PLCS in the Norwegian Defence

ERP Implementation Program

- Program Golf -

Boye Tranum
Lieutenant Colonel
Assistant Program Director
Norwegian Defence ERP Implementation Program

- 4.6 mill people
- Area equal to UK
- Defence:
  - ~18000 staff
  - conscripts
  - NATO member
1. Reorganization in the Norwegian Defence

2. The ERP program and the reorganization

3. Program characteristics

4. PLCS and standards

5. The future
Vision:

"The defence Reorganization will result in a rationalized national defence with a strong international engagement."

Main objective:

"Within reasonable and foreseeable economical limits create a modern and flexible defence in tune with its tasks and roles in the new environment."
Operational expenses: 
"reduced by min 2 bil kr/year"

Materiel: 
"maximum disposal"

Property: 
"reduced by a minimum of 2 mill m2"

Man-years: 
"reduced with a minimum of 5000"

Organization: 
"end activities which are decided terminated."

"as soon as possible and latest by 31 December 2005"

MoD/ Def HQ: 
"reduced by 50%, or 800 people"
The Defence reorganization schedule outlines the implementation plan for the Norwegian Defence ERP (Enterprise Resource Planning) program. The schedule is divided into three phases:

**Phase 2 - Execution (2003 & 2004):**
- Structural changes
  - MoD/Def HQ: Establish
  - DLO: Political
  - ERP: PreProj 1 – Finance/Payroll
  - Property: Continuous rationalization of Property
  - HR: MB
- Implementation

**Phase 3 – Follow up (2005):**
- RSF – Prep.
  - MoD/Def HQ: Improve organisation until new building is ready
- DLO: Joint Divisions
- ERP: Project 2 – LOG (+)
- Property: Property
- HR: Implementation of strategic HR

**Implementation of ERP:**
- Joint Divisions
- MB

**Implementation of strategic HRFO/P&Ø:**
- MB
- Program Golf -
The ERP Implementation Program
”Norwegian Armed Forces will implement a joint system for Personnel, Material and Financial management. The Armed Forces organization and processes will be changed in order to achieve substantial savings. Use of legacy systems and existing competence will be considered if found cost effective, based on the assumption that we are aiming for a joint management system for the Armed Forces.”

Ref.: FO/LED 29 mar 00/9142
Program characteristics

• IBM selected as end to end solution integrator
• Integrated ERP-System (SAP)
• For all administrative & logistic processes
• For all services (civil and military)
• For all unit levels (MOD to the tactical level)
• First rollout ultimo 2003
• (Nearly) all legacy functional IT Systems replaced by 2006
• SAP v4.6c in first rollout – 4.7 in second rollout
• Planned # of users: 15,000 (ESS)
• Estimated cost approx 250 mill $
Functional areas

- **Finance**
  - Planning, budgeting and accounting
  - Defence internal B2B
- **Payroll**
- **HR**
- **Material/logistics**
  - Procurement, administration, maintenance, management and ”retirement” (Life cycle)
- **Organizational management**
- **Information management**
- **Decision Support and Defence management**
  - BSC pilot under implementation (BW/SAP SEM)
Norwegian Defence ERP Implementation Program

End State – Process, Technology, Organization

Long term planning, budgeting and management

Force structure planning & -management

Electronic information management

Basic IT infrastructure/ Communication backbone

Assign Personnel
Administrative Personnel
Recruit Personnel
Personnel-data
Payroll
Finance
CM & Inventory
Acquisition
Supply Chain mgmt
Maintenance
Norwegian Defence ERP Implementation Program

ERP Implementation Schedule

2002

Pre proj 1

2003

Proj 1 Finance/Payroll

WS. log

Pre proj 2

2004

Proj 2 Logistics

Pre proj 3

2005

Proj 3

Data conversion and data QA

Decision Support and Defence management (BSC)

"Prep ERP in Service"

"ERP in Service"
Architectural control is essential when implementing ERP systems
The architecture in ARIS is modelled in several dimensions:

- **Information**
  - Product
  - Knowledge
  - Data
  - Part

- **Technology**
  - Application
  - Information/Database
  - Resources

- **Process**
  - Event/Result
  - Database
  - Application

- **Organization**
  - Strategy/Planning
  - Infrastructure
  - Resources

**Hierarchy of goals**

- Vision
  - To modern, flexible and quality good forces to turn the organization in an agile and flexible organisation that has the capacity to solve tasks in connection with peace, crisis, war and international operations within given political conditions and objectives...

- Objectives
  - The forces shall within 2010 achieve an organization that is an agile and flexible organization with the capacity to solve tasks in connection with peace, crisis, war and international operations within given political conditions and objectives.

**ARIS** is modelled in several dimensions:

- **Leadership & Governance**
- **Strategic IT Planning**
- **Operational IT Planning**
- **Fellows Processes**
- **Technological Infrastructure**
- **Application Infrastructure**
- **Resource Management**
- **Operational Processes**
- **Knowledge Management**
- **Organizational Model**
Process -structure – Process level 1

Resources

Activity

Result

Goal

Primary processes

Force production

Operational activities

Result

Force-elements w/capacities
- Units
- Systems

Goals
- Military presence
- Intelligence and surveillance
- Crisis management
- Defence of Norwegian area
- Secure vital functions
- International engagement
- Other use of the Armed Forces

Resources

Activity

Result

Goal
All Services: approximately 115 systems
Possible Architecture

mySAP.com Enterprise
- mySAP SRM
- mySAP HR
- mySAP SCM
- mySAP Fin.
- mySAP PLM
- mySAP CRM
- mySAP BI

webMethods

Logistics
- Skade
- FN/NATO
- AMSYS
- Commit

Finance

HR
- SDB

Late 05
System architecture – ”End State”

Possible Architecture

mySAP.com Enterprise

mySAP Enterprise Portals

mySAP SRM  mySAP HR  mySAP SCM  mySAP Fin.  mySAP PLM  mySAP CRM  mySAP BI

webMethods or SAP Exchange Infrastructure

Logistics  Finance  HR

Niche-systems

Within 06
Existing systems - Logistics

SAP R/3
Client / Server
ABAP/4
Program Organization

Program Director

Support Staff
Contracting/Negotiations
Info / Admin

Section Strategy & Architecture
Ass. Prog Dir

Program office
Manager PO

Program level
~ 50 Staff

Architecture
grp

O&M
grp

Plan /content
Quality/Risk

Security
grp

Reorganization
Roll out

Resource koord
Budget/finance

Programplan
grp

Projects / Studies
~ 210 Staff

Study
Log

Study
HR

Study
B2B

Proj 1
Finanace
Payroll

Proj
DQ

Proj
Mngm
Supp

October 2003

Program Gol f

0.09.03 Norwegian Defence ERP Implementation Program 23

Norwegian Defence ERP Implementation Program

30.09.03

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October 2003
The Norwegian Defence seeks a more uniformed and standardizes way to cooperate with industry and partner nations.

Prime focus is information interoperability.

Use of Information Standards will:
- Lower costs in operation
- Increased weapon system availability
- Increased value of international cooperation
ISO STEP 10303 – 239 (PLCS)

• The Norwegian Defence believes that ISO STEP 10303 – 239 (PLCS) will be the leading standard for product data and Life Cycle Management

• We are running a pilot projects to ensure that:
  • the standard works as a real standard between vendor and customer
  • the standard work in a SAP environment

• Pending the pilot the Norwegian Defence will require the use of ISO STEP 10303 – 239 (PLCS) it in all future acquisition projects

• The Norwegian defence will work with partner nations, in and outside NATO, to seek a common agreement on ISO STEP 10303 - 239
Using the New Frigate Program as a Pilot case

Pilot 1 (NDLO/Sea):
Mapping of IZAR data to PLCS

Pilot 2 (NDLO):
Receipt and testing of data from IZAR

GOLF Logistics pilot – receipt of Life Cycle info.

Pilot 3 (Programme GOLF):
Analysis of storing of frigate data in SAP based on the PLCS standard

Additional applications

PLCS Inc. DEX development

SAP ver. 4.7

IZAR PDB

Quality Check

Mapping

Translator

DEX

Functional difference
Information content difference

Staging area

PDTF PLCS

Translator
Preparing for the future

• The Joint ERP system will be one of the components in the NCW solution
• A strong focus on Information Resources will help the implementation of NCW
• The ERP Implementation Program (Golf) prepares for the future
Thank you!

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