Orchestration AS

A TOGAF9 Case Study:

eGovernmental services and public investments in Norway

The Gekko – our inspiration!

- Agile!
- Adaptable!

- Fast!
- Effective!

Contents

- Short Intro
- An overview of status on eGovernmental services in Norway, what's the rush? Why do the governmental sectors need to change?
- The process for financing major public investment project in Norway. Why do we need a formalized process? The quality assurance process?
- A case study from the The Norwegian Labour and Welfare Administration. Why did we apply TOGAF9 in this project? The approach, major deliverables, business benefits, lessons learned.

Key Takeways

1. The decision process for major public investments
2. Tips and techniques in order to establish the target architecture for major eGovernmental services
3. Benefits with ADM/TOGAF9

Contents

- Short Intro
- An overview of status on eGovernmental services in Norway, what's the rush? Why do the governmental sectors need to change?
- The process for financing major public investment project in Norway. Why do we need a formalized process? The quality assurance process?
- A case study from the The Norwegian Labour and Welfare Administration. Why did we apply TOGAF9 in this project? The approach, major deliverables, business benefits, lessons learned.

Key Takeways

1. The decision process for major public investments
2. Tips and techniques in order to establish the target architecture for major eGovernmental services
3. Benefits with ADM/TOGAF9

Lars Houge, CEO, Orchestration AS

- Master degree from the Norwegian University of Science and Technology, 1992.
- Worked across industries with business and technology related challenges for 20 years. ABB (energy/engineering), DNV(defence), Storebrand (non-life insurance), Capgemini (consulting), eScienza (consulting, co-founder), Norway Post, Orchestration (founder).
- CEO in Orchestration AS, a company helping business managers to operationalize business strategies through a combination of innovative consulting, tools and methodology.
- My favourite role is in the intersection between the business- and technical management, a role where I must an helipcopter view of the whole project.
- I have, for the last two years been responsible for a modernization program in the governmental sector in Norway, 50% as a program manager and 50% as an enterprise architect.

Norway

Facts you were already aware of

- The norse man Leiv Eiriksson discovered America in year 1000
- Polar bears roam the streets freely
- Most expensive country in the world? Big Mac index USD 7,5…
- Norway is all about oil, fjords and fish

Facts you may not be aware of

- We invented the cheese slicer
- There are almost 5 million of us
- Government pension fund valued at $525 bn, 1% of global equity markets, largest stock owner in Europe
- eGovernment usage 79 % (enterprises)

Orchestration AS

- Private company, established in 2007
- Consulting and management software.
- Primary clints; The Norwegian Labour and Welfare Administration, SAS (software), Norway Post, Telenor (Telco), Norsk Tipping (Norwegian lottery)

Consulting:

- Business consulting with emphasis on the analysis phase utilising our own product Conductor.
- Enterprise Architecture with primary focus on business-, application- and information architectures.

Visiting adress:

Lysaker Torg 15, 1366 Lysaker, Norway

Postal adress:

Postbox 320, 1326 Lysaker, Norway

Contact Information:

Lars Houge, CEO, +47 99593450
lars.houge@orchestration.no

Conductor

– A management tool for analysis and decision logistics

«Innovative collaboration tool ensuring quality in decision making processes leading to targeted actions»

Conductor supports

- complex business issues
- process-oriented problem solving
- collaboration across functional roles and organizational levels
- Continuity and transparency in decision making processes
- **BMM compliant**

«A low investment, high value tool, supported by experienced advisers that understand customers' needs»

Contents

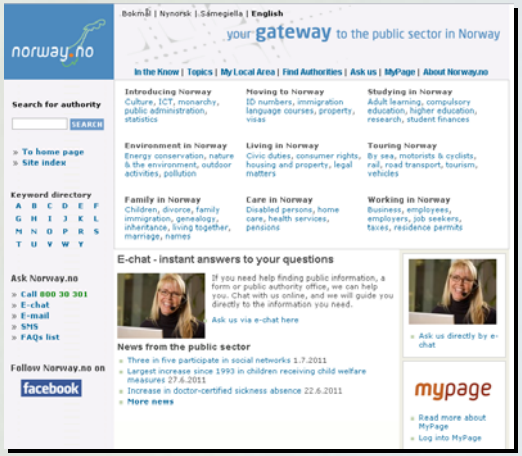
- Short Intro
- An overview of status on eGovernmental services in Norway, what's the rush? Why do the governmental sectors need to change?
- The process for financing major public investment project in Norway. Why do we need a formalized process? The quality assurance process?
- A case study from the The Norwegian Labour and Welfare Administration. Why did we apply TOGAF9 in this project? The approach, major deliverables, business benefits, lessons learned.

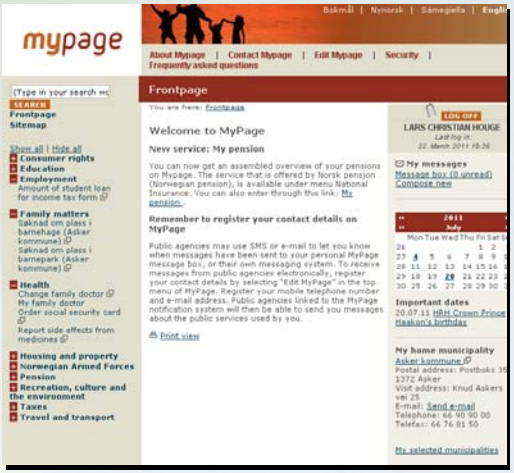
Key Takeways

1. The decision process for major public investments
2. Tips and techniques in order to establish the target architecture for major eGovernmental services
3. Benefits with ADM/TOGAF9

An overview of status on eGovernmental services in Norway, what's the rush? Why do the governmental sectors need to change?

- Agency for Public Management and eGovernment (Difi) was established 1 January 2008
- **Norway.no** is the gateway to the public sector in Norway. The portal aims to help members of the public find public information and access public services more easily.
- From Norway.no, you can access the one-stop online service centre **MyPage**. MyPage offers citizens a secured interaction point with public agences, presentation of personal data stored in public registers and the opportunity to submit online applications and notifications.
- From **Altinn.no** enterprises complete a series of public reporting forms in order to satisfy the public authorities need for informationcan. In January 2011 there were 29 public agencies, three municipalities and one county municipality present as service providers in Altinn. In 2009 more than 440.000 businesses chose to do their statutory reporting through Altinn, and at that time over 700 different public forms were available in the web portal.





Bokmål | Nynorsk | Sámegiella | **English**

norway.no

your **gateway** to the public sector in Norway

In the Know | **Topics** | **My Local Area** | **Find Authorities** | **Ask us** | **MyPage** | **About Norway.no**

Search for authority

SEARCH

» **To home page**
» **Site index**

Keyword directory

A B C D E F
G H I J K L
M N O P R S
T U V W Y

Ask Norway.no

» **Call 800 30 301**
» **E-chat**
» **E-mail**
» **SMS**
» **FAQs list**

Follow Norway.no on

facebook

Introducing Norway
Culture, ICT, monarchy, public administration, statistics

Moving to Norway
ID numbers, immigration language courses, property, visas

Studying in Norway
Adult learning, compulsory education, higher education, research, student finances

Environment in Norway
Energy conservation, nature & the environment, outdoor activities, pollution

Living in Norway
Civic duties, consumer rights, housing and property, legal matters

Touring Norway
By sea, motorists & cyclists, rail, road transport, tourism, vehicles

Family in Norway
Children, divorce, family immigration, genealogy, inheritance, living together, marriage, names

Care in Norway
Disabled persons, home care, health services, pensions

Working in Norway
Business, employees, employers, job seekers, taxes, residence permits

E-chat - instant answers to your questions

If you need help finding public information, a form or public authority office, we can help you. Chat with us online, and we will guide you directly to the information you need.

- Ask us via e-chat here

- Ask us directly by e-chat

News from the public sector

- Three in five participate in social networks 1.7.2011
- Largest increase since 1993 in children receiving child welfare measures 27.6.2011
- Increase in doctor-certified sickness absence 22.6.2011
- **More news**

mypage

- Read more about MyPage
- Log into MyPage

mypage

Bokmål | Nynorsk | Sámegiella | Engli

About Mypage | Contact Mypage | Edit Mypage | Security |
Frequently asked questions

(Type in your search wc

SEARCH

Frontpage
Sitemap

Show all | Hide all

+ Consumer rights
+ Education
− Employment
Amount of student loan for income tax form

− Family matters
Søknad om plass i barnehage (Asker kommune)
Søknad om plass i barnepark (Asker kommune)

− Health
Change family doctor
My family doctor
Order social security card
Report side effects from medicines

+ Housing and property
+ Norwegian Armed Forces
+ Pension
+ Recreation, culture and the environment
+ Taxes
+ Travel and transport

Frontpage

You are here: Frontpage

Welcome to MyPage

New service: My pension

You can now get an assembled overview of your pensions on Mypage. The service that is offered by Norsk pensjon (Norwegian pension), is available under menu National Insurance. You can also enter through this link: My pension .

Remember to register your contact details on MyPage

Public agencies may use SMS or e-mail to let you know when messages have been sent to your personal MyPage message box, or their own messaging system. To receive messages from public agencies electronically, register your contact details by selecting "Edit MyPage" in the top menu of MyPage. Register your mobile telephone number and e-mail address. Public agencies linked to the MyPage notification system will then be able to send you messages about the public services used by you.

Print view

LOG OFF

LARS CHRISTIAN HOUGE
Last log in:
22. March 2011 18:26

My messages
Message box (0 unread)
Compose new

<<	2011					
<<	July					
	Mon	Tue	Wed	Thu	Fri	Sat
26					1	2
27	4	5	6	7	8	9
28	11	12	13	14	15	16
29	18	19	20	21	22	23
30	25	26	27	28	29	30

Important dates
20.07.11 HRH Crown Prince Haakon's birthday

My home municipality
Asker kommune
Postal address: Postboks 35
1372 Asker
Visit address: Knud Askers vei 25
E-mail: Send e-mail
Telephone: 66 90 90 00
Telefax: 66 76 81 50

My selected municipalities

Forms and services

- Skatteoppgjøret
- Tax return for self-employed persons etc.
- Selvangivelse for aksjeselskap mv. 2010
- Selskapsoppgave for deltakerliknet selskap 2010
- Firmaattest
- Employer's payment record for National Insurance contributions and payroll withholding tax
- Samordnet registermelding - registrering av nye og endring av eksisterende foretak og enheter
- Flyttemelding for flytting innenlands
- Aa-melding (Melding til Arbeidsgiver- og arbeidstakerregisteret)
- Oppgjørsrapport K27
- **All forms and services**

About Altinn
(17.09.2007)

More news

Shortcuts

- Service messages
- Catalogue of forms
- About Altinn

Choose shortcut

Help with the rules

- Before you start
- Registration
- Documentation duties
- Direct and indirect taxes
- Employment relationship(s)
- **See all guides**

EUGO
Part of the EUGO network

Point of Single Contact for the Services Directive

My main page

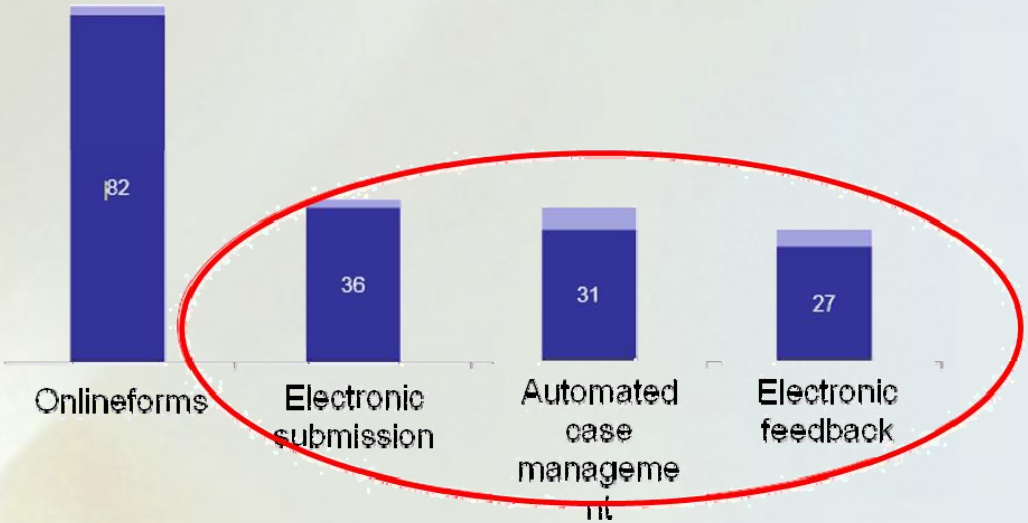
Log off

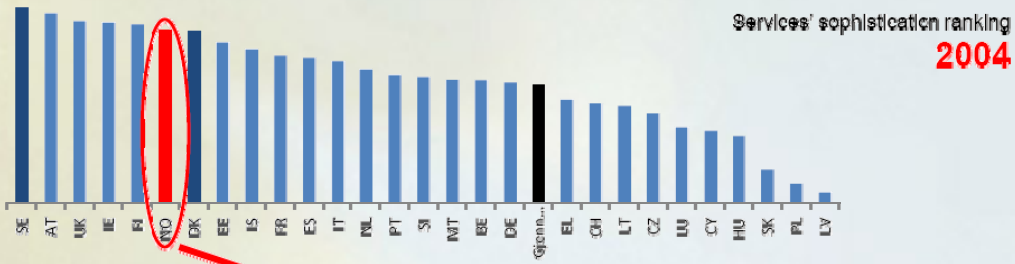
Altinn A-Z

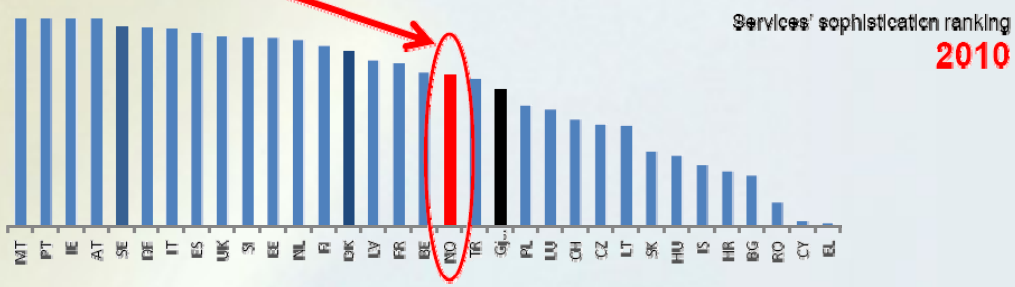
A C D E F G H I L N O P R S T V

An overview of status on eGovernmental services in Norway, what's the rush? Why do the governmental sectors need to change?

- eGovernmental services is not very mature and there is a huge potential for more efficient services.
- Norway was an earliy adopter but we are loosing our position compared to other EU countries.
- We know from other citizen surveys that there is a way to go.

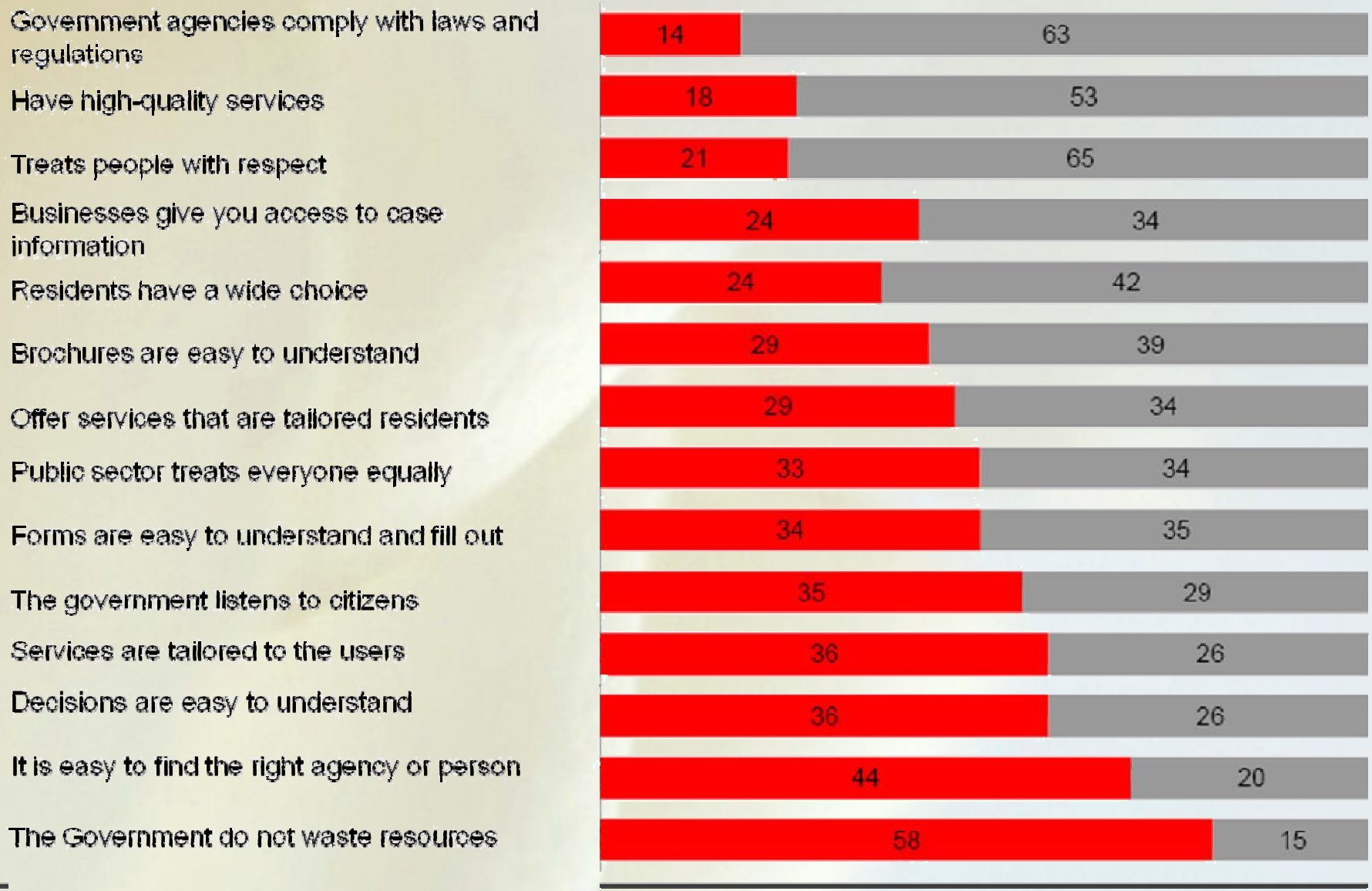






Source: CapGemin,iRand Europe, IDC, Sogeti og Dti for EU (2011)

An overview of status on eGovernmental services in Norway, what's the rush? Why do the governmental sectors need to change?



Source: Citizen survey 2011

Contents

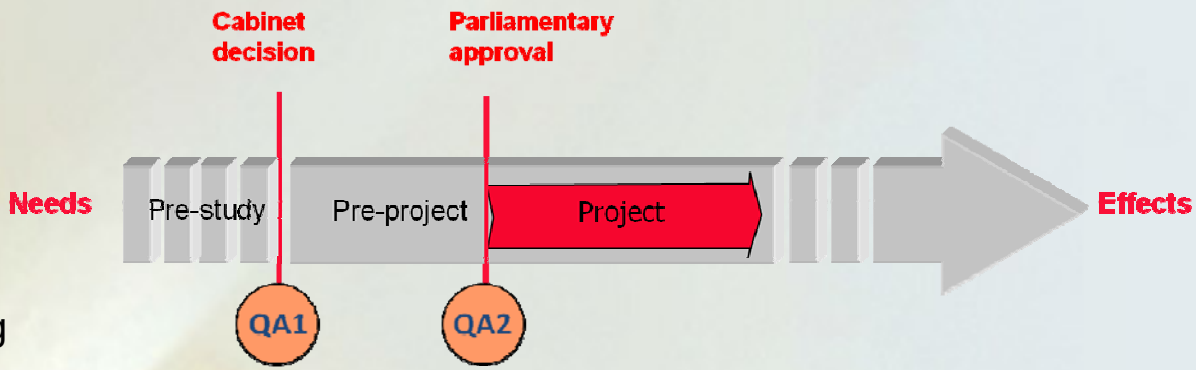
- Short Intro
- An overview of status on eGovernmental services in Norway, what's the rush? Why do the governmental sectors need to change?
- The process for financing major public investment project in Norway. Why do we need a formalized process? The quality assurance process?
- A case study from the The Norwegian Labour and Welfare Administration. Why did we apply TOGAF9 in this project? The approach, major deliverables, business benefits, lessons learned.

Key Takeways

1. The decision process for major public investments
2. Tips and techniques in order to establish the target architecture for major eGovernmental services
3. Benefits with ADM/TOGAF9

Ministry of Finance scheme for quality assurance of major public investments (the QA scheme)

- In December 1997 the Norwegian Government initiated a project to review the systems for planning, implementing, and following up public investment projects. The background was numerous examples of projects that had failed in terms of cost overruns, delays, quality standards not being met, etc.
- A quality assurance scheme was introduced in 2000. The Ministry of Finance entered into a framework agreement with constellations of consultants to perform the Qas, and it is mandatory to use one of the constellations to perform QA1 and QA2.
- All projects with an expected budget exceeding NOK 750 million (approx 125 million USD) must undergo QA.
- During the ten-year period, 153 QAs were undertaken, 24 of which were QA1s and 129 were QA2s. About half of the QAs were related to the transport and communication sector, whereas about one- quarter of the QAs were within the defence sector.

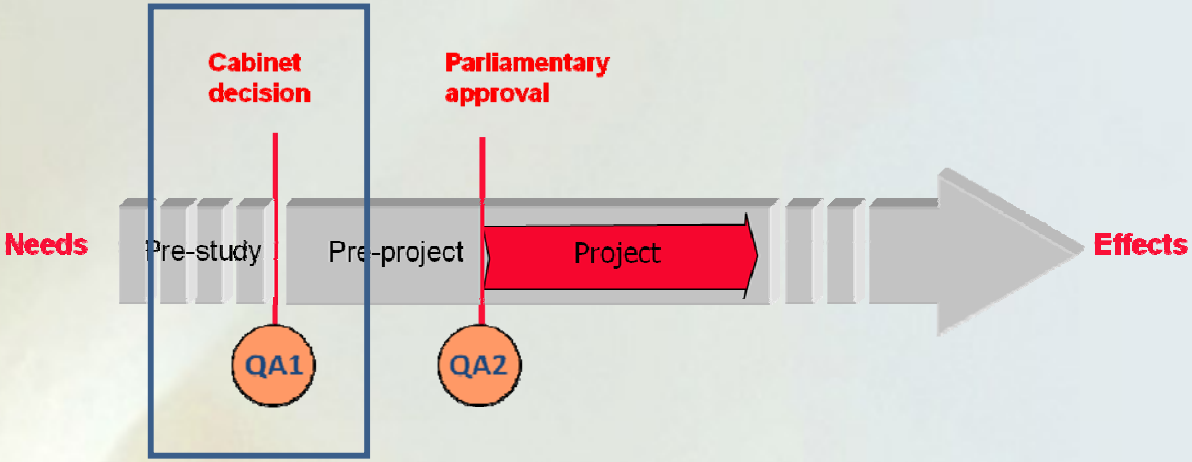


Two external reviews

- The Norwegian QA scheme includes two external reviews in an investment project's planning process:
  - QA1 – Quality assurance of choice of concept before Cabinet decision to start a pre-project
  - QA2 – Quality assurance of the management base and cost estimates before the project is submitted to Parliament for approval and funding.

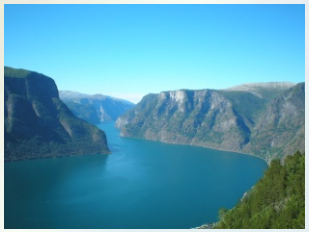
Ministry of Finance scheme for quality assurance of major public investments (the QA scheme)

- Quality assurance of the choice of concept is to be performed by the end of the pre-study phase, before a decision is made by the Cabinet to start a pre-project.
- As a basis for the QA1 exercise, the ministry or agency must prepare the following documentation; Needs analysis, Overall strategy, Overall requirements, Possibility study, Alternatives analysis and Guidance for the pre-project phase.
- The alternatives analysis shall take the form of a cost-benefit analysis that includes all costs and benefits to society.
- The consultant is to review this documentation and check for consistency within and between chapters and to control that the alternatives given are relevant to needs, strategy, and requirements, and fully exploit the opportunity space.



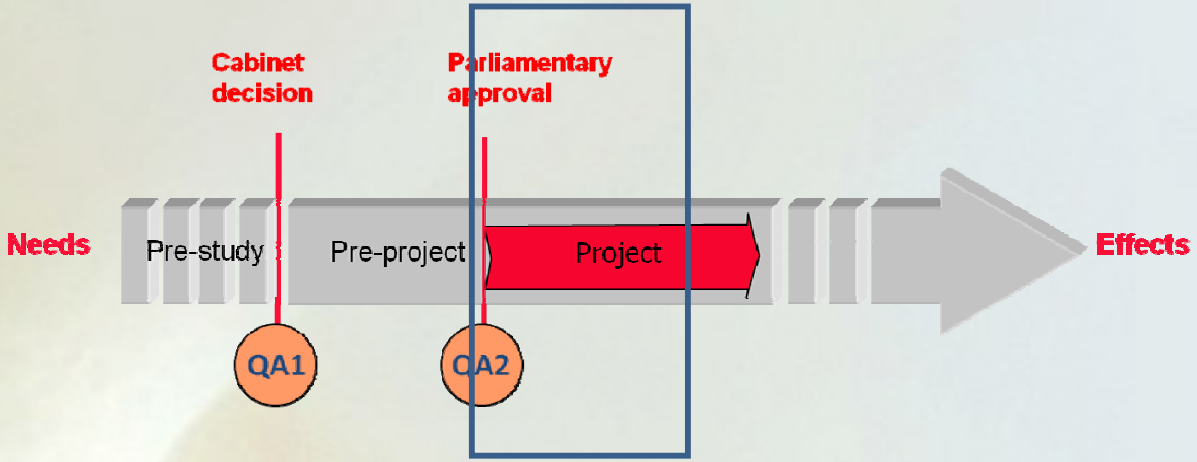
Purpose of QA1

- To ensure that the choice of concept has been subjected to a political process of fair and rational choice. The ultimate aim is that the chosen concept is the one with the highest economic returns and the best use of public funds. The choice of concept is a political decision to be made by the Cabinet, while the consultant's role is restricted to assert the quality of the documents supporting the decision.



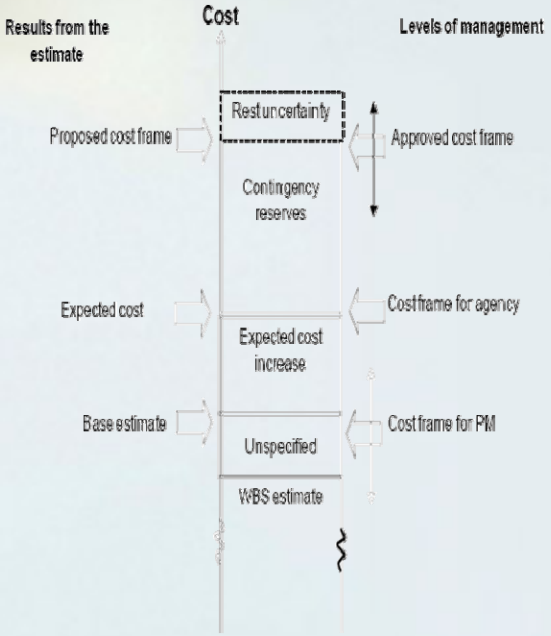
Ministry of Finance scheme for quality assurance of major public investments (the QA scheme)

- QA2 is to be performed before the project is submitted to Parliament for approval and funding. Normally, this is done at the end of the pre-project phase.
- The control aspect is the main objective of this exercise. The consultant shall review the documentation behind the proposition presented to Parliament, with emphasis on cost estimates.
- In addition, the QA shall be forward-looking by charting the management challenges in the remaining phases of the project.
- As a basis for the QA2 exercise, the following documents must be prepared; An overall project management document (steering document), A complete cost estimate and an assessment of at least two alternative contract strategies.



Purpose of QA2

- To ensure the quality of the decision basis including cost estimates and uncertainties associated with the chosen project alternative before it is submitted to Parliament for funding. The control aspect is the main feature in this exercise. Also, the evaluation shall focus on challenges related to project management in the implementation phase.



Contents

- Short Intro
- An overview of status on eGovernmental services in Norway, what's the rush? Why do the governmental sectors need to change?
- The process for financing major public investment project in Norway. Why do we need a formalized process? The quality assurance process?
- A case study from the The Norwegian Labour and Welfare Administration. Why did we apply TOGAF9 in this project? The approach, major deliverables, business benefits, lessons learned.

Key Takeways

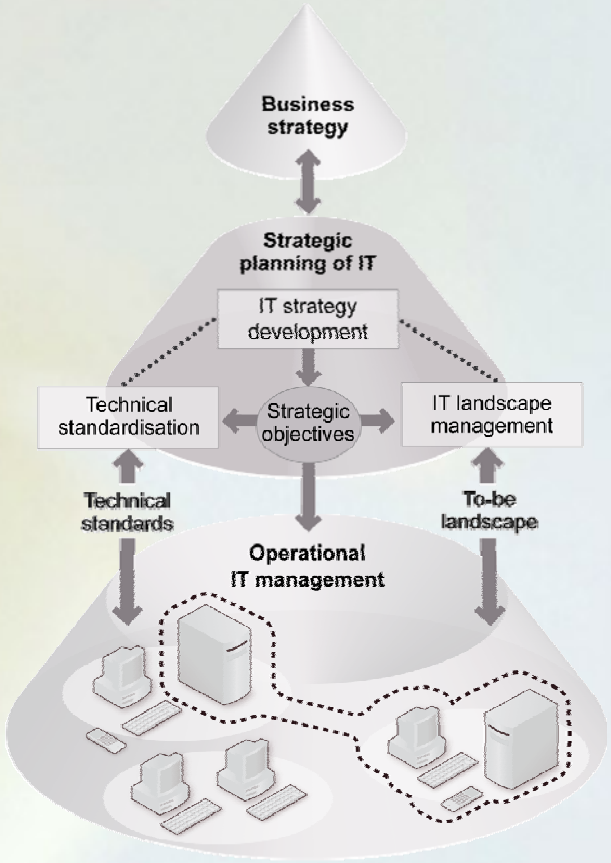
1. The decision process for major public investments
2. Tips and techniques in order to establish the target architecture for major eGovernmental services
3. Benefits with ADM/TOGAF9

What is it – what does it do?

- NAV = The Norwegian Labour and Welfare Administration
- Established 2006, the most wide-ranging, fundamental welfare reform of modern times
- HQ and 453 local branch offices – 14,000 staff
- Social functions with main goals
  - to get more people into work and activities, and have fewer on welfare benefits
  - a well-functioning labour market
  - to provide the right services and benefits at the right time
  - to provide good services tailored to the users' needs and circumstances
  - comprehensive and efficient labor and welfare administration
- Is responsible for 1/3 of the national budget.

How we have contributed

- Modernizing NAV; Key role driving business critical change throughout the enterprise architecture



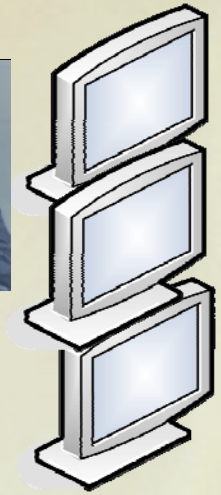
Source: Strategic IT Management:
A Toolkit for Enterprise Architecture Management

Why do NAV need to change?

- NAV is not able to implement political decisions within an acceptable timeframe.
- The financial statements have not been approved for the last 2 years.
- Requirements for privacy are not met.
- In addition; legacy, costs, lack of skills, old technology etc.

Riksrevisjonen
Office of the Auditor General of Norway

The current situation vs. the target architecture - a brief summary

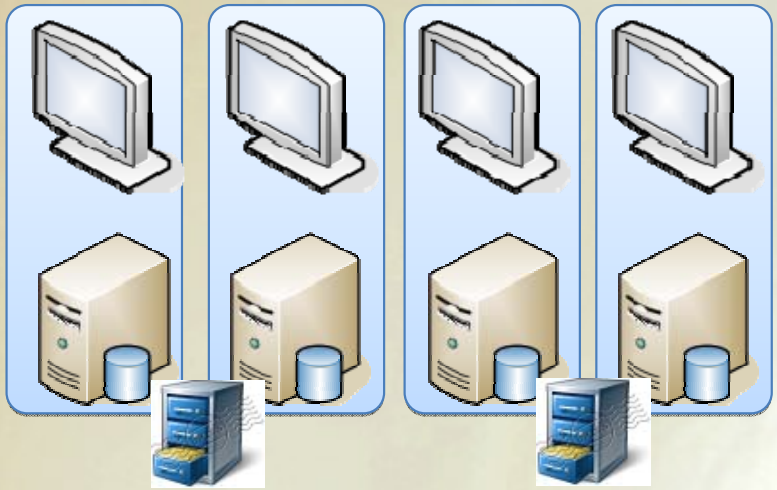


transition

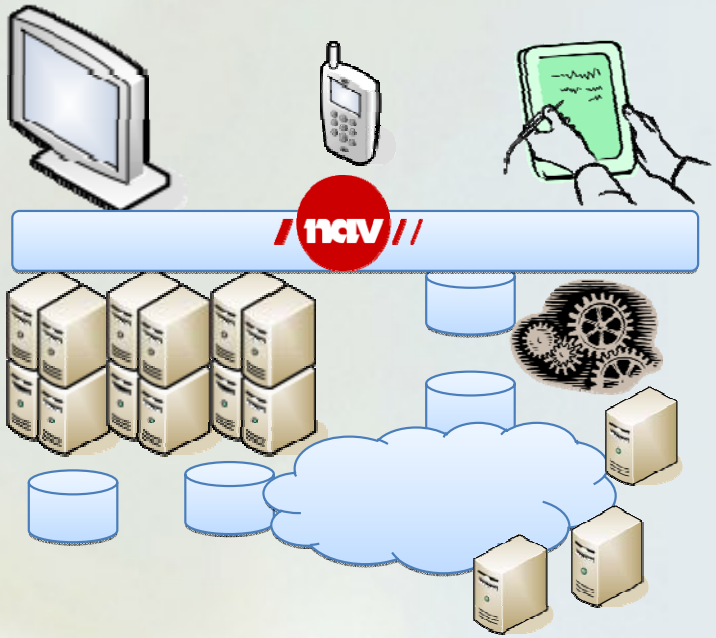
- Employees use several different systems for different case management tasks (several identities, no common work space, difficult access to information etc).
- Manual registration from manual applications or forms received electronically.
- Neither the user or officer has an overview of registered information, privacy laws are not met.
- No guarantee for right decisions and payments according to regulatory rights (documentation, traceability etc.).

- One common work space for all employees
- One self service platform for all users, individuals and organizations.
- Electronic exchange of information, we should not as for information we already have access to (master data management)
- Automated case management processes (rule management, process engine)
- Common processes and reusable solution components for different public services (service orienter architecture).

The current situation vs. the target architecture - a brief summary



transition



- Employees use several different systems for different case management tasks (several identities, no common work space, difficult access to information etc).
- Manual registration from manual applications or forms received electronically.
- Neither the user or officer has an overview of registered information, privacy laws are not met.
- No guarantee for right decisions and payments according to regulatory rights (documentation, traceability etc.).

- One common work space for all employees
- One self service platform for all users, individuals and organizations.
- Electronic exchange of information, we should not as for information we already have access to (master data management)
- Automated case management processes (rule management, process engine)
- Common processes and reusable solution components for different public services (service orienter architecture).

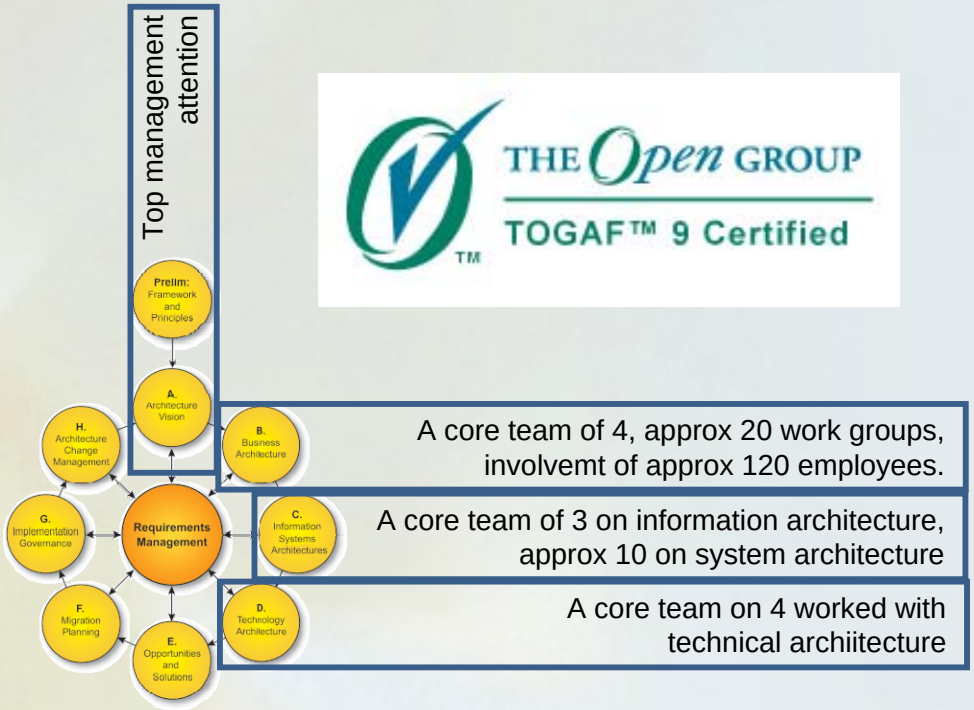
A major change program is necessary

(the red project from the QA slides…)

- The program involves major changes in mission critical solutions and involves high risks associated with implementation and ongoing production and operation.
- The program affects a large part of the business and involves major changes and restructuring
- The program will tie up a large portion of corporate assets for several years.
- The restructuring of old and rigid solutions to the new architecture is technologically complicated.
- The program will be expensive and requires additional financing from the parlament (therefore QA1 and QA2).

How did we go forward in order to establish and run the project?

- A small architecture project got priority before other short term investments.
- The results of the architecture project gave the top management necessary decision basis in order to prioritize the pre-study (QA1) project.
- The pre-study (QA1) got top management attention and involvement.
- We established å competent team with internal and extenal resources.
- Picked individuals <u>not</u> companies.
- Decided on TOGAF as our standard framework and methodology. Common training with certification.
- Decided to use an EA-tool for our modelling, one common repository, one architecture portal.
- Used neccessary time up front in order to agree on how to work, deliverables, milestones etc.
- Strong project management, commitment to the agreed milestones by everybody in the core team.

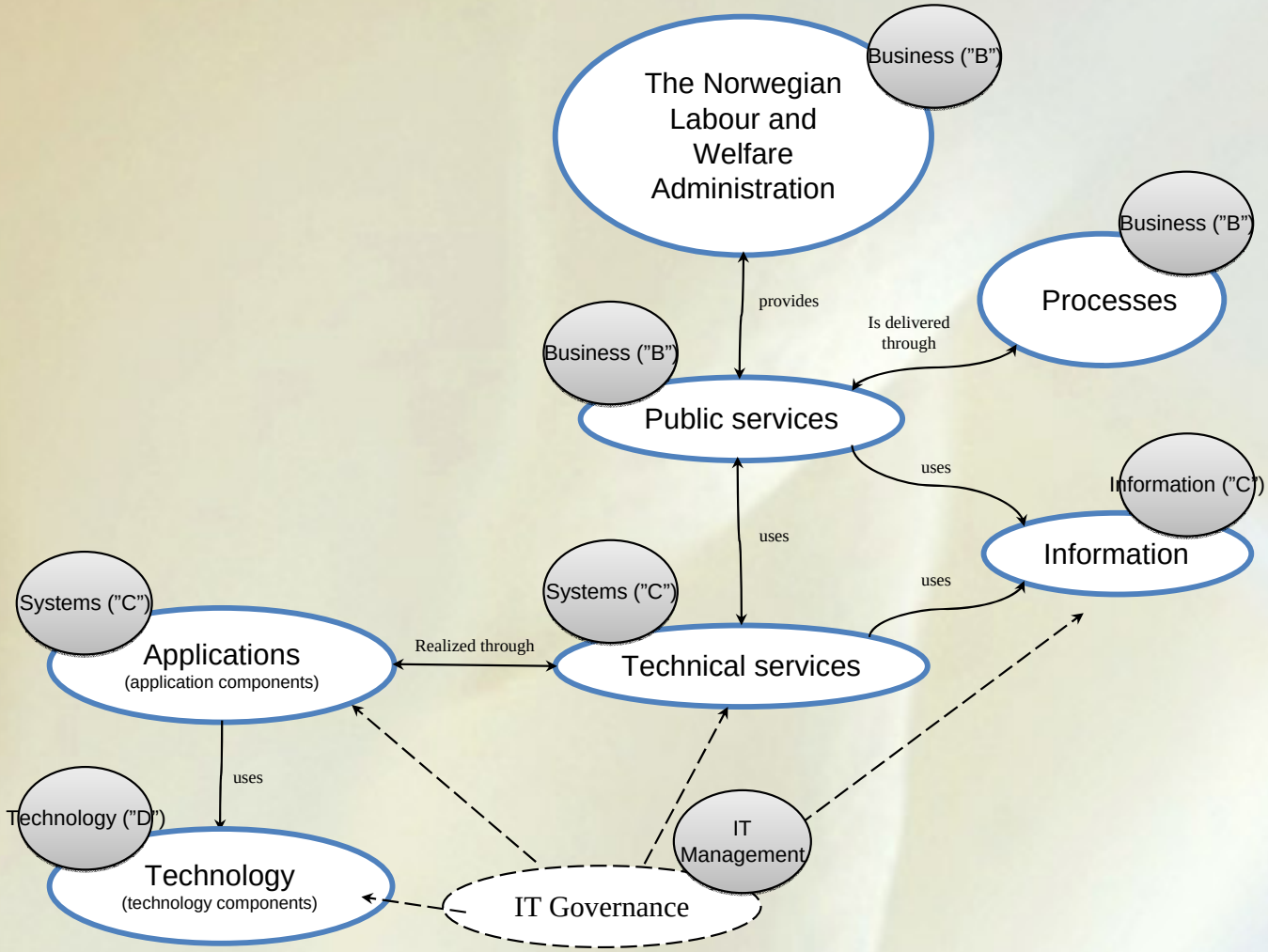


THE Open GROUP
TOGAF™ 9 Certified

<u>Facts about ICT in NAV</u>

- 12 application portfolios with approx 350 applications.
- 2 major applications, one more that 30 years old (cobol, dl1, mainframe).
- Several different technical platforms (the results of mergers without consolidation...)

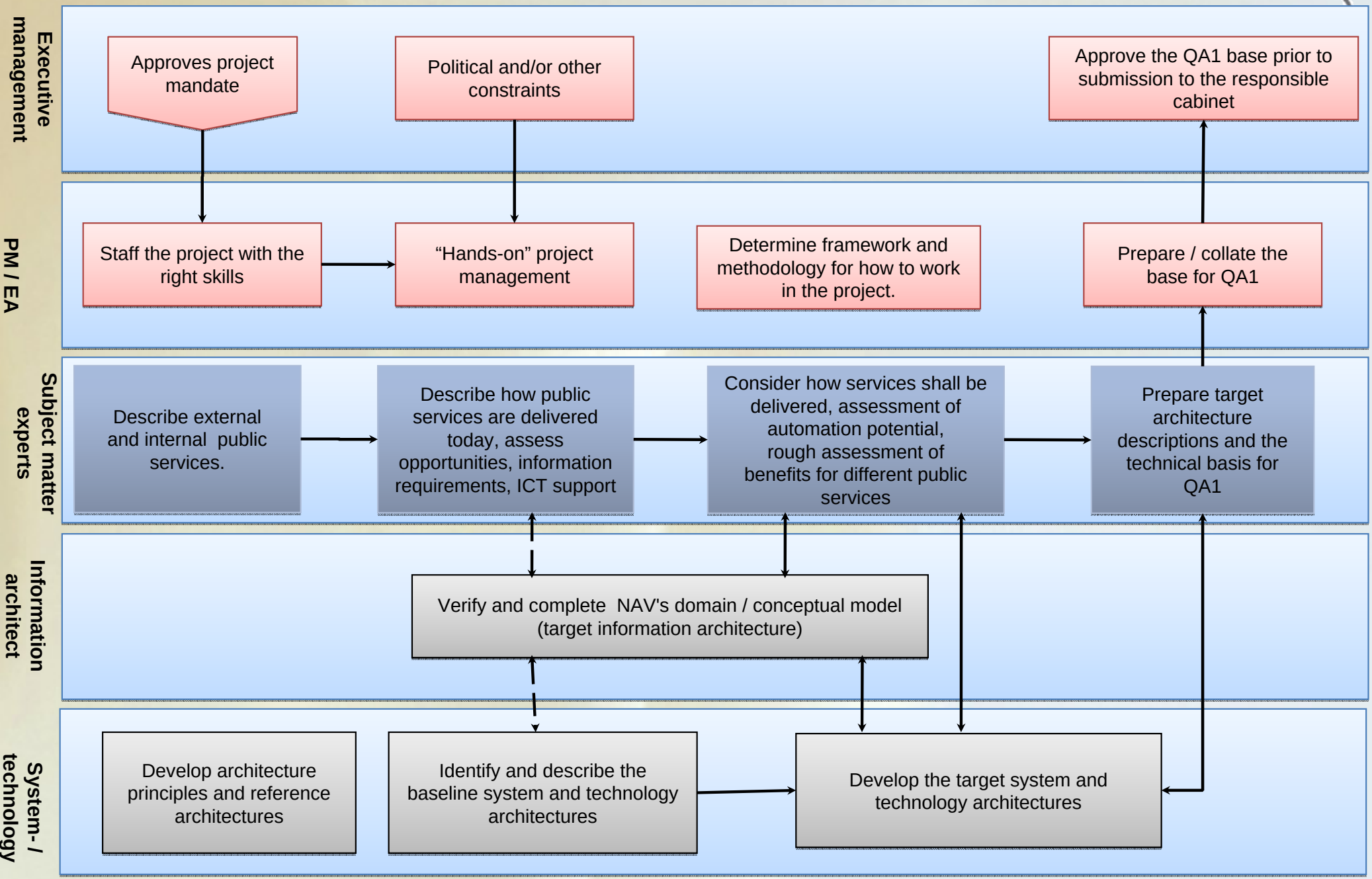
Areas of responsibility and necessary ”high-level” vocabolary!



Possible questions to be answered

- Which services offer NAV to users?
- What processes support the services?
- What information is used in different services?
- What IT services will be used in new services?
- Which applications are used today in various services?
- Which operation is used in different services?
- What infrastructure is used? We me the interfaces in this application?
- What does this business service architecture page?

Roles and responsibilities



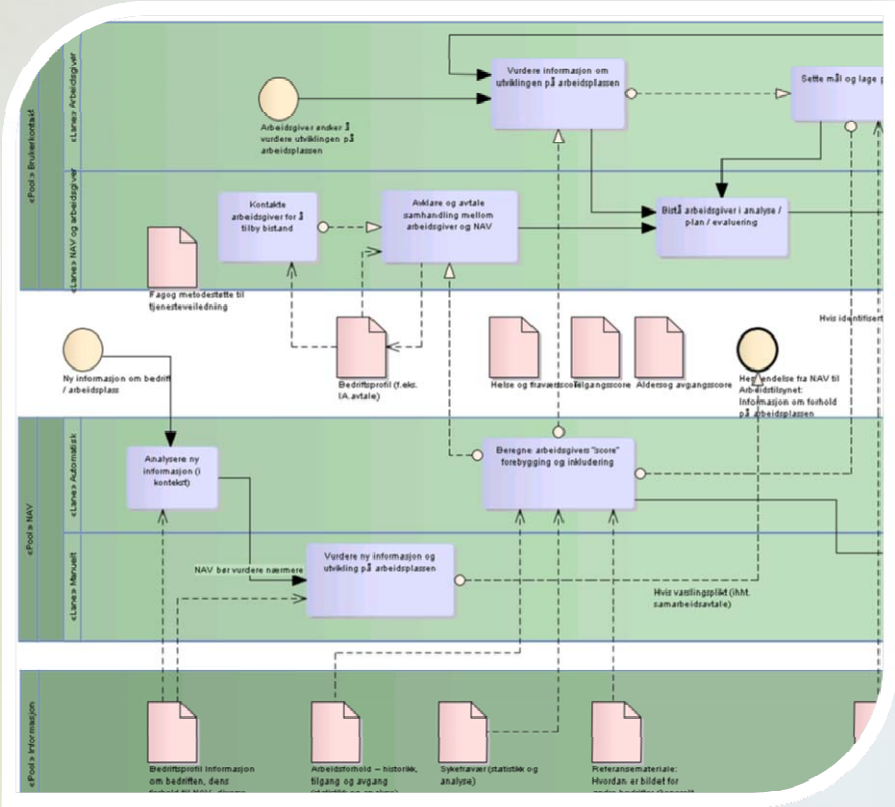
Business Architecture (“B”)

What we did:

- Value chain analysis with BPMN modelling.
- Approx 20 main processes (one for each of the main public services...), >120 employees involved in workshops, 3 group i parallell over a 4 week period.
- We introduced special lanes for work done by NAV either manually or automatic. Special attention to everything done manually.

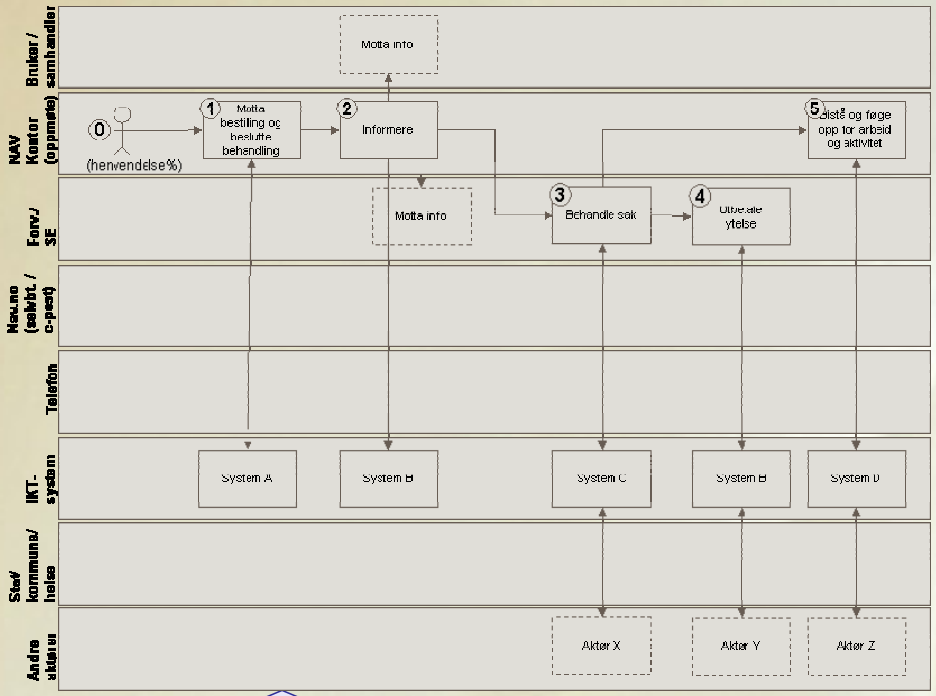
Benefits:

- Strong attention towards activities in the ”manual lane”. Why can’t this activity be automated?
- Ensured a strong focus on necessary technical services and information. A solid bridge between business and technology.

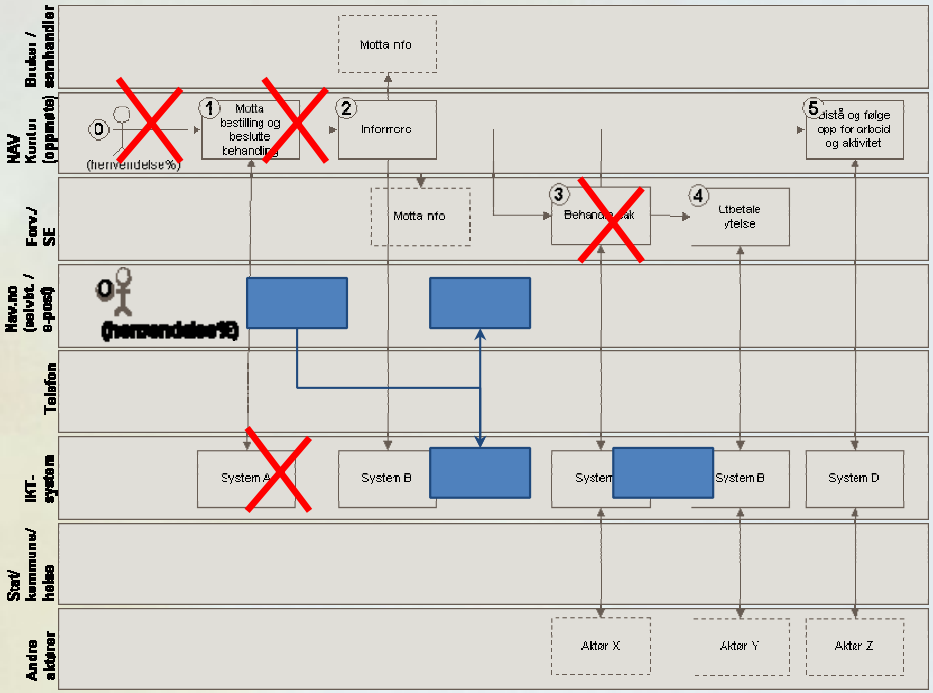


Process Analysis, step by step

”AS-IS”



”TO-BE”



Subject matter experts

Describe external and internal public services. → Describe how public services are delivered today, assess opportunities, information requirements, ICT support → Consider how services shall be delivered, assessment of automation potential, rough assessment of benefits for different public services → Prepare target architecture descriptions and the technical basis for QA1

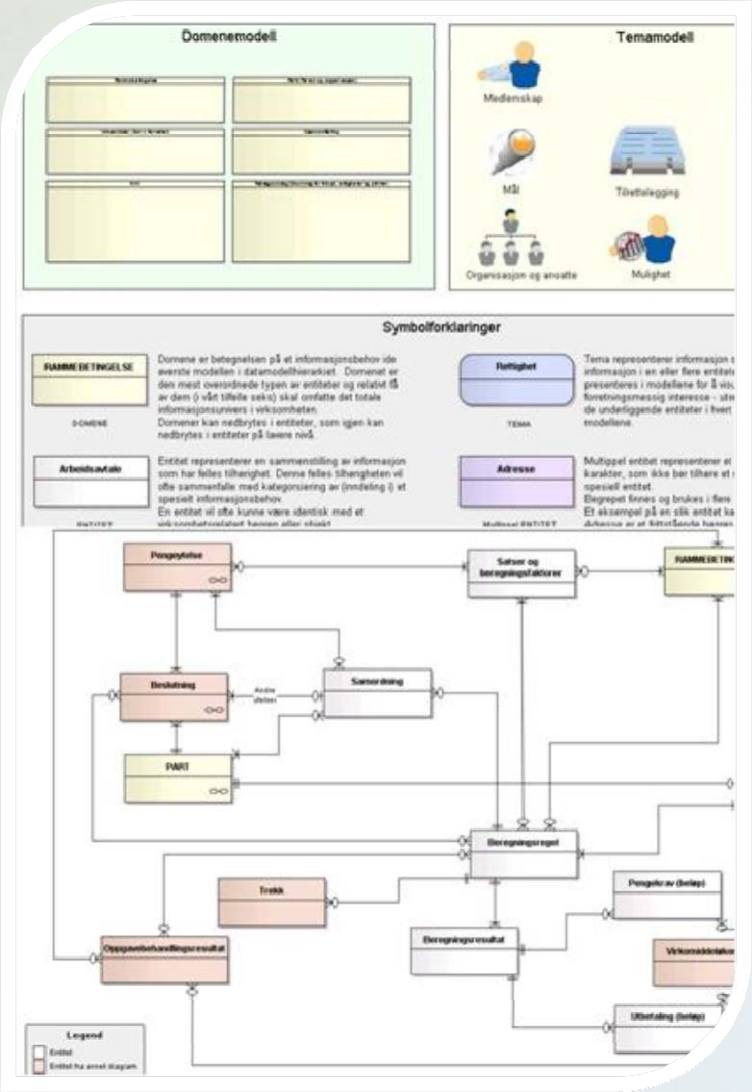
Information Architecture (“C”)

What we did:

- Information architects participated in workshops related to the business architecture in order to capture special information needs and work with the information model.
- Conceptual data modellering using the ER notation. More detailsed modelling in areas where a common language is more important, ex case, service...

Benefits:

- One common definition for unified information management; every piece of information, structured, unstructured, archivable case documents etc.
- One common domain model for the target architecture, common definition of patterns and terms.
- Objectives not fulfilled by the project so far;
  - A common master data management strategy
  - A common strategy related to meta data management
  - Roles and responsibilities related to data and data quality is not established.



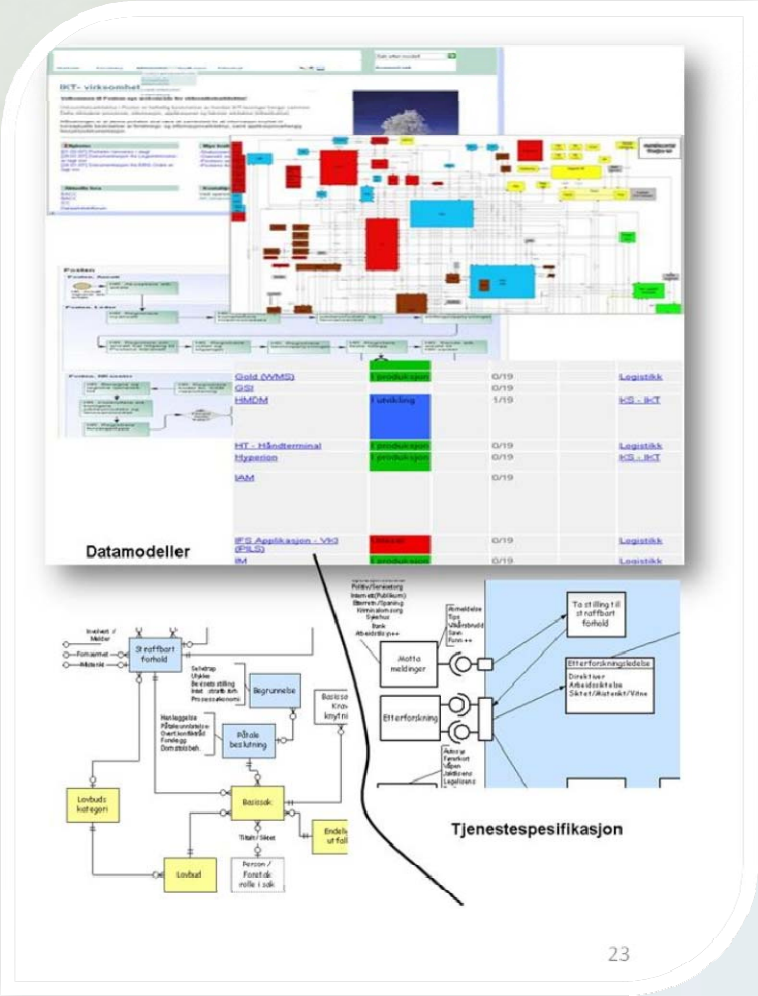
Application Architecture (“C”)

What we did:

- The current baseline architecture was described as a seperate activity and documented in a repository uning an EA-tool (Sparx Enterprise Architect).
- Developed IT Policies and Reference Architectures
- Special days in the business analysis where dedicated to IT services and information needs.
- The objective was to identify necessary IT services in order to automate processes and reduce the need for manual work processes.
- IT services with similar characteristics where grouped together into service areas.
- The target architecture was mapped and assessed towards the the current baseline architecture.

Benefits:

- Clear understanding of where we want to go (direction) and which technical capabilities the ICT department has to deliver.
- A common understanding of the gaps between the baseline and necessary target architecture (scope).
- Guiding principles and reference architectures for ongoing and planned projects.
- Necessary decision basis in order for do a proper estimation of necessary development work.



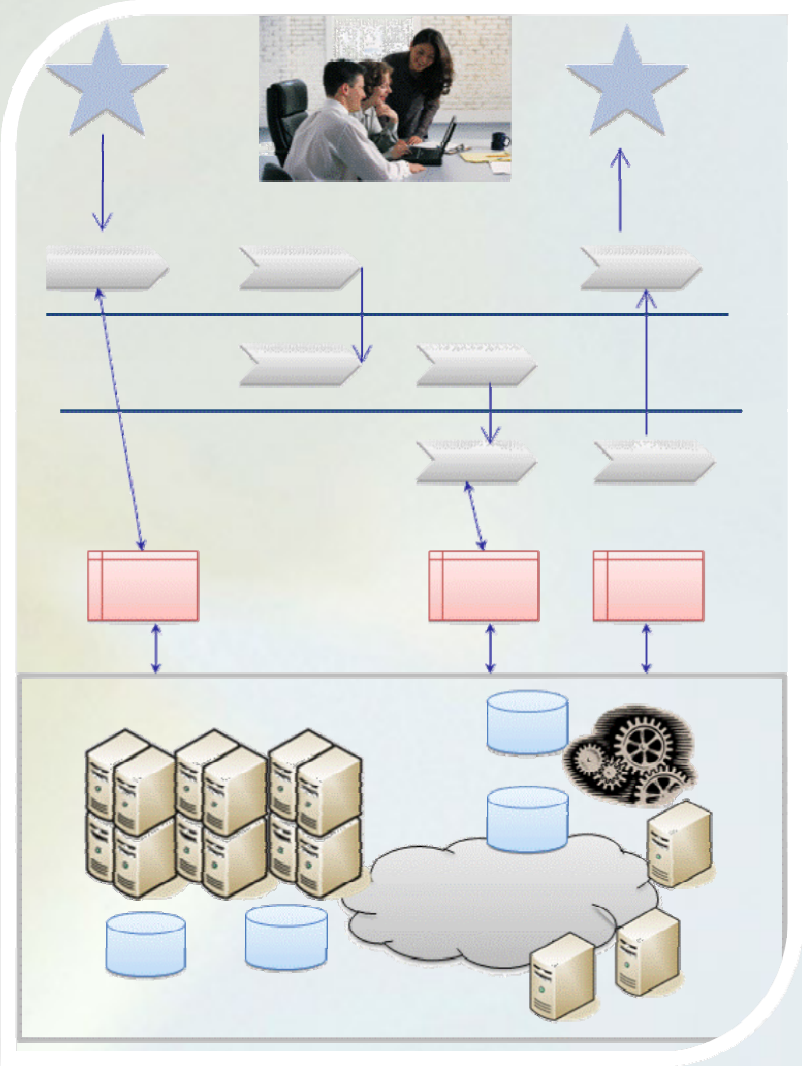
Technical Architecture (“D”)

What we did:

- We described the technical architecture at a high level (”platform level”) when we established the baseline application architecture.

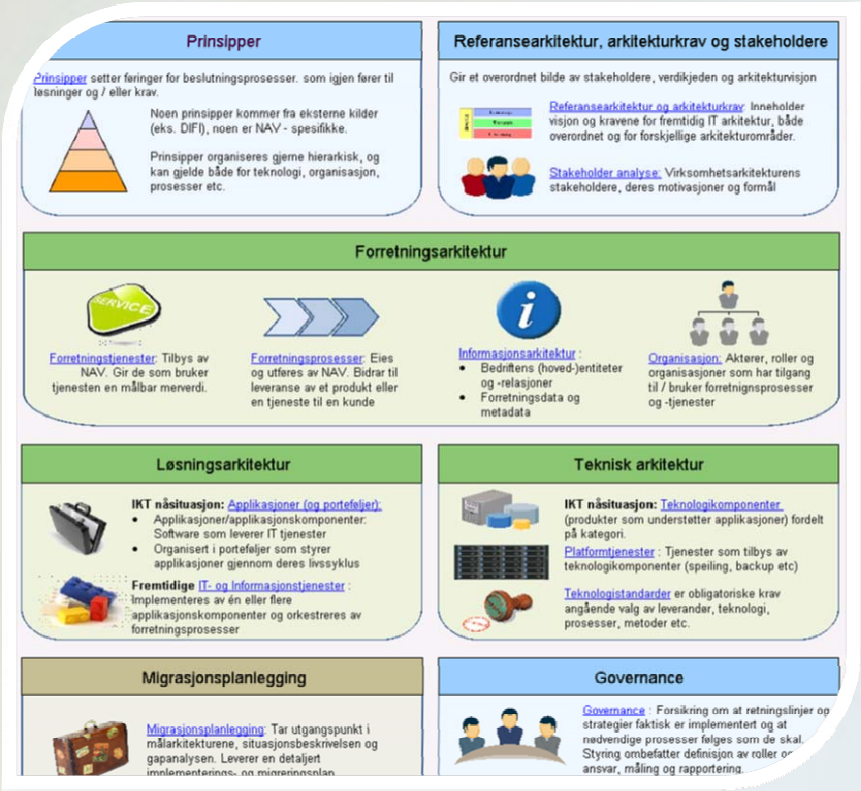
Benefits:

- A common understanding of the baseline architecture and existing value chains.
- The analysis revield, not surprisingly, that we had multiple platforms offering the same functionality.
- Multiple, high criticality, value chains, ex more than 20 different document management systems.
- The objective was to standarise on less platforms and value chains.
- The preffered platforms was known to management but not chosen and explisity announced to the whole IT department.



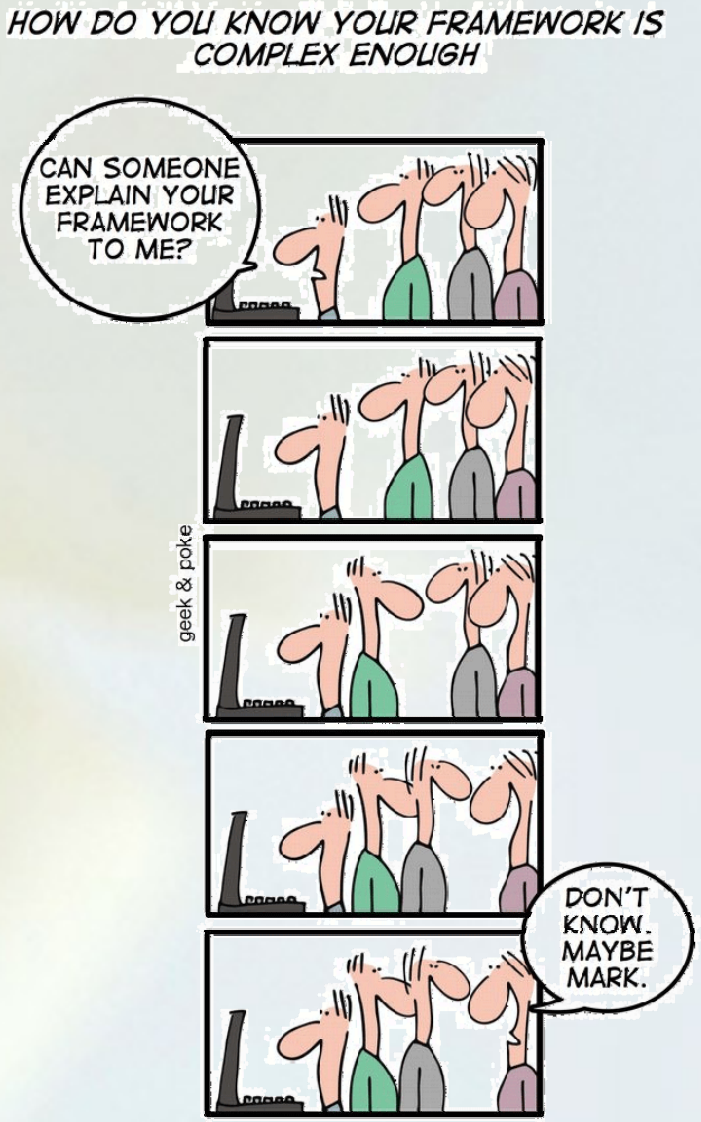
Governance and documentation

- A governance organisation where set up in order to maintain the architectures (baseline and target).
- All information easily available from an ”architecture portal”.

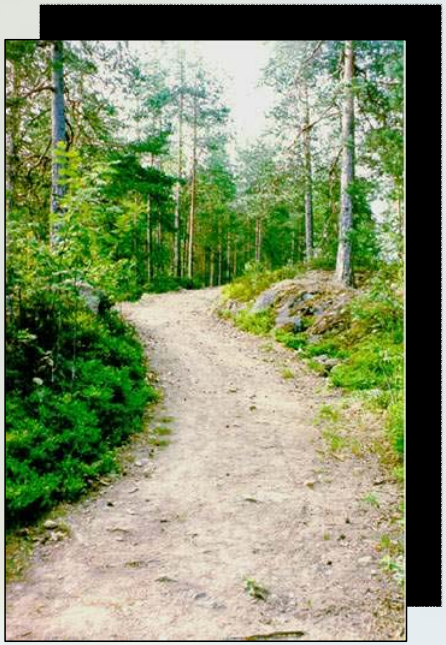


What is "lessons learned" from the Norwegian Labour and Welfare Administration

- TOGAF and the ADM gave us a ”kick- start”, common vocabulary, common understanding, roles and resposibilities, teambuilding during training. A little bit competition during certification…
- Should be used as a starting point, not as a very rigorous methodology. Pick and choose…
- A strong project management and architecture function is of crucial importance.
- Organization and responsibilities must be established and agreed upon, takes time.
- Necessary clarification against other projects and initiatives should be done early, ex business/strategy projects…
- Don't miss the big picture and be lost in the details, nice frameworks, functionality in a tool, data modelling is fun...



Questions?



Contact Information:

Lars Houge, CEO, +47 99593450
lars.houge@orchestration.no