campaign, the Ministry of Justice commissioned a study on how the public powers could support free visibility of individual election candidates and the access to information by the voters.⁸¹ In the study, it was found that the election web-site of the Ministry of Justice “www.vaalit.fi” could be developed further to provide platform to candidates to present themselves in an equal way. According to the study the renewed web service would provide a citizen's search portal for information on the candidates and in the future could also link to information concerning the activities of different politicians in their positions and could also, eventually, provide a social media platform and virtual elections panels for the encounter and communication between the candidates and the citizens. A good point in the report and in the discussion leading to the report is that

79 See Act on the Election Campaign Financing (273/2009) and the Report of the Parliament's Constitutional Law Committee, *Perustuslakivaliokunnan lausunto 2/2009 vp*. And, see also Act on Political Parties (10/1969) as it is amended by Act 683/2010, on this Act see *Government Proposal HE 6/2010 vp. laeiksi puoluelain, ehdokkaan vaalirahoituksesta annetun lain ja rahankeräyslain muuttamisesta* and the *Report of the Constitutional Law Committee of the Parliament, PeVM 3/2010 vp*.

80 Political parties and entities closely associated with the parties shall register at least on monthly bases all donations of 1500 euros or above in the new information system.

81 The report was made by a journalist, Johanna Korhonen and published in the publication series of the Ministry of Justice. See Johanna Korhonen: *Ehdokkaat esiin! Miten julkinen valta voi tukea vaaliehtokkaiden maksutonta näkyvyyttä ja äänestäjien tiedonsaantia* (Let the candidates become visible. How the public power can support the free-of-charge visibility of election candidates and enhance the access to information by the voters). Oikeusministeriön selvityksiä ja ohjeita 33/2010. Oikeusministeriö, Helsinki 2010.

communication by the public authorities is seen as a universal information service the government provides to the citizens.⁸²

The idea of government organised media visibility, however, raises questions and concerns about the limits of the public authorities' information services and on the border line between media and the government organisations.⁸³ The Ministry of Justice runs also a citizens' discussion forum "www.otakantaa.fi" which is intended to have public consultations on major government initiatives and draft legislative proposals. The participation rate to the debates in the forum has been very low and the Ministries have also been fairly reluctant to have consultations on this forum. Finland in general has weaknesses in the public consultations processes and citizens' consultation is not necessarily very high on the real political – administrative agenda despite assurances and declarations on the contrary. Citizens' consultation and participation are often regarded as a burden without results and consultation is limited to seeking written opinions from recognised partners.⁸⁴ The iGovernment provides several possibilities to enhance public participation and reduce also the administrative burden related to such consultations. The debate about the provision of visibility and the border lines between government information services and the media relates to wider legal issues of the iGovernment and active use of communication by public authorities. In the iGovernment active communication and dissemination of information are core functions of public authorities. Public authorities also appear regularly in media as advocates of their agenda which means that objectivity, neutrality and trust and legitimacy and legal protection for the abuses and failures of governmental action shall be secured partly in new operative models and circumstances of public action.⁸⁵

82 The acces-to-information held by public authorities is in the process of evolution towards a universal public service in which the public authorities do their share in the enhancement of informational democracy, see Pöysti: *ICT and Legal Principles*, op.cit., op.cit. and also Pöysti: *A Scandinavian Idea of Informational Fairness*, op. cit.

83 Some members of the parliament reacted rather strongly to the commissioning and findings of the report on how the Government could improve the visibility of candidates, see debates in the Parliament concerning the reform of the election campaign and political party financing and election reforms on the occasion Government Proposal HE 6/2010 and on the occasion of the *Government Proposal HE 7/2010 vp. for changing the section 25 of the Constitution and the Act on Elections and Act on Political Parties*.

84 See OECD *Public Governance Review of Finland*, op.cit. and, see also the speech by the Auditor-General of Finland, Dr. Tuomas Pöysti, on the occasion of the publication of the OECD *Public Governance Review of Finland* gives a good basis for the public management agenda of the next electoral period, available at "www.vtv.fi/en/news/speeches_and_presentations/" [page visited 12.7.2010]. See also Vartiainen Pirkko: *Kansalaiset terveydenhuollon uudistajina* in Vakkuri Jarmo (ed.): *Paras mahdollinen julkishallinto – tehokkuuden monet tulkinnat*, Gaudeamus Helsinki University Press, Helsinki 2009, 172-185.

85 On this challenge to law and changing nature of the public administration see Graver, Hans-Petter : *Rettslige sider ved forvaltningens mediehåndtering*, Tidsskrift for rettsvitenskap, Vol. 120 (2007), 321-360.

3.5 *The Effectiveness of Societal Policies and Improved Legal Certainty*

The functional gains of iGovernment also relate to the enhanced potential in societal steering. The ubiquitous use of ICT and iGovernment enable building information and steering directly into the technical solutions. In this approach, the code literally becomes the law and a kind of automatic control and steering becomes possible.⁸⁶ The iGovernment provides also practical means to improve presentation of data in an appealing and user-friendly way and helps the internationalisation of information to individual decision-making and hereby improves significantly the efficiency and effectiveness of information steering, governance by information.⁸⁷

The general solutions so far are yet fairly limited but different kinds of electronic information services related to advice and guidance in practical actions seem to be rapidly emerging. In the domain of public administration, the iGovernment solutions improve the quality and efficiency of giving advice on the procedure and even on the substantive contents. Some interesting applications are a service of the Finnish migration authority in which the formal satisfaction of the criteria for Finnish citizenship can fairly easily be checked. The eventual practical gains also include enabling better information flows and informational foundations of decisions and policies leading to the improved over-all quality of decisions and the evidence-based or otherwise well-informed policy making. The current over-flow of legal information and substantive information means that any serious attempt on the high quality judicial or administrative decision-making and governmental policy-making shall be based on the wise and user-centred information systems helping users to overcome information over-flood and information processing difficulties and supporting with good information reading skills and with good quality of information.

The iGovernment and ICT systems can also provide managerial and control tools to ensure compliance with the principles of good administration. The potential of the iGovernment to enhance productivity provides also possibilities to ensure that matters are handled without unreasonable delay. The Parliamentary Ombudsman has, in addition, emphasised the use of ICT applications in the administrative management and internal controls to ensure proper handling times.⁸⁸ The ICT and data analyses / data mining solutions give

86 Cecilia Magnusson-Sjöberg rightly notes that legal automation today means also automation of legal information and documents management and that documents management and automated management of legal information are vital legal issues which also shall be subject to legal controls, see Magnusson-Sjöberg C.: *Rätt rättisinformation*, op.cit., p.157-159.

87 On the information steering and governance by producing information, see Graham et. al., *Full Disclosure*, op.cit.

88 See Parliamentary Ombudsman in matter *EOAK 955/08* which concerned disappearance of a complaint at the Office of the Chancellor of the University of Helsinki. The Parliamentary ombudsman stated that the constitutional right to proper handling of one's matter provided for in section 21 of the Constitution entails that public authorities themselves on their own initiative follow up on the bases information on the registry or case management systems the processing with pending cases. Ombudsman has considered lists of cases/matters still pending provided by the ICT as an expedient way of management and control but ICT-based follow-up does not discharge for example police officer, who acts as responsible pre-trial investigation leader, from taking additional and more personal oversight and management

good possibilities to analytic oversight and auditing in which oversight and audit authorities focus their activities on anomalies or other risk factors.⁸⁹ In the future the iGovernment solutions might also directly connect citizens' to dispute resolution and new kinds of mediation trying to help citizens' to get access to rights.⁹⁰

3.6 *The Dependency of the Rights on Information Security and Quality of Information Systems*

The fundamental legal risk in the iGovernment is its profound dependency on ICT systems and information processing and networks. The dependency extends well beyond the daily functioning and running of the ICT systems. The effectiveness of rights and good government and the right to good administration in general depend on the quality of the network and enterprise architecture of the government with its sub-components and on the quality of design and management of ICT systems and information processes. Weaknesses in network and enterprise architecture, systems design and programming and ICT governance and systems management easily become structural problems for legal certainty. This issue is not a novelty in Scandinavian legal informatics but rather a long-time constant theme. While the earlier focus in the legal informatics was the code and individual systems design, the current day challenges have expanded to the overall enterprise architecture and information and communication infrastructure. That is also why legislation and law evolve towards a more infrastructure and infrastructures-centric principles.⁹¹

The information law and its sub-branch ICT law has started clearly to develop legislative solutions for securing the quality of infra-structures and ensuring information security. This follows from the fact that weak information security and poor information management are particular legal risks to private life and

measures in order to fulfil his duties, see Parliamentary Ombudsman in matter *EOAK 2358/08* which concerned unreasonable delays in pre-trial investigation. Similarly the Deputy Ombudsman found in matter *EOAK 811/07* that a public legal aid official at the public legal aid office is responsible as part of his legal duties to follow from the case management systems the advancement and situation of cases for whom he/she is responsible. In the matter under complaint legal aid office's lawyer had failed to announce dissatisfaction to the a District Court decision in due time.

89 Data base solutions and analysing of electronic transaction records, the so called analytic auditing, are essential working tools and methods in the National Audit Office of Finland external audits, particularly in financial and compliance (legality and good governance) audits.

90 This could also be a new direction for the ombudsman, on the future of legality overseeing in Finland see Olli Mäenpää: *Laillisuusvalvonnan haasteet*, Lakimies. Vol. 107 (2009), 1094-1105.

91 See Saarenpää A.: *e-Government*, op.cit., and Saarenpää A.: *Information and Law*, op.cit. and Saarenpää A., *Oikeusinformatiikka*, op.cit. See also Pöysti T: *Verkkoyhteiskunnan viestintä-infrastruktuurin metaoikeudet*, op.cit. The role of the principles of ICT law is to provide general legal foundations to the systems management and development in the context of iGovernment and to the wider information and communication infrastructure, on the general principles of ICT law see a recent Finnish doctoral dissertation, Voutilainen Tomi: *ICT-oikeus sähköisessä hallinnossa – ICT-oikeudelliset periaatteet ja sähköinen hallintomenettely*, Edita Publishing, Helsinki 2009, in particular p. 180-239.

right of access to information. The EU Personal Data Directive 95/46/EC, Personal Data Act and Openness Act contain a fair amount of provisions which concern quality of systems and architecture design and processes. In addition, information security has become a general principle of law derived from the principle of legality and developed in the practise of the European Court on Human Rights on the basis of article on the right to private life.⁹² On the basis of a mandate given in the Openness Act, the Government has issued a Decree on the Information Security in the central government (state authorities) on 1 July 2010. The new Information Security Decree establishes security classification of documents, contains a short legal definition of information security and sets requirements for a basic level of information security which all state authorities should attain in the coming 5 years after a transition period. The Decree will be complemented by practical codes and guidelines issued by the Ministry of Finance.⁹³ The challenge here will be that the basic level defined in the Information Security Decree is relatively low and fairly often higher level will be required either by sustainable operational reasons or directly as a results of the Personal Data Act or other Acts. The lack of attention and lack of appreciation of the significance of information security among the senior managers may cause ignorance on the obvious needs for improvement of information security. On the basis of National Audit Office of Finland external audit findings and supervisory observations, the level of information security in many authorities is still too weak and on the same time vulnerabilities and outright failures of security and other security incidents seem to become more common.⁹⁴ The lack of overall appreciation has also led to the fact that endeavours to produce information to the information networks by the public authorities have resulted to putting unduly personal data to the net or that close connections between some authorities and media in a mediatised society leads to

92 See, for example case *I v. Finland*, no 20511/03, 17 July 2008.

93 See Government Decree on Information Security in State Administration, *valtioneuvoston asetus tietoturvallisuudesta valtionihallinnossa* (681/2010) adopted at 1.7.2010, and the Explanatory memorandum of the Decree, available at the Ministry of Justice and Ministry of Finance web-sites, “www.om.fi”.

94 See *National Audit Office of Finland Annual Parliamentary Report K 15/2009*, p. 60 for a very short summary of observations on the ICT systems and security audits performed by NAOF. Outsourcing of systems and activities and user management were typical problematic areas of security. In risk analyses the communication difficulties and lack of mutual understanding between the senior executive management and information security experts have been rising as a significant risk factor. See also similar observations on the deficiencies in ICT and information security and the lack of effective steering and interest to information security management in the government agencies in Sweden by Swedish National Audit Office, see Riksrevision: *Regeringens styrning av informationssäkerhetsarbetet i den statliga förvaltningen*, RiR 2007:10. In Norway the Auditor-General has found that there is even a more general deficiency in steering of the societal risk management and protection of critical infrastructures, see Riksrevisjonen: *Riksrevisjonens undersøkelse av justisdepartementets samordningsansvar for samfunnsikkerhet*, Dokument nr. 3:4 (2007-2008). I have argued that risk analyses and risk management theories and skills belong to the core of the discipline of legal informatics. They also belong to core the skills of the public managers and law-drafters, see Pöysti Tuomas: *Forskning om rätt och säkerhet* in Seipel Peter (ed.): *Rätten och säkerheten i IT-samhället*, Jure, Stockholm 2006, 95 – 111.

risking privacy by the disclosure of too much data.⁹⁵ Behind the undue publication in the net of administrative documents, there is often a weak information management and a weak structuring of information. In good documents and information management systems, information is structured and personal data particularly tagged and specific systemic solutions are provided for the protection of privacy.

The ubiquitous and embedded nature of ICT systems in the iGovernment and Network Society means that in addition to informational rights, all other fundamental rights and freedoms and other legal rights become dependent on the quality of enterprise architecture and information systems and processes belonging therein. This is increasingly also seen in the case law of the oversight authorities, in particular the Parliamentary Ombudsman, who has been sensitive to the issue and in the advice and guidance given by the Data Protection Ombudsman. The fact that this perspective has less appeared in the ordinary courts or administrative courts than in the practise of the Ombudsman may eventually tell about the problems in the system of retroactive legal protection: relevant cases do not appear in Courts because of the high cost risks or uncertainty over success or because the perspective and grounds for appeal are too narrow.

The Parliamentary Ombudsman and other oversight authorities have an important role to play in the enforcement of good government at the enterprise architecture and information systems. With this respect the very limited resources and thereby limited possibilities for audits and inspection of the Data Protection Ombudsman in Finland creates a risk to legal security in the conditions of network society. The National Audit Office of Finland has pointed out to these risks and since the audit report a very modest albeit positive reply has been made by the Government.⁹⁶ The external government audit and the ICT systems audit it includes by the National Audit Office of Finland, as an independent constitutional watchdog of government and administration, will also in the future have an increased societal role in the safeguarding at a systemic level and at the level enterprise architectures the right to good administration and sufficient conditions for legal protection.⁹⁷

95 See Parliamentary Ombudsman's observations on the municipal authorities documents containing personal data and the treatment of personal data in the local government's (municipalities) web communications, *EOAE 441/05*. Complaint concerned among other things that municipalities publish on the net meeting memorandums containing information about the maternity and parental leaves of individual civil servants etc. For a recent complaint in which the authorities did not manage to draw the line between privacy and giving openly information to the press see Parliamentary Ombudsman in *EOAH 4510/2009* concerning a local police chief's press interview concerning an arrest.

96 For a short synthesis see the National Audit Office Performance Audit Report on the Identification Services, Valtiontalouden tarkastusvirasto, *Tunnistuspalveluiden kehittäminen ja käyttö julkisessa hallinnossa*, Valtiontalouden tarkastusviraston tuloksellisuustarkastuskertomus 161/2008.

97 In this way the external government audit complements the supreme legality oversight exercised by the Parliamentary Ombudsman and the Chancellor of Justice particularly on structural conditions to safeguard fundamental rights and freedoms, see the *Expert opinion given by the National Audit Office of Finland Executive Vice President & Chief of Staff Tytti Yli-Viikari to the Parliament's Legislative Affairs Committee on the Government Report to*

An acute example of the vulnerabilities is the functioning of the patient information systems. Patient information systems are significant for the realisation of the right of access to care enshrined in section 19 of the Constitution. While good quality patient information systems give several opportunities to improve the quality and efficiency of treatment and care, the information security problems and dysfunctions of the systems create serious risks to the realisation of the right to treatment and care in accordance with the Constitution. In a complaint concerning patient information systems, the Parliamentary Ombudsman has stated that the planning of the continuity of the functioning of patient information system shall be done as part of the obligations to give effect to the fundamental right and freedoms. The system managers shall have contingency planning and proper information policy on how to act during the system break downs. In addition, there shall be proper plans and other measures for the maintenance of continuity of the processing.⁹⁸

In a similar manner, procedural rights in the administrative procedure become widely dependent on the quality and functioning of information systems and on the ability to use them properly. The Parliamentary Ombudsman has pointed out that the rights of the use of one's own language shall also be secured in the design of the information systems.⁹⁹ The ICT provides powerful steering tools but occasionally ICT may also guide to the wrong direction. The logic of the ICT systems replaces reasoning by law. The Ombudsman has pointed out that authorities may not require a personal identification code solely on the basis of the fact that the logic of an ICT system requires collection of that code.¹⁰⁰

The Parliamentary Ombudsman has furthermore called on the duties of care in the use of new techniques and procedures and constructed specific obligations of care from the general principles and requirements of administrative law and constitutional handling of the matters. The practise of the oversight authorities has thus complemented the general Acts of information law in creation foundations how the principles of good administration should be applied in the conditions of iGovernment.

The duties of care and approach by the management in the system development and supervision of it are vital in ensuring the rights to good administration in practise. A significant risk lies in the fact that management is not up to this task and the managers may also lack some ICT and information management skills and knowledge about the legal requirements concerning management of ICT systems. Good management requires there an eye for

*Parliament on Human Rights Policy (VNS 7/2009 vp.), 20.11.2009, available at "www.vtv.fi/files/1932/VTV_ihmisoikeuspolitiikka_201109.pdf" [visited 8.7.2010]. The supreme external audit can provide systemic oversight and systemic control over administration which has been called upon in the legal literature, see, for a Norwegian debate in administrative law Boe Erik: *Skaper e-forvaltningen behov for reform av forvaltningslovgivningen?* in Schartum Dag Wiese: *Elektronisk forvaltning i Norden*, Fakkbokforlaget, Bergen 2007, 289 – 302, p. 301.*

98 Parliamentary Ombudsman in matter *EOAK 3256/2007*.

99 Parliamentary Ombudsman in matter *EOAK 212/2008*.

100 See Parliamentary Ombudsman in a matter concerning the reimbursement of unduly collected parking fine, *EOAK 1777/2008*.

detailed systems analyse, well-designed quality and internal control procedures and good user testing which all may easily be bypassed or let without sufficient time and attention in a public management with short term productivity pressures. An administrative culture which favours the painting of the big strategic picture or focus on broad lines of societal policy over a careful but detailed management further aggravates these risks.

A good example of the realisation of this risk is the experiment on electronic voting in Finland.¹⁰¹ On the user testing of the electronic voting system it was observed that some users may withdraw their electronic voting card before their vote is registered to the system and that the voter may still be in belief that he has voted. The report of this feature was ignored by the senior civil servants of the Ministry of Justice responsible for the organisation of elections and the issue was never reported to the Minister of Justice. The system, which as such was not dysfunctional, but which use required a logic from the user not all users were accustomed to, was experimentally taken into use in the 2008 municipal elections in three municipalities.¹⁰² In these three municipalities there were a number of electronic votes which were not registered. On appeal the Supreme Administrative Court annulled municipal elections in these municipalities and new elections were organised. The Supreme Administrative Court did not accept the argument presented by the Ministry of Justice acting as the general election authority that the errors were due to the fact that voters had misunderstood the way in which the electronic voting system functions. The Supreme Administrative Court also pointed out to the fact that user instructions were not comprehensive and misleading on the use of the system and did not fully follow the description of the electronic voting in the Election Act. The electronic voting system did not, in addition, give an error message if the voting event was interrupted because of the removal of the voting card. The Supreme Administrative Court decided on these bases that because of the errors and omissions in the voting instructions and in the functioning of the system municipal elections in the municipalities of Kauniainen, Karkkiala and Vihti had to be renewed.¹⁰³

The decision of the Supreme Administrative Court may be considered well reasoned since the responsibility of a misleading user interface and the legal consequences of it should not reside at the user if there is an aim to arrive at a fair and efficient distribution of risks on the basis of who is best placed to act to rectify or prevent those risks. The decision rightly also highlights the significance of the user interface to the legal quality of iGovernment solutions.

The Ministry of Justice conducted an internal audit on how the electronic voting project and related ICT project was run and found several administrative

101 The experiment was based on the Act 660/2006 on the Amendment of Elections Act (714/1998).

102 The interface required that a voter pushes button OK twice, only one push was not sufficient to register the vote. In addition, the system allowed the voter to remove his/her electronic voting card during the voting procedure and did not give clear indications to the user what will happen in the event the user had removed his voting card from the systems reader.

103 See Supreme Administrative Court decision *KHO 2009:39*.

weaknesses in the project management and project reporting. The internal audit found also general weaknesses in the structures and management of the Ministry which all had contributed to the errors in the implementation of the electronic voting.¹⁰⁴

3.7 *Legislative risks in the iGovernment*

The European Court on Human Rights has on its case law set a requirement that the legislator shall regularly assess the societal and technological development and the risks it entails to the effective realisation of fundamental rights and freedoms and the balancing of the eventually conflicting interests to the protection of fundamental rights. Failure to perform this technological impact and environmental assessment and resulting weaknesses and loopholes in legislation are considered as violations of the rights guaranteed by the European Convention. This was one of the key messages in case *K.U. v. Finland* in which the Court found Finland to be violating the right to private life guaranteed by the Convention.¹⁰⁵ This raises again the old issue of legislative risks in the iGovernment.¹⁰⁶

A systemic risk to rights to private life and protection of personal data in the iGovernment rises from the poor compatibility of general acts and sector-specific acts. The bureaucratic laziness in which the governance of social problems is resolved by giving various authorities wide access to public registers, further aggravates this problem.

In Finland, an area of problematic sector-specific legislation is the social and health care and the prevention of social exclusion. Professionals of social work and education have long time been complaining about the problems "data protection rules" create to their work. The obstacles are mainly created by the interpretation of sector-specific acts and several problems would be avoided if the legislation followed the principles set in the general Acts of information law, in particular the Personal Data Act. The National Audit Office of Finland has pointed out the issue of specific acts in 1998 and repeatedly raised this issue in a major effectiveness audit report concerning the exclusion of the young in 2007. The Data Protection Ombudsman has repeatedly raised the same issue and the topic has also been discussed in the legal literature.¹⁰⁷ No major action has been undertaken to address this issue.

104 See Oikeusministeriö, sisäisen tarkastuksen yksikkö: *Selvitys sähköisen äänestyksen kokeilu* (Inquiry into the Experiment on Electronic Voting), Oikeusministeriö dnro 11/0152/2008, Oikeusministeriö 2008.

105 For an analyses of the case *K.U. v. Finland*, see Pöysti Tuomas: *Judgment in the Case of K.U. v. Finland: op.cit.*

106 Legislative risk was a particular type of legally relevant information security risks recognised in the Finnish study on information security and law, see Saarenpää Ahti & Pöysti Tuomas (ed.): *Tietoturvallisuus ja laki*, Valtiovarainministeriö ja Lapin yliopiston oikeusinformatiikan instituutti, Helsinki 1997.

107 See Korhonen R., *Perusrekisterit*, op.cit. and Konstari T., & Kalima K.: *Pankkisalaisuus, viranomaiset ja tietosuojat* (Bank Secrecy, Authorities and Data Protection), Suomalaiset oikeusjulkaisut SOJ, Helsinki 2002.

This problem appears now also in the public health care which faces major organisational changes following the likely enactment of the new Act on Health Care and as a consequence of the PARAS local government reform project which is changing the organisations for the production of health care and other basic services in municipalities.¹⁰⁸ The current specific data protection legislation is based on the idea of the processing of personal data in a single organisational unit of health care. The law is, thus, not constructed upon the concept of processing in a complete chain of treatment. That is also the reason why in the Act on Electronic Processing of Client Data in Social and Health Care (159/2007) also an electronic administration of patient's consents is foreseen.¹⁰⁹ The principle that the processing of personal data should be based on informed consent in the social and health care is a sound one.¹¹⁰ The problem in the current approach is that it may make the protection of personal data to appear trivial. In addition, the organisation wide access to patient data may in several occasions be too wide access which was one of the core topics in the ECHR judgment in the case *I v. Finland*. Proper solutions would entail changes to the Act on the Rights and Protection of the Patients.

4 Conclusions

The iGovernment is the currently evolving paradigm of government and public administration in the network society. The iGovernment brings deep structural changes to the organisation and processes of public administration and to the law. The promise of iGovernment lays in embedding legal protection and law-based societal steering and social co-ordination to the ubiquitous technological solutions of everyday life and user-centric communication processes. The public authorities are knots in a fluid communication network and they have a significant role in the provision of universal information services. The iGovernment provides technical means to realise an old Scandinavian dream and goal of deliberative democracy and enlightened governance through informed public and private debates. This societal idea and model of democracy underlies the Swedish-Finnish principle of publicity since the 18th Century. The driving force behind the iGovernment development, however, is the aim of improving the economic efficiency of public policies and the public sector. The

108 Government has given its proposal to a new Health Care Act to Parliament, see *HE 90/2010 vp. terveydenhuoltolaiksi sekä laeiksi kansanterveyslain ja erikoissairaanhoidon lain muuttamisesta sekä sosiaali- ja terveydenhuollon asiakasmaksuista annetun lain muuttamisesta*. The Parliament has not yet adopted the new legislation. PARAS Reform project on the local government is based on a framework Act on the Reform of Municipal and Service Structures (169/2007).

109 See section 13 of the Act.

110 The Parliamentary Ombudsman has re-iterated the significance of the principle of informed consent enacted in the Personal Data Act and in the Act on the Position and Rights of a Client of Social Services in the delivering to further entities and to an additional expert information about a client of social services, see *EOAK 2822/2008*.

iGovernment is seen as a method to improve the productivity of public administration and service production.

The primary legal perils in the iGovernment are the increased vulnerabilities in information security and the wide dependence of rights of the functioning of ICT systems and on the structures of enterprise architectures and how they are implemented. The code and systems definitions rather literally become the law. The information security and good ICT systems design and management become essential preconditions to ensure good administration and protection of the fundamental rights and freedoms in practise. Scarcities of skills and knowledge and lack of attention among administrative managers, ICT specialists and managers and lawyers easily create situations in which enterprise architecture and sub-architectures and the system requirements are not designed with sufficient perspective and sufficient detail and situations in which little incidents telling about structural weaknesses are ignored. The traditional control of legality by administrative courts is not sufficient to ensure the conditions for overall legality. The legality oversight by the Parliamentary Ombudsman and Chancellor of Justice has, thus, a partly new area to cover and the role of the Data Protection Authorities becomes even more significant than in the past. Ensuring that the elements of good administration are in place requires information system audits and paying attention to the information processes of government and administration. This increases the role of the National Audit Office as the constitutional external auditor of the government and state administration and the ICT and information government audits it performs in the assurance that the conditions and elements of good administration are in place.

An additional legal peril is a weak level of inter-operability and compatibility of information and ICT systems. Deficiencies in inter-operability restrict competition and easily undermine the promise of productivity and better flow of information and communication. To reply to the challenges of inter-operability requires new models of steering based on the ideas of multi-layered and multi-method governance.

The realisation of promises and the management of the risks of the iGovernment requires new kinds of strategic and systemic thinking and skills. In addition to a good design and management of individual systems, a systematic approach to the design of infrastructures and network and enterprise architectures is needed. This higher level management of the information and communication processes and structures and of the ICT systems requires also legal skills and co-operation between general managers, financial managers, lawyers and ICT managers and specialists. Knowledge, skills and *savoir-faire* in legal informatics and information law and ICT law is required.¹¹¹ Knowledge in legal informatics and information law is part of the general public leadership and management skills. The university curricula and continued education systems still fall short of sufficient introduction of these perspectives. The safeguarding of good administration in the context of the iGovernment takes place as a combination of dynamic application of the principles of administrative law and the principles and learning of information law and risk management.

111 *Savoir-faire* here refers to know-how how to do things rightly and in accordance with the principles of rule of law, constitutional governance and good administration.

The independent external government audit has an important role in the systemic control and assurance of the good government and good administration in iGovernment and its architecture. This systemic control complements the more traditional legality controls by the Courts and by the complaints to the supreme legality overseers. The promises of iGovernment are appealing but the challenges ahead to a 21st century model of rule of law embedded in the information systems and enterprise architectures are vast.