IJPIS

ACTING OUT THE SWEDISH E-GOVERNMENT ACTION PLAN

- MIND AND MEND THE GAPS

MIKAEL LIND
School of Business and Informatics, University of Borås, and
Viktoria Institute
Mikael.Lind@hb.se

OLOV ÖSTBERG
Public Information Systems
Mid Sweden University
Olov.Ostberg@miun.se

PER JOHANNISSON
Enterprise Architecture
Defence Materiel Administration
Per.Johannisson@fmv.se

Abstract

The Swedish Government has made the decision to reclaim its world leadership in the eGov ranking circus within two years. This is indeed easier said than done; policy documents alone will not overcome the age old gaps between the three layers of public administration containing some six hundred independently managed agencies. At best, it may prove possible to make the agencies in the state sector capability cloud march to the whole_of_government tune. Included in the problems faced in the attempted paradigm shift are (i) unrealistic time scale, (ii) governance is not possible without an enterprise architecture, (iii) the modeling of the needs of the end user cannot be left solely to individual agencies, (iv) clusters and federations must be defined by means of federation level agreements in addition to service level agreements, (v) low adherence level to EU's directives regarding e.g. Services and Public Information Re-usage will be rewarded with low eGov EU ranking, and (vi) there are very few mandatory standards and profiles for Swedish agencies and no Swedish National Interoperability Framework on the horizon. Among the positive signs are that very ambitious work is taking place in both the defense and e-health sectors. To compensate for the unrealistic time scale, and to secure public value, it is an absolute must for forums with reference to eGov discussions, architecting work and information exchange to be established as soon as possible.

Keywords: ministry, cabinet, action plan, public administration, agency, architecture, benchmarking, coherency management, eGov, enterprise, federation, governance, interoperability, public authority, services, Sweden, transformation, communities of interest, agreement.

1. Preamble

The present authors have fifty years of experience between them with regards to the Swedish e-Government (eGov) evolution from a variety of perspectives including that of policy, advisory, practitioner, end-user, developer, implementer, and researcher. It is from these perspectives that the present paper analyses the unfolding Swedish

Government's eGov action plan, and offers pointers towards practical decisions regarding how to handle the existing obstacles (legal, policy, culture, governance, personnel, technology). This should enable a whole_of_government information sharing to take place across state, regional, and local layers and should also enable involvement from citizens and the private sector thus forming a very loosely defined extended enterprise. The research question addressed in the present paper is: *How would whole_of_government information sharing be established taking Sweden's historical efforts in eGov into consideration?* This research question is founded on the successes and failures relating to Sweden's eGov history stretching back over the last sixty years. The Swedish definition of eGov is a direct translation of the definition used in the European Union, i.e. as *the use of information and communication technology in public administrations combined with organizational change and new skills in order to improve public services and democratic processes and strengthen support to public policies* [COM, 2003].

A strong emphasis is thus placed upon a historical reconstruction in which the computerization within Swedish government agencies and the preparation of Swedish citizens in a whole_of_government information sharing approach (section 2) are seen as paramount. In addition it is accepted that Sweden's position as a highly ranked eGov nation has occurred in spite of a perceived un-focused central leadership and an absence of whole_of_government tools such as the appointment of a Chief Information Officer and a tailor made Service Delivery Architecture (section 3) and that the efforts associated with Action Plans I and II have not produced the required insights and that there has been a lack of both whole_of_government standards and governance (section 4). In line with the historical insights and the 'good policy words' from Action Plan II, a whole_of_government architecture model is introduced and is propped up by considerations in relation to contemporary Swedish initiatives (section 5). The paper is concluded by addressing whether Sweden's efforts in eGov will actually come to fruition (section 6) due to this architectural emphasis and offers some reflections as to whether the prescribed eGov medicine will work (section 7).

The research method adopted in the present paper is built upon the premise that the history of Sweden's eGov efforts can be used as empirical data. Key findings are then used as the driver for discovering the characteristics to be used in deriving important conditions for the establishment of a whole_of_government information sharing capability framework. Empirically, the formulation of the framework is inspired by contemporary efforts in other sectors (defense and health). The generalized emerging picture is that *a democratic nation's public administration's enterprise services can be seen as a shareable capability cloud* between the nation's law-making parliament and the nation's physical (citizens) and juridical (firms) subjects. The role of the capability cloud is to fulfil the political visions by implementing decisions and laws in a transparent, trustful, effective, and efficient way. When the related business processes and delivery information channels are implemented into both *Electronic Information* and *Communication Technology*, then this now deals with e-functions and related eGov, and also with the continuous optimization of service delivery and governance by transforming internal and external relationships through new information grid-technology above the internet technology, and new media, in a legal and trustworthy way.

2. Unwinding Sweden's e-Government Saga

2.1. The Moulding Years

In 1945, the Swedish Board for Computing Machinery was formed with the task of purchasing calculation machines from the USA. This did not meet with universal approval from the US Administration, partly due to Sweden's interest in nuclear undertakings, and as a result the Board embarked on a development program of its own.

Using 8000 standard electro-mechanical phone relays, Sweden in 1950 completed the construction of the calculation machine named BARK (Binär Aritmetisk Relä-Kalkylator). Four years later this was replaced by BESK (Binär Elektronisk SekvensKalkylator), which was equipped with 3000 vacuum tubes and a ferrite core memory array. For a period of ten months, during 1954, Sweden was then actually the proud owner of the world's fastest 'multiplication machine' [Petersson, 2005].

In parallel, starting in 1954, the Swedish company Facit produced 'civil' BESK copies – Facit EDB – and also gradually excelled in producing manual and electro-mechanical desk-top calculators for office applications. Facit was a de facto world leader for such products until 1970 when it failed to move into the electronic era and was quickly dethroned by Japan and collapsed in 1973.

A very important role during the past-BESK era was played by Gunnar Sträng, an ardent welfare democrat who in the years 1947-1976 served as the minister of National Economy, Agriculture, Social Affairs, and, last but not least, Finance. He understood that the very ambitious welfare reforms could not be implemented without the support of computing machinery, and almost single-handed turned Statskontoret, the Swedish Agency for Public Administration, into a national administrative computing hub. Thus it could be stated that Gunnar Sträng, de facto, fathered what is today called an action plan. Twenty years later, as an important source for subsequent action plans, a more outspoken governmental initiative for promoting the use of IT was put forward. This initiative was taken by the Commission of IT [1994] led by Carl Bildt, who soon thereafter became the prime minister of the right-wing coalition.

2.2. Public e-Administration Roll-out

In 1962 it was 'mission completed' for the Swedish Board for Computing Machinery, with regard to the early administrative aspects of acquiring and implementing powerful strategic computing resources. As a result and according to the wishes of Gunnar Sträng, the Board was dissolved, only to reappear within Statskontoret. At that time, any Swedish state agency wishing to purchase office equipment or consultancy services, above a set threshold limit, had to ask for approval from Statskontoret. The IBM 'golf ball typewriter' was above that threshold.

Officials at Statskontoret, the rationalisation agency of the central government administration, instilled the world view inherited from the Board for Computing Machinery into the new state-owned consultancy firm Statskonsult. The idea was that the ambitious computer acquisition programme of the 1970s required a competence in computer programming and systems development that was currently unavailable in the market. More specifically, the reason for starting Statskonsult was the high salaries required to recruit competent staff and that Statskonsult should bid for projects on the open market to assure the competiveness of the firm in relation to its privately owned competitors.

DAFA, a computer centre for administrative data processing, was simultaneously hived off from the computer centre of the National Bureau of Statistics. Its task was to carry out administrative data processing on behalf of other civil state agencies. DAFA was supervised by Statskontoret from 1970 to 1975, and then served as an independent agency until it became a state owned stock-company in 1986. Together with Statskonsult, DAFA was eventually privatized in 1993. [Springdal, 2001] A similar development took place within the local government sector.

Sweden's keen interest in securing computing resources for *research* was contagious. Statskontoret acted as the prime mover in the buildup of *administrative* computing resources; all the major public authorities had become computerized by 1990. One explanation for Sweden's rapid up-take of information technology for administrative purposes in the public sector is that unique identity numbers are given to all citizens and companies. The register for personal identity numbers was in place by 1947 and the registration was computerized in the 1960s [Swedish National Tax Board, 2000]. In this way all agency case handling could be computerized, and large national databases could be filled with more or less sensitive information. As a corollary, Sweden pioneered, in 1973, a national Data Inspection Board[1].

Swedish society at large was also involved in a rapid up-take of computers; see Ilshammar et al. [2005] for a full review. Starting with 'The Government Bill 1981/82:123 on a Co-ordinated Data Policy', a number of computer or ICT-related bills and policy documents had been passed by the Swedish Parliament. The most notable was the 1997 Parliament decision to provide a tax deduction incentive for employees to purchase PCs via their employers. The idea behind this costly 'Home PC Reform' was to (i) create an information society for all, (ii) act as an injection to industry, (iii) support democracy by means of *e-access* and *e-participation*, and (iv)to serve as a base rationale for *e-services*. These reform components (i-iv) usually act together under the umbrella term *eGov*.

The reform was by far the most important driver behind the fact that Sweden had become a world leader in PC penetration. The proportion of employees with access to a computer at home rose from 48% to 67% between 1997 and 1998 [Booze Allen Hamilton, 2002]. The spread of PCs also lead to widespread awareness and expectations of the opportunities for accessing information and services via the internet. After ten years the reform was considered to have been successfully completed, and it will probably be phased out by the end of 2009.

3. A Plateau or Downhill?

High level eGov policy makers are very sensitive to international benchmarkings. Unfortunately, low-budget projects employing consultancy firms or university sophomores often result in low-quality benchmarkings. If repeated year after year, they nevertheless provide useful relative information.

Time and again, Sweden has been pointed out as being one of the world leaders in international benchmarkings on issues dealing with eGov and the information society. Sweden held the Presidency of the European Union from January - June 2001. During that period Sweden was instrumental in establishing a method for the measurement of eGov performance among the member states. In fact, the measurements were adapted from Sweden's 24/7 concept [Statskontoret, 2001], which in turn was an outflow of *Public Administration in the Service of Democracy—an*

[1] http://www.datainspektionen.se

Action Programme [Swedish Government Offices, 2000]; or more succinctly Action Plan I.

In the EU eGov benchmarkings, Sweden was initially an unchallenged leader, but, primarily the other Nordic countries and most notably Denmark, gradually caught up with them and now this position as leader has been lost:

> Sweden's advancement over recent years has been minimal and it has dropped from its leading position in earlier years to be at the lower end of the upper quartile, ranking 7th.
>
> [Capgemini, 2007]

It should not be considered as being something to be ashamed of being ranked 7th among the now 27 EU member States, especially as the measurements, which were commissioned to the consultancy firm Capgemini, typically involve merely scrutinizing the face output of the national web portals. There are high ranking member states offering advanced services, which have almost no users. This can happen in highly centralized countries, but not in Sweden where all agencies[2] receive annual appropriation and will have to bear the costs of providing services to their respective users; no agency is willing to provide advanced services unless there is the likelihood of being a significant number of users.

Sweden should rather be proud of the fact that the United Nation benchmarking of 192 countries round the world consistently has given Sweden top rankings in measurements of somewhat broader information society issues. These issues are in accordance with the aforementioned eGov Action Plan I, that asks for the implementation of issues related to services quality, transparency, the basic values of democracy, and the rule of law and efficiency[3]. The 'eGov readiness' of the UN benchmarking is a composite index, which consists of a web measure index, a telecommunication infrastructure index and a human capital index. The focus of the benchmarking is on 'government to citizen' and 'government to government' aspects of eGov:

> The world average of the global e-Government index continues to increase as more countries invest resources in developing websites that are informative. Most countries have e-information on policies, laws and an archive section on their portals/websites. The gap between e-information, e-consultation and e-decision-making is still wide for developing and developed countries. For the first time since this survey has been produced, there is a new leader. In the 2008 Survey, *Sweden* (0.9157) took the number one spot from the *United States*. The Scandinavian countries took the top three spots in the 2008 Survey, with *Denmark* (0.9134) and *Norway* (0.8921) in second and third place respectively. The *United States* (0.8644) came in fourth.
>
> [The United Nations e-Government Readiness Index 2008]

The two recent International benchmarkings of Capgemini [2007] and UN [2008], respectively, appear to offer conflicting views on Sweden's eGov performance. An earlier International benchmarking carried out by Booz Allen Hamilton [2002]

[2] For a handful agencies, the appropriations are reduced in accordance with their respective income on permits and data/information—which may explain why Sweden has had a remarkable low profile with regard to the EU directive on reuse of public information.

[3] Presently, the ministry of finance—and public administration—wants to move ahead with 'ethos'.

highlights the conflicting views and provides a clue as to how to interpret the dichotomy. Nine countries were analysed (Australia, Canada, France, Germany, Italy, Japan, Sweden, USA, and UK). It was found that Sweden was *top* with regards to e-services delivery and uptake, but was at the *bottom* with regard to the capability and maturity of delivering those very e-services. One interpretation might be that the individual Swedish service delivering front-end agencies had worked well in spite of poor central leadership (such as the absence of whole_of_government tools such as a Chief Information Officer and a tailor made Service Delivery Architecture).

Another International benchmarking provides yet further viewpoints for interpretation. Blakemore and Lloyd [2007] found that the Nordic countries, led by Sweden, were by far the most successful when the eGov performance of EU Member States was analyzed using a composite index incorporating measures of 'public good', 'trust', 'transparency', and 'citizen centric' perspectives, respectively.

4. Come e-Government Action Plan II

4.1. 4.1 Action Plan I on the Loose

The Swedish model of public administration dates back to the constitution of 1634, and the invention of the concept of agencies. Fifty years later, several of today's state agencies had already been established. Today, in governing the nation, the Government is assisted by the Central Government Offices (Cabinet), an integral authority consisting of the Prime Minister's Office, the ministries and the Office of Administrative Affairs. Administratively speaking, the Cabinet is a *state agency*, whose duty is to assist the Government in its task of governing the realm and achieving its policy objectives. The Cabinet in turn is supported by an array of agencies making up the state administration. Again, administratively speaking, all public authorities at the regional and local level are also agencies, even if they do not report directly to the Cabinet.

The Cabinet is quite small by International standards. Some of the state agencies, on the other hand, are rather large, relatively speaking, and are independently led by director generals. Any forceful central administrative actions from the Government are, as a result, relatively few and far between. Governmental Action Plans should be viewed using that structure as a background. *Criteria for 24/7 agencies* were drawn up by Statskontoret [2000], but Action Plan I clearly spells out that the purpose of the criteria was to (quote) encourage the agencies to develop electronic services in a manner that suits the needs of citizens, companies and other consumers (unquote). That is, the aim was for the criteria to be used in the agencies' own efforts to become 24/7 agencies. It should be noted that Action Plan I primarily addressed service issues at the approximately 240 independently governed public authorities constituting the core of the state sector. *This is what we want you to do*, said Action Plan I, *but no additional funding will be available and you will have to use your regular budget and make decisions as to how to prioritize your work*.

Every agency is fully responsible for developing its own business systems, which means that the decisions of each agency are primarily based on the assessments of benefits and costs for its own activities, which in turn means that there is an obvious risk of whole_of_government sub optimization. The root of sub-optimization is, to a large extent, the fact that there is no coordination of the appropriation directives which are broadcast to the agencies. A typical example is described in a report by Verva [2008a] on the automation of ordinary case handling processes: The projected substantial savings regarding the automation of 'bankruptcy case handling' could not

be achieved because only two of the four involved agencies had received direct instructions to take part in the ensuing cross-agency processes.

The launch of the action program can be seen as an example of what is referred to as the Swedish 'light touch' governing approach. It is often the case that the Cabinet (or a ministry) expresses its vision, suggests solutions, but stops short of expressing any normative statements regarding how to achieve these aims. In fact, the communicative intent put forward in Action Plan I is so general and vague that it hardly qualifies as an *action* plan. The Swedish National Audit Office [Riksrevisionen, 2004] accordingly found that the results of the Action Plan were very limited, that there were serious shortcomings in the implementation of the eGov framework, and that all this had negatively affected citizens and companies as well as the agencies themselves. The laconic and rhetoric title of the revision report was "Who Governs the Electronic Administration"? A similar conclusion can be deduced from the last (before closure) eGov survey by Verva [2008b].

As noted in the revision report, the agencies themselves were affected by the lack of program governance. Eventually a group of director generals from the large agencies wrote a letter to the Government asking for more firm leadership. The response was a 'do-it-yourself' answer in that the Government on 1 January 2004 appointed the Government Interoperability Board [GIB]. The board was to consist of director generals and deputy director generals. Its task was to support and promote secure and effective electronic information exchange within the administration and between the administration and the citizens. The GIB was mandated to establish common standards for electronic information exchange; issue guidelines for electronic information exchange and promote the availability of information exchange services and products available in the market. The GIB, an agency in its own right, had the right to issue regulations that are mandatory for *all* state agencies, as well as non-mandatory guidelines. The funding for such work would have to be found in-between the GIB member agencies.

Output from the GIB would not be binding for local and regional governments. To support those sectors, the Government formed yet another agency, the 24/7 Delegation. However, very little output appeared from either of these two new support agencies. The GIB directors had not been provided with any budget and could not, as predicted, agree upon any mandatory standards. The 24/7 Delegation had no tools whatsoever.

At this point the Government attempted to restart the eGov work by pooling all the Action Plan I support competence from five different agencies, including Statskontoret, into a new support agency named Verva - The Swedish Administrative Development Agency.

4.2. Infra-services seen as a patch for Action Plan I

Complying with the 'light touch', Action Plan I was, by and large, taken to mean that agencies should climb the 24/7 steps[4] at their own discretionary manner and pace: (i) web presence, (ii) transactions, (iii) personalization, and (iv) integration [Statskontoret, 2000]. Smaller agencies were able to reach halfway into stage (iii), but then were forced to stop due to lack of technical, personnel and financial resources, and in reality due to a lack of a whole_of_government federated enterprise architecture. The eGov support agencies, firstly Statskontoret and thereafter Verva,

[4] There are several variations in the naming of the 24/7 steps. Another popular version is Presence-Interaction-Transaction-Transformation

attempted to come to the rescue by introducing the so called Infra-Services available via framework procurement. The Infra-Services framework is primarily a support based on the use of standardized solutions of electronic identification and secure exchange of data. The aim of the Infra-Services framework was to facilitate and reduce the costs of e-service development and operations for public authorities working towards becoming 24/7-agencies [Lundbergh, 2004].

The firms delivering infra-services were also allowed to provide add-on services. This meant that the firms could provide small and middle-sized agencies with a comprehensive 24/7 package if these were required. This in turn meant that the firms could act as fee-for-service interoperability operators, which also meant that these operators could establish 'fiefdom federations' of partially 24/7 enabled agencies. Statskontoret/Verva unfortunately appear to have omitted to ensure that the infra-services operators were interoperable, partly because no '24/7 standards' had been established for the communication layer of interoperability. The infra-services concept was, however, a commendable pioneering initiative anticipating today's Software-As-A-Service and Cloud Computing. It should be noted that there is no barrier to the infra-services firms from marketing their services within the private sector.

4.3. Action Plan II in the Being

Verva started on the 1st of January 2006 and it was only after two years that the Government appeared to accept that it was not possible to implement the far reaching eGov ideas which had been somewhat vaguely expressed in Action Plan I. These plans relied on the small and tooth- and moneyless Verva having the ability to both coach and push forward hundreds of agencies. It appeared that this 'light-touch' model was unable to automatically firm up its ideas under those circumstances.

In a Country Report to the International Council for Information Technology in Government Administration [ICA], the following three emerging eGov trends were reported from within Sweden:

- The traditional reliance on *independent individual agencies* is complemented with a reliance on *functional 'agency federations'*.
- The national agenda becomes more and more intertwined with the agenda Sweden subscribes to as an *EU Member State*.
- The new (Autumn 2006) Government is signaling more *emphasis on joined-up issues* and an *extended eGov portfolio for Verva*, an Administration Development Expert Agency.

[Verva, 2007]

The projections noted above from Verva proved to be correct, the exception being that the Government decided to dissolve Verva and to deal with the extended eGov portfolio in the form of a new structure within the Government Offices. In a Press Release from the Ministry of Finance on 18 September 2008, under the headline *Major e-Government Reform*, the following points can be discerned:

1. The strategy in Action Plan I was to delegate the 24/7 agenda to the heads of state agencies. This resulted in the neglect of whole_of_government issues.
2. A more focused organization is required for e-Government development, and the Government must govern the development more distinctly.

3. An operative whole_of_government *e-Delegation* will be created within the Central Government Offices.
4. The e-Delegation will be responsible for (i) implementing Action Plan II, (ii) reviewing the agencies' ICT spending, (iii) co-ordinating the state sector ICT standardization, and (iv) fostering interplay between all e-Government parties; Government, State Agencies, Municipalities, Regions, and Industry.
5. Verva will be dissolved by 31 December 2008.

When Action Plan II [Government Offices, 2008], mentioned in the above 'reform list', was published on 18 January 2008, it proved somewhat difficult to come to terms with because of its repeated statement that it was *not an action plan for the service delivering agencies to adhere to*, as was the case with Action Plan I, but rather an action plan regarding how the Central Government Offices should deal with eGov issues. Three interesting statements serve as a framework for Action Plan II:

- The objective is: ***as simple as possible for as many as possible***.
- The aim of the action plan is to improve the coordination of strategic eGov work within the Swedish Government Offices. If the administrations make use of these new opportunities, Swedish public administration will be able to ***retake a leading position in the eGov field by 2010***. This will not be possible without active and committed participation from the agencies themselves.

The objective has been set for 2010, but we have an important intermediate target in the autumn of 2009 when we are due to ***arrange a ministerial conference on eGov during Sweden's EU Presidency***. By that time we will be well on our way to our objectives - towards an eGov that simplifies everyday life for citizens and businesses.

4.4. Sweden's e-Government 'as-is' at end of 2008

Action Plan II and the concomitant reshuffling of the support agency line up is a sign that the Central Government Offices are aware of the problems involved. Some of the negative and positive symptoms have already been mentioned, and others are stated or discernable in both their documents and speeches. An important source is the evaluation carried out by a special investigator whose task was to review the performance of the Government's four support agencies[5] [Stabsutredningen, 2008]. The investigator concluded that Verva had failed to deliver the required support with regards to eGov issues, but at the same time concluded that this was to be expected since the Government had given Verva neither the necessary tools nor a concrete definition of the eGov mission. Without management power, it proved to be impossible for a small agency such as Verva to coach 250 state agencies, several of which had budget and staff resources which were 100 times greater than that of Verva. The following is the present authors' compilation of a 2008 global health check list for eGov in Sweden:

[5] *ESV* (Financial Management Authority), *Kammarkollegiet* (Legal, Financial and Administrative Services Agency), *Statskontoret*, and *Verva*.

- ☺ Information Society for All.
- ☺ Performance at Agency Level.
- ☺ National Data Bases
- ☺ Infra-services Initiative
- ☺ Democracy and Trust
- 😐 EU conformance
- 😐 AAA; Authentication, Authorization, Accounting
- ☹ Services stovepipes within agencies
- ☹ Services stovepipes across agencies
- ☹ PPP; Public-Private Partnership
- ☹ Enterprise Architecture (Framework)
- ☹ Whole_of_Government Standards
- ☹ Whole_of_Government approach to end-user issues
- ☹ Governance of eGov

The last item on the list was formulated in the report "Who Governs the Electronic Administration?" [Riksrevisionen, 2004]. The general views on such matters are voiced over and over again in the eGov community in words such as "There is no political energy in eGov, no points for politicians to score." Löfgren [2008] concluded that the Swedish model of government organization in many respects hampers attempts to address the ☹-symptoms in the above list. In addition to these symptoms there are several steps in the legacy of the eGov development in Sweden that point to the requirement for normative statements of realization as well as supporting tools.

Action Plan II is yet to be implemented by the proposed e-Delegation. It should be stressed, however, that it takes determination, time, resources, and not least governance skills, to bring about a fully integrated networked public administration. It will not work, as noted by Hall (quoted by Löfgren [2008]), to rely on such meagre policy instruments as 'dialogue' and 'governance by visions'. The Swedish Central Government Offices has acknowledged that it is high time for the administration to catch-up with the development. The transfer from a hard copy paper culture to a bustling e-society culture will for example have ramifications for the balance between statutory rights of transparency and integrity, respectively. The Commission on a New Administrative Procedure Act[6] has been given the task of catching up with this work. The parallel Committee of Inquiry on e-Access to Official Documents[7] is expected to make a request for a law which makes it mandatory for agencies to provide (non-secrete) information in electronic form, if so requested.

At the start of 2009, the Swedish Central Government Offices appeared to have a development portfolio for an e-services delivery platform made up of a fully integrated networked public administration. However, it is not possible for such an undertaking to be accomplished without the support of sub-portfolios for (i) service strategy, (ii) service design, (iii) service transition, (iv) service operation, and (v) continual service improvement; i.e. the main components of ITIL (IT Infrastructure Library) providing a framework of Best Practice guidance for the most widely accepted approach to IT Service Management in the world. A proposal for a comprehensive Swedish ITIL best practice framework was recently published by the Swedish National Financial Management Authority (Ekonomistyrningsverket) [ESV, 2008].

[6] Directive Ju 2008:08
[7] Directive Ju 2008:06

In the absence of the adoption of a whole_of_government coherency policy, Sweden's eGov has at present been formed by numerous individual e-services initiatives at independently managed agencies. Sweden has, nevertheless, been at the forefront of international eGov. However, in spite of attempting to keep ahead there are, naturally, still elements of the past visible in Action Plan II and other communications from the Swedish Central Government Offices. Most importantly, however, is that 2009 appears to be the year when the Government has taken the decision to provide *coherency management* [Doucet et al., 2009] using a type of enterprise architecture approach in order to achieve alignment, agility, and assurance.

5. Bootstrapping the e-Government Restart

The following list of 'good policy words' has been compiled from the available policy documents, and in particular from Action Plan II:

> •federated approach •service-based architecture •greater coordination •joint objectives •network-orientation •clusters •administration-wide cooperation and integration •coordination of IT-standardization •regulatory framework •strategic partnership with the business sector •inter-administration cooperation •consensus between central government and municipalities •EU Directives on eGov •holistic view of Swedish public administration •legal and organisational conditions for long-term interorganizational cooperation at large •involvement of private actors •joint operational support and integrated monitoring and consolidation.

The Swedish model of public administration is to be recognized as a loosely coupled organization [Weick, 1976]. The loosely coupled organization has been described as a system having its subsystems being both decoupled and tightly coupled [Orton and Weick, 1991]. Through these means, the subsystems of a loosely coupled organization may exhibit tightly coupled and interdependence between certain components of the different subsystems while others operates quite independently.

The historical reconstruction of Sweden's efforts in eGov which are taking place at the present time, point strongly towards the requirement for common standards in order to establish a fully integrated networked public administration. Such standardization has a good resonance in relation to inter-organizational IT innovation [Andersson et al, 2008]. Fomin et al. [2008] have stated nine issues which are related to open standards in the development of public Information and Communication Technology (ICT) infrastructure. These have been brought forward in order to explore (i) whether standards matter in developing and governing public ICT infrastructures, and if they do, (ii) what can or should be the Government's role in developing standards-related policy. These nine issues are Economics of Standards, Public Good and Compliance, Syntax and Semantics, One Stop Service Experience, Technical Maturity, Future-Proof, Goals of Participation, Accessibility, and Intellectual Property Right.

What can be noted is that these issues/dimensions have a strong resemblance to the key characteristics and the "good policy words" identified above in Action Plan II. It should however be noted that end-user issues are absent in the above list of 'good policy words'. The explanation might be that Action Plan II, contrary to Action Plan I, is concerned with eGov issues from a Central Government Office perspective, and not from the perspective of a service delivering agency. Abdicating responsibility from end-user issues is a mistake. Time and again the Government has asked the agencies to define and deliver services from a more user-centric perspective. However, the

problem is that the agencies do believe that this is what is being done since they are user-centric from their respective agency perspective (i.e., they are *usage-centric*).

Whole_of_government user-centricity cannot in a wholesale fashion be left solely to the approximately six hundred independently managed Swedish agencies (stat/region/local). Modelling the requirements of the user must be conducted both centrally and at the agency level. A report commissioned by the Norwegian Ministry of Government Administration and Reform [Brandtzæg and Lüders, 2008] provides two good additional points:

- Public information should be made freely available and reusable. Public institutions must be willing to experiment and take risks to a larger extent.
- The public sector must create a culture of sharing, in which public information is distributed *by the citizens themselves*, without losing important content or trust in the process

Action Plan II is far from perfect. As an attempt at being of assistance in this matter, the present paper wishes to support this signalled 'Swedish eGov restart' by uncovering the necessary framework components for networked e-services capabilities, taking the legacy factor into account, e.g. as manifested in the form agency specific internal electronic services bus systems, embracing several business lines and a multitude of vendors. However a reminder should firstly be noted:

> While public officials at all levels of government play important roles in interoperability efforts, government leaders alone have the power to alleviate the institutional constraints that impede these potentially transformative, but highly complex enterprise initiatives. Unfortunately, while leaders have the unique power to make these changes, experience shows that the policy environments they have created, or in many cases inherited, often limit the capability of governments to share authority, to collaborate, and to jointly and strategically manage enterprise initiatives. To change this, leaders must understand the link between their policy decisions and the capability of governments to create the systems necessary to share information and other resources across boundaries.
>
> [Pardo and Burke, 2008]

5.1. Government, get your legal acts together

In May 2007 the Government appointed a special investigator to review the 'Law on regional cross-government cooperation', and in particular with a view towards promoting the use of ICT. The review had been triggered by the fact that large agencies handling issues such as taxation, employment, and social security, had gradually reduced their local presence. They were investigating the possibilities of halting this downward trend by establishing joint service offices. On 14 November 2008, the investigator delivered the report [Committee on Public Administration, 2008] and summarized his findings in the newspaper article "Sluggish agencies let down the citizens" [Högdahl, 2008]. However, the investigator does not place the blame on these very agencies, but rather on the cherished Swedish system of independently managed agencies: "Stovepipes are formed in the parliament and show up in state agencies and municipalities".

The remedies put forward by the special investigator can be viewed as a combination of *law-making* on whole_of_government issues, and *service-making* by

means a confederated system for public services to citizens and industries. Such an approach, including an example of an *eGov doctrine*, had been proposed previously by Charas et al. [2007].

As this is viewed as a juridical subject, whenever a Public Authority enters into cooperation with another juridical subject, be it private or public, the cooperation will have to be registered by means of a contractual agreement. If such a contract binds several participating subjects together with regard to a defined information domain, then a federated information domain exists as defined by the *Federation Level Agreements* (FLAs). It is impossible for the Government to be involved in the details of all future information federations. Thus the Government must establish an eGov FLA Framework and perhaps also a set of FLA templates for the most common types of eGov services federations.

5.2. Agencies, make yourselves federation enabled

It is not a difficult task for an agency to exchange information with a peer agency as all that is involved is an agreement on a set of AAA protocols (Authentication, Authorization, Accounting) and the service quality parameters. Those interoperability specifications are usually called *Service Level Agreements* (SLAs), and are necessary for interactions with both federation partners and end users embedded in federations.

FLAs and SLAs are to be viewed as standardizations. Tassey [2000] identified that the infrastructure roles of standards had gradually increased in importance over the years, and identified the following reasons:

1. many new technologies are systems or networks so that increasing returns to scale can generate huge economic rewards for the version of a technology that becomes the standard;
2. the demand for quality and reliability in technologically complex products and systems requires a range of standards based on sophisticated infra technologies;
3. the systems nature of critically important technologies means that competition is greatly affected by the degree of standardization within product structures and at the interfaces between components of these systems; and
4. the shortening of the average technology life cycle has on average increased the pressure on the standards setting process with respect to timing. The central strategic problem of managing the timing and content of standards is a difficult one because
   - many types of standards are required in today's typical technology-based industry;
   - they interact to varying degrees with one another; and
   - non-product standards, as one type of technology infrastructure, are derived from different sources other than those of the industry's core technology and thereby often conflict with corporate strategies. [ibid., pp. 600]

In the near future, any Swedish agency will be required not only to be a partner to other Swedish agencies (state, regions, and municipalities) but also EU-wide to industry (EU PSI Directive) and to public authorities (EU Services Directive). In the near future, an agency will, in other words, have to step forward and offer its (information vault) capabilities 'as a service'. This can only happen if agencies adopt a true services oriented architecture, i.e. that the information exchange functionality is detached from the agency centric production system.

This in turn can only happen if the Government governs the agency collective in a firm and coherent manner, following an explicit whole_of_government architecture (symbolically depicted in Figure 1), and provides support in the form of standards, building blocks, enterprise reference models, and frameworks. This symbolic architecture for a whole_of_government approach is to be seen as the basis for an interoperability framework and also for an enterprise architecture [Guijarro, 2007]. Thus, this architecture for a whole_of_government approach is to be considered as the backbone for a fully integrated networked public administration. "An interoperability framework aims at referencing the basic technical specifications that all agencies relevant to the eGov strategy implementation should adopt. This interoperability framework should enable, at least, the interoperability between information systems from different agencies in order to provide services to citizens and businesses in an integrated way" [ibid., pp. 90]. "Enterprise architecture refers to a comprehensive description of all the key elements and relationships that make up an enterprise. […] Enterprise architecture aims at aligning the business processes and goals of an enterprise and the applications and systems that constitute its technical infrastructure" [ibid., pp. 96].

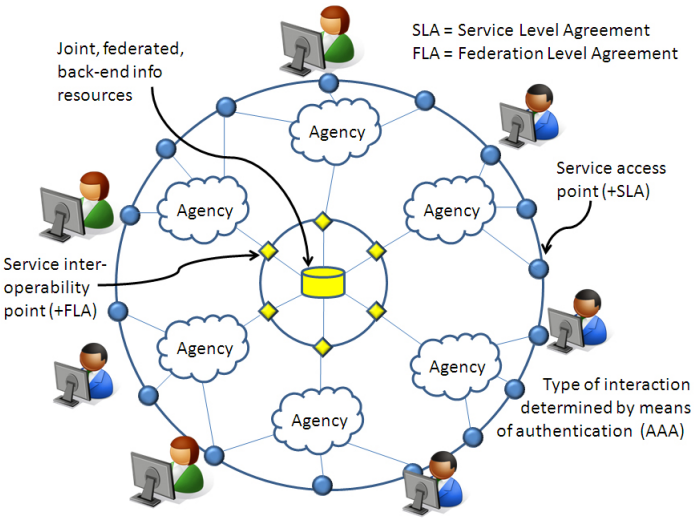

Figure 1.

Symbolic picture of a proposed architecture for a whole_of_government approach. Do also note that today's service access points are primarily tailored towards traditional internet terminals, but will shortly have to be fully mobile enabled.

Guijarro [ibid] compared the two tools, interoperability framework, and enterprise architecture, for policy and guidance with in the area of interoperability for eGov agencies. After this comparison, by investigating the experiences developed in Europe and the United States, the author proposes a two-phase interoperability roadmap; (i) using interoperability frameworks for enabling interoperability by providing the basic technical standards and policies to enable the seamless flow of information between different administrations in the delivery of e-services and (ii) using an enterprise architecture for facilitating the alignment of the administrative procedures with the technical systems. In the two following sections these two levels of interoperability, are recognized by making architectural considerations in relation to contemporary Swedish initiatives (Network Based Defense (NBD) and National (eHealth) Information Infrastructure (NI)).

5.3. Re-use architectural considerations from the Swedish Armed Forces

Every service delivering agency by definition has its own service delivery architecture, either an explicit architecture of its own, or an architecture implicitly defined by its ICT vendors. Large, well-managed agencies *usually* have two separate architecture functionalities, IT architecture and business architecture. The not-so-big-agency *seldom* talks about architecture. Sweden's Central Government Offices *never* talks about architecture in whole_of_government terms.

The modernization of the Swedish Armed Forces is an exception. Analyses of a network-based 'whole_of_defense' started in 1999. The Swedish Parliament in 2001 passed a bill establishing that the "Armed Forces are to be developed according to the concept of network-based defense (NBD)", and calling for a major development program to provide the network capability to implement the concept. The most salient feature of the Swedish NBD is the strict adherence to high level business logic: resources, effect based operations, generic services, functional federations with a centric focus capability instead of being platform specific, etc., and a serious commitment to model based development along the lines of a proper Enterprise Architecture The Swedish NBD work has been carried out jointly with the UK Ministry of Defense (MOD). As a result, the MOD Architecture Framework (MODAF), and the related NATO Architecture Framework (NAF, ver. 3), have special views for services based on the Swedish NBD development efforts.

Taking this one step further, as the Swedish national military defense resources will gradually work more closely with the civil society in order to be part of the total defense of Sweden's national livelihood, it is to be hoped that the implementers of Sweden's eGov action plan pay attention to the NBD. This does appear to be sufficiently compelling for it to be happening in the UK; as well as being mandated for use in the MOD acquisition of systems and MODAF is also used or evaluated by a number of other UK Government departments and agencies, including the Cabinet Office and the Parliament.

The proof of the pudding is in the eating. In September 2008, NATO Allies and Swedish civilian and military forces therefore conducted a joint demonstration in Enköping, Sweden, to test new ways of sharing critical emergency information. It was found that it was indeed possible to exchange 'near real time' information from land, sea and air between civil and military players in order to mount effective joint responses to emergencies.

5.4. Clusters come Communities of Interest (CoI) come Federations proper

The eGov Action Plans I & II have positive views on agency-initiated cooperation, especially when based on geographical closeness, but, lately, also when agencies shares resources or customers/clients. The NBD initiative is an extreme example leading to a united national defense system, where the former army, navy, and air force stovepipes are presently viewed as whole_of_defense capability profiles. The Swedish Armed Forces are on the other hand never mentioned in connection with eGov issues.

In the civilian sector, pioneering work is taking place with the ongoing project on a National Information Structure [Socialstyrelsen, 2008] in the e-health arena (healthcare and social care), where *Professionals need access to efficient, interoperable e-health solutions*, and *Authorities need ICT for management and resource distribution aiming at increased safety and quality in e-health services.* It

deserves the label 'pioneering' for two reasons; (i) it defines a set of generic concepts, roles, processes, and responsibilities, and (ii) the process model focuses on what the value is that should be achieved for the individual patient/client as well as with regards to cooperation between e-health actors in society at large. *Figure 2* shows that the e-health people have adopted structuring in a generic fashion, which paves the way for 'copy-cats' from other eGov sectors. Other parts of the project work on the e-health term standards and the technical architecture, respectively. The project is led by the Swedish National Board of Health and Welfare, and the final results are to be delivered by the end of 2009.

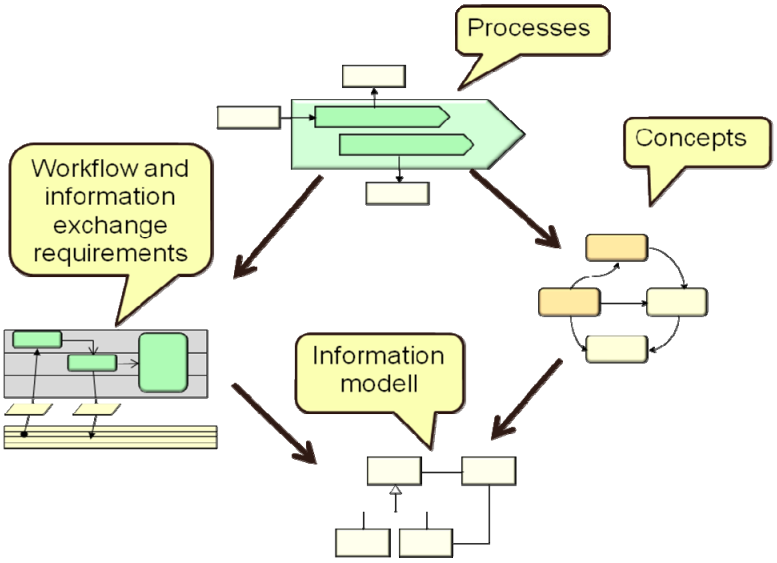

Figure 2.

Models used in the Swedish project on *National Information Structure Support for Access to Appropriate Information* on the e-health arena.

There are also a handful of more restricted cooperative initiatives attempting to ease the burden of citizens and companies in cases such as applications for licenses and permits. One important observation is that services involving 'sharp' cooperation between government agencies and industries run into uncharted legal territories that can only be overcome by the creation of a company acting as a government-industry federation proxy. Examples are the portals www.minpensíon.se, forecasting my pension, and www.mittbygge.se, guiding someone through the maze with regards to building a house. The former is run by the company MinPension AB, and the latter is run by the company MittBygge AB. Shortly an announcement is to be made by a company to be named MinVaccination AB, which will assist citizens in keeping track of all their different vaccinations.

The common denominator for the above portal services examples is the lack of central government SLA and FLA support for joint business processes when transferring from non-cooperating clusters into more serious 'communities of interest' and ending up as proper federations. A careful analysis of this situation is arrived at from a Swedish 'community of interest' called the RIF group and which is made up of all state agencies involved in the law enforcement processes (police, customs, courts, etc.). The government in 1996 asked this group of agencies to jointly work out procedures for enabling a speeding up of their crisscrossing information sharing relay. The group was to govern and finance itself. Virtually nothing happened for ten years. Action Plan II indicates that the Central Government Offices will deal with RIF and other sleeping clusters. The response of the RIF group was to eventually produce an eGov action plan of its own, and in particular an analysis of the legal requirements for the stated cooperation. The report concluded that the RIF member agencies are

'locked in' by existing laws, but that a systematic restructuring of the laws might possibly reveal that cooperation, information exchange, and re-use of information is actually allowed [RIF, 2008].

In summary (compare Figures 1 and 2): Treating the administration as a federated system, whose capability to deliver public good is to be realized involves the need for a strategy for the development of, and agreed upon, federation rules regarding legal processes, legal workflows, COI oriented concept models, and a federated information model per federated cluster. Having created this generic federation platform, the information exchange model for '*My information*' can be published (and subscribed to) and handled in the federation.

5.5. Governing the ungovernable

Recovering from the *9/11 shock*, the US Federal agencies in the name of 'homeland security' found that they had to abandon several of the restrictions regarding cross-government information sharing. Today, eight years later, the situation has normalized, but there is no desire to re-install all the pre-9/11 information sharing red tape.

Based on constitutional laws and traditions, Sweden has probably become the world's most transparent nation with reference to access to public sector documents. It is possible for anyone to anonymously request to see public documents – many of which would not be considered public in other nations – but public authorities themselves cannot compare their respective public registers.Throughout the last decades, Sweden has, to some minor extent, removed some information exchange barriers in order to prevent 'cheating' in the taxation and welfare systems, but as both citizens and companies are a priori considered to be honest, this 'dirty word' rarely appears in policy documents.

The fact remains that the Swedish Public Administration consists of approximately six hundred central/regional/local public authority domains in the form of legal entities called agencies. There are no incentives for, and, indeed, there is a requirement for legal cunning, in order to be able to establish business processes across agencies. At best, the Central Government Offices is able to manage the agency director generals through hiring/firing, budgets, and annual directives, but both regional and local governments fall outside this command and control sphere.

The reality is that some 70 per cent of all citizens' government contacts take place outside the command and control reach and thus it is a difficult task for the Central Government Offices to achieve the oft repeated national policy mantra that *services should be offered in such a way that citizens do not need to know the inner workings and organization of the public sector*. It appears that the setting up of an e-Delegation (see section 7) equipped with the Action Plan II document will have to be supported by a mature understanding that information sharing includes the cultural, managerial, and technical behaviors which one participant may use as leverage regarding information held or created by another participant.

Action Plan II appears to place some confidence on relying on services clusters and federations. This appears to be a plan, but then the Central Government Offices will also have to provide support for tailor-made cluster/federation action plans, and, in addition, a plan regarding how to federate a federation into a whole_of_government situation *so that citizens do not need to know the inner workings and organization of the public sector.* Determination and hard work are crucial components in order to achieve such a coherency management framework. The following concepts and

approaches for a federated governance of information sharing within the extended enterprise are offered by Aucoin and Magnusson [2007]:

- Self-forming, self-organizing and self-regulating;
- Required to support the establishment and maintenance of trust relationships for sharing;
- Agile: supporting rapid change in business/mission requirements;
- Light-weight: can be reliably implemented with minimal additional administrative burden;
- There is no "one-size fits all" style of governance within federated environments. The style of governance must be tailored for the state or phase of evolution of a given federation as it forms and self-organizes.

5.6. End-users' sociotech lifecycles stages

In the eGov arena, the concept of lifecycle often denotes the grouping of an agency's front office services addressing life events such as birth, education, marriage, unemployment, retirement, and death. Similar life events can be devised for firms. In the back office, lifecycle usually refers to the life of system components, and in particular to routines required in order for new components to be smoothly and securely phased in when older components are phased out. Components can be hardware and software, but can also be processes, information, and services [Lind and Goldkuhl, 1998]. The lifecycle of a service would involve all the states from needs modeling, formation, prototyping, implementation, evaluation, etc.

The MeWe-generation was the name Lindgren et al. [2005] gave to a cohort of young people, stressing their communication needs and desires. It has always been the case that the speed of e-artifact penetration is different in different sectors of society, and in different age groups, and is an important ingredient in decisions regarding an agency's services portfolio: Personal visits to services offices, communications by letter, e-mail, telephony, web portals, TV – are examples of well known service channels. However, what about all those information tools covered by the catchword *Web 2.0*? Some of these concepts are here today and gone tomorrow, and many do not fall in line with the traditional criteria for e-services quality. It is a moving target for which no readymade architecture is available for implementation. The Government Central Offices must nevertheless put *end-user sociotech lifecycle stages* on the Action Plan agenda.

6. Rise and shine again[8]

Sweden's early and successful entry into the world of administrative computing carried over into a position as an internationally acknowledged eGov leader. Sweden is still performing well, but, during the last couple of years, there has been the sense that the golden days are finished. Many "we must shape up" warnings have been expressed by e.g. agency director generals. Suggestions that the Government should appoint an eGov CIO/Tzar have been turned down with arguments such as "There is no need for such a person. Ministers can handle their own respective eGov portfolio, and all Government decisions are made collectively by the ministers". Had this happened in industry, then Sweden's eGov business line would have gone bankrupt

[8] *Shining Stockholm* was the caption of the cover of *Newsweek International*, February 2000, in which Sweden was declared the centre of Internet commerce.

[Christensen, 1997], just as happened when Sweden's world leading producer of electro-mechanical desk-top calculator disappeared in the 70's.

Luckily, governments and agencies are bankruptcy proof and will survive even a failing eGov agenda. The visible results will '*only*' be increased costs for the administration machinery, low civil servant morale, dissatisfied citizens, critique from the Swedish National Audit Office and the Ombudsmen of Justice, reduced international ratings on e.g. business climate, and so on and so forth.

Luckily, Sweden's new eGov agenda looks promising and may even be described as a paradigm shift for the better. The new agenda will however not have any visible effects on the agencies' performances for several years. The projects on a Network Based Defense (NBD) and on a National (eHealth) Information Infrastructure (NI), respectively, have shown that whole_of_government approaches take a very long time (more than five years?) and may involve hundreds of subject matter experts. The Central Government Offices may have to start several new sector projects as a part of the whole_of_government agenda. There are no short cuts.

Not a short cut but a useful drastic cut was suggested in the advice to professional writers given in 1914 by Quiller Couch[9]: "Whenever you feel an impulse to perpetrate a piece of exceptionally fine writing, obey it—whole-heartedly—and delete it before sending your manuscript to press. *Murder your darlings*." This slogan was later popularized in the Swedish film "*Kill your Darlings*", and it might be a good advice also for the Swedish eGov renewal agenda based on the darlings named *Independently Governed Agencies*. It is not possible to whole-heartedly rally around a whole_of_government agenda without removing a significant portion of that dear independence. In announcing the close down of the 24/7 (eGov) support agency Verva, the Government of Sweden has actually acknowledged that "The so called 24/7 strategy, based on delegating IT issues to individual agency directors, has resulted in a number of whole_of_government issues being neglected"[10]. In Sweden, this is indeed a remarkable statement. A new eGov agenda addressing this problem will have to face centuries of administrative legacy structure. It is estimated that at ~ 80 percent of a project's life-cycle costs — and benefits — are locked in by the initial chosen concept. Changes cannot be crafted and implemented from one day to another; it will take years if not decades.

Canada [2005], Netherlands [2006], Finland [2007] and Denmark [2008] have already embarked on enterprise architecture supported State IT consolidation and sourcing programs. Australia [2008] has actually appointed a 'Razor Gang' to restore back-office efficiencies in order to reduce expenditure on ICT business-as-usual in order to free up money for service delivery capability. In 1993, Sweden privatized the central state data processing center DAFA. It is now time for a restart, but this time with a focus on enterprise architecture. While it is generally considered 'enough' to 'act-as-one' towards the citizens and businesses in the front-offices and portals, when it comes to back-office functions such as internal administrative services it is all about whole_of_government sharing resources and consolidating services.

In sharing resources and consolidating services, the public administration must not, however, override the rules regarding market competition. The Committee on Public Administration (2008) has had the instruction of reviewing the tasks and organization of the state administration. Among the Committee's views with a bearing upon eGov issues are (i) that the opportunities for efficiency gains based on cooperation across agencies have been used only marginally because of various

[9] http://www.bartleby.com/190/12.html
[10] Ministry of Finance Press Release, 18 September 2007.

obstacles or inadequate incentives, and that (ii) financial management and personnel administration are natural areas for said efficiency gains, but (iii) that cross-agency IT services cooperation could bring even greater savings and efficiency gains. The Committee furthermore proposed (iv) that a general rule should be introduced by law, stipulating that state agencies are not allowed to sell goods and services in competitive markets or markets that are potentially open to competition, and (v) that even inter-agency purchases of goods and services should be covered by the principles that apply to public procurement in general. Sweden is yet – mid 2009 – to implement the EU PSI directive, and the eGov action plan does not address the obstacles and inadequate incentives for cross-agency cooperation.

A final piece of advice comes from the US Government Accountability Office (GAO) which has published a set of *management recommendations for the incoming 2009 Obama administration*. IT management is one of the most pressing management challenges identified. GAO's experience has shown that attempting to modernize (and maintain) information technology environments without an architecture to guide and constrain investments results in mission operations and supporting systems that are duplicative, not well-integrated, and costly to maintain, and thus are inefficient and ineffective in achieving institutional goals and performance measures:

> A key to successfully leveraging information technology for organizational transformation is having and using an enterprise architecture—or modernization blueprint—as an authoritative frame of reference against which to assess and decide how individual system investments are defined, designed, acquired, and developed.
>
> [GAO, 2008][11]

7. Will the prescribed e-Government medicine work?

It is generally accepted in Sweden that a modern action plan taking a whole_of_government approach and appointing a resourceful CIO function is long overdue.

The year 2000 Action Plan I and its 24/7 mantra worked to the extent that all public authorities acted in a concerted manner to climb the prescribed ladder leading to their being full-fledged 24/7 agencies, but failed because there was no conductor for the imagined orchestrated networked administration.

The 2008 Action Plan II, which came into action by 1st January 2009, has put forward the stated mantra that Sweden shall have retaken a leading position in the eGov field by 2010. Such a mantra may work for politicians, policy makers, and the 'eGovTsar' (CIO) yet to be appointed, but has no meaning for individual agencies (state/region/local). It is natural that the agencies do feel somewhat alienated and frustrated when faced by the closing-down of the eGov support agency Verva without there being a replacement in sight. The agencies do not understand how a few central policy people will be able to implement an eGov agenda that within a year and a half is supposed to show world leading results.

The answer from the Central Government Offices (the Cabinet) was to appoint, on 26 March 2009, an e-Delegation consisting of director generals from twelve large

[11] http://www.gao.gov/transition_2009/challenges/information_technology/developing_blueprints.php

state agencies plus the president of the Swedish Association of Local Authorities and Regions. The summary of their task reads:

> Public services need to be continually developed in order to meet new demands and expectations. E-Government is an important part in this development. To strengthen the e-Government development and create good opportunities for cross-agency co-ordination an e-Government delegation is established.
>
> The first task of the delegation is to draw up a proposal for a strategy on the agencies' e-Government work. The proposal shall be delivered to the Government by 30 September 2009.
>
> The second task of delegation is to co-ordinate the state agencies' IT based development projects and to monitor their effects on citizens, companies and agency staff. The delegation shall furthermore co-ordinate certain IT standardization issues, and shall assist the Government in the international standardization work.
>
> [Kommittédirektiv, 2009]

Further reading of the said e-Delegation directive shows that the Government appears to have created a powerful eGov task force by drawing on the resources of the large state agencies and has asked them to bring in outside competence when it is required. A crucial component is unfortunately missing: the very governance of the e-Delegation. The introduction to the Action Plan actually ended with the following paragraph:

> The aim of the action plan is to improve the coordination of strategic e-Government work within the Swedish Government Offices. If the administrations make use of these new opportunities, Swedish public administration will be able to retake a leading position in the e-Government field by 2010. This will not be possible without active and committed participation from the administrations themselves.
>
> [Swedish Central Government Offices (2008). *E-Government Action Plan.*]

The implementation of the 2008 e-Government Action Plan will not be possible unless the agency director generals of the 2009 e-Delegation agree to commit substantial resources, i.e. that they "make use of these new opportunities". Those resources were not committed during the three years that the support agency Verva served as a rather toothless coach. The outlook for the implementation of the e-Government Action Plan is more promising. The to-do-list is on the other hand much longer and more ambitious, and does reach into the territory of local and regional governments where state agencies have no say. Let us compare the Swedish work with the parallel work in Finland. The Finnish action plan, among other things, calls for integrating the information system architectures of the State and municipalities, whereas Sweden has not even begun to develop a State information system architecture.

As discussed earlier in the present paper, with reference to the Swedish system with highly independent agencies, the Government is not "Killing her Darlings" but is rather "Nurturing her Darlings". It is possible that this approach might work and to follow the work in detail would be an interesting research project.

References

Andersson, M., Lindgren, R. and Henfridsson, O. (2008). "Architectural Knowledge in Inter-Organizational IT Innovation". *Journal of Strategic Information Systems*. Volume 1, pp. 19-38.

Aucoin, A. and Magnusson, J. S. (2007). *Federated Governance of Information Sharing Within the Extended Enterprise*. ISWG White Paper. Association for Enterprise Integration. Arlington, Virginia.

Australia (2008). *Government to implement Gershon ICT Review recommendations in full*. Media Release 37/2008, 24 November 2008.

Blakemore, M, and Lloyd, P. (2007). *Trust and Transparency: Pre-requisites for Effective eGovernment. Think paper 10*[12]

Booz Allen Hamilton (2002), *An International e-Economy Benchmarking—The World's Most Effective Policies For The e-Economy*

Brandtzæg, P. B. and Lüders, M. (2008). *eCitizen 2.0* (In Norwegian[13]) Fornyings- og Administrasions-departemanget, Oslo, 2008.

Canada (2005). *Canada's Country Report 2005*. Submitted to the International Council for Information Technology in Government Administration[14]

Capgemini (2007). *The User Challenge, Benchmarking the Supply of Online Public Services, 7th measurement*[15]

Charas, P., Johannisson, P. and Östberg, O. (2007). A Philosophy of Public Service – Architectural Principles for Digital Democracy. *International Journal of Public Information Systems, 2007*(2), pp. 89-99.

Christensen, C. M. (1997). *The Innovator's Dilemma: When New Technologies Cause Great Firms to Fail*. Harvard Business School Press.

COM (2003). The Role of e-Government for Europe's Future. *COM(2003)567 final.*

Committee on IT (1994). *INFORMATIONSTEKNOLOGIN – Vingar åt människans förmåga, Betänkande av IT-kommissionen*. SOU 1994:118

Committee on Public Administration (2008). *Steering and arranging—proposals for a more effectualt state administration*. (In Swedish with an English summary). SOU 2008:118.

Denmark (2008). *Administrative Servicecentre i Staten*. (Administrative state service centres) Ministry of Finance.

Doucet, G., Gøtze, J., Saha, P. and Bernard, S. (eds.) (2009). *Coherency Management: Architectecting the Enterprise for Alignment, Agility and Assurance.* Authorhouse.

ESV (2008). *Ramverk för programstyrning av IT-baserad verksamhetsutveckling* (Framework for program management of IT based business development).

Finland (2007). *Overview of Enterprise Architecture work in 15 countries. Finnish Enterprise* Architecture *Research Project.* Ministry of Finance.

Fomin V. V., Pedersen M. K., Vries H. J. (2008) Open Standards and Government Policy: Results of a Delphi Survey, *Communications of the Association for Information Systems*, Vol 22 (25), pp. 459-484

Guijarro L. (2007) Interoperability frameworks and enterprise architectures in e-government initiatives in Europe and the United States, *Government Information Quarterly 24*, pp. 89-101

Högdah, L. (2008), "Tröga myndigheter sviker medborgarna" (Sluggish agencies let down the citizens). *Dagens Nyheter*, 14 November 2008, p. 6.

[12] http://www.ccegov.eu/?Page=ThinkPapers
[13] http://www.regjeringen.no/upload/FAD/Vedlegg/IKT-politikk/e_borger_20.pdf
[14] http://www.tbs-sct.gc.ca/cio-dpi/2005/canada/canada-eng.pdf
[15] http://ec.europa.eu/information_society/eeurope/i2010/docs/benchmarking/egov_benchmark_2007.pdf

Ilshammar, L., Bjurström, A., and Grönlund, Å. (2005). Public E-Services in Sweden—Old Wine in New Bottles? *Scandinavian Journal of Information Systems*, 2005, *17*(2) pp.11–40

Kommittédirektiv. Delegation för e-förvaltning, 26 mars 2009. *Dir. 209/19.*

Lind M. and Goldkuhl G. (1998). Service Development as Action and Communication—from Process Reconstruction to Process Redesign.[16]

Lindgren M., Lüthi B. and Fürth T. (2005). *The MeWe Generation – What business and politics must know about the next generation*. Bookhouse Publishing.

Löfgren, K. (2008). The Governance of E-government. A Governance Perspective on the Swedish E-government Strategy. *Public Policy and Administration*, *22*(3), pp. 335-352.

Lundberg, A. (2004). *Infra Services—a Swedish Way to Facilitate Public E-services Development*[17]. ICA General Issue 82(4)

Netherlands (2006). *The Dutch governmental shared service organization for ICT*. GBO Overheid Factsheet.[18]

Orton, J. D., and Weick, K. E. (1990). Loosely Coupled Systems: A Reconceptualization. *The Academy of Management Review,* 15(2), 203-223.

Pardo, T. A. and Burke, G. B. (2008), *Government Worth Having: A briefing on interoperability for government leader*[19]*s*. Center for Technology in Government, Albany, SUNY

Petersson, T. (2005), Facit and the BESK Boys: Sweden's Computer Industry (1956-1962). *IEEE Annals of the History of Computing*, 27(4), 23-30.

RIF (2008). *Regeringens handlingsplan för e-förvaltningsarbetet—rättsliga överväganden för en effektivare och säkrare myndighetsövergripande samverkan och informationshantering* (The e-government action plan—considerations on cross-government cooperation and information handling). RIF- sekretariatet, 2 September 2008.

Riksrevisionen (2004). *Vem granskar den elektroniska förvaltningen*?(Who Governs the Electronic Administration?:[20])

Springdal, K. (2001). *Privatisation of the IT sector in Sweden*, Lund Business Press

Stabsutredningen (2008), *Ett stabsstöd i tiden*. *SOU 2008:22*. (Up to date support agencies)

Statskontoret (2000). *The 24/7 Agency: criteria for 24/7 agencies in the networked public administration*[21]

Swedish Central Government Offices (2000). *Public Administration in the Service of Democracy—an Action Programme*

Swedish Central Government Offices (2008). *eGovernment Action Plan. A new basis for IT-based organisational development in public administration*[22].

Swedish National Tax Board (2000), *Population Registration in Sweden* (3rd edition)

Socialstyrelsen (2008). National (eHealth) Information Infrastructure Faktablad[23]

Tassey G., (2000) Standardization in technology-based markets, *Research Policy*, 29, pp. 587-602

UN (2008). *United Nations e-Government Survey 2008. From e-Government to Connected Governance*[24]

Verva (2007). *ICA Country Report 2007: Sweden*[25]

[16] http://www.vits.org/publikationer/dokument/89.pdf
[17] http://www.ica-it.org/docs/issue82/issue_82_2004_04.html
[18] http://gbo.overheid.nl/fileadmin/GBO/070809_factsheet_GBO_ENG_DEF.pdf
[19] http://www.ctg.albany.edu/publications/reports/government_worth_having/government_worth_having.pdf
[20] http://www.riksrevisionen.se/templates/OpenDocument.aspx?documentid=4584
[21] http://www.statskontoret.se/upload/publikationer/2000/200041.pdf
[22] http://www.regeringen.se/content/1/c6/09/65/12/4ffd1319.pdf
[23] http://www.socialstyrelsen.se/NR/rdonlyres/9EF507D0-D9CC-49F9-905E-7055382E5272/0/Faktablad.pdf
[24] http://unpan1.un.org/intradoc/groups/public/documents/UN/UNPAN028607.pdf

Verva (2008a), *Automation of Ordinary Case Handling Processes* (in Swedish). Report2008:15.

Verva (2008b). *E Action Plans for Agencies*. Report 2008:14.

Weick, K. E. (1976). Educational organizations as loosely coupled systems. *Administrative Science Quarterly*, 21(1), 1-19.

[25] http://www.ica-it.org/conf41/docs/Conf41_country_report_Sweden.pdf