Evaluation of the Iceland State Financial and Human Resource System

REPORT OF THE INDIVIDUAL EVALUATOR

Annex 1
ARRANGEMENTS IN OTHER COUNTRIES

Introductory remarks

The subject of the Evaluation is the investment made in the State administration's Financial and Human Resource System, which represents a substantial investment for the State. Its overall objective is to assess how well the System fulfils the requirements and needs of the State and to propose actions to improve the IT-systems supporting the State finances and human resource management. As part of this, the Evaluation is expected to assess the cost and quality of the operation, maintenance and support for the System and compare with experiences from neighbouring countries.

Information has been collected on the arrangements in six small European countries with a reputation for being innovative users of information technologies; i.e. Austria, Belgium, Denmark, Finland, Norway and Sweden. Information has been collected both from government websites and through contacts with state officials in each country.

I have not been able to find any international comparative studies or other relevant literature concerning the back-office information management systems in public administrations. Much of the focus of research and international studies has during the last decades been focused on front office functions; i.e. on expanding and improving the services provided online to citizens and enterprises. The back office arrangements have been taken for granted or has been left to the ICT professions to discuss in more general terms.

I have not been able to find sufficient substantive information on the cost of operating and maintaining back-office information management systems in other countries to make it possible to compare cost levels. There may be different reasons for this. Costs are for example registered and reported in different ways in each country so that data are not comparable or sometimes not even available. The costs are normally borne by different institutions, and countries may not have produced aggregated data across the entire State administration. Some state administrations may also have been reticent about making information on total cost public.

I have also collected information from the Uppsala County Council in Sweden. It runs one of Sweden's major hospitals and thus in many ways similar to Landspítalinn in Reykjavik.

It is evident from the six countries covered by the survey that there is no single best solution, since countries have chosen different arrangements and suppliers. No country has however chosen to set up a single shared back office system including all the functions that are included in the System. Some countries have been open about problems encountered, while problems in other countries can only be inferred from extended implementation timed..

Five of the six countries operate share service centres providing administrative services to other state services. Using the centre is compulsory in one country (Finland) and widely used in the other countries. The services provided are typically based on service contracts between the centre and the serviced institutions. The Centres are normally not financed be own budget authorisations, but by fees paid by the serviced institutions.

It is also evident that the internal administrative arrangements are salient factors between different choices. Austria's centrally managed system would not have been compatible with Sweden's agency model, but nor would Sweden's loose network have satisfied the needs of the Austrian state administration. It is also clear the Icelandic State administration was both an early mover and an unusually daring mover when it already twelve years ago decided to set up a shared back-office information system.

AUSTRIA

Context

Austria is a federal country with 8,4 million inhabitants and an area of 84 400 km^2. GDP per inhabitant in PPS relative to the EU27 average is 126. The public fiscal balance was -4,6 per cent in 2010. [1] It is composed of nine constituent states (*Länder*). These states are subdivided into a total of 99 administrative districts under federal tutelage, and into a total 2 357 communes (*Gemeinden*).

The powers of the federal level is relatively extensive and include traditional sovereignty functions, the judiciary including police services, financial sector, industrial policy, environment, health, traffic and communications. Responsibility for education and social policies are shared between the federal level and the constituent states. Its state administration is close to the classical weberian model with reliance on central functions and statutory governance.

Back-office functions

The Federal ministry of Finance (*Bundesministerium des Finanzen*) coordinates ICT-development in the administration (the IT-section in the ministry's central bureau). Austria is presently building an integrated information system on the basis of a SAP integration platform. The core budgeting system used by the Ministry has however been developed separately.

The federal financial management authority (*Buchhaltungsagentur des Bundes*, BHAG) is a separately managed State institution. It provides a range of accounting and financial management services to other State institutions using SAP applications. These include the SAP User Management and User support modules. The core services provided are compulsory, while other services are agreed between the authority and the institutions serviced.

The agency responsible for public buildings is running project portfolio management in a SAP module. It is not known if other agencies do it as well.

---

[1] eGovernment in Austria, October 2011. http://epractices.eu.

The federal Chancellery (*Bundeskanzlersamt*, BKA) is responsible for issues relating to public human resource management. A data warehouse is being established on an SAP platform as the basis for an integrated Human Resource Management system for the federal administration. The Chancellery is also providing selected shared services related to recruitment and staff development.

BELGIUM

Context

Belgium is a federal country with 11,0 million inhabitants and an area of 30 500 km2. GDP per inhabitant in PPS relative to the EU27 average is 119. The public fiscal balance was -4,1 per cent in 2010.[2] It is composed of three territorial regions but also at same time of three linguistic communities. These are autonomous in relation to the federal level although subordinated to royal decrees. Below this level Belgium is subdivided into 10 provinces and the next level 189 communes.

The federal administration is organised in vertical federal services (*Service Public Fédéral*, SPF), each linked to a ministry. Three federal services are considered to be horizontal; the SPF Personnel and Organisation, the SPF Budget and Management (FedCom), and the SPF IT and Communication (FEDICT). The Federal public administration and the Flemish public administration[3] are innovative in both e-services and human resource management practices.

Back-office functions

The SPF Budget and Management operates Belgium's system for budgeting, financial management and monitoring. It is run on an SAP platform with SAP applications.

The SPF IT and Communication is responsible for an IAM (Identity and Access Management system. It is run on the Oracle Service Bus.

The SPF Personnel and Organisation has at present separate shared systems for each type of administrative function. A number of problems with this type of arrangement have been identified, and work on an integrated Human Resource Management system was initiated in 2007. It has however met a number of obstacles and has not yet resulted in a new system. Work is now focused on developing a Human Resource Management Database in an Oracle application (*Data Base Oracle for Human Resources Administration*, DeBOHRA) as the core element in a Human Resource Management system and for communicating with existing system for data registration.

DENMARK

Context

Denmark is a unitary country with 5,6 million inhabitants and an area of 43 100 km². In addition, Greenland and the Faeroe Islands are home rule territories belonging to the Danish realm. GDP per inhabitant in PPS relative to the EU27 average is 127. The public fiscal balance was -2.6 per cent in 2010.[4] Following the completion of the 'structural reform' of the local government on 1

---

[2] eGovernment in Belgium,, November 2011. http://epractices.eu.
[3] Common for the Flandres region and the Dutch language community.
[4] eGovernment in Denmark, November 2011. http://epractices.eu.

January 2007, the local government in Denmark is now composed of 5 regions and 98 municipalities. As a result of the reform, tasks have been transferred from the regional level to the municipal level as well as to the State level. The municipalities are responsible for handling most tasks related to citizen service delivery. The regions are responsible for hospital care and health insurance, social affairs, regional development and coordination with business, tourism, transport and environment. Regions and municipalities are subordinated to the national government but enjoy substantial freedom of action.

The Danish public administration is of the Nordic type with separately managed state institutions, but the government still exercises a substantial control over the institutions. In 2011, the Agency for the Modernisation of Public Administration (*Moderniseringsstyrelsen*) was created in through a merger of the Financial Management Agency (*Økonomistyrelsen*) and the Human Resource Management Agency (*Personalestyrelsen*). The new agency is responsible for both the State accounting system and for the central co-ordination of human resource management.

Back-office functions

All State institutions except the five largest use Navision Stat for financial management, with certain amendments to enable it to use a parallel system for payments (*NemKonto*), for dealing with e-invoices and for transferring data to a State reconciliation system (*Statens Koncern System*) used for aggregated reporting purposes and for the preparation of the State fiscal accounts. The *Økonomi Servicecenter* (ØSC) at the Moderniseringsstyrelsen provides administrative services to these institutions.

The reconciliation system was designed and developed in-house. The five largest entities use SAP-based systems, and deliver data from them to the reconciliation system.

There is no full bodied human resource management system, but only a salary management system that also includes some human resource management functions, and that integrates with the financial management system for certain data. There is no shared central government project planning system.

The Danish state administration uses a range of separately developed back-office functions. Among them are IndFak delivered by Evenex, RejsUd delivered by Basware, and the state salary system (*Statens Löne System*) developed in co-operation with CSC.

Denmark has since the introduction of e-invoicing worked on delivering a full bodied procurement system. Central government agencies that use Navision Stat use that for e-invoices. However, only some of these use the procurement part of the system. It is hoped to expand the use of the procurement part.

FINLAND

Context

Finland is a unitary country with 5,4 million inhabitants and an area of 338 000 km^2. GDP per inhabitant in PPS relative to the EU27 average is 116. The public fiscal balance was -2.5 per cent in 2010. [5] It is subdivided into 336 self-governing communes that are subordinated to the national Parliament and not to the Government. The communes are responsible for a range of important services and functions and employ the majority of public employees. There are six

---

[5] eGovernment in Finland, January 2012. http://epractices.eu.

regional state administrative agencies (AVI) that govern and supervise the State's functions in the regions.

Back-office functions

Finland began developing an integrated government administration system – KIEKU – in 2004, intended to replace a large number of separate applications for different functions and institutions. The project includes a harmonisation or work flows, work processes and data structures. The development project is linked to the creation of a separate service centre (PALKEET) in 2006. Use of this centre's services is compulsory. The centre is financed through fees paid by the serviced institutions.

The responsibility for developing the KIEKU system rests with the Ministry of Finance (*Valtiovarainministeriö/Finansministeriet, VM*). The system will be based on a SAP integration platform. A purchase decision was taken in 2008 and the system is expected to be implemented between 2012 and 2015. So far it has only been implemented in four government institutions and in a part of the Ministry of Finance.

The estimated running costs of the system when fully implemented is estimated to be about 12,5 M€ per year including infrastructure (servers and other "backbone" components), application licenses (maintenance fees), application maintenance (external work), interfaces between KIEKU and agency specific systems and own work (internal). The total cost per user and year is estimated at about 200€.

The figures above do not include the initial investment. That is estimated to cost around 120 M€ during eight years (2008-2016) including both external (work and other purchases) and internal costs (mainly work).

The system will not only contain applications from SAP, but also from other suppliers. The financial management application will be provided by Logica. The human resource management application will be provided by Logica, since the SAP module could not be adapted to the new State salary system. It should be noted that Finland also experienced problems in setting up the interaction between the Logica application and the SAP-system.

NORWAY

Context

Norway is a unitary country with 4,9 million inhabitants and an area of 324 000 km². GDP per inhabitant in PPS relative to the EU27 average is 179. The public fiscal balance was 10.6 per cent in 2010. Norway is divided into 18 counties and 430 municipalities. These are responsible for a range of important services and functions and employ the majority of public employees. Their powers have been delegated by the State, and are set out in legislation, not in the Constitution. [6]

The Financial Management Authority (*Direktoratet for økonomistyring, DFØ*) is responsible for the State accounting system (*Regnskapsprogrammet*) and for developing the accounting function in the State administration. Recommended State accounting standards (*De statlige regnskapsstandardene, SRS*) were introduced in 2010 but are not compulsory. A standardized accounting plan for the State administration was introduced in 2011 and is intended to become compulsory in 2014.

---

[6] eGovernment in Norway, November 2011. http://epractices.eu.

Back-office functions

Each State institution is responsible for its own accounting. The Financial Management Authority provides services to interested State institutions, using the Agresso information system. The interested State institutions can choose between full or partial services. The use of these services is voluntary, and the coverage is at present 62 percent.

Each State institution is responsible for managing its own information on human resources. The Financial Management Authority provides self-services for State institutions and employees, using the SAP Human Resources information system. This system is adapted to state administrations and configured in accordance with the State´s regulations concerning human resource management, financial management and salaries. The use of these services is voluntary, and the coverage is at present 78 percent.

All services are financed by fees paid by the institutions that use the services. The fee depends on the number of users in the institutions.

An electronic trading (e-procurement) application is provided by the Financial Management Authority as a complement to its accounting services, using a Basware system. This system is tightly integrated with Agresso. All information about suppliers, cost types and cost centres etc. is registered and maintained in the accounting systems and transmitted automatically to the procurement system.

SWEDEN

Context

Sweden is a unitary country with 9,4 million inhabitants and an area of 450 000 km^2. GDP per inhabitant in PPS relative to the EU27 average is 123. The public fiscal balance was 0,2 per cent in 2010. Sweden is divided into 21 counties and 290 municipalities.[7] These are responsible for a range of important services and functions and employ the majority of public employees. They are subordinated to the Parliament but not to the Government, and responsible for a range of important services and functions including social services, primary and secondary education, and health services.

The state administration in Sweden is characterised by an extensive delegation of all administrative and operational decisions to about 250[8] separately managed government institutions (*'förvaltningsmyndigheter'*).

The Uppsala county has 342 000 inhabitants and an area of 8 200 km^2. The County Council (*Landstinget i Uppsala län*) runs the Uppsala University Hospital (*Akademiska sjukhuset*) with 8 000 employees and 1100 beds. The hospital provides highly specialised care requiring top up-to-date medical competence, with providing more normal care for the county's own inhabitants and cooperating the medical Faculty of the Uppsala University. It is also responsible for governing both private and own primary health care centres.

Back-office functions

Each state institution decides independently on its purchases of goods and services, including the acquisition and operation of its different information management systems. Central statutes focus

---

[7] eGovernment in Sweden, January 2012. http://epractices.eu.
[8] Agencies without own budgets are excluded here.

merely on the interoperability of systems and on the data that must be supplied to the government's aggregated accounts.

Purchases are coordinated by various government institutions that sign framework agreements with selected suppliers for different products and services. These institutions establish required specifications, verify product conformity with these specifications, verify suppliers' capacity and reliability, and ensure that the legal rules for public procurement are observed. Other institutions can then choose whether to purchase from the contracted supplier or whether to initiate an independent purchase. It the latter case, it has to observe the national and European regulations for public procurement.

The Financial Management Authority (*Ekonomistyrningsverket*, ESV) is operating the central government accounting System. It is also responsible for framework agreements for systems for i.a. (i) financial management (at present Unit 4/Agresso and KMD Sverige), (ii) human resource management (at present Logica/Palasso), and (iii) electronic purchasing (at present Logica and Visma). A recent attempt to get a framework agreement for Business Intelligence failed, as no bids were entered.[9] ESV is at present reviewing its future procurement strategy.

The shared service centres of the Tax Authority and of the Social Security Services were merged in 2012 and are now form a separate institution, the State's Service Centre (*Statens Servicecenter*). Other State institutions are expected to contract with the Service Centre for their financial and human resource management information systems. There is no obligation to do so, but institutions that opt out are expected to present acceptable business cases for their preferred arrangements. It has however been difficult to enforce the latter requirement.

The Uppsala County Council is autonomous in its management decisions and choices of information systems. It has no central or strategic management of its information systems. These are instead seen as administrative tools, and decisions on choice, management and development are taken by the concerned unit. The council's ICT-unit has an overall responsibility for security functions.

The Council uses *Agresso* for financial management and purchase management since 1996. Maintenance and support costs are about 1,3 MSEK/year and operating costs (servers run by external contractor) about 1,4 MSEK/year. These costs do not include the costs for ad-hoc consultants.

It uses the Primula suite for HR applications (*Primula* for HRM, *BeSched* for scheduling and *Tidomat* for time registration). Maintenance and support costs are about 2,4 MSEK/year and operating costs (servers run by external contractor) about 1,0 MSEK/year. These costs do not include the costs for ad-hoc consultants.

The Hospital uses *Cosmic* for its medical records. It is leading actor in a national project to give clients internet access to their own medical records.

---

[9] The reason is said to have been legal stipulations unacceptable to companies operating under US laws.