



Management
of change
Apply Sørco

Management of Change

Elin Østbø Lunde

Apply Sørco AS

QualiWare International Conference

5-6th of May 2015

- My background

- Employed with Apply Sørco AS since autumn 2010
- Engineer in petroleum science
- Worked with Quality Assurance for 12 years+
- Implemented management systems in three companies
- Certified risk manager and lead auditor
- Currently doing my master in industrial economy with risk management specialising

Apply Business Structure

Apply

- A topside focused oil and gas service provider.

- Restructured to topside focused oil and gas service company
- Upgrading office facilities across the board in Norway
- Leading independent supplier of offshore living quarters globally
- Serving NCS operators with modifications, operations support and maintenance planning
- Rig & Modules– smaller but growing business area



APPLY/SØRCO

Upstream Facilities

- Feed & Design
- M&M
- Modifications
- Operations
- Laser Scanning & Data Management

1420 mnok



APPLY/LQ & HD

Living Quarters & Helidecks

- Aluminium LQ
- Steel LQ
- After Sales LQ
- Helidecks

1270 mnok

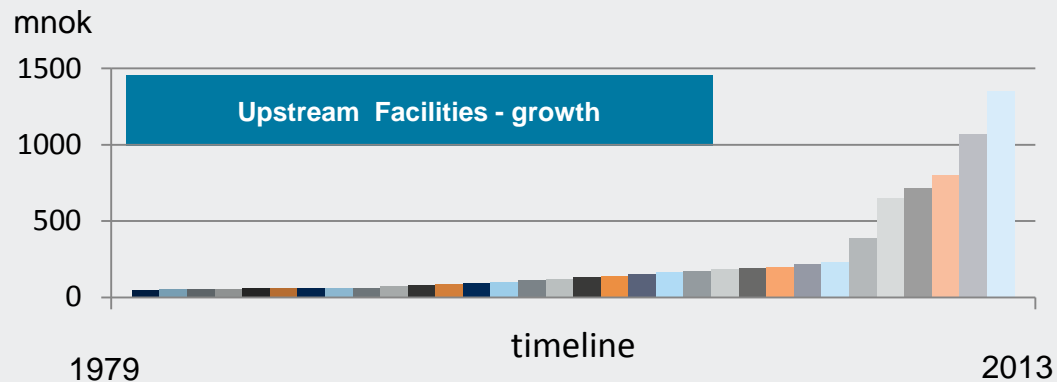


APPLY/RIG & MODULES

Rig & Modules

- Offshore Services
- Automation Systems
- Project Services
- Drilling Systems

390 mnok



Apply Upstream Facilities

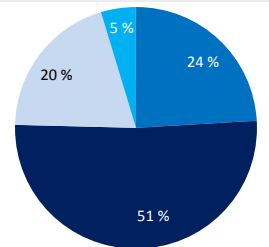
MMO

- Long term M&M Frame Contracts
- Planning, optimisation and execution of maintenance campaigns and programs
- Maturation and execution of modification projects
- Coordination of turnarounds
- Assistance to operations
- Ongoing main projects
 - Kviteseid, Brage and Goliat



Upstream Facilities business mix

YTD Nov 2014



■ M&M ■ Mod ■ O & E ■ Asset Vis.



Operations & Engineering services

- Development and maturation of topsides solutions; concept, feasibility, FEED¹⁾
- Detail engineering, procurement & construction assistance and project management support (EPCM²⁾)
- Maintenance analysis, planning and support
- Documentation for operation, systems and operations procedures
- Training and supply of operator personnel

Modifications (Brownfield)

- Execution of EPCIC³⁾ projects, offshore facilities
- SAS⁴⁾ and control system upgrades
- Process and capacity upgrades
- Subsea tie-backs to existing facilities, topsides
- Safety and technical integrity upgrades
- Ongoing main projects
 - Gullfaks, Troll and Statfjord

Asset Visualization

- Laser scanning & dimension control
- 3D Services
- Engineering Support
- Digital asset management
- Portal

Geographical footprint and locations

- We deliver value to our clients through Borderless Performance

Stavanger (HQ)



Bergen



Cracow, PLN



Hammerfest



Apply Upstream Facilities locations



Ongoing projects

Statoil, Statfjord B & C Fire & Gas Upgrade, EPCI (2012-2015)



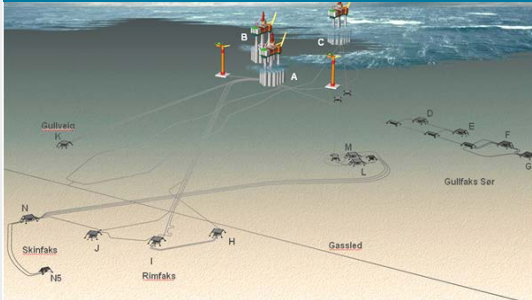
Eni, Goliat Maintenance & Modification Contract (2012-2015)



Eni, Goliat Operations and Maintenance Support Contract (2012-2015)



Statoil, Gullfaks Subsea Compression Topside, EPCI (2012-2016)



Statoil, Kvitebjørn Maintenance & Modification Contract (2010-2016)



Wintershall, Brage Maintenance & Modification Contract (2010-2014)



Statoil, Troll C Low Nox Turbine Upgrade, EPCI (2012-2014)



Statoil Valemon, Maintenance & Modification Contract →2016



Lundin Edvard Grieg Maintenance & Modification Contract (2014-2018)



Apply Improvement Agenda

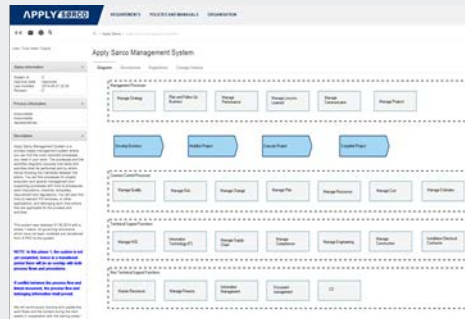
Apply4Change – new business solution



- Avoid duplication of information in various systems
- Improved business and project control
- Improved recourse planning
- Streamlined work processes
- Real time data availability
- Interface to planning, rotating, weight, PDMS, document systems

New management system

- Significantly reduced amount of work processes
- Simplified work instructions and execution models
- Higher efficiency through standarization
- Achieved organizational flexibility



Apply VIP – Improve execution performance



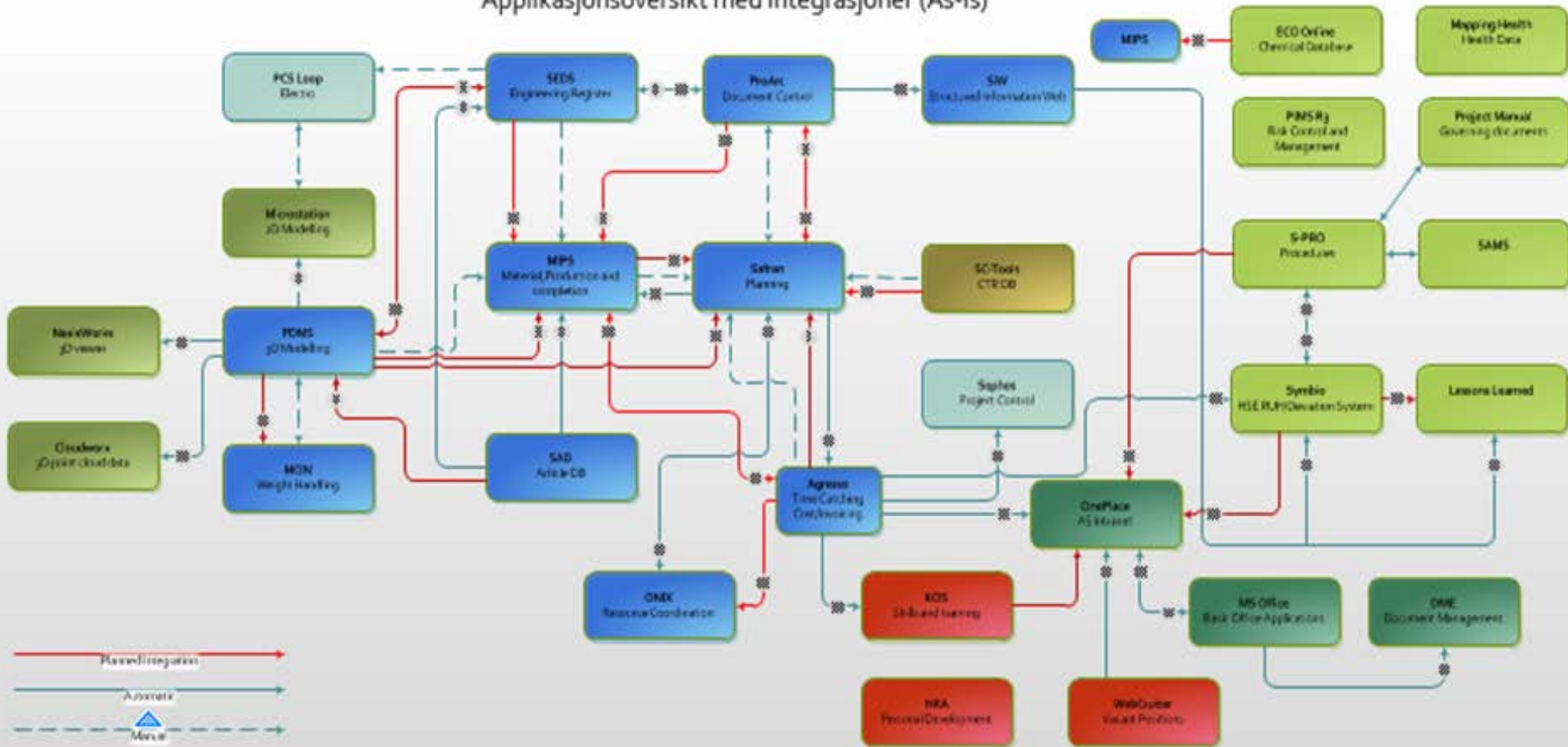
LEAN Implementation



A «change» was necessary

- Increase efficiency through simplification and coordination of work processes
 - To handle bigger and more complex projects with reduced implementation risk
 - Optimal resource planning
 - Updated management information
 - Better interaction internally, customers and suppliers

Applikasjonsoversikt med integrasjoner (As-Is)



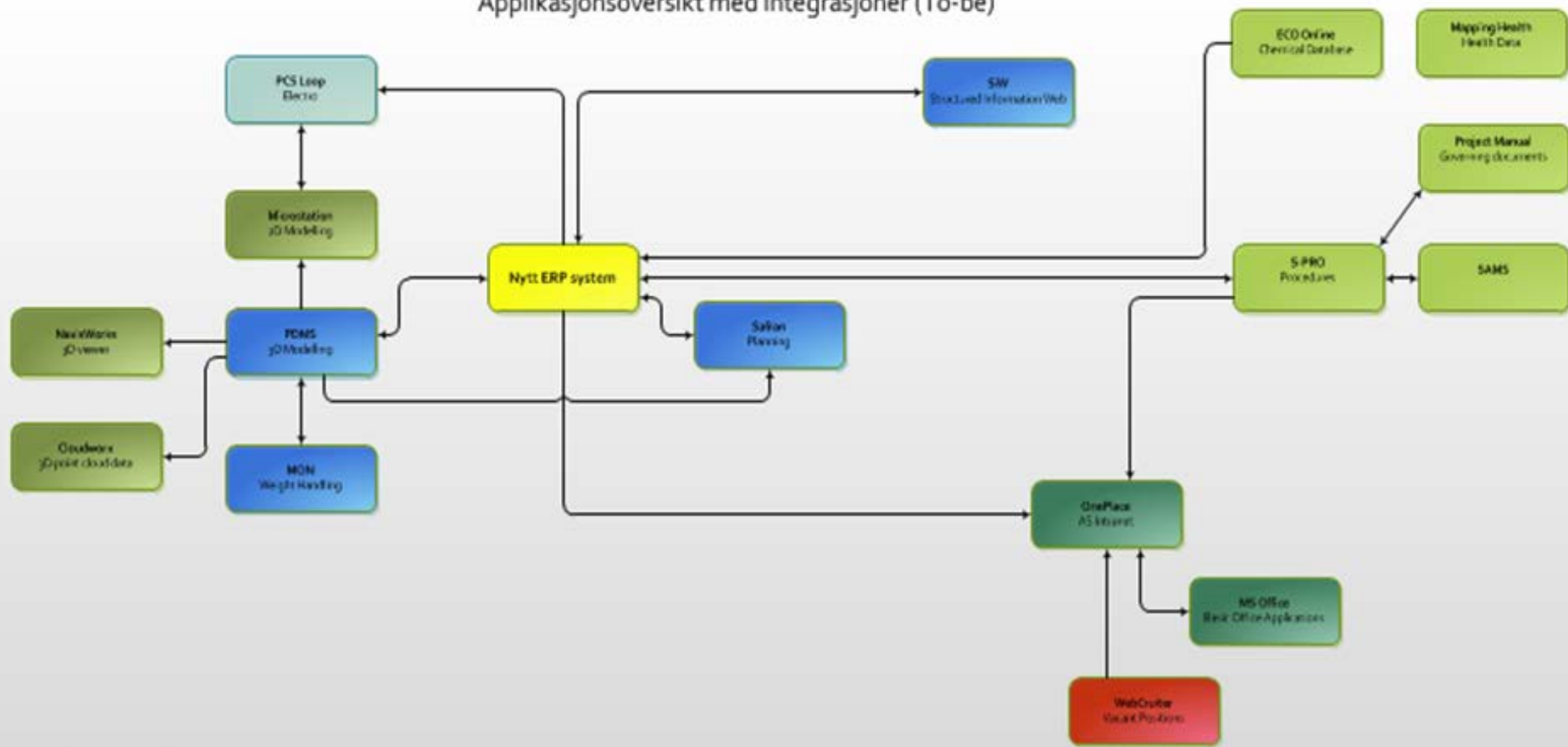
Application Categories

- CPST – Core Project System Tools
- Planning, document control and reporting
- Personnel
- CAD
- Basis
- Business Area, Operation
- Technical
- HSE/QA

Applikasjoner uten integrasjoner



Applikasjonsoversikt med integrasjoner (To-be)



Application Categories

- CPST – Central Project System Tools
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Applikasjoner uten integrasjoner



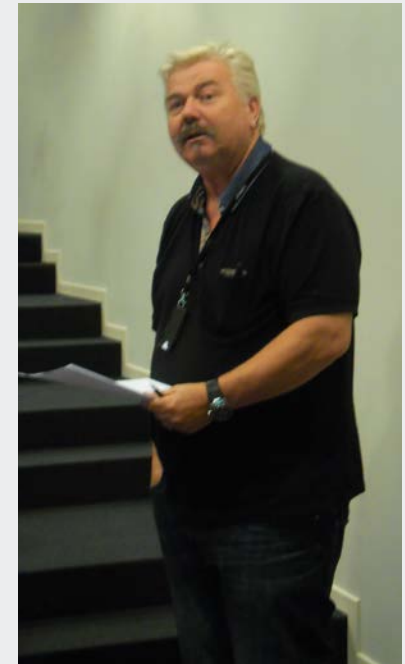
Quality campaign «Apply Quality Culture»



Feedback from group sessions:

Management system:

- Visualize interfaces / responsibility
- Make it easier to navigate in – processes insted of documents
- PEM must be updated
- Ease access to governing documents relevant to procedure
- Ownership to governing procedures



Plan for installation of IFS

Decision to implement a process based management system



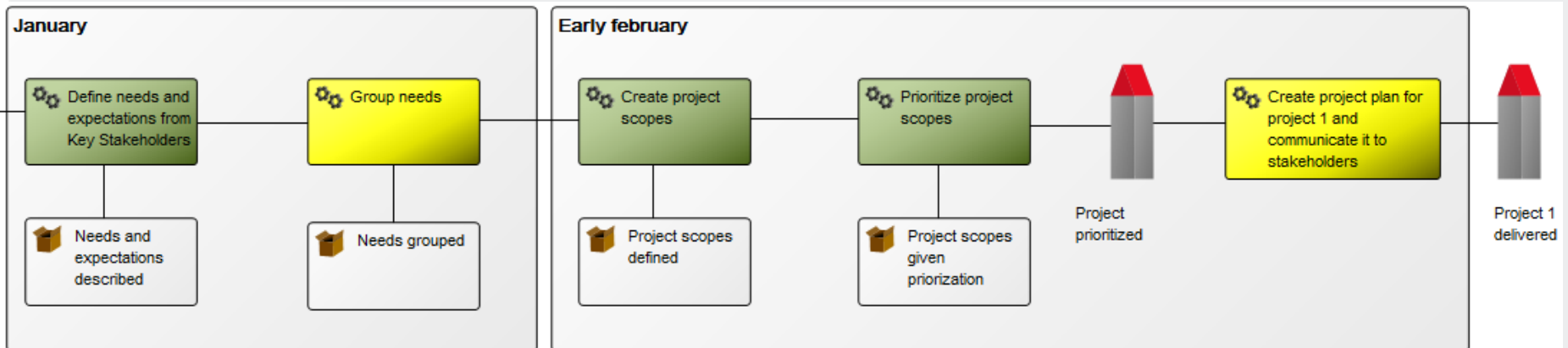
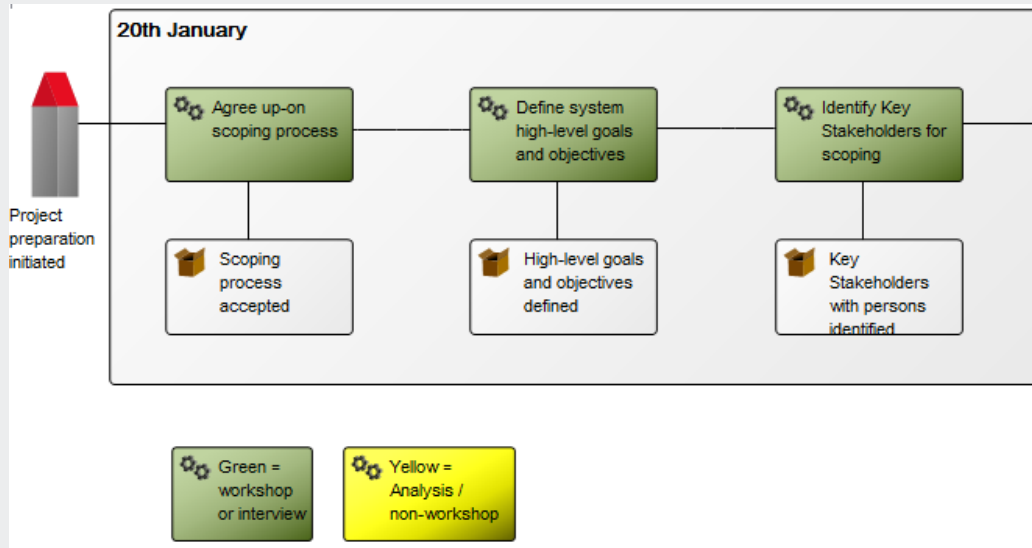
Milestone: start mapping phase Q1 2013

Milestone: decision go / no go Q2/Q3 2013

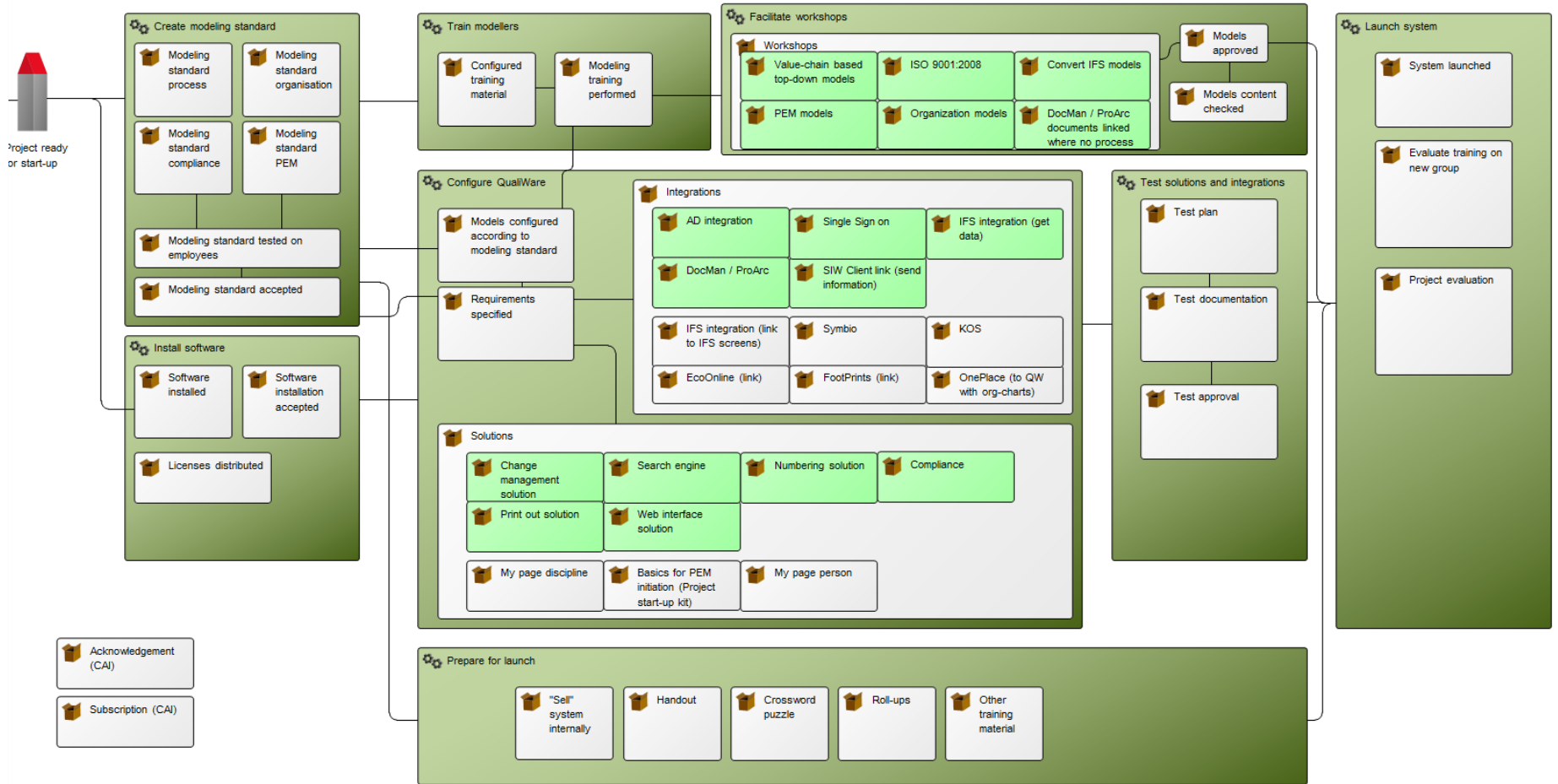
Milestone: go live Q2/Q3 2014

Milestone: decision go / no go Q3/Q4 2014

Scoping plan



Scoping



Main objectives for going live

- To have an operational management system in place covering the ISO 9001 / ISO 14001 standard requirements
- Ensure that all elements in the "old" management system were transferred to Qualiware (both in flow charts and document form)
- Implement changes in operation due to ERP implementation in Qualiware
- Information to and training of end users
- Focus on need to have, but embrace opportunities along the road

Resources

- Project Manager



- Project team
 - Modelling / area responsables



- Modellers
 - (5 licenses – 4 active modellers)

- PEM responsible – development



- «Overloaded» process owners

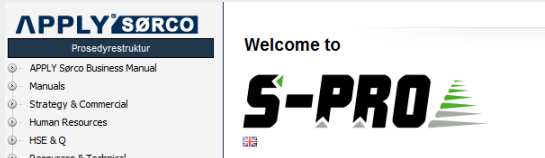
What's new?

Old management system

- S-Pro
- SAMS
- SMS

New management system

- Qualiware
- ProArc (documents)



Scope of work

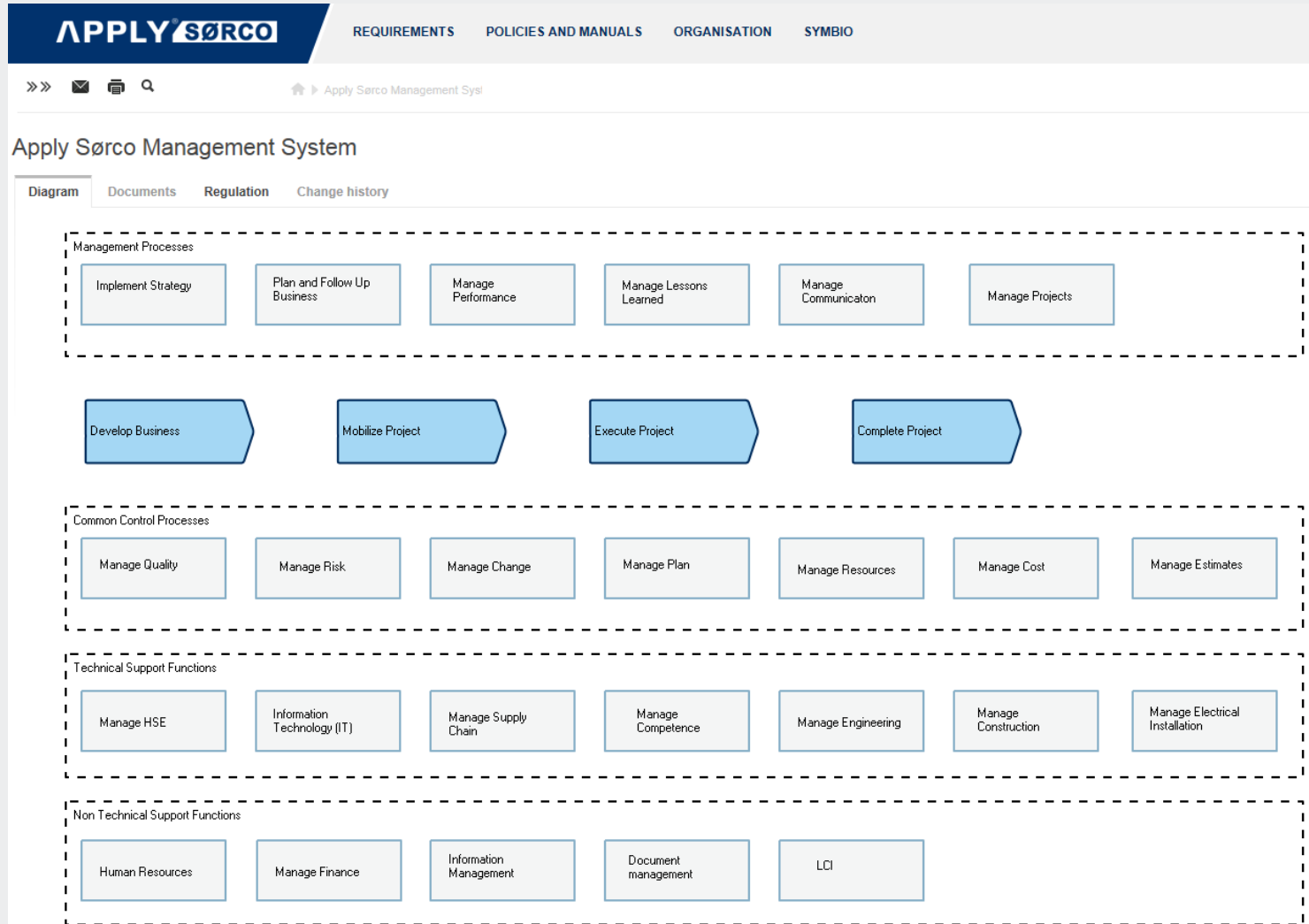
AKTIVITET
Installasjon
Installasjon av software
Avklare tekniske krav (hardware, nettverk, firewall etc)
Installasjon
AD sync
Oppsett av repositories
Acceptanse av installasjon
Distribuere lisenser
Modelleringsstandard
Lage modelleringsstandard for prosess
Modelleringsstandard organisasjon
Modelleringsstandard compliance
Modelleringsstandard PEM
Total
Test av modelleringsstandard
Akseptanse av modelleringsstandard
Total
Modeller config according to modelleringstandard
Lage opplæringsmaterieill
Tilpass materiale
Opplæring av modellører basiskurs

AKTIVITET
Integrasjoner
AD integrasjon
Single sign on
IFS integration (hente data)
DocMan/Proarc documents linked where no processes w/document view
SIW (kunder logger seg inn for å se status på prosjekt) kunne nå informasjonen fra QLM (pdf for eks)
Delakseptanse fra kunde på integrasjoner
Løsning
Change management løsning
Godkjenning på web(approve knapp)
Historikk m. rolle på godkjenningstidspunkt
Test og dokumentasjon
Search engine
Filtrering
Test og dokumentasjon
Compliance
Samsvarsmatrise
Aktivet/prosess som dekker krav
Test og dokumentasjon
Numbering solution
Unique ID
Test og dokumentasjon
Print solution
Printerfriendly web site from current page with content
Test og dokumentasjon
Web interface solution
Grafisk oppsett: farger, layout, logo etc
Test og dokumentasjon
Delakseptanse fra kunde på løsninger

AKTIVITET
Fasilitere workshops
Forberedelser workshop
Workshops
Etterarbeid workshop
Value chain based models
Management, Value/Core, Support
PEM models - 2 nivå
Tilpassning for PEM modeller
Repository struktur
ISO 9001:2008
Organization models
Lage org kart basert på info lest inn
Konvertere IFS modeller
Linke dokumenter fra ProArc/DocMan hvor ikke er prosesser
Sammenlikne ekisterende prosesser med nye på: input, output, regulations innen lansering
Test og funn
Testplan
Test documentation
Test
Funn og oppfølging av funn
Test approval

AKTIVITET
Lansering
Opplæringsmaterieill
Håndbok
Puzzle
Roll ups
Treningsprogram
Lanseringsdag
Evaluering av treningsgruppe før launch
Evaluering av treningsgruppe etter launch
Prosjektevaluering
Project management
Prosjektstyring
Total

Management system front page



Modelling standard



Kravspesifikasjon

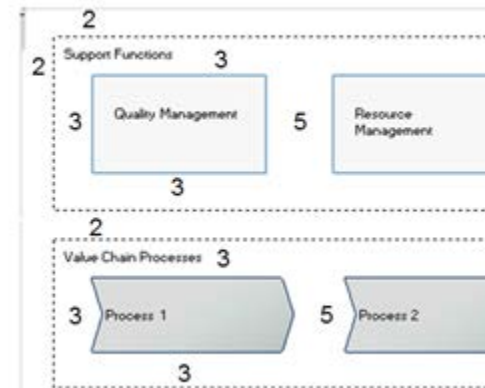
Tittel:	Apply Sørcø, Modelleringsstandard, Metamodel
Kunde:	Apply Sørcø
Bestiller:	Apply Sørcø

Symboler på dette nivået:

+

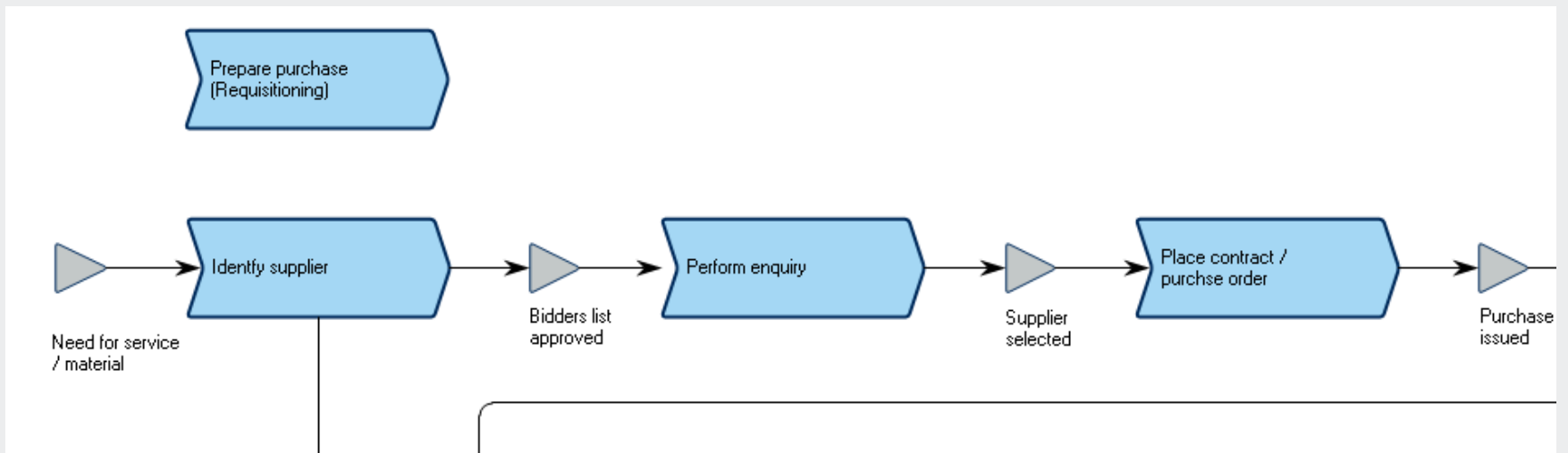
Symbol

Grafisk føringer:



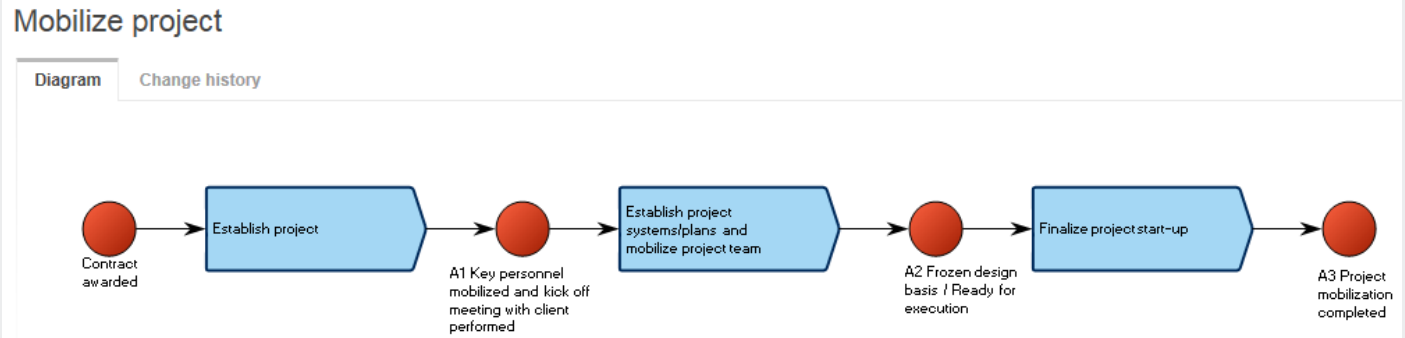
Modelling

- Started with Qualisoft facilitators
 - Decided to facilitate/model ourselves
- Used Qualisoft facilitator/modeller as quality control
- 623 documents transferred to Qualisoft out of 1122

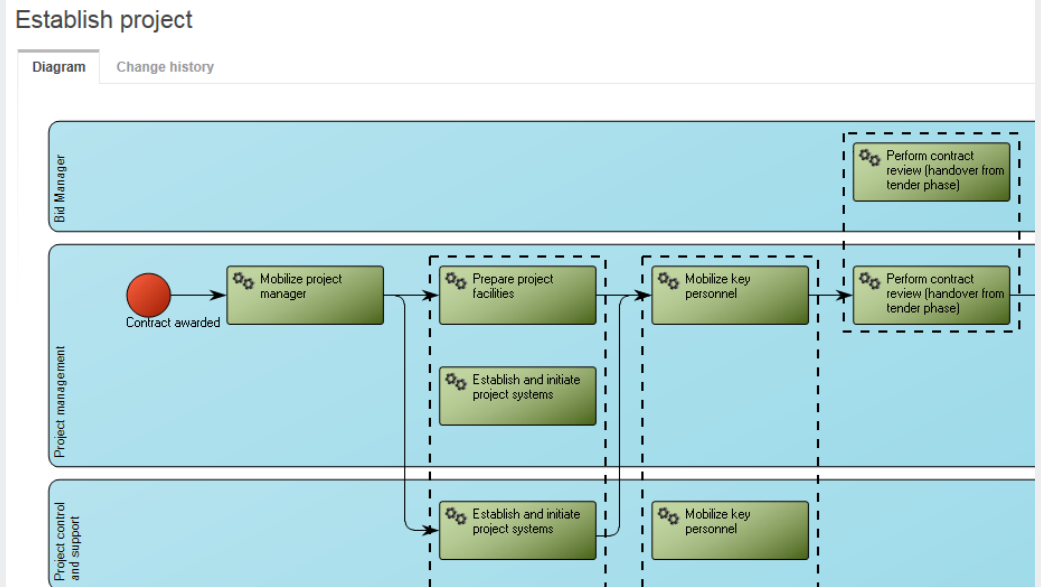


PEM development

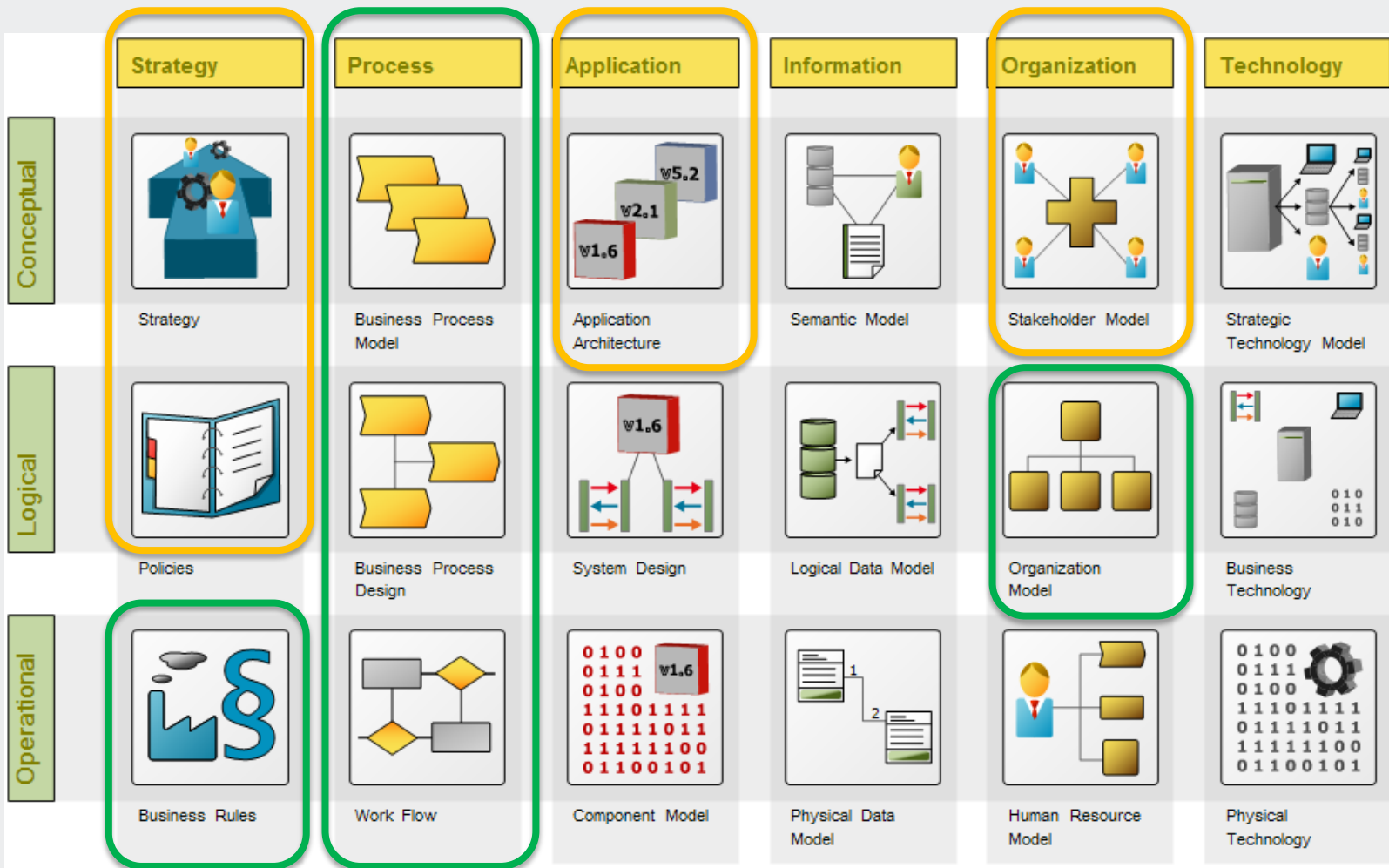
Level 1



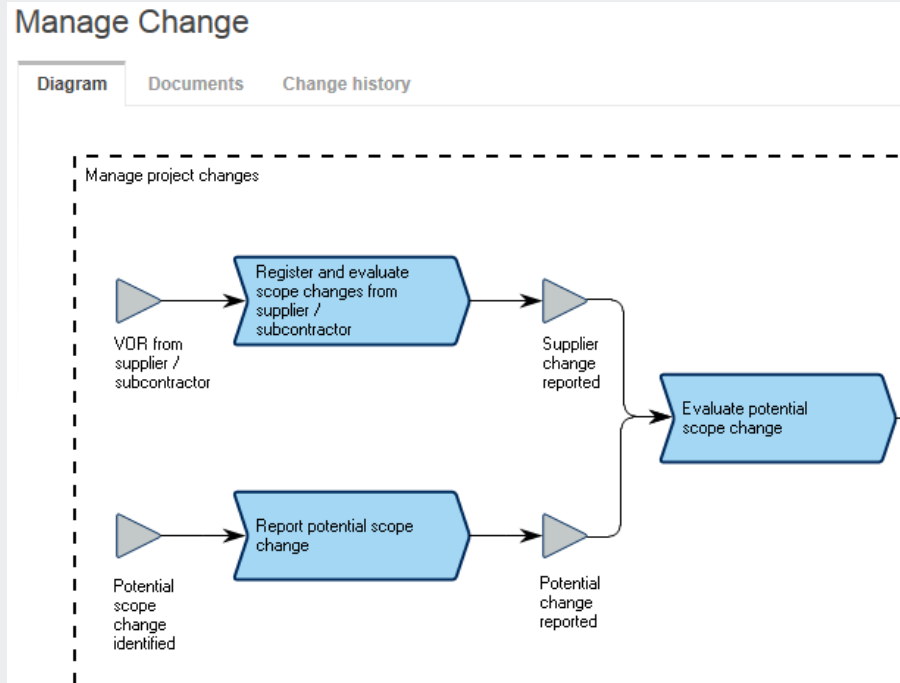
Level 2



What we have implemented



Manage Change



We are very good at managing changes in our projects - documented processes

Internal change management – we managed - no formal process documented

Risk management

Risk ID: 0001 Title: Risk for at grunnlaget for engineerings PEM ikke blir etablert i tide til å kunne modellere disse inn i Qualiware til lansering

Description: PEM modeller i S-Pro er ikke oppdatert til å reflektere dagens situasjon i Apply Sørco. Dette vil influere prosjektet på fremdrift. Engineerings PEM kan erstatte flere andre PEM modeller. Dette må avklares av prosesseiere og et hovedmilepølse sett må etableres i forkant av implementering i Qualiware. Go live dato for Qualisoft er 1. juni 2014

Risk Owner: Lunde, Elin Østbø * Status: Open

Phase: Modelling Project: [] X

Risk type: Solution

Responsible: Apply Sørco

H & WE
 Security
 Quality
 Safety
 Environment
 Reputation

Schedule: 1 days

Manageability: [] Cost: 0 mill.

Consequence Comments: []

Assessment Date: 11/03/2014

ALARP: Potential major accident

Time of exposure: []

[Quick](#)

Action ID	Action Title	Responsible	Deadline
2841	Bygge en PEM struktur som vi kan "flytte inn i". Dette er et samarbeid mellom Qualisoft og Apply Sørco. Egen workshop er under planlegging	Kvåle, Anders Even	31/03/2014
2842	Ferdigstille så mange av prosessene som mulig som hører inn under PEM (innkjøp, QHSE, ressursstyring, plan etc)	Lunde, Elin Østbø	30/04/2014
2840	Eget internprosjekt opprettet med Anders som prosjektleder. Gjennomgang av hovedmilepøler og antall PEM som skal brukes i AS	Kvåle, Anders Even	30/04/2014
2844	Sikre eierskap og etterspørsel på fremdrift av PEM prosjektet i EMT og hos alle FO	Aadnøy, Astrid	30/04/2014
2843	QA representert i alle møter mellom engineering og Qualisoft for å sikre fremdrift, god kommunikasjon og være generelt en pådriver slik at denne viktige delen av styringssystemet kommer på plass	Lunde, Elin Østbø	01/06/2014

*

Communication

Home HSE Quality HR Service Desk The Social Club Projects Departments

Qualiware - Apply Sørco's new Quality Management System

Apply Sørco will replace S-Pro with a flow chart process based Quality Management System.

Report and handle incidents

Apply Sørco's Quality Management System (QMS) S-Pro has served us well for many years. But now a change is necessary.

The need of a flow chart visualized process based QMS has been pressing for some time now. Therefore I am proud to introduce our new QMS, Qualiware, a Qualisoft application.

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Home Quality HR Service Desk The Social Club Projects Departments

Qualiware PEM update

Qualiware is continuously being updated. Please read up on the latest news regarding PEM.

APPLY SØRÇO MANAGEMENT SYSTEM

APPLY SØRÇO

APPLY SØRÇO

Home Company Information HSE

USEFUL LINKS

- Apply Intranet
- Emergency Preparedness
- Qualiware
- Symbio
- Facilities
- IT Support
- IFS Enterprise Explorer
- Agresso (READ ONLY)
- New Employees
- Meeting Rooms

Vacant Positions

qualiware
- the Apply Sørco Management System

Symbio

Training of end users

- Presentations were given to all Apply Sørco personnel
 - Some difficulties reaching all offshore personnel
- QA visited all ongoing projects – going over the basics – getting first hand feed back
- Issued a user instruction
- Presented Qualiware to our customers

Go live

- Monday 2nd of June 2014 IFS and Qualiware went live
 - Hectic weekend before go live– «the last finish»
- IFS – great focus – little noise - success
- Qualiware – success – end users and certifying authority satisfied
 - End users – improvement suggestions

Success factors

- Early management involvement
- Common understanding of the task
- Risk monitoring
- Good planning and update
- Process owner involvement
 - Co-operation between modellers and process owners
- Qualisoft project manager – control
- Communication

Now what? ? ?

- Filling «holes» in our management system
- Finalising the remaining PEM's
- Go from building phase to maintaining phase
- Further investigate EA – possibilities
 - Process started – application architecture
 - Tie together strategy, application architecture and processes
- X-border processes
 - Run stakeholders analysis
 - Get the whole process from start to finish
- Further reduce number of process descriptions and procedures
- Establish improvement groups – Lean implementation

APPLY SØRCO MANAGEMENT SYSTEM



What's new?

Old management system



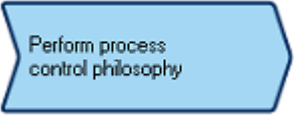

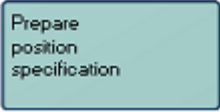


- S-Pro
- SAMS
- SMS

New management system

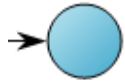
- Qualiware
- ProArc

The screenshot shows the old S-Pro management system interface. On the left, there is a navigation menu with the 'APPLY SØRÇO' logo and a list of items: 'Prosesdyrestruktur', 'APPLY Sørco Business Manual', 'Manuals', 'Strategy & Commercial', 'Human Resources', 'HSE & Q', and 'Resources & Technical'. To the right of the menu, it says 'Welcome to' followed by the 'S-PRO' logo. Below this, there is a dark blue header bar with the 'APPLY SØRÇO' logo in white. To the right of the logo, there are three navigation links: 'REQUIREMENTS', 'POLICIES AND MANUALS', and 'ORGANISATION'. Below the header bar, there are four icons: a double left arrow, an envelope, a printer, and a magnifying glass. To the right of these icons, there is a breadcrumb trail: 'Home > Apply Sørco Management System'. Below the breadcrumb trail, the main heading is 'Apply Sørco Management System'. At the bottom, there is a horizontal menu with four tabs: 'Diagram' (which is selected), 'Documents', 'Regulation', and 'Change history'.

Symbols and icons used in the management system

	Process area	<p>A process area shows the processes included in this area</p> <p>A process area could break down to one or more main processes or sub-processes.</p>
	Main process	<p>A main process could break down to a sub-process diagram or a activity diagram.</p>
	Sub-process	<p>A subprocess tells you the steps in a main process and could break down to a activity flow.</p>
	Event	<p>An event tells us when to start or end a process. Events is not the same as inputs and outputs.</p>
	Activity	<p>An activity describes which assignment an individual role shall carry out. The activity may have associated requirements. The "Requirements" tab will only be displayed if requirements are associated with the activity.</p>
	Collaboration	<p>This symbol is used to emphasise the collaboration between different roles. The role with which an activity flow arrow is associated is responsible for ensuring that the activity.</p>
	Role	<p>A role describes who is responsible for carrying out the activities in a work process. A person may have several roles in one or more work processes, based on his or her qualifications.</p>

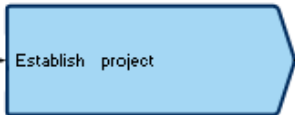
Symbols and icons used in the management system



B3 - Project
mobilization
completed

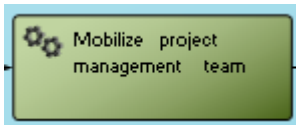
PEM
Milestone

Project milestones



PEM Process
level 1

Project main process to be carried out to achieve a milestone



Project
activity

A project activity visualizes a group of activities to be carried out



Lane

A lane describes who is responsible for the project activities being initiated and carried out

Functionalities of the management system

«« Expands the screen horizontally

✉ Report on improvement issues, mail with reference to the open diagram / process

🖨 Print

🔍 Search function

🏠 Return to start page



APPLY SØRÇO

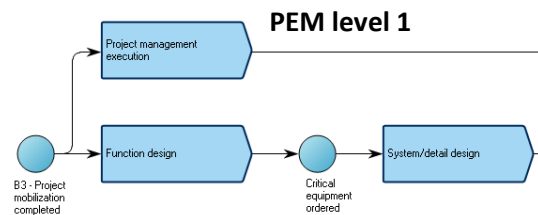
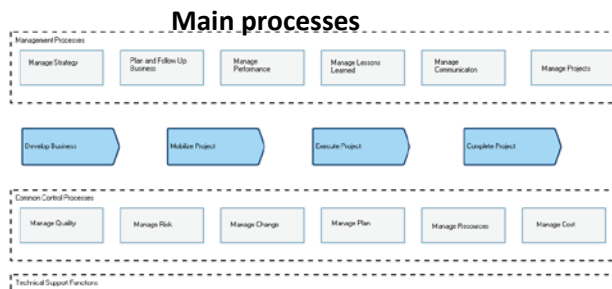
Return to start page

Levels in the management system

Overview of the levels:

- Main processes
- Sub processes
- Activity flow diagrams

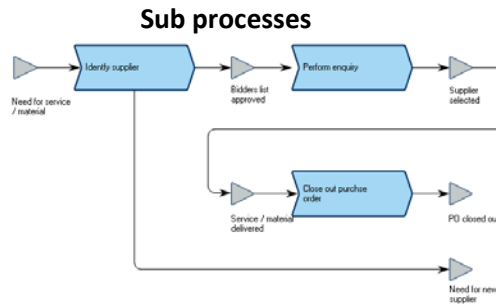
To find the desired information you can navigate directly in the diagrams or by the breadcrumb trail.



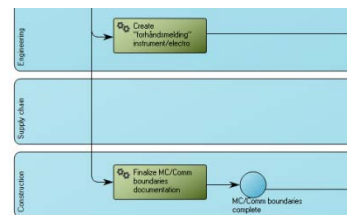
Using diagrams facilitating common understanding

Work processes are visualised using activity flow diagrams.

Activity flow diagrams show roles and responsibility



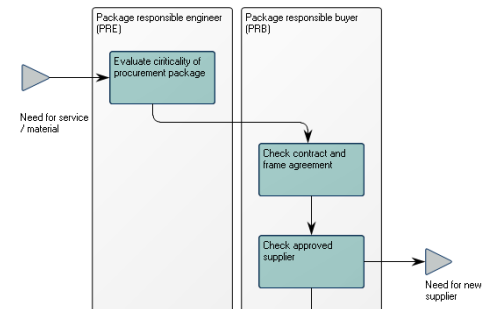
PEM level 2



Accountable role is responsible for:

- To prepare and develop processes and requirements
- To approve applications for deviation and to ensure that processes and requirements comply with regulations
- To ensure that governing documentation in the accountable's area is kept up to date

Work flow



Present status of the management system

- All main processes are identified and visualized on front page of Apply Sørroc Management System
 - Including many sub processes and workflows
- The Project Execution Model is published as an interim model
 - PEM for Modification is published with processes/main milestones and activity/secondary milestones in the level below
 - The purpose has been to consolidate information from old models to a new interface
 - After IFS go live, the PEM work will step up and we will involve all relevant functions in the company, thus improvement will be implemented in the upcoming weeks
 - **For ongoing projects; The project manual is applicable for all project personnel**
- Organization charts are updated
- Governing requirements included in processes
 - ISO 9001, ISO 14001 and Norsok S-006
 - Several more will come shortly
- The management system is under development – changes will come!

Contact information

- Elin Østbø Lunde (general and system information)
 - QA& Risk manager
- Vigdis Jøsang (general and system information)
 - Quality System & Improvement
- Åshild Svennevik (Engineering / PEM)
 - Quality / Engineering
- Anders Even Kvåle (Engineering / PEM)
 - Area Head Engineering Manager



We kindly ask you to report improvement suggestions using the  function in Qualiware!

[Link to Apply Sørco Management System](#)