



Standards for lightweight  
IT service management



**EOSC-hub**

# FitSM Webinar

## Lightweight IT Service Management

### NI4OS – 15 Sept 2020

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# Content

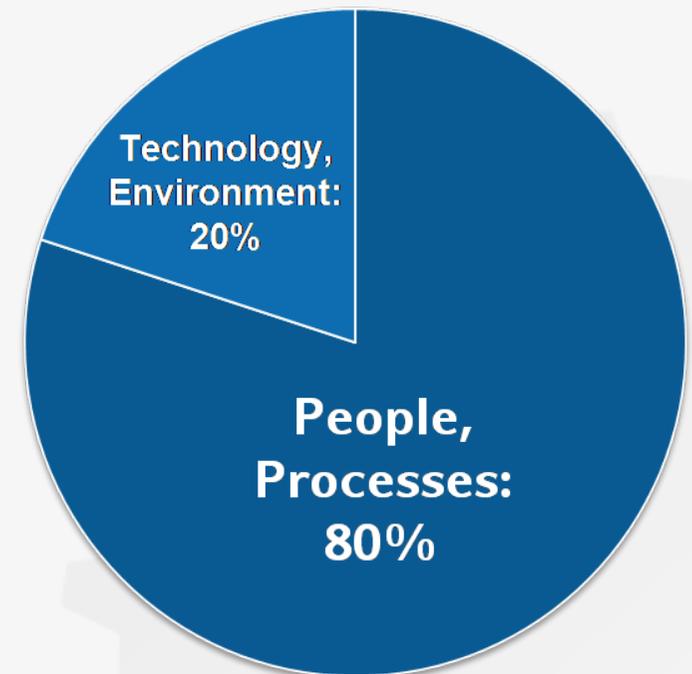


- Why ITSM
- What is FitSM
- Key Concepts
- 7-step Approach to implement
- Training and Certification
- Q&A

# Why Service Management is Needed



- **Why IT service management (ITSM)?**
  - About 80% of all IT service outages originate from "people and process issues"
  - Duration of outages and degradations significantly dependent on non-technical factors
- **IT service management ...**
  - ... aims at providing high quality IT services meeting customers' and users' expectations ...
  - ... by defining, establishing and maintaining service management processes



Reasons for service outages  
[Gartner]

# ITSM success factors



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## People

- Responsibilities
- Skills
- Awareness
- Shared language

## Technology

- Support people in their roles
- Increase process effectiveness and efficiency (i.e. automation)

## Processes

- Defined activities
- Effectiveness and repeatability
- Procedures

# IT Service Management.....in Research



- Shift in expected results
  - FP7 -> H2020 = Publications -> Services
  - Focus on Sustainability!
  - Major cultural shift
- Increased customer expectations
  - Commoditization of digital services
  - XaaS (Anything as a Service) now commonplace
  - Reliability of services
- Skills, experience and knowledge gap
  - Limited to no formal training or diverse experience and frameworks (e.g. Agile, DevOps, ITIL)
  - Need for a common/shared approach to professionally plan, deliver, operate and control IT services



***We are now  
service providers?***

# FitSM adoption: Research/Academia



## Organizations

## Federations / Projects



UK Research and Innovation



*\*Non-exhaustive list*

# What is FitSM?



- Standards family for lightweight IT service management
- Suitable for IT service providers of any type and scale
- Main design principle: Keep it simple!
- All FitSM parts are freely released under Creative Commons licenses
- FitSM is operated and managed by ITEMO (non-profit)
- Certification provided by ICO-Cert and APMG International



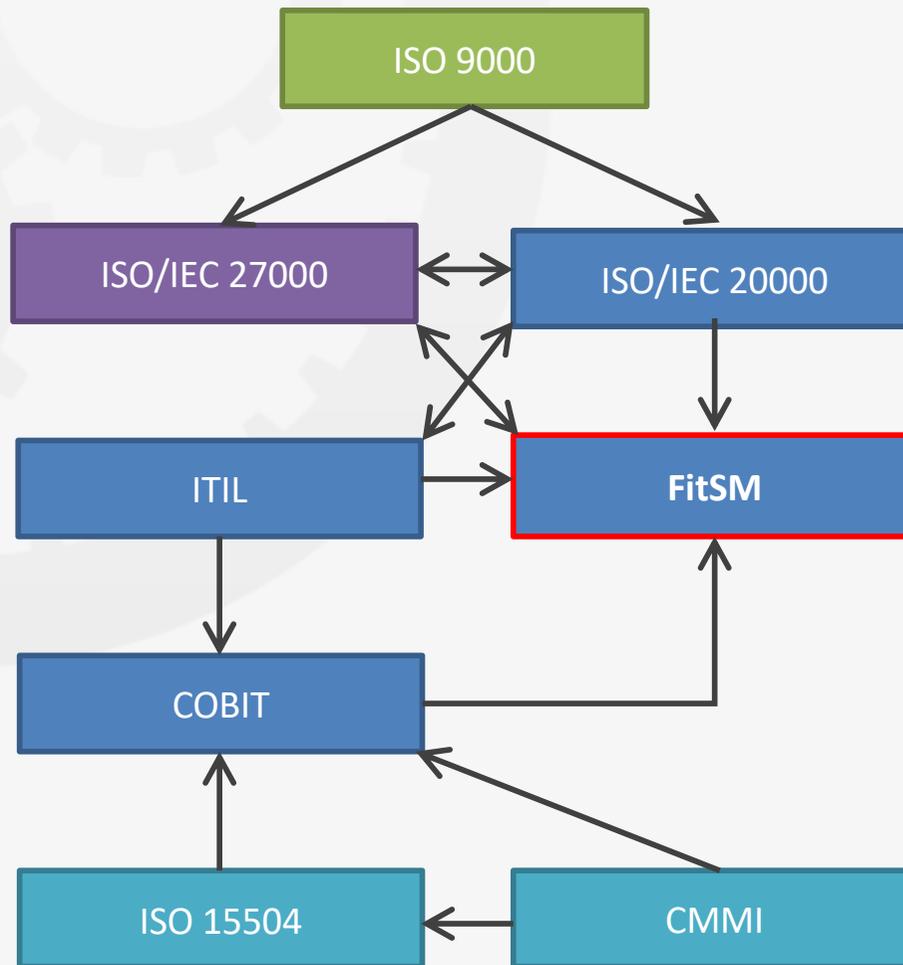
[www.fitsm.eu](http://www.fitsm.eu)

 FitSM\_Standard



*The development of FitSM was originally funded by the European Commission through an EC-FP7 project "FedSM" (2012-2015)*

# Related standards and frameworks



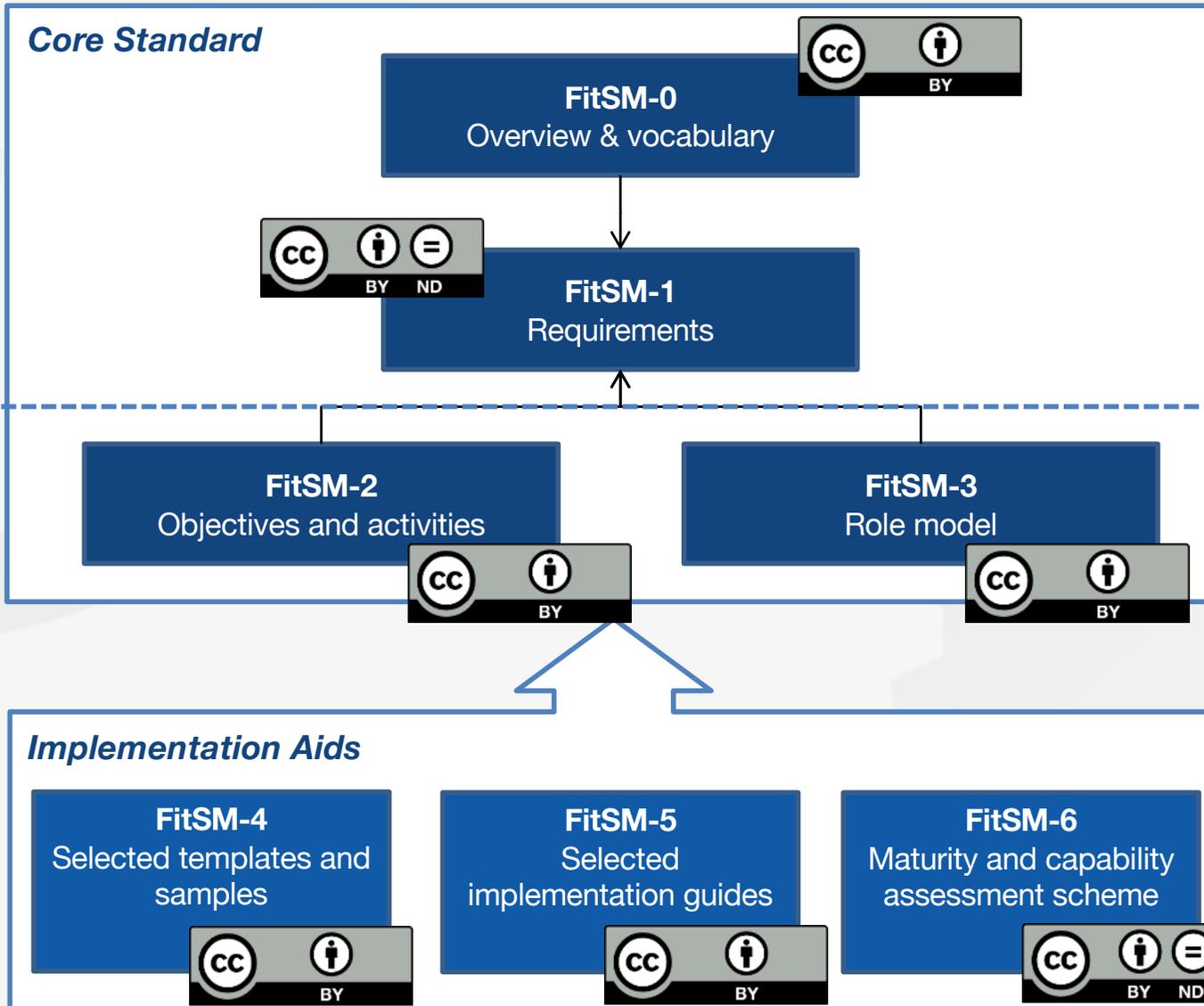


# FitSM parts

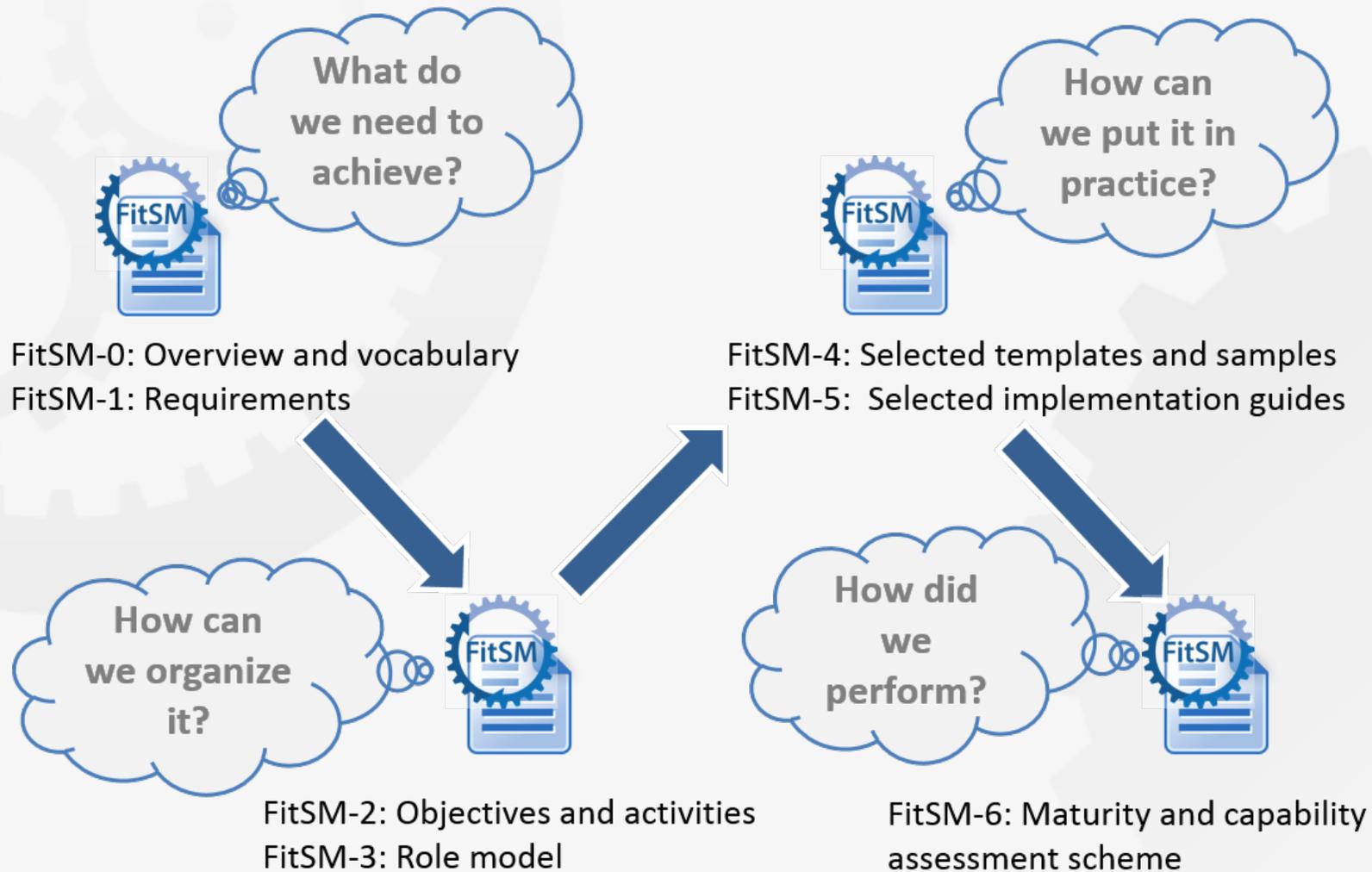


Normative

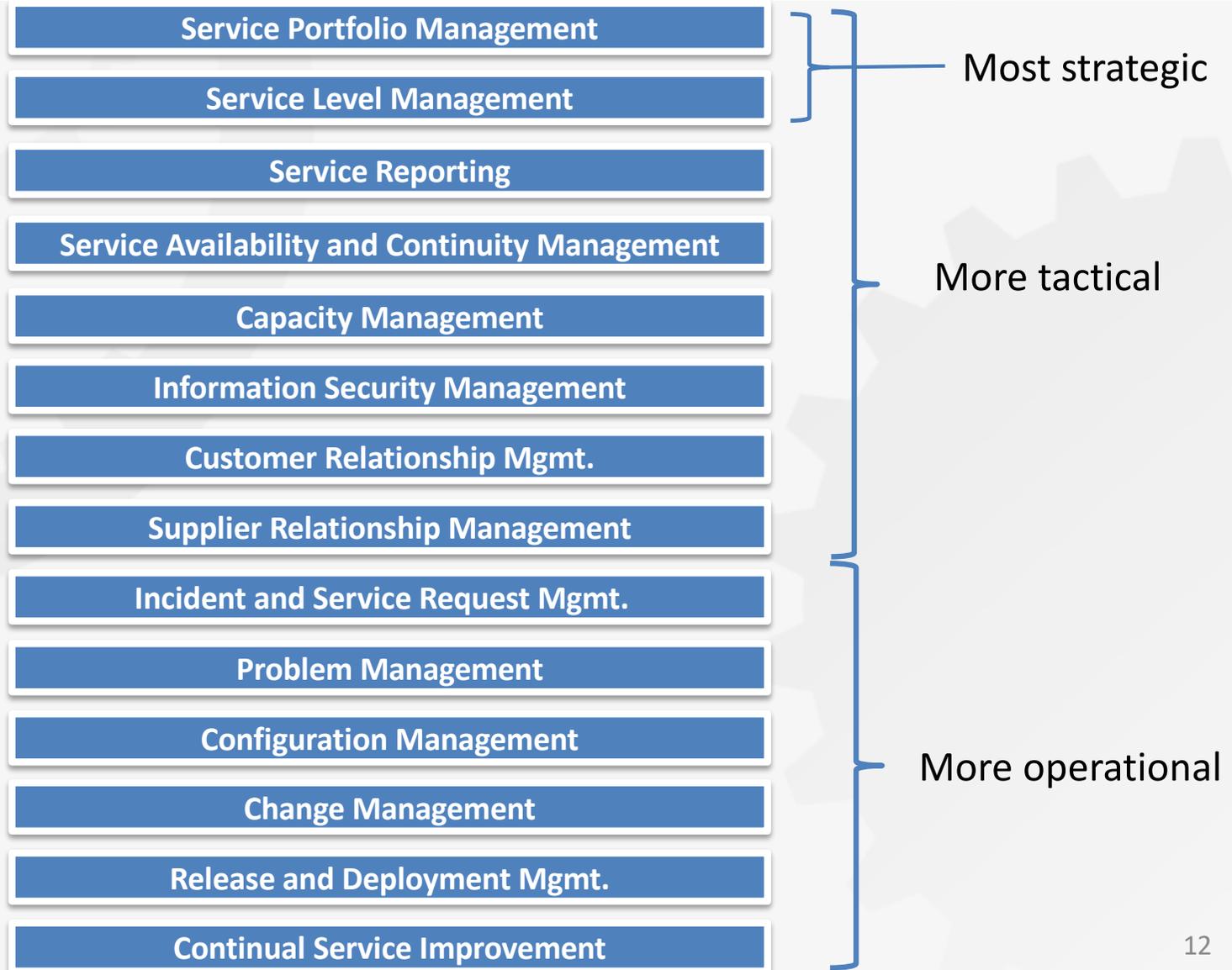
Informational



# FitSM logic



# FitSM process model



# Grouping the FitSM processes



## Six main topic areas:

### Offer & Agree

- SPM
- SLM
- CRM

### Plan & Ensure

- SUPPM
- SACM
- CAPM

### Control & Deploy

- CONFM
- CHM
- RDM

### Resolve & Prevent

- ISRM
- PM

### Report & Improve

- SRM
- CSI

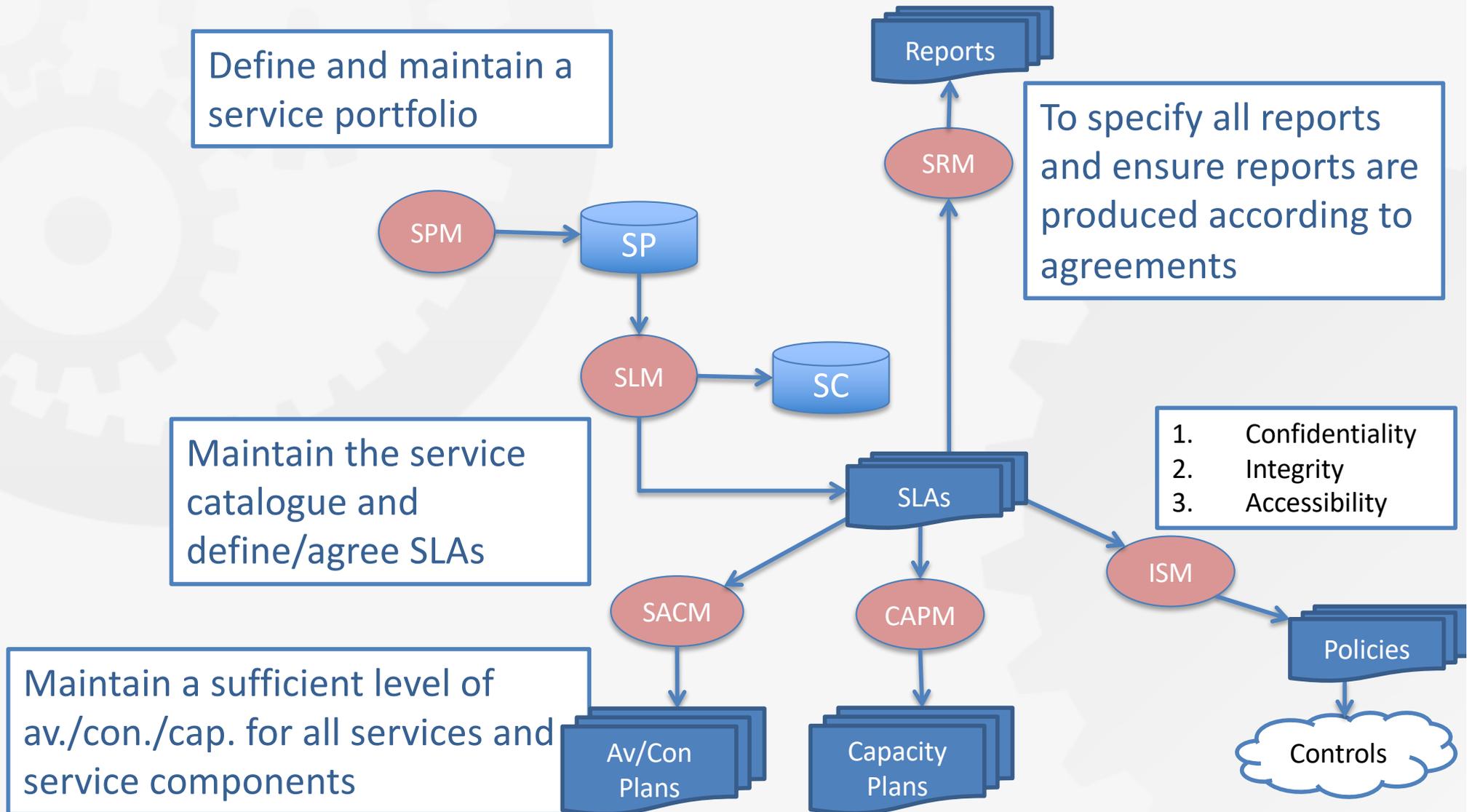
### Protect & Secure

- ISM

# ITSM Processes + Interfaces (Part I)



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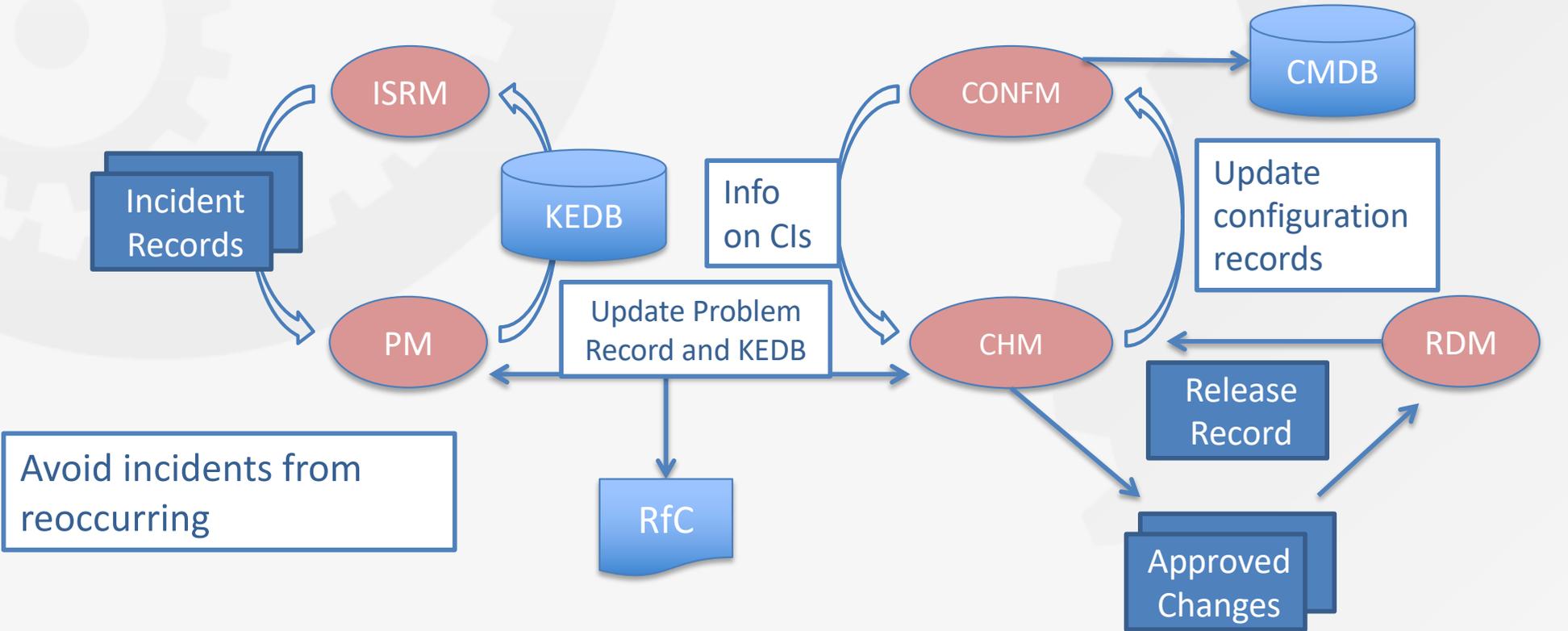


# ITSM Processes + Interfaces (Part II)



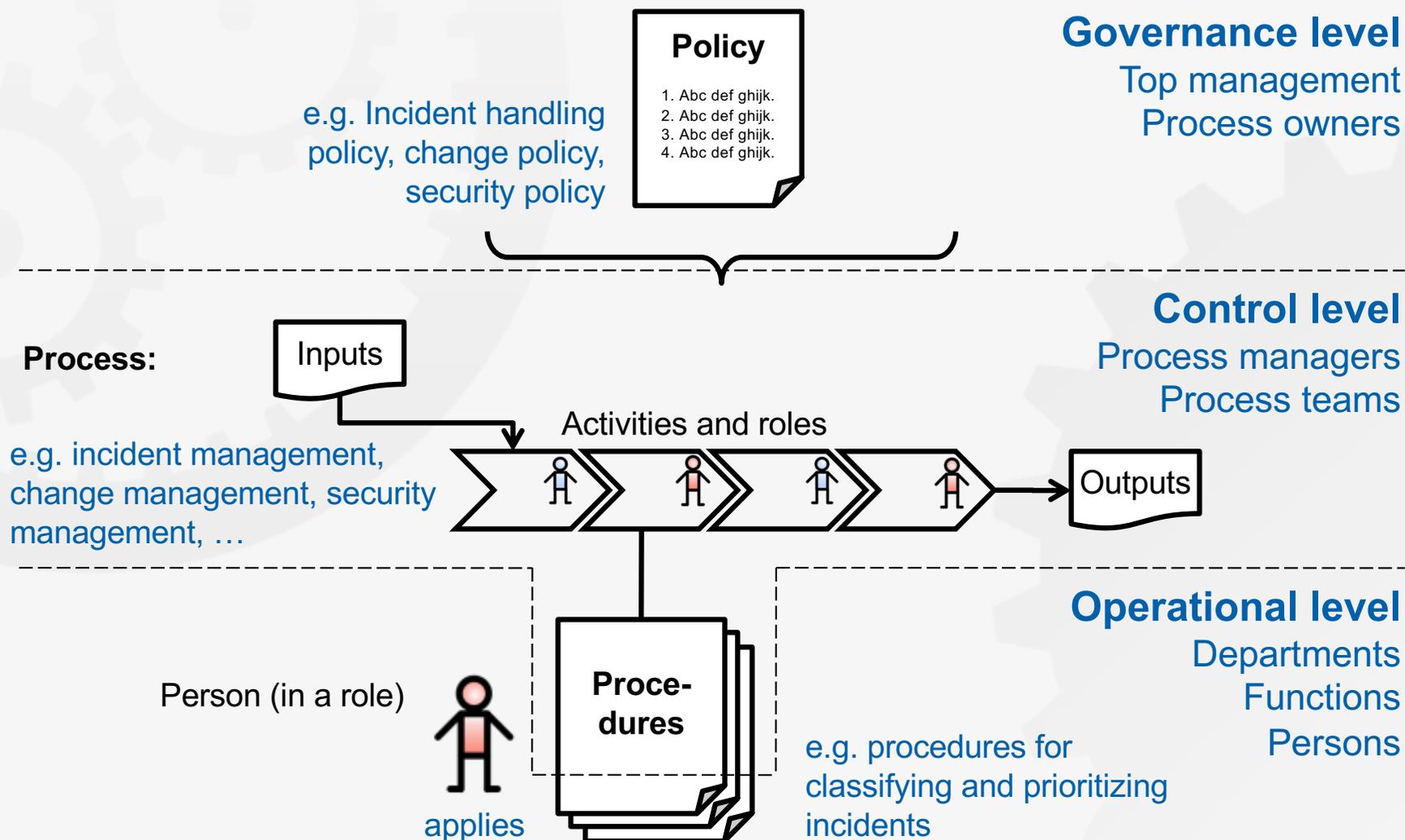
Restore agreed service after a disruption and respond to service requests

Maintain an agreed model of all configuration items (CIs) and their relationships



Avoid incidents from reoccurring

# Service management system (SMS)



# Service management system (SMS)



Taking a structured approach to already existing set of activities (sometimes undocumented) e.g. Confluence/JIRA

This screenshot shows the Confluence interface for 'SMS Policies'. The page title is 'SMS Policies' and it was created by Malgorzata Krakowian. Below the title is an 'Overview: All policy' section with a table of policy details.

Title	Area	Policy status	Owner	Approval status	Next policy review
Service Management Policy	SMS	<b>FINALIZED</b>	XXX	<b>APPROVED</b>	17 May 2018 by XXX

This screenshot shows the Jira Software interface for 'Open issues'. The main issue displayed is 'Update service INDICO from ver. 2.2.5 to 2.2.6'. The issue details are as follows:

Field	Value
Type	Request for Change
Status	PEER REVIEW / C...
Component/s	Collaboration Tools - Indico
Resolution	Unresolved
Risk impact	Minor
Risk likelihood	Unlikely
Risk level	Low
Type of change	Normal
Does the change affect other EGI services?:	No
Is rollback possible?:	Yes

# Descriptions -> Checklist



## PR5 Capacity Management (CAPM)

### REQUIREMENTS

- PR5.1 Service capacity and performance requirements shall be identified taking into consideration SLAs.
- PR5.2 Capacity plans shall be created and maintained.
- PR5.3 Capacity planning shall consider human, technical and financial resources.
- PR5.4 Performance of services and service components shall be monitored based on monitoring the degree of capacity utilisation and identifying operational warnings and exceptions.

## PR6 Information Security Management (ISM)

### REQUIREMENTS

- PR6.1 Information security policies shall be defined.
- PR6.2 Physical, technical and organizational information security controls shall be implemented to reduce the probability and impact of identified information security risks.
- PR6.3 Information security policies and controls shall be reviewed at planned intervals.
- PR6.4 Information security events and incidents shall be given an appropriate priority and managed accordingly.
- PR6.5 Access control, including provisioning of access rights, for information-processing systems and services shall be carried out in a consistent manner.

# Key Concepts: Service and value

- **Service is...**
  - ... a means of delivering **value** to customers ...
  - ... by supporting them in **achieving** their **goals**
  - ... can be provided (sold) **on its own**
- What is value from a customer perspective?



What is the **key purpose** of the service?

Which additional factors will impact the customers' service **quality / performance perception**?

# Key Concepts: Service vs. Service Component



## Definition following FitSM-0:

### **Service:**

A way to provide *value* to a *user / customer* through bringing about results that they want to achieve

*Note 1: Services usually provide value when taken on their own – unlike the specific service components they are composed of.*

*Note 2: In the context of the FitSM standard series, when referring to services, usually IT services are meant.*

## Definition following FitSM-0:

### **Service component:**

Logical part of a *service* that provides a function enabling or enhancing a *service*

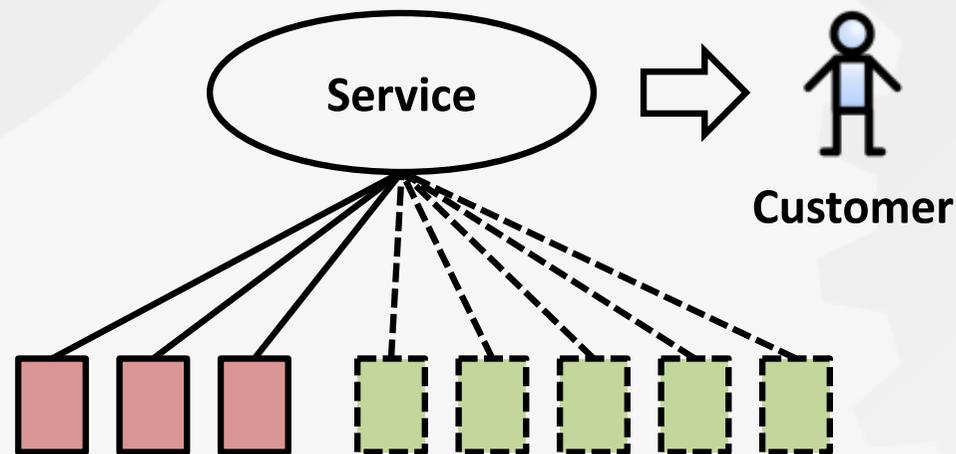
*Note 1: A service is usually composed of several service components.*

*Note 2: A service component is usually built from one or more CIs.*

*Note 3: Although a service component underlies one or more services, it usually does not create value for a customer alone and is therefore not a service by itself.*

## Key Concepts: Service vs. Service Component

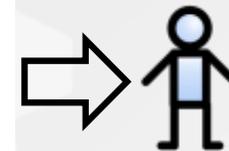
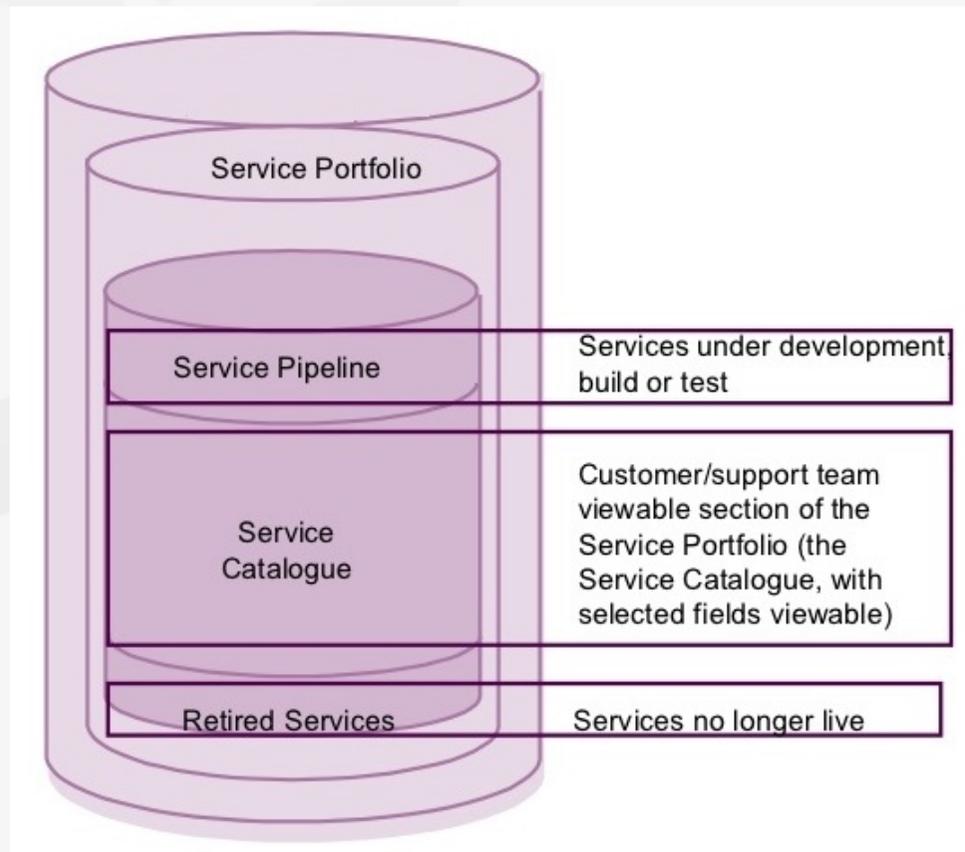
- A service is usually composed of different service components
  - enable the service (**enabling service components**);
    - Minimum required to make the service function
  - enhance the service (**enhancing service components**)
    - Added to make the service more attractive to the customer



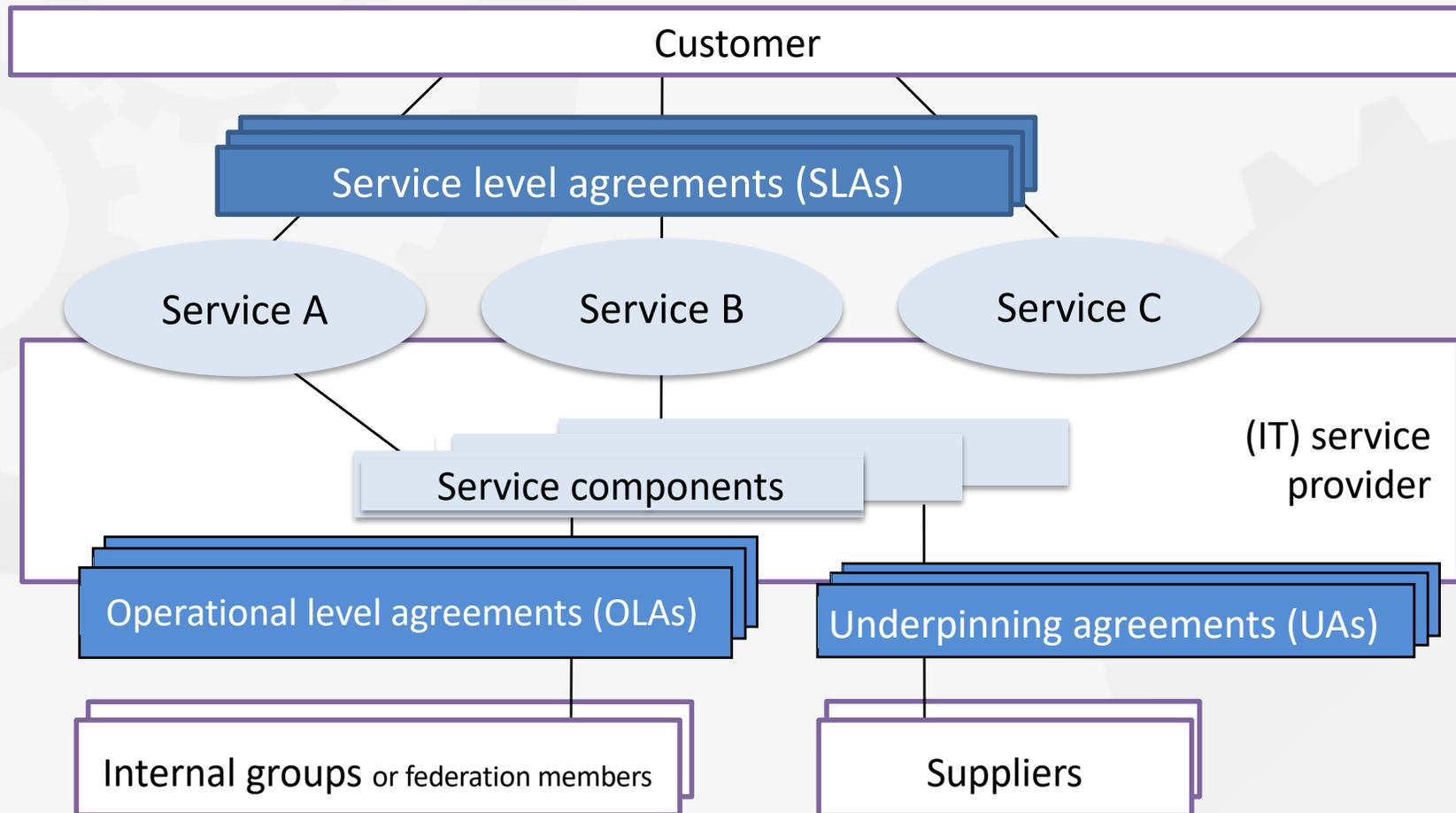
# Key Concepts: Service Portfolio vs. Catalogue



The service portfolio is the basis for the service catalogue



# Key Concepts: SLA vs. OLA



# Examples of types of federation



## In looser federations:

Individual federation members are responsible for delivering services to their customers largely on their own  
→ Few, if any, federation-wide ITSM processes

ITSM perspective



## In more tightly integrated federations:

Service delivery to customers requires joint effort from multiple federation members  
→ Many, if not all, ITSM processes are federation-wide

Invisible  
coordination

...

Matchmaking

...

Full service  
integration

# What is FitSM?



1. Define the rationale for implementing service management and get top management commitment and support
2. Identify/assign roles and responsibilities for planning/implementation
3. Ensure training and awareness
4. Perform an initial organisation maturity assessment comprising a review of the service portfolio; and federation model if applicable
5. Define a service management plan with overall scope of the SMS, goals and milestones including selection of initial tools
6. Start defining polices, activities and procedures for each process
7. Re-assess progress through formal reviews or audits (e.g. annually)

# ITSM: Benefits and risks in practice



## **(Some) Typical benefits:**

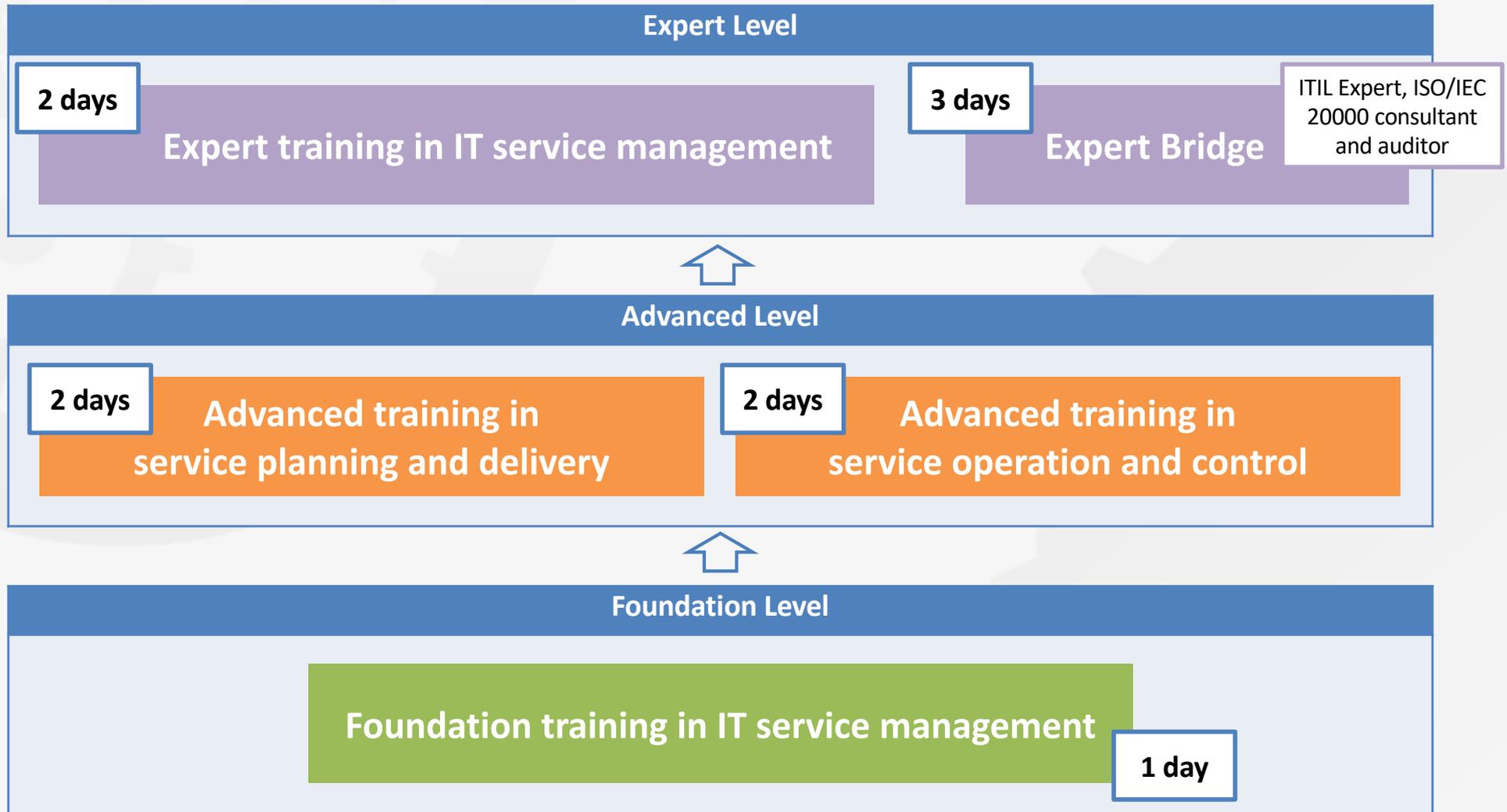
- + Understand organization structure
- + Customer focus, alignment of IT and customers
- + Repeatability of desired outputs
- + Higher effectiveness and efficiency
- + Reduce organization fragmentation / silos
- + Facilitate/capture innovation
- + Improved reputation
- + Better reporting

*- Structure what you are (already) doing*  
*- More easily identify gaps to be filled*

## **Potential risks (excerpt):**

- Processes and procedures may become too bureaucratic, more paperwork
- Lower effectiveness and efficiency, if ...
  - Staff are not aware of processes and measures
  - Top management lacks a clear commitment and related actions
  - Personnel do not accept the system
  - Processes are bypassed

# FitSM Training and Certification





## Thank you!

## Any Questions?

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