

Quality assurance



- Cirkular of quality assurance
- Executive order
- Tradition



The main elements of the reform

Construction damage Foundation

Systematic maintenance

The responsibility of the contractors

The responsibility of the producers
and suppliers

Quality assurance

5 years inspection



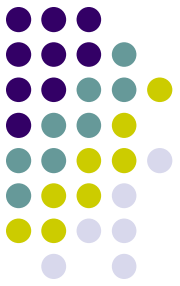
Quality assurance

- For who and why do we make quality assurance?
- Will it be paid ?



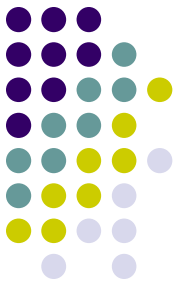
For who do we do it ?

- The client
- The maincontractor
- Partners
- Our self



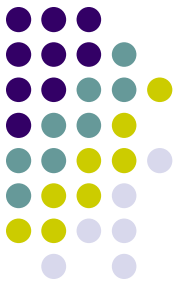
Why do we do it ?

- We must (public supported)
- Our reputation
- The profit
- Too much shit is build



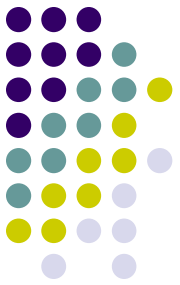
Who is guilty?

- The guilt can be shared between all involved
 - The public institutions
 - The client
 - The architects/ engineers
 - The contractors
 - The workers



What is done ?

- Laws, regulations and instructions
 - Executive order of quality assurance
 - Construction damage foundation
 - Letters of experience
 - Mark books to the contractors and designers



The content of quality assurance

- Setting the quality/ The client
- Secure the quality/ The consultants and the contractors
- Management of the quality/The consultants and the contractorsrådgiver og entreprenør
- Documentation and maintenance



What does the executive order say ?

- All involved must secure their performances
- Concentrate on risk areas
- Have the money
- Make a plan for control and inspection
- Special demand must be clear
- Use GC 92



The quality assurance includes

- All the activities where the client ask for documentation in relation to the contract until the handing over



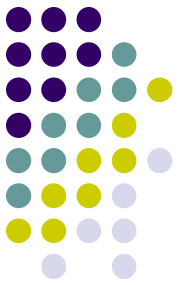
QA includes:

- Work instructions
- Watching and managing of work operations
- Accept of methods and equipment
- Demands to subcons and suppliers



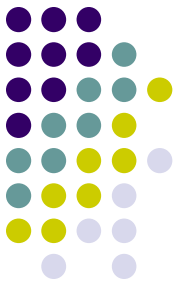
QA activities on the building site

- The preventing where the processes are analyzed
- The controlling where the demands are stated
- The registering and correcting information of differences are communicated



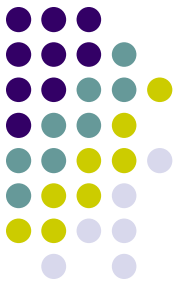
"The Quality assurance system"

- The ten steps
- The coherence for the contractor
- The QA system

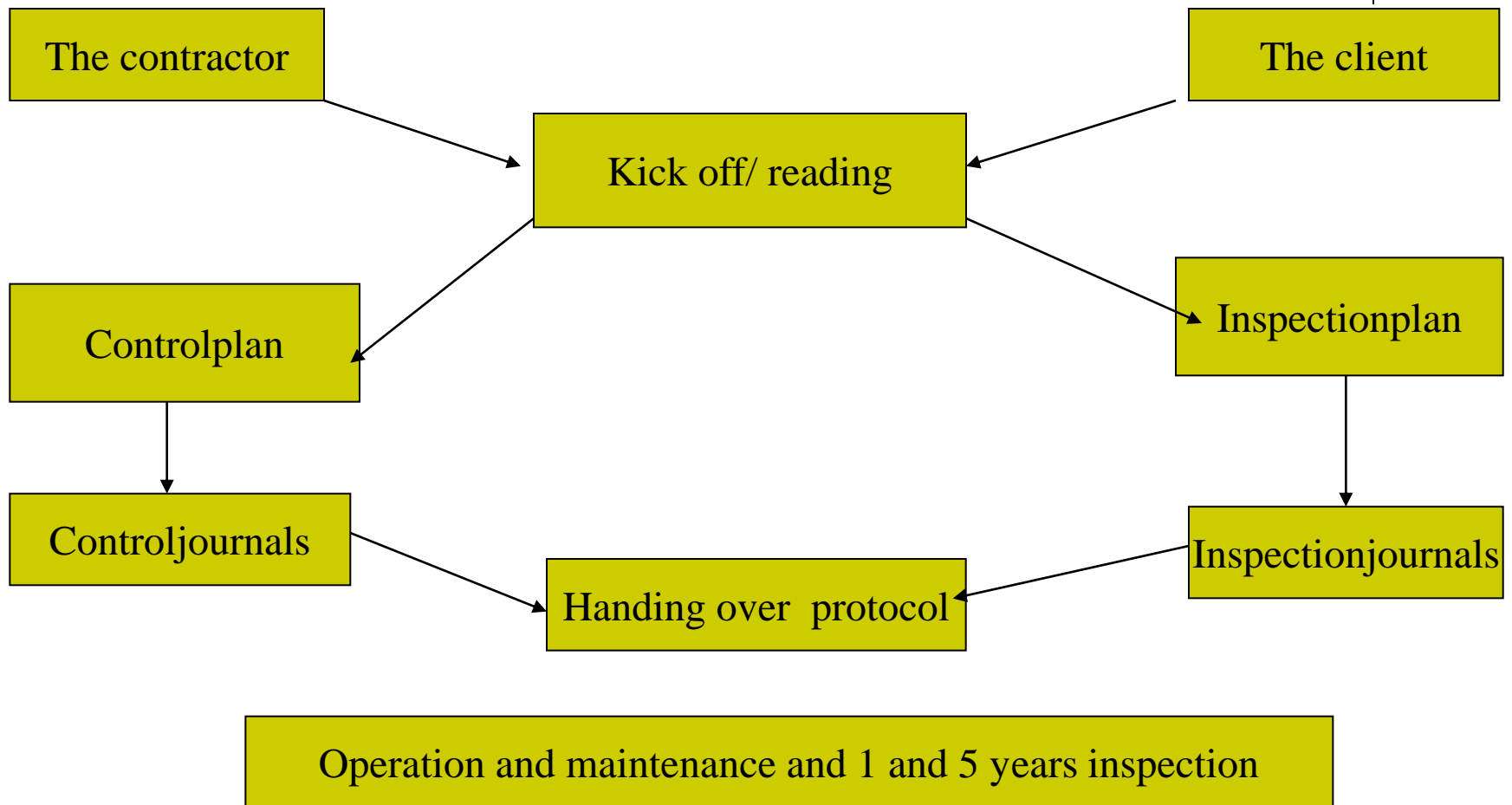


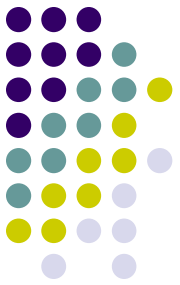
The ten steps

- The clients responsibility
- The consultants quality assurance handbook
- Systemizing of the design
- Scrutinyzing of the project
- Reading the project
- Inspectionplan
- Controlplan
- The contractors quality assurance handbook
- Documentation of the quality assurance
- Maintenance- and operationplanning

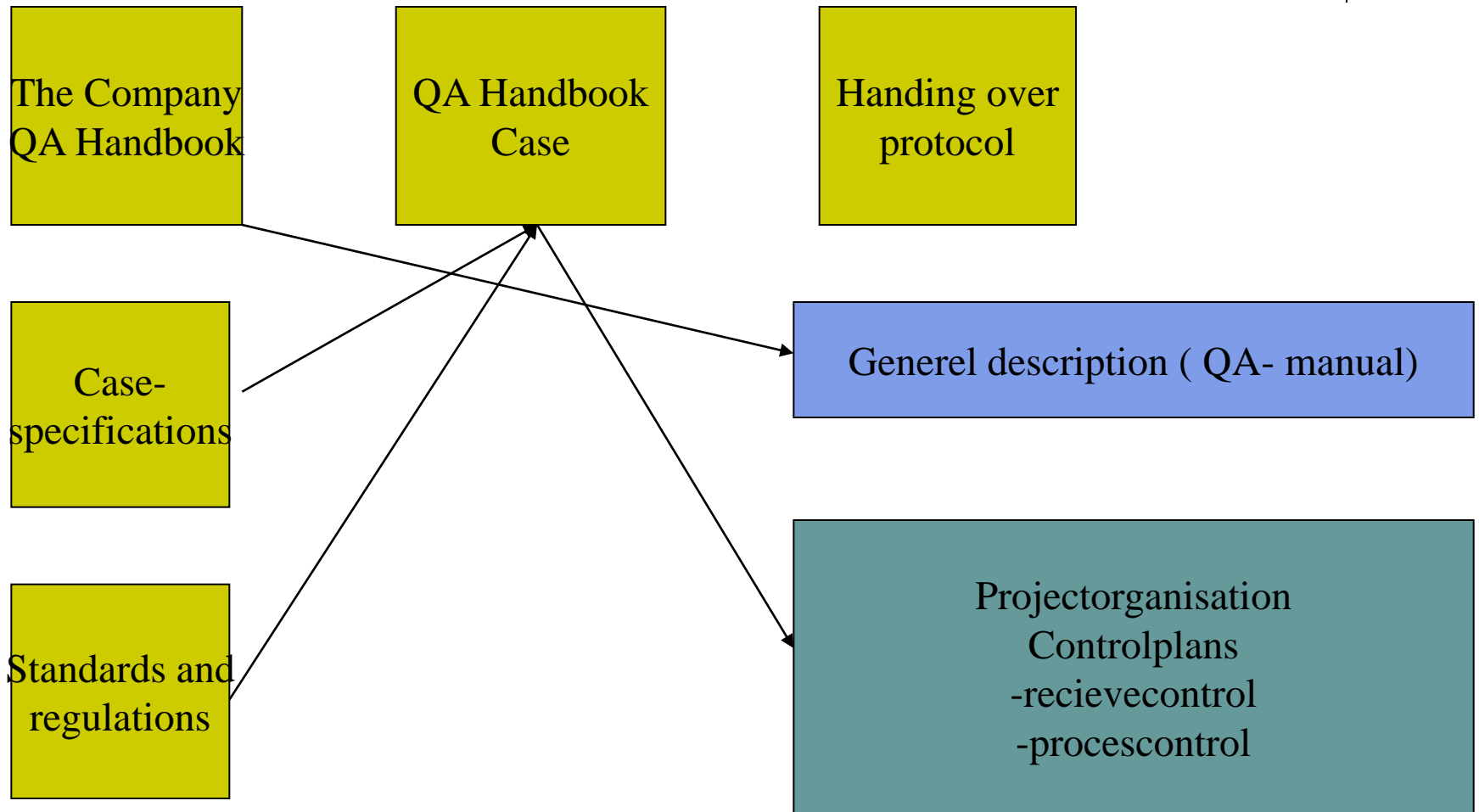


Sammenhængen for mesteren





Kvalitetssystemet





QA costs 1

Preventing costs

Establish and maintain the qa system

Education and training in the qa system



QA costs 2

- Control costs
- Inspection
- Control
- Tests



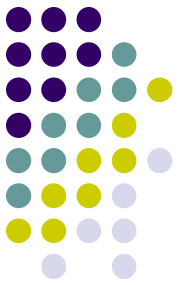
QA costs 3

- Internal/ external costs
- Reparations during the construction and before handing over
- Loss of goodwill



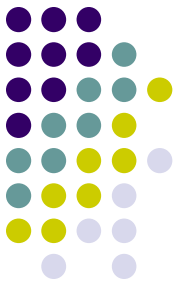
Effort areas

- Lesser paper/ better moral
- Project scrutinyzing
- Procesreading/ kick off
- Changing of oprations
- Ownership
- Common tools
- Marking of products
- Guarantees
- Certification of products and workers
- Manegment and education



Dansk Byggeri

- Kvalitetshåndbøger (firma og sagsorienteret)
- Lov – og regelsamlinger
- Blanketter



Quality assurance handbooks

- Content:
 - Case identification
 - Internal case organization
 - QA of the case:
 - Managing of the documents
 - Process scrutinizing
 - Project reading/ kick off
 - Receive control
 - Process control
 - Final control
 - Documentation

Skemaer

- OH gennemgang

