Service Planning & Delivery

Advanced training in service planning and delivery according to FitSM

Version 2.5

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Purpose of this training

• Repeat the most important foundation knowledge on (lightweight) IT Service Management (ITSM)

• Become familiar with ...
  – the general aspects of implementing ITSM;
  – the processes required to plan and deliver services effectively, according to the FitSM-1 standard;
  – important interfaces in a service management system.

• Achieve the
  Advanced level certificate in service planning and delivery according to FitSM
  issued by TÜV SÜD Examination Institute
FitSM Advanced Level exam

- At the end of this training
- Closed book, i.e. no aids are allowed
- Duration: 60 minutes
- 30 multiple choice questions:
  - Four possible answers for each question: A, B, C or D
  - One correct answer per question
- At least 70% correct answers (21 of 30) are required to pass the examination
FitSM qualification program

**Foundation Level**
- Foundation training in IT service management
  - 1 day

**Advanced Level**
- Advanced training in service planning and delivery
  - 2 days
- Advanced training in service operation and control
  - 2 days

**Expert Level**
- Expert training in IT service management
  - 2 days
Agenda of this training

• FitSM Foundation wrap-up & ITSM basics
• Selected general aspects of establishing a service management system (SMS)
• ITSM processes for the planning and delivery of services
• ITSM process interfaces and dependencies
FitSM Foundation Wrap-Up & ITSM Basics
What is a service?

**Definition following FitSM-0:**

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

**Definition following FitSM-0:**

**IT service:**
A service that is enabled by the use of information technology (IT)

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What is the **key purpose** of the service?  
Which additional factors will impact the customers’ service **quality / performance perception**?
## IT service management

**Definition following FitSM-0:**

**IT service management (ITSM):**

The entirety of *activities* performed by an IT service *provider* to plan, deliver, operate and control *IT services* offered to *customers*.

*Note: The activities carried out in the ITSM context should be directed by policies and structured and organised by processes and supporting procedures.*

**Definition following FitSM-0:**

**Management system:**

Entirety of *policies, processes, procedures* and related resources and capabilities aiming at effectively performing management tasks in a given context and for a given subject.

*Note: A management system is generally intangible. It is based on the idea of a systematic, structured and process-oriented way of managing.*
Service management system (SMS)

Definition following FitSM-0:

Service management system (SMS):

Overall *management system* that controls and supports *(IT) service management* within an organisation or *federation*

- Key elements in an SMS:
  - Policies
  - Processes
    - Inputs
    - Activities
    - Outputs
  - Roles
  - Procedures
Service management system (SMS)

**Policy**
1. Abc def ghijk.
2. Abc def ghijk.
3. Abc def ghijk.
4. Abc def ghijk.

**Governance level**
Top management
Process owners

**Control level**
Process managers
Process teams

**Operational level**
Departments
Functions
Persons

**Process:**

- **Governance level**
  - Top management
  - Process owners

- **Control level**
  - Process managers
  - Process teams

- **Operational level**
  - Departments
  - Functions
  - Persons

**Activity and roles**
- Incident handling policy
- Change policy
- Security policy

**Example activities and roles**
- Incident management
- Change management
- Security management

**Example outputs**
- Procedures for classifying and prioritizing incidents

**Example inputs**
- Policy

**Person (in a role)**
- Applies procedures
### Policies and processes

<table>
<thead>
<tr>
<th>Definition following FitSM-0:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Policy:</strong></td>
</tr>
<tr>
<td>Documented set of intentions, expectations, goals, rules and requirements, often formally expressed by <em>top management</em> representatives in an organisation or <em>federation</em></td>
</tr>
<tr>
<td><em>Note:</em> Policies are then realised in processes, which are in turn made up of procedures that people carry out.*</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Definition following FitSM-0:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Process:</strong></td>
</tr>
<tr>
<td>Structured set of <em>activities</em>, with clearly defined responsibilities, that bring about a specific objective or set of results from a set of defined inputs</td>
</tr>
<tr>
<td><em>Note:</em> Generally, a process is a logical subdivision of a larger set of activities used to provide or manage services.*</td>
</tr>
</tbody>
</table>
Activities and procedures

<table>
<thead>
<tr>
<th>Definition following FitSM-0:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Activity:</strong></td>
</tr>
<tr>
<td>Set of actions carried out within a <em>process</em></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Definition following FitSM-0:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Procedure:</strong></td>
</tr>
<tr>
<td>Specified set of steps or instructions to be carried out by an individual or team to perform one or more <em>activities</em> of a <em>process</em></td>
</tr>
</tbody>
</table>
What is a process?

• How to define a process:

  - Goal(s), objectives
  - Clearly defined inputs, triggers and outputs
  - Set of interrelated activities
  - Roles and responsibilities

**Definition following FitSM-0:**

**Role:**
Set of responsibilities collected into a logical unit that can be assigned to an individual
What is FitSM?

• A family of standards for lightweight IT service management
• Suitable for IT service providers of any type and scale
• Main design principle: Keep it simple!
• All parts freely available: www.fitsm.eu

The development of the FitSM standards is supported and funded by the European Commission through the EC-FP7 project “FedSM” under contract number 312851.
FitSM parts

- **FitSM-0**
  - Overview & vocabulary

- **FitSM-1**
  - Requirements

- **FitSM-2**
  - Objectives and activities

- **FitSM-3**
  - Role model

- **FitSM-4**
  - Selected templates and samples

- **FitSM-5**
  - Selected implementation guides

- **FitSM-6**
  - Maturity and capability assessment scheme
FitSM logic

FitSM-0: Overview and vocabulary
FitSM-1: Requirements

How can we organize it?
FitSM-2: Objectives and activities
FitSM-3: Role model

What do we need to achieve?

How can we put it in practice?
FitSM-4: Selected templates and samples
FitSM-5: Selected implementation guides

How did we perform?
FitSM-6: Maturity and capability assessment scheme
FitSM: ITSM process framework

1. Service portfolio management (SPM)
2. Service level management (SLM)
3. Service reporting management (SRM)
4. Service availability & continuity management (SACM)
5. Capacity management (CAPM)
6. Information security management (ISM)
7. Customer relationship management (CRM)
8. Supplier relationship management (SUPPM)
9. Incident & service request management (ISRM)
10. Problem management (PM)
11. Configuration management (CONFM)
12. Change management (CHM)
13. Release & deployment management (RDM)
14. Continual service improvement management (CSI)
Related standards and frameworks

ISO 9000

ISO/IEC 27000

ISO/IEC 20000

ITIL

FitSM

COBIT

ISO 15504

CMMI

Legend

IT service management standard / framework
Quality management standard
Information security management standard
Software engineering maturity model
Adoption of concepts
### IT Infrastructure Library
- Number of books with "good practice" in IT Service Management
- Slogan: "the key to managing IT services"
- Descriptions of key principles, concepts and processes in ITSM

### ISO/IEC 20000
- International standard for managing and delivering IT services
- Defines the minimum requirements on ITSM

### Control Objectives for Information and Related Technologies
- IT Governance framework
- Specifies control objectives, metrics, maturity models

### Additional Information
- Most popular and widespread framework
- Not a "real" standard, but often related to as "de-facto standard"
- 5 books released by the British Cabinet Office

- Developed by a joint committee (JTC) of ISO and IEC
- Based on ITIL®, BS 15000
- Auditable, certifiable

- Developed by ISACA
- can be combined with ITIL® and ISO/IEC 20000
<table>
<thead>
<tr>
<th>ISO 9000</th>
<th>ISO/IEC 27000</th>
<th>CMMI</th>
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</thead>
</table>
| ISO 9000 | • International standard for quality management  
           • Quality management principles  
           • Minimum requirements for a quality management system | • Applicable to all organizations and branches  
           • Auditable, certifiable  
           • Several documents |
| ISO/IEC 27000 | • International standard for information security management  
                  • Minimum requirements for an information security management system (ISMS)  
                  • More than 100 security controls | • Applicable to all organizations and branches  
                  • Auditable, certifiable  
                  • Based on BS 7799  
                  • Auditable, certifiable  
                  • Several documents |
| Capability Maturity Model Integration | • Maturity and capability model  
                                            • Organizational maturity assessment | • Developed by SEI (Software Engineering Institute), Carnegie Mellon University |
ITSM: Benefits and risks in practice

Typical benefits (excerpt):

- Repeatability of desired outputs
- Higher effectiveness and efficiency
- Customer focus, alignment of IT and their customers
- Improved reputation

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 and personnel do not accept the system
  - top management lacks a clear commitment and related actions
  - processes are bypassed
Challenges in federated IT service provisioning

• Traditional IT service management (ITSM) practices ...
  – assume single central control over all service management processes by one organisation acting as the service provider;
  – hardly address collaborative approaches to service delivery.
• As a result: Applying ITSM in federated environments may be more difficult, and not all concepts / ideas will work.
• Important in a federated environment: Understanding the roles of the federation members (including the roles or “business models” of the federators involved)
Examples of federator roles ("business models")

Every federation member has to manage their specific services, i.e. ITSM is often highly decentralized, and overall integration / coordination is limited to key process interfaces.

The integrator needs to manage the services offered by the federation, i.e. ITSM is often more centralized, and a high level of coordination effort is required from the integrator.
Agenda of this training

• FitSM Foundation wrap-up & ITSM basics
  ➢ Selected general aspects of establishing a service management system (SMS)
• ITSM processes for the planning and delivery of services
• ITSM process interfaces and dependencies
Selected General Aspects of Establishing a Service Management System
Overview

• Top management responsibility
  – Commitment and leadership
  – Governance and policies

• Documentation
  – Documents and records
  – Document control

• Defining the scope of service management

• The PDCA cycle applied to the SMS
  – Planning service management (PLAN)
  – Implementing service management (DO)
  – Monitoring and reviewing service management (CHECK)
  – Continually improving service management (ACT)
Top management responsibility

Why?
To ensure that top management of the organisation(s) involved in the delivery of services is clearly committed to a service- and process-oriented approach and that they fulfil their leadership duties.
Top management responsibility: Important terms & concepts

<table>
<thead>
<tr>
<th>Definition following FitSM-0:</th>
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<tbody>
<tr>
<td><strong>Top management:</strong></td>
</tr>
<tr>
<td>Senior management within the <em>service provider</em> organisation or <em>federation</em> who set <em>policies</em> and exercise overall control of the organisation or <em>federation</em>.</td>
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</table>

<table>
<thead>
<tr>
<th>Definition following FitSM-0:</th>
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<tbody>
<tr>
<td><strong>Service provider:</strong></td>
</tr>
<tr>
<td>Organisation or <em>federation</em> or part of an organisation or <em>federation</em> that manages and delivers a <em>service</em> or services to <em>customers</em>.</td>
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</table>
GR1 Top Management Commitment & Responsibility

REQUIREMENTS

- GR1.1 Top management of the organisation(s) involved in the delivery of services shall show evidence that they are committed to planning, implementing, operating, monitoring, reviewing, and improving the service management system (SMS) and services. They shall:
  - Assign one individual to be accountable for the overall SMS with sufficient authority to exercise this role
  - Define and communicate goals
  - Define a general service management policy
  - Conduct management reviews at planned intervals
- GR1.2 The service management policy shall include:
  - A commitment to fulfil customer service requirements
  - A commitment to a service-oriented approach
  - A commitment to a process approach
  - A commitment to continual improvement
  - Overall service management goals
To ensure that policies, processes and procedures and their outputs are sufficiently documented to support and enhance effectiveness and traceability of IT service management.
### Documentation: Requirements according to FitSM-1

<table>
<thead>
<tr>
<th>GR2 Documentation</th>
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<tbody>
<tr>
<td>REQUIREMENTS</td>
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</table>

- **GR2.1** The overall SMS shall be documented to support effective planning. This documentation shall include:
  - Service management scope statement (see GR3)
  - Service management policy (see GR1)
  - Service management plan and related plans (see GR4)

- **GR2.2** Documented definitions of all service management processes (see PR1-PR14) shall be created and maintained. Each of these definitions shall at least cover or reference:
  - Description of the goals of the process
  - Description of the inputs, activities and outputs of the process
  - Description of process-specific roles and responsibilities
  - Description of interfaces to other processes
  - Related process-specific policies as applicable
  - Related process- and activity-specific procedures as required
### GR2.3
The outputs of all service management processes (see PR1-PR14) shall be documented, and the execution of key activities of these processes recorded.

### GR2.4
Documentation shall be controlled, addressing the following activities as applicable:
- Creation and approval
- Communication and distribution
- Review
- Versioning and change tracking
### Document:

Information and its supporting medium

*Note: Examples of documents include policies, plans, process descriptions, procedures, SLAs, contract or records.*

### Record:

Documentation of an event or the results of performing a *process* or *activity*
Examples

- Examples of documents that are **not** records:
  - Policy
  - Plan
  - Process description
  - Procedure definition
  - Agreement
  - Contract

- Examples of documents that **are** records:
  - Ticket (e.g. incident / service request / change ticket)
  - Training record
  - Audit report
  - Meeting minutes
  - Visitor list / guestbook
Defining the scope of service management

Why?
To agree and document the extent and boundaries of the SMS by clearly defining the service(s), organisation(s) and location(s) for which the SMS is valid.
Defining the scope of service management: Requirements according to FitSM-1

GR3 Defining The Scope Of Service Management

REQUIREMENTS

• GR3.1 The scope of the SMS shall be defined and a scope statement created.

• The scope of the SMS may be limited to ...
  – certain services or service catalogues
  – certain technologies
  – certain (geographical) locations
  – certain organisations or parts of organisations
  – certain parts of a federation (in a federated environment)
  – service provision for specific (groups of) customers / users
Defining the scope of service management: Examples of scope statements

• 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 Microsoft Windows-based desktop and communication services from their data center site in Amsterdam to all ACME business units at locations in The Netherlands
The PDCA cycle applied to the SMS

Why?
To ensure that the SMS as a whole is solidly planned, implemented, monitored and continually improved
Plan-Do-Check-Act Cycle (PDCA)

- Quality management approach according to W. E. Deming
- Cyclical optimization of quality leads to continual improvement
- Plan-Do-Check-Act can be applied to the whole service management system
PDCA applied to the SMS: Brief overview

• **Plan:**
  - Define the scope of the SMS
  - Set the timeline for implementing service management processes (service management plan)

• **Do:**
  - Implement processes
  - Provide training to people involved in the processes

• **Check:**
  - Monitor key performance indicators (KPIs) to evaluate effectiveness and efficiency
  - Perform (internal) audits to determine the level of compliance
  - Assess the organisational maturity

• **Act:**
  - Identify opportunities for improvements
  - Prioritize and initiate improvements
Planning ITSM: Requirements according to FitSM-1

<table>
<thead>
<tr>
<th>GR4 Planning Service Management (PLAN)</th>
</tr>
</thead>
<tbody>
<tr>
<td>REQUIREMENTS</td>
</tr>
<tr>
<td>• GR4.1 A service management plan shall be created and maintained.</td>
</tr>
<tr>
<td>• GR4.2 The service management plan shall at minimum include or reference:</td>
</tr>
<tr>
<td>o Goals and timing of implementing the SMS and the related processes</td>
</tr>
<tr>
<td>o Overall roles and responsibilities</td>
</tr>
<tr>
<td>o Required training and awareness activities</td>
</tr>
<tr>
<td>o Required technology (tools) to support the SMS</td>
</tr>
<tr>
<td>• GR4.3 Any plan shall be aligned to other plans and the overall service management plan.</td>
</tr>
</tbody>
</table>
## Planning ITSM: Roles and responsibilities

<table>
<thead>
<tr>
<th>Description</th>
<th>ITSM example</th>
<th>Non-ITSM example</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Generic role</strong></td>
<td>A conceptual class of role which is instantiated in a specific context to create a specific role</td>
<td>Process manager</td>
</tr>
<tr>
<td><strong>Specific role</strong></td>
<td>A concrete role which can be assigned to a person or team in order to give this person or team the responsibility for something</td>
<td>Incident manager (process manager for the incident and service request management process) of an IT service provider</td>
</tr>
</tbody>
</table>
Planning ITSM: Generic roles according to FitSM-3

- SMS owner
- SMS manager
- Process owner (optional)
- Process manager
- Case owner
- Member of process staff
- Service owner
## SMS owner: General tasks

<table>
<thead>
<tr>
<th>Role</th>
<th>Tasks</th>
<th>Ca. number of persons performing this role</th>
</tr>
</thead>
</table>
| SMS owner     | • Senior accountable owner of the entire service management system (SMS)  
                • Overall accountability for all ITSM-related activities  
                • Act as the primary contact point for concerns in the context of governing the entire SMS  
                • Define and approve goals and policies for the entire SMS  
                • Nominate the process owners and/or managers, and ensure they are competent to fulfil their roles  
                • Approve changes to the overall SMS  
                • Decide on the provision of resources dedicated to ITSM  
                • Based on monitoring and reviews, decide on necessary changes in the goals, policies and provided resources for the SMS | 1 for the overall SMS  
Often, the person taking over the SMS owner role may also take over the process owner role for the entirety or a subset of the ITSM processes. |
# SMS manager: General tasks

<table>
<thead>
<tr>
<th>Role</th>
<th>Tasks</th>
<th>Ca. number of persons performing this role</th>
</tr>
</thead>
</table>
| SMS manager      | • Act as the primary contact point for all **tactical concerns** (including planning and development) in the context of the entire SMS  
• Maintain the service management plan and ensure it is available to relevant stakeholders  
• Ensure IT service management processes are implemented according to approved goals and policies  
• Maintain an adequate level of awareness and competence of the people involved in the SMS, in particular the process managers  
• Monitor and keep track of the suitability, effectiveness and maturity of the entire SMS  
• Report and, if necessary, escalate to the SMS owner  
• Identify opportunities for improving the effectiveness and efficiency of the SMS | 1 for the overall SMS                        |
## Process owner: General tasks

<table>
<thead>
<tr>
<th>Role</th>
<th>Tasks</th>
<th>Ca. number of persons performing this role</th>
</tr>
</thead>
</table>
| Process owner  
 (*optional, see comment in right column*) | • Act as the primary contact point for concerns in the context of governing one specific ITSM process  
 • Define and approve goals and policies in the context of the process according to the overall SMS goals and policies  
 • Nominate the process manager, and ensure he / she is competent to fulfil this role  
 • Approve changes / improvements to the operational process, such as (significant) changes to the process definition  
 • Decide on the provision of resources dedicated to the process and its activities  
 • Based on process monitoring and reviews, decide on necessary changes in the process-specific goals, policies and provided resources  | 1 per process  

*In many situations in practice, the SMS owner takes over the role of the process owner for all ITSM processes. If this is the case, it is not required to establish the process owner role as a dedicated role at all, since it is merged with the SMS owner role.*
## Process manager: General tasks

<table>
<thead>
<tr>
<th>Role</th>
<th>Tasks</th>
<th>Ca. number of persons performing this role</th>
</tr>
</thead>
</table>
| Process manager    | • Act as the primary contact point for operational concerns in the context of the process  
• Maintain the process definition / description and ensure it is available to relevant persons  
• Maintain an adequate level of awareness and competence of the people involved in the process  
• Monitor and keep track of the process execution and results (incl. process reviews)  
• Report on process performance to the process owner  
• Escalate to the process owner, if necessary  
• Identify opportunities for improving the effectiveness and efficiency of the process  
• **Additional tasks – depending on the specific process (see: process-specific role models)** | 1 per process  
*One person may take over the process manager role for one or more processes.* |
## Case owner: General tasks

<table>
<thead>
<tr>
<th>Role</th>
<th>Tasks</th>
<th>Ca. number of persons performing this role</th>
</tr>
</thead>
</table>
| Case owner      | • Overall responsibility for one specific case occurring in a process context (e.g. one specific incident to be resolved or one specific SLA to be maintained)  
• Act as the primary contact point for all concerns in the context of that specific case  
• Coordinate all activities required to handle / resolve the specific case  
• Escalate exceptions to the process manager, where required  
• *Additional tasks – depending on the specific process (see: process-specific role models)* | 1 per case  
*There may be different cases per process at a time. One person or group may be assigned the case owner role for one or more (or even all) concurrent cases.* |

**Note:** The role of a case owner is usually required in a process, if occurrences (e.g. incidents, service requests, problems, changes, releases, ...) or logical entities / artefacts (e.g. different types of agreements, reports or plans, ...) are managed by the process, and the process manager him- / herself does not take over specific responsibility for all of these occurrences or entities.
## Member of process staff: General tasks

<table>
<thead>
<tr>
<th>Role</th>
<th>Tasks</th>
<th>Ca. number of persons performing this role</th>
</tr>
</thead>
</table>
| Member of process staff (sometimes also referred to as process practitioner) | • Carry out defined activities according to the defined / established process and, as applicable, its procedures (e.g. the activity of prioritizing an incident)  
• Report to the case owner and / or process manager  
• Additional tasks – depending on the specific process (see: process-specific role models) | 1 or more per process  
*One person may take over the member of process staff role for one or more processes.* |
## Service owner: General tasks

<table>
<thead>
<tr>
<th>Role</th>
<th>Tasks</th>
<th>Ca. number of persons performing this role</th>
</tr>
</thead>
</table>
| Service owner   | • Overall responsibility for one specific service which is part of the service portfolio  
• Act as the primary contact point for all (process-independent) concerns in the context of that specific service  
• Act as an “expert” for the service in technical and non-technical concerns  
• Maintain the core service documentation, such as the service specification / description  
• Be kept informed of every event, situation or change connected to the service  
• Be involved in tasks significantly related to the service as part of selected ITSM processes, in particular SPM and SLM *(see: process-specific role models)*  
• Report on the service to the SMS owner                                                                 | One person may take over the service owner role for one or more (or even all) services. |
Planning ITSM: Summary of the role model

Overall service management system (SMS)

- Service owner: E-mail
  - Service: E-Mail
- Service owner: HP computing
  - Service: High performance computing

Other services

Service owners

Process owner SPM & SLM

- Process: SPM
  - Activity 1
  - Activity 2
  - Activity 3
- Process: SLM
  - Activity 1
  - Activity 2
  - Activity 3

Process managers

- Process: ISRM
  - Activity 1
  - Step 1
  - Step 2
  - Step 3
  - Step 4
  - Activity 2

Other processes

- Case owner incident 142
- Case owner incident 143
- Case owner incident 144

Process staff

SMS manager

SMS owner

Case owners

Service owners
GR5 Implementing 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.
Monitoring and reviewing ITSM: Requirements according to FitSM-1

<table>
<thead>
<tr>
<th>REQUIREMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>• GR6.1 The effectiveness and performance 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 targets.</td>
</tr>
<tr>
<td>• GR6.2 Assessments and audits of the SMS shall be conducted to evaluate the level of maturity and compliance.</td>
</tr>
</tbody>
</table>
Continually improving ITSM: Requirements according to FitSM-1

GR7 Continually Improving Service Management (ACT)

<table>
<thead>
<tr>
<th>REQUIREMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>• GR7.1 Nonconformities and deviations from targets shall be identified and corrective actions shall be taken to prevent them from recurring.</td>
</tr>
<tr>
<td>• GR7.2 Improvements shall be planned and implemented according to the Continual Service Improvement Management process (see PR14).</td>
</tr>
</tbody>
</table>
Agenda of this training

• FitSM Foundation wrap-up & ITSM basics
• Selected general aspects of establishing a service management system (SMS)
  ➢ ITSM processes for the planning and delivery of services
• ITSM process interfaces and dependencies
ITSM Processes for the Planning & Delivery of Services
Overview

• Service portfolio management (SPM)
• Service level management (SLM)
• Service reporting management (SRM)
• Service availability & continuity management (SACM)
• Capacity management (CAPM)
• Information security management (ISM)
• Customer relationship management (CRM)
• Supplier relationship management (SUPPM)
Common structure of the presentation of ITSM processes in this training material

• Objective
• Important terms & concepts
• Process-specific requirements according to FitSM-1
• Initial process setup
• Inputs & outputs
• Ongoing process activities
• Roles
• Critical success factors & KPIs
• Simplified application example

for selected ITSM processes
Overview

• **Service portfolio management (SPM)**
• Service level management (SLM)
• Service reporting management (SRM)
• Service availability & continuity management (SACM)
• Capacity management (CAPM)
• Information security management (ISM)
• Customer relationship management (CRM)
• Supplier relationship management (SUPPM)
Service Portfolio Management (SPM)

Objective

To define and maintain a service portfolio
**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.*

**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 Cls.*

*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.*
Important: A service is usually composed of different service components, which may ... 

- enable the service (enabling service components); 
- enhance the service (enhancing service components).
What are the services of a hotel?

- Elevator
- TV
- Accommodation
- Conference rooms
- Restaurant
- Laundry
- Room service
- Fitness centre
- Parking
- Website
- Invoice system
- Concierge
- Swimming Pool
- Cleaning
- Pay TV
- Fire detection system
- Food sourcing
- Facility management
- Internet, Wifi
- Limousine
- Air conditioning
- Access control
Service portfolio:

Internal list that details all the services offered by the service provider (those in preparation, live and discontinued)

Note: The service portfolio includes meta-information about services such as their value proposition, target customer base, service descriptions, technical specifications, cost and price, risks to the provider, service level packages offered etc.
### Service design and transition package (SDTP):

Entirety of plans for the design and transition of a specific new or changed service.

**Note:** A service design and transition package should be produced for every new or changed service. It may consist of a number of documented plans and other relevant information, available in different formats, including a list of requirements and service acceptance criteria (SAC), a project plan, communication and training plans, technical plans and specifications, resource plans, development and deployment schedules/timetables etc.
• Important: The service portfolio is the basis for the service catalogue.
SPM: Requirements according to FitSM-1

PR1 Service Portfolio Management (SPM)

REQUIREMENTS

- PR1.1 A service portfolio shall be maintained. All services shall be specified as part of the service portfolio.
- PR1.2 Design and transition of new or changed services shall be planned.
- PR1.3 Plans for the design and transition of new or changed services shall consider timescales, responsibilities, new or changed technology, communication and service acceptance criteria.
- PR1.4 The organisational structure supporting the delivery of services shall be identified, including a potential federation structure as well as contact points for all parties involved.
### SPM: Initial process setup

<table>
<thead>
<tr>
<th>Initial activities</th>
<th>Typical results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Define a way to document the service portfolio</td>
<td>Initial (empty) service portfolio database</td>
</tr>
<tr>
<td>Define a way to describe / specify a specific service</td>
<td>Service specification template</td>
</tr>
<tr>
<td>Set up an initial service portfolio (including service specifications) covering at least all live services provided to customers, as far as they are in the scope of the service management system</td>
<td>Initial service portfolio</td>
</tr>
</tbody>
</table>
| Create a map of the bodies / parties (organisations, federation members) involved in delivering services  
  • Identify and describe the broad role of each party in service provisioning  
  • Identify a single contact point for each body / party | Documented chart or list of parties involved in service provisioning, description of their roles, list of contact points |
SPM: Inputs & outputs

**Inputs**
- Customer demand and requirements
- Understanding of the service provider’s resources and capabilities
- Understanding of the service provider’s limitations and constraints

**Outputs**
- A complete and up-to-date service portfolio
- Valid and consistent service descriptions / specifications
- Service design and transition packages for new or changed services
SPM: Ongoing process activities

• Manage and maintain the service portfolio
  – Add a service to the service portfolio
  – Update a service in the service portfolio
  – Retire a service in the service portfolio

• Manage the design and transition of new or changed services
  – Create and approve a service design and transition package
  – Update a service design and transition package

• Manage the organisational structure involved in delivering services
## SPM: Roles

<table>
<thead>
<tr>
<th>Role</th>
<th>Tasks</th>
<th>Ca. number of persons performing this role</th>
</tr>
</thead>
<tbody>
<tr>
<td>Process owner SPM</td>
<td><em>Generic tasks of a process owner applied in the context of SPM</em></td>
<td>1 in total</td>
</tr>
<tr>
<td>Process manager SPM</td>
<td><em>Generic tasks of a process manager, plus:</em></td>
<td>1 in total</td>
</tr>
<tr>
<td></td>
<td>• Maintain the service portfolio</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Manage updates to the service portfolio</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Review the service portfolio at planned intervals</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Ensure new or changed services are planned and designed according to the SPM process, and service design and transition packages are created and maintained</td>
<td></td>
</tr>
</tbody>
</table>
## SPM: Critical success factors & KPIs

<table>
<thead>
<tr>
<th>Critical success factors</th>
<th>Key performance indicators (KPIs)</th>
</tr>
</thead>
</table>
| Every service provided is reflected in the service portfolio | • Overall number of services in the service portfolio  
• Percentage of services not covered by the service portfolio |
| The service portfolio is up-to-date and well-maintained | • Frequency of service portfolio reviews or updates |
| For each new or changed service, a service design and transition package (SDTP) is created | • Number of documented SDTPs |
A simplified example

• **Describe the typical service portfolio of a pizza delivery company!**

  – What is the main / core service provided?
  – What are potential enhancing service components?
  – What are typical enabling service components?
Overview

- Service portfolio management (SPM)
- **Service level management (SLM)**
- Service reporting management (SRM)
- Service availability & continuity management (SACM)
- Capacity management (CAPM)
- Information security management (ISM)
- Customer relationship management (CRM)
- Supplier relationship management (SUPPM)
Service Level Management (SLM)

Objective
To maintain a service catalogue, and to define, agree and monitor service levels with customers by establishing meaningful service level agreements (SLAs) and supportive operational level agreements (OLAs) and underpinning agreements (UAs) with suppliers.
### Service level agreement (SLA):
Documented agreement between a *customer* and *service provider* that specifies the *service* to be provided and the *service targets* that define how it will be provided.

### Service catalogue:
*User / customer* facing list of all live *services* offered along with relevant information about these *services*.

### Operational level agreement (OLA):
Agreement between a *service provider* or *federation member* and another part of the *service provider’s* organisation or the *federation* to provide a *service component* or subsidiary *service* needed to allow provision of *services* to *customers*.
# SLM: Important terms & concepts

**Definition following FitSM-0:**

**Service target:**

Values for parameters or measures applied to a *service* that are listed in a *service level agreement* related to it.

*Note: Typical service targets might include availability or resolution time for incidents, though many hard and soft targets can be considered.*

<table>
<thead>
<tr>
<th>Definition following FitSM-0:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Underpinning agreement (UA):</strong></td>
</tr>
<tr>
<td>Documented agreement between a <em>service provider</em> and an external <em>supplier</em> that specifies the underpinning <em>service(s)</em> or <em>service component(s)</em> to be provided by the <em>supplier</em>, and the <em>service targets</em> that define how it will be provided.</td>
</tr>
</tbody>
</table>

*Note: A UA can be seen as a service level agreement (SLA) with an external supplier where the service provider is in the customer role.*
## SLM: Requirements according to FitSM-1

### PR2 Service Level Management (SLM)

<table>
<thead>
<tr>
<th>REQUIREMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>• PR2.1 A service catalogue shall be maintained.</td>
</tr>
<tr>
<td>• PR2.2 For all services delivered to customers, SLAs shall be in place.</td>
</tr>
<tr>
<td>• PR2.3 SLAs shall be reviewed at planned intervals.</td>
</tr>
<tr>
<td>• PR2.4 Service performance shall be evaluated against service targets defined in SLAs.</td>
</tr>
<tr>
<td>• PR2.5 For supporting services or service components provided by federation members or groups belonging to the same organisation as the service provider or external suppliers, OLAs and UAs shall be agreed.</td>
</tr>
<tr>
<td>• PR2.6 OLAs and UAs shall be reviewed at planned intervals.</td>
</tr>
<tr>
<td>• PR2.7 Performance of service components shall be evaluated against operational targets defined in OLAs and UAs.</td>
</tr>
</tbody>
</table>
SLM: Important terms & concepts

• Typical contents in an SLA (included or referenced):
  – Service description
  – Service hours and exceptions
  – Service components and dependencies
  – Support (incident handling and fulfilment of service requests)
  – Service level targets
  – Limitations and constraints
  – Communication, reporting and escalation (general communication, regular reporting, SLA violations, escalations and complaints)
  – Information security and data protection
  – Additional responsibilities of the service provider
  – Customer responsibilities
  – Review
  – Glossary of terms
SLM: Types of service agreements and their relationships

Service level agreements (SLAs)

Operational level agreements (OLAs)

Underpinning agreements (UAs)

Customer

Service A

Service B

Service C

Service components

Internal groups or federation members

Suppliers

IT service provider
## SLM: Initial process setup

<table>
<thead>
<tr>
<th>Initial activities</th>
<th>Typical results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Define the structure and format of the service catalogue, and create an initial service catalogue based on the service portfolio</td>
<td>Initial service catalogue</td>
</tr>
<tr>
<td>Define a basic / default SLA valid for all services provided to customers, where no specific / individual SLAs are in place</td>
<td>Default / corporate level SLA</td>
</tr>
<tr>
<td>Define templates for individual SLAs, OLAs and UAs</td>
<td>SLA template, OLA / UA template</td>
</tr>
<tr>
<td>Identify the most critical supporting service components, and agree OLAs and UAs with those contributing to delivering services to customers</td>
<td>Initial OLAs and UAs</td>
</tr>
<tr>
<td>Agree individual SLAs with customers for the most important / critical services</td>
<td>Initial SLAs</td>
</tr>
</tbody>
</table>
SLM: Inputs & outputs

**Inputs**

- Defined service portfolio
- General and specific customer requirements

**Outputs**

- Up-to-date service catalogue
- Default / corporate level SLA
- Individual SLAs with customers
- Supporting OLAs and UAs
• Maintain the service catalogue
  – Add a service to service catalogue
  – Update a service in the service catalogue
  – Remove a service from service catalogue

• Manage SLAs
  – Negotiate and sign a new SLA
  – Evaluate and report on SLA fulfilment
  – Notify customer of an SLA violation
  – Update or resign an SLA
SLM: Activities

• Manage OLAs and UAs
  – Negotiate and sign an OLA / UA
  – Evaluate and report on OLA / UA fulfilment
  – Notify supporting party / federation member or supplier of an OLA / UA violation
  – Update or resign an OLA / UA
## SLM: Roles

<table>
<thead>
<tr>
<th>Role</th>
<th>Tasks</th>
<th>Ca. number of persons performing this role</th>
</tr>
</thead>
<tbody>
<tr>
<td>Process owner</td>
<td><strong>Generic tasks of a process owner applied in the context of SLM</strong></td>
<td>1 in total</td>
</tr>
<tr>
<td>SLM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Process manager</td>
<td><strong>Generic tasks of a process manager, plus:</strong></td>
<td>1 in total</td>
</tr>
<tr>
<td>SLM</td>
<td>• Maintain the service catalogue</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Manage updates to the service catalogue</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Ensure the service catalogue is aligned with the service portfolio</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Negotiate SLAs with customers</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Propose and negotiate OLAs with internal groups or federation members</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Propose and negotiate UAs with external suppliers</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Ensure that all SLAs, OLAs and UAs are documented in a consistent manner</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Approve new or changed SLAs, OLAs and UAs</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Ensure SLAs, OLAs and UAs are aligned to each other</td>
<td></td>
</tr>
</tbody>
</table>
## SLM: Roles

<table>
<thead>
<tr>
<th>Role</th>
<th>Tasks</th>
<th>Ca. number of persons performing this role</th>
</tr>
</thead>
</table>
| SLA / OLA / UA owner  | • Maintain the SLA, OLA or UA under his/her ownership and ensure it is specified and documented according to relevant specifications  
• Evaluate the fulfillment of the SLA, OLA or UA  
• Ensure that violations of the targets defined in the SLA, OLA or UA are identified and investigated to prevent future recurrence  
• Perform regular reviews of the SLA, OLA or UA  
• Understand new or changed requirements on the SLA, OLA or UA under his/her ownership, and initiate necessary updates or other follow-up actions | 1 per SLA, OLA and UA                      |
## SLM: Critical success factors & KPIs

<table>
<thead>
<tr>
<th>Critical success factors</th>
<th>Key performance indicators (KPIs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A complete and consistent service catalogue is made available to customers</td>
<td>• Percentage of services not covered by the service catalogue</td>
</tr>
</tbody>
</table>
| Every service provided to one or more customers is subject to one or more SLAs | • Number of SLAs  
• Frequency of SLA reviews or updates |
| For critical supporting service components, OLAs and/or UAs are in place | • Number of OLAs and UAs  
• Frequency of OLA and UA reviews or updates |
A simplified example

- **Define a default SLA for the pizza delivery service!**

  - What are the main service level parameters?
  - Which kinds of service “incidents” and service requests may occur, and how are they addressed by the SLA?

- **Identify the need for OLAs for supporting service components!**
Overview

- Service portfolio management (SPM)
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- Information security management (ISM)
- Customer relationship management (CRM)
- Supplier relationship management (SUPPM)
Service Reporting Management (SRM)

Objective

To specify all service reports and ensure they are produced according to specifications in a timely manner to support decision-making
Definition following FitSM-0:

Service report:
Report that details the performance of a service versus the service targets detailed in service level agreements (SLAs) – often based on key performance indicators (KPIs)
### PR3 Service Reporting Management (SRM)

#### REQUIREMENTS

- **PR3.1** Service reports shall be specified and agreed with their recipients.
- **PR3.2** The specification of each service report shall include its identity, purpose, audience, frequency, content, format and method of delivery.
- **PR3.3** Service reports shall be produced. Service reporting shall include performance against agreed targets, information about significant events and detected nonconformities.
## SRM: Initial process setup

<table>
<thead>
<tr>
<th>Initial activities</th>
<th>Typical results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Create a list of all service reports that are currently produced or will be produced on a regular basis in the future</td>
<td>Initial list of (current / future) service reports</td>
</tr>
<tr>
<td>Specify every identified service report by giving the report a unique name (ID), describing the purpose of the report, identifying its audience / addressee, defining its frequency, outlining the intended contents of the report, and defining its format and method of delivery</td>
<td>Service report specifications (1 for every report that is or will be produced regularly)</td>
</tr>
<tr>
<td>Define general or specific templates for service reports to standardise / harmonise the report structure and support effective and repeatable reporting</td>
<td>Service report template(s)</td>
</tr>
</tbody>
</table>
SRM: Inputs & outputs

Inputs

Reporting requirements (e.g. from SLAs)

Outputs

List of all (agreed) service reports
Specifications of all service reports
Actual reports (produced on a regular basis)
SRM: Ongoing process activities

• Maintain service report specifications
  – Define/specify a new service report
  – Update a report specification
  – Terminate a service report

• Monitor the production and distribution of service reports
  – Verify the production and distribution of service reports according to specifications
  – Initiate follow-up actions in case of inaccurate reporting
## SRM: Roles

<table>
<thead>
<tr>
<th>Role</th>
<th>Tasks</th>
<th>Ca. number of persons performing this role</th>
</tr>
</thead>
<tbody>
<tr>
<td>Process owner SRM</td>
<td><em>Generic tasks of a process owner applied in the context of SRM</em></td>
<td>1 in total</td>
</tr>
<tr>
<td>Process manager SRM</td>
<td><em>Generic tasks of a process manager, plus:</em></td>
<td>1 in total</td>
</tr>
<tr>
<td></td>
<td>• Maintain the list of service reports</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Review service report specifications in regular intervals</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Monitor the production of accurate reports according to specifications</td>
<td></td>
</tr>
<tr>
<td>Service report owner</td>
<td>• Maintain the service report specification for the report under his/her ownership</td>
<td>1 per service report</td>
</tr>
<tr>
<td></td>
<td>• Produce and deliver the service report according to the specification</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Ensure that the input / contributions required to produce the report is provided in time</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Understand new or changed requirements on the report under his/her ownership, and update the report specification accordingly</td>
<td></td>
</tr>
</tbody>
</table>
SRM: Critical success factors & KPIs

<table>
<thead>
<tr>
<th>Critical success factors</th>
<th>Key performance indicators (KPIs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A comprehensive and up-to-date list of all agreed service reports is available.</td>
<td>• Percentage of reports that are covered by the list of service reports</td>
</tr>
<tr>
<td>Every service report is clearly specified.</td>
<td>• Number / percentage of service reports, for which a clear report specification has been documented</td>
</tr>
<tr>
<td>Service reports are produced in a timely manner and delivered to their audiences to support them in making decisions.</td>
<td>• Accuracy and timeliness of delivered reports</td>
</tr>
</tbody>
</table>
A simplified example

- Complete the report specifications in the following table!

<table>
<thead>
<tr>
<th>Report name</th>
<th>Purpose</th>
<th>Addressee</th>
<th>Frequency</th>
<th>Contents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pizza delivery service level report</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Customer complaints report</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>...</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Overview

- Service portfolio management (SPM)
- Service level management (SLM)
- Service reporting management (SRM)
- Service availability & continuity management (SACM)
- Capacity management (CAPM)
- Information security management (ISM)
- Customer relationship management (CRM)
- Supplier relationship management (SUPPM)
Objective

To ensure sufficient service availability to meet agreed requirements and adequate service continuity in case of exceptional situations
**Availability:**

The ability of a *service* or *service component* to fulfil its intended function at a specific time or over a specific period of time.

\[
\text{Availability} \, [%] = \frac{\text{Agreed service hours} - \text{downtime}}{\text{Agreed service hours}} \times 100
\]
**Definition following FitSM-0:**

**Continuity:**

Ability of a *service* to operate for extended periods of time and to survive, to the best of a *service provider's* ability, unexpected or even potentially disastrous occurrences.
## PR4 Service Availability & Continuity Management (SACM)

### REQUIREMENTS

- PR4.1 Service availability and continuity requirements shall be identified taking into consideration SLAs.
- PR4.2 Service availability and continuity plans shall be created and maintained.
- PR4.3 Service availability and continuity planning shall consider measures to reduce the probability and impact of identified availability and continuity risks.
- PR4.4 Availability of services and service components shall be monitored.
# SACM: Initial process setup

<table>
<thead>
<tr>
<th>Initial activities</th>
<th>Typical results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identify the most critical service availability and continuity requirements based on SLAs and other sources of information</td>
<td>Initial service availability and continuity requirement specifications</td>
</tr>
<tr>
<td>Define the structure and format of a (generic) service availability and continuity plan</td>
<td>Service availability and continuity plan template</td>
</tr>
<tr>
<td>Define an approach to monitor service availability (and continuity) and to record the results on an ongoing basis</td>
<td>(Generic) service availability monitoring plan</td>
</tr>
</tbody>
</table>
SACM: Inputs & outputs

**Inputs**
- Service availability and continuity requirements (e.g. from SLAs)
- Risk factors having impact on the capability of delivering services according to agreed availability and continuity targets

**Outputs**
- Service availability and continuity plans
- Service availability and continuity monitoring plans / concept
- Service availability and continuity monitoring records / reports
SACM: Ongoing process activities

- Identify and record service availability and continuity requirements
- Assess risks related to service availability and continuity
- Maintain service availability and continuity plans
- Perform service continuity tests
- Monitor service availability and continuity
# SACM: Roles

<table>
<thead>
<tr>
<th>Role</th>
<th>Tasks</th>
<th>Ca. number of persons performing this role</th>
</tr>
</thead>
<tbody>
<tr>
<td>Process owner SACM</td>
<td><strong>Generic tasks of a process owner applied in the context of SACM</strong></td>
<td>1 in total</td>
</tr>
<tr>
<td>Process manager SACM</td>
<td><strong>Generic tasks of a process manager, plus:</strong></td>
<td>1 in total</td>
</tr>
<tr>
<td></td>
<td>• Identify service availability and continuity requirements</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Ensure that the input / contributions required to produce service</td>
<td></td>
</tr>
<tr>
<td></td>
<td>availability and continuity plans are provided by relevant parties</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Produce, maintain and review all service availability and continuity</td>
<td></td>
</tr>
<tr>
<td></td>
<td>plans regularly</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Ensure that measures to increase service availability and continuity</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(according to plans) are planned and implemented under the control</td>
<td></td>
</tr>
<tr>
<td></td>
<td>of the change management process</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Act as a contact point in case of questions regarding service</td>
<td></td>
</tr>
<tr>
<td></td>
<td>availability and continuity requirements and measures</td>
<td></td>
</tr>
</tbody>
</table>
## SACM: Roles

<table>
<thead>
<tr>
<th>Role</th>
<th>Tasks</th>
<th>Ca. number of persons performing this role</th>
</tr>
</thead>
</table>
| Availability plan owner / continuity plan owner | • Create and maintain the availability or continuity plan under his/her ownership  
  • Ensure that relevant stakeholders in the context of the plan are consulted and informed when creating, updating or implementing the plan  
  • Ensure the plan and any updates to it are approved according by relevant authorities  
  • Based on the contents of the final / approved plan, raise requests for changes or trigger the continual service improvement process as required  
  • In case of a continuity plan: Ensure that the needs for testing the plan are identified and tests of preventive or reactive measures are performed regularly | 1 per availability plan / continuity plan                   |
Overview

- Service portfolio management (SPM)
- Service level management (SLM)
- Service reporting management (SRM)
- Service availability & continuity management (SACM)
- **Capacity management (CAPM)**
- Information security management (ISM)
- Customer relationship management (CRM)
- Supplier relationship management (SUPPM)
Capacity Management (CAPM)

Objective

To ensure sufficient capacities are provided to meet agreed service capacity and performance requirements
### Definition following FitSM-0:

**Capacity:**

The maximum extent to which a certain element of the infrastructure (such as a *configuration item*) can be used

*Note: This might mean the total disk capacity or network bandwidth. It could also be the maximum ability of a system to process requests or respond to customers.*
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.
## CAPM: Initial process setup

<table>
<thead>
<tr>
<th>Initial activities</th>
<th>Typical results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Define the structure and format of a (generic) capacity plan</td>
<td>Capacity plan template</td>
</tr>
<tr>
<td>Define an approach to monitor service performance and capacity (including utilisation of resources) on to record the results on an ongoing basis</td>
<td>(Generic) service performance and capacity monitoring plan</td>
</tr>
</tbody>
</table>
CAPM: Inputs & Outputs

**Inputs**
- Service performance and capacity requirements (e.g. from SLAs)
- Current level of capacities plus information on the past, current and future (predicted) utilisation of resources
- Information on available resources and constraints

**Outputs**
- Capacity plans (reflecting demands, planned upgrades, downgrades and reallocations of resources)
- Capacity and service performance monitoring plans / concept
- Capacity and service performance monitoring records / reports
CAPM: Ongoing process activities

• Identify and record capacity and performance requirements
• Maintain capacity plans
• Monitor capacity, resource utilisation and service performance
## CAPM: Roles

<table>
<thead>
<tr>
<th>Role</th>
<th>Tasks</th>
<th>Ca. number of persons performing this role</th>
</tr>
</thead>
<tbody>
<tr>
<td>Process owner</td>
<td><strong>Generic tasks of a process owner applied in the context of CAPM</strong></td>
<td>1 in total</td>
</tr>
<tr>
<td>CAPM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Process manager</td>
<td><strong>Generic tasks of a process manager, plus:</strong></td>
<td>1 in total</td>
</tr>
<tr>
<td>CAPM</td>
<td>• Identify service performance and capacity requirements</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Ensure that the input / contributions required to produce capacity plans are provided by relevant parties</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Produce, maintain and review capacity plans regularly</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Ensure that measures to increase service performance and capacity (according to plans) are planned and implemented under the control of the change management process</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Act as a contact point in case of questions regarding service performance and capacity requirements and measures</td>
<td></td>
</tr>
</tbody>
</table>
## CAPM: Roles

<table>
<thead>
<tr>
<th>Role</th>
<th>Tasks</th>
<th>Ca. number of persons performing this role</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capacity plan owner</td>
<td>• Create and maintain the capacity plan under his/her ownership</td>
<td>1 per capacity plan</td>
</tr>
<tr>
<td></td>
<td>• Ensure that relevant stakeholders in the context of the plan are consulted and informed when creating, updating or implementing the plan</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Ensure the plan and any updates to it are approved according by relevant authorities</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Based on the contents of the final / approved plan, raise requests for changes or trigger the continual service improvement process as required</td>
<td></td>
</tr>
</tbody>
</table>
Overview

- Service portfolio management (SPM)
- Service level management (SLM)
- Service reporting management (SRM)
- Service availability & continuity management (SACM)
- Capacity management (CAPM)
- Information security management (ISM)
- Customer relationship management (CRM)
- Supplier relationship management (SUPPM)
Objective

To manage information security effectively through all activities performed to deliver and manage services, so that the confidentiality, integrity and accessibility of relevant information assets are preserved.
ISM: Important terms & concepts

<table>
<thead>
<tr>
<th>Definition following FitSM-0:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information security:</td>
</tr>
<tr>
<td>Preservation of confidentiality, integrity and accessibility of information</td>
</tr>
</tbody>
</table>

- Key information security aspects:
  - Confidentiality
  - Integrity
  - **Accessibility** of information

<table>
<thead>
<tr>
<th>Definition following FitSM-0:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information security control:</td>
</tr>
<tr>
<td>A means of controlling or managing one or more risks to information security</td>
</tr>
</tbody>
</table>
**Confidentiality**: To protect information from unauthorized disclosure

**Integrity**: To protect information from modifications, additions, deletions, rearrangement, duplication or re-recording
### Information security event:

An occurrence or previously unknown situation indicating a possible breach of **information security**

*Note: An occurrence or situation is considered a potential breach of information security if it may lead to a negative impact on the confidentiality, integrity and / or accessibility of one or more information assets.*

### Information security incident:

Single *information security event* or a series of information security events with a significant probability of having a negative impact on the delivery of *services* to *customers*, and therefore on the *customers’* business operations.
ISM: Requirements according to FitSM-1

<table>
<thead>
<tr>
<th>PR6 Information Security Management (ISM)</th>
<th>REQUIREMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>• PR6.1 Information security policies shall be defined.</td>
<td></td>
</tr>
<tr>
<td>• PR6.2 Physical, technical and organizational information security controls shall be implemented to reduce the probability and impact of identified information security risks.</td>
<td></td>
</tr>
<tr>
<td>• PR6.3 Information security policies and controls shall be reviewed at planned intervals.</td>
<td></td>
</tr>
<tr>
<td>• PR6.4 Information security events and incidents shall be given an appropriate priority and managed accordingly.</td>
<td></td>
</tr>
<tr>
<td>• PR6.5 Access control, including provisioning of access rights, for information-processing systems and services shall be carried out in a consistent manner.</td>
<td></td>
</tr>
</tbody>
</table>
### ISM: Initial process setup

<table>
<thead>
<tr>
<th>Initial activities</th>
<th>Typical results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Define a scheme to classify information assets according to their sensitivity / criticality</td>
<td>Information classification scheme</td>
</tr>
<tr>
<td>Define a way to document an inventory of (information) assets</td>
<td>Initial (empty) asset inventory</td>
</tr>
<tr>
<td>Identify, describe and classify the most important information assets</td>
<td>Asset inventory filled with initial data on information assets</td>
</tr>
<tr>
<td>Identify the most important links between configuration items (CIs) such as information-processing systems / facilities and the information assets identified before</td>
<td>Asset inventory filled with information assets linked to CIs</td>
</tr>
</tbody>
</table>
# ISM: Initial process setup

<table>
<thead>
<tr>
<th>Initial activities</th>
<th>Typical results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Define a method / scheme to identify and assess information security risks</td>
<td>Risk assessment method and scheme</td>
</tr>
<tr>
<td>Perform an initial risk assessment, based on the identified assets, and focused on the most significant information security risks</td>
<td>Risk assessment report</td>
</tr>
<tr>
<td>Define clear information security policies as a basis for effective information security governance</td>
<td>Various information security policies</td>
</tr>
<tr>
<td>Define a way to document information security controls and to monitor their status and progress of implementation</td>
<td>Initial (empty) repository of information security controls</td>
</tr>
<tr>
<td>Identify and document the most important technical, physical and organisational information security controls in place</td>
<td>Documented information security controls</td>
</tr>
</tbody>
</table>
ISM: Inputs & outputs

**Inputs**
- Information security requirements (from SLAs, legislation, contracts)
- Relevant risk factors (information on assets, vulnerabilities, threats)

**Outputs**
- Up-to-date inventory of information assets
- Approved information security policies
- Up-to-date information security risk assessment
- Documented information security controls
- Reports on information security events, incidents and follow-up actions
ISM: Inputs & outputs

- Information assets
- Vulnerabilities
- Threats

- Asset inventory
- IS risks

- Information security policies
- Information security controls
ISM: Ongoing process activities

- Manage (information) assets:
  - Add an information asset to the asset inventory
  - Update the description or classification of an information asset in the asset inventory
  - Remove an information asset from the asset inventory

- Manage information security risks:
  - Identify and assess a new or changed information security risk
  - Review or repeat the information security risk assessment (in regular intervals)
ISM: Ongoing process activities

• Maintain information security policies:
  – Create, approve and communicate a new information security policy
  – Update an existing information security policy
  – Retire an existing information security policy

• Plan and implement information security controls:
  – Specify a new information security control
  – Update the specification of an existing information security control
  – Retire an existing information security control
ISM: Ongoing process activities

• Manage information security events and incidents:
  – Monitor, record and classify information security events
  – Identify and handle an information security incident
  – Define and monitor follow-up actions after an information security incident

• Perform access control
  – Process requests for access rights
  – Provide access rights
  – Modify or revoke access rights
  – Review access rights (in regular intervals)
## ISM: Roles

<table>
<thead>
<tr>
<th>Role</th>
<th>Tasks</th>
<th>Ca. number of persons performing this role</th>
</tr>
</thead>
<tbody>
<tr>
<td>Process owner ISM</td>
<td><strong>Generic tasks of a process owner applied in the context of ISM</strong></td>
<td>1 in total</td>
</tr>
<tr>
<td>Process manager ISM</td>
<td><strong>Generic tasks of a process manager, plus:</strong></td>
<td>1 in total</td>
</tr>
<tr>
<td>(Information security manager / officer)</td>
<td>• Act as the primary contact of the service provider for all information security-related issues</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Monitor the status and progress of all activities connected to the process of information security management, in particular the maintenance of the asset inventory, information security risk assessment and handling of information security events and incidents</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Ensure that information security incidents are detected and classified as such as quickly as possible, and handled in an effective way to minimise harm caused by them</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Ensure that all security-related documentation is maintained ad up-to-date</td>
<td></td>
</tr>
</tbody>
</table>
## ISM: Roles

<table>
<thead>
<tr>
<th>Role</th>
<th>Tasks</th>
<th>Ca. number of persons performing this role</th>
</tr>
</thead>
</table>
| Information security risk manager | • Ensure that the asset inventory is complete and up-to-date  
• Ensure that the asset owners maintain the descriptions and classifications of the assets under their ownership and provide other information relevant for identifying and assessing information security risks  
• Perform a solid risk assessment periodically, based on available information on assets to be protected, as well as up-to-date information on vulnerabilities and threats  
• Update the risk assessment, whenever necessary – in particular, if a significant risk factor has changed  
• Together with other experts, identify, plan, implement and document information security controls to treat risks | 1 in total |
<table>
<thead>
<tr>
<th>Role</th>
<th>Tasks</th>
<th>Ca. number of persons performing this role</th>
</tr>
</thead>
</table>
| Asset owner                 | • Maintain and review the description and classification of a specific (information) asset in the asset inventory  
                               • Act as a primary contact point for the asset under his/her ownership  
                               • Support the identification and analysis of information security risks connected to the asset under his/her ownership by providing information / input to the risk assessment | 1 per (information) asset                 |
| Information security control owner | • Maintain and review the specification / documentation of a specific information security control  
                                • Act as a primary contact point and expert for the control under his/her ownership | 1 per security control                   |
### Critical success factors & KPIs

<table>
<thead>
<tr>
<th>Critical success factors</th>
<th>Key performance indicators (KPIs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>An up-to-date asset inventory is available and reviewed regularly.</td>
<td>• Number of assets identified and described in the asset inventory</td>
</tr>
<tr>
<td>Information security risks are identified and assessed.</td>
<td>• Number of risks identified</td>
</tr>
<tr>
<td>Technical, physical and organisational / administrative measures (controls) to mitigate information security risks are effectively implemented and continually reviewed and improved.</td>
<td>• Number of security controls planned / implemented</td>
</tr>
<tr>
<td></td>
<td>• Costs of implementing and maintaining security controls vs. loss / damage avoided</td>
</tr>
<tr>
<td>Information security incidents are avoided effectively.</td>
<td>• Number of potential information security incidents that have been avoided through effective countermeasures</td>
</tr>
<tr>
<td>If an information security incident occurred, it is identified as such and handled in an effective way.</td>
<td>• Number of information security events identified</td>
</tr>
<tr>
<td></td>
<td>• Number of information security incidents</td>
</tr>
</tbody>
</table>
A simplified example

• **Identify the most important information assets and related risks of the pizza delivery company!**

  – Which assets are how critical for the operation of the services?
  – What are the potential vulnerabilities, threats and resulting security risks?

• **Define reasonable information security policies and controls to address the identified risks!**
Overview

- Service portfolio management (SPM)
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- Capacity management (CAPM)
- Information security management (ISM)
- **Customer relationship management (CRM)**
- Supplier relationship management (SUPPM)
Customer Relationship Management (CRM)

Objective
To establish and maintain a good relationship with customers receiving services
<table>
<thead>
<tr>
<th>Definition following FitSM-0:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Customer:</strong></td>
</tr>
<tr>
<td>The organisation or part of an organisation that negotiates the level of <em>services</em> and commissions the <em>service provider</em>, doing so on behalf of a number of <em>users</em></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Definition following FitSM-0:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>User:</strong></td>
</tr>
<tr>
<td>Individual that primarily benefits from and uses a <em>service</em></td>
</tr>
</tbody>
</table>
## PR7 Customer Relationship Management (CRM)

### REQUIREMENTS

- PR7.1 Service customers shall be identified.
- PR7.2 For each customer, there shall be a designated contact responsible for managing the customer relationship and customer satisfaction.
- PR7.3 Communication mechanisms with customers shall be established.
- PR7.4 Service reviews with the customers shall be conducted at planned intervals.
- PR7.5 Service complaints from customers shall be managed.
- PR7.6 Customer satisfaction shall be managed.
**CRM: Initial process setup**

<table>
<thead>
<tr>
<th>Initial activities</th>
<th>Typical results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Set up an initial customer database, and for each service customer document the most important information including contact information both on the customer side as well as a designated contact for the customer on the service provider side (account manager)</td>
<td>Initial customer database</td>
</tr>
<tr>
<td>Define a way to perform and document the results of a service review</td>
<td>Service review documentation template (and related procedures)</td>
</tr>
<tr>
<td>Define a way to record, respond to and follow-up a customer complaint</td>
<td>Customer complaints processing system or documentation template</td>
</tr>
<tr>
<td>Define a way to evaluate customer satisfaction on a regular basis, e.g. based on regular (online) surveys</td>
<td>Customer satisfaction questionnaire / online survey</td>
</tr>
</tbody>
</table>
**CRM: Inputs & outputs**

**Inputs**
- Information on service customers
- Current service catalogue
- Customer demands and requirements
- Existing SLAs with customers
- Customer complaints

**Outputs**
- Up-to-date database of service customers (customer database)
- Service review reports
- Customer complaints records
- Customer satisfaction reports
CRM: Ongoing process activities

- Maintain the customer database
  - Add a new customer to the customer database
  - Update the information on a customer in the customer database
  - Remove a customer from the customer database

- Manage customer complaints
  - Record, handle and close a customer complaint
  - Monitor the implementation status of actions following a customer complaint
  - Review all customer complaints and follow-up actions periodically
CRM: Ongoing process activities

- Manage customer satisfaction
  - Plan and prepare a customer satisfaction survey
  - Perform and record the results of a customer satisfaction survey
  - Initiate follow-up actions in response to insufficient customer satisfaction

- Perform customer service reviews
  - Plan and prepare a service review
  - Perform and record a service review
## CRM: Roles

<table>
<thead>
<tr>
<th>Role</th>
<th>Tasks</th>
<th>Ca. number of persons performing this role</th>
</tr>
</thead>
<tbody>
<tr>
<td>Process owner CRM</td>
<td><em>Generic tasks of a process owner applied in the context of CRM</em></td>
<td>1 in total</td>
</tr>
<tr>
<td>Process manager CRM</td>
<td><em>Generic tasks of a process manager, plus:</em>&lt;br&gt;• Maintain the customer database&lt;br&gt;• Ensure that customer complaints are handled according to the process&lt;br&gt;• Coordinate customer satisfaction surveys&lt;br&gt;• Review the results from customer service reviews</td>
<td>1 in total</td>
</tr>
<tr>
<td>Customer relationship manager (Account manager)</td>
<td>• Act as the primary contact point for a specific customer&lt;br&gt;• Maintain the relationship with that customer by regular communication&lt;br&gt;• Process formal customer complaints&lt;br&gt;• Conduct, moderate and record customer service reviews</td>
<td>1 per identified customer</td>
</tr>
</tbody>
</table>


Overview

• Service portfolio management (SPM)
• Service level management (SLM)
• Service reporting management (SRM)
• Service availability & continuity management (SACM)
• Capacity management (CAPM)
• Information security management (ISM)
• Customer relationship management (CRM)
• Supplier relationship management (SUPPM)
Supplier Relationship Management (SUPPM)

Objective
To establish and maintain a healthy relationship with suppliers supporting the service provider in delivering services to customers, and monitor their performance
## Definition following FitSM-0:

**Supplier:**

External organisation that provides a *service* or product to the *service provider*, which they need to operate their business and provide *services* to their *customers/users*.
SUPPM: Requirements accord. to FitSM-1

<table>
<thead>
<tr>
<th>PR8 Supplier Relationship Management (SUPPM)</th>
<th>REQUIREMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>• PR8.1 Suppliers shall be identified.</td>
<td></td>
</tr>
<tr>
<td>• PR8.2 For each supplier, there shall be a designated contact responsible for managing the relationship with the supplier.</td>
<td></td>
</tr>
<tr>
<td>• PR8.3 Communication mechanisms with suppliers shall be established.</td>
<td></td>
</tr>
<tr>
<td>• PR8.4 Supplier performance shall be monitored.</td>
<td></td>
</tr>
</tbody>
</table>
## SUPPM: Initial process setup

<table>
<thead>
<tr>
<th>Initial activities</th>
<th>Typical results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Set up an initial supplier database, and for each supplier document the most important information including contact information both on the supplier side as well as on the service provider side (supplier relationship manager)</td>
<td>Initial supplier database</td>
</tr>
</tbody>
</table>
SUPPM: Inputs & outputs

**Inputs**
- Information on suppliers
- Information on supplier offerings
- UAs with suppliers

**Outputs**
- Up-to-date supplier database
- Supplier performance reports
SUPPM: Ongoing process activities

- Maintain the supplier database
  - Add a new supplier to the supplier database
  - Update the information on a supplier in the supplier database
  - Remove a supplier from the supplier database

- Monitor supplier performance
  - Measure and review supplier performance based on underpinning agreements (UAs) with suppliers
  - Initiate follow-up actions in response to insufficient supplier performance
# SUPPM: Roles

<table>
<thead>
<tr>
<th>Role</th>
<th>Tasks</th>
<th>Ca. number of persons performing this role</th>
</tr>
</thead>
<tbody>
<tr>
<td>Process owner SUPPM</td>
<td><em>Generic tasks of a process owner applied in the context of SUPPM</em></td>
<td>1 in total</td>
</tr>
<tr>
<td>Process manager SUPPM</td>
<td><em>Generic tasks of a process manager, plus:</em></td>
<td>1 in total</td>
</tr>
<tr>
<td></td>
<td>• Maintain the supplier database</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Ensure that supplier performance is monitored according to the process</td>
<td></td>
</tr>
<tr>
<td>Supplier relationship manager</td>
<td>• Act as the primary contact point for a specific supplier</td>
<td>1 per identified supplier</td>
</tr>
<tr>
<td></td>
<td>• Maintain the relationship with that supplier by regular communication</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Maintain mechanisms for monitoring the performance of the supplier</td>
<td></td>
</tr>
</tbody>
</table>
A simplified example

• **Identify the most important suppliers of the pizza delivery company!**

  – How would you document and classify the suppliers?
  – How would you monitor supplier performance?
Agenda of this training

• FitSM Foundation wrap-up & ITSM basics
• Selected general aspects of establishing a service management system (SMS)
• ITSM processes for the planning and delivery of services

> **ITSM process interfaces and dependencies**
ITSM Process Interfaces & Dependencies
Service Planning & Delivery: Overview of key process interfaces

- SPM: Service portfolio
- SDTPs
- UAs
- OLAs
- Identified customer requirements
- SUPPM: Supplier database, Supplier performance reports
- Customer satisfaction reports
- CRM: Customer database
- SRM: Service reports, Service catalogue
- SACM: Av. & cont. plans
- CAPM: Capacity plans
- ISM
- ISM
- ISM
- ISM
ITSM process, i.e. one of the service planning & delivery processes introduced earlier

Process artefact, i.e. input to or output to / from an ITSM process

[artefact] is input to [ITSM process] / [artefact] is output from [ITSM process]

[artefact] is a basis for / used for / aligned with / referenced from [artefact]

[output] is at the same time input to [ITSM process] (relevant for “closed-loop” processes) – i.e. the output is maintained by its “producing” ITSM process and requires regular reviews / updates
Detailed process interfaces: SPM, SLM and CRM
Detailed process interfaces: SLM, CRM and SUPPM

- SLM
- CRM
- SUPPM

Service catalogue

Identified customer requirements

SLAs

UAs

OLAs

Customer database

Supplier database
<table>
<thead>
<tr>
<th>slide in this deck (v2.5)</th>
<th>what has changed compared to v2.4?</th>
<th>comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>23 (federation models)</td>
<td>slight update with examples and minor text adjustments</td>
<td>copied over from latest interim Foundation slides (v2.10b)</td>
</tr>
<tr>
<td>45 (SMS manager role)</td>
<td>new slide</td>
<td></td>
</tr>
<tr>
<td>63 (services of a hotel)</td>
<td>new slide</td>
<td></td>
</tr>
<tr>
<td>65 (SDTP)</td>
<td>new slide</td>
<td></td>
</tr>
<tr>
<td>117 (Cap. Plan Onwer)</td>
<td>new slide</td>
<td></td>
</tr>
<tr>
<td>All slides reg. the process manager role of a specific process (e.g. 71 for SPM)</td>
<td>role description of process owner added</td>
<td></td>
</tr>
</tbody>
</table>