

Asset Management System

Certification Process

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Agenda

- Asset and Asset Classification
- Asset Management
- Benefit of Asset Management
- ISO standard for Asset Management
- Asset Management System Requirements
- Road Map of Certification
- Agreement and Man-day Calculation
- DNVGL Practical Approach
- Audit Process
- DNVGL History in Asset Management System Certification

What is an Asset?

An asset is an item, thing or entity that has potential or actual value to an organization.

- **The value can be tangible or intangible, financial or non-financial, and includes consideration of risks and liabilities.**
- **It can also be positive or negative at different stages of the asset life.**

Asset Classification

- **Physical assets usually refer to equipment, inventory and properties owned by the organization.**

Non-physical assets usually refer to leases, brands, digital assets, use rights, licences, intellectual property rights, reputation or agreements.

What is Asset Management?

Strategic Asset Management enables an organization to realize “value” from assets in the achievement of its organizational objectives

Its success is dependent on the

- **objectives and their rationality**
- **nature and purpose of the organization**
- **needs and expectations of the organization’s stakeholders**

Tangible Benefits of Asset Management

improved financial performance

improving the return on investments and reducing costs can be achieved, while preserving asset value and without sacrificing the short or long-term realization of organizational objectives

informed investment decisions

enabling the organization to improve its decision making and effectively balance costs, risks, opportunities and performance

improved services and outputs

assuring the performance of assets can lead to improved services or products that consistently meet or exceed the expectations of customers / stakeholders

improved efficiency and effectiveness

reviewing and improving processes, procedures and asset performance can improve efficiency and effectiveness, and the achievement of organizational objectives

demonstrated compliance

transparently conforming with legal, statutory, regulatory requirements can enable demonstration of compliance

managed risk

reducing financial losses, improving health and safety, good will and reputation, minimizing environmental and social impact, can result in reduced liabilities such as insurance premiums, fines and penalties

Intangible Benefits of Asset Management

demonstrated social responsibility

improving the organization's ability to, for example, reduce emissions, conserve resources and adapt to climate change, enables it to demonstrate socially responsible and ethical business practices and stewardship

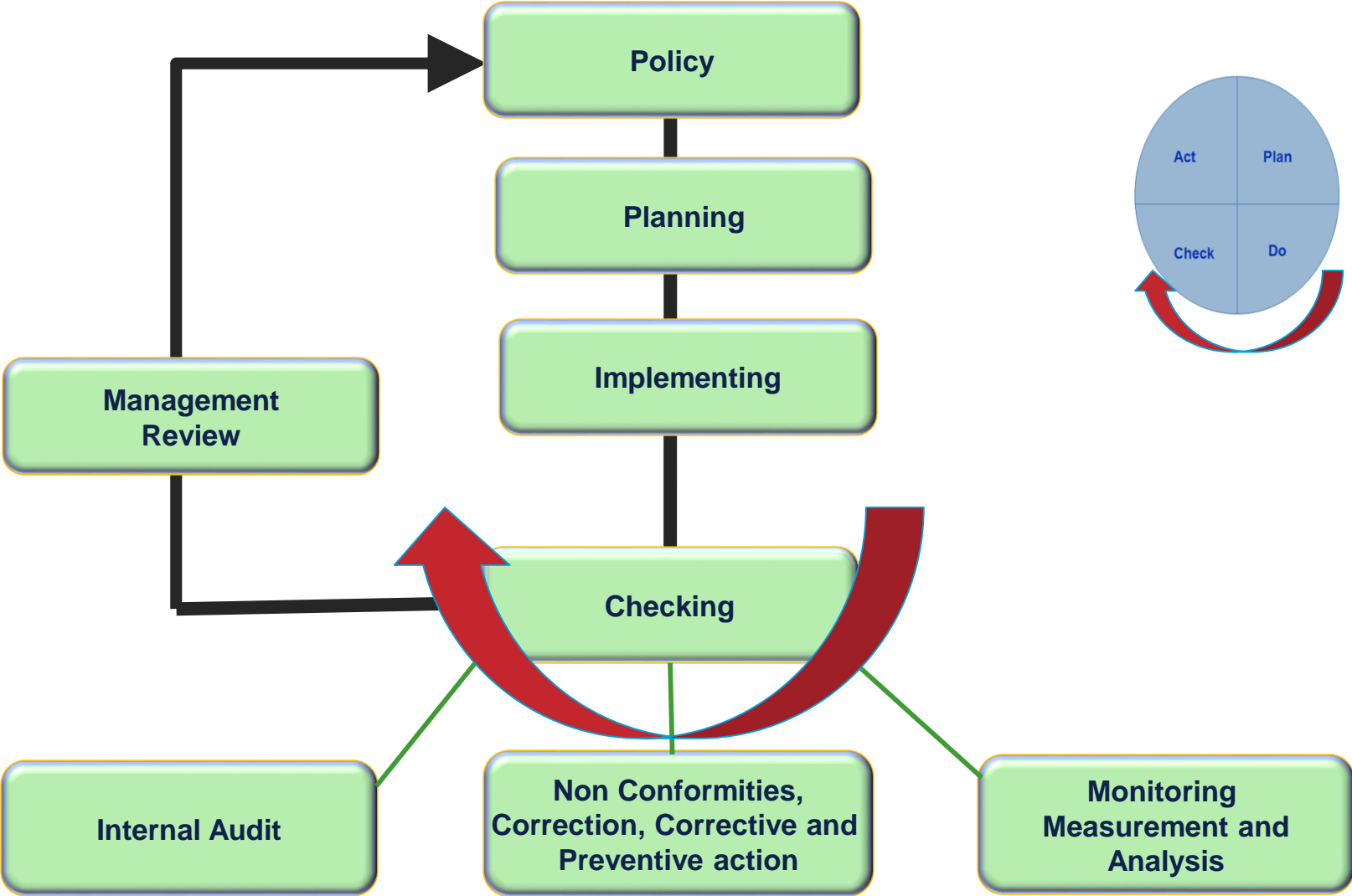
improved organizational sustainability

effectively managing short and long-term effects, expenditures and performance, can improve the sustainability of operations and the organization;

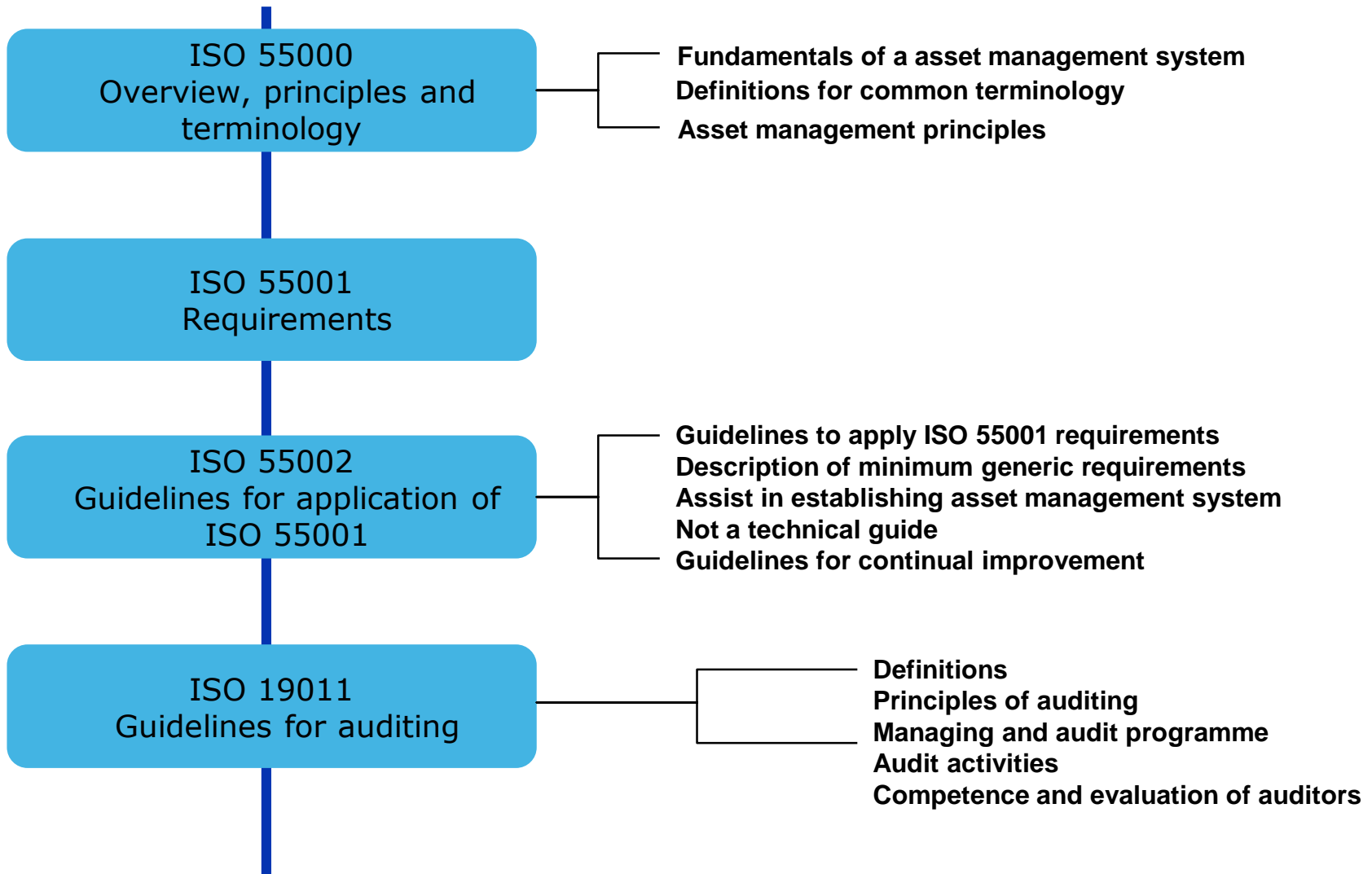
enhanced reputation

through improved customer satisfaction, stakeholder awareness and confidence

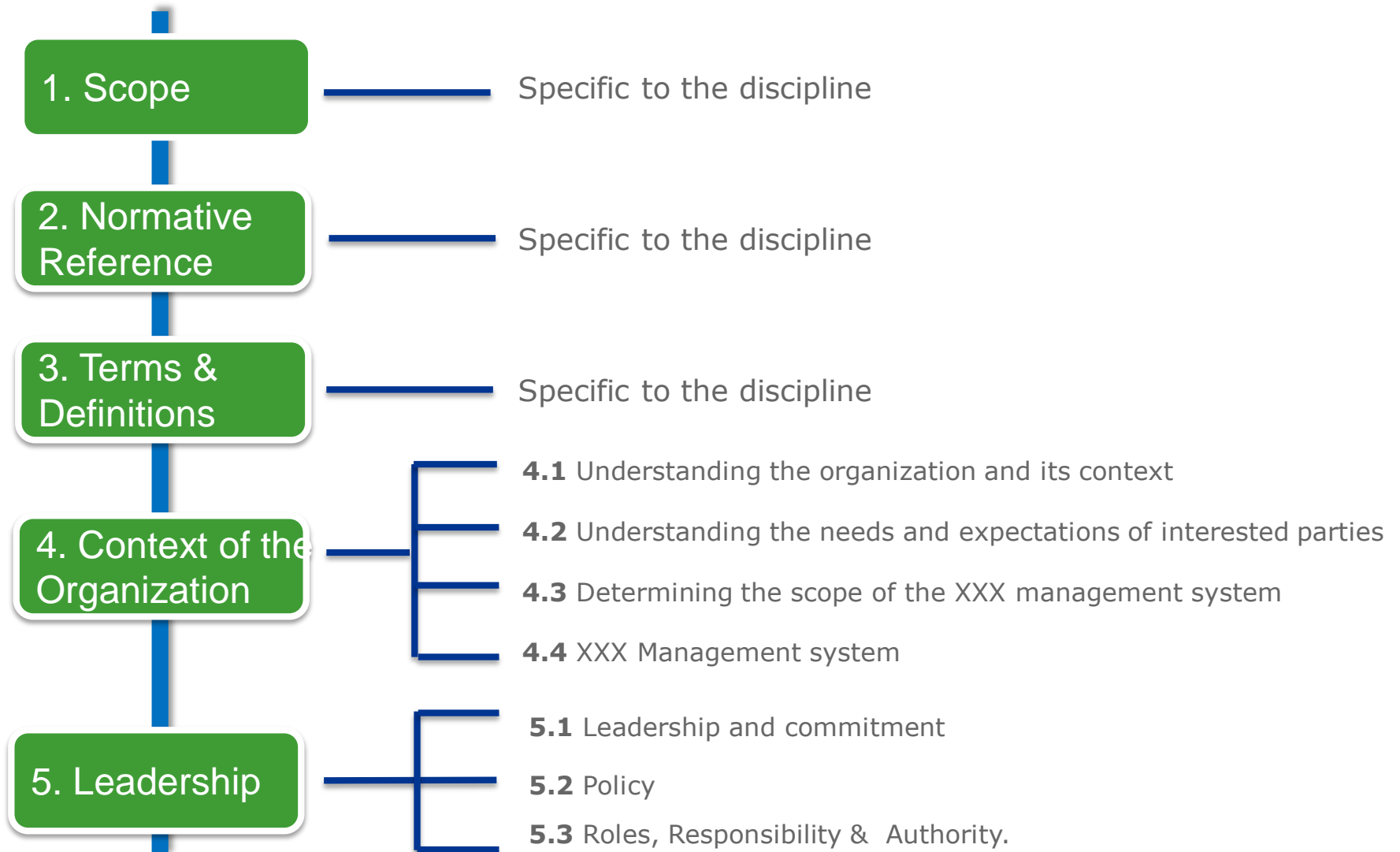
ISO 55001 Concept



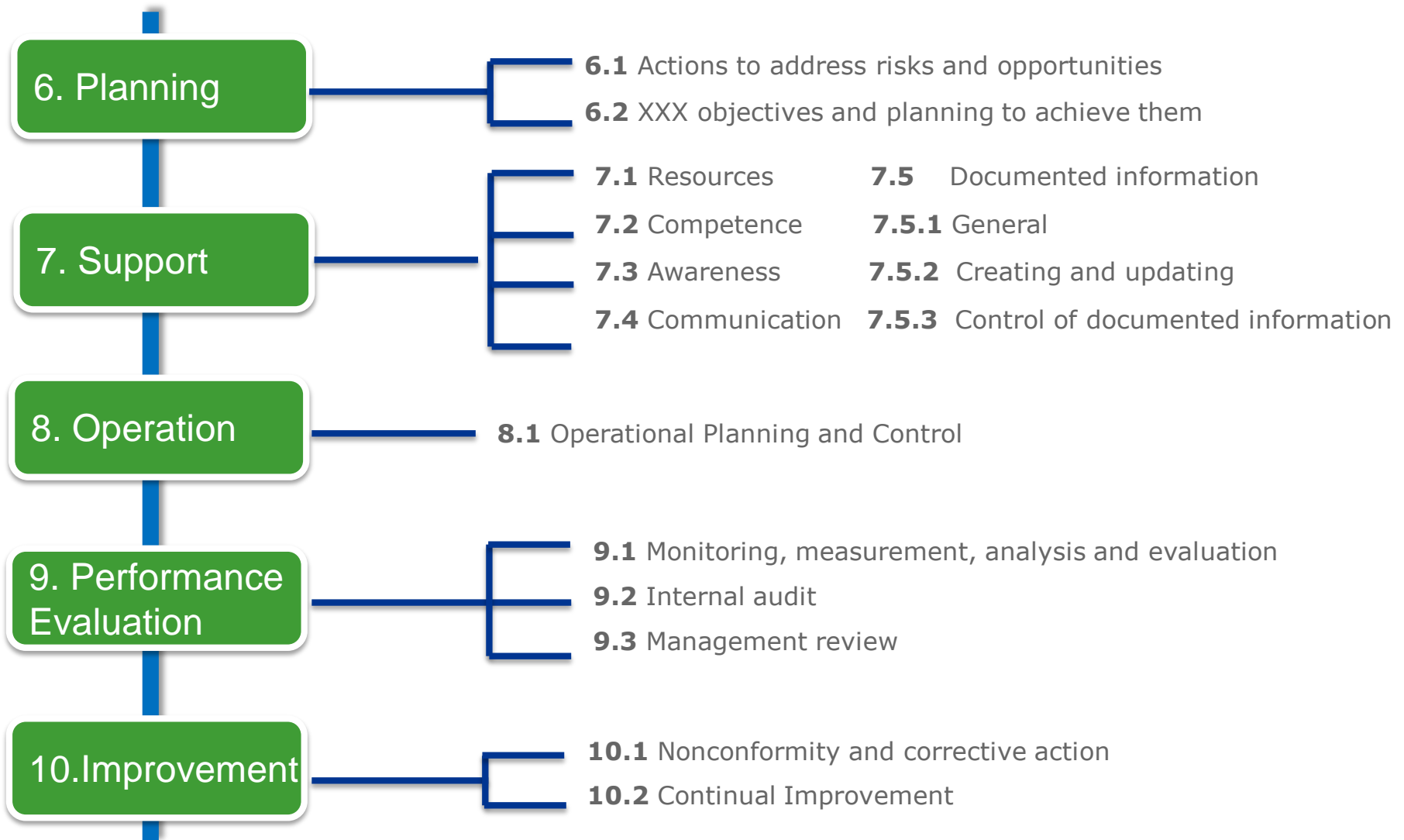
ISO 55000 Series



HLS - 10 Clause structure



HLS – 10 Clause structure



ISO 55001: Management System Requirements

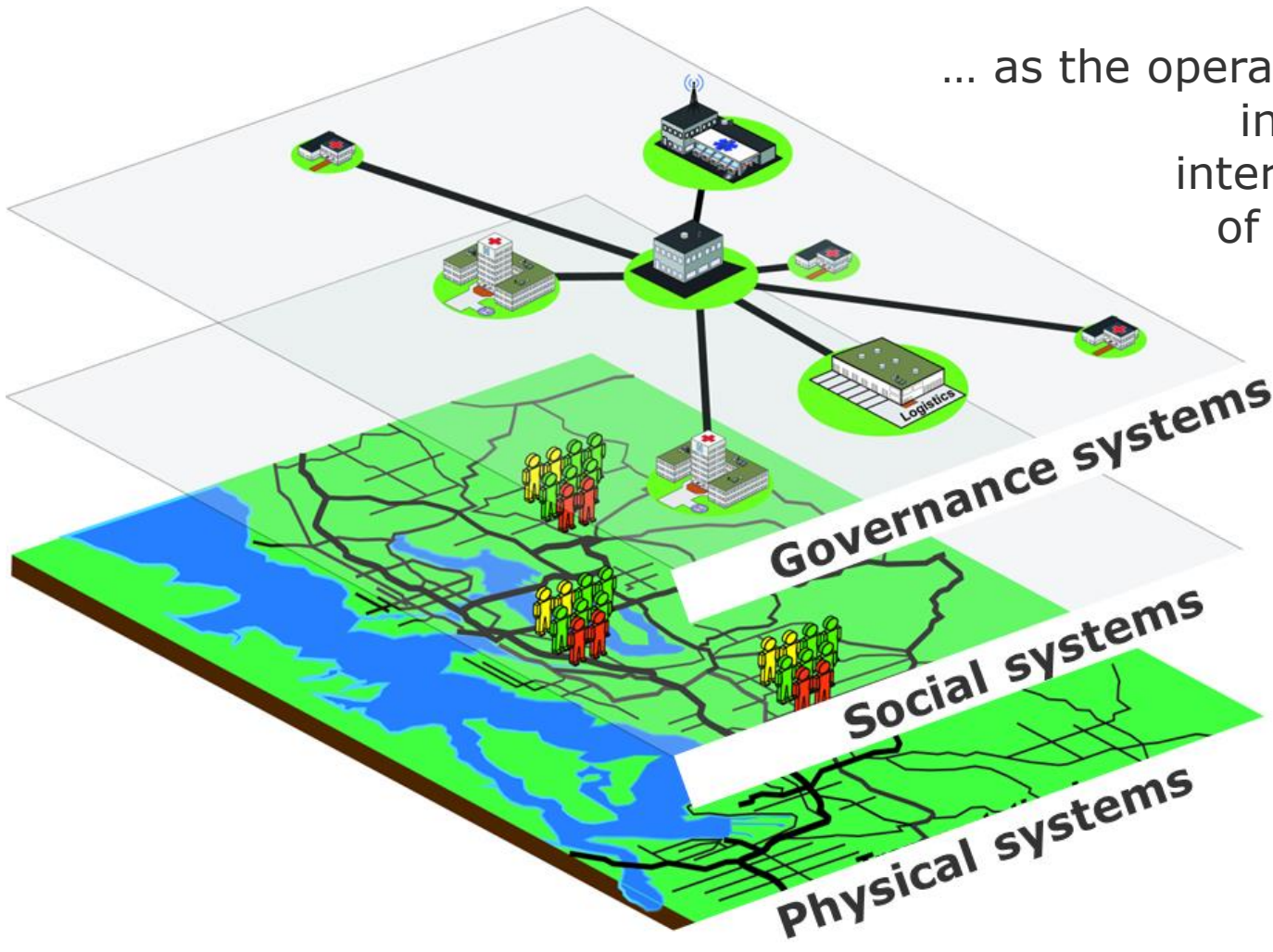
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Main Requirements

- **Context** : scope, internal /external issues, risk and opportunity assessment
- **Leadership**: policy, organization, roles and responsibility
- **Planning**: objective, SAMP, AMP
- **Support**: resource, competence, awareness, communication
- **Operation**: Operation control, management of change, outsourcing
- **Performance Evaluation**: monitoring, analysis, internal audit, management review
- **Improvement**: non-conformance, continual improvement

Asset Management is a challenge...

... as the operations comprise an interconnected and interdependent model of 3 unique systems



Road Map to receive the certificate

Internal Arrangement:

- Obtain the standard
- Team allocation
- Determine the training needs
- Develop the Manual
- Develop procedures
- Implement the procedures



External Arrangement:

- Agreement
- Gap Assessment
- Certification Audit

Agreement

- Asset Management Agreement:

- Consist of:

- Gap Assessment (optional)
 - Stage 1 (Document Review)
 - Stage 2 (Certification Audit)
 - Surveillance Audits (Annual)

- Fees will be based:

- on the man-day plus accreditation fees

- Man-days will be based on:

- Effective number of personnel
 - Complexity of the industry
 - Number of site-based and numbers of mobile staff
 - Level of maturity of systems
 - **Integration with other management systems**

Man-day Calculations

Agriculture and fishing	- Medium
Light manufacturing	- High/Medium
Heavy manufacturing	- High/Medium
Oil/gas extraction, chemical, other process industries	- High/Medium/Low
Recycling/waste	- High/Medium/Low
Mining/quarrying	- High/Medium
Nuclear	- High
Aerospace	- High/Medium
Railways	- High/Medium
Shipping	- High/Medium
Construction	- High/Medium
Transport	- High/Medium
Facilities, hospitals, offices, commercial premises	- Medium/Low
Fairgrounds	- Medium
Utilities, water, electricity, gas	- High/Medium
IT, financial assets, telecoms	- High/Medium
Armed services	- High

Effective Number of Personnel	Audit Duration Stage 1 + Stage 2 (days)		
	High	Medium	Low
1-25	3.0 - 5.5	2.5 - 4.5	2.5 - 3.5
26-125	7.0 - 11.0	5.5 - 8.0	4.0 - 5.5
126-625	12.0 - 16.0	9.0 - 12.0	6.0 - 9.0
626-1550	17.0 - 20.0	13.0 - 16.0	10.0 - 12.0
1551-3450	21.0 - 25.0	17.0 - 19.0	12.0 - 14.0
3451-6800	27.0 - 30.0	20.0 - 23.0	15.0 - 17.0
6801+	32.0 +	25.0 +	19.0 +

Man-day Calculations Example

- Example: XYZ Refinery with 200 personnel in total with 50 effective number of staff involved in asset management activities:
 - Then it is HIGH complexity
 - Needs 7-11 days for Stage 1 & 2

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	High	Medium	Low
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6801+	32.0 +	25.0 +	19.0 +

DNV GL's practical approach to ISO 55001 Certification

A

Assessment Phase (optional)

Preparation

Draft the gap analysis plan

- Analysis of documentation
- Create consultation planning
- Review and commitment

Gap Analysis

Status assessment vs. ISO 55000 & requirements

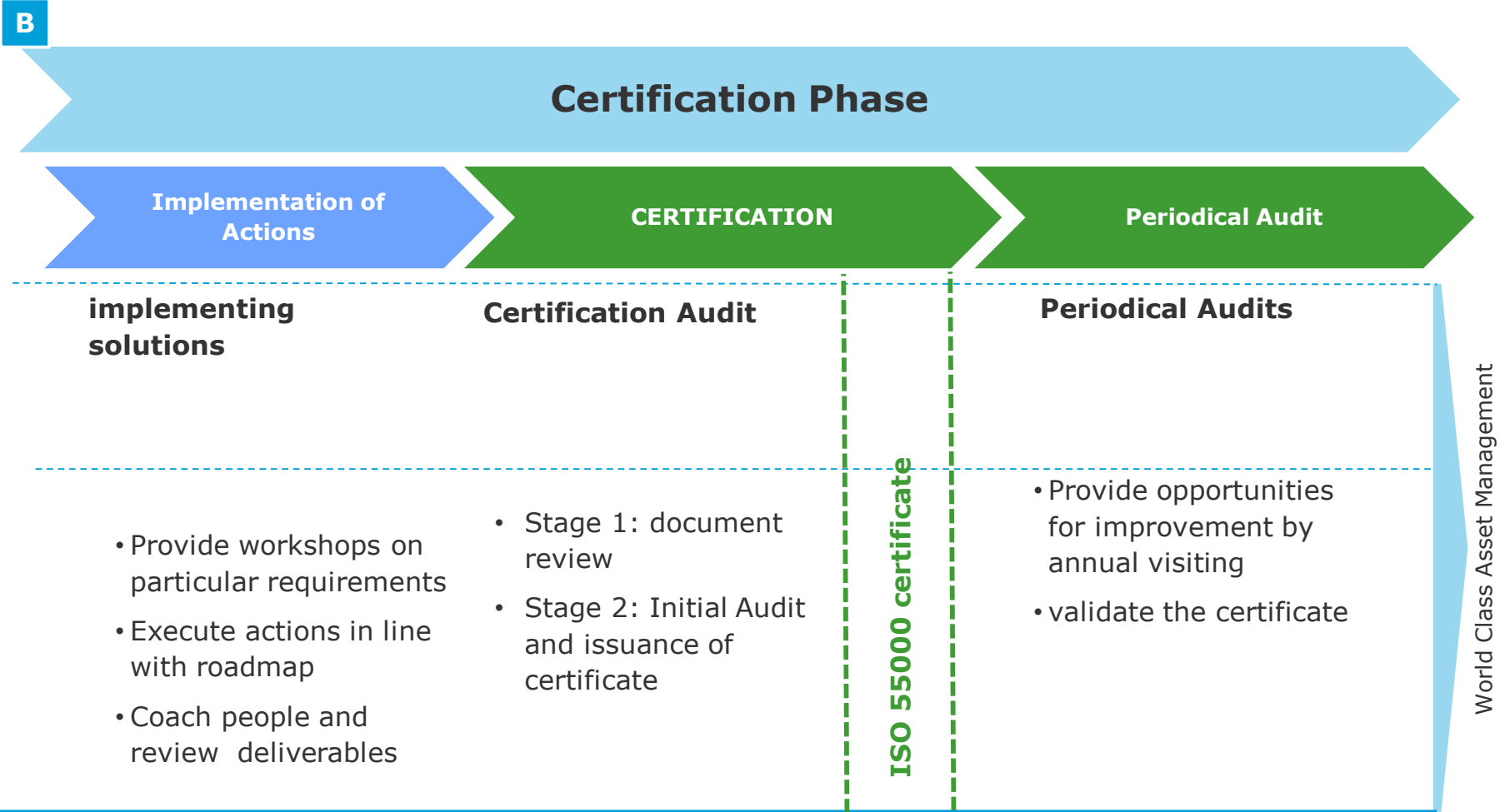
- Awareness workshop
- Consultations with selected personnel
- Assessment with the DNV GL TEAM tool

Roadmap Preparation

Draft roadmap for implementing solutions

- Prioritize actions needed to close
- Specify DNV GL's roles and involvement
- Draft and align roadmap

DNV GL's practical approach to ISO 55001 Certification



The Audit Process



Some of DNV GL's clients (PAS 55 and ISO 55001)

We have been leading the way in asset management and have been helping companies integrate their risk management systems with the principles of **PAS 55** (precursor to ISO 55001) via our Leading Business Index / ISRS services.

With the launch of the ISO 55000 series, companies are now starting to transition from PAS 55 to ISO.

In Australia, to date we have been primarily approached by government agencies with requests for training and assessment on the standard, certification will follow from 2016 onwards.



Thank You

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