



Standards for lightweight
IT service management

FitSM Expert & Auditor

Expert & Auditor training in IT Service Management
according to FitSM

Version 3.0



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Purpose of this training

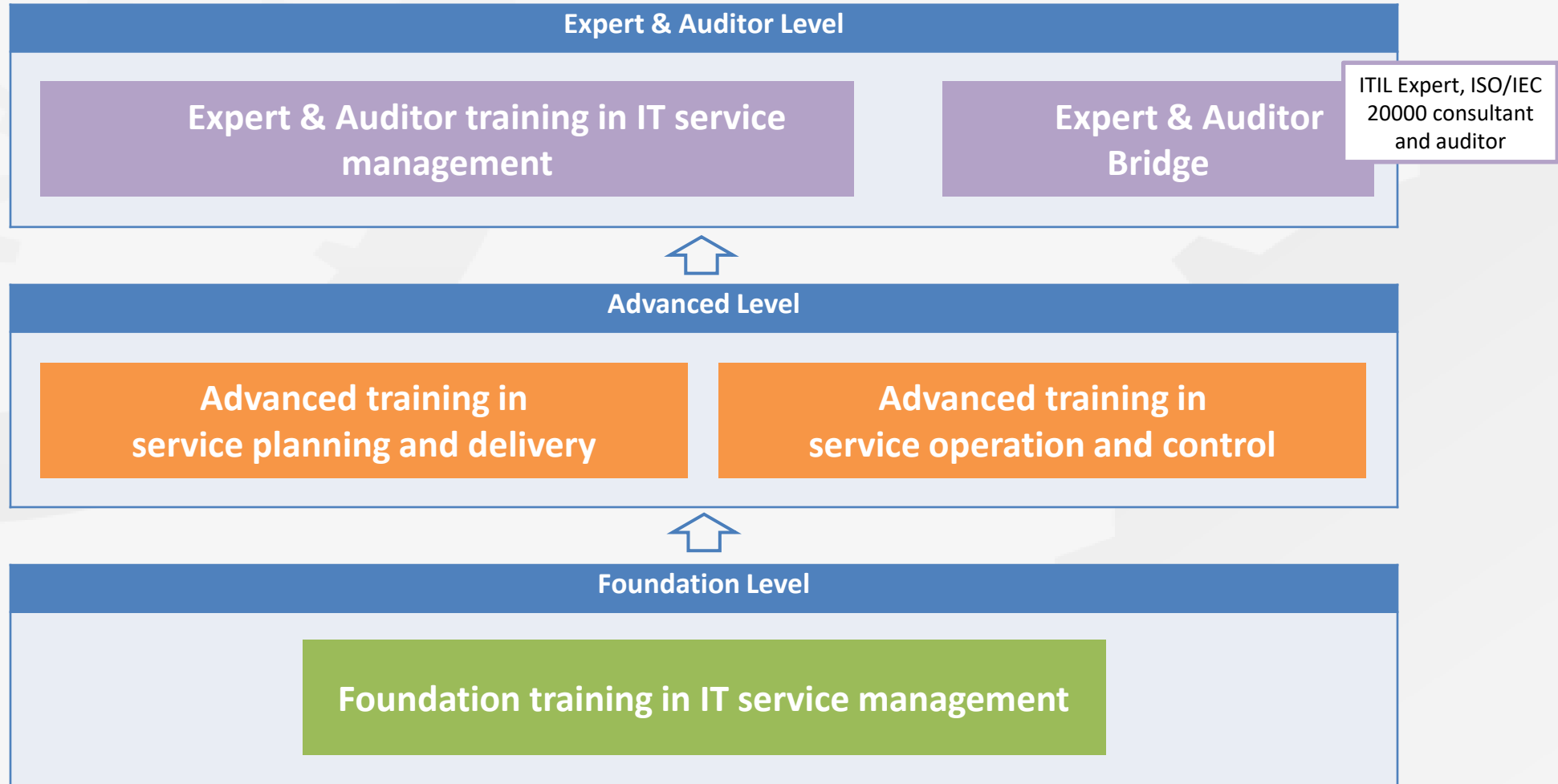
- Become familiar with
 - knowledge (concepts, methods) vital to successfully implementing different aspects of IT service management (ITSM)
 - how to apply that knowledge in a service management system (SMS) which is aligned to the FitSM standard
- Achieve the ***Expert & Auditor Level Certificate in IT Service Management*** according to FitSM

FitSM Expert & Auditor exam



- At the end of this training
- Closed book, i.e. no aids are allowed
- Duration: 75 minutes
- 40 multiple choice questions:
 - Four possible answers for each question: A, B, C or D
 - One correct answer per question
- At least 75% correct answers (30 of 40) are required to pass the examination

FitSM qualification program





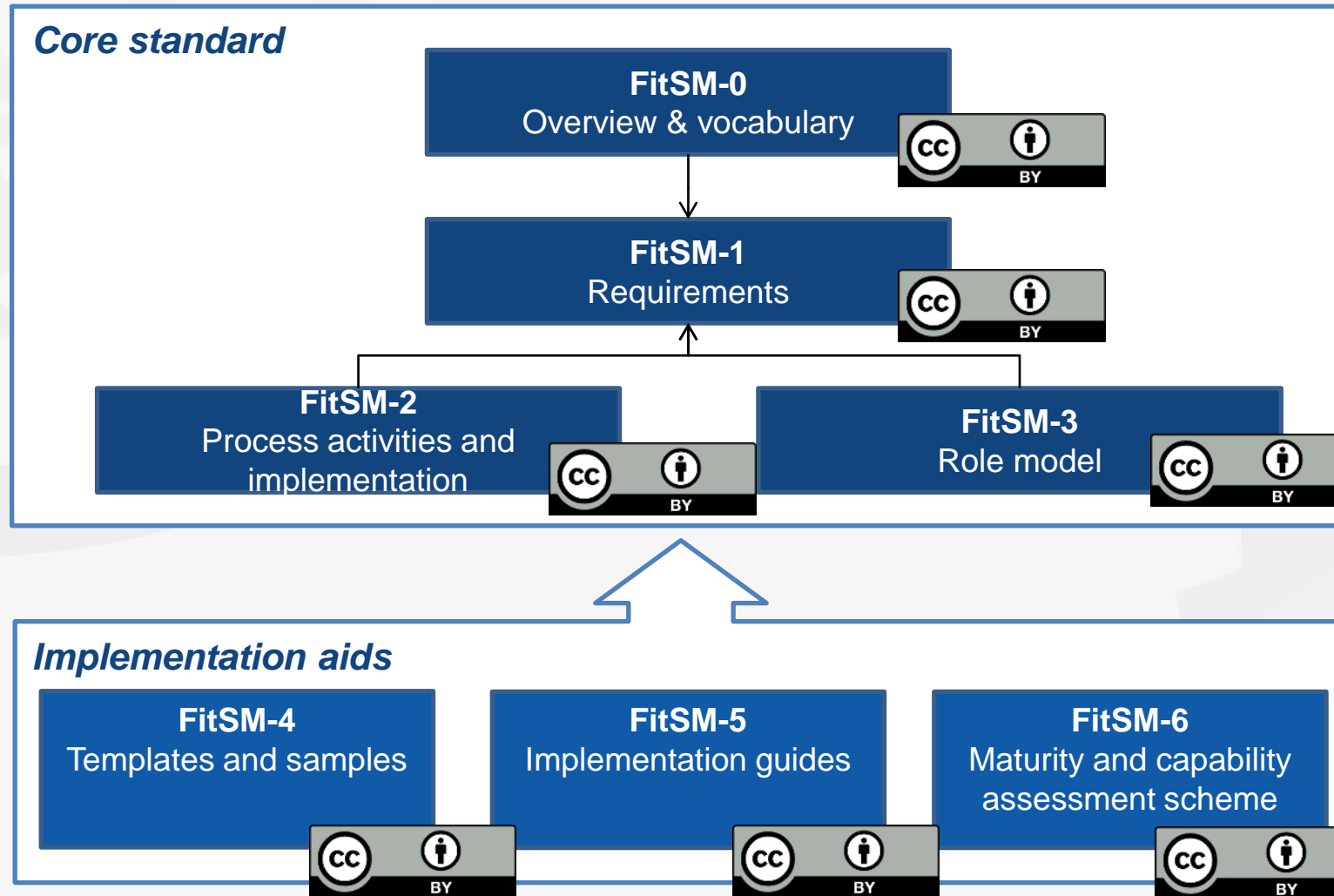
- FitSM Foundation & Advanced wrap-up
- **Standards, frameworks, concepts and practices** related to IT service management
- **Leadership, governance, risk and compliance** in IT service management
- **Planning and implementing** services and IT service management (PLAN, DO)
- **Monitoring, reviewing, auditing and improving** services and IT service management (CHECK, ACT)



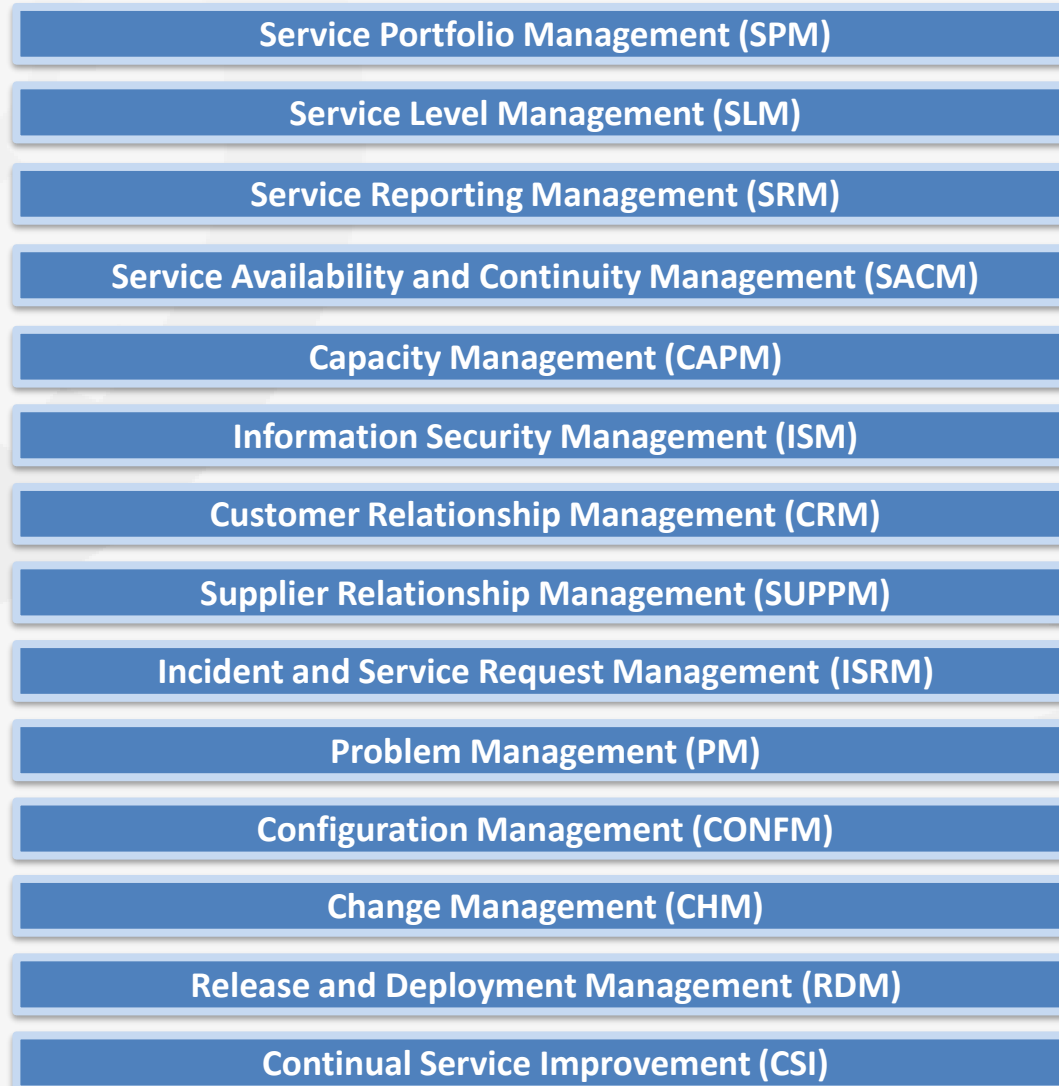
Standards for lightweight
IT service management

FitSM Foundation & Advanced wrap-up

The FitSM standard: Overview



FitSM process model according to FitSM-0 /-1



FitSM process model: Key subjects (1/5)

SPM

- Service Portfolio Management:
 - Maintain and develop the service portfolio, based on changing demand
 - Manage services through their lifecycle
 - Understand the supply chains behind the services

SLM

- Service Level Management:
 - Maintain service catalogue(s)
 - Define and agree SLAs and supporting agreements (OLAs, UAs)
 - Evaluate fulfilment of SLAs, OLAs and UAs

SRM

- Service Reporting Management:
 - Keep track of reporting requirements
 - Specify all reports to understand how often, by whom, for whom they are produced
 - Monitor report production and distribution



FitSM process model: Key subjects (2/5)

SACM

- Service Availability & Continuity Management:
 - Identify availability and continuity requirements
 - Plan measures to achieve requirements
 - Monitor service availability

CAPM

- Capacity Management:
 - Identify capacity and performance requirements
 - Plan measures to achieve requirements
 - Monitor capacity and utilisation

ISM

- Information Security Management:
 - Identify information security requirements and risks
 - Establish information security policies and controls
 - Manage access and handle information security events and incidents

FitSM process model: Key subjects (3/5)

CRM

- Customer Relationship Management:
 - Identify service customers and customer requirements
 - Conduct service reviews and handle complaints
 - Determine customer satisfaction

SUPPM

- Supplier Relationship Management:
 - Identify internal and external suppliers
 - Communicate with suppliers
 - Monitor supplier performance

ISRM

- Incident & Service Request Management:
 - Register, classify and prioritise incidents and service requests
 - Escalate and resolve / fulfil incidents and service requests
 - Identify major incidents and deal with them

FitSM process model: Key subjects (4/5)

- PM** • Problem Management:
 - Identify and analyse problems to determine root causes
 - Identify workarounds and maintain the known error database
 - Trigger changes to eliminate problems
- CONFM** • Configuration Management
 - Maintain information on CIs and their relationships
 - Update the information in the CMDB
 - Verify the information in the CMDB
- CHM** • Change Management:
 - Register, classify and assess requests for changes
 - Manage the approval of changes and coordinate their implementation
 - Review changes for success

FitSM process model: Key subjects (5/5)

RDM

- Release & Deployment Management:
 - Bundle changes into releases
 - Plan, build, test and deploy releases and the connected changes
 - Deal with unsuccessful deployment

CSI

- Continual Service Improvement Management:
 - Register and prioritise suggestions for improvements
 - Manage the decision on which improvements are to be implemented
 - Track the progress and implementation of improvements

FitSM: General aspects of an SMS (1/3)

- General aspects of a service management system (SMS) cover all topics that are **not directly related to a specific ITSM process**.
- Topics to be considered:

Top Management Commitment & Accountability (MCA)

Documentation (DOC)

Scope & Stakeholders of IT Service Management (SCS)

Planning IT Service Management (PLAN)

Implementing IT Service Management (DO)

Monitoring & Reviewing IT Service Management (CHECK)

Continually Improving IT Service Management (ACT)

FitSM: General aspects of an SMS (2/3)

GR1 MCA

- Top management commitment & accountability:
 - Assign one individual to be accountable for the overall SMS
 - Define and communicate goals
 - Define a general service management policy
 - Conduct management reviews

GR2 DOC

- Documentation:
 - Documentation to the extent necessary to support effective planning, including:
 - General service management policy
 - Service management plan and related plans (see GR4)
 - Definitions of all service management processes (see PR1-PR14)
 - Control of documentation, addressing as applicable:
 - Creation and approval
 - Communication and distribution
 - Review
 - Versioning and change tracking

FitSM: General aspects of an SMS (3/3)

GR3 SCS

GR4 PLAN

- Planning IT service management:
 - Define the scope of the SMS
 - Set the timeline for implementing service management processes (service management plan)

GR5 DO

- Implementing IT service management:
 - Implement processes as planned
 - Support and enforce practical application of defined processes

GR6 CHECK

- Monitoring & reviewing IT service management:
 - Monitor key performance indicators (KPIs) to evaluate effectiveness and efficiency
 - Perform assessments and / or (internal) audits to determine the level of compliance
 - Assess the organisational maturity

GR7 ACT

- Continually improving IT service management:
 - Identify nonconformities and deviations from goals
 - Take action → Manage improvements through the CSI process (see PR14)



- FitSM is **compatible** with other IT service management frameworks and standards, such as ITIL and ISO/IEC 20000.
- All parts of the FitSM standard are **freely available** under a Creative Commons license.
- The FitSM process model, requirements, recommended activities and role model target a **lightweight and achievable** implementation of ITSM
- The FitSM standard is applicable to **all types of organisation** (e.g. commercial enterprises, government agencies, non-profit organizations) that need to manage IT services.
- FitSM is based on the key principles **practicality, consistency, sufficiency and extendibility**.



- FitSM Foundation & Advanced wrap-up
- **Standards, frameworks, concepts and practices related to IT service management**
- Leadership, governance, risk and compliance in IT service management
- Planning and implementing services and IT service management (PLAN, DO)
- Monitoring, reviewing, auditing and improving services and IT service management (CHECK, ACT)



Standards for lightweight
IT service management

Management systems

Topics

Different types of management systems and related standards

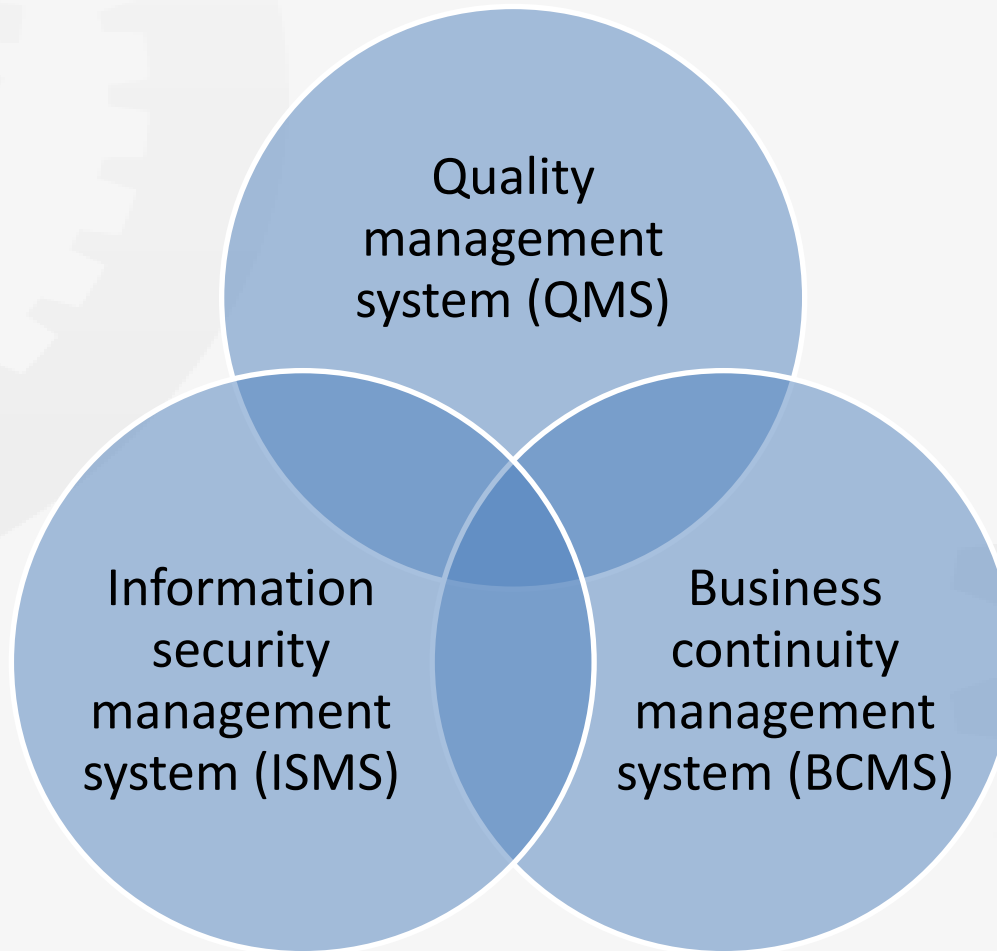
Overview: Management systems

- **Typical management systems include:**
 - Quality management system (QMS)
 - Business continuity management system (BCMS)
 - Information security management system (ISMS)
 - Occupational health and safety management system (OH&S)
 - Environmental management system
 - Sustainability management system
 - Innovation management system
 - Compliance management system
 - (...)
- These may be complemented by **sector-specific management systems**, like:
 - Food safety management system
 - Food loss and waste management system
 - Healthcare organization management system
 - Educational organization management system
 - (...)

Typical characteristics of management systems

- Systematic and repeatable operations and practices, e.g. through clearly defined processes
- Clearly defined and assigned responsibilities within the organisation
- Transparency of important activities, e.g. through sufficient documentation / recording
- Effective control over suppliers
- Application of continual evaluation and improvement

Most important management systems in relation to a service management system (SMS)



Management systems mapped to ITSM and the SMS

Management system	ITSM process / SMS aspect	Explanation / How to apply
Quality management system (QMS) ISO 9001	Overall SMS, all processes	<p>Embed the SMS in the organisation's overall quality management system</p> <ul style="list-style-type: none"> → From the QMS point of view, ITSM could be considered one of the supporting processes of the organisation (or federation). → The implementation of the quality management process "Manage IT services" is realised through the SMS, which will re-use / apply some of the methods and practices defined in the QMS. <p>An SMS can also be considered a special type of quality management system by itself, where the quality to be managed is the quality of the IT services (in terms of their availability, performance / capacity).</p>

Management systems mapped to ITSM and the SMS

Management system	ITSM process / SMS aspect	Explanation / How to apply
Business continuity management system (BCMS) ISO 22301	Service availability & continuity management (SACM)	<p>Align the SACM process to the organisation's overall BCMS</p> <ul style="list-style-type: none"> → The BCMS will provide an analysis of the business criticality of the organisation's (or federation's) business processes. → When identifying service continuity requirements, the criticality of the business processes supported by a particular IT service should be considered.



Management systems mapped to ITSM and the SMS

Management system	ITSM process / SMS aspect	Explanation / How to apply
Information security management system (ISMS) ISO/IEC 27001	Information security management (ISM)	Align the ISM process to the organisation's overall ISMS → The ISMS will provide an analysis of protection needs of the organisation's (or federation's) primary assets (including information assets and business processes), identify and assess overall information security risks and define security controls to treat these risks. → The ISM process as part of the SMS should ensure that those information security risks that are related to planning, delivering, operating and supporting IT services are identified, assessed and treated.



Standards for lightweight
IT service management

Commonly used organisational methods and practices

Topics

Process management and process orientation, project management, risk management, agile methodology, supply chain and sourcing management

Process management and process orientation

- Process orientation: Activities required to achieve objectives are carried out as part of well-understood and effective processes.
- Process management in ITSM covers all activities to plan, deliver, operate and control IT services according to defined service levels.
- Process-oriented ITSM standards and frameworks:
 - FitSM
 - ISO/IEC 20000
 - ISO/IEC 20000-1 (Service management system requirements)
 - ISO/IEC 20000-2 (Guidance on the application of service management systems)
 - ITIL (IT Infrastructure Library, good practice guidance on ITSM)
 - COBIT (IT governance framework)

Other process-oriented ITSM frameworks and standards mapped to FitSM



ITSM framework / standard	Most corresponding part(s) of FitSM	Explanation
ISO/IEC 20000-1	FitSM-1	<p>Both FitSM-1 and ISO/IEC 20000-1 specify auditable requirements for a service management system (SMS).</p> <ul style="list-style-type: none">→ FitSM-1 is more compact, with a more lightweight process model.→ ISO/IEC 20000-1 provides more detailed requirements on the design, development and transition of new or changed services as well as on some key aspects of the management system.→ FitSM and ISO/IEC 20000-1 are generally compatible, i.e. they share a common understanding of basic (IT) service management principles, ideas, concepts and terminology.→ Organisations and their SMS can be independently audited and certified against both ISO/IEC 20000-1 and FitSM-1, and full conformity against FitSM-1 could be used as a basis or “bridge” towards an ISO/IEC 20000-1 certification.→ In no case, the certification of the SMS will guarantee a certain service quality or service level achievement rate.→ ISO/IEC 20000-1 is not freely available, copies / licenses of the standard can be purchased from ISO.

Other process-oriented ITSM frameworks and standards mapped to FitSM



ITSM framework / standard	Most corresponding part(s) of FitSM	Explanation
ISO/IEC 20000-2	FitSM-2 FitSM-5	<p>ISO/IEC 20000-2 is a non-normative standard and provides implementation guidance for an SMS, comparable to the guidance provided by FitSM-2 and FitSM-5.</p> <ul style="list-style-type: none">→ FitSM and ISO/IEC 20000-2 are generally compatible, i.e. they share a common understanding of basic (IT) service management principles, ideas, concepts and terminology.→ ISO/IEC 20000-2 does not provide any documentation templates or samples (see FitSM-4).→ In contrast to FitSM-2, ISO/IEC 20000-2 does not include structured activity / workflow models or visualisation.→ ISO/IEC 20000-2 is not freely available, copies / licenses of the standard can be purchased from ISO.

Other process-oriented ITSM frameworks and standards mapped to FitSM



ITSM framework / standard	Most corresponding part(s) of FitSM	Explanation
ITIL	FitSM-2 FitSM-3 FitSM-4 FitSM-5	<p>ITIL provides good practice guidance on IT service management.</p> <ul style="list-style-type: none">→ FitSM and ITIL are mostly compatible, i.e. they share a common understanding of basic (IT) service management principles, ideas, concepts and terminology.→ FitSM is more compact, with a more lightweight process model.→ ITIL consists of a number of books (library) with a quite high volume (large collection of good practices).→ ITIL does not provide auditable minimum requirements (see FitSM-1 and ISO/IEC 20000-1).→ ITIL is not freely available, books / licenses need to be purchased.

Project management

- Project management covers all activities, means and methods to initiate, control, monitor and complete projects so that they achieve their defined objectives
- Popular project management frameworks and standards:
 - PMBOK Guide
 - PRINCE2
 - ISO 21500 (Project, programme and portfolio management)

- Risk management covers all activities to direct and control an organisation with regard to risk.
- Risk management is composed of two processes:
 - Risk assessment
 - Risk treatment
- Risk management standard: ISO 31000 (Risk management guidelines)
- *More on risk management → Later in this training*

Agile methodology

- Agile methodology is a management approach that involves breaking a project into phases and emphasises continuous collaboration and improvement. Teams follow a cycle of planning, executing, and evaluating.
- Popular Agile methodologies:
 - Scrum
 - Kanban
 - Extreme Programming (XP)

Supply chain and sourcing management (1/2)

- Types of IT service delivery from a sourcing perspective:
 - IT service provision by a single provider
 - IT service provision by several providers organised in a supply chain
 - IT service provision by several providers organised in a federation
- Special challenges for ITSM in federations:
 - Enforcing conformity against processes can be more difficult, as there is not single hierarchical chain of control.
 - Interfaces between activities and processes can be more complex and more difficult to control.



- FitSM-1 requires the IT service provider to identify the organisational structure supporting the delivery of services.
 - When identifying the organisational structure involved in delivering services, contact points for all parties involved shall be determined.
 - An understanding of the organisational structure supporting the delivery of services to customers is helpful to understand, where OLAs and UAs may be necessary to underpin service quality commitments made in SLAs.

Commonly used organisational methods and practices mapped to ITSM and the SMS



Method / practice	ITSM process / SMS aspect	Explanation / How to apply
Process orientation, process management	Overall SMS, all processes	ITSM is a process-oriented approach, all ITSM processes should be effectively managed
Project management	Overall SMS	Planning and implementing an SMS is usually considered a project, as it requires a coordinated approach and keeping track of the progress made in different areas. → The “SMS project” usually ends with the SMS being established up to a defined level of conformity and maturity (see later in this training).
Project management	Service portfolio management (SPM)	In the context of SPM, the services of the service portfolio are managed through their lifecycle. → Need to manage how new services are introduced or major changes to existing services are implemented

Commonly used organisational methods and practices mapped to ITSM and the SMS



Method / practice	ITSM process / SMS aspect	Explanation / How to apply
Project management	Change management (CHM)	<p>A (complex) change or a number of related changes may require a project that will control their planning, development and implementation. → Change triggers project</p> <p>Also, projects (such as a project to plan a new service) may trigger changes to implement certain (technical) aspects related to the service and its supporting service components and Cis → Project triggers change</p>

Commonly used organisational methods and practices mapped to ITSM and the SMS



Method / practice	ITSM process / SMS aspect	Explanation / How to apply
Risk management	Service availability & continuity management (SACM)	<p>SACM requires an understanding of the risk factors and risks of not achieving the required level of service availability and continuity.</p> <ul style="list-style-type: none">→ Apply risk management methods in SACM to assess risks→ Embed risk management related actions in the SACM process
Risk management	Information security management (ISM)	<p>ISM requires an understanding of the risk factors and risks of not achieving the required level of information security</p> <ul style="list-style-type: none">→ Apply risk management methods in ISM to assess risks→ Embed risk management related actions in the ISM process

Commonly used organisational methods and practices mapped to ITSM and the SMS



Method / practice	ITSM process / SMS aspect	Explanation / How to apply
Risk management	Change management (CHM)	<p>When assessing requested changes prior to their approval, risks, among other things, need to be identified and assessed.</p> <ul style="list-style-type: none">→ What are the risks related to the change?→ Apply risk management methods in CHM to assess risks→ Embed risk management related actions in the CHM process
Agile methodology, continuous integration / development	Release & deployment management (RDM)	<p>Planning and deployment of releases may be subject of continuous integration / development for some services or service component (e.g. software, applications).</p> <ul style="list-style-type: none">→ Consider agile methodologies when defining release and deployment strategies

Commonly used organisational methods and practices mapped to ITSM and the SMS



Method / practice	ITSM process / SMS aspect	Explanation / How to apply
Supply chain and sourcing management	Service portfolio management (SPM)	It is subject of the SPM process to identify the internal and external suppliers involved in delivering the services, including, as relevant, federation members. → Understand the service supply chains and sourcing decisions made for all services and service components
Supply chain and sourcing management	Supplier relationship management (SUPPM)	Suppliers are evaluated as part of the SUPPM process. → Apply supplier evaluation mechanisms in the SUPPM process
Supply chain and sourcing management	Service level management (SLM)	Underpinning agreements (UAs) with suppliers are established and the performance of related services and service components evaluated against UAs. → Apply control over suppliers by reflecting relevant requirements / commitments in UAs → Apply mechanisms for supplier audit, as relevant

Training agenda

- FitSM Foundation & Advanced wrap-up
- Standards, frameworks, concepts and practices related to IT service management
- **Leadership, governance, risk and compliance in IT service management**
- Planning and implementing services and IT service management (PLAN, DO)
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Requirements related to leadership, risk and compliance in ITSM according to FitSM-1



GR1 Top Management Commitment & Accountability (MCA)

REQUIREMENTS

- GR1.2 A **general service management policy** shall be defined that includes overall service management goals as well as a commitment to continual improvement and a service-oriented and process-oriented approach. The service management policy shall be approved and **communicated to relevant parties** by the SMS owner.

GR3 Scope & Stakeholders of IT Service Management (SCS)

REQUIREMENTS

- GR3.1 The **stakeholders of the IT services and the SMS** shall be identified and their needs and expectations analysed. Relevant legal, regulatory and contractual requirements shall be considered.
- GR3.2 The **scope of the SMS** shall be defined taking into consideration results from the stakeholder analysis.



Standards for lightweight
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Leadership and (IT) governance

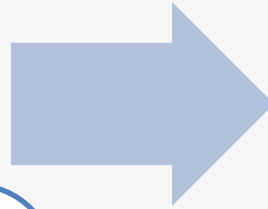
Topics

Stakeholder analysis and management, governing the strategic direction, defining the scope of the SMS, effective policies, effective communication

Stakeholder analysis and management

Typical stakeholders (interested parties) in ITSM / for an SMS:

- Customers
- Top management of the IT service provider
- Employees / staff of the IT service provider
- Internal suppliers and/or federation members
- External suppliers
- Authorities



Stakeholder analysis and stakeholder management

- Identify the stakeholders or stakeholder groups in sufficient granularity / level of detail (e.g. different types / groups of customers)
- Understand stakeholder requirements and expectations on ITSM and the SMS
- Understand how ITSM and the SMS will or may impact the stakeholders
- Derive actions

Governing the strategic direction: Strategy and strategic alignment



- A strategy is a plan or set of plans intended to achieve one or more objectives, usually over a long period.
- Types of strategies:
 - **Corporate / business strategy (customer level)**
 - Defines the long-term corporate / business goals
 - Sets out plans on how to achieve these goals
 - **IT or IT service strategy (IT service provider level)**
 - Defines the long-term goals related to delivering IT services and generating value through IT services for the customer / business
 - Sets out plans on how to develop the service portfolio and the SMS to achieve the goals
- The IT / IT service strategy should be aligned to relevant corporate / business strategies on the customer level.

Governing the strategic direction: Role of SPM

- The **most strategic process** in the FitSM process model is **service portfolio management (SPM)**, as it ...
 - covers the (long-term, strategic) development of the service portfolio;
 - reflects the (IT) service strategy by the services included and to be included in the service portfolio in the future;
 - triggers (strategic) projects that aim at developing new changes or major changes to existing services (as part of managing IT services through their lifecycle).

Defining the scope of the SMS (1/2)

- The scope of the SMS defines (and limits, as needed) what is subject to the ITSM policies and processes.
- The scope of the SMS may be limited to ...
 - certain IT services or service catalogues
 - certain technologies
 - certain (geographical) locations where IT services or service components are provided
 - certain organisations or parts of organisations
 - certain parts of a federation (in a federated environment)
 - service provision for specific (groups of) customers / users or customer locations

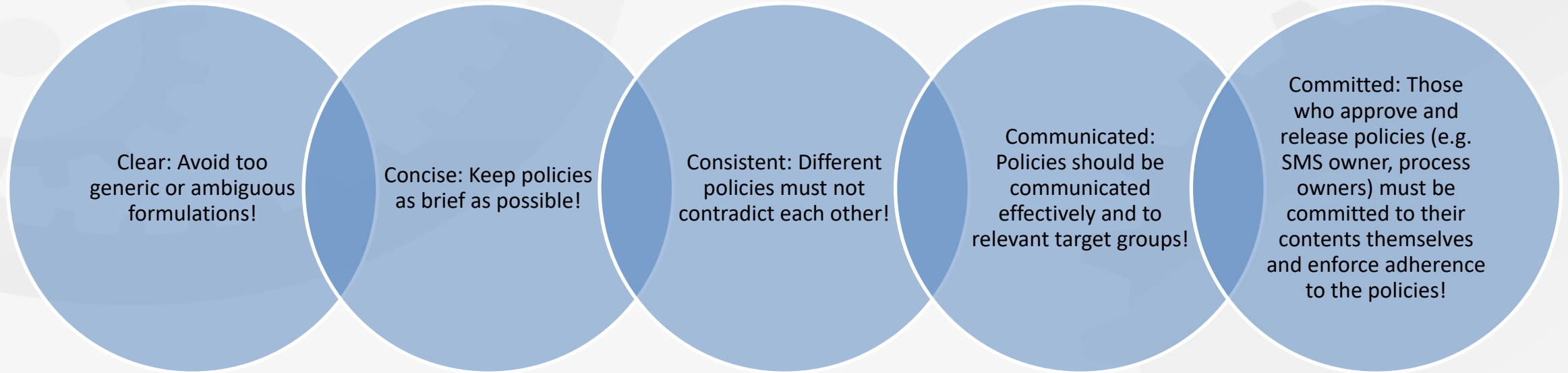
Defining the scope of the SMS (2/2)

- Generic scope statement:
 - *The SMS of [name of the service provider or federation] that delivers [technology] [service(s)] from [service provider location(s)] to [customer(s)] at [customer(s') location(s)]*
- Example:
 - *The SMS of the ACME IT service unit that delivers desktop and communication services from their data center site in Amsterdam to all ACME business units at locations in The Netherlands*

Effective policies

- Policies are one of the most important mechanisms for exerting governance in an organisation / federation and over a management system.
- General policies, e.g.:
 - Overall service management policy
 - Policy on continual improvement
 - ...
- Process-specific policies, e.g.:
 - Configuration management policy
 - Change management policy
 - Information security policies
 - ...

Effective policies: The 5 Cs



Effective policies: Enforcement

Create awareness

- Set up awareness campaign
- Communicate with sense of urgency
- Ensure easy access to policies

Monitor conformity

- Detect and follow-up on violations of policies
- Reasons for violations?
- Decide on disciplinary measures

Enable people / staff to act on the policy

- Transfer of knowledge / competence
- Provision of resources
- Motivation

Effective policies: Enforcement – disciplinary measures in case of policy violations



	Unintentional, first time	Unintentional, repeated	Deliberately, first time	Deliberately, repeated
Minor violation (low impact on effectiveness of ITSM)	Information / dialogue	Information / dialogue; consider topic-related training	Information / dialogue; consider motivational measures	Written warning; consider: <ul style="list-style-type: none"> • motivational measures • re-assignment of responsibilities
Significant violation (significant impact on effectiveness of ITSM)	Information / dialogue, consider topic-related training	Message / conversation; consider: <ul style="list-style-type: none"> • topic-related training • written warning • re-assignment of responsibilities 	Written warning; consider: <ul style="list-style-type: none"> • motivational measures • re-assignment of responsibilities 	Written warning; consider: <ul style="list-style-type: none"> • motivational measures • re-assignment of responsibilities • Further action

Effective policies: The general service management policy



- The service management policy is mostly a “political statement”.
- Typical / exemplary content in the service management policy:
 - *“The provision of IT services is aligned to customer and user needs.”*
 - *“We are committed to a process-oriented approach in managing IT services.”*
 - *“IT services and IT service management processes are subject to continual improvement.”*
- What you should **not** find in the service management policy:
 - *“The average resolution time of low-priority incidents has been reduced by 10%.”* → This is an observation related to a measurement (KPI) and could be subject to a KPI report.
 - *“We aim at a first response to user service requests and incident reports within 15 minutes during office hours.”* → Too specific goal; this should be included in a (default) SLA.

Effective communication: Planning (1/2)

- Planning communication can ensure that communication is carried out in a structured and professional manner.
- Typical aspects to be considered in communication planning:
 - Who informs?
 - Who is informed? → Consider target-group-specific communication!
 - About what? (What is the message / content?)
 - When and how often? (Timing, frequency)
 - By which means? (Communication medium, tools used)
 - How is the reception of the communication acknowledged / approved?
 - How is the success of the communication evaluated?

Effective communication: Planning (2/2)

- Examples of categories of communication media:
 - Mailing, memo
 - Instant message, chat
 - Meeting (on-site or remote)
 - Social event
- Examples of communication channels:
 - Broadcast communication (all)
 - Group communication (some)
 - Individual communication (exactly one)
- Examples of variations of acknowledgment:
 - No acknowledgment required
 - Acknowledged / approved, if no veto
 - Explicit acknowledgment / approval



Effective communication: Meetings

- Good meetings ...
 - are planned in advance
 - have a defined purpose and agenda
 - start on time
 - have all participants follow a common code of conduct, including:
 - Avoid distractions
 - No other activities in parallel
 - Let other people speak out
 - Don't hijack for other purposes than agreed
 - ...
 - end with the discussion of follow-up actions (“Who will do what by when?”)
 - end on time

Are you lonely?
Work on your own?
Hate to make decisions?
Rather talk about it than do it?

Then why not
HOLD A MEETING!

You can get to see
other people,
offload decisions,
feel important and
impress your colleagues.

MEETINGS
– the practical
alternative to work!



Standards for lightweight
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Risk management

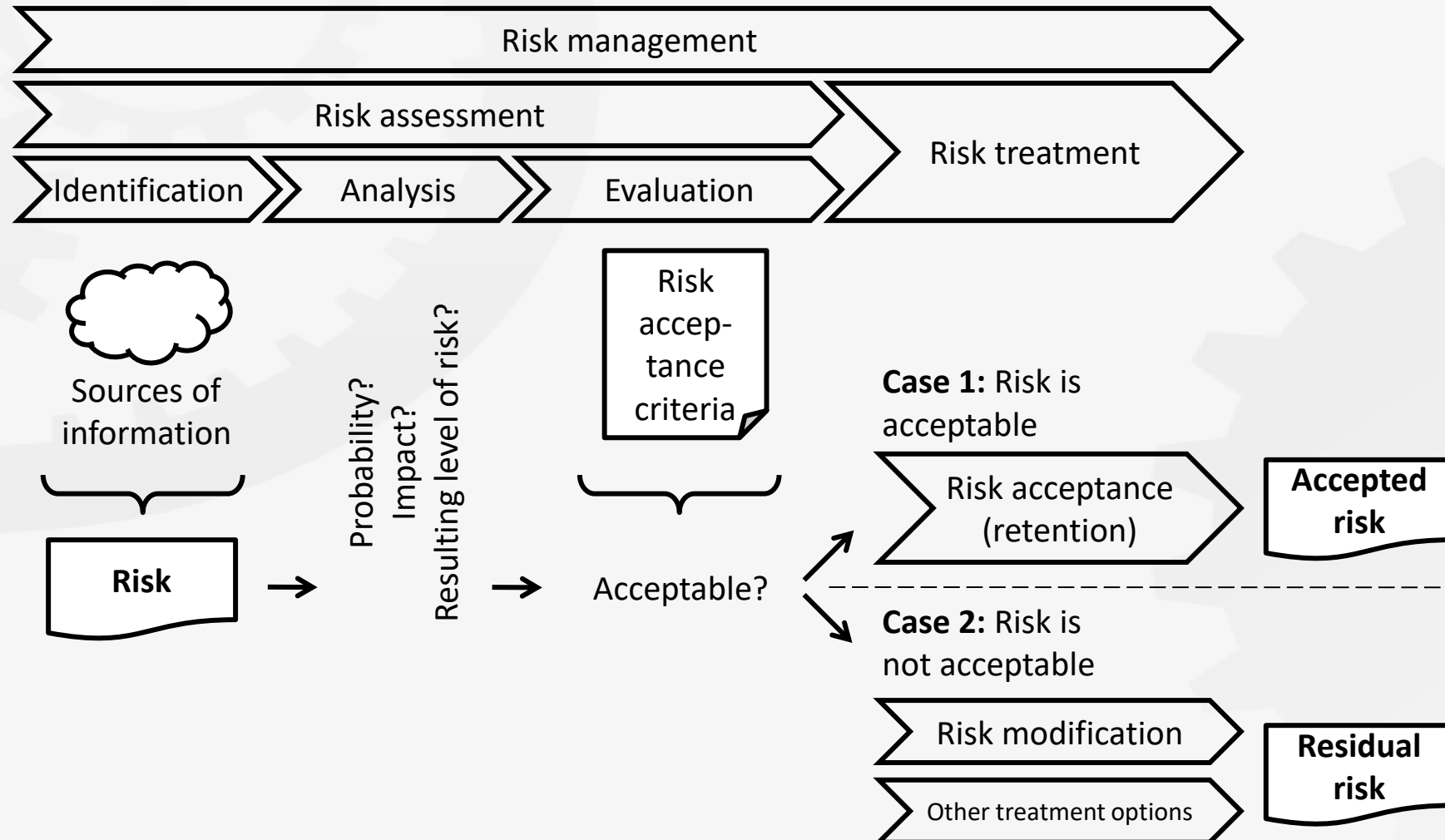
Topics

Risk and risk management, risk management process

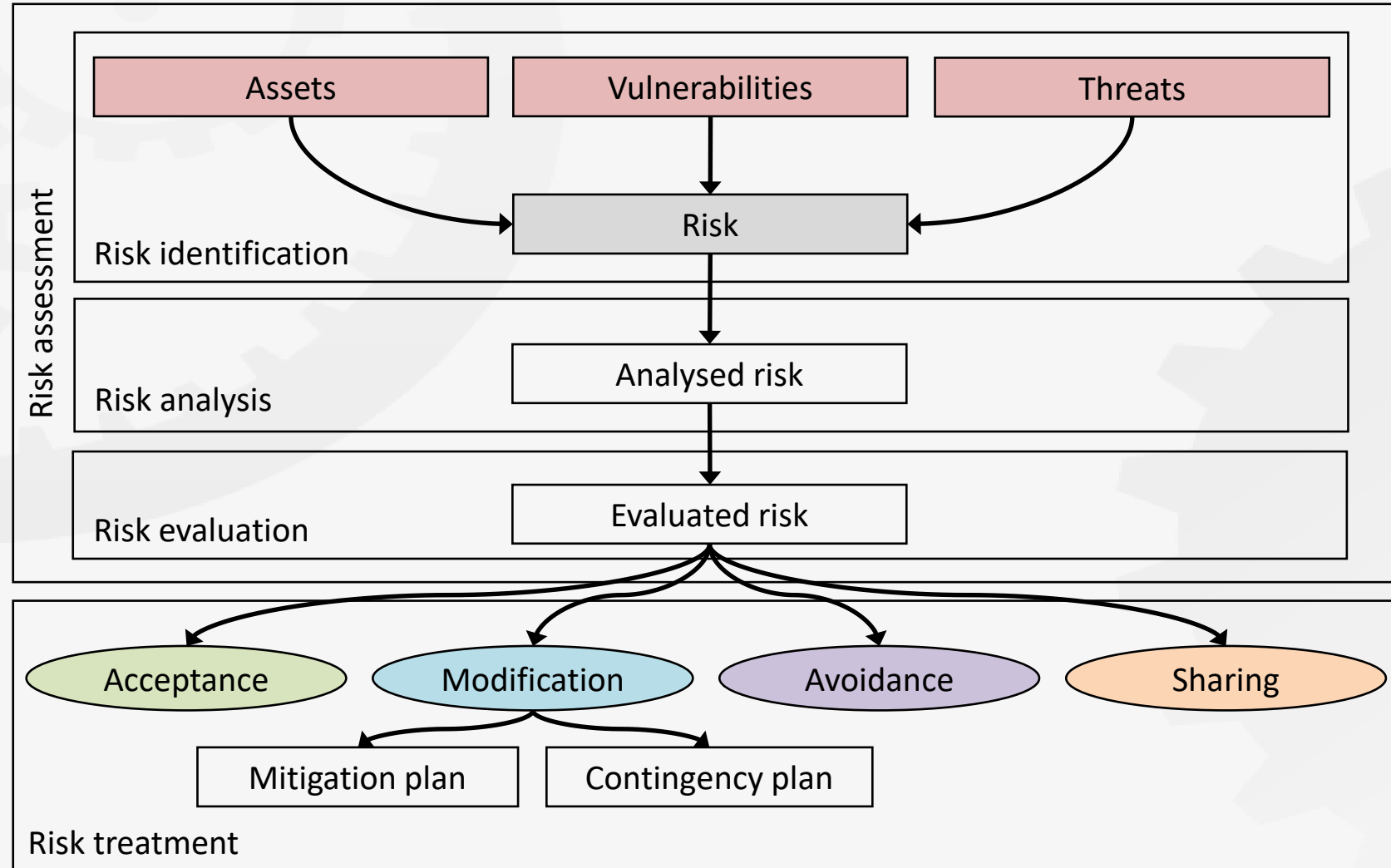
Risk and risk management

- Risk:
 - In general: Uncertainty in achieving goals
 - In ITSM: Possible negative occurrence that would have a negative impact on the service provider's ability to deliver agreed services to customers, or that would decrease the value generated through some service
- Risk management:
 - Risk assessment
 - Risk treatment

Risk management process



Risk management process: Inputs and risk treatment strategies



Training agenda

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Requirements related to PLAN, DO according to FitSM-1

GR4 Planning IT Service Management (PLAN)

REQUIREMENTS

- GR4.1 A **service management plan** shall be created and maintained. It shall include:
 - Goals and timing of implementing or improving the SMS and the related processes
 - **Roles and responsibilities**
 - **Training** and **awareness** activities
 - **Technology (tools)** to support the SMS
- GR4.2 Any process-specific plan shall be aligned to the overall service management plan

GR5 Implementing IT Service Management (DO)

REQUIREMENTS

- GR5.1 The service management plan shall be implemented.
- GR5.2 Within the scope of the SMS, the defined service management **processes shall be followed in practice**, and their application, together with the adherence to related policies and procedures, shall be **enforced**.



Standards for lightweight
IT service management

Service and service management planning

Topics

Service management plan, planning new or changed services, business case, service acceptance criteria

Two main aspects



Planning the service management system (SMS)

- Service management plan



Planning new or changed services

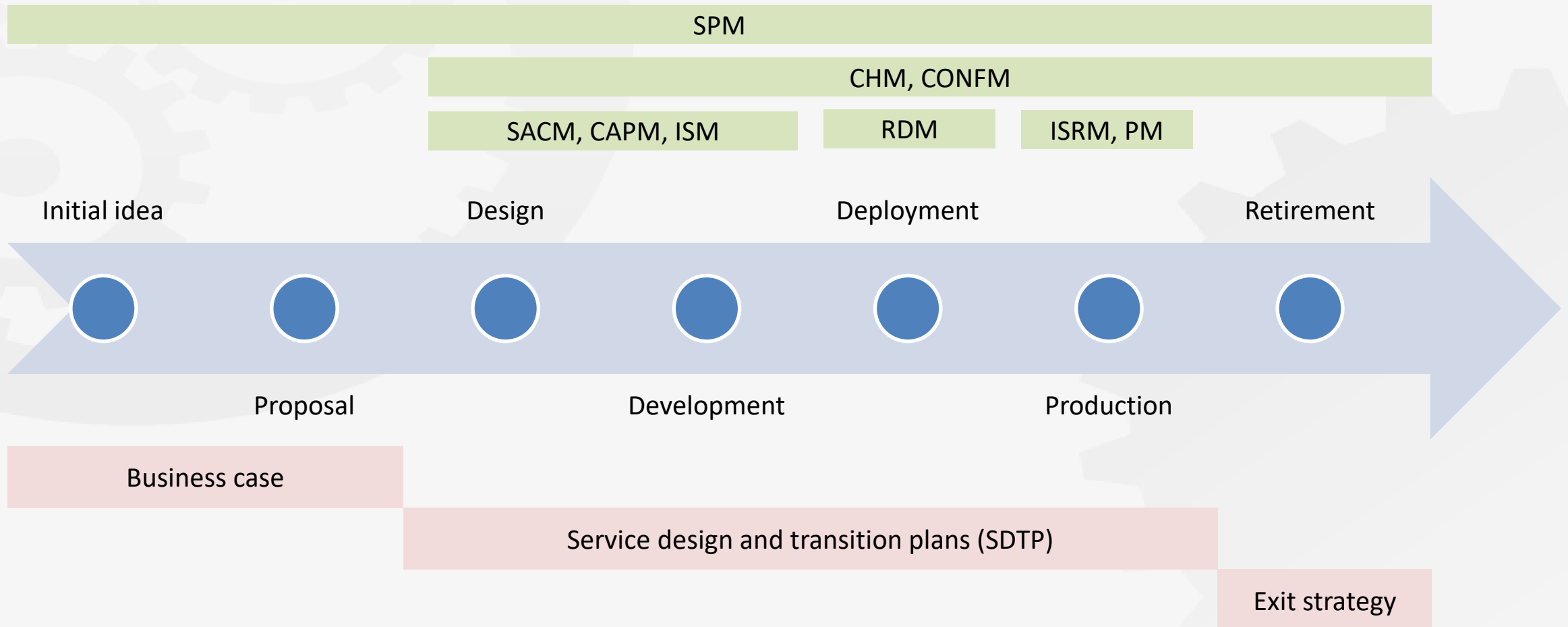
- Business case
- Service specification
- Service design / development project

Service management plan: Possible structure / content



- Status quo of the SMS (e.g. based on self-assessment, reviews, audits)
- Overall goals for the period covered by the plan, including:
 - Identification of focus areas / high-priority topics
 - Definition of milestones and timing for achieving goals
- Current and future ITSM-related core roles and responsibilities
- Planned ITSM-related training and awareness activities
- Current and future tool support for ITSM
- Work packages and tasks / activities
 - e.g. work package “Setup SLM process”
 - e.g. tasks / activities according to FitSM-2 (sections on “initial process setup”)
- References to other relevant plans (including task- or process-specific plans)

Planning new or changed services: Typical service lifecycle phases



Business case for a service

- A business case is a conceptual tool to support decision making, often used to justify a significant item of expenditure.
- General recommendations:
 - Create a business case for every service
 - Existing services (already in your portfolio)
 - New services (to be included in your portfolio)
 - Services undergoing major change
 - Keep it simple
 - When defining assumptions, identifying risks and calculating costs consider different scenarios / situations (such as best case, worst case)
- The business case for a service should help understand the value proposition of this service

Business case for a service: Exemplary structure

Part 1: The customer perspective				
Status quo / current situation (baseline)		Describe the situation without the new or changed service, including potential pain points the service is intended to resolve or unexploited opportunities for the customer(s).		
Expected customer and user benefits / value proposition		Describe how the new or changed service alleviates specific user pains and/or supports its intended customer(s) to exploit new opportunities.		
Part 2: The service provider perspective				
		Best case	Expected case	Worst case
Demand assessment				
Assumptions and constraints				
Expected organisational impact on the service provider				
Expected financial impact	Expenses			
	Revenue			
Risks				

Business case for a service: Financial impact

- Expenses: Consider the total cost of ownership, i.e.:
 - Direct and indirect costs for the service
 - Variable and fixed costs
 - Apportioning of shared costs to the service
 - Costs through all service lifecycle phases (including design / development, operation and termination / removal from operation)
- Revenue: Consider any income, e.g. from ...
 - Charging
 - Funding

Business case for a service: Constraints

- Legal requirements / constraints, including regulation
- Contractual requirements / constraints
- Policies
- Any other forms of compliance / conformity issues
- Monetary requirements / constraints
- People / staffing / competence requirements / constraints
- Any other resource constraints

Service acceptance criteria

- Service acceptance criteria can be helpful to support a smooth transition of a new or changed service to the live environment by ...
 - creating a common understanding between the service provider and customers / other stakeholders of expectations regarding the new / changed service;
 - avoiding conflicts between the service provider and customers / other stakeholders by clearly stating the conditions under which the new or changed service is deployed into the live environment;
 - Creating a basis for quality assurance during the design / development and transition phase.

Service acceptance criteria: Categories and examples

Functional	<ul style="list-style-type: none">• The service supports the following use cases as specified: (...)
Technical	<ul style="list-style-type: none">• The client runs on the following operating systems: (...)
Information security and data protection-related	<ul style="list-style-type: none">• All data transmitted over public networks encrypted according to encryption standard (...)
Usability-related	<ul style="list-style-type: none">• SSO supported, user experience guidelines fulfilled as specified: (...)
Organisational	<ul style="list-style-type: none">• Support staff and users have been trained, (...)
Availability, continuity and performance-related	<ul style="list-style-type: none">• Service continuity plans have been updated, load test performance meets service level target (...)



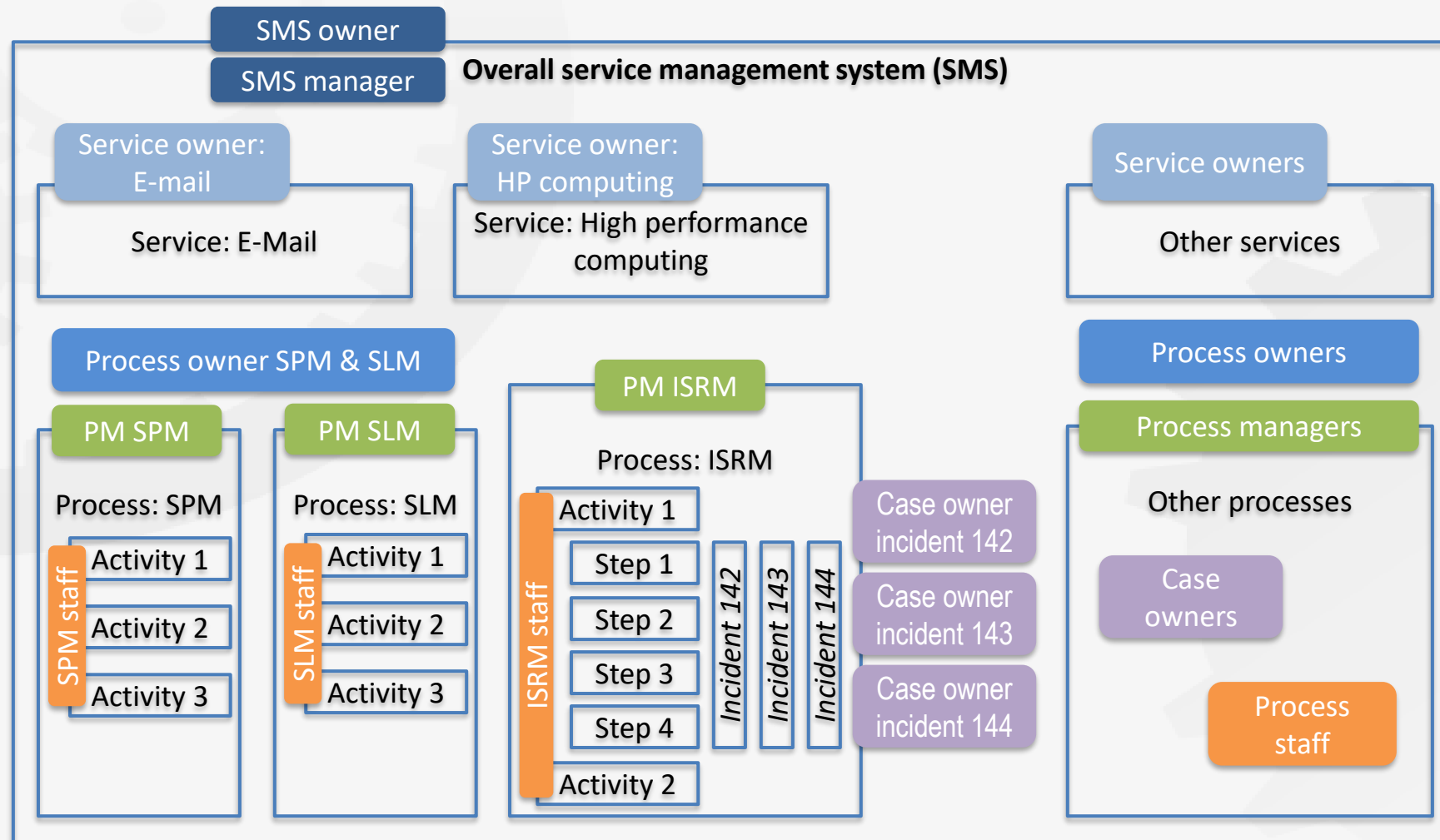
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IT service management

Roles, responsibilities and competences in ITSM

Topics

FitSM role model, generic and specific roles, RACI

The FitSM role model: Visualisation



The FitSM role model: Generic and specific roles

	Description	ITSM example	Non-ITSM example
Generic role	A conceptual class of role which is instantiated in a specific context to create a specific role	Process manager	Flight captain
Specific role	A concrete role which can be assigned to a person or group in order to give this person or group the responsibility for something	Process manager for the incident and service request management process of an IT service provider	Flight captain for flight XX123 from Munich to Brussels

Generic roles according to FitSM-3



- SMS owner
- SMS manager
- Process owner (SMS owner could be the process owner for all or most processes)
- Process manager
- Case owner
- Member of process staff
- Service owner

Planning and assigning responsibilities with RACI (1/3)

- The RACI matrix is a concept to describe roles and responsibilities within a specific context in a simplified and easy to grasp manner.

	Role 1	Role 2	Role 3	...
Activity 1	A	R	I	
Activity 2	AI	C	R	
Activity 3	AC	R	C	
...				

Planning and assigning responsibilities with RACI (2/3)

- The four letters R, A, C and I stand for the various generic forms of responsibility or participation:
 - **Responsible:** A person or role actually executing / performing / carrying out a process or activity
 - **Accountable:** The person or role governing a process or activity by defining and approving goals and providing or acquiring resources and capabilities required so that the process or activity can be carried out effectively
 - **Consulted:** A person or role whose expertise or other kind of contribution is needed to carry out a process or activity without this person being responsible for the process or activity him-/herself
 - **Informed:** A person or role who needs to be kept informed about the status and/or results of a process or activity

Planning and assigning responsibilities with RACI (3/3)

- Every row should contain exactly one “A”.
 - The rationale behind this rule is that there should be clear accountability for every activity.
 - At the same time, it might lead to confusion and lack of individual commitment or enforceability, if two or more persons or roles are accountable at the same point in time.
- Every row should contain at least one “R”.
 - There should be no activities for which the responsibilities of executing them are undefined.
- It should be avoided as far as possible that the same person or role is accountable and responsible at the same time, i.e. for the same activity.

Training and awareness

- The effectiveness of ITSM depends on the people (at least as much as on the processes and technology)
- Enable people by effective means of ...
 - Awareness (Why?)
 - Role-based education and training (How?)
 - Technical skills
 - Personal skills / soft skills
 - Experience
- Manage competence by ...
 - setting up a training and awareness program (regular update, part of the service management plan);
 - maintaining information (records) on competence, education, training and experience.



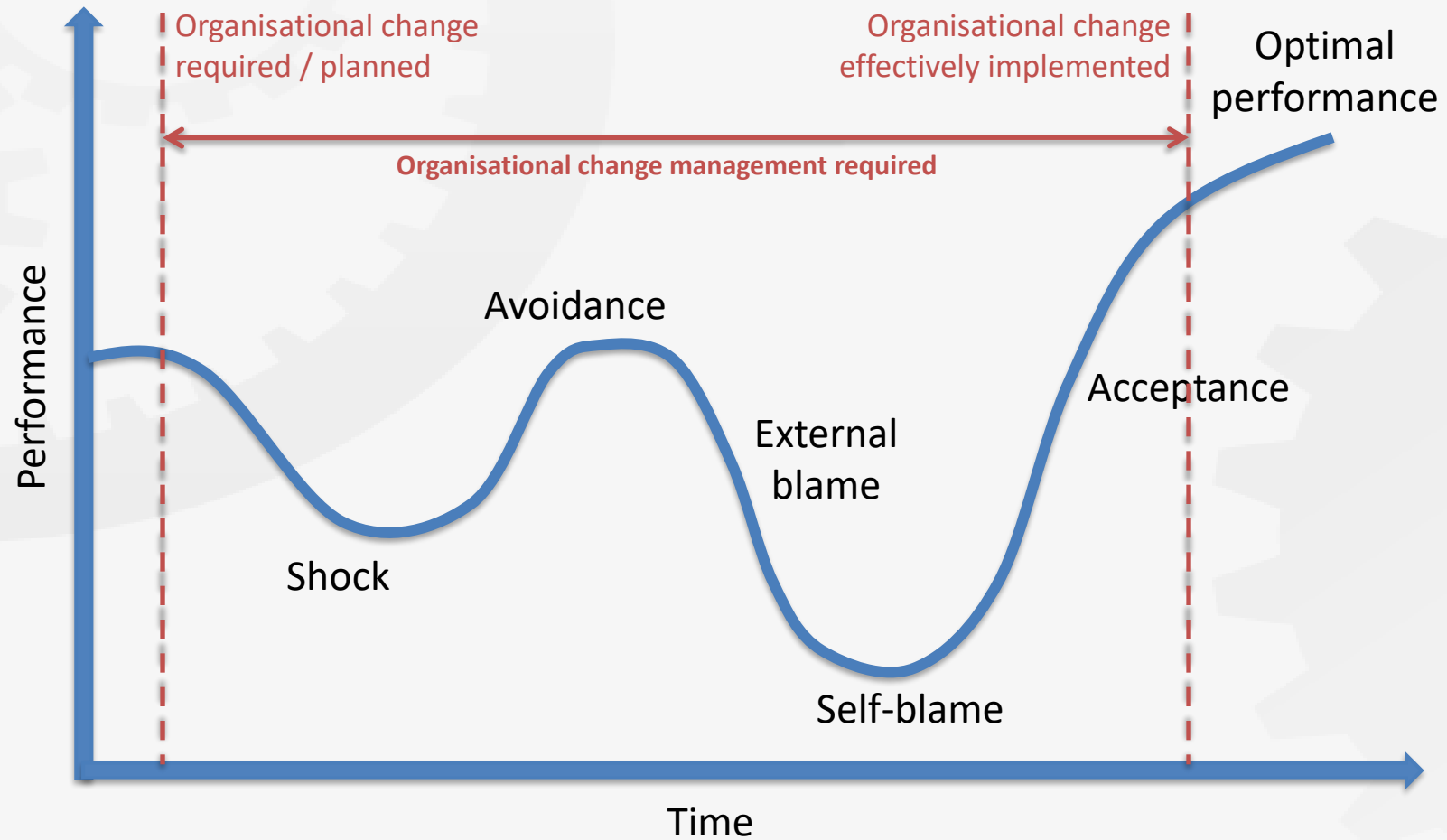
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Organisational change

Topics

Emotional cycle of change, managing organisational change

Emotional cycle of change



Managing organizational change

1. Create a sense of urgency
2. Establish a guiding coalition
3. Develop a vision and strategy
4. Communicate the vision
5. Empower people to act on the vision
6. Create quick-wins
7. Consolidate achievements and create more change
8. Institutionalise the organisational change in the organisation's culture

1. Create a sense of urgency

What to do (core challenge)

- Get people out of the bunker
- Create initial awareness and organisational readiness

What to achieve (desired behaviour / situation)

- People start talking about it and motivating each other

What to avoid (risks)

- No (clear) commitment from top management
- Lip services and smoke grenades

How to move it forward (recommended actions)

- Update policies and plans
- Start communicating

2. Establish a guiding coalition

What to do (core challenge)

- Get the right people in place
- Ensure they are committed to the change and respected by others

What to achieve (desired behaviour / situation)

- A powerful group influences others to accept the change.
- Opposing to the change means being against the coalition.

What to avoid (risks)

- Lack of trust and confidence in the coalition

How to move it forward (recommended actions)

- Identify skilled and respected individuals from major stakeholder groups

3. Develop a vision and strategy

What to do (core challenge)

- Get the guiding coalition to develop a clear vision and strategy
- As part of the strategy, address the people factor

What to achieve (desired behaviour / situation)

- A clear vision and strategy has been developed by the guiding team

What to avoid (risks)

- Only focus on numbers (finance) and technology
- Too much consultant speak, too little concrete orientation

How to move it forward (recommended actions)

- Set up a strategic plan taking into account the people, process and technology factors

4. Communicate the vision

What to do (core challenge)

- Address all relevant stakeholder groups and make them become a part of the organisational change

What to achieve (desired behaviour / situation)

- People start buying in to the change and behave accordingly

What to avoid (risks)

- Too little, too late communication
- Communication not well aligned to the needs of the audience

How to move it forward (recommended actions)

- Set up a communication plan, based on stakeholder identification
- Communicate according to the plan

5. Empower people to act on the vision

What to do (core challenge)

- Remove the obstacles that would stop people from acting towards the vision

What to achieve (desired behaviour / situation)

- More people feel able to act on the vision.

What to avoid (risks)

- Too many (notorious) objection raisers left exerting influence on others.

How to move it forward (recommended actions)

- Launch an awareness campaign, motivate people
- Provide professional training (role-based)

6. Create quick-wins

What to do (core challenge)	What to achieve (desired behaviour / situation)	What to avoid (risks)	How to move it forward (recommended actions)
<ul style="list-style-type: none">• Produce enough short-term achievements quickly enough to energize and motivate the change helpers, enlighten pessimists and build momentum	<ul style="list-style-type: none">• Momentum builds, while fewer people resist the organisational change• Cynics and pessimists are defused	<ul style="list-style-type: none">• Quick-wins, although they have been achieved, are not visible enough	<ul style="list-style-type: none">• Prioritize tasks in support of quick-wins• As soon as achievements have been realised, communicate broadly

7. Consolidate achievements and create more change

What to do (core challenge)	What to achieve (desired behaviour / situation)	What to avoid (risks)	How to move it forward (recommended actions)
<ul style="list-style-type: none">• Continue with the same energy and effort after first achievements have been made	<ul style="list-style-type: none">• People remain motivated and energized.• Further change is pushed forward towards the overall vision.	<ul style="list-style-type: none">• The momentum gets lost, people rest on their achievements.• Resources are taken away after high-priority quick-wins were achieved.	<ul style="list-style-type: none">• Keep up top management commitment and involvement• Keep up planning and communicating

8. Institutionalise the organisational change in the organisation's culture



What to do (core challenge)	What to achieve (desired behaviour / situation)	What to avoid (risks)	How to move it forward (recommended actions)
<ul style="list-style-type: none">• Create effective supporting structures as the roots for new ways of operating	<ul style="list-style-type: none">• New behaviour continues	<ul style="list-style-type: none">• Fall-back to “old traditions”	<ul style="list-style-type: none">• Refresh awareness from time to time• Monitor, evaluate and further improve on an ongoing basis



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Tooling

Topics

Types of ITSM tools, mapping to ITSM processes

- Goals of effective tool support in ITSM:
 - Support process execution and achievement of goals → effectiveness
 - Speed-up process execution → efficiency
 - Ensure processes are executed as required / defined → conformity
 - Ensure traceability of process execution → transparency
- Keep in mind: A tool will never replace / substitute a process!

Types of ITSM tools



Workflow
support

Documentation
management

Collaboration
support

Configuration
management

Communication
and e-learning

Monitoring

Types of ITSM tools mapped to the FitSM process model



- Workflow support → ISRM, PM, CHM
- Documentation management → All processes / entire SMS
- Collaboration support → SPM, SLM, CRM, SUPPM, RDM
- Configuration management → CONFM
- Communication and e-learning → All processes / entire SMS
- Monitoring → SACM, CAPM, ISM, SLM, SRM

Training agenda

- FitSM Foundation & Advanced wrap-up
- Standards, frameworks, concepts and practices related to IT service management
- Leadership, governance, risk and compliance in IT service management
- Planning and implementing services and IT service management (PLAN, DO)
- **Monitoring, reviewing, auditing and improving services and IT service management (CHECK, ACT)**



Requirements related to CHECK, ACT according to FitSM-1

GR6 Monitoring & Reviewing IT Service Management (CHECK)

REQUIREMENTS

- GR6.1 The effectiveness of the SMS and its service management processes shall be **measured** and evaluated based on suitable **key performance indicators** in support of defined or agreed goals.
- GR6.2 **Assessments** or **audits** of the SMS shall be conducted at planned intervals to evaluate the **level of maturity** and **conformity**.

GR7 Continually Improving IT Service Management (ACT)

REQUIREMENTS

- GR7.1 **Nonconformities** and deviations from goals shall be **identified** and **actions** shall be taken to prevent them from recurring.



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Compliance, conformity, effectiveness & efficiency

Topics

Conformity, compliance, effectiveness, efficiency

Conformity, effectiveness and efficiency (1/2)

- **Conformity (compliance):**

- Question: Are requirements fulfilled and specifications met?
- Examples for sources of requirements: legislation, policies, defined processes and procedures, ...

- **Effectiveness:**

- Question: Are intended goals / objectives achieved?
- Examples of goals to be achieved: service level targets (from SLAs), operational targets (from OLAs), process goals, ...

- **Efficiency:**

- Question: Given the achieved level of effectiveness, is the level of consumption of resources appropriate?
- Examples of resources: financial resources (money), human resources (manpower), technical resources (capacities), ...

Conformity, effectiveness and efficiency (2/2)



Efficiency

- The consumption of financial, human and technical resources is being monitored, evaluated and optimized.
- Resource consumption is appropriate for the achieved level of effectiveness.

Effectiveness

- Goals connected to policies and processes are actually achieved.
- Services are provided according to agreed SLAs.

Conformity

- Policies providing overall direction and rules are adhered to.
- Processes and procedures are carried out according to specifications in practice.

Conformity vs. Compliance

- Sometimes, a distinction is made between conformity and compliance:
 - **Conformity:** Adherence to internal regulations and requirements, such as they are defined by ...
 - Policies
 - Processes
 - Procedures
 - **Compliance:** Adherence to external requirements, such as:
 - Laws
 - Other legal and regulatory requirements
 - Standards
 - Contracts



Standards for lightweight
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Measurements

Topics

SMART, critical success factors (CSFs) and key performance indicators (KPIs)

SMART measurements



Specific

- targeting an area of improvement, indicative of the level achievement of a critical success factor

Measurable

- defined way measure and/or calculate the KPI

Achievable

- target areas for KPIs are achievable

Relevant

- matters, unexpected results warrant further investigation

Time-framed

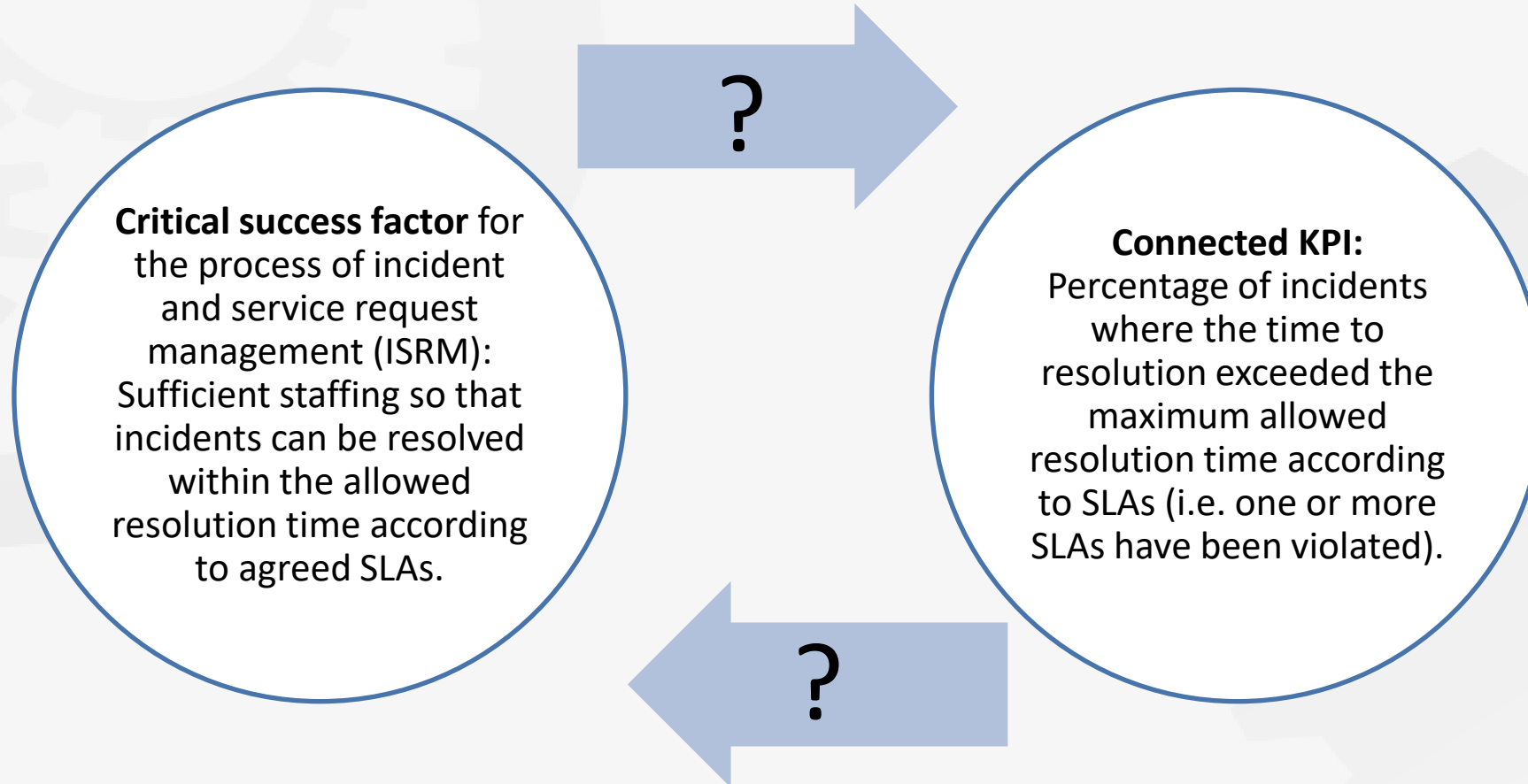
- has defined measurement interval

Critical success factors and key performance indicators



- Critical success factor (CSFs): Key area where “things must go right”, for overall goals to be achieved
- Key performance indicator (KPI): Metric that is used to track the performance, effectiveness or efficiency of a service or process
 - Note: KPIs are generally important metrics that will be aligned to critical success factors and important goals. KPIs are therefore a subset of all possible metrics, intended to allow for monitoring a service or process.
- Metric: Something that is or can be measured
- A KPI can be based on one or more metrics and should be related to one or more CSFs.

Critical success factors and key performance indicators: Example (1/2)



Critical success factors and key performance indicators: Example (2/2)



Month	Value
Jan	20%
Feb	19%
Mar	19%
Apr	17%
May	16%
Jun	11%
Jul	8%
Aug	3%
Sep	4%
Oct	5%
Nov	5%
Dec	5%

KPI: Percentage of incidents where the time to resolution exceeded the maximum allowed resolution time according to SLAs (i.e. one or more SLAs have been violated).



Based on these numbers, what would be **valid conclusions**?



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Auditing and assessment and practices

Topics

Audit, ISO 19011, principles of auditing, audit types, important terms, audit evidence and audit findings, roles related to audits, managing an audit program, conducting an audit

What is an audit?



An **audit** is a ...

systematic, independent and
documented process

for

obtaining audit evidence and
evaluating it objectively

to

determine the extent to which the
audit criteria are fulfilled.

- Major points to be considered when preparing and conducting an audit:
 - Systematic = clear audit plan
 - Independent = auditor does not audit his/her own work
 - Documented = defined process + records of audit activities performed
 - Obtain audit evidence = documentation reviews + interviews + observation
 - Evaluate audit evidence = make findings
 - Determine the extent to which audit criteria are fulfilled = draw conclusions

The ISO 19011 standard

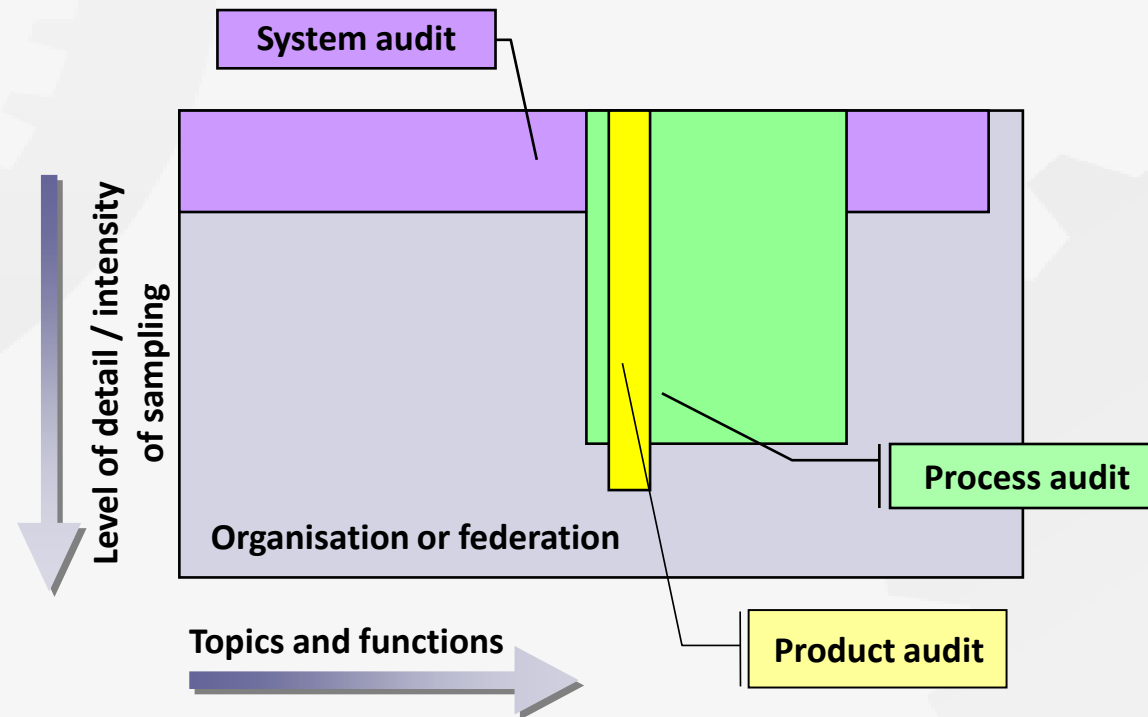
- ISO 19011 is an International Standard that covers **guidelines for auditing management systems**
- Subjects / content:
 - Terms and definitions related to auditing
 - Principles of auditing
 - Process of managing an audit program
 - Process of conducting management system audits
 - Competence and evaluation of auditors
- Who can apply it? Any organisation operating and maintaining a management system (including quality management systems or service management systems)

Principles of auditing according to ISO 19011

Integrity	Fair presentation	Due professional care	Confidentiality	Independence	Evidence-based approach	Risk-based approach
Auditors are competent, act ethically and with honesty	Audit results are truthful and accurately reflect audit activities	Audits are conducted in a professional way, following the audit process	Protect information processed during an audit from unauthorised disclosure	Avoid any bias or conflict of interest	Process verifiable audit evidence to support reproducible audit results	Focus on matters relevant to achieve defined objectives
Auditors are sensitive with respect to situations impacting their judgement.	Ambiguities and conflicts are reported	Auditors understand the importance of their work	Auditors do not use information from audits to their personal advantage	Auditors do not audit their own work or area of responsibility	Ensure sufficient sampling and avoid assumptions	Reduce risk of not achieving the goals of the audit

Audit types (1/2)

- System audit
- Process audit
- Product audit



Audit types (2/2)

- Internal audit:
 - Conducted under the direct responsibility and control of an organisation or federation within their own boundaries
 - Carried out by an internal or external auditor
- External audit:
 - Conducted under the responsibility and control of an external organization
 - Carried out by an external auditor
- Certification audits (e.g. against FitSM-1, ISO/IEC 20000-1) are always external audits.

Important terms

- Audit program: Entirety of audits planned on a given subject matter for a defined period of time (e.g. 3 years)
- Audit plan: Description and schedule of the activities, arrangements and logistics for one specific audit
- Audit scope: Extent and boundaries of an audit (e.g. defining the organisations, units, locations, management systems, processes etc. that are subject to the audit)
- Audit criteria: Requirements against which audit evidence are compared
- Audit evidence: Verifiable fact or information which is relevant to the audit criteria
- Audit finding: Result of comparing and evaluating audit evidence against audit criteria
- Audit conclusion: Overall outcome of an audit, after consideration of the audit objective and all audit findings

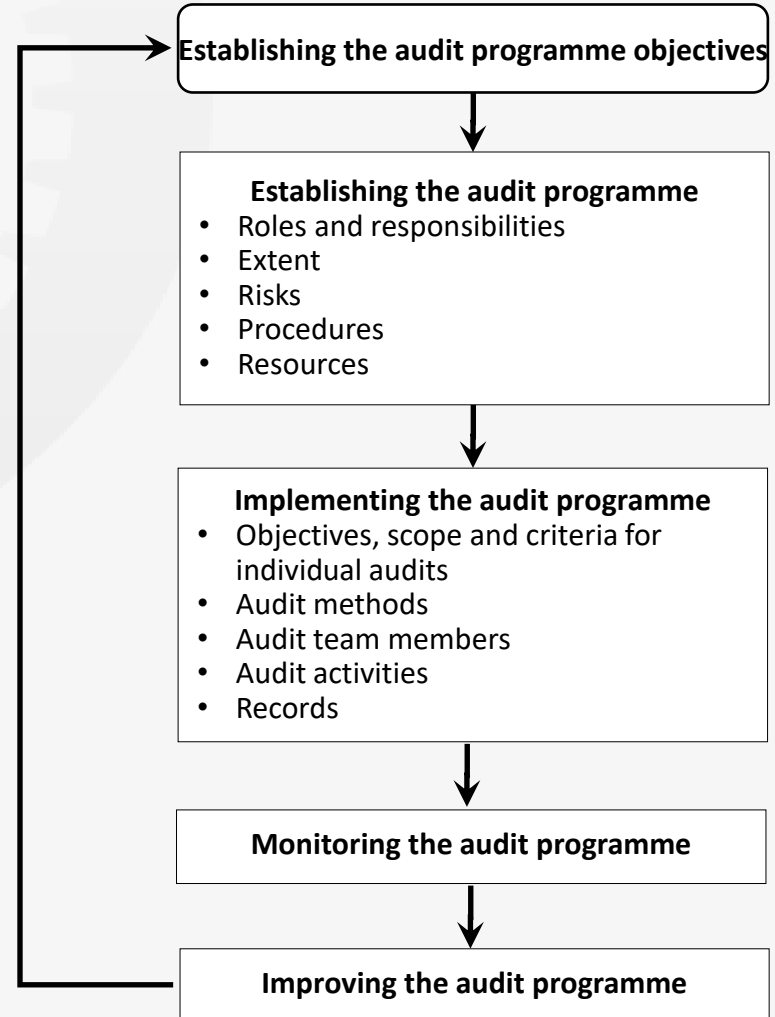
Audit evidence and audit findings

- Typical types of audit evidence:
 - Documentation (including records of activities performed)
 - Interviews
 - Observations of activities or facts
- Typical scheme for audit findings
 - Conformity (C)
 - Nonconformity (NC)
 - Minor nonconformity
 - Major nonconformity → e.g. full process not in place, effectiveness of the management system in danger
 - Opportunity for improvement (OFI)
 - Positive aspect (PA)

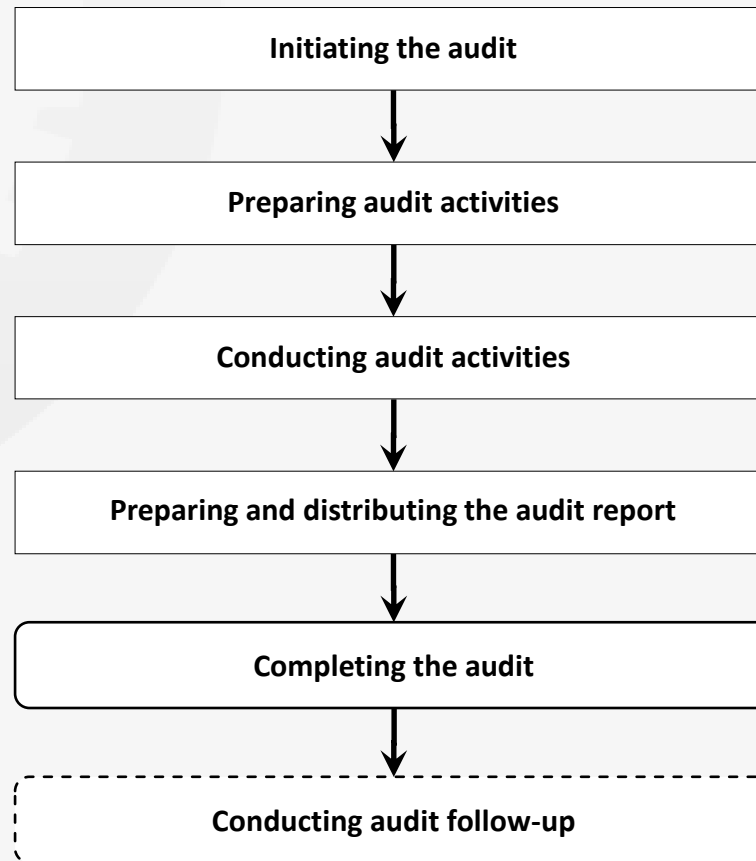
Roles related to an audit



Managing an audit program



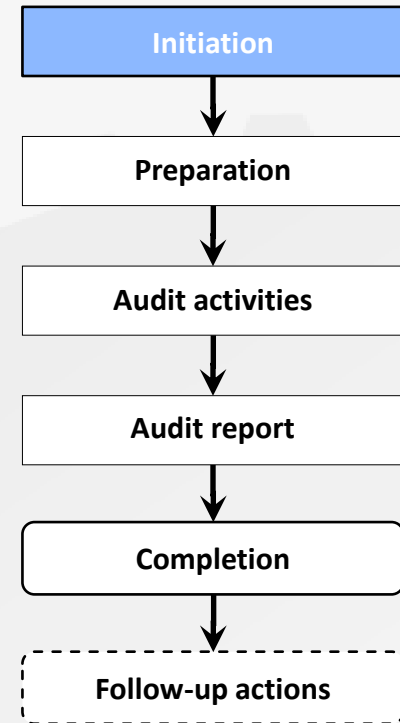
Conducting an audit





Initiating the audit

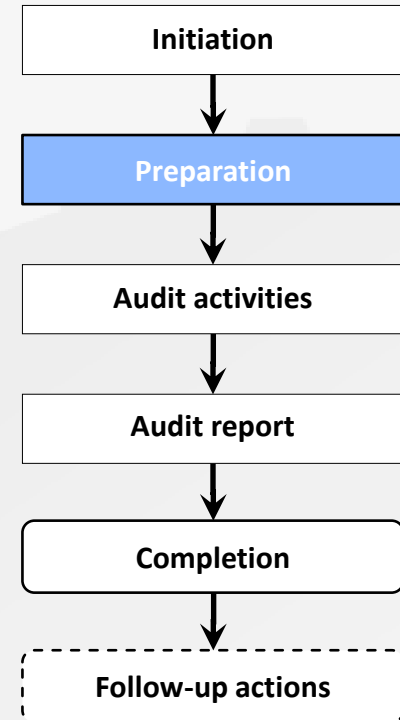
- Establish initial contact with the auditee
 - Contact may be formal or informal
 - Responsible: lead auditor (audit team member)
- Determine the feasibility of the audit
 - Sufficient and appropriate information for planning and conducting the audit?
 - Adequate cooperation from the auditee?
 - Sufficient time and resources?





Preparing audit activities (1/2)

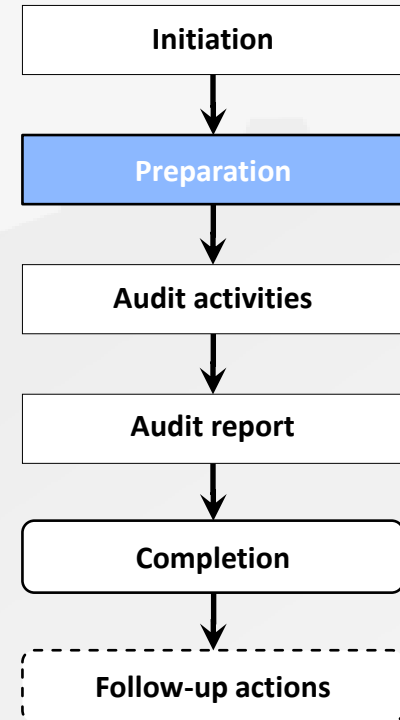
- Perform document review in preparation for the audit
 - Documentation of the management system (e.g. policies, process descriptions)
 - Records of activities performed
- Assign work to the audit team
 - Define and assign roles in the audit team
 - Consider the level of competence and experience of each auditor when assigning work
- Create an audit plan (see next slide)
- Prepare working documents





Preparing audit activities (2/2)

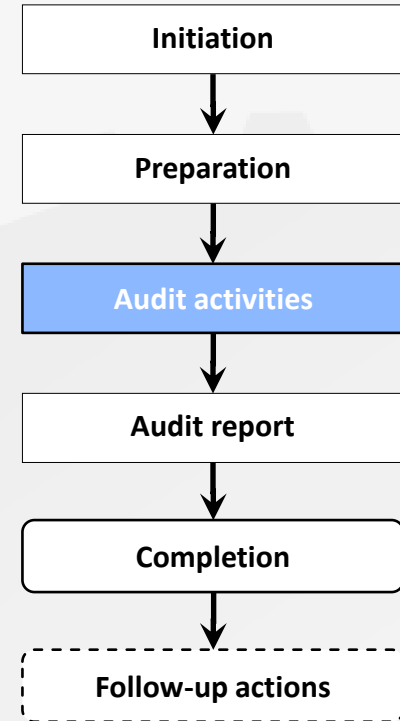
- Typical contents of an audit plan:
 - Audit objectives
 - Audit scope
 - Audit criteria
 - Logistics (locations, dates, times) of audit activities
 - Audit methods to be used
 - Roles and responsibilities of the audit team members
- Examples of working documents:
 - Checklists
 - Forms to record audit evidence (including minutes of interviews) and findings





Conducting audit activities (1/3)

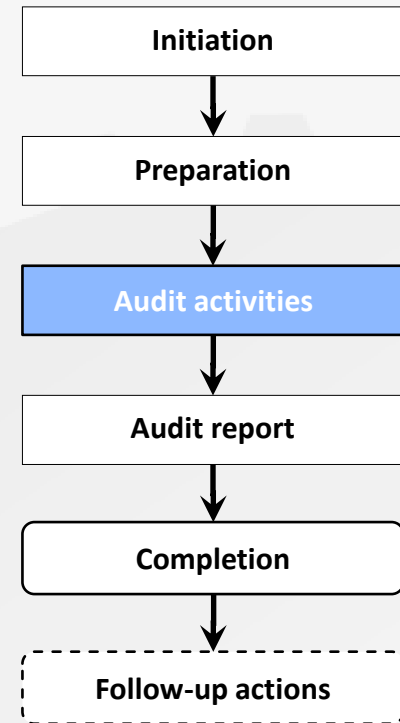
1. Conduct the opening meeting
2. Assign roles of guides and observers
3. Collect and verify information / audit evidence
4. Generate audit findings
5. Prepare audit conclusions
6. Conduct the closing meeting





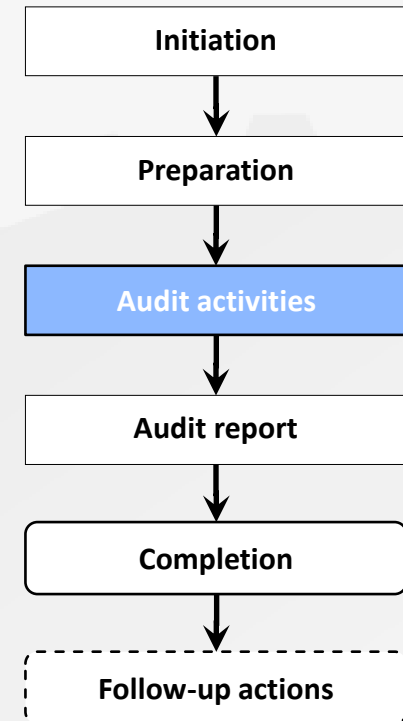
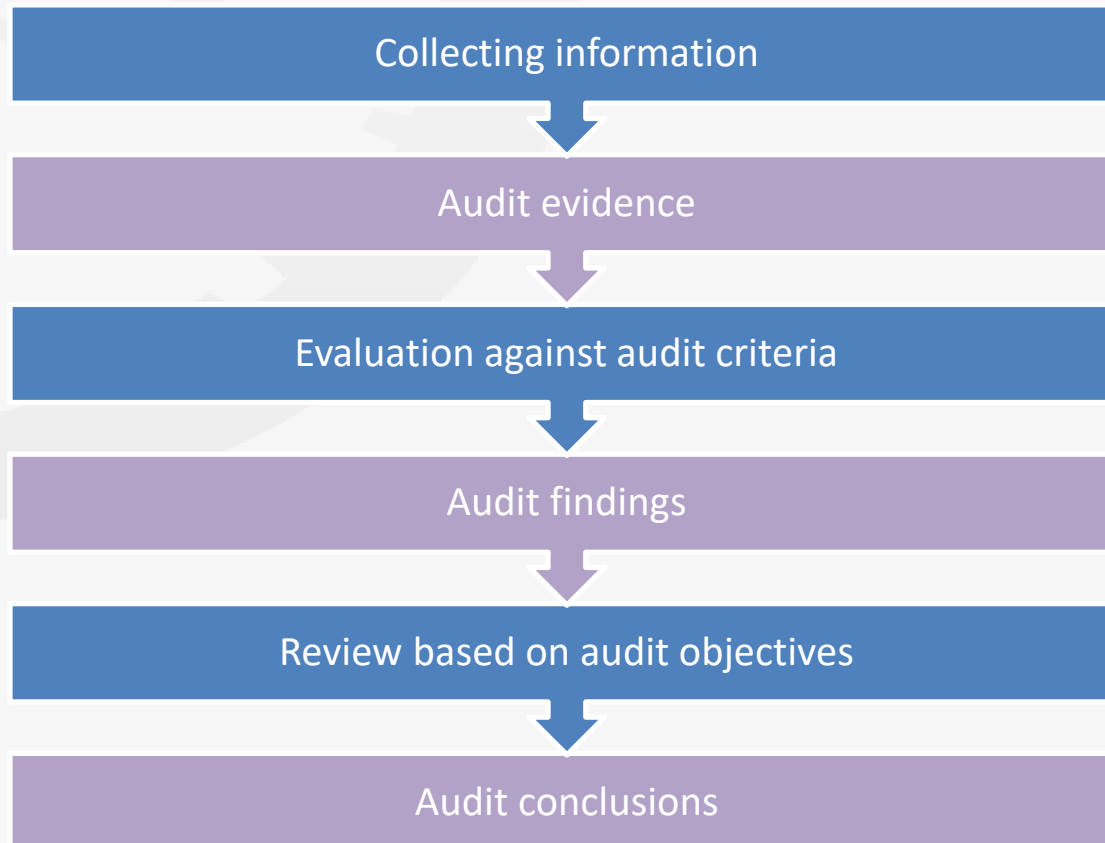
Conducting audit activities (2/3)

- Methods of collecting and verifying information / audit evidence:
 - On-site document reviews
 - Focus: Completeness, correctness, consistency and currentness of documentation
 - Important: Adequate sampling
 - Interviews
 - Ensure availability of the “right” persons
 - Carefully select questioning techniques (e.g. open vs. closed questions)
 - Observations of facts
 - Avoid disturbing or interrupting on-site operations (e.g. production, service delivery)



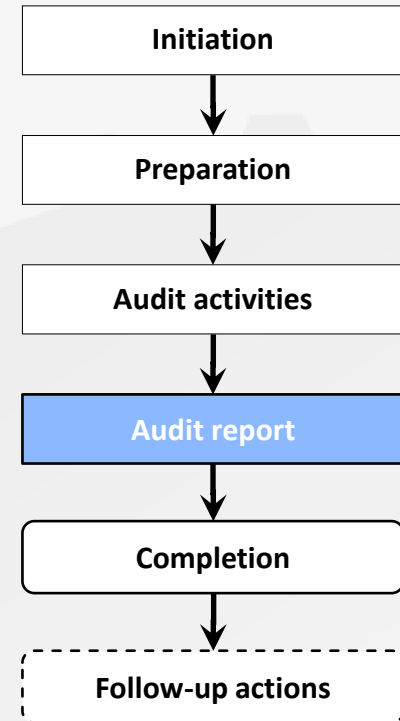
Conducting audit activities (3/3)

- The typical audit flow:



Preparing and distributing the audit report

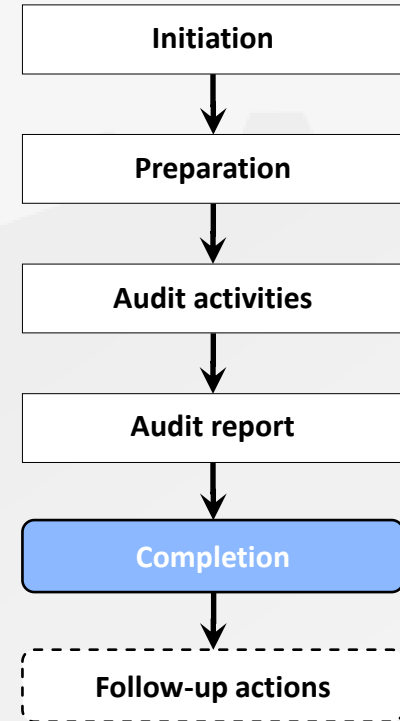
- Typical contents of an audit report:
 - Audit objectives
 - Audit scope
 - Audit criteria
 - Identification of the audit client, audit team and auditees's participants in the audit
 - Locations, dates and times of performed audit activities
 - Audit findings
 - Audit conclusions
 - Statement on the degree to which audit criteria were fulfilled





Completing the audit

- The audit is completed after all planned audit activities have been carried out.
- Disclosure of documentation and information obtained during the audit remains a duty of the audit team
- In the case of audits conducted by external auditors, the audit report is “owned” by the audit client





Standards for lightweight
IT service management

Capability and maturity assessment

Topics

Capability vs. maturity, capability and maturity model, FitSM-6

Capability vs. maturity



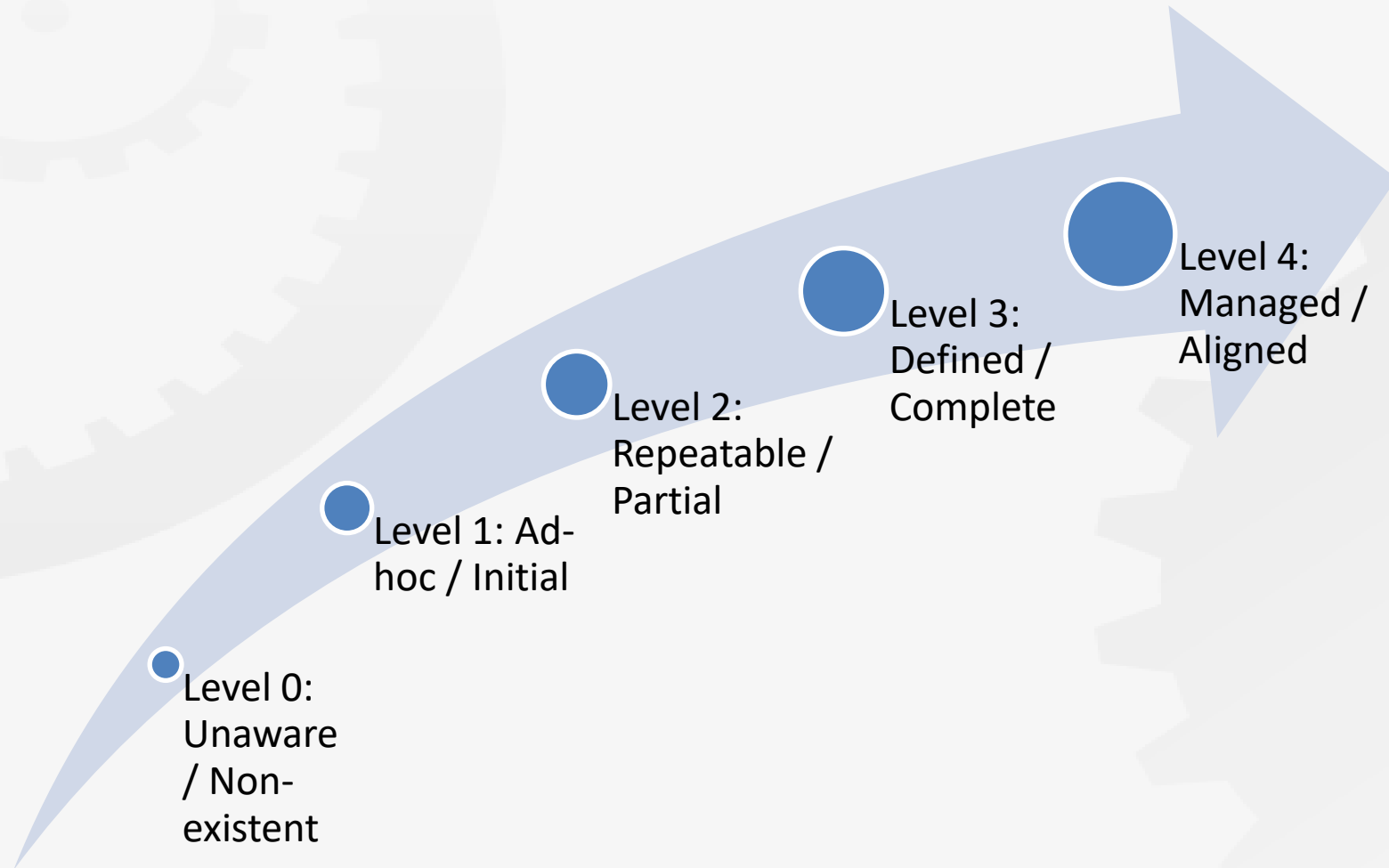
Capability:

- How good / effective are you at a single process or activity?
- How complete / consistent / well-maintained is a specific output?

Maturity:

- How good / effective is your overall management system, based on the specific capabilities in each process?

Capability and maturity model (1/2) according to FitSM-6



Capability and maturity model (2/2) according to FitSM-6

Level 0: Unaware / Non-existent

- There is no awareness or a significant lack of understanding of the required activities. Key outputs do not exist.

Level 1: Ad-hoc / Initial

- There is awareness of the required activities, but execution is uncontrolled and reactive, responsibilities are not always clear. There may be documentation, but it does not noticeably match practical implementation. Some outputs are produced, but with core elements missing.

Level 2: Repeatable / Partial

- Required activities are carried out in a repeatable way and are reasonably effective. Key outputs are produced. There is a significant gap between documentation and implementation, either through intuitively performed activities which are under-documented, or over-documented activities which are only partially implemented.

Level 3: Defined / Complete

- Required activities and related responsibilities are defined and carried out effectively. Documentation is sufficient to support consistent achievement and matches practical implementation. Expected outputs are produced.

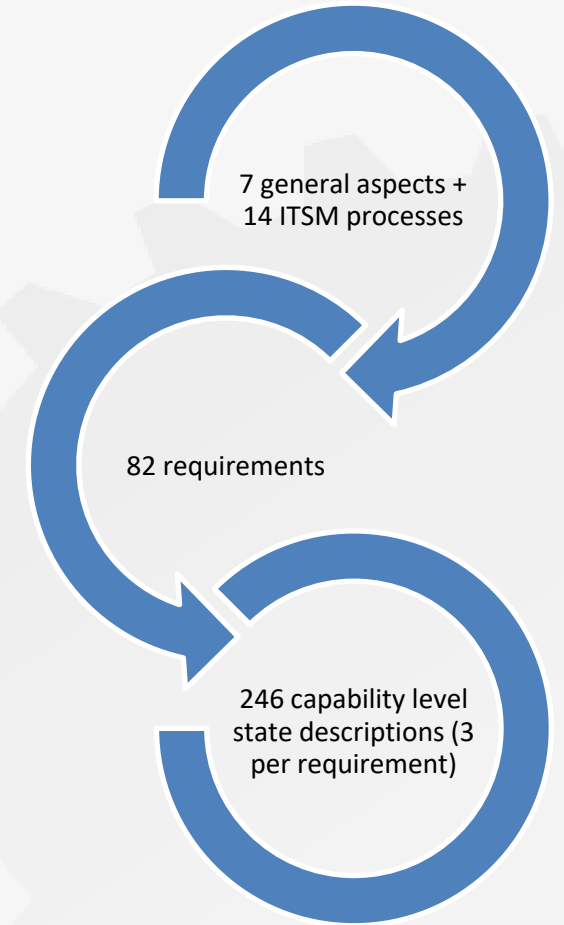
Level 4: Managed / Aligned

- Required activities are managed, monitored and their effectiveness evaluated on a regular basis. Regular reviews and audits lead to continual improvement. Outputs are clearly aligned to other outputs.



FitSM-6: Maturity and capability assessment tool

- FitSM-6 is an easy-to-use tool (Excel-based) to assess the capability levels of ITSM processes and derive the overall maturity level of the SMS in a specific context of application
- Per requirement in FitSM-1: State descriptions for each of the capability levels 1, 2 and 3 – for the specific context of the given requirement





Standards for lightweight
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Management review

Topics

Capability vs. maturity, capability and maturity model, FitSM-6

Management review

- Regular (often annual) review of the SMS by the SMS owner or another member of top management
- Key questions:
 - Are policies and processes adequate and purposeful?
 - Which level of conformity has been achieved?
 - Is the SMS effective and efficient in its practical application?

Management review: Inputs and Outputs

Inputs

- Information on past and future changes in the organization or federation that could potentially affect the SMS and the services
- Results and follow-up actions from audits and assessments
- Results from recent risk assessments related to the SMS
- Results and follow-up actions from previous management reviews
- Customer feedback, information on customer satisfaction and information on the service performance
- Current and forecast demand of resources and capabilities
- Already identified opportunities for improvement
- Current service management plan

Outputs

- Overall assessment of the SMS
- Identified focal areas for improvement
- Plan(s) of follow-up actions
- Required changes on the governance level, including:
 - Need for new or changed policies
 - Need for changes in the provision / allocation of resources
 - Need for changes to the audit program
- Required changes to plans:
 - Need for changes to the service management plan
 - Need for changes to communication plan(s)