Practical implications of comprehensive asset management

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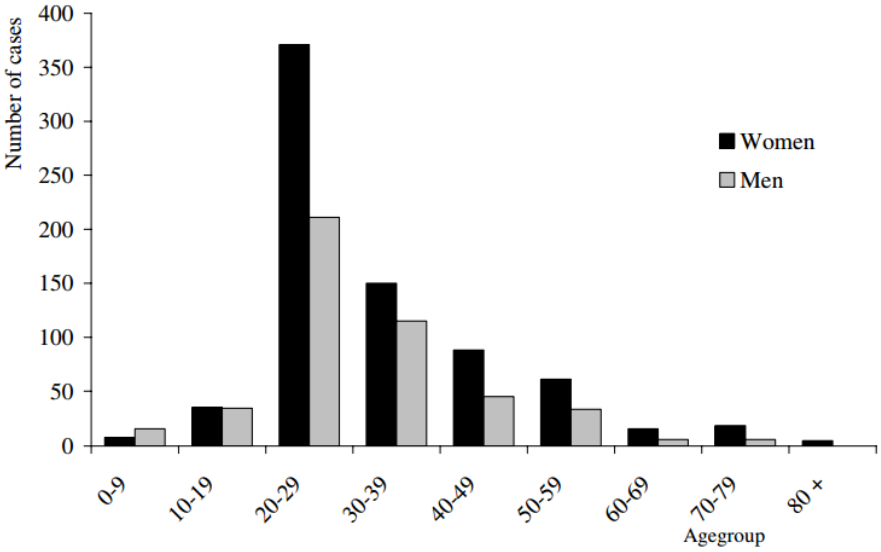
Overview

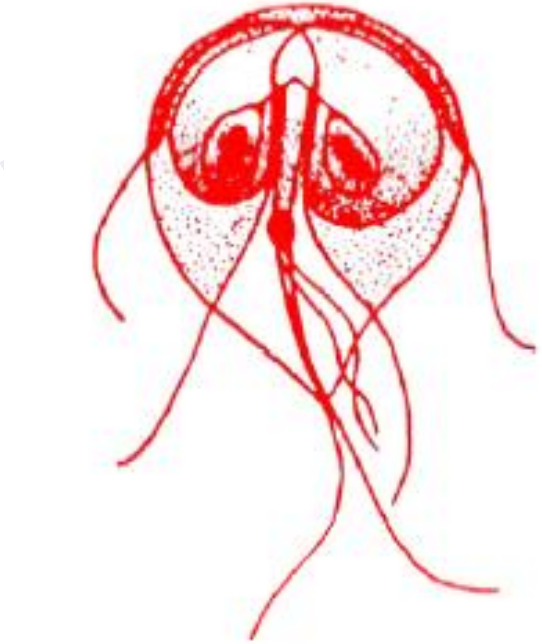
- Introductory examples
- Complexity of real world
- Comprehensive approach
- Some approaches
- Will it work?

Introductory examples

Bergen, Norway, autumn 2004

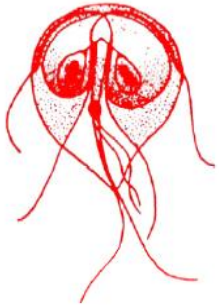
- Outbreak of Giardia Lamblia
- An estimated 5000 people were infected
- Around 1400 people were diagnosed
- 200 to 400 had chronic giardiasis
- 40 were hospitalized
- 1 fatality (female, age 33)

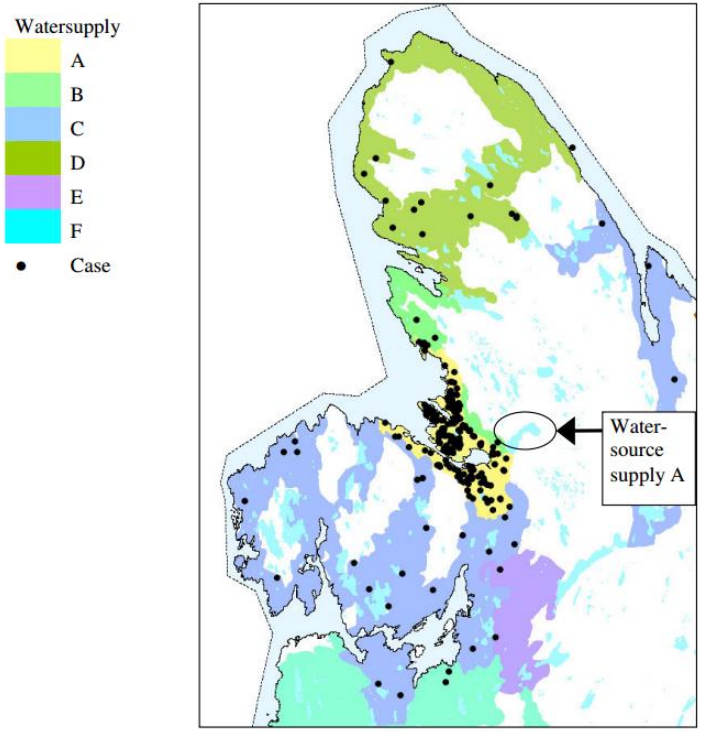




Bergen, Norway, autumn 2004

- Found in drinking water, especially in area A
- Source: lake Svartediket
- Leaking sewage pipes were the plausible cause
- Outbreak could have been detected 2-4 weeks earlier





Utrecht, The Netherlands, January 10 2006

- Gas explosion in shopping centre
- Several shops were demolished
- 24 people were injured
- 4 hospitalized
- 1 girl was in coma for 3 weeks

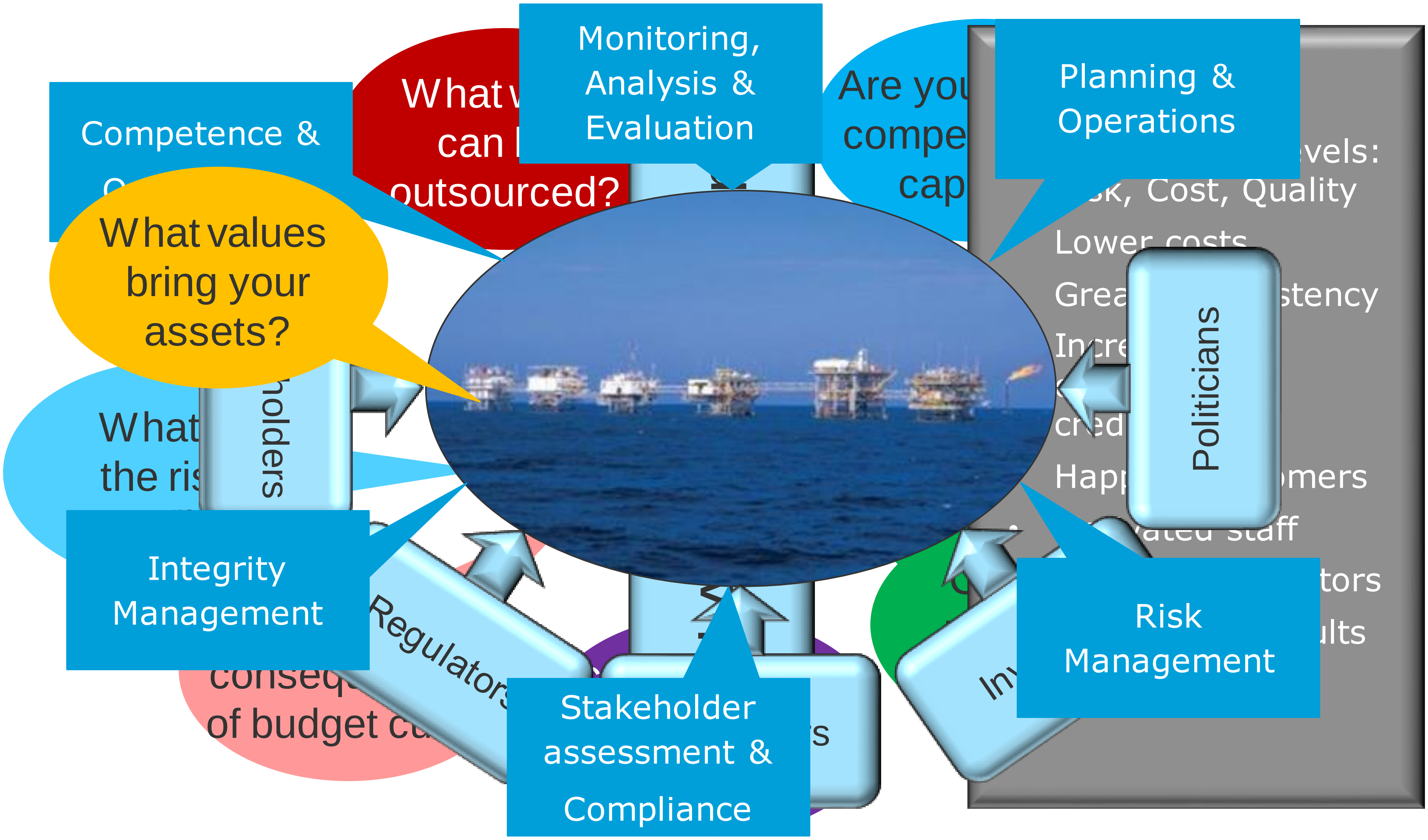
Utrecht, The Netherlands, January 10 2006

- A probe was used to test soil stability for renewal of shops
- Drawings were not taken to the site
- Crew used a dowsing device

- Natural gas diffused through the soil into the crawlspace
- An explosion occurred two hours after incident alert

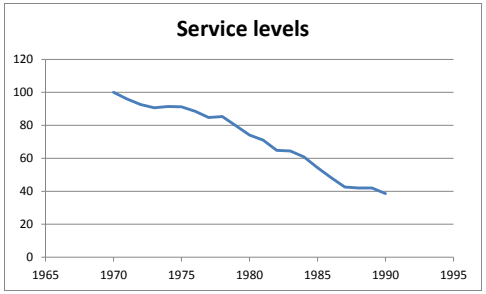
Comprehensive asset management

Operational excellence: comprehensive asset management



Origins of comprehensive asset management

Piper Alpha disaster

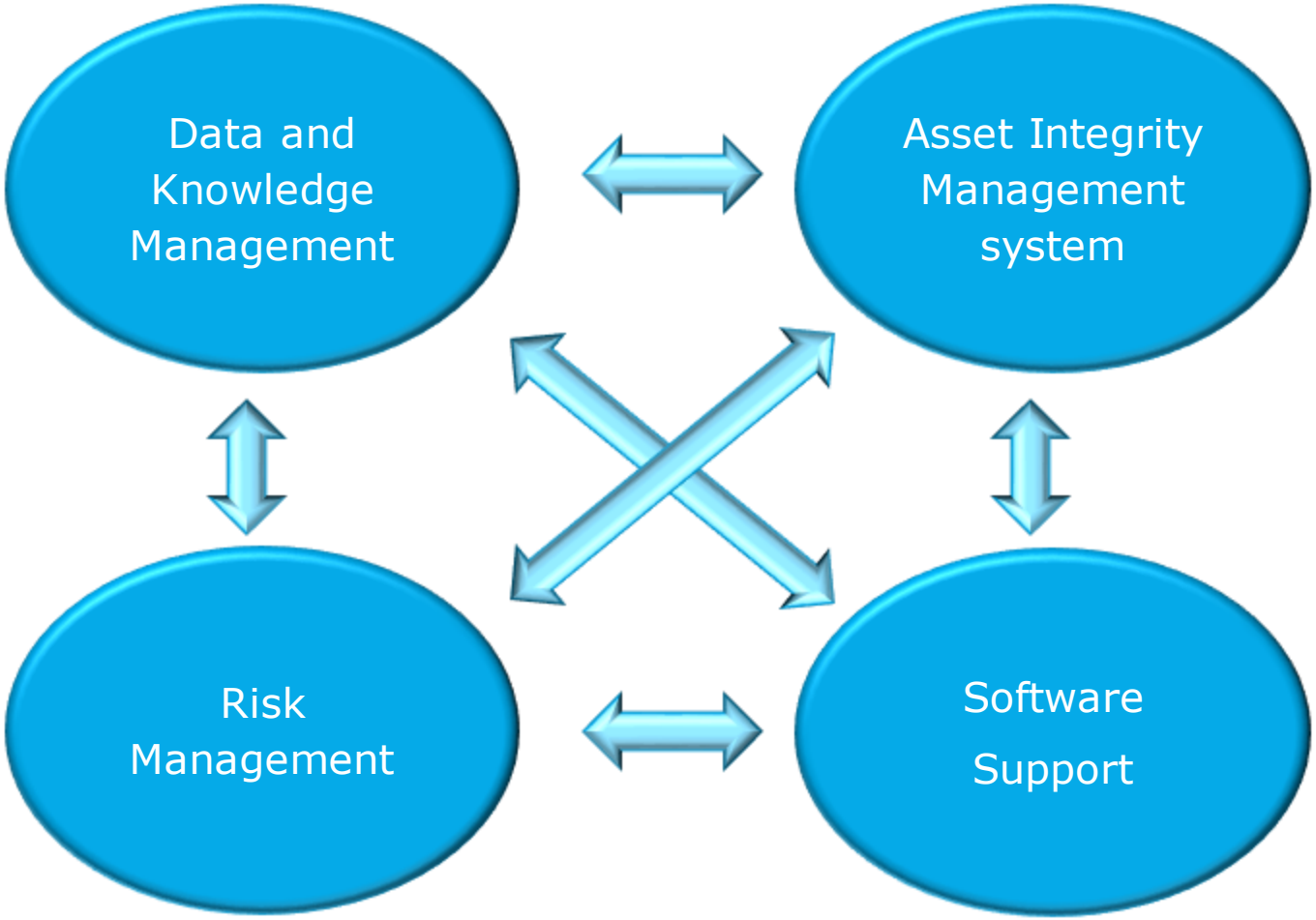


Australia and New Zealand dropping service levels

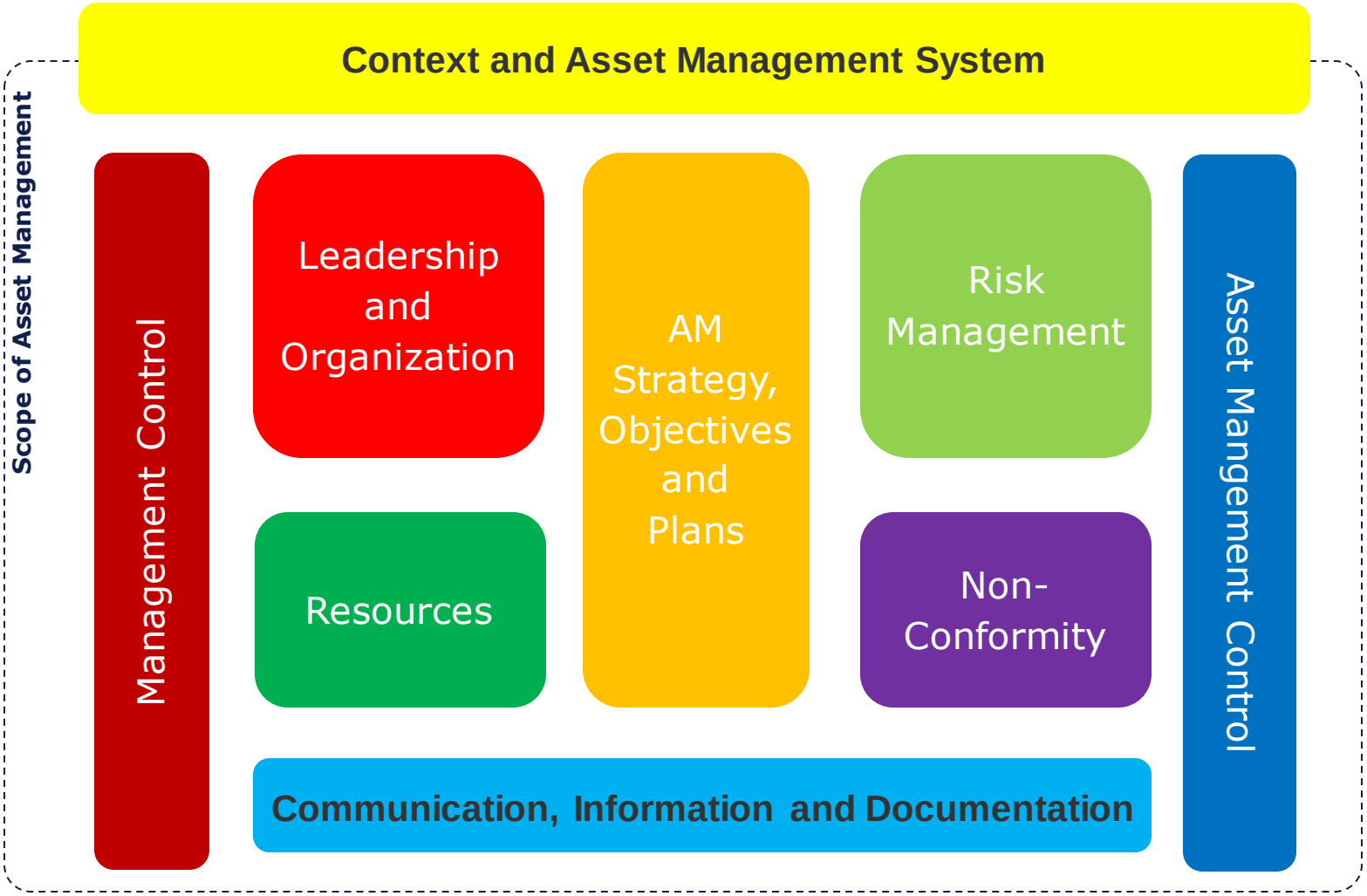
Dedicated

Multi Discipline Approach

Asset integrity management: 4 high level services

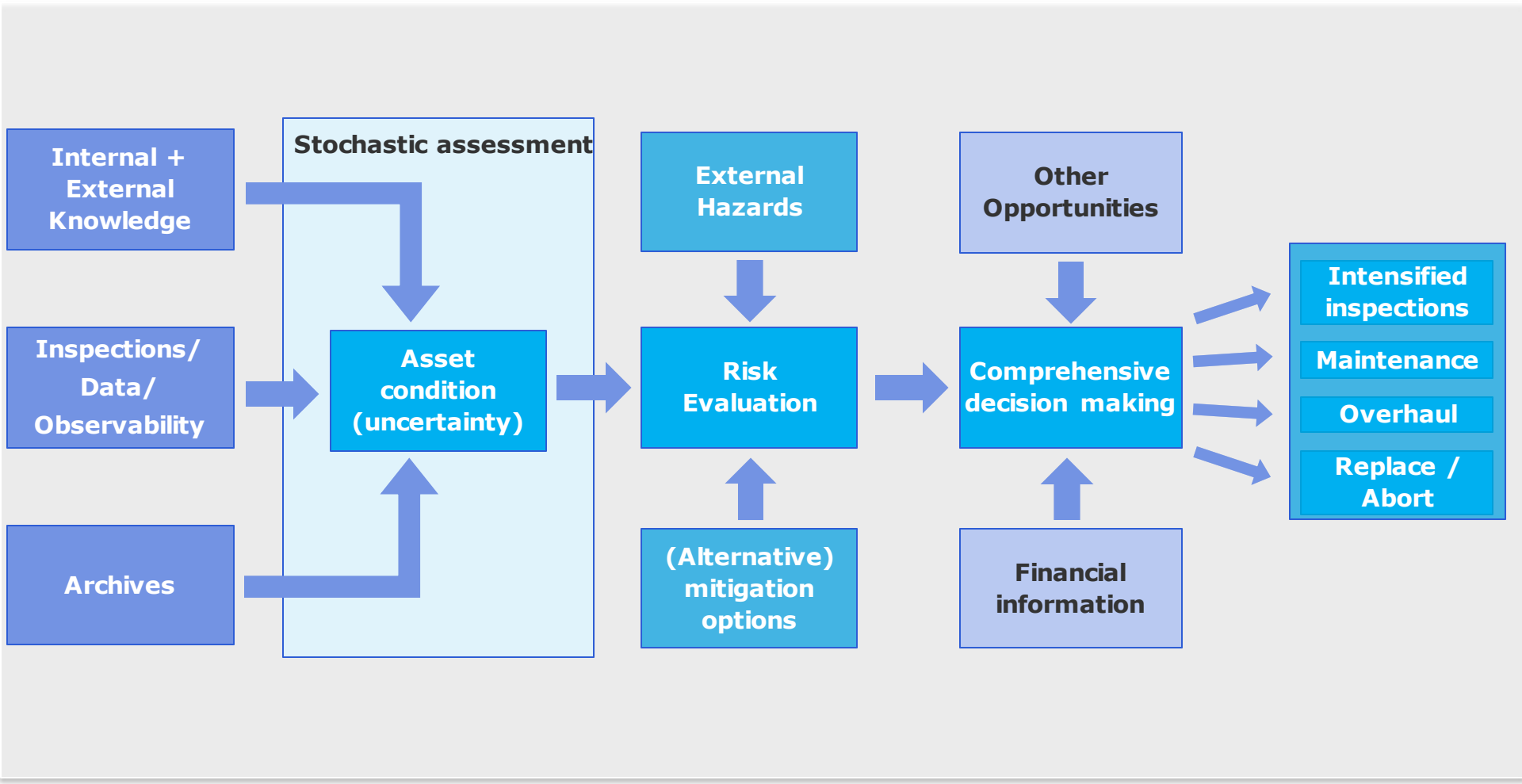


Platform:
Comprehensive asset management ISO55000



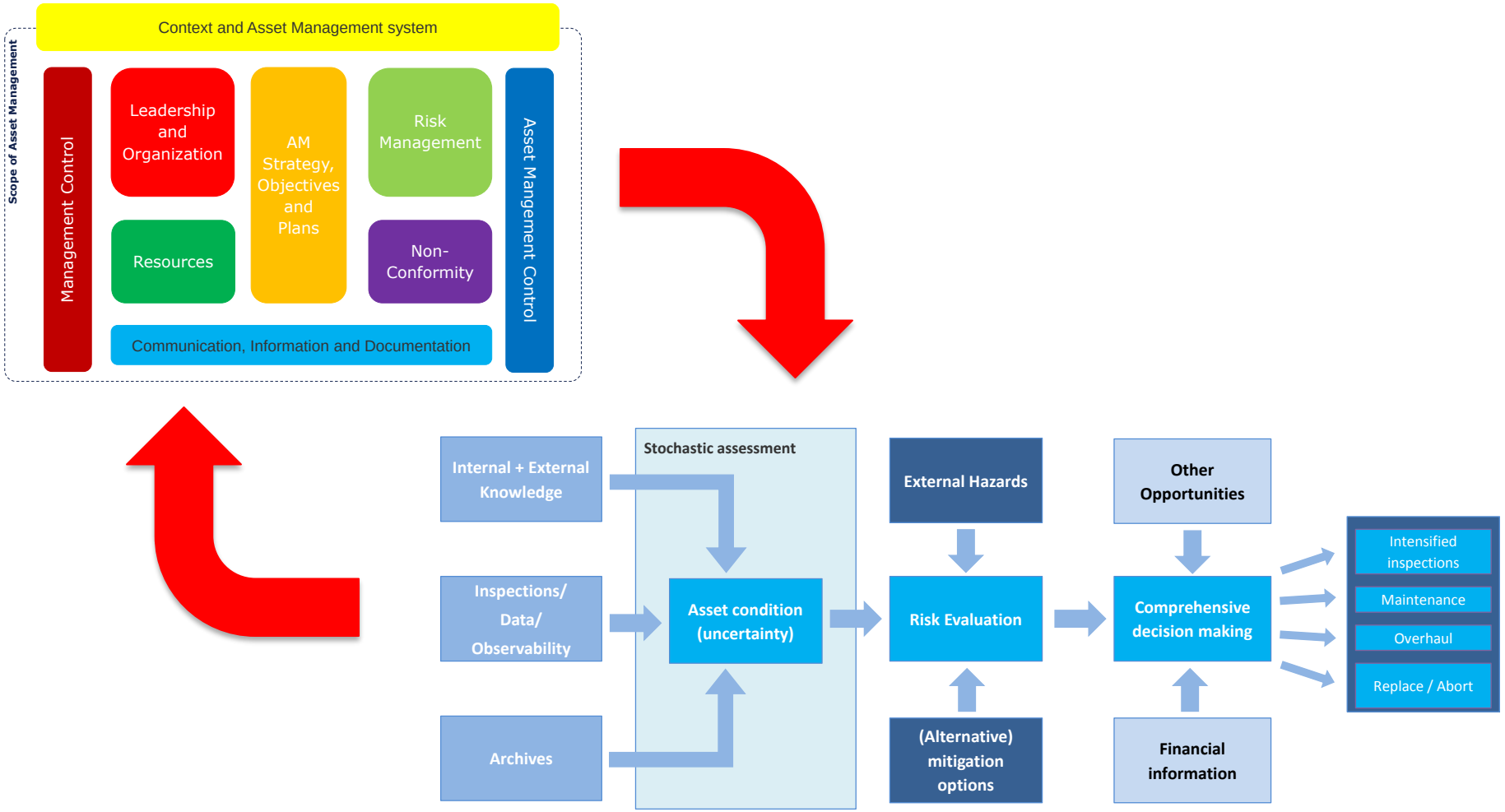
ISO55000

Data and Knowledge Management



Aligned Software Support: Tailored made approach

Data and Management system integration



Extra:
From technical knowledge to integration and comprehensive

Asset Management System

Asset Management

Comprehensive Asset Management

Surpass Asset Management Standards

Suggested Activities: Roadmap

Timing of activities

- urgent
- Ambitiously scheduled
- Finishing
- Integrated with other activity

Activities

Initiative and form

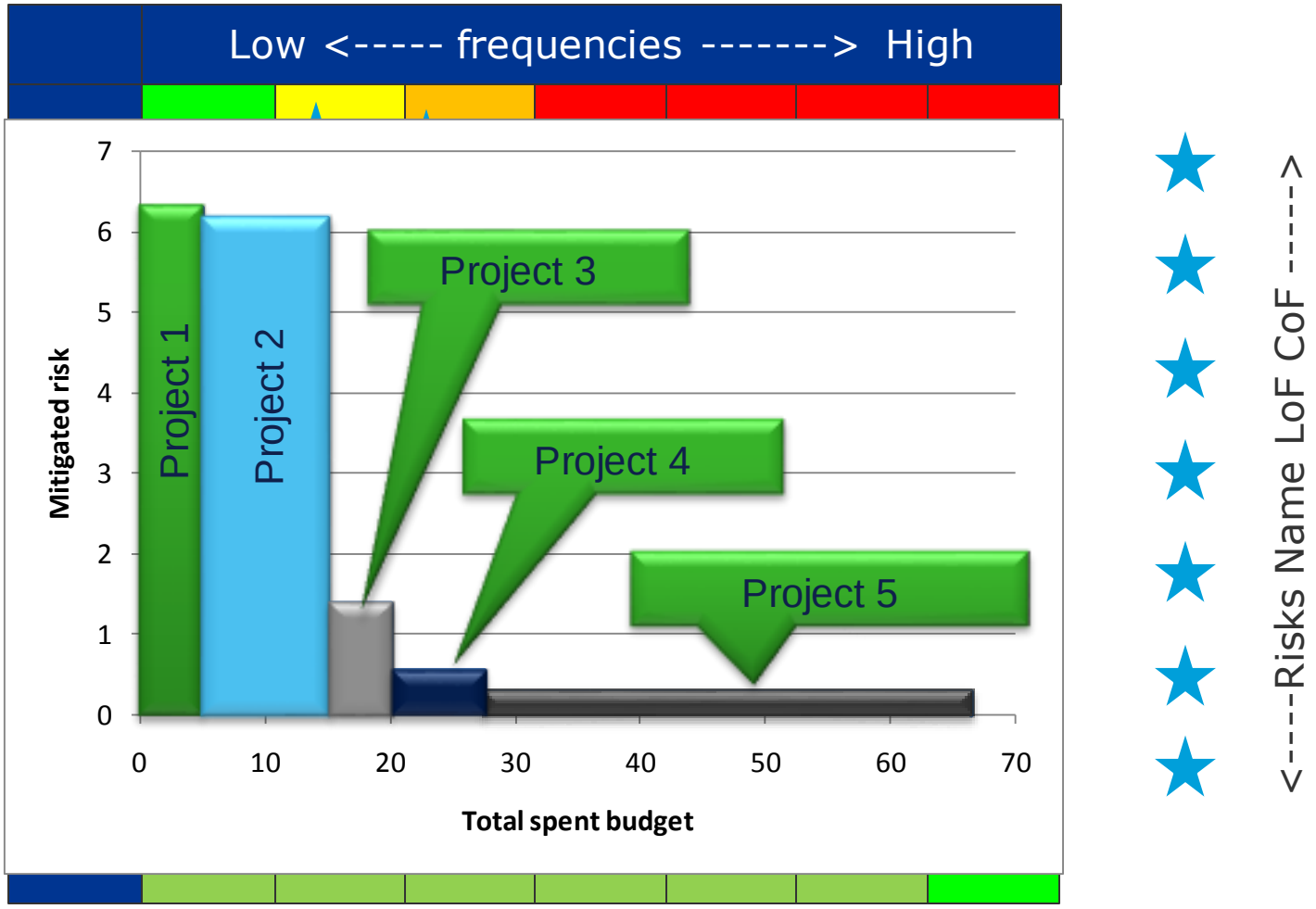
- Workshop
- DNVGL to initiate
- Follows other activity
- DNVGL to review
- Customer decision

Implementation

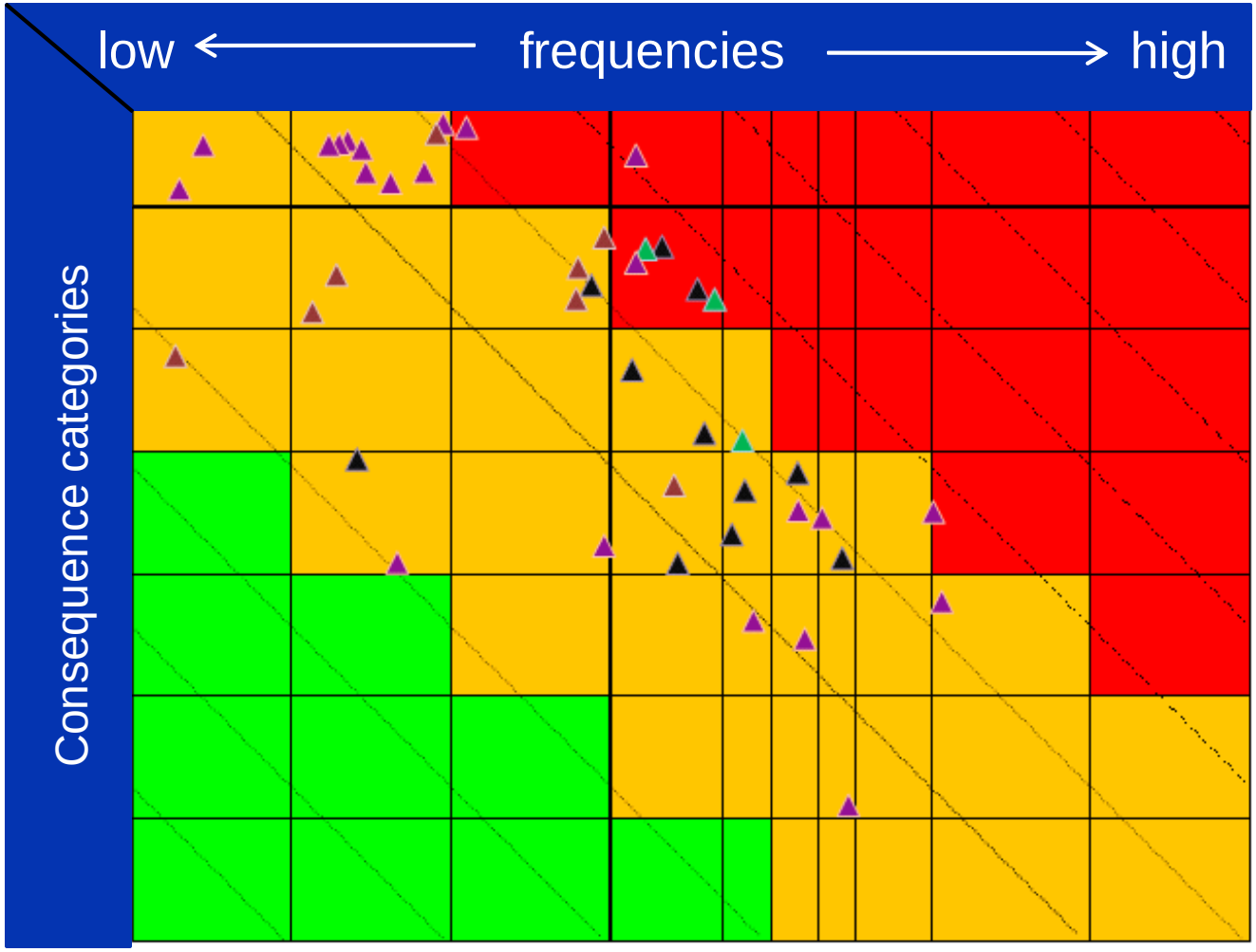
Risk Management: process and matrix

	LL	L	M	H	HH
HH					
H					
M					
L					
LL					

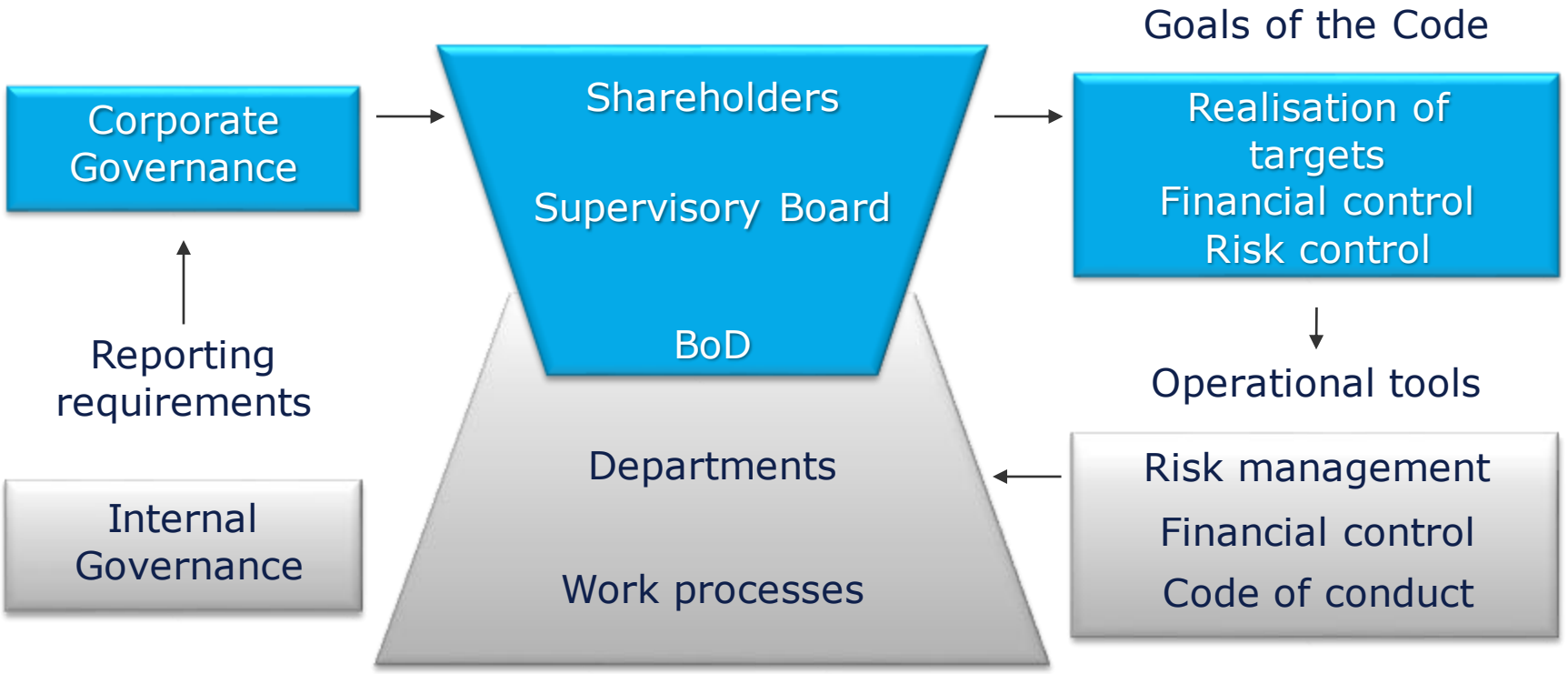
Risk management: risk matrix



Example of assessment results



Risk Management enables the Board of Directors to realise the required control over an organisation

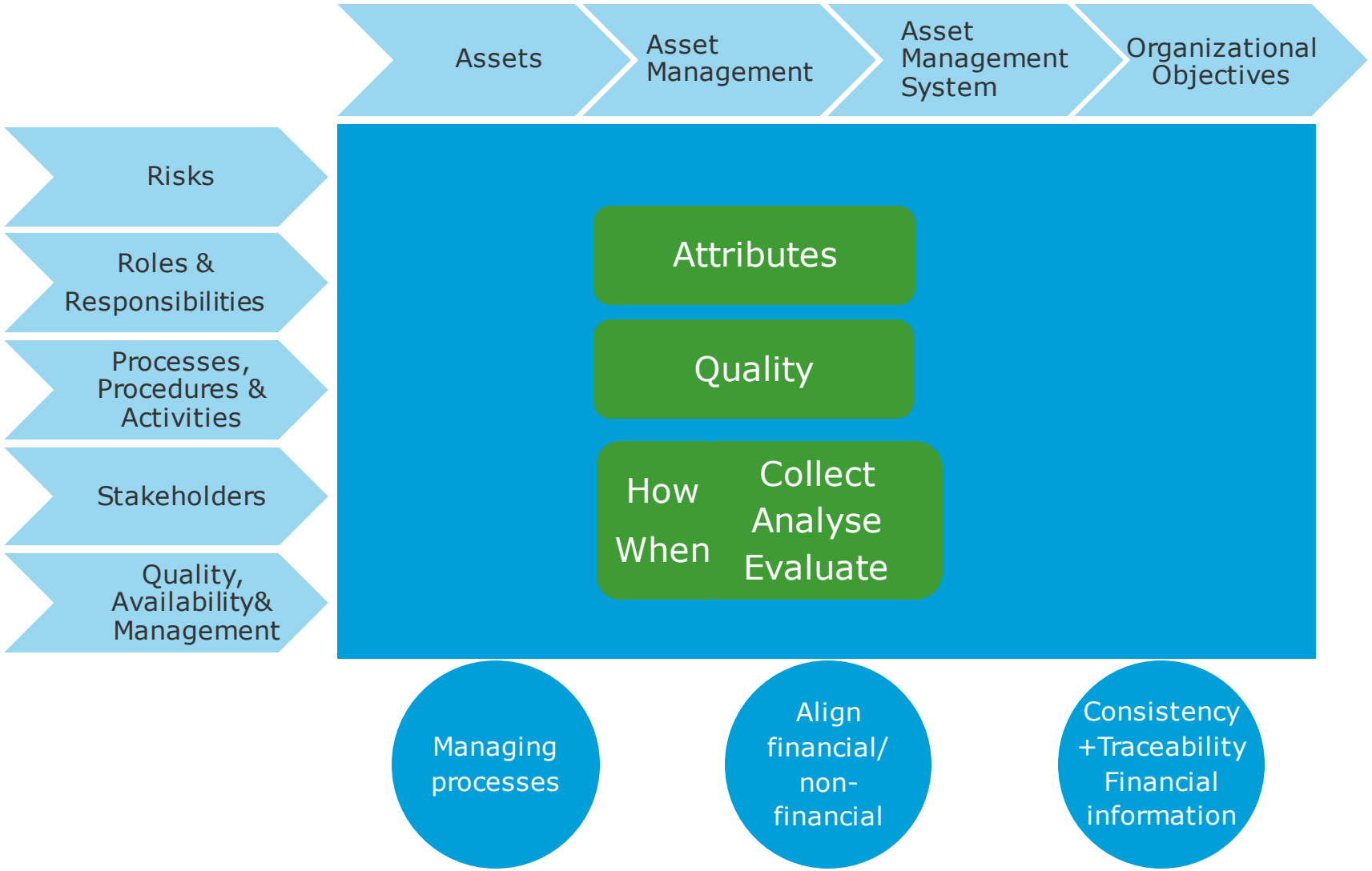


To manage our risks better in order to ensure our performance

Information requirements

Overview

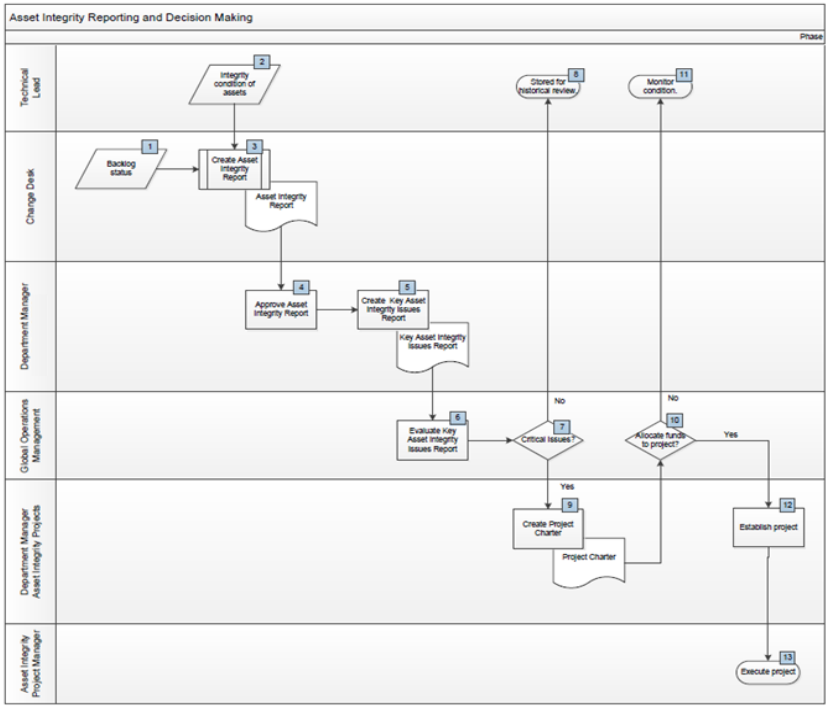
Requirements in ISO 55000



Processes assessment

Processes

- Clear description
- Stakeholder requirements
- Link to roles and responsibilities (RACI)
- Information and documentation
- Organisation review
- Part of communication plan

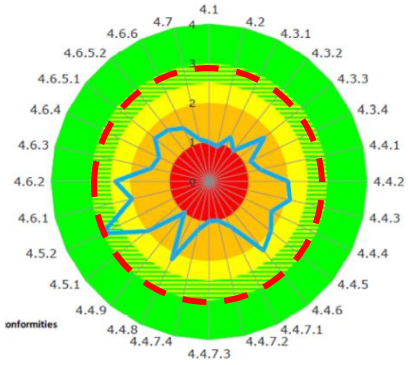


Implementation

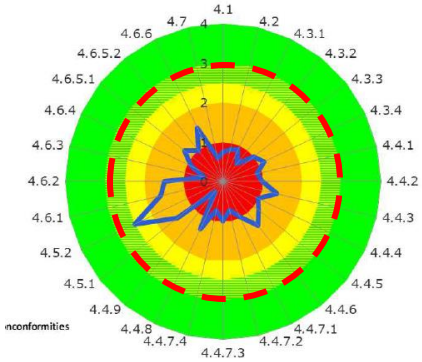
Results and incident prevention?

Checking Maturity along the way

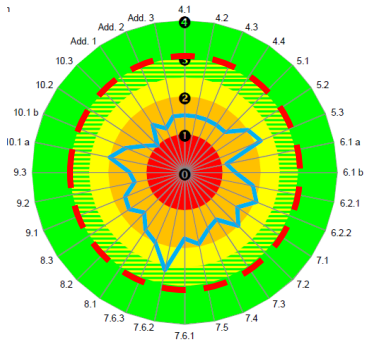
PAS 55 | **ISO 55000**



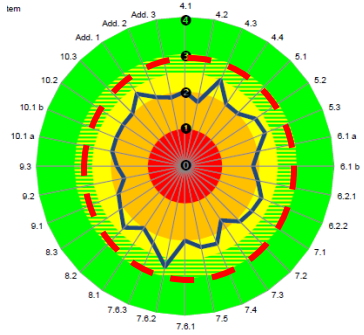
Site 1



Site 2



AM department

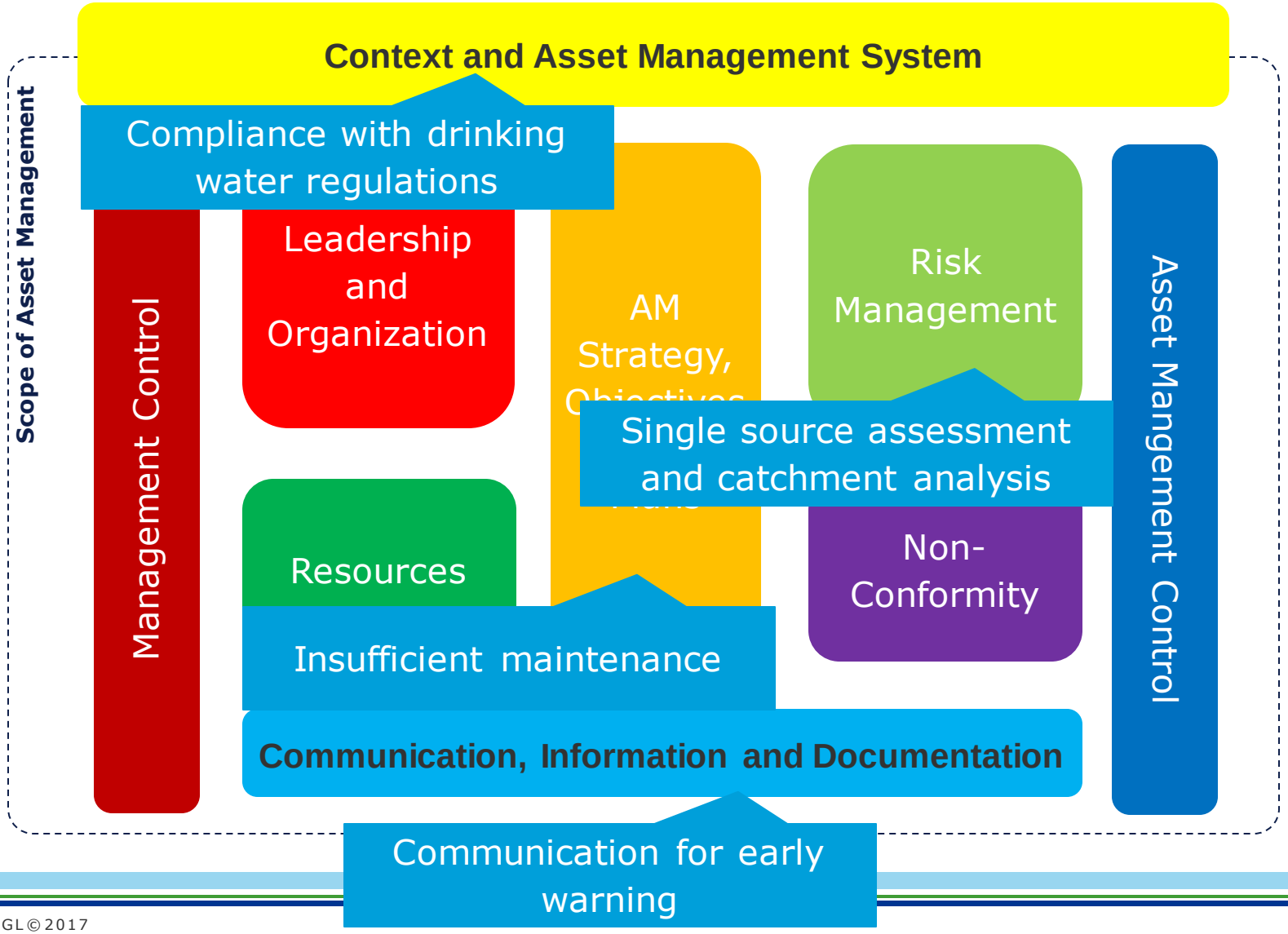


Site 3

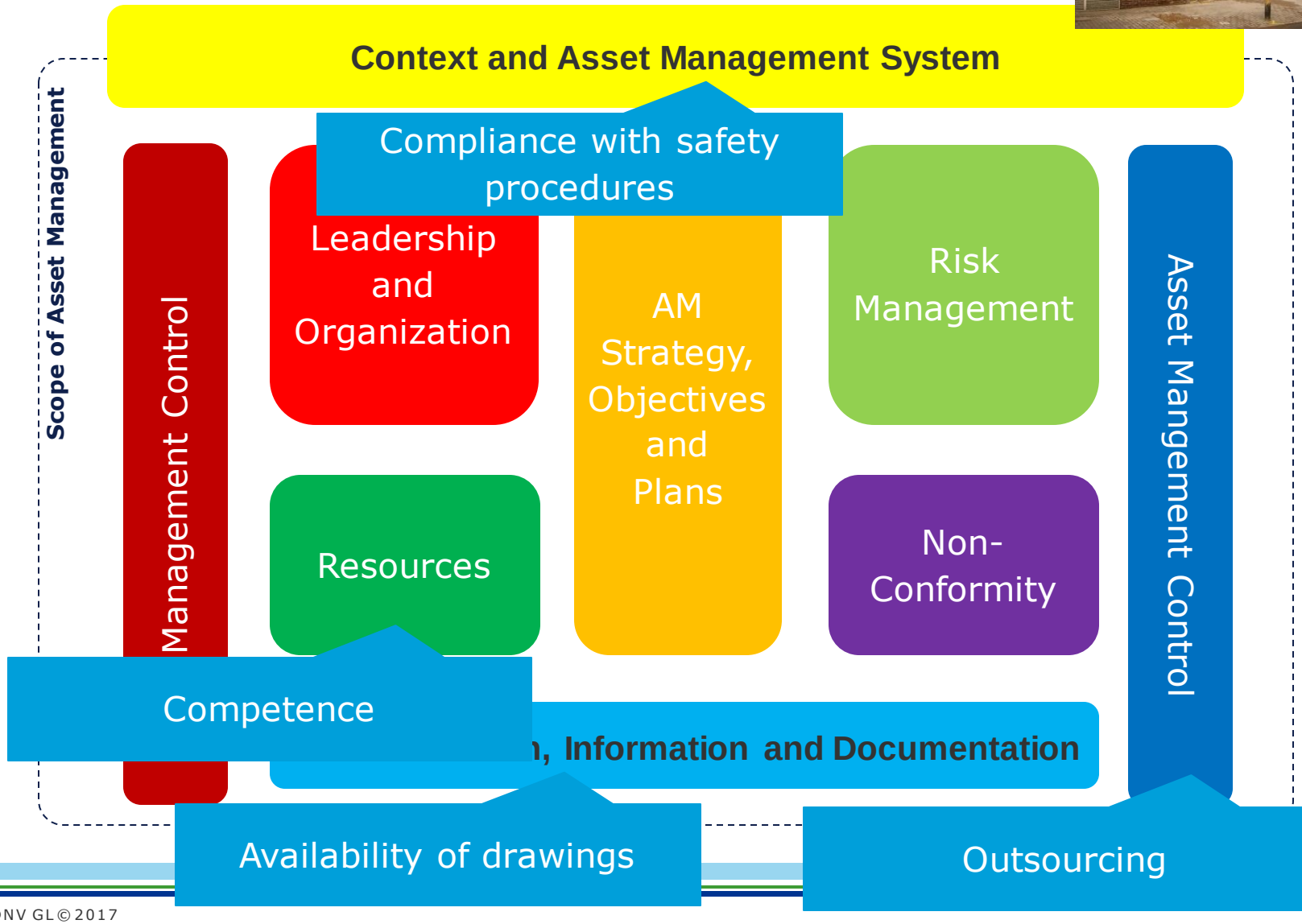
Time

Dotted Line: Maturity Level of 3 (required for ISO 55001 certification)

Bergen: Would it have worked?



Utrecht: Would it have worked?



Thank you!

Questions?

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