

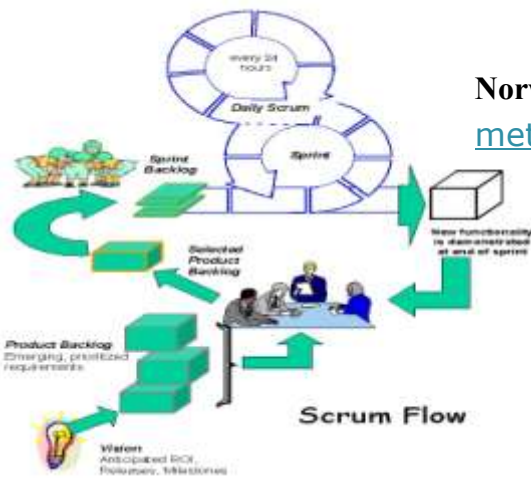


How to get at multi team agile project going a presentation based on the experience from **PERFORM**

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This is the Norwegian Public Service Pension Fund



Norways main
provider of public
occupational
pensions



Provider of mortgage
with one of the
norwegian markets
best interest rate



Provider of insurance
schemes

We are owned by the Ministry of Labour, and our framework conditions are determined by the Norwegian parliament.

On behalf of the Norwegian state, we administer pension entitlements of **339 billion Norwegian kroner** for **1,600** organisations and **950,000** former and existing employees (members) in the public sector, schools, research institutions, pharmacy businesses and organisations.

Long-standing traditions

Our history can be traced back to 1814, when our predecessor was established under the name “Den almindelige norske enkekasse”. In 1917 the Norwegian Public Service Pension Fund was established, and from 1 January 2001 it was set up as a management company.

Number of employees

The Norwegian Public Service Pension Fund has around 380 employees – plus 100 project workers who have been brought in to work on the pension reform.

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Membership figures

950,000 members across 1600 organisations

Approx 138,000 receive a retirement pension

Approx 58,000 receive a disability pension

Approx 47,000 receive a spouse pension/ dependent's pension

Approx 2000 receive a children's pension

Some may receive several pensions concurrently

310,000 of the 950,000 members are completely or partially fit for work.

432,000 no longer work in an organisation affiliated with SPK, but have accrued pension entitlements in the Fund – so called deferred pension.

Our 950,000 members have total accrued pension entitlements in the Norwegian Public Service Pension Fund of 339 billion kroner.

Total pension payments in 2009

We paid out 18.4 billion kroner in pension – after coordination with the National Insurance Scheme. This means that our members received total payments of 18.4 billion kroner more in pension in 2009 than they would have received if they had only been part of the National Insurance Scheme.

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Innovative IT and change management project

In 1957 we were among the first in Norway to introduce the punched card system. In connection with the pension reform, we established the Perform project – one of the largest IT and change management projects in the public sector.

The Perform project started in 2008, and it delivered a new case handling system on a new technology platform for the introduction of the new pension scheme on 01.01. 2011.

175 people work on the project, which will continue until 01.01.2012 and is estimated to cost around one billion kroner.

Throughout our existence, we have created new solutions in order to meet changing needs. Our most important task is to ensure on-time and correct pension payments and invoicing – irrespective of the changes experienced by society.

PERFORM is SPK's biggest and most business-critical project ever

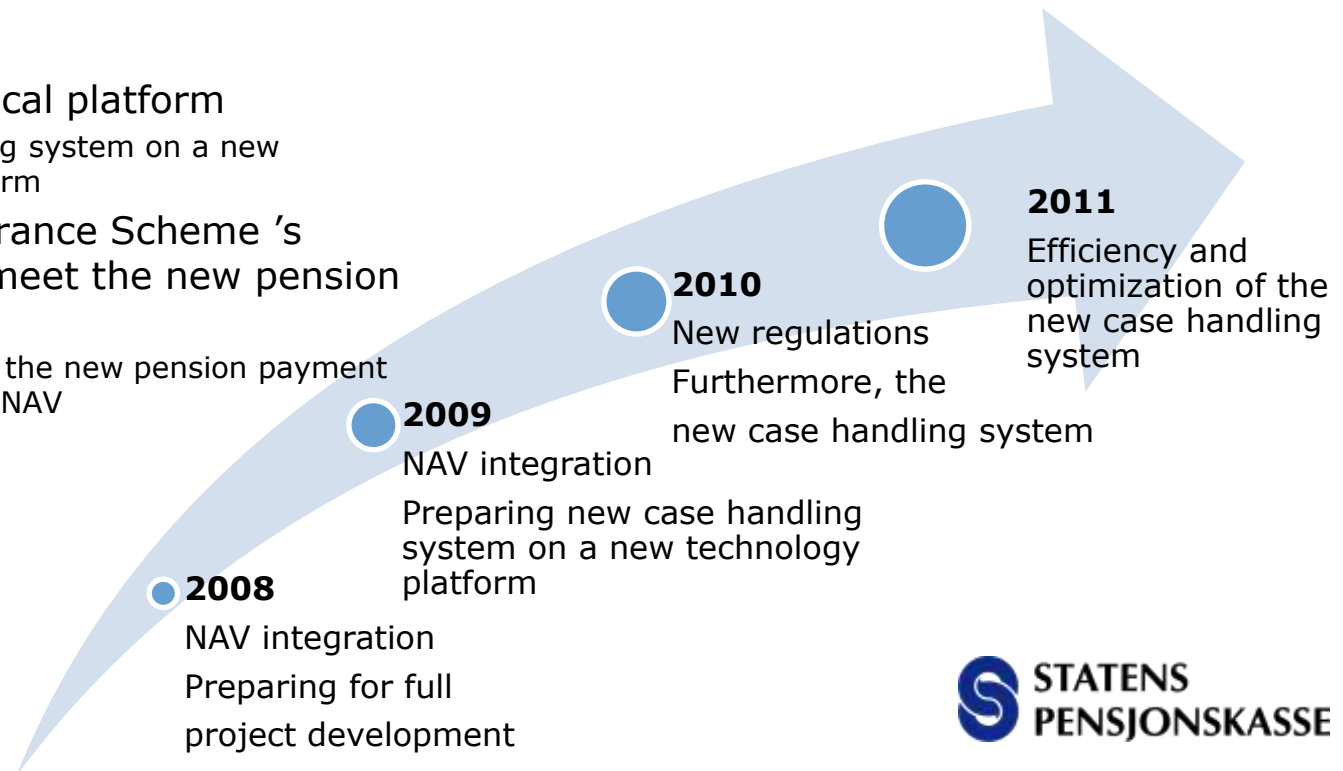
- Duration 2008-2011
- Size
 - About 750.000 project hours
 - 100-180 people, max in 2010 and 2011
 - About 80 of SPK's 380 employees are working fulltime in the project
- The project consists of 12 scrum teams
 - 2 main contractors (Steria and Accenture)
 - Contributes with 3 scrum teams each
 - SPK is also treated as a contractor
 - Contributes with 6 scrum teams
- 3 contractors fill roles at the customers side (CapGemini, EDB ErgoGroup and Kantega)
- All project members are colocated

With strong commitment from SPK's top management



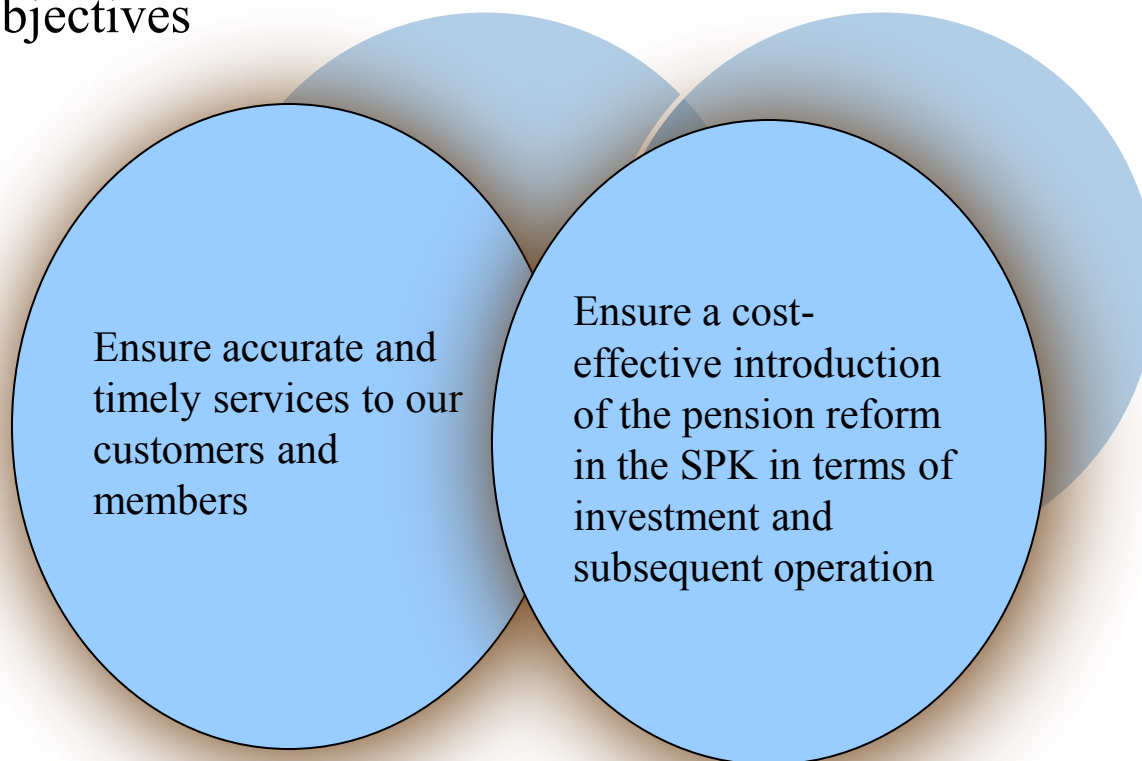
PERFORM was formed to meet four very critical business drives

1. New rules for temporary disability pensions
 1. Effective from 1. march - 2010
 - New calculation rules
2. The introduction of the new pension scheme
 1. Effective from 1. january 2011
 - New calculation rules and use of new basic data
3. Out of date technical platform
 - new case handling system on a new technology platform
4. The National Insurance Scheme 's (NAV) project to meet the new pension scheme
 1. Customization to the new pension payment system made by NAV



The aim of Perform

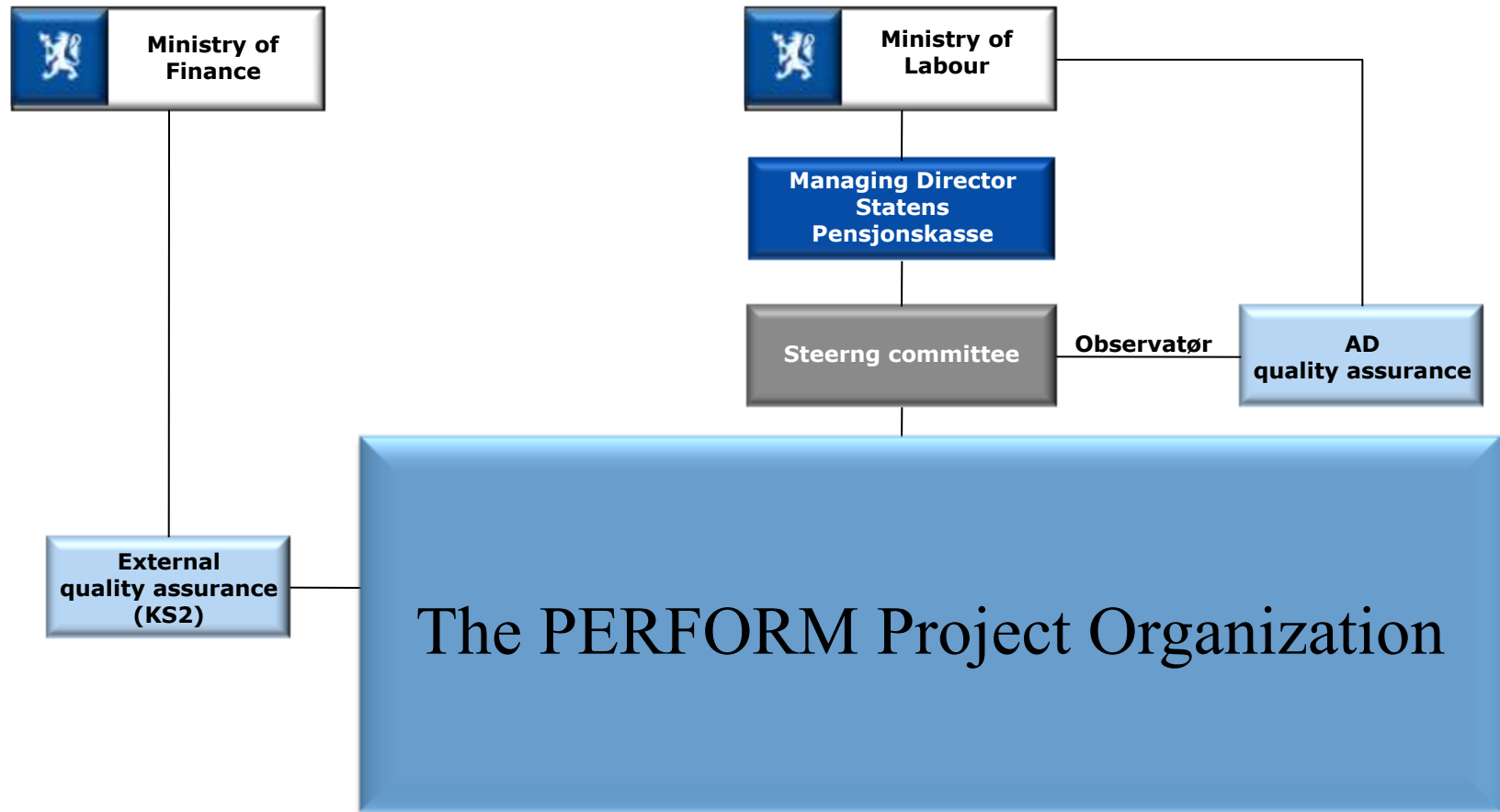
Social objectives



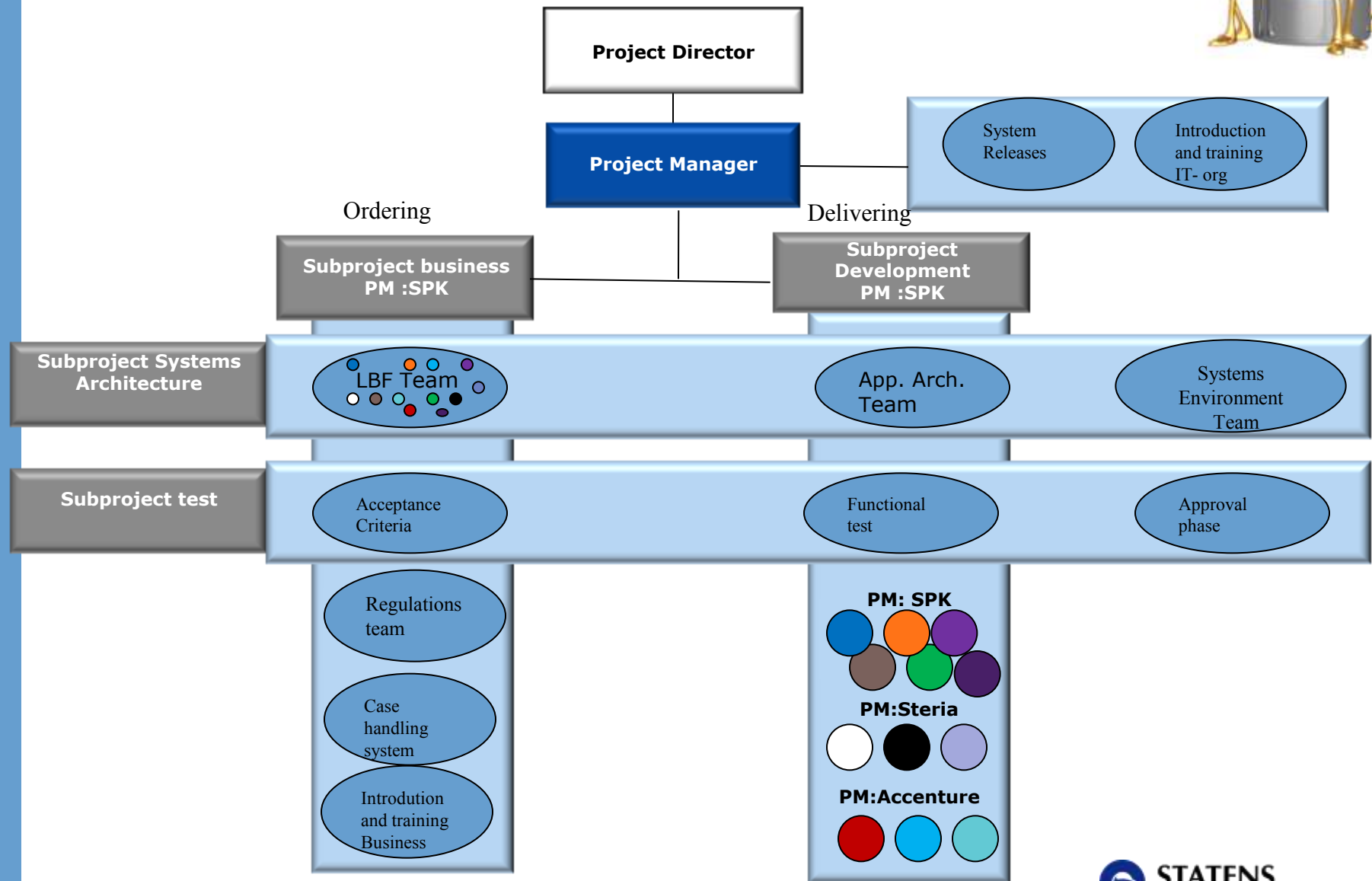
Results and outcome of Perform

- The correct pension is paid at the right time (during the project period and after project deliveries)
- Our customers will have a predictable product and a predictable and correct premium during and after implementation of the new pension scheme
- SPK will facilitate good information about the new regulations of our customers and members (nearly one million retail customers by 1600 corporate clients)
- Minimum 95% of SPKs pension benefits should be treated automatically following the introduction of new regulations as of 01/01/2012 (85% as of 01/01/2011)
- Case handling processing time shall not increase beyond the current target as a result of the new pension scheme
- PERFORM will deliver a flexible case handling system, where changes can be quickly implemented
- SPK will have established an information and simulation solution for the new regulations in 2009

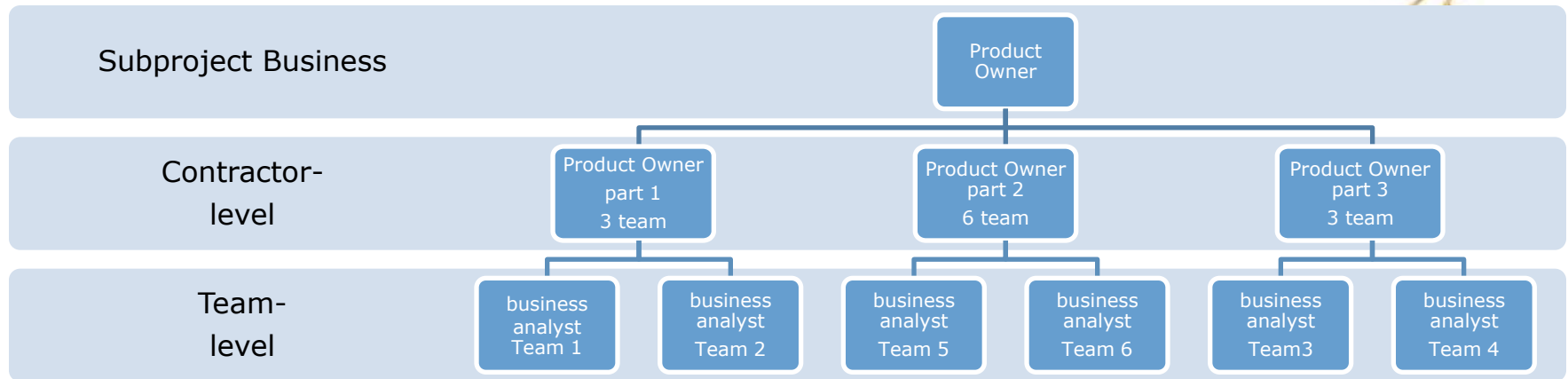
Perform is part of SPK, governed by Ministry of Labour



PERFORM



Product Owner i PERFORM



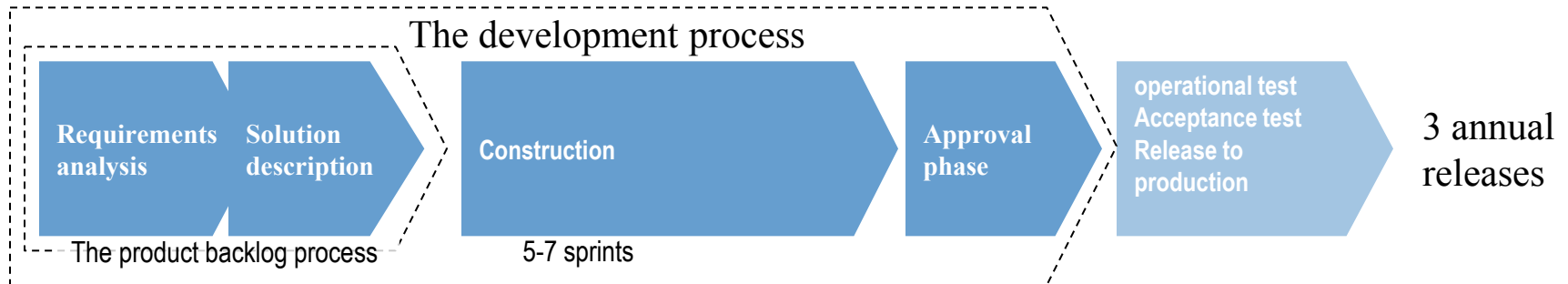
The Product Owner team at the contractors level

–Product Owner, Business Architect, functional Architect, technical Architect



Project Implementation

We work according to agile methods in the project - SCRUM



- Subproject business demands and Subproject development delivers in accordance with requirements
- Overall design and specification are made jointly and then split into three areas for the contractors to focus on
- The overall design and specification form the basis for the product backlog
- To get the right level of detail in the product backlog process, we focus on "just enough"
- Delivery agreements are made with all three contractors
 - Target price agreements for the construction phase
 - Time & Material on other tasks
- Architecture is defined / developed both prior to and throughout the sprints
- Acceptance Testing is carried out before handover

The master plan defines the scope of the PERFORM project

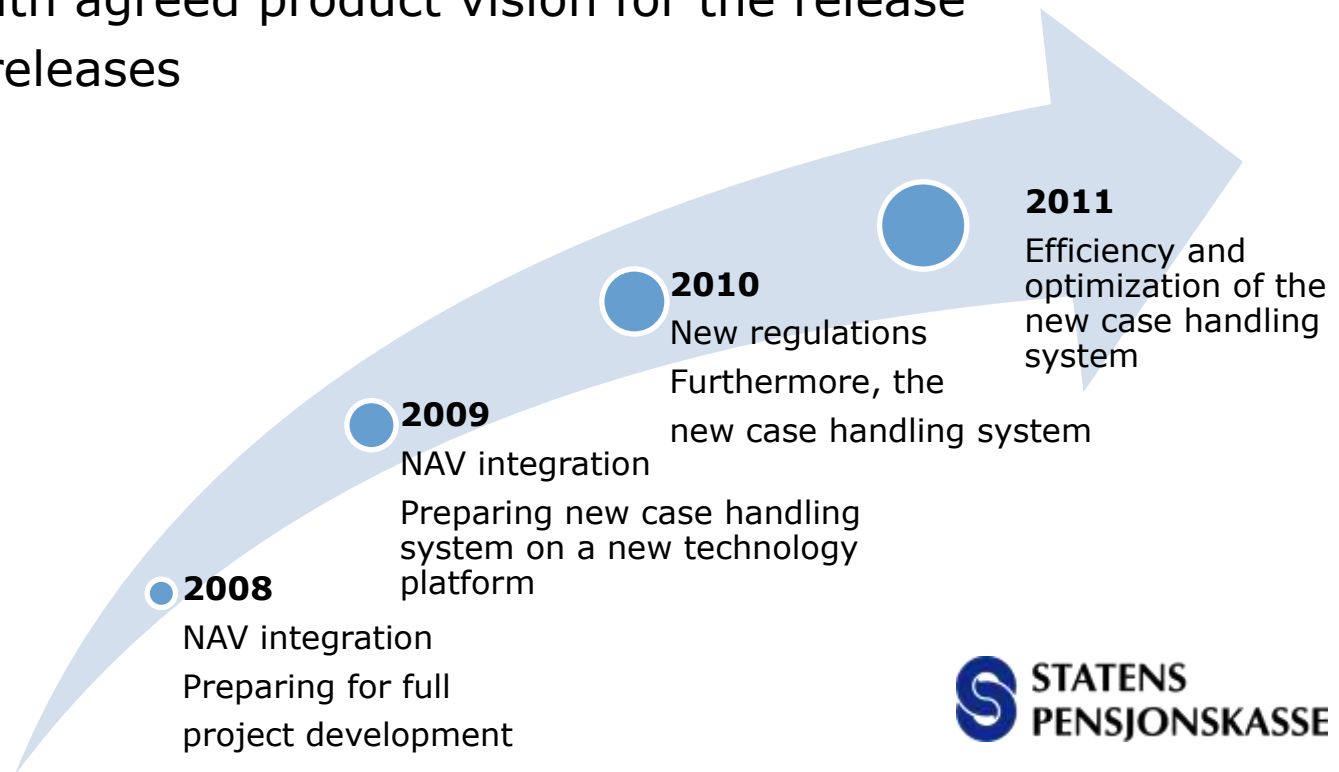


The Master plan

- 308 use cases (Epics / master elements) that define the scope of the PERFORM project, these are divided into 11 functional areas and prioritized by importance relative to the effective date of implementation of the regulations
 - 1.1.2011 is a politically driven date that the project's success is measured against
- Each epic is roughly estimated using planning poker so they have a relative size to each other
- For a release period, the Product Owners will review the remaining user stories and define which must be delivered in a release. These will then enter the product backlog process and form the basis for the product vision of this release, which is communicated to all recipients and developers

Selection of user stories in a release

- Overall, the order of the main releases pri. 1
 - Progress, Quality, Cost
- Technical and functional sequence due to dependencies
- High cost / benefit and high user value for SPK and the case workers
- Compliance with agreed product vision for the release
- Independent releases



The product backlog process



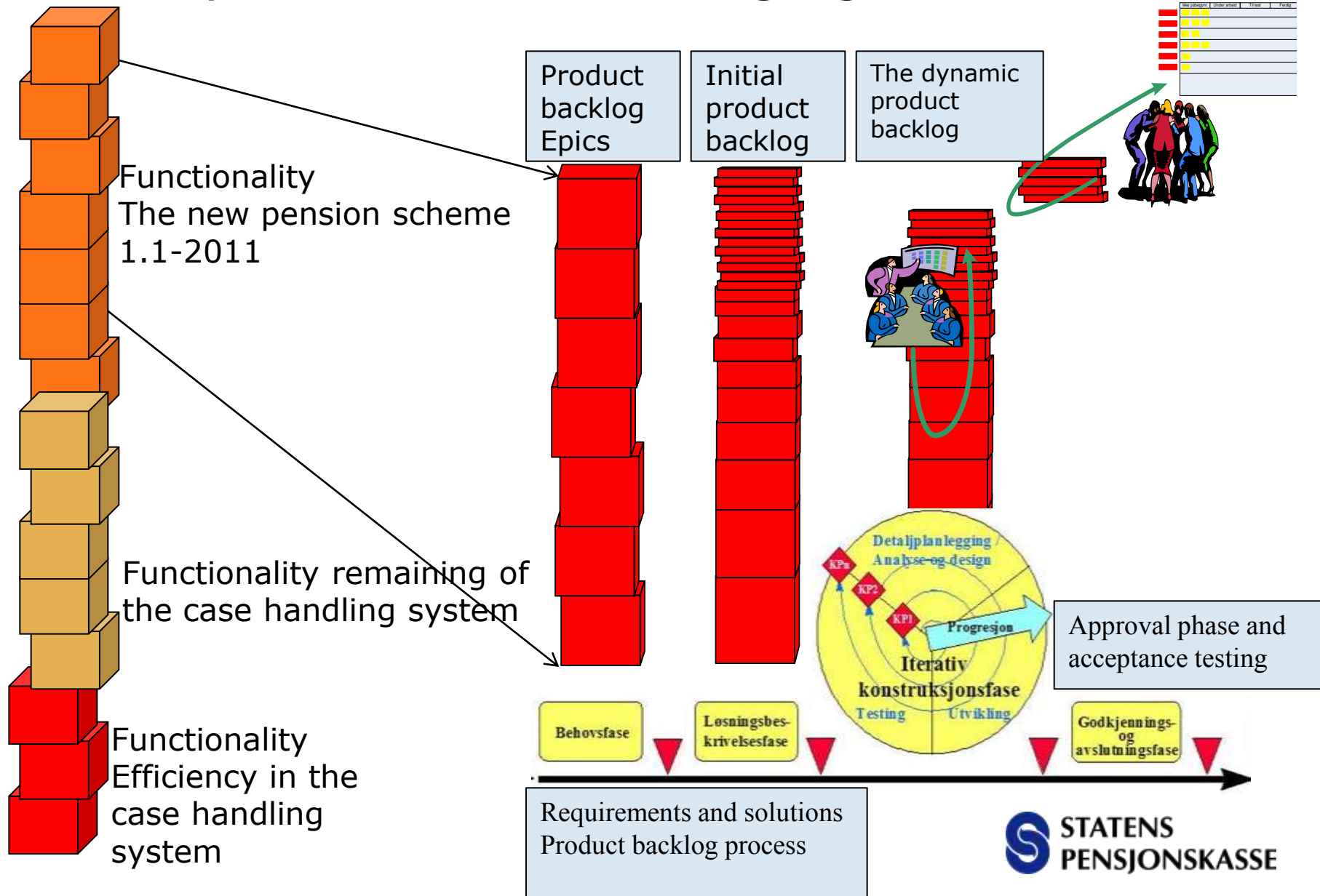
- Through the product backlog process for each release the epics (master elements) are broken down into user stories that form the product backlog items
- The product backlog items provide a basis for delivery agreements for construction of the solution. Each element get an agreed upon estimate that defines the target price
- Subproject Systems Architecture makes a quality review of the estimates from the contractors
- The product backlog items are prioritized in the order the product owners think they must be performed
 - Evaluated according to the functional importance, technical dependencies, and technical importance
- The Product Owner may change the priority of the product backlog items during the construction phase

Pre-planning - what will the next sprint contain

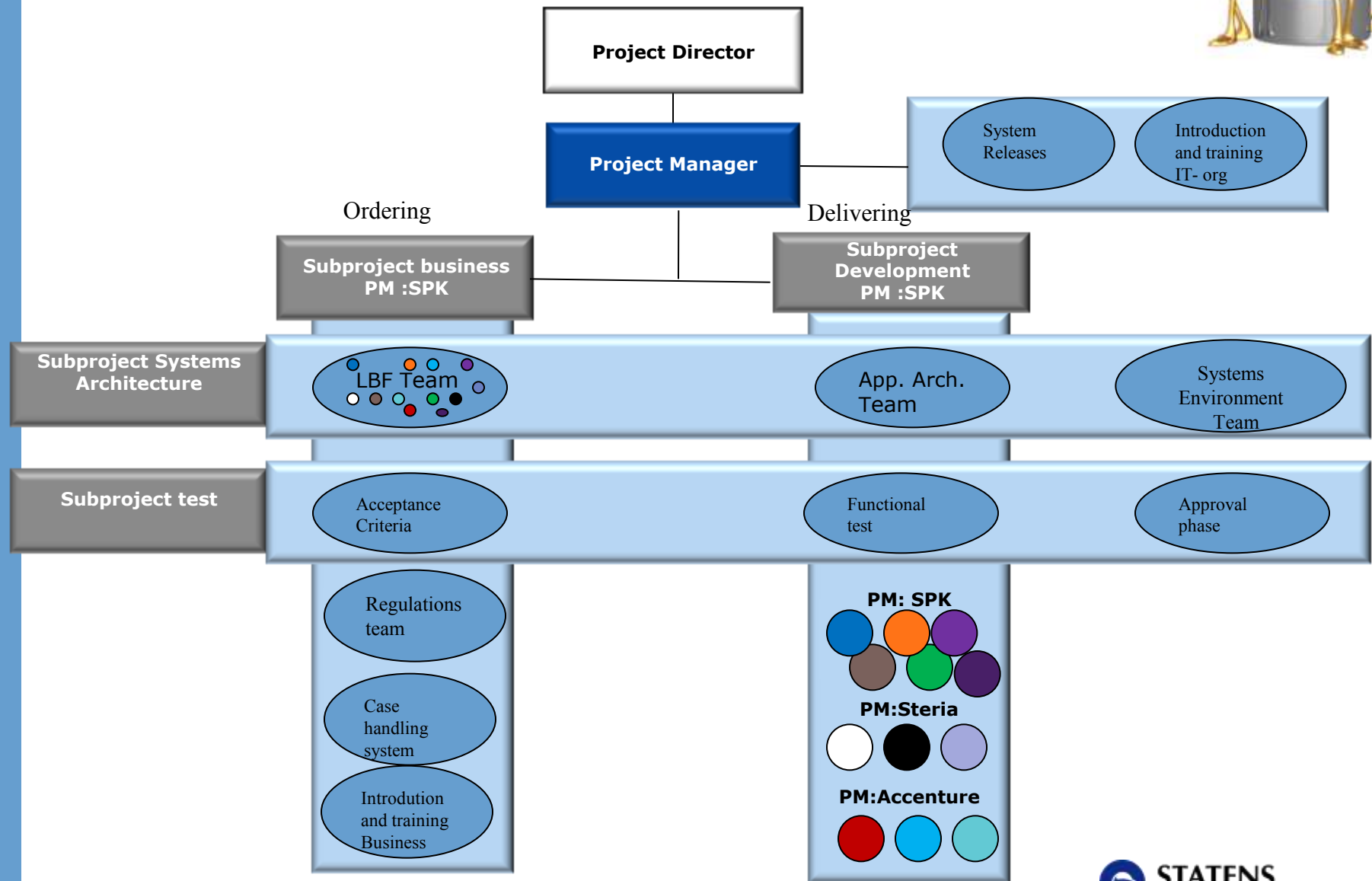


- Product Owner pre-plans every sprint and prepare the next product backlog items to the team
- Approx. 1.5 weeks before sprint planning
- Coordination of the total product backlog between the product owners
- Ongoing assessment of the product vision for the upcoming release
 - Proper prioritization across the contractors' product backlog
- Within each sprint the teams further detail the product backlog items they have been provided. The team estimate their work on the detailed items and make a team commitment, this work will become the teams sprint backlog

The requirements are changing over time!



PERFORM



The team - in Perform

Business analyst

Team-architect

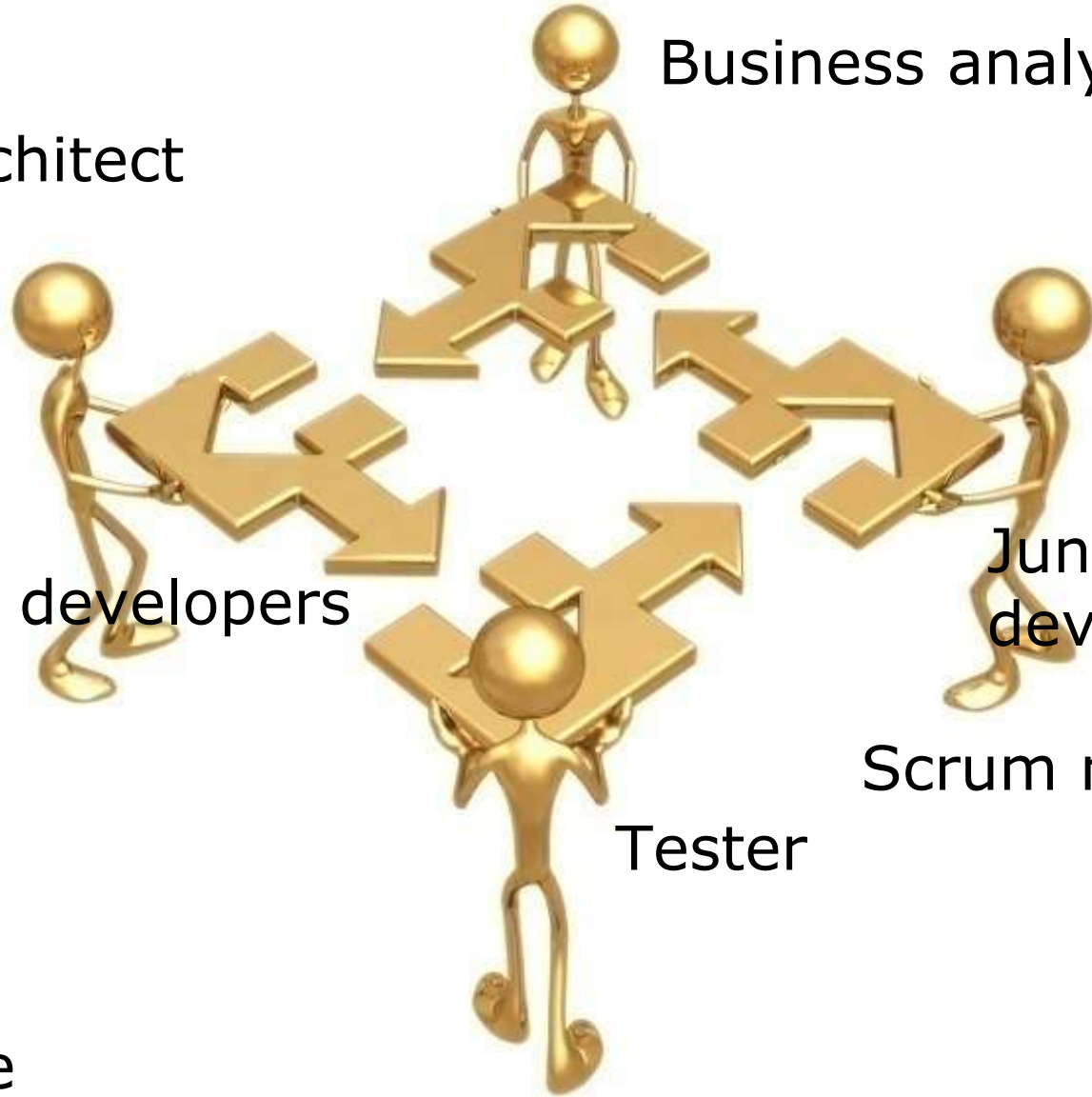
Senior developers

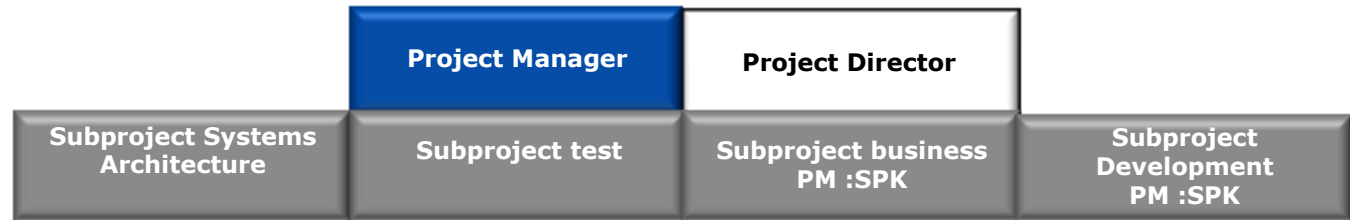
Junior
developers

Scrum master

Tester

All in all:
7-9 people





Twice a week we have the "meta-scrum" meeting where each of the contractors meet together with all the other parties that have an interest in the construction from the teams. Dependencies that still is a problem are lifted here.



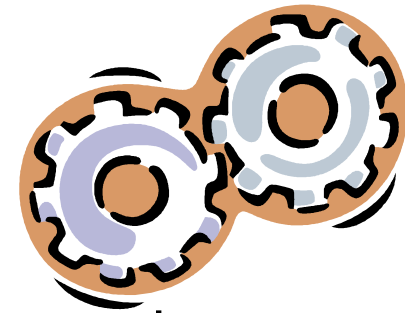
About 1,5 weeks before planning of the sprint, the product owners have a meeting to coordinate the tasks for the next sprint.

On the Scrum of scrum meetings 3 times a week the Scrum Masters lift the problems that they themselves can't solve regarding dependencies.



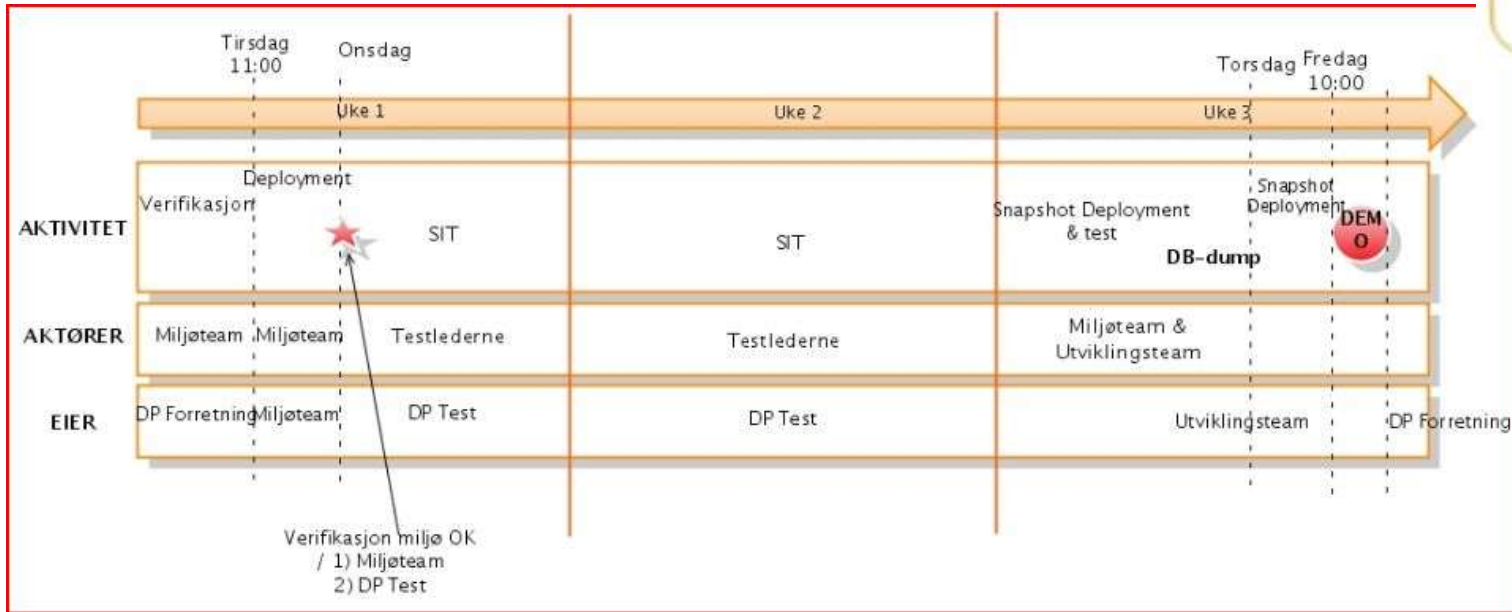
The day after the sprint planning all the Scrum Masters meets to tell each other what the team commitments are this sprint. They focus on dependencies and make notes about were to go if they run into problems regarding tasks the other teams are solving.

Continuous integration testing



- 12 team makes 8500 hours worth of systems code within the sprint
 - Automatic and continuous building
 - Must integrate continuously
 - Integration with other team's code and solution
 - Integration with existing systems
- Requires an integration test environment
 - Developed product backlog items need to be executable on the integration test environment and demonstrated in this environment to pass the control gate

Systems integration test - SIT

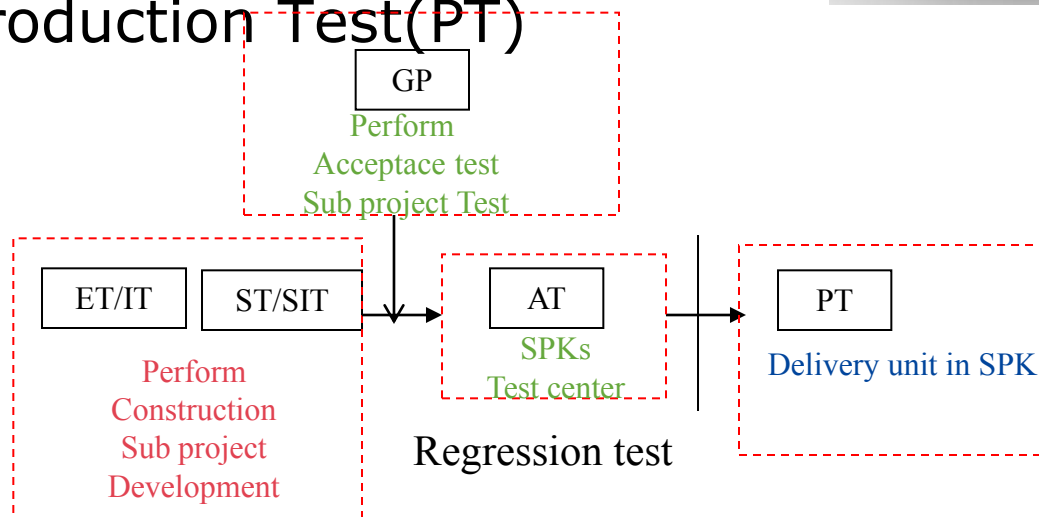


- Separate test environment where all teams have to run their sprint demo.
- The environment team tests deployment of all the code and configurations in this environment
- This environment are during the sprint used for:
 - Quality assurance test performed by the product owners
 - Systems integrations test between all the teams

Test model / strategy in SPK / Perform



- Unit test (UT)
- Integration test (IT)
 - Continuous build and integration test on the common code base
- System test (ST)
- Systems integration test (SIT)
- Approval phase in PERFORM (GP)
- Acceptance test in SPK (AT)
- Production Test(PT)



System test and system integration test are part of the construction phase



- Requires automated tests
 - PERFORM uses the Fitnesse framework
 - Smart use of the Fitnesse framework is difficult
- Requires team test environment
 - The teams test their code, with all the code from the code base included
- Requires system integration test environment
 - All 12 teams bring together everything they've done over the last sprints and the tests are carried out across the system
- Requires coordination of the tests within the construction phase

The control gate



- Each sprint ends with the control gate
 - The control gate is used to verify the definition of done from the construction phase
 - This is important since we can't put the produced systems changes in production after each sprint

DOD- definition of done as it says in the SPKs agile guide
When is a product backlog item done ?

There is sufficient functional tests developed for the item

All its development tasks are completed

Other tasks related to the item is completed

Documentation is developed according to project standard, including the SPKs requirements for all projects

Business analysts have approved that the item is done

The product backlog item has passed the control gate

What do we check at the control gate ..



- Demo
 - Do the team deliver the functionality that is ordered?
 - Does the delivery have the functional quality as ordered?
 - Code Quality
 - Is the code easy to maintain
 - Is the code following the coding standards
 - Do the code quality develop to the better
 - Architectural Guidelines
 - Do the developers follow the standard for accessing the database
 - Do the developers follow the standard for the use of SPRING
 - Do the developers follow the standard for division of the modules
- And much more 😊



What do we check at the control gate ..



- Documentation
 - Is the systems documentation ok
 - Is the operations documentation established
 - Is the user documentation ok
 - Is the release documentation ok
 - Do the teams follow the guidelines for handover of the projects deliveries
 - Test Quality
 - Is the test coverage good enough
 - Is there enough negative tests
 - Is the code moved to the system integration test environment
 - Has the sprint delivery been tested in team environment
- And much more 😊



Product Owner's role in demo and approval of the Sprint deliverables

- Demo every 3rd Friday and control gate the following Wednesday
- Subproject Business tests on an ongoing basis the finished product backlog items in a team environment - "mini-demos"
- Subproject Business actively participates in the verification of all product backlog items delivered to the control gate
- Not everything can be tested in the control gate
- The product backlog items approved in the control gate is burned down in the burn down chart for this release

