YaSM and the
YaSM® Process Map

Introduction to
YaSM Service Management

YaSM®

Contents

Why "Yet another Service Management Model"?

YaSM - the idea

The idea behind YaSM®[1] is not to add yet another service management framework to the many that are already in existence, but to describe a straightforward set of processes that enables organizations to learn by example and bridge the gap between theory and practice.

To this end we assessed the most often used frameworks, concepts and standards for service management and ITSM, in particular ITIL®, ISO 20000®, COBIT®, USMBOK™, CMMI-SVC®, SIAM® and VeriSM™, and assimilated the common principles.

The result of this effort - the YaSM model - is streamlined insofar as it has a perfectly clear structure that makes it easy to understand the purpose of each process. For each process, YaSM provides a detailed template, describing the activities to be performed, the required inputs and the resulting outputs, as well as the responsibilities.

---

[1] YaSM stands for "Yet another Service Management Model". YaSM® is a registered trade mark of IT Process Maps GbR.
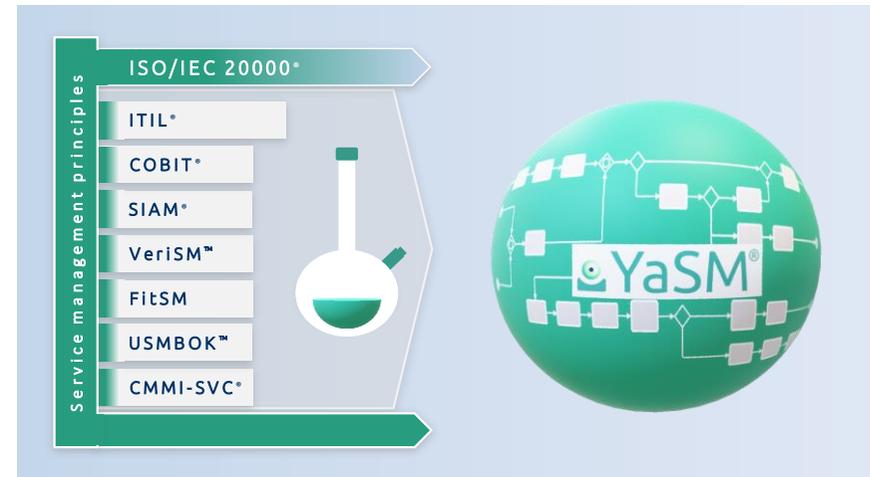
YaSM isn't about blindly following "best practice"

The YaSM processes are not prescriptive. YaSM is rather a basis for defining tailor-made processes that work in your organization.

And YaSM doesn't have to be "implemented" in full. You can start small, concentrating on those process improvements that offer the most benefits.

Giving the YaSM model a clear, easily understood structure was important to us because we wanted to ensure the model can be adopted in a flexible way: In our experience it is almost impossible to simplify a complex system - while starting with something simple and adding more sophistication where needed is relatively easy.

For a first introduction to the YaSM processes, please refer to section "YaSM processes in brief" from page 9.

A model for everyone in the business of providing services

Service management frameworks (especially ITIL®) have until recently been used mainly in the domain of information technology (IT) services, for whom these frameworks were originally created.

As ITIL grew popular, more and more organizations realized that ITIL and service management best practice can be applied to all types of services, such as HR, financial, healthcare, etc. (a trend that is often referred to as "enterprise service management"). So we made a point of ensuring that YaSM is accessible and easy to understand for everyone providing services.

YaSM and ITIL, ISO 20000, SIAM, VeriSM, DevOps, …

Time never stands still, and the service management discipline keeps evolving. ITIL®[2] started some 30 years ago with a focus on operating IT infrastructure. Today many service providers are better described as "service integrators", as their customer-facing services are based on supporting services supplied by third parties. What's more, service management best practice is increasingly applied in other areas outside of the IT organization (see above).

This has led to the emergence of new concepts, each with its own focus:

SIAM®[3], for example, contains guidance specifically for service integration, and VeriSM™[4] introduces the "management mesh" as a management approach from the organizational level. At the same time, service providers discovered that they can greatly benefit from concepts such as Agile, Lean, DevOps, Kanban, etc.

As a result, the service management discipline is now getting more diverse. But its key principles are well established, as enshrined in ISO/IEC 20000 ("ISO 20000"), the international standard for service management. We have thus ensured the YaSM model is perfectly aligned with ISO 20000.

Everyone versed in ITIL, ISO 20000, SIAM or VeriSM will instantly feel at home, and you can easily extend the YaSM processes with inputs from these frameworks - or indeed with any other concepts and ideas that help you with providing better services.

Please refer to the YaSM Wiki at yasm.com/wiki for more details on how YaSM relates to, and can be used with, the most popular concepts and methods in service management:

---

[2] ITIL® is a registered trade mark of AXELOS Limited.

[3] SIAM® is a registered trademark of EXIN.

[4] VeriSM® is a registered trademark of IFDC.

— ISO/IEC 20000

— ITIL®

— COBIT® (Control Objectives for Information and Related Technologies)[5]

— CMMI® for Services (CMMI-SVC)[6]

— USMBOK™ (Universal Service Management Body of Knowledge)[7]

— SIAM® Service Integration and Management

— VeriSM™

— DevOps

— Agile

— Lean

The YaSM® process model

The main product in the YaSM product family is the "YaSM® Process Map": For each process and sub-process, the service management process model defines in the form of a diagram the activities to be performed, the required inputs and the resulting outputs. It also contains a full set of detailed document templates ("checklists") for the documents and records produced by the YaSM processes.

The YaSM® Process Map is currently available for two platforms, Microsoft Visio®[8] and ARIS™[9]. All diagrams and documents are completely editable, which makes the process model the ideal starting point for developing a set of processes tailored to the needs of specific organizations.

An additional component (the "YaSM® - ISO 20000 Bridge") relates the YaSM processes to the ISO 20000 requirements and specifically addresses the needs of organizations that wish to achieve certification against ISO 20000. It's the perfect companion as you get ready for the ISO 20000 audit.

For more information on the YaSM products and services, please refer to page 52.

History of YaSM

Since 2006 we have been supplying an officially accredited process model for ITIL (the "ITIL® Process Map") to help IT service providers with

---

[5] COBIT® is a registered trademark of ISACA (Information Systems Audit and Control Association).

[6] CMMI® and Capability Maturity Model® are registered trademarks of Carnegie Mellon University.

[7] USMBOK™ is a registered trademark of Virtual Knowledge Solutions International Incorporated (VKSII).

[8] Visio® is registerd trademark of Microsoft Corp.

[9] ARIS™ and ARIS Process Platform™ are registered trademarks of Software AG.

understanding the principles behind ITIL and designing their ITIL-aligned processes and documents. Our approach to presenting the ITIL concepts in the form of process diagrams has been well received and is used by hundreds of organizations world-wide.

But from countless conversations with our customers it became clear that many find the existing guidance useful in principle, but too complex and difficult to understand. So we decided that, after some 20 or 30 years, it was time for a fresh start with a new, streamlined process model that is easier to understand, has a perfectly clear and pragmatic structure, and is supported by a full set of ready-to-use templates.

What's more, we wanted to offer a model that can be used for business service management/ enterprise service management, as well as ITSM. And that's how the idea for YaSM was born.

We spent two years developing the YaSM model and published the initial version of YaSM 1.0 in 2014: The YaSM model is a translation of service management 'best practice' into a streamlined, accessible set of processes and ready-to-use templates.

The first major update was completed in 2018 to incorporate user feedback and align the YaSM processes with the latest edition of ISO 20000:2018.

Where to learn more about YaSM

First of all, the remaining chapters of this introduction provide you with a complete overview of YaSM, including its processes and underlying principles.

There is also the YaSM Wiki, available to everyone for free on the internet. In the YaSM Wiki you will find additional information, such as a comprehensive account of the YaSM processes and sub-processes with their outputs, the YaSM glossary, the YaSM RACI matrix, as well as in-depth information on how YaSM relates to other service management standards and frameworks.

YaSM processes in brief

Service lifecycle processes and supporting processes - The main differences

YaSM's process structure distinguishes between "*service lifecycle processes*" and "*supporting service management processes*".

The lifecycle processes (shown as a circle in the diagram to the right) are modelled upon a well-established management method for continuous improvement, known for example as the Deming or Plan-Do-Check-Act cycle.

The YaSM service lifecycle processes:

— Decide upon the service provider's strategic direction and the range of services to be offered to customers

— Design, build and deploy new or changed services

— Operate the services, including resolve incidents, service requests and problems

— Improve the services.
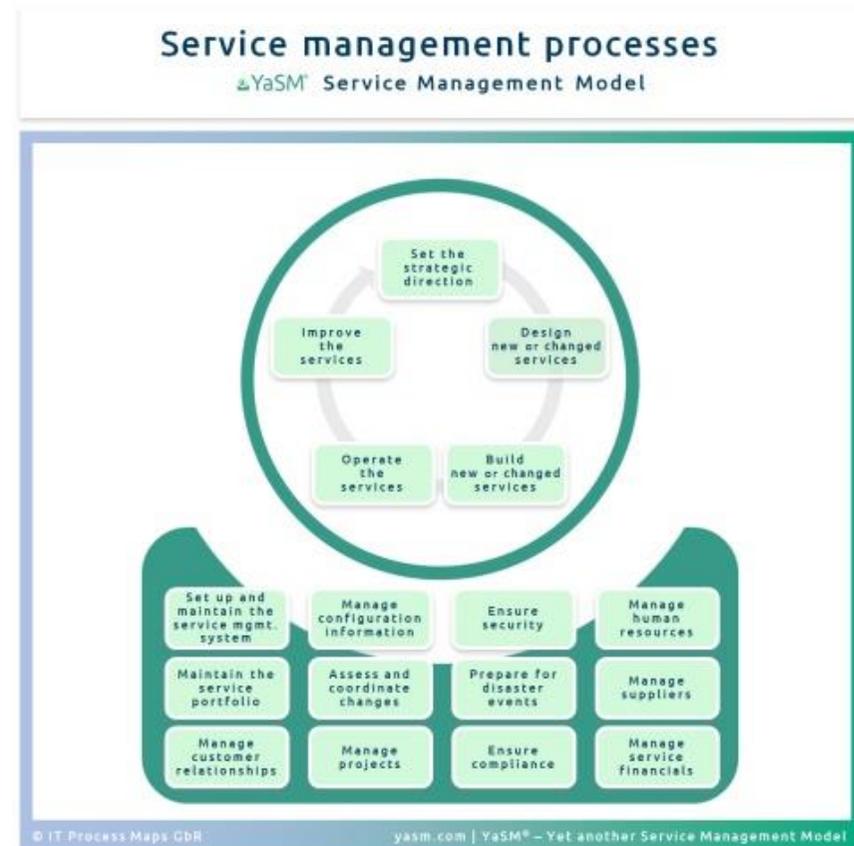
Service management processes
YaSM Service Management Model

The supporting service management processes provide various kinds of support to the service lifecycle processes, such as the management of customer relationships, projects, etc.

Note: Those familiar with ITIL will recognize the similarity with the service lifecycle introduced with ITIL v3 - but also the differences.

We chose to arrange a set of supporting processes "underneath" the lifecycle processes because this makes the whole process structure a lot easier to understand.

Some of the complexity in ITIL results from the fact that ITIL places every process in one of five service lifecycle stages. Configuration management, for instance, is part of the service transition stage. But configuration management activities take place at various points across the service lifecycle, and configuration information is needed as an input for virtually every ITIL process. It is thus more straightforward and intuitive to treat the management of configuration information as a "supporting" process outside the service lifecycle.

The following pages present a brief introduction to each YaSM process, highlighting its purpose within the YaSM model and its most important activities. We recommend reading this introduction in combination with the YaSM glossary, where you will find definitions of all YaSM terms (the glossary is available in the YaSM Wiki on the internet, or in PDF format as part of the YaSM® Process Map).

Service lifecycle processes

YaSM's service lifecycle processes are directly concerned with managing the service provider's range of services across their lifecycle.

Strategic assessments of the service provider's current situation and future developments provide the basis for deciding which services are to be offered to customers.

Once that decision has been made, the service lifecycle processes will design, build, deploy, operate and constantly improve the services.

The five service life cycle processes are:

— LP1: Set the strategic direction

— LP2: Design new or changed services

— LP3: Build new or changed services

— LP4: Operate the services, including

    — LP4.6: Resolve incidents and service requests

    — LP4.7: Resolve problems

— LP5: Improve the services.

LP1: Set the strategic direction
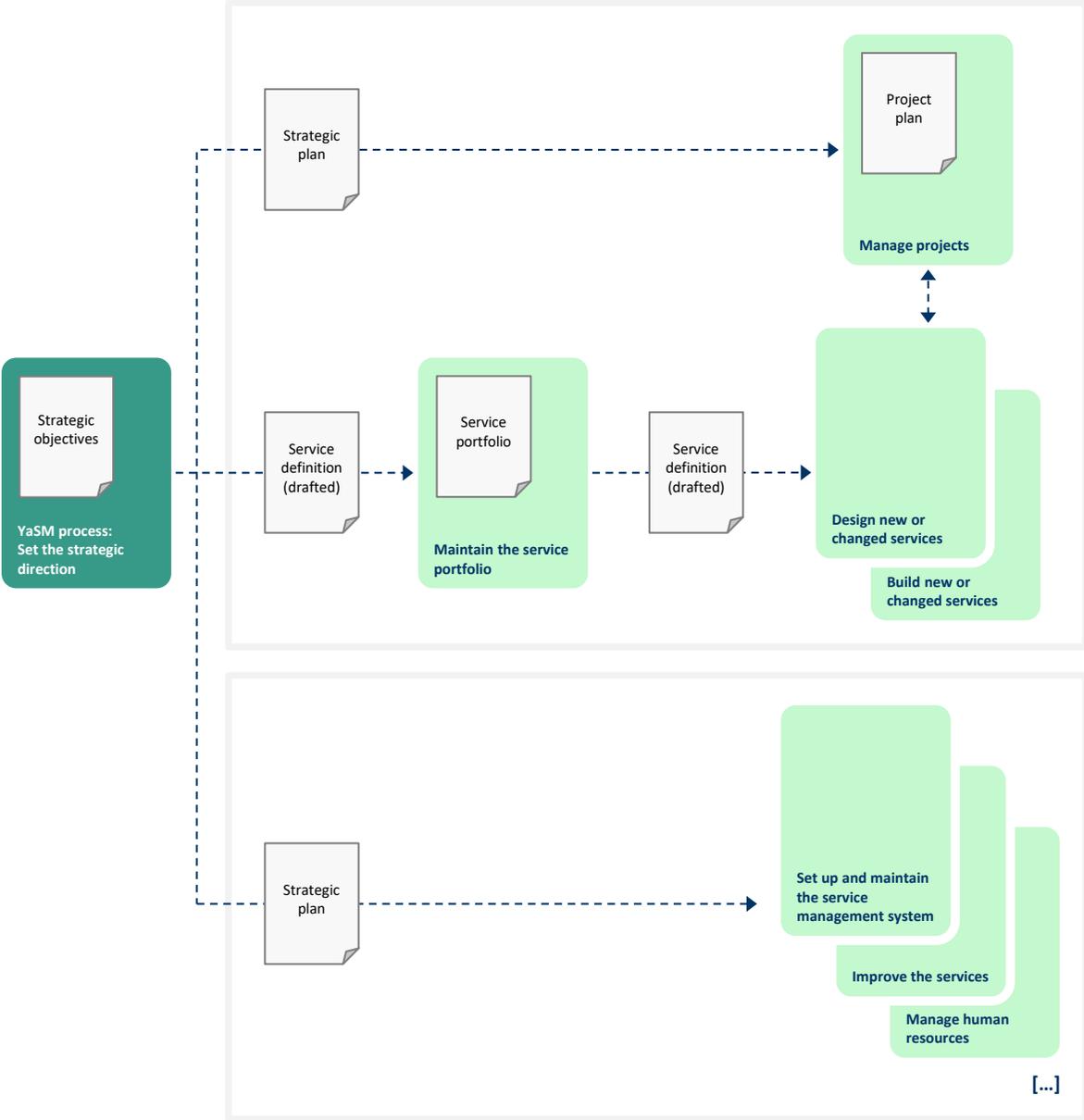
Example 1:

Strategic initiative executed as a service development project

Example 2:

Strategic initiative executed through other YaSM processes

Project plan

Manage projects

Strategic plan

Strategic objectives

YaSM process: Set the strategic direction

Service definition (drafted)

Service portfolio

Maintain the service portfolio

Service definition (drafted)

Design new or changed services

Build new or changed services

Strategic plan

Set up and maintain the service management system

Improve the services

Manage human resources

[...]

The *strategic process (LP1: Set the strategic direction)* starts with an assessment of the service provider's range of services and the needs of current or potential future customers.

Based on this assessment, the service provider is able to establish its strategic objectives and to draw up the strategic plan (the "service strategy"). The strategic plan contains a number of initiatives or projects aimed at achieving the strategic objectives.

A typical example for a strategic objective would be the ability to offer a new service to a particular group of customers. The strategic plan would then contain one or several initiatives for developing the new service, including all required supporting infrastructure and other capabilities.

As shown in the figure above, strategic initiatives are defined and initiated by the strategic process, but usually executed by a number of other YaSM processes:

Initiatives with the aim of creating new or significantly changed services will be carried out as formal service development projects through the service design and build processes.

For other types of strategic initiatives, YaSM provides further mechanisms for their execution, such as:

— Service improvement initiatives managed through service improvement plans

— Process improvement initiatives managed through process improvement plans

— Skill development initiatives managed through skills development plans.

LP2: Design new or changed services;

LP3: Build new or changed services

Project plan

Manage projects

Set up and maintain the service management system

Ensure security

Manage human resources

[...]

YaSM process: Design new or changed services

Service implmnt. blueprint

YaSM process: Build new or changed services

Service operation manual

Operate the services

Service definition (drafted)

Service definition (drafted)

Service definition (ready for activation)

Service definition (activated)

Service portfolio

Maintain the service portfolio

The main responsibilities of *service design (LP2: Design new or changed services)* are to define the required service properties, to determine the infrastructure and other capabilities which are needed to provide the service, and to develop the approach for implementing new or changed services.

Based on this information, the *service build process (LP3: Build new or changed services)* will create, test and deploy the required infrastructure, supporting services, documentation and other service components.

Other processes may be called upon if specific capabilities must be upgraded due to the introduction of a new service. For example, it may be necessary to

— Modify service management processes

— Adapt the security mechanisms and controls

— Update the service continuity arrangements

— Develop new skills.

While the service design and service build processes carry out the design and build activities, the project management process will typically be in charge of overall planning and coordination of the service development project.

LP4: Operate the services

Build new or changed services

Service operation manual

CI record (verified)

CI record (updated)

Manage configuration information

Service portfolio

Maintain the service portfolio

Service definition

Operational service agreement

YaSM process: Operate the services

Service quality report

Improve the services

Customer process

Incident record

Service request record

YaSM process: Operate the services > Monitor the services

Incident record

YaSM process: Operate the services > Resolve incidents and service requests

Incident record

Problem record (suggested)

YaSM process: Operate the services > Resolve problems

Incident model

Problem record

YaSM process: Operate the services

Service operation (LP4) ensures that the services are delivered effectively and efficiently, in line with the contractual commitments. This includes fulfilling service requests, resolving incidents and problems, as well as carrying out routine operational tasks.

The achieved service quality is measured on a regular basis. The resulting service quality reports are an important input for the service improvement process.

The figure above also highlights how three particular sub-processes from service operation (*Monitor the services, Resolve incidents and service requests, Resolve problems*) cooperate in order to detect and resolve actual or potential incidents and their underlying causes (problems).

LP5: Improve the services

Manage customer relationships

Customer service agree-ment

Customer meeting minutes

Manage projects

Project plan

Operate the services

Service quality report

YaSM process: Improve the services

Service improv. plan (SIP)

Service definition (updated)

Maintain the service portfolio

Service portfolio

Service definition (activated)

Operational service agreement

Set the strategic direction

Manage suppliers

Strategic assess-ment report

Supplier meeting minutes

[...]

[...]

The *service improvement process (LP5)* performs regular service reviews to check if the delivered service quality is in line with the contractual commitments or if there are better ways of providing the service. Service reviews are held for all types of services, i.e. for customer-facing services as well as (internal or external) supporting services.

Suggestions for service improvements may also originate from other sources, for example from

— Strategic assessments

— Customer meetings

— Supplier meetings.

If potential for improvement is identified, this may lead to the definition and execution of service improvement initiatives which are managed through service improvement plans.

While the implementation of some improvement initiatives can be co-ordinated by the service owner, initiatives of a larger scale should be run as formal projects (the project policy contains the rules for deciding if a project must be set up).

Supporting service management processes

YaSM's supporting service management processes provide various kinds of support to the service lifecycle processes.

For example, the customer relationship management process can be called upon to communicate with the customers, for example when the service strategy is being developed, when new services are to be designed, or when existing services need to be improved.

The YaSM model includes twelve supporting service management processes:

— SP1: Set up and maintain the service management system
— SP2: Maintain the service portfolio
— SP3: Manage customer relationships
— SP4: Manage configuration information
— SP5: Assess and coordinate changes
— SP6: Manage projects
— SP7: Ensure security
— SP8: Prepare for disaster events
— SP9: Ensure compliance
— SP10: Manage human resources
— SP11: Manage suppliers
— SP12: Manage service financials.

SP1: Set up and maintain the service management system

Build new or
changed services

Request to
update the
service
mgmt.
processes

Process
improv.
plan
- PIP

YaSM process:
Set up and maintain
the SMS

Process
model

Service
manage-
ment
policies

*(The process model
and the service
management policies
are important inputs
for virtually every
YaSM process)*

Set the strategic
direction

Operate the services

Improve the services

[...]

Suggested
process
modification

One of the key principles in YaSM is that services should be managed through a service management system (SMS), in line with the requirements of ISO 20000, the leading service management standard.

The *process for setting up and maintaining the SMS (SP1)* is thus a very important one. Specifically, this process is responsible for designing, implementing, operating and continually improving the processes of the service provider organization. It will also provide a complete set of service management policies which contain definitions and rules to direct the service provider's actions.

The impetus for setting up or modifying service management processes often comes from service development projects, for example if the introduction of a new service requires an update to the incident resolution process.

It is also possible that a strategic review will lead to the conclusion that a process must be introduced or changed. Other than that, suggestions for process improvements may originate from anywhere in the service provider organization.

Note: If processes are operated by external parties, YaSM recommends treating such processes as external supporting services, to be managed through the service lifecycle processes.

SP2: Maintain the service portfolio
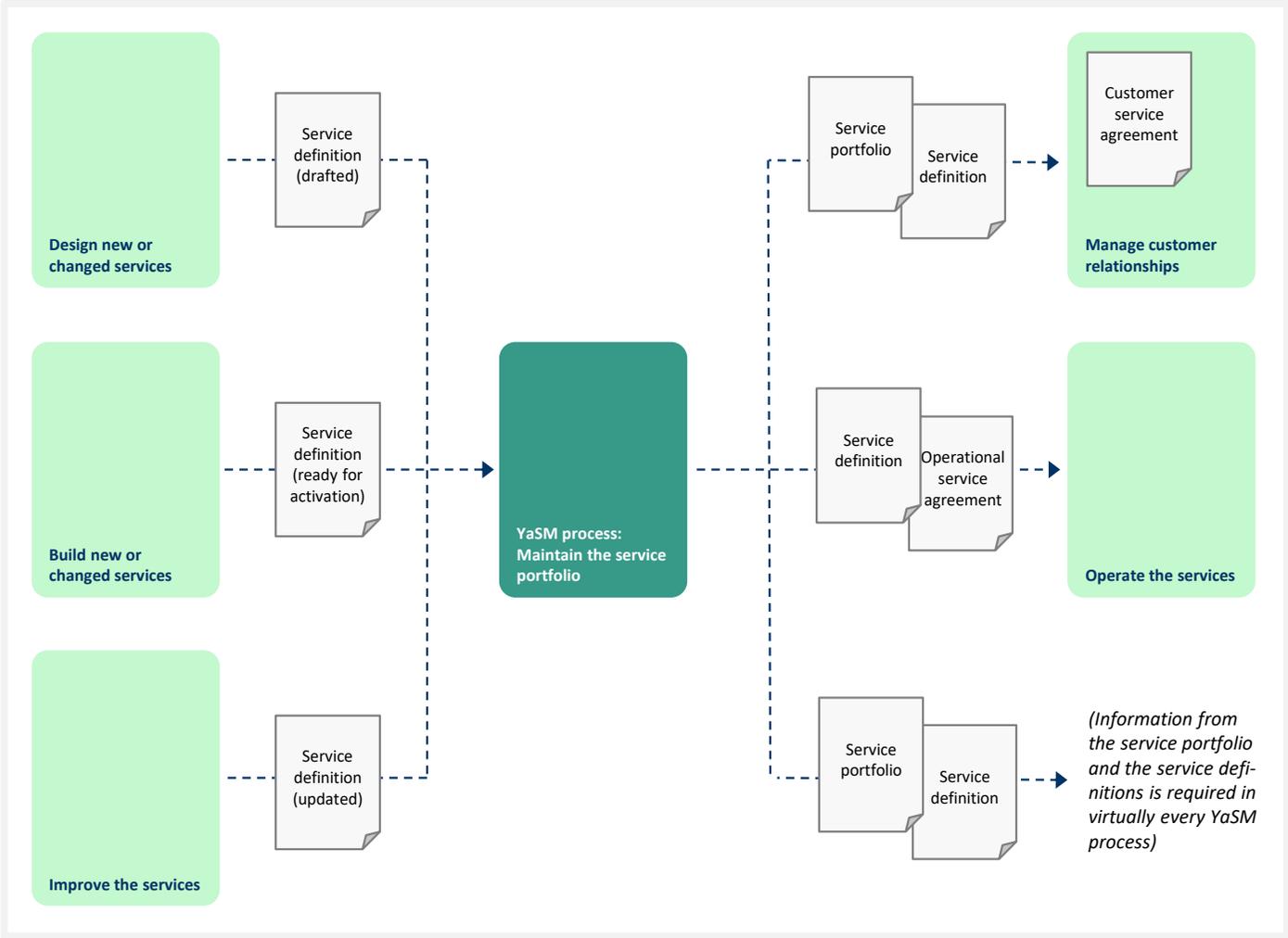
The YaSM *process for maintaining the service portfolio (SP2)* is responsible for controlling all changes to the service portfolio, making sure that the information in the service portfolio and the related service definitions are an accurate representation of the range of services managed by the service provider.

Changes to the service portfolio are usually the result of new services being proposed or built, or existing services being modified.

The service portfolio and the service definitions are an important input for most YaSM processes. For example, the definitions of customer services are the basis for setting up customer service agreements. Since the service definitions specify the service quality to be delivered, they are also a crucial input for service operation.

YaSM's service portfolio maintenance process also maintains the operational service agreements. As a rule, whenever a new or changed supporting service is ready to be activated in the service portfolio, the service portfolio manager will ensure that an operational service agreement is signed with the responsible service owner.

Note: Customer service agreements are managed by the customer relationship manager role (as soon as a customer service is activated in the service portfolio, customers may sign up for it).

SP3: Manage customer relationships
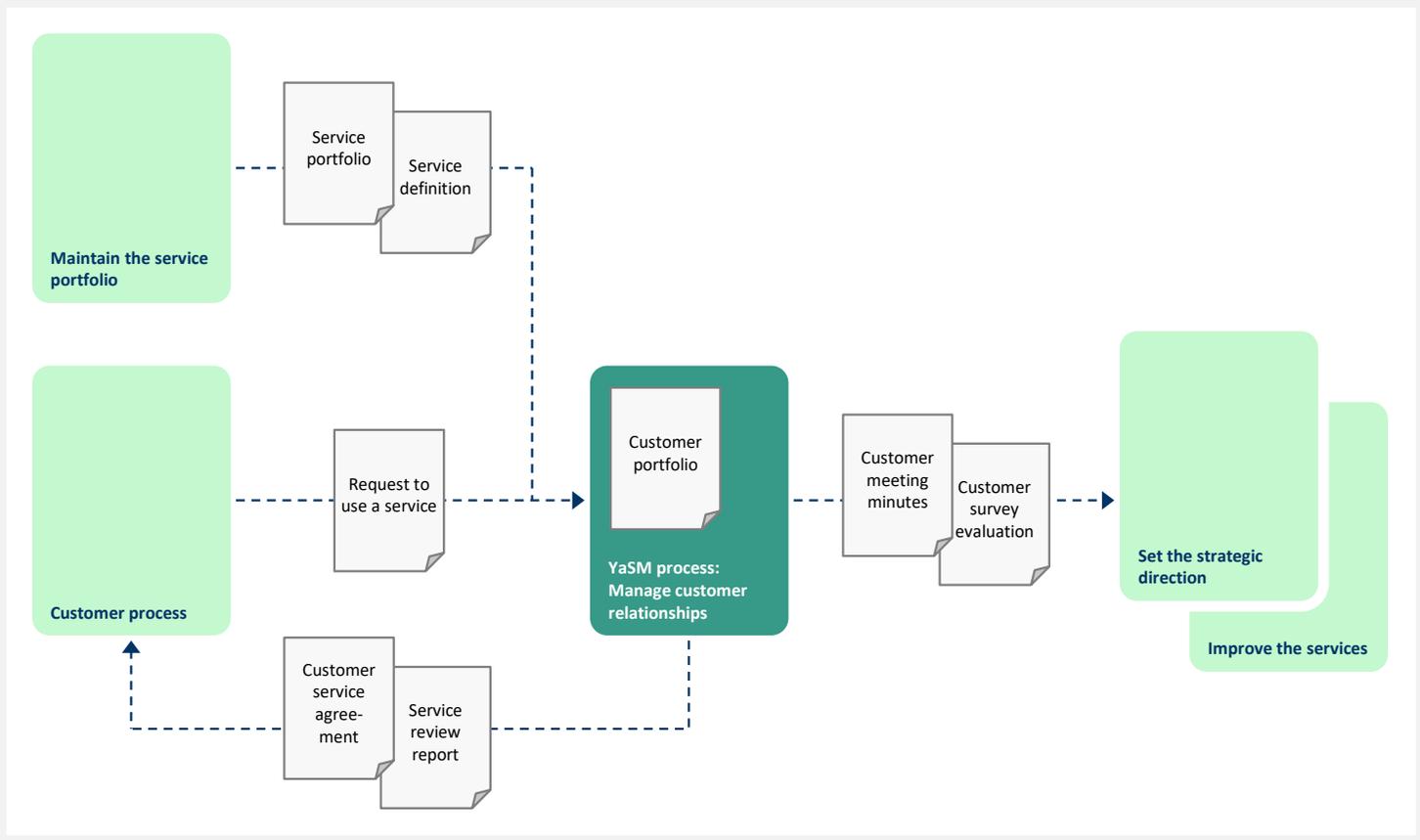
Customer relationship management (SP3: Manage customer relationships) is about finding new customers for the service provider's offerings and establishing a mutually beneficial relationship with existing customers.

This is achieved in particular by obtaining regular feedback from customers through customer meetings and surveys, and by dealing with customer requirements (and complaints) in a professional way. The information gained is an important input for other service management processes, such as

— The strategic process which decides about the introduction of new services or significant enhancements to existing ones

— The service improvement process which is tasked with identifying weaknesses and improvement potentials in the current services.

Customer relationship management also takes care of negotiating and signing formal contracts (customer service agreements) between the customer and the service provider.

SP4: Manage configuration information
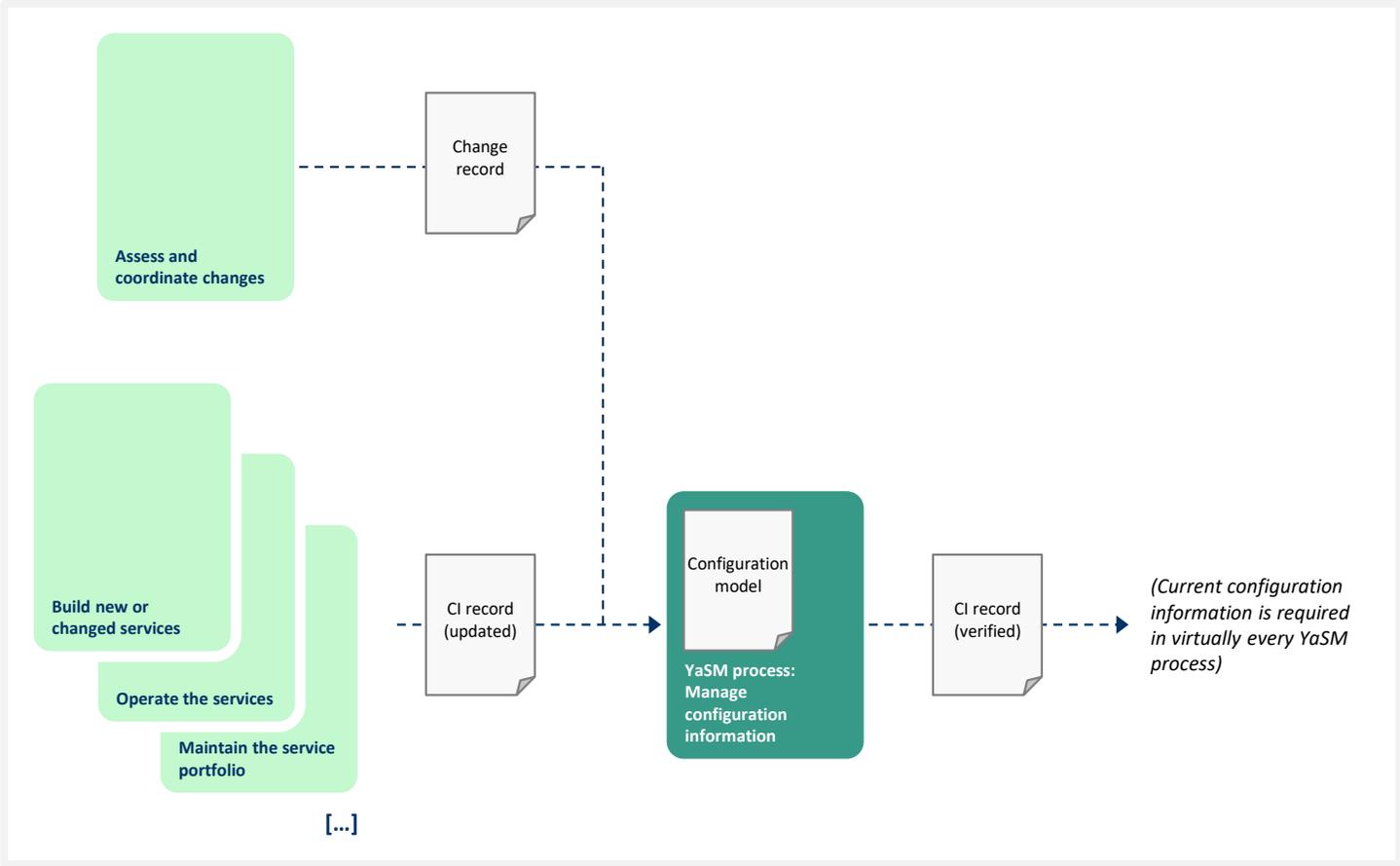
The *configuration management process (SP4)* ensures that up-to-date and reliable configuration information is available for the other service management processes.

To this end, configuration management maintains a configuration model, which defines the types of items (referred to as "configuration items" or "CIs") to be managed through the configuration management system (CMS).

Once the configuration model is defined and the CMS configured accordingly, control can be exercised over all updates to the CI records in the CMS, for example by specifying who is authorized to make particular types of changes in the CMS and by reviewing updates to the CMS.

The information in the CMS is also subjected to regular audits in order to ensure that it is an exact representation of the configuration items in the live productive environment.

Configuration information is an important input for virtually every YaSM process. For example, it is essential for the resolution of incidents and problems to know precisely what types and versions of infrastructure items are installed.

SP5: Assess and coordinate changes
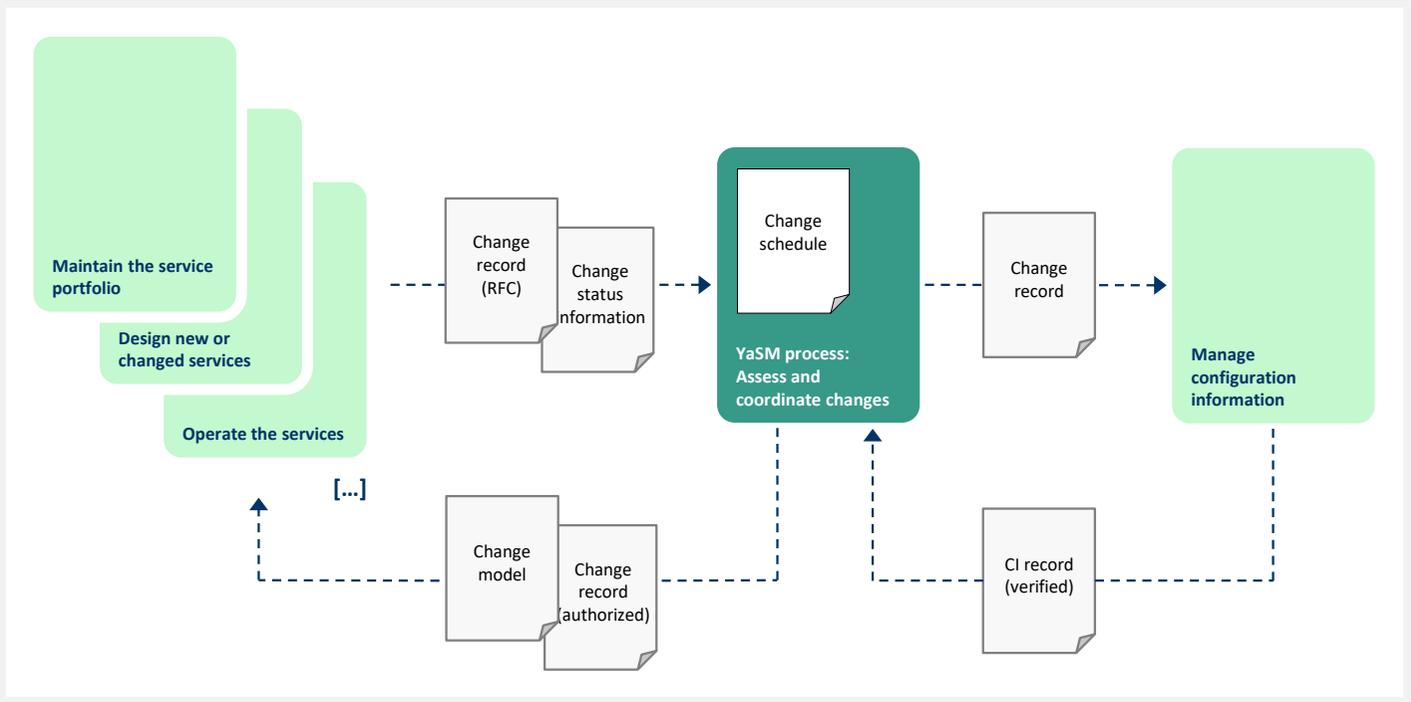
The *change assessment and coordination process (SP5)* acts as a gate-keeper, ensuring that modifications to the service provider's range of services and its underlying components are made only after risks and potential side-effects have been carefully considered.

To this end, other YaSM processes requiring a change will submit a request for change (RFC) to the change manager. The RFC will then be assessed by the change manager or the CAB, depending on the required level of authority for approval.

A special procedure is called upon for assessing emergency changes, for example if the resolution of a major incident requires the implementation of a non-standard change on an urgent basis.

In this context, change models are an important tool for reducing the workload of the change manager and the CAB. Change models are used to define "standard changes" - types of well-known, low-risk changes which may be implemented without the involvement of the formal change assessment process.

SP6: Manage projects
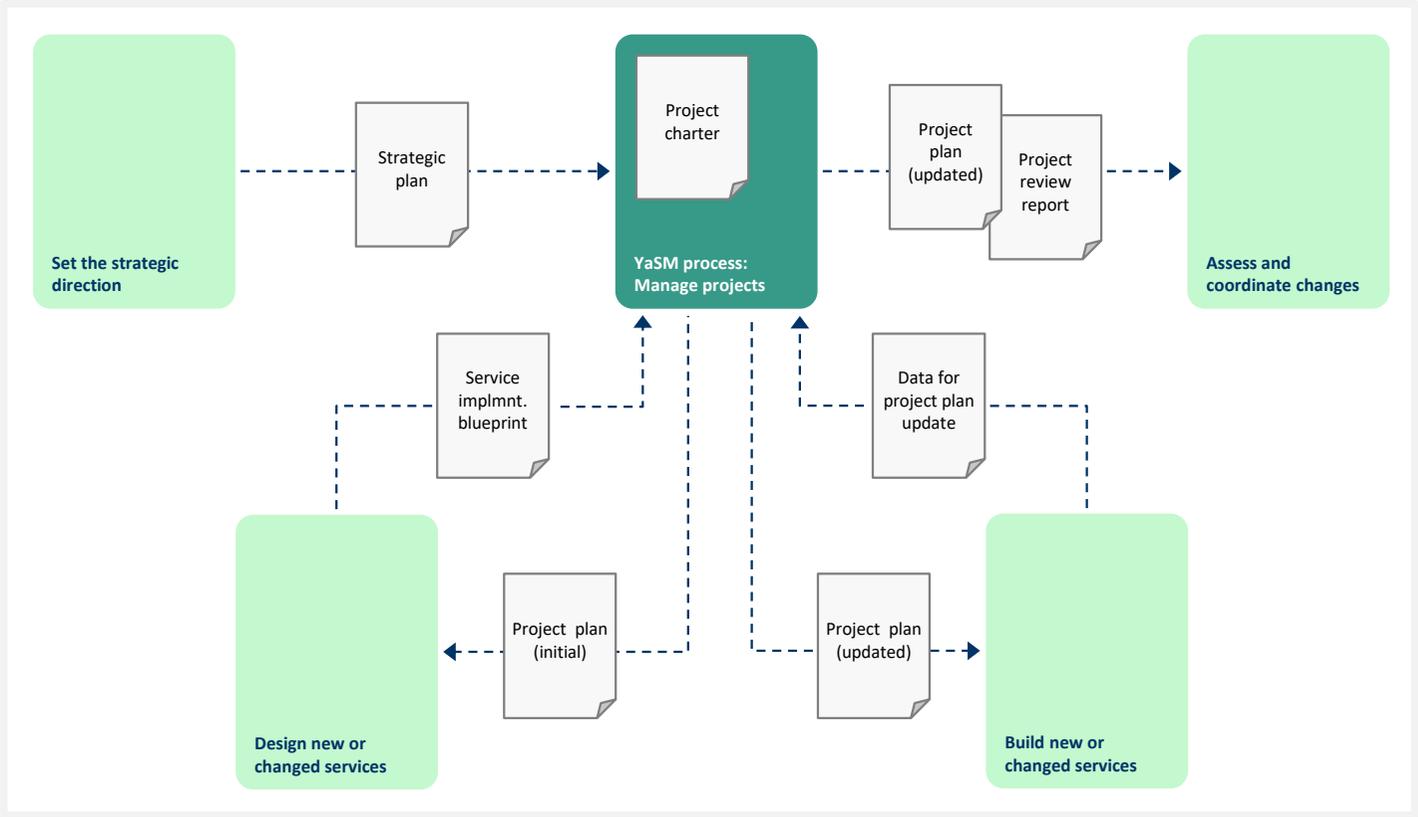
Example 1: Strategic initiative coordinated through the project management process.

Set the strategic direction

Strategic plan

YaSM process: Manage projects

Project charter

Project plan (updated)

Project review report

Assess and coordinate changes

Service implmnt. blueprint

Data for project plan update

Design new or changed services

Project plan (initial)

Project plan (updated)

Build new or changed services
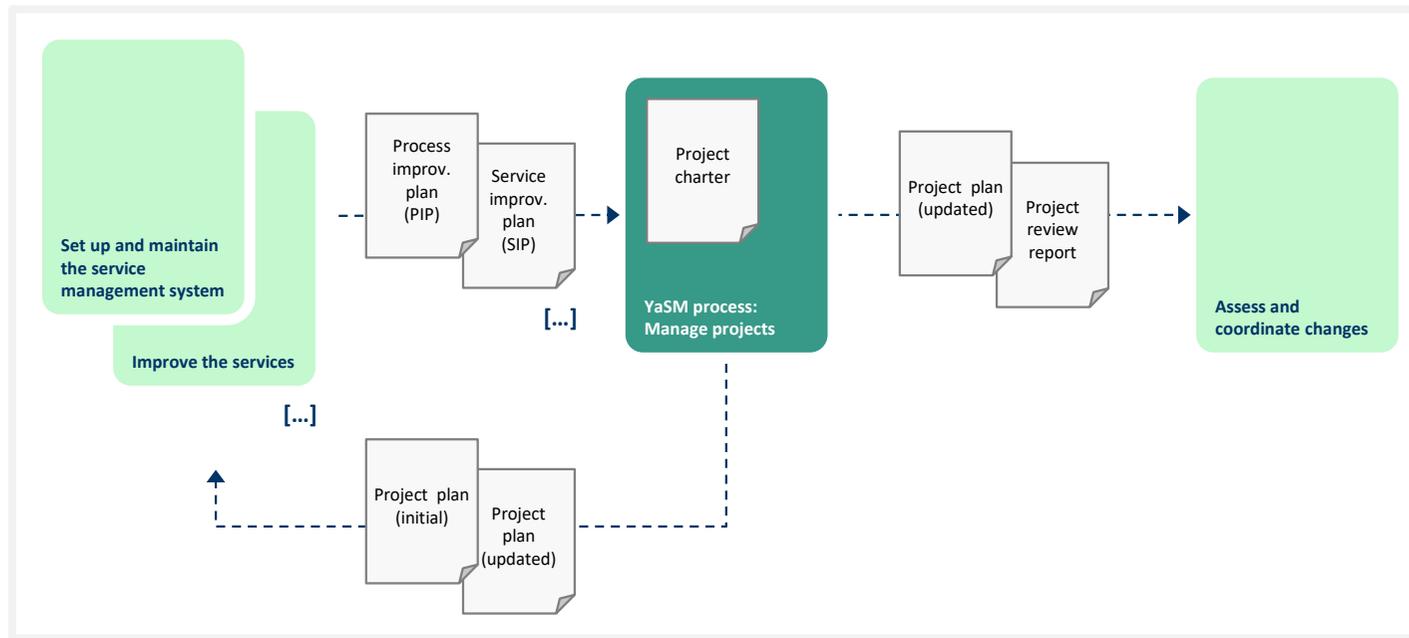
Example 2: Process or service improvement initiative coordinated through the project management process.

YaSM recommends executing all initiatives of a larger scale as formal projects (the project policy contains the rules for deciding if a project must be set up).

The impetus to start up a project may come from various sources, depending on the nature of the initiatives that are to be executed. Typical examples are:

— Strategic initiatives with the aim of establishing a new or significantly changed service

— Process improvement initiatives

— Service improvement initiatives

— Initiatives to improve service security or continuity.

As many projects will involve the implementation of a number of changes that have to be tracked, the *project management process (SP6)* will regularly report the project status to the change assessment and coordination process.

SP7: Ensure security

Request to assess security risks

Service definition

Service implmnt. blueprint

Design new or changed services

Build new or changed services

Register of security risks

Security improv. plan

YaSM process: Ensure security

Under-pinning security policies

Incident model

Security alert

Operate the services
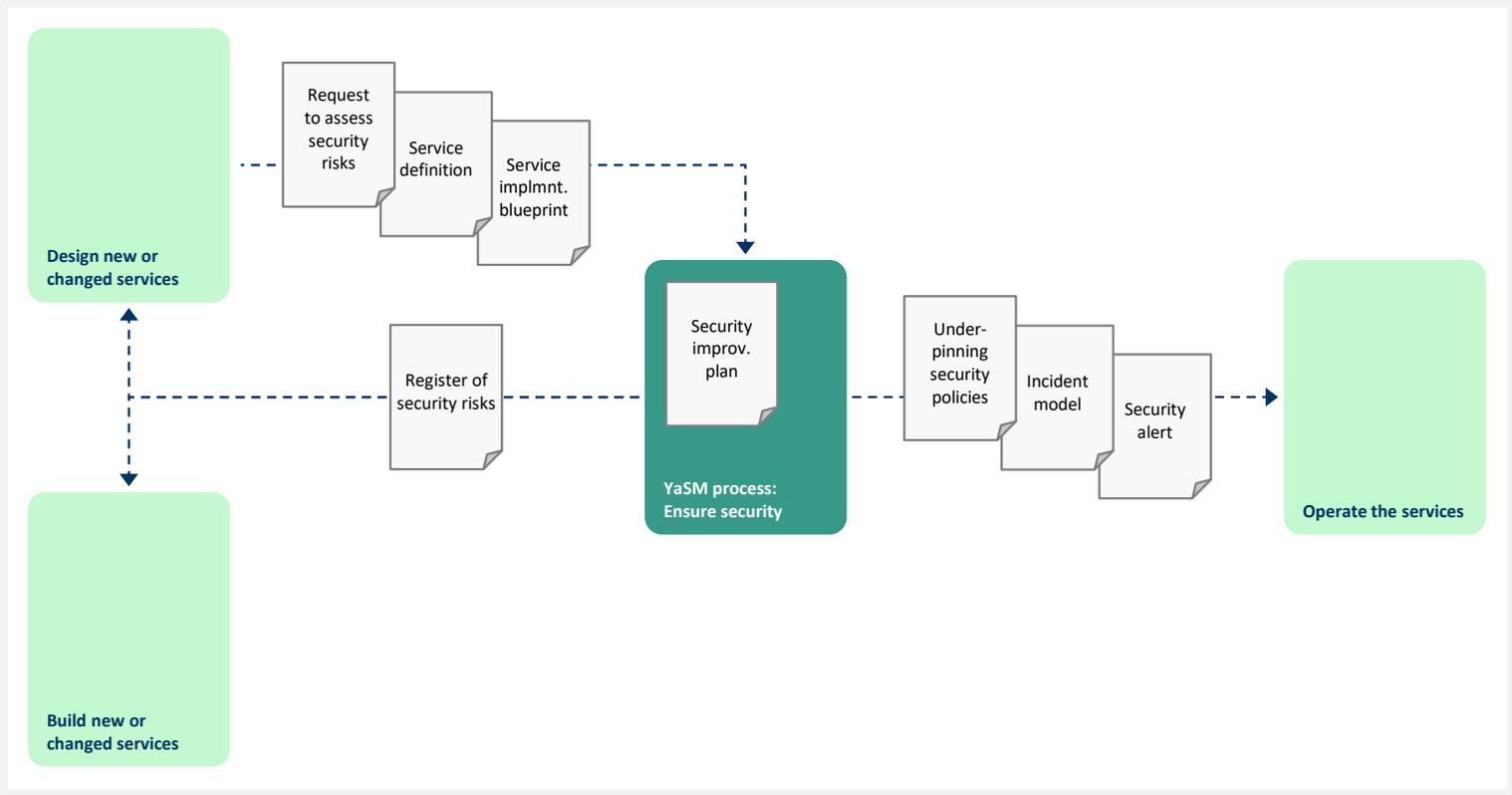
This process is responsible for fulfilling the security needs of the service provider and its customers.

Ensuring security (SP7) starts with the compilation of a security risk register which lists the identified security risks and their properties, as well as suitable risk responses (security controls or other risk mitigation measures).

The YaSM processes provide a number of ways for the security manager to exert influence. Most importantly, the security manager will be involved in the service design and build stages to ensure the security of new or updated services. Once it has been established during service design which security controls and mechanisms are required for a new service, these can be put in place, notably

— Through the service build process, by adding suitable security features to the service infrastructure that is to be created or updated

— Through the security process, by updating security policies as well as security mechanisms and controls which are operated under the responsibility of the security manager.

The security manager is also involved in service or process improvement initiatives if security is affected.

If new security threats emerge or if the security controls need to be upgraded for other reasons, the security process is able to start security improvement initiatives on its own account. Such initiatives are managed through the security improvement plan.

Finally, the security manager will also ensure security by defining rules and providing information, for example in the form of under-

pinning security policies, incident and service request models, as well as security alerts.

Note: YaSM does not provide a detailed explanation of all aspects of security management, as there are dedicated and more detailed sources available (see, for example, ISO 27001). Rather, YaSM highlights the most important security management activities and describes the interfaces with other YaSM processes.

SP8: Prepare for disaster events
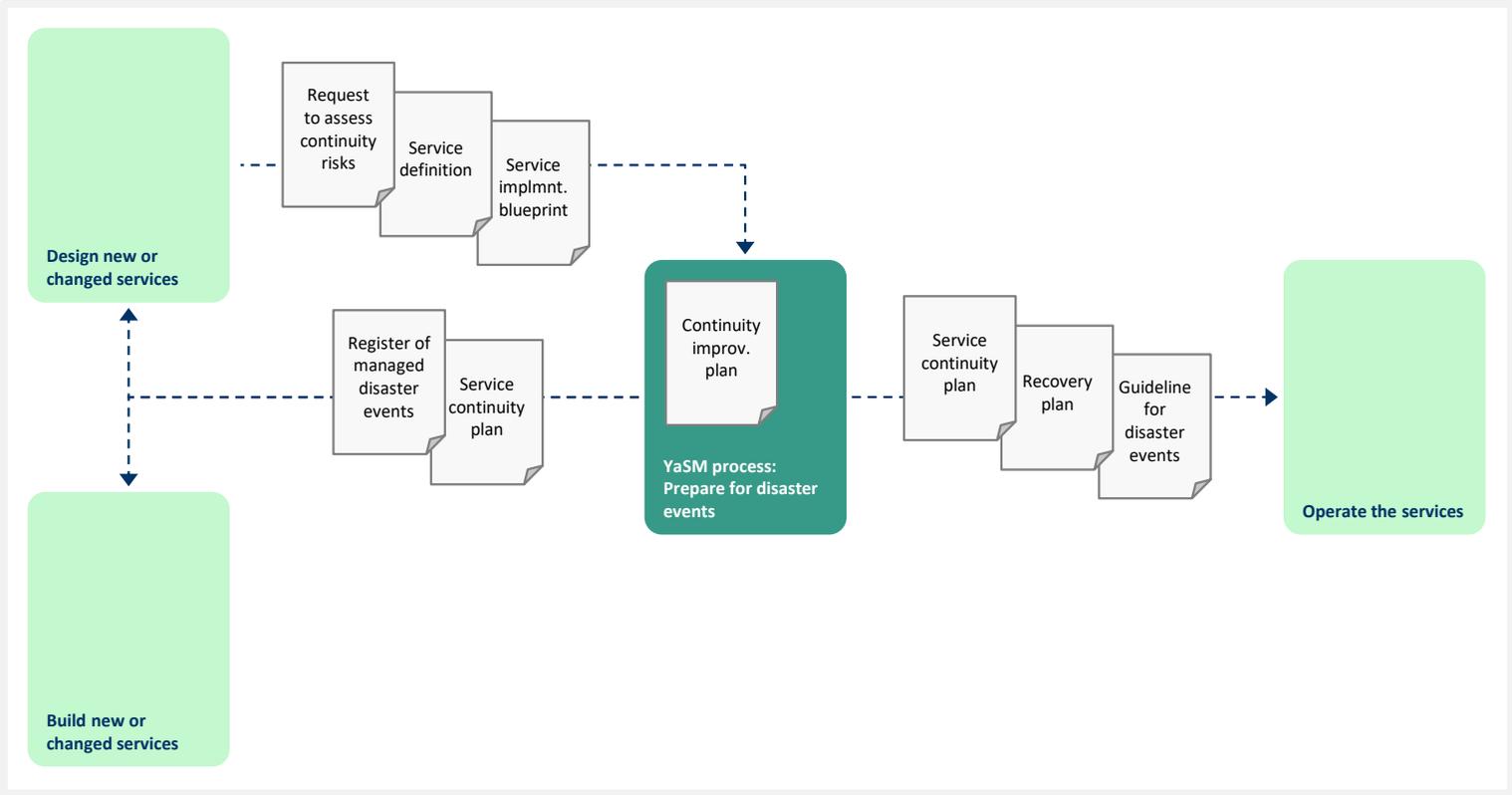
The purpose of this process is to ensure service continuity in the case of events considered disasters, such as floods, fires, power failures, etc.

Preparing for disaster events (SP8) starts with the compilation of a register of managed disaster events, which lists the types of disasters for which the service provider has decided to put some kind of preparation in place. The register also specifies the responses to the identified events, in particular the related service continuity plans.

The continuity manager may ensure service continuity in a number of ways. Most importantly, this role is involved in the service design and build stages to ensure continuity aspects are taken into account when creating or updating services. Once it has been established during service design which continuity arrangements and mechanisms are required for a new service, these can be put in place, notably

— Through the service build process, by adding suitable continuity features to the service infrastructure that is to be created

— Through the disaster preparation process, by updating continuity arrangements and mechanisms which are operated under the responsibility of the service continuity manager.

The service continuity manager is also involved in service or process improvement initiatives if service continuity aspects are to be considered.

If new types of disasters are to be addressed or if the continuity arrangements need to be upgraded for other reasons, the disaster preparation process is able to start continuity improvement initiatives on its own account. Such initiatives are managed through the continuity improvement plan.

SP9: Ensure compliance

Many organizations are subject to various types of compliance requirements, such as laws, industry standards, etc. The *process for ensuring compliance (SP9)* is responsible for identifying the compliance requirements which are relevant for the organization and for defining the approach for fulfilling those requirements.

All applicable compliance requirements are managed through the compliance register, where the properties of the requirements are described. The compliance register also lists any compliance controls or mechanisms which need to be in place to achieve compliance. In this respect, compliance controls and mechanisms may be technical solutions or suitable organizational procedures built into the service management processes, policies and guidelines.

Typically, the compliance process will be called upon to assess the implications on compliance requirements when services or processes are to be established or modified.

If the compliance manager detects that compliance controls and mechanisms need to be upgraded, it will be the responsibility of the service or process owners to create those controls as part of the service or process implementation.

Note: YaSM provides a basic process for ensuring compliance with laws, regulations, industry standards, etc., which highlights the most important compliance-related activities and describes the interfaces with the other YaSM processes.
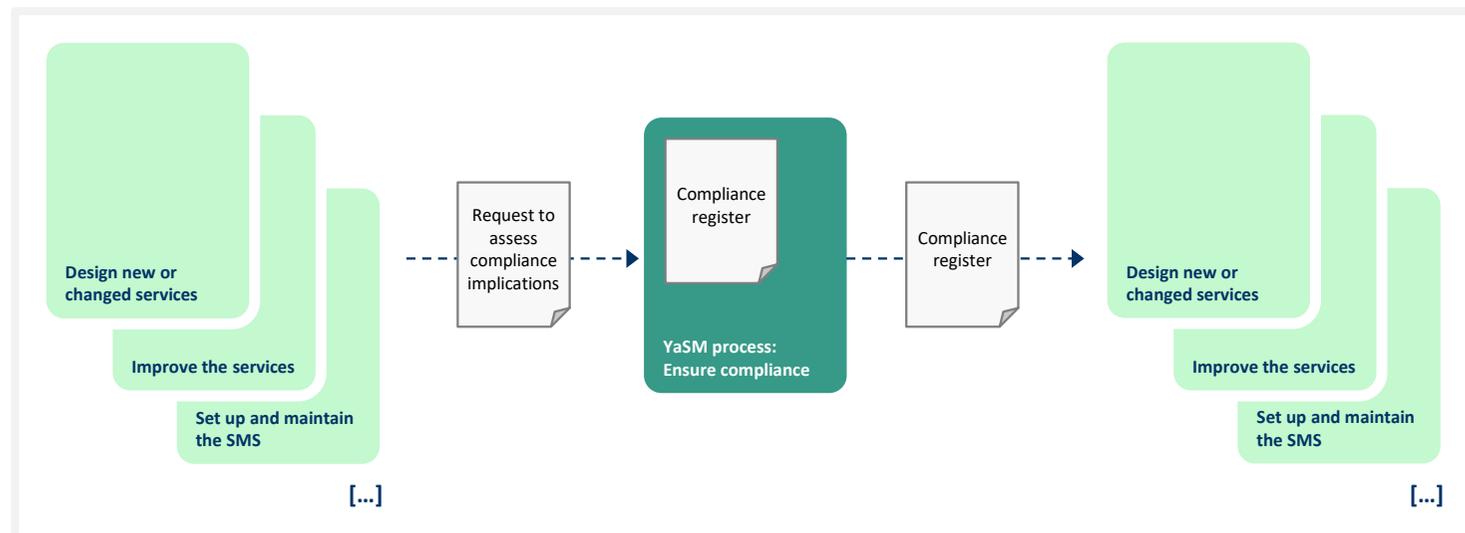
SP10: Manage human resources
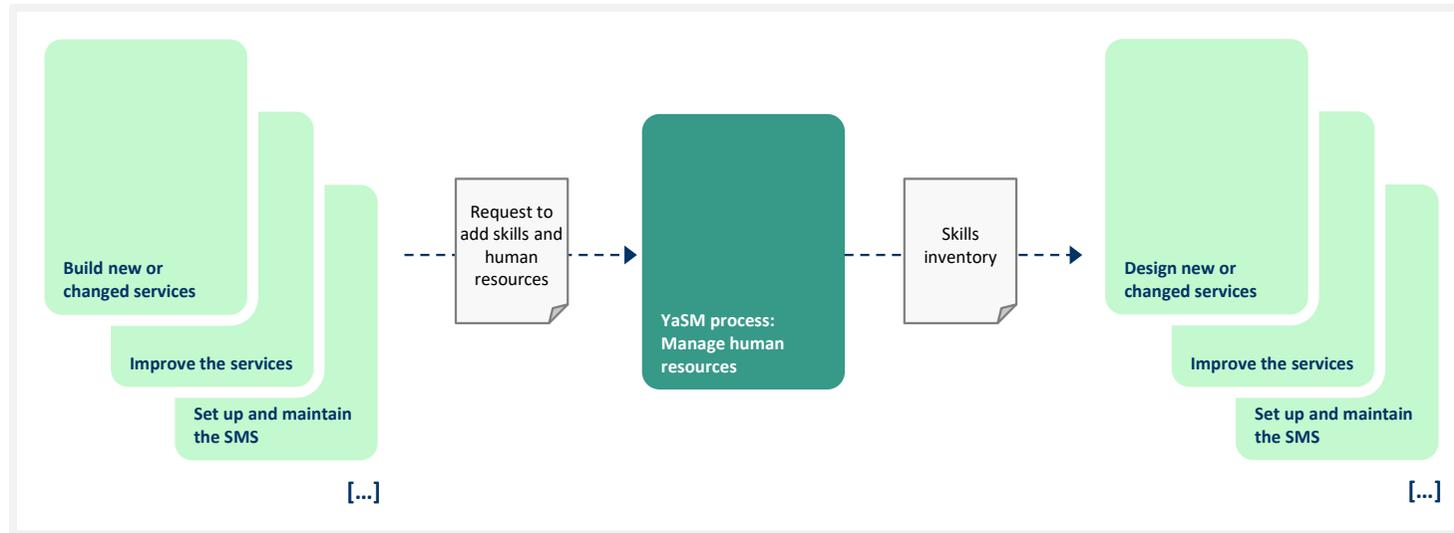
The YaSM *process for managing human resources (SP10)* identifies the skills and human resources required for the service provider to achieve its objectives. Once the set of required skills is established, the human resources manager will initiate suitable measures to acquire those skills, for example by organizing training and education programs or by recruiting new staff.

The skills available in the service provider organization are managed through the skills register, which describes the skills and lists the individuals who possess those skills.

Note: YaSM contains a basic process for managing human resources, which highlights the most important HR management activities and describes the interfaces with the other YaSM processes.

SP11: Manage suppliers
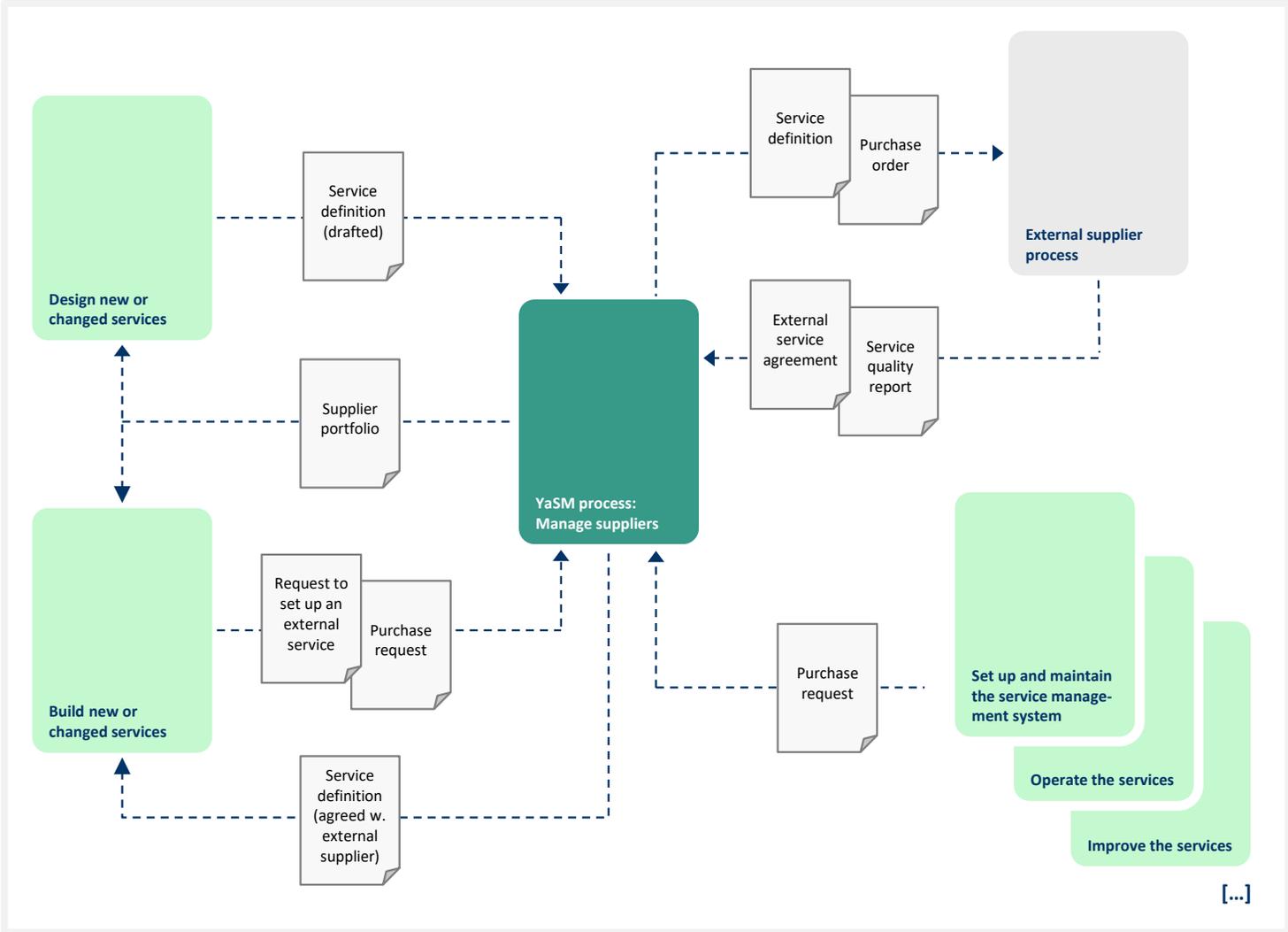
One of the key responsibilities of the *supplier management process (SP11)* is setting up externally supplied supporting services.

If external supporting services need to be put in place as part of a service development project, service design will provide the requirements for such services. The supplier manager is then in charge of selecting suitable suppliers and negotiating the precise details of the services to be delivered (documented in service definitions and external service agreements).

Once supplier agreements are in place, supplier management performs regular reviews of the agreements to ensure that the contracts continue to be in line with business needs. It also monitors on an ongoing basis if the suppliers meet their contractual commitments and takes corrective action if required.

Last but not least, the supplier management process procures the various goods required by the service provider organization, such as spare parts, licenses and consumables.

SP12: Manage service financials
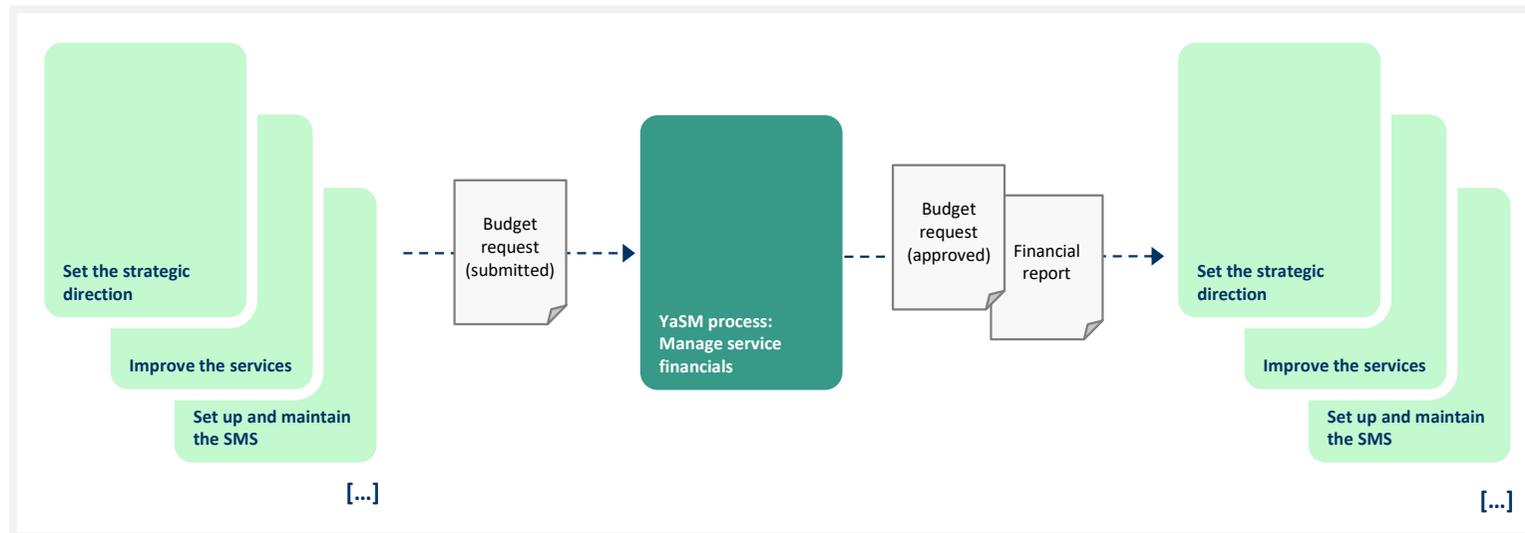
Financial management (SP12) ensures that the required financial resources are available for setting up, improving and operating the service provider's range of services.

In particular, this process is responsible for preparing the financial budget, which includes assessing and approving budget requests.

The financial management process also determines the cost of providing each service and monitors expenditures and revenues to perform a budget deviation analysis. The resulting financial reports will be used in various service management processes to identify opportunities for providing the services more economically.

Note: YaSM contains a basic financial management process, which highlights the most important financial management activities related to the management of services and describes the interfaces with the other YaSM processes.

Three key concepts

This chapter provides detailed information on three important YaSM concepts (or principles) which are used in many YaSM processes. Understanding these concepts will be helpful for understanding how YaSM and the YaSM processes work.

The concepts in question are:

The service portfolio, service definitions and service catalogs

Every service provider needs a precise understanding of the services it provides and the interdependencies between those services - otherwise it will be very difficult to manage those services.

In this respect, YaSM is aligned with the most widely used service management frameworks and recommends maintaining a service portfolio that provides a complete overview of all services, and possibly one or several service catalogs for the customers. The detailed service properties are documented in service definitions.

Customer vs. operational service definitions and agreements

Services in the service portfolio may be "customer services" (services offered to customers) or "supporting services" (services visible only inside the service provider organization which are used as building blocks for the customer services).

For example, if a service provider offers a "web site hosting" service to its clients, this customer service will often be based on a number of internal supporting services, such as "network infrastructure management service", "server management service", etc.

Ultimately, the service provider must deliver the customer services as agreed with the customers. Since the customer services are based on supporting services, this can only work if the supporting services are aligned with the requirements of the customer services and delivered as specified.

This means the service provider will need to

— Define and agree with the customers what is to be delivered, in the form of service definitions and customer service agreements

— Define and agree with the owners of the internal supporting services what is to be delivered; this includes specifying the properties of the supporting services in the form of service definitions, and signing operational service agreements with the internal service owners.

Plans for organizing initiatives

Readers familiar with ITIL will know the service improvement plan (SIP). There is also a service improvement plan in YaSM, but YaSM extends the concept and recommends maintaining similar plans for organizing other kinds of work and initiatives, e.g. a process improvement plan to manage process improvement initiatives, a security improvement plan to manage security improvement initiatives, etc.

The service portfolio, service definitions and service catalogs

The *service portfolio* provides an overview of the services managed by the service provider.

The service portfolio contains high-level information on the services and is particularly important for managing the service interdependencies: As a rule, every customer service relies on one or several supporting services (internal services not visible to the customers), which in turn may rely on further, lower-level supporting services.

Service definitions describe the properties of the services in detail, and every item in the service portfolio will typically be associated with (and contain a link to) a service definition.

Many organizations also publish "*service catalogs*", special views of the information in the service portfolio which allow current or prospective customers to obtain information about the service on offer. Service catalogs are often also "interactive", allowing customers and users, for example, to report incidents (service interruptions) or raise service requests. There may be several service catalogs, for instance for specific (groups of) customers or purposes.
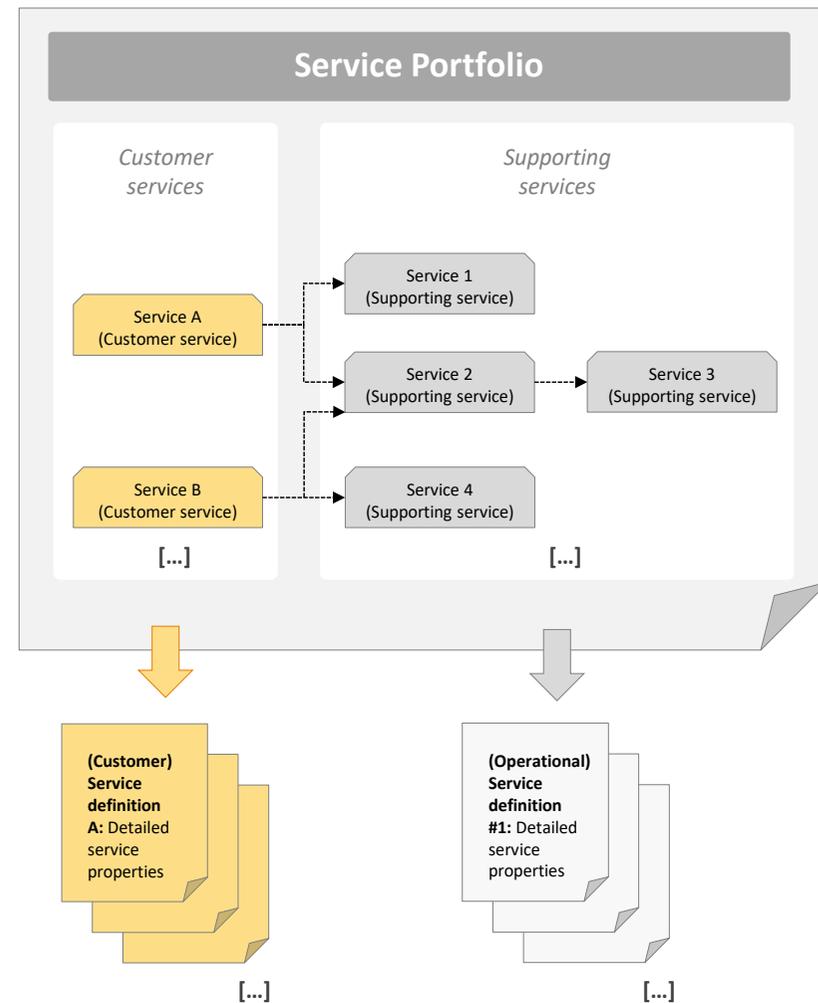
Customer vs. operational service definitions and agreements

One of the important principles in YaSM is that customer-facing services are backed up by (internally or externally provided) supporting services. The properties of each service are defined in a service definition, and for each type of service there is a particular type of agreement:

— *Customer service agreements* represent a commitment by a customer to use a service and the service provider to provide the service, as specified in the service definition.

— *Operational service agreements* are made between a service provider and a part of the same organization for supplying a supporting service, as specified in a service definition. They represent a commitment by an internal service owner to provide a service within the defined service quality levels.

— *External service agreements* are made between a service provider and an external service supplier for supplying a supporting service, as specified in the service definition. They represent a commitment by an external service supplier to provide a service within the defined service quality levels and a commitment by the service provider to purchase specified volumes of the supporting service.

Depending on the type of service provider, the structure of the service definitions and agreements will be relatively simple or more complex. The following examples are meant to highlight several possible approaches, taking into account aspects such as the number of customers using a service or the ways in which supporting services are organized.

Example 1: Individual service for a single customer
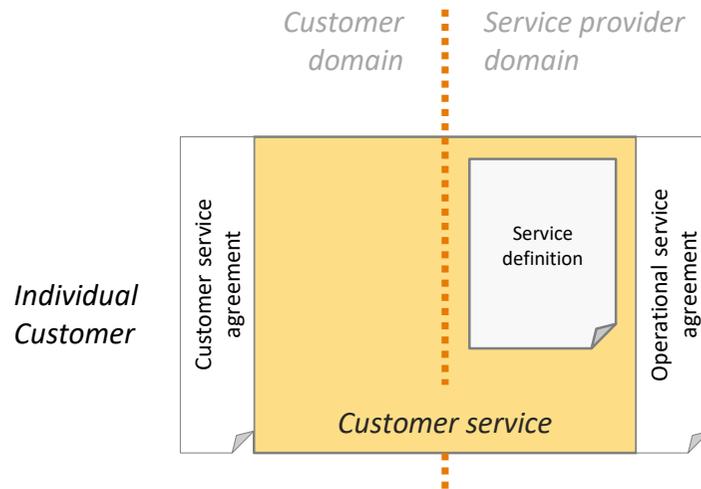
— A customer service is specifically designed for one customer and only used by that customer.

— No supporting services are required to deliver the service (or the service provider has not defined any supporting services).

In this simple scenario, it will be sufficient to describe the service properties in one service definition document. A customer service agreement should be signed by the customer, and an operational service agreement should be signed by the service owner (the individual within the service provider organization who is responsible for operating and managing the service).

Example 2: Free service provided to multiple customers
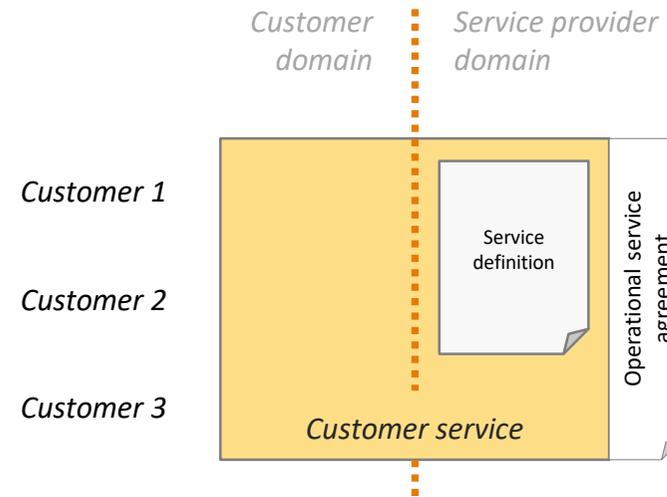
— A service is provided for free to several customers who are not required to sign up (an example would be a news web site where visitors are not required to register).

— No supporting services are required to deliver the service (or the service provider has not defined any supporting services).

In this scenario, the service properties may be described in one a service definition document. An operational service agreement should be signed by the responsible service owner within the service provider organization.

Example 3: Standardized service provided to several customers

— A standardized service is provided to several customers who are required to sign up (typical examples are cloud-based applications like Service Now™[10]or Salesforce®[11]).

— The service provider has defined one supporting service.

In this scenario, the service properties from the customer perspective should be described in a service definition for the customer, and every customer will sign a customer service agreement.

The properties of the supporting service should be defined in a definition for the supporting service. An operational service agreement will be signed by the responsible service owner.

Note: A separate service definition for the supporting service is likely to be needed in this scenario because typically it will differ in some key aspects from the customer service definition. For example, every customer might be guaranteed a certain amount of storage capacity. In this case, the supporting service must guarantee the committed storage space for all customers across

the board, even as new customers sign up. The supporting service definition should thus contain scalability provisions - which are not relevant for the customer service definition.

Customer domain   *Service provider domain*

Customer 1

Customer service agreement | (Customer) Service definition

Customer 2

Customer service agreement

Customer 3

Customer service agreement | *Customer service*

(Operational) Service definition | Operational service agreement

Internal supporting service

---

[10] ServiceNow™ is a trademark of ServiceNow, Inc.

[11] Salesforce® is a registered trademark of salesforce.com, Inc.

Example 4: Customer service based on several supporting services
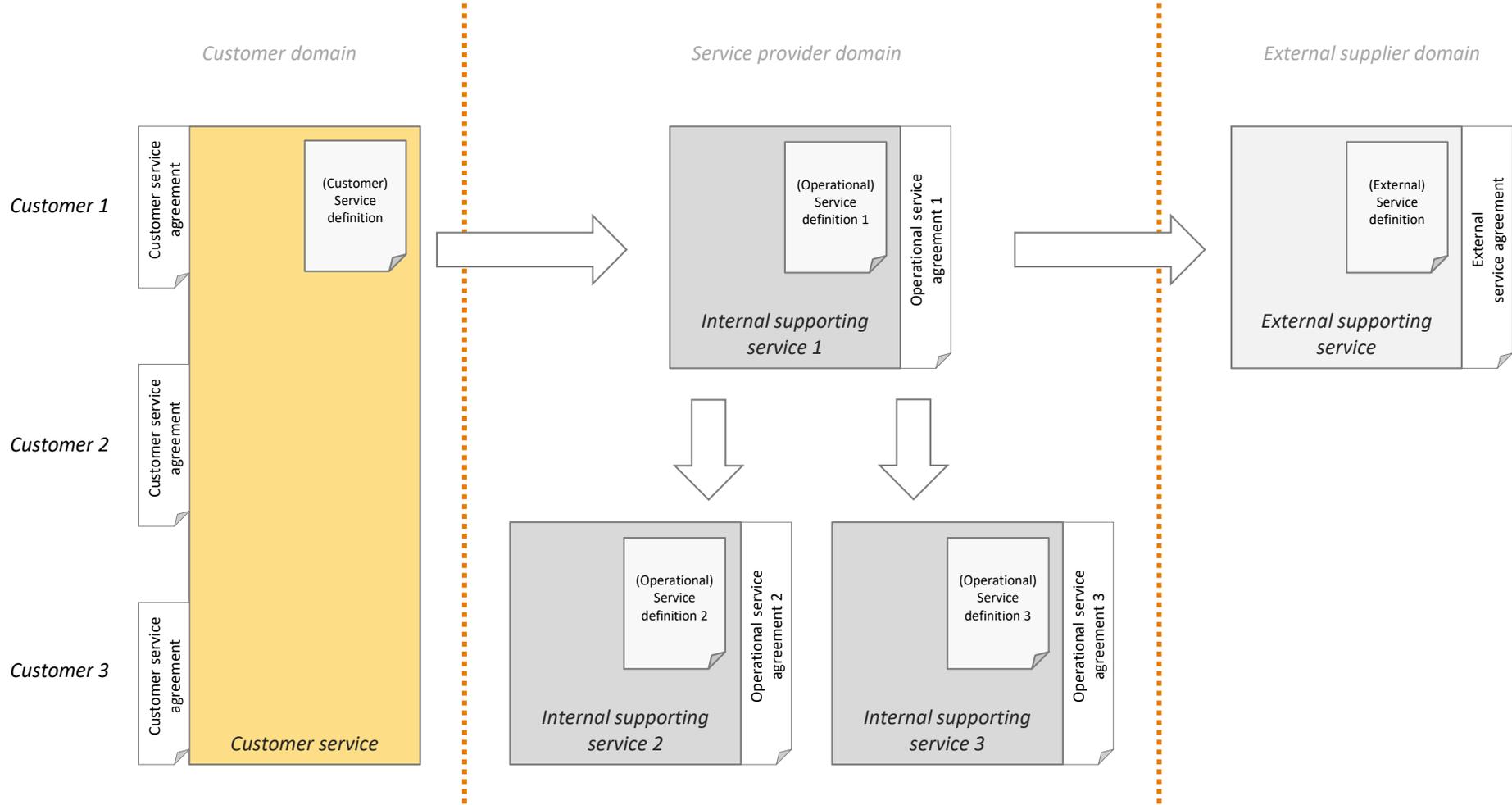
— A service is provided to several customers.

— The service provider uses a number of internal and external support-ing services to deliver the service (in the situation illustrated above, supporting service 1 relies on internal supporting services 2 and 3 and on an external supporting service).

In this scenario, the service properties from a customer perspective should be described in a service definition for the customer service, and every customer will sign a customer service agreement.

The properties of the supporting services should be defined in service definitions for the supporting services. Operational service agreements will be signed by the responsible service owners within the service pro-vider organization, while external service agreements will be signed by the external service supplier.

Plans for organizing initiatives

If services, their underlying components or parts of the service management system need to be set up or modified, YaSM recommends organizing such work as "*initiatives*" managed through a number of "*plans*":

— The *strategic plan* is owned by the steering committee and maintained by the service strategy manager. Its purpose is to manage *strategic initiatives*, i.e. initiatives aimed at achieving the strategic objectives. Typical examples are the development of new or significantly changed services or service management processes, or the introduction of new technologies or capabilities on a larger scale.

— The *service improvement plans* are owned by the service owners. Their purpose is to manage *service improvement initiatives*, i.e. initiatives of a somewhat smaller scale aimed at continually improving existing services. A typical example is an infrastructure enhancement to improve service availability.

— The *process improvement plans* are owned by the process owners. Their purpose is to manage initiatives aimed at *setting up or improving the service provider's processes* (which are an important part of the service management system). A typical example is an upgrade to the incident resolution process.

— The *security improvement plan* is owned by the security manager. Its purpose is to manage *initiatives aimed at improving security*. For such improvements, it is often impractical to execute them as service improvement initiatives because several services are affected. A typical example is the introduction of a new malware detection system.

— The *continuity improvement plan* is owned by the service continuity manager. Its purpose is to manage *initiatives aimed at improving service continuity* in the case of disaster events. For such improvements, it is often impractical to execute them as service improvement initiatives because several services are affected. A typical example is an upgrade to a stand-by data center.

— The *skill development plans* are owned by the human resources manager. Their purpose is to manage the *development of the skills* required in the service provider organization. A typical example for an item in the skills development plan is a training program aimed at acquiring the necessary skills for mastering a new technology.

The various YaSM plans play a central role in getting the initiatives approved and funded, and also in tracking their status. For example, a new strategic initiative is first entered into the strategic plan as a proposal. The steering committee then needs to approve the initiative, which in turn allows the initiative's owner to obtain funding by submitting a budget request. While it is being implemented, the initiative's status information in the strategic plan is constantly updated.

Depending on their scale, some initiatives will be carried out as formal projects, while others will be executed in an informal way.

Execution of strategic initiatives

Because the strategic process defines a number of strategic initiatives but does not normally have the resources to carry them out, the strategic plan often functions as a top-level plan, as shown in the figure on the right.

In this respect, YaSM allows for *strategic initiatives* to be executed for example as:

— Service improvement initiatives managed through a service improvement plan

— Process improvement initiatives managed through a process improvement plan

— Skill development initiatives managed through a skills development plan

Strategic plan

Strategic initiatives:
1 : Create new service a
2 : Upgrade process b
3 : Develop skill c
…

YaSM process:
Set the strategic direction

Requests to execute strategic initiatives

Process improvement plan

Process improvement initiatives:
1 : …
2 : …
3 : Upgrade process b
…

YaSM process:
Set up and maintain the service management system

Example 1:

Strategic initiative executed as a process improvement initiative through a process improvement plan.

Skills development plan

Skill development initiatives:
1 : …
2 : Develop skill c
3 : …
…

YaSM process:
Manage human resources

Example 2:

Strategic initiative executed as a skills development initiative through a skills development plan.

Suggestions for strategic initiatives

It is also possible that issues are identified during service reviews which point to problems whose resolution is beyond the scope of "ordinary" service improvements (for instance a perceived gap in the service portfolio).

In such cases it will be appropriate to submit suggestions for strategic initiatives to the strategic process.

Strategic plan

Strategic initiatives:
1: Create new service a
2: Upgrade process b
3: Develop skill c
...

YaSM process:
Set the strategic direction

Service review report

Service improvement plan

Service improvement initiatives:

1: ...
2: ...
3: Upgrade process b
...

YaSM process:
Improve the services

Suggest strategic initiative
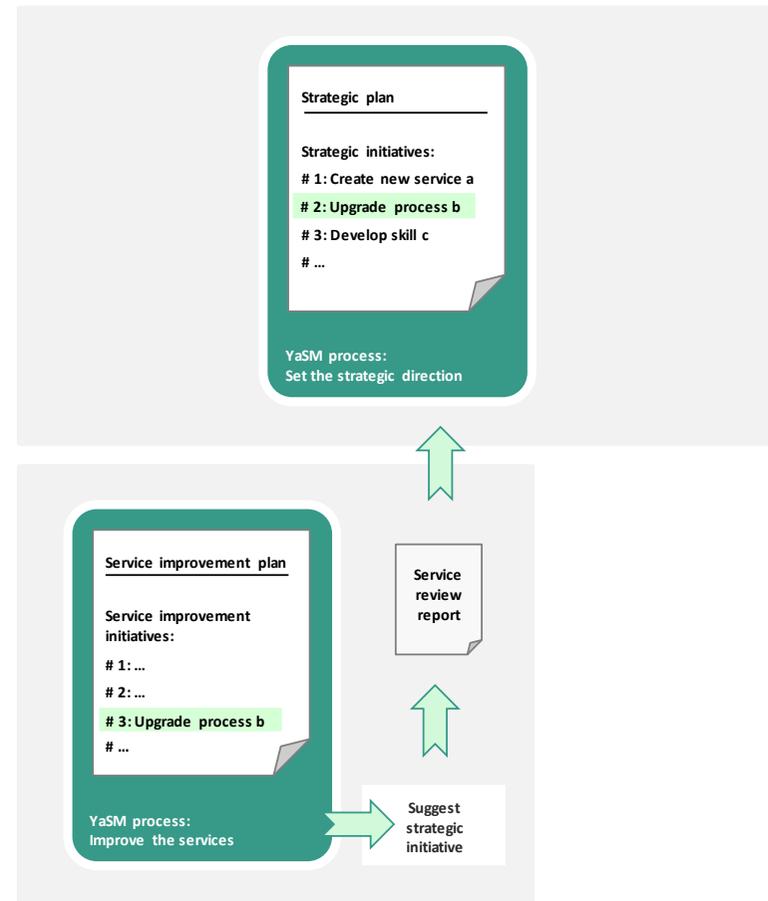
YaSM products and services

YaSM Wiki: Free information on the internet

The YaSM Wiki provides a complete overview of YaSM. It is the ideal starting point if you would like to learn more about YaSM and service management in general.

The YaSM Wiki includes, for example:

— A comprehensive account of the YaSM processes with
  — Descriptions of all YaSM processes and sub-processes
  — Process inputs and outputs
  — Responsibilities of the YaSM roles.
— The YaSM glossary and the YaSM data object model
— An index of the YaSM roles and the YaSM RACI matrix
— A collection of process metrics
— Details on how YaSM relates to other concepts and methods in service management:
  — ISO/IEC 20000
  — ITIL®
  — COBIT® (Control Objectives for Information and Related Technologies)
  — CMMI® for Services (CMMI-SVC)

— USMBOK™ (Universal Service Management Body of Knowledge)
— SIAM® Service Integration and Management
— VeriSM™
— DevOps
— Agile
— Lean

Premium products and services

The complete YaSM process model is available in the form of a commercial product (the "YaSM® Process Map"). The process map is provided for a number of popular process management platforms such as Visio® and ARIS™. It is thus not only a detailed description of the YaSM processes down to the level of single activities, but also a set of ready-to-use process and document templates that can be easily adapted to the needs of your organization.

An additional component (the "YaSM® - ISO 20000 Bridge") specifically addresses the needs of organizations that wish to achieve certification against ISO 20000.

License holders are entitled to maintenance and support services such as product updates, technical support and the submission of general questions on YaSM.

The YaSM® Process Map

The YaSM process model is available as a product called the "YaSM® Process Map".

For each process and sub-process, the process model defines in the form of a diagram the activities to be performed, the required inputs and the resulting outputs. The responsibilities of the YaSM roles in the various processes are described in a responsibility or RACI matrix.

The process inputs and outputs are represented by data objects. For each significant data object, the YaSM model contains a checklist (or template) which describes its contents, as well as a lifecycle diagram. The lifecycle diagrams depict how the status of an object changes as it is created, updated, read and archived by the YaSM processes.

The YaSM® Process Map is available for different platforms, for example Microsoft Visio® and ARIS™ of Software AG. All diagrams and documents are completely editable, which makes the process model the ideal starting point for developing a set of processes tailored to the needs of specific organizations.

Process diagrams

The core of the YaSM model is a set of process diagrams in three levels of detail. The model can be navigated in the familiar way by clicking on links. This makes it possible, in particular, to easily drill down to more detailed views and to jump directly into preceding or subsequent processes from any process diagram.

On detail levels 1 and 2, "overview diagrams" show for each main process how it is related to the other main processes and what sub-processes it contains.

On detail level 3, flowchart diagrams illustrate the process interfaces and activities in detail.

For the incident and problem resolution processes (part of service operation), there is an additional layer of detail, because service management best practice offers particularly detailed recommendations in these areas.

Additional diagrams present the complete structure of the YaSM processes, the YaSM data model and the lifecycles of the YaSM data objects.

On the following pages you will find examples for each of these diagram types.

Top-level diagram (level 1)

The top-level diagram on the highest level of detail presents an overview of the YaSM processes. From here you can start drilling down to more detailed views.

YaSM Service Lifecycle Processes

- Set the strategic direction
  - Strategic plan (updated)
- Design new or changed services
  - Service definition (drafted)
  - Service implmnt. blueprint (completed)
- Build new or changed services
  - Service operation manual (drafted)
- Operate the services
  - Service quality report (completed)
- Improve the services
  - Service review report (completed)
  - Service improvement plan - SIP (updated)

Overview diagrams (level 2)

Overview diagrams show for each main process how it is related to the other main processes and what sub-processes it contains.

There are 19 diagrams of this type in the YaSM® Process Map.
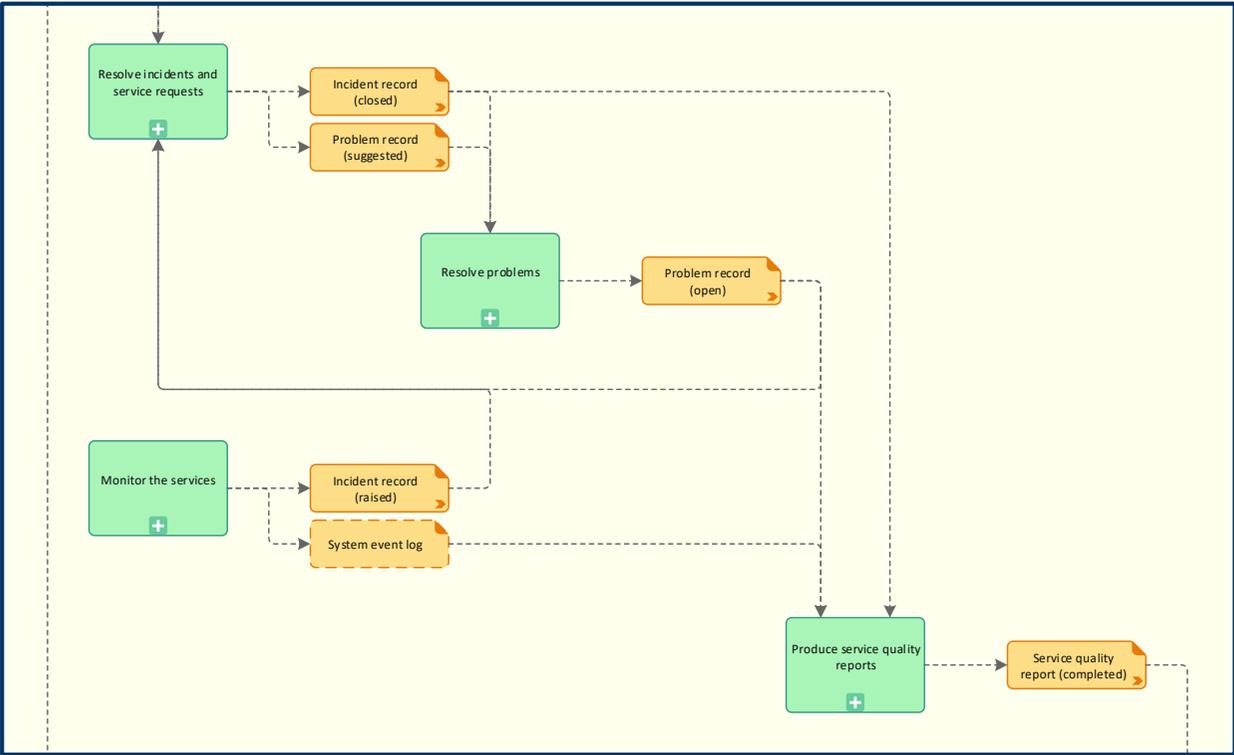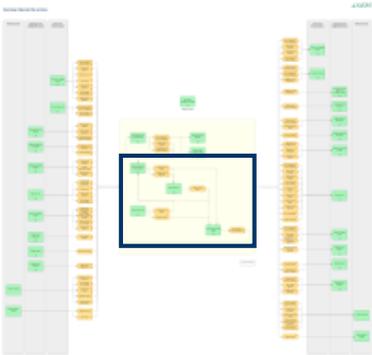
Flowchart diagrams/ process interfaces (level 3)

The top area of the flowchart diagrams illustrates the process interfaces in detail.

Process objective:
To resolve an incident (service interruption) within the agreed time frame. The aim is the fast recovery of the service, possibly by applying a workaround. As soon as it becomes clear that 1st level support is not able to resolve the incident itself or when target times for 1st level resolution are exceeded, the incident is transferred to 2nd level support.

Flowchart diagrams/ activities

Underneath the top area with the process interfaces, the flowchart diagrams contain one or several swim lanes with a detailed account of the process activities.

The YaSM® Process Map includes 105 diagrams of this type.
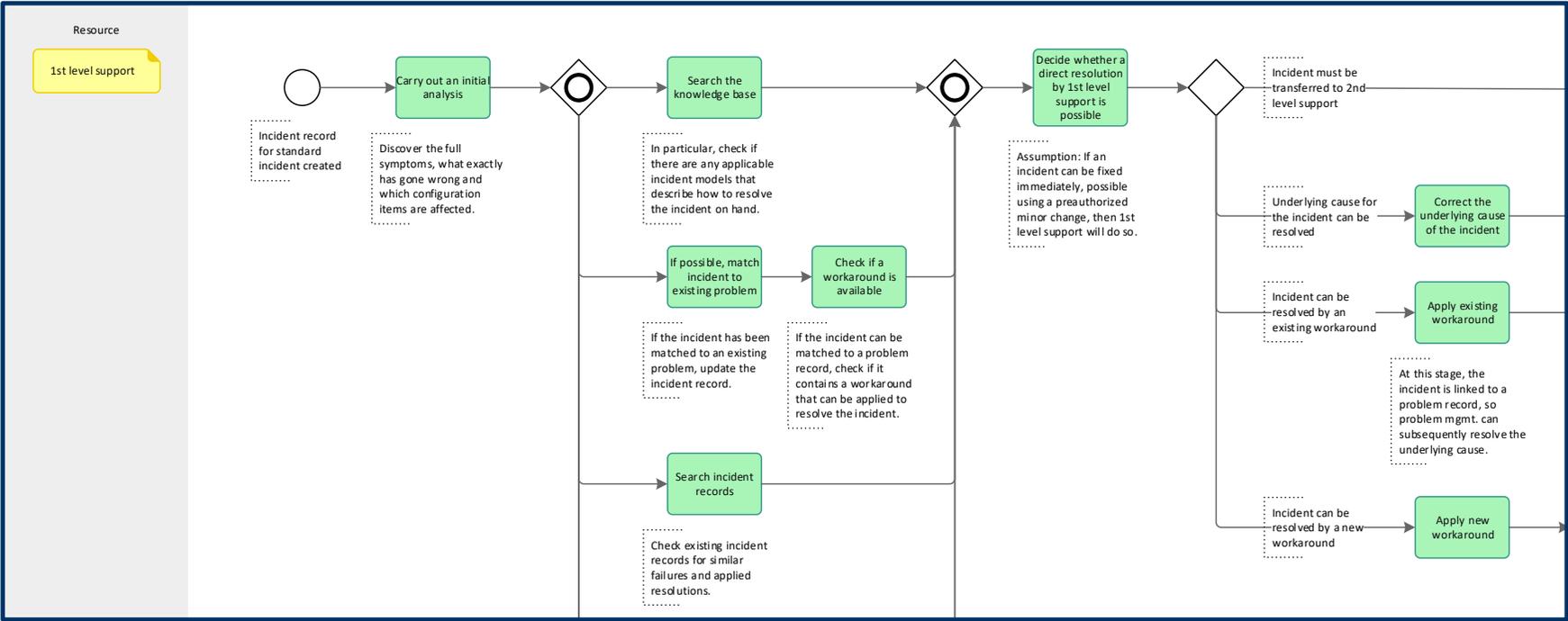
Process structure diagram

The process structure diagram provides a complete view of the YaSM process structure on a single page.

This diagram can be used for directly navigating to specific overview or flowchart diagrams on the main or sub-process levels.
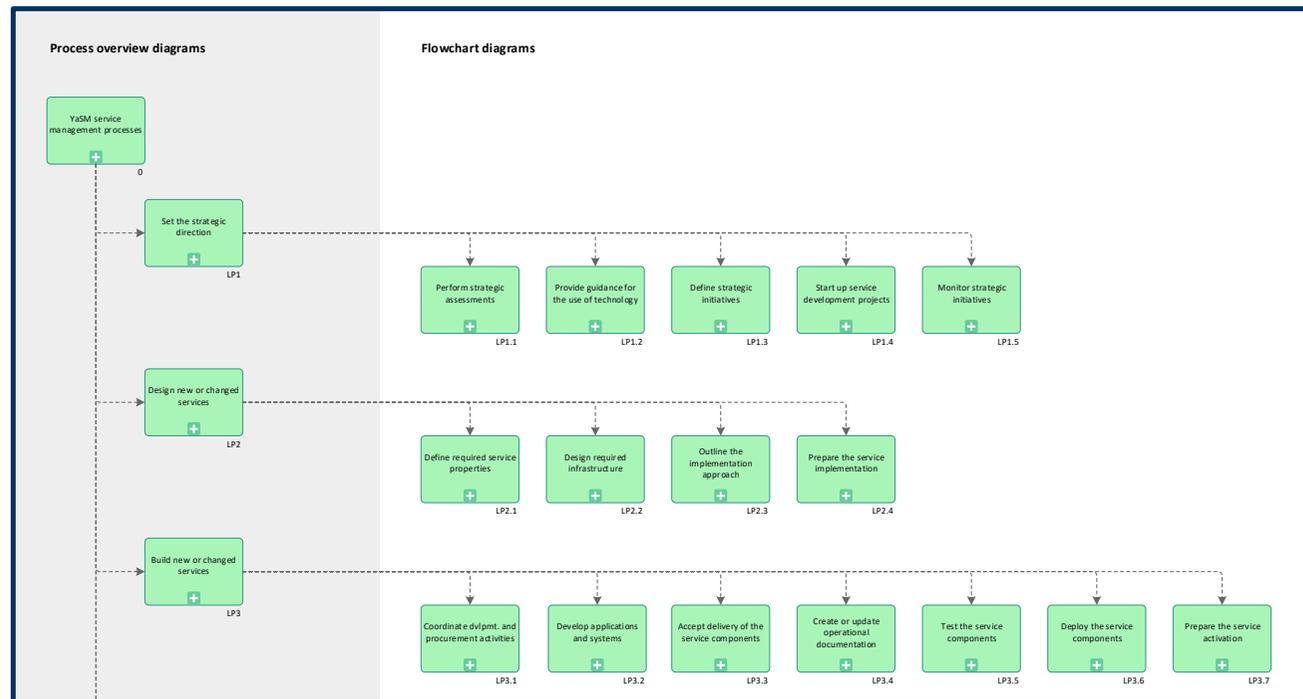
Data-focused diagrams

Overview of YaSM data objects

This diagram provides a list of all YaSM data objects, sorted by the processes which are most closely associated with the objects.

Every YaSM data object has an associated checklist which describes the object in more detail, and an associated data object lifecycle diagram (see below). Both can be opened via hyperlinks from the overview of YaSM data objects.
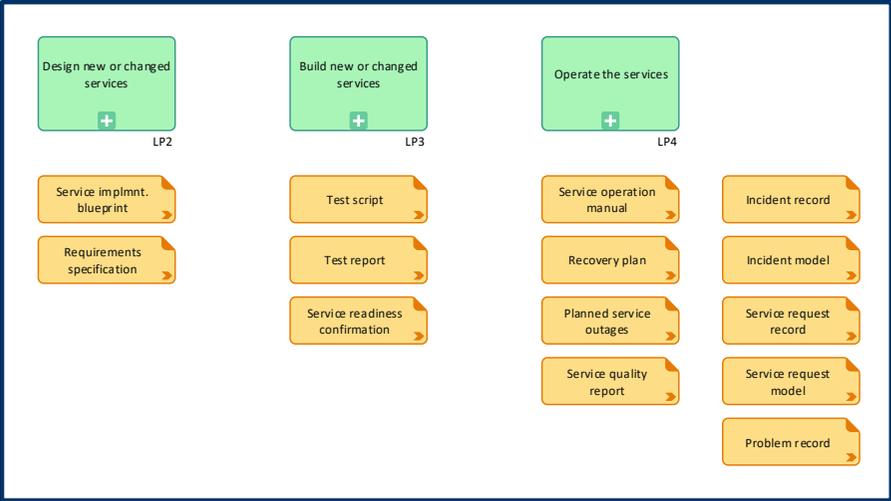
YaSM data object model

The YaSM data object model provides a complete overview of the key relationships between the YaSM objects. Its purpose is to facilitate an understanding of each object's relevance within the YaSM framework.
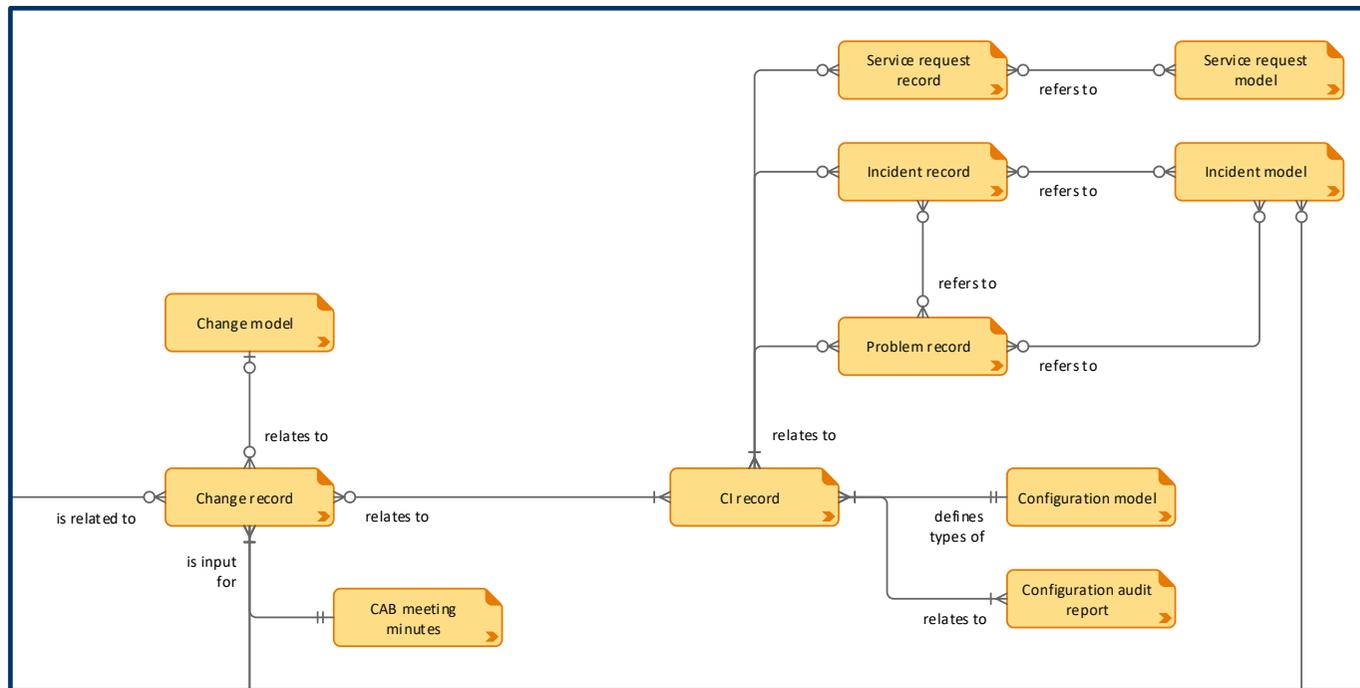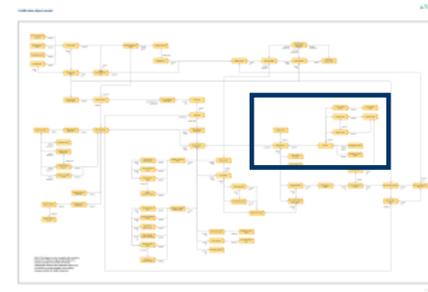
YaSM object lifecycle diagrams

Object lifecycle diagrams illustrate which YaSM processes create, up-date, read and archive particular YaSM data objects, and how their status changes throughout their lifecycle.

The YaSM® Process Map includes 77 object lifecycle diagrams, one for every YaSM data object.

RACI matrix

The RACI or responsibility matrix provides a summary of the YaSM roles' responsibilities in the various YaSM processes.

The YaSM® Process Map

RACI Matrix

Click here to see the Legend

YaSM Roles

YaSM Processes

|	1st level support	2nd level support	Application/ System	Change advisory board (CAB)	Change manager	Change owner	Compliance manager	Configuration manager	Customer	Customer relationship	Emergency change advisory	Financial manager	Human resources manager	Incident manager	Major incident team	Operations manager	Operator	Problem manager	Process owner	Project board	Project manager	Project owner	Security manager	Service continuity manager	Service design manager	Service implementation	Service improvement	Service owner	Service portfolio manager	Service request fulfillment	Service strategy manager	SMS manager	Steering group	Supplier manager	Technical domain expert	Test manager
LP4 Operate the services																																				
...																																				
LP4.6 Resolve incidents and service requests																																				
LP4.6.1 Support incident and service request resolution														AR														R								R
LP4.6.2 Log incidents and service requests	R													A																						
LP4.6.3 Fulfill service requests	R													A																R						
LP4.6.4 Pro-actively inform users and clients	R													A																						
LP4.6.5 Resolve major incidents	R							R						AR	R																					
LP4.6.6 Resolve incidents in 1st level support	R													A																						
LP4.6.7 Resolve incidents in 2nd level support		R						R						A																						R
LP4.6.8 Monitor incidents and service requests	R													AR																						
LP4.6.9 Close incidents and service requests	R													A																						
LP4.7 Resolve problems																																				
...																																				

Checklists and document templates

Checklists provide detailed explanations of the various documents and records ("data objects") which are produced by the YaSM processes.

Each checklist describes the typical contents of a YaSM document or record, as in the example on the right. Because the checklists are Microsoft Word documents, they can often be used as templates when creating the service management documents for a particular organization.

The YaSM® Process Map includes 76 checklists, one for every YaSM data object. In addition, there is a set of 19 checklists for the service management policies.

ஃ YaSM®
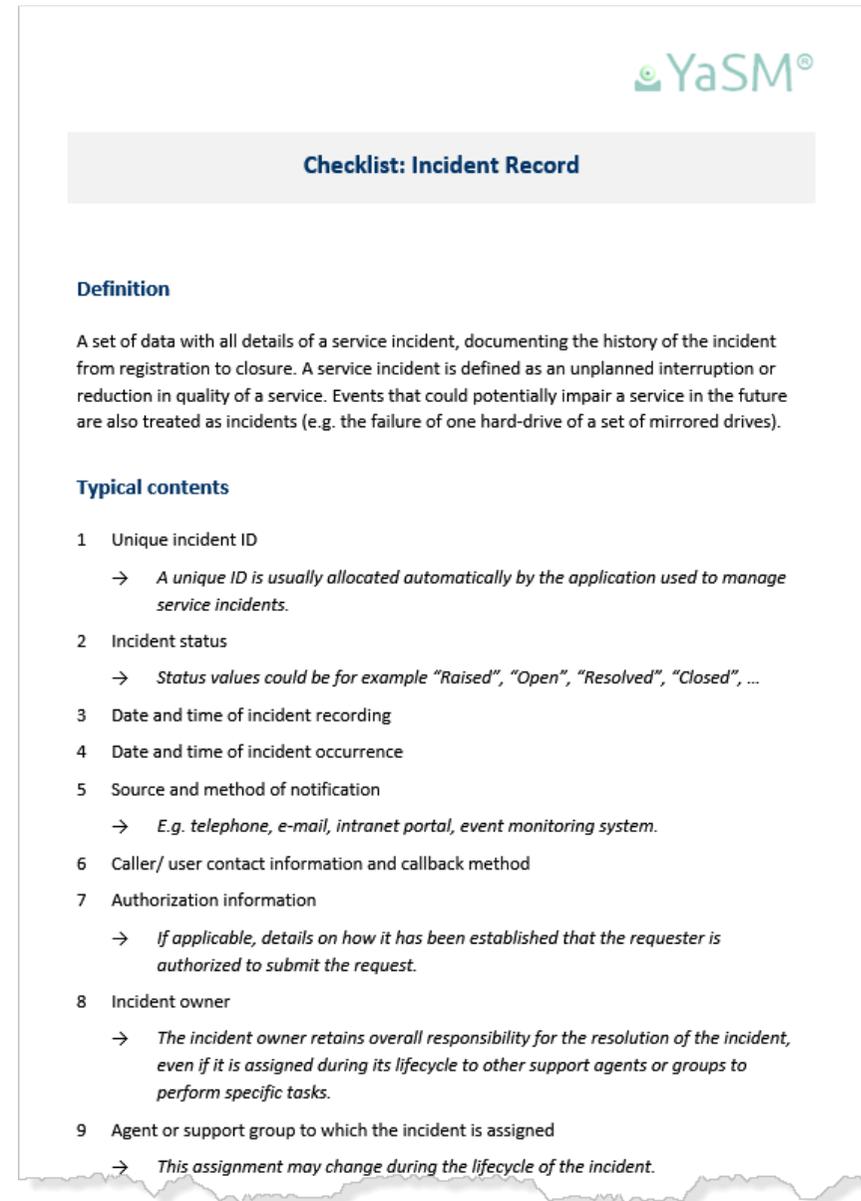
Checklist: Incident Record

Definition

A set of data with all details of a service incident, documenting the history of the incident from registration to closure. A service incident is defined as an unplanned interruption or reduction in quality of a service. Events that could potentially impair a service in the future are also treated as incidents (e.g. the failure of one hard-drive of a set of mirrored drives).

Typical contents

1   Unique incident ID

    → *A unique ID is usually allocated automatically by the application used to manage service incidents.*

2   Incident status

    → *Status values could be for example "Raised", "Open", "Resolved", "Closed", ...*

3   Date and time of incident recording

4   Date and time of incident occurrence

5   Source and method of notification

    → *E.g. telephone, e-mail, intranet portal, event monitoring system.*

6   Caller/ user contact information and callback method

7   Authorization information

    → *If applicable, details on how it has been established that the requester is authorized to submit the request.*

8   Incident owner

    → *The incident owner retains overall responsibility for the resolution of the incident, even if it is assigned during its lifecycle to other support agents or groups to perform specific tasks.*

9   Agent or support group to which the incident is assigned

    → *This assignment may change during the lifecycle of the incident.*

Accompanying documentation

User manual

The user manual contains instructions on setting up, navigating and modifying the YaSM® Process Map.

YaSM and other service management frameworks and standards

YaSM is modelled upon the key principles of the most popular service management frameworks and standards, and a number of documents included in the YaSM® Process Map specifically explain how YaSM relates to those standards and frameworks.

Implementation guide

YaSM projects (and service management projects in general) are characterized by a typical course of action, independent of the size and type of organization. The implementation guide is a time-tested project blueprint which can serve as a guideline for a wide range of service management and ISO 20000 initiatives.

Quick references

"Quick references" provide overviews of the different types of objects used in the process model in printer-friendly format:

— YaSM process descriptions: This PDF quick reference provides a list of all YaSM processes defined in the YaSM process model, complete with brief descriptions of the process objectives.

— YaSM glossary: The YaSM glossary in PDF format contains definitions or short descriptions of the YaSM key terms. Many of those terms correspond to "YaSM data objects" in the YaSM® Process Map, which are used to describe the information flows between the YaSM processes. For each YaSM data object there is a checklist with more detailed information.

— Process inputs/ outputs: This Excel workbook contains two tables, providing a complete list of inputs and outputs for each process. Filtering and sorting can be applied to create specific views, focusing on particular processes, inputs or outputs.

— YaSM role descriptions: This PDF document contains short descriptions or definitions of all YaSM roles. Role objects are used in the flowchart diagrams and the RACI matrix to illustrate the responsibilities for whole processes or single process activities.

— Process metrics: To support the selection of suitable process metrics, the YaSM® Process Map contains for each process a list of widely used metrics with brief definitions in PDF format.

Platform-specific features

The YaSM® Process Map is currently available in two versions for specific platforms: Microsoft Visio® and ARIS™.

Each version is designed to make best use of those platforms. For example, the Visio version includes a special stencil with a number of master shapes specifically designed for the YaSM® Process Map, and a Visio® add-in which allows managing information like process names, descriptions and links in a simple Excel repository.

The ARIS version is a professionally crafted ARIS database which makes consistent use of ARIS features like object instances, attributes and hierarchically structured models.

Please refer to the user manuals for the ARIS and Visio versions of the YaSM® Process Map for more information.

The YaSM® - ISO 20000 Bridge

The "YaSM® - ISO 20000 Bridge" is an additional component to the YaSM® Process Map. It specifically addresses the needs of organizations that wish to achieve certification against ISO 20000.

The Bridge consists of a set of diagrams relating every single ISO 20000 requirement to the YaSM processes and documents/ records. You are thus able to start from the ISO 20000 requirements and to open compliant process models and checklists with a mouse-click - so for every requirement you will find specific suggestions on how it can be fulfilled. This is the ideal way to get started with your ISO 20000 initiative and quickly understand what exactly it means for your organization to become ISO 20000 compliant.

For an introduction to ISO 20000 and the concept of the "Bridge", please refer to the document "Introduction to ISO 20000 and the YaSM® - ISO 20000 Bridge" or check out the information and videos on yasm.com.

IT Process Maps GbR

Dipl.-Ing. Stefan Kempter & Dr. Andrea Kempter

Schönauer Str. 57

88131 Lindau (Bodensee)

Germany

Tel. +49 8382 2809303

Member of itSMF

info@yasm.com

it-processmaps.com | yasm.com

© IT Process Maps GbR

YaSM® is a registered trade mark of IT Process Maps GbR.

ITIL® is a registered trade mark of AXELOS Limited.

COBIT® is a registered trademark of ISACA.

USMBOK™ is a registered trade mark of Virtual Knowledge Solutions International Incorporated (VKSII).

CMMI® and Capability Maturity Model® are registered trademarks of Carnegie Mellon University.

SIAM® is a registered trademark of EXIN.

VeriSM® is a registered trademark of IFDC.

ARIS™, ARIS Process Platform™ and IDS Scheer™ are registered trademarks of Software AG.

Microsoft®, Word™, Excel® and Visio® are registered trademarks of Microsoft Corp.

All processes and methods in our products were compiled with the greatest of diligence. Despite this fact, errors may not be ruled out. IT Process Maps GbR therefore makes no guarantee nor accepts any type of liability for consequences which may be associated with incorrect statements.

Users must decide in their own particular case if the processes and methods described are applicable to their organization or business.