TIPA® for ITIL® 2011 r2 v4.1
Process Assessment Model

SUMMARY

This document presents the Process Assessment Model (PAM) for ITIL® 2011.

This document describes the Process Assessment Model (PAM) for IT Service Management based on ITIL® 2011 (Information Technology Infrastructure Library).
The process dimension details the 26 processes of ITIL 2011 structured in 5 process groups similarly to the original publications.
The capability dimension defines 5 capability levels based on the ISO/IEC 15504-5 Exemplar Process Assessment Model, extended with 2 generic practices that support a better alignment with the particular context of the ITIL processes.

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TIPA® for ITIL® 2011
Process Assessment Model

Release 2
Version 4.1

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I Introduction

This document has been produced by the Luxembourg Institute of Science and Technology (LIST).

The Process Assessment Model (PAM) defined in this document is based on the IT Service Management (ITSM) best practices such as presented in the five core books of ITIL® 2011 (IT Infrastructure Library): Service Strategy, Service Design, Service Transition, Service Operation and Continual Service Improvement, published by The Stationary Office (TSO).

These ITSM best practices are intended to help organizations implementing and improving the management of their IT resources, infrastructure and services. Consequently, the community of interest includes all the ITSM and ITIL experts as well as the ITSM process owners, managers and users.

The selected Process Reference Model (PRM) is the ITSM PRM that the TIPA Team has developed based on ITIL 2011 where the 26 processes identified through the five core books of ITIL 2011 are described. The maturity dimension is using the same structure, process maturity levels and process attributes than those defined in ISO/IEC 15504-2.

This PAM has been designed according to the requirements of ISO/IEC 15504-2:2003. This means that the ITSM processes are defined in terms of the achievement of purpose and expected results in accordance with the requirements of ISO/IEC 15504-2:2003.

The well-informed reader will notice that the term “outcome” from the ISO/IEC 15504 standard has been replaced by the term “Expected Result” in this PAM (and the related PRM). This has been done purposely to ensure the common understanding of these concepts by the whole community of interest. Whatever the term used in the PAM, the intent of the standard has been preserved.

In addition, the PAM includes a set of indicators (i.e. practices and work products) that explicitly addresses the purposes and expected results of all the ITSM processes within the scope of the PAM and that demonstrates the achievement of the process attributes of the maturity levels. These indicators focus attention on the implementation of the ITSM processes.

This PAM for ITSM (and its associated PRM) has been reviewed by a group of ITSM experts from the standardization community (ISO/JTC1 SC7), members of the TIPA LinkedIn group and partners from the ITPreneurs’ network. All the reviewers’ comments have been addressed and their disposition can be consulted upon request. Disposition of comments has been made with the purpose of keeping alignment with both ISO/IEC 15504 standard and ITIL 2011. The PAM has also been validated on the field through several TIPA assessments.

I.1 DEFINITION OF A PROCESS ASSESSMENT MODEL

A Process Assessment Model is related to one or more Process Reference Models. It forms the basis for the collection of evidence and rating of process maturity.

A Process Assessment Model provides a two-dimensional view of process maturity.

In the process dimension, it describes a set of processes that relate to the processes defined in the selected Process Reference Model(s). In addition to information provided in the PRM, processes are described with a set of indicators (e.g. base practices and work products).

In the maturity dimension, the Process Assessment Model describes capabilities that relate to the process maturity levels and process attributes defined in ISO/IEC 15504.

Requirements related to Process Assessment Models are defined in part 6.3 of ISO/IEC 15504-2:2003.

I.2 FOREWORD

The following writing conventions apply in the below process descriptions:

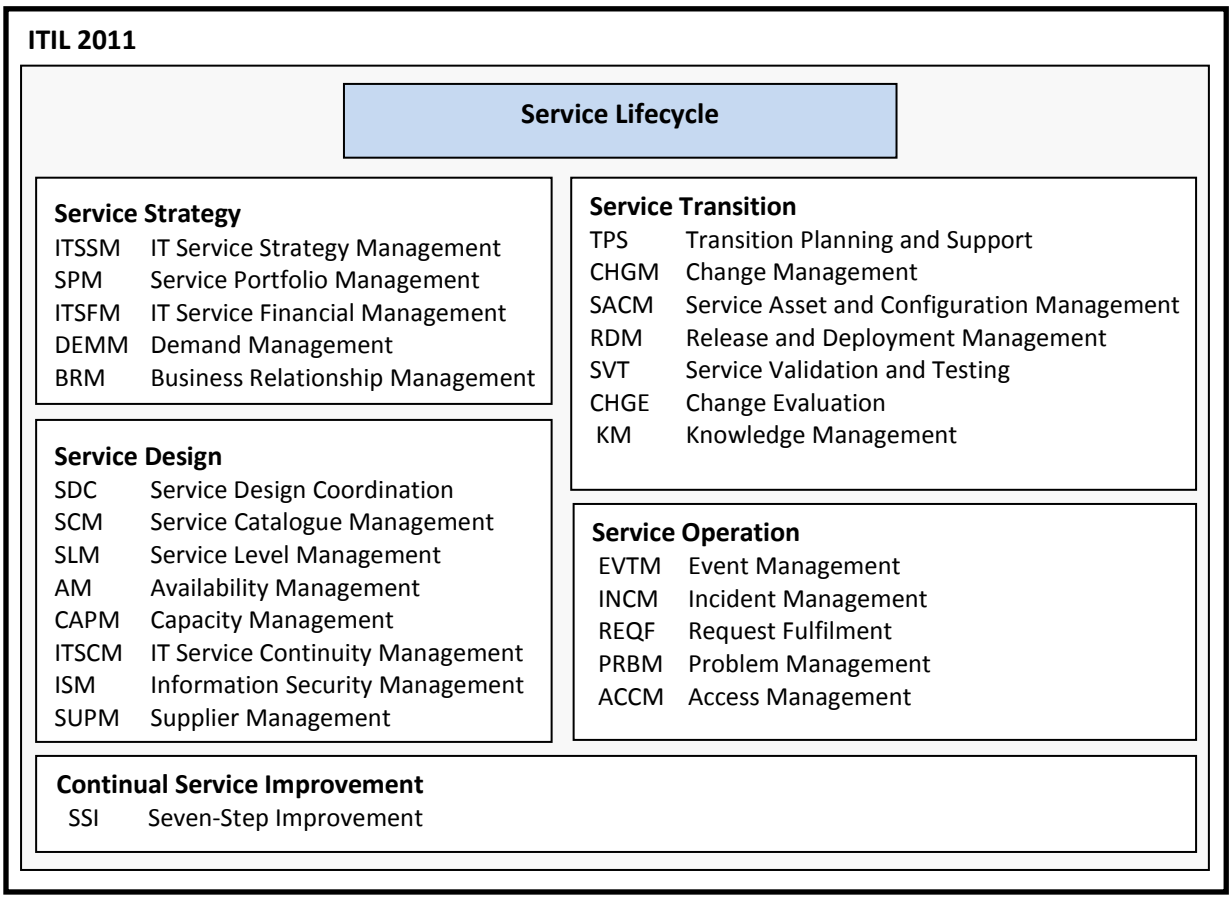
[*ref*] refers to a source of information for this PAM element.

[Expected Result 1] links this element to a specified expected result.

[BP1] links this element to a specified base practice.

NOTE1 Notes are added to PAM elements to clarify their meaning.

II PAM process map



III Description of process groups

III.1 SERVICE STRATEGY

Service Strategy group provides guidance on how to view service management not only as an organizational capability but as a strategic asset.

This group includes the following processes:

ID	Process Name	Sources
ITSSM	IT Service Strategy Management	*ITIL 2011 - Service Strategy: p133*
SPM	Service Portfolio Management	*ITIL 2011 - Service Strategy: p170*
ITSFM	IT Service Financial Management	*ITIL 2011 - Service Strategy: p200*
DEMM	Demand Management	*ITIL 2011 - Service Strategy: p244*
BRM	Business Relationship Management	*ITIL 2011 - Service Strategy: p256*

III.2 SERVICE DESIGN

Service Design group provides guidance for the design and development of services and service management practices. It covers design principles and methods for translating strategic objectives into portfolios of services and service assets.

This group includes the following processes:

ID	Process Name	Sources
SDC	Service Design Coordination	*ITIL 2011 - Service Design: p86*
SCM	Service Catalogue Management	*ITIL 2011 - Service Design: p97*
SLM	Service Level Management	*ITIL 2011 - Service Design: p106*
AM	Availability Management	*ITIL 2011 - Service Design: p125*
CAPM	Capacity Management	*ITIL 2011 - Service Design: p157*
ITSCM	IT Service Continuity Management	*ITIL 2011 - Service Design: p179*
ISM	Information Security Management	*ITIL 2011 - Service Design: p196*
SUPM	Supplier Management	*ITIL 2011 - Service Design: p207*

III.3 SERVICE TRANSITION

Service Transition group provides guidance for the development and improvement of capabilities for introducing new or changed services into supported environments. It ensures that the value(s) identified in the service strategy, and encoded in service design, are effectively transitioned so that they can be realized in service operation.

This group includes the following processes:

ID	Process Name	Sources
TPS	Transition Planning and Support	*ITIL 2011 - Service Transition: p51*
CHGM	Change Management	*ITIL 2011 - Service Transition: p60*
SACM	Service Asset and Configuration Management	*ITIL 2011 - Service Transition: p89*
RDM	Release and Deployment Management	*ITIL 2011 - Service Transition: p114*

SVT	Service Validation and Testing	*ITIL 2011 - Service Transition: p150*
CHGE	Change Evaluation	*ITIL 2011 - Service Transition: p175*
KM	Knowledge Management	*ITIL 2011 - Service Transition: p181*

III.4 SERVICE OPERATION

Service Operation group provides guidance on achieving effectiveness and efficiency in the delivery and support of services to ensure value for the customer, the users and the services provider. It also provides guidance on how to maintain stability in service operations, allowing for changes in design, scale, scope and service levels.

This group includes the following processes:

ID	Process Name	Sources
EVTM	Event Management	*ITIL 2011 - Service Operation: p58*
INCM	Incident Management	*ITIL 2011 - Service Operation: p72*
REQF	Request Fulfilment	*ITIL 2011 - Service Operation: p86*
PRBM	Problem Management	*ITIL 2011 - Service Operation: p97*
ACCM	Access Management	*ITIL 2011 - Service Operation: p110*

III.5 CONTINUAL SERVICE IMPROVEMENT

Continual Service Improvement provides guidance on creating and maintaining value for customers through better strategy, design, transition and operation of services. It combines principles, practices and methods from quality management, change management and capability improvement.

This group includes the following processes:

ID	Process Name	Sources
SSI	Seven-Step Improvement	*ITIL 2011 - Continual Service Improvement: p110*

IV Description of processes

IV.1 SERVICE STRATEGY

IV.1.1 IT Service Strategy Management

Process ID	**ITSSM**
Process Name	**IT Service Strategy Management**
Process Purpose	The purpose of the IT Service Strategy Management process is to define, maintain and ensure effectiveness of the IT service strategy. *[ITIL 2011 - Service Strategy: p133]* NOTE 1: The IT service strategy is a subset of the overall (IT) strategy for the (IT) organization. It aims at: - articulating how an IT service provider will enable an organization to achieve its business outcomes, - establishing the criteria and mechanisms to decide which services will be best suited to meet the business outcomes, - determining the most effective and efficient way to manage these services. NOTE 2: This process applies to both external and internal service providers organizations. However, some aspects of service management such as customers, contracts, competition, market spaces, revenue and strategy take on noticeably different meanings depending on the type of service provider. NOTE 3: ISO/IEC 20000 and/or any legal framework defining specific requirements related to the management of IT services may be used as a reference to establish a Service Management System (SMS).
Process Expected Results	As a result of successful implementation of the IT Service Strategy Management process: 1. The environment in which the service provider operates, including the related constraints and opportunities (market spaces), is understood; NOTE 4: The environment includes the internal and external environments of the service provider. 2. Relevant objectives and perspective (i.e. vision and mission statement) are established and kept aligned with changing environment; 3. The position of the service provider relative to its customers and the other service providers is established; NOTE 5: The service provider's position includes defining which services will be delivered to which market spaces and how to maintain a competitive advantage. 4. The strategic plan(s), which identifies how the service provider will achieve its objectives, perspective and position, is (are) produced, communicated and maintained; 5. The translation of the strategic plan(s) into tactical and operational plans

	(patterns) is ensured for each organizational unit that is expected to deliver the strategy; 6. The IT service strategy is implemented.
Base Practices	**ITSSM.BP1: Strategic assessment - Analyze the internal environment** Perform a careful assessment of the organization over a period of time in order to identify the service provider's strengths and weaknesses. *[ITIL 2011 - Service Strategy: p139]* [Expected Result 1, 3] NOTE 6: Typical categories of analyzing strengths and weaknesses include: existing services, financial analysis, human resources, operations, relationship with the business units, resources and capabilities, and existing projects. **ITSSM.BP2: Strategic assessment - Analyze the external environment** Perform a careful analysis of the external factors that might impact directly the service provider in order to identify the current and future (potential) opportunities and threats. *[ITIL 2011 - Service Strategy: p140]* [Expected Result 1, 3] NOTE 7: External factors include: industry and market analysis, customers, suppliers, partners, competitors, legislation and regulation, political, socio-economic and technology. **ITSSM.BP3: Strategic assessment - Define market spaces** Document all current market spaces (i.e. served by existing service assets) and any potential new market spaces (i.e. unserved or under-served) that have been identified from the internal and external environment analysis. *[ITIL 2011 - Service Strategy: p141]* [Expected Result 1, 3] NOTE 8: A market space is defined by the opportunities that an IT service provider could exploit to meet the business needs of customers. Market spaces identify the possible IT services that an IT service provider may wish to consider delivering. Where ever there is a need for a business outcome and the potential for a supplier to deliver a service capable of helping to achieve that business outcome, we have a market space. **ITSSM.BP4: Strategic assessment - Identify and review strategic industry factors and Critical Success Factors (CSFs)** For each market space, identify and review periodically the critical factors (called strategic industry factors) that determine the success or failure of the IT service strategy and translate them into a set of executable CSFs. *[ITIL 2011 - Service Strategy: p141, 142, 158]* [Expected Result 1, 6] NOTE 9: The strategic industry factors for each market space are influenced by customer needs, business trends, competition, regulatory environment, suppliers, standards, industry best practices and technologies. NOTE 10: The CSFs require a combination of several service assets such as financial assets, experience, competencies, Intellectual Property (IP), processes, infrastructure and scale of operations. **ITSSM.BP5: Strategic assessment - Establish service provider's objectives**

Establish the results that the service provider expects to achieve by pursuing its IT service strategy. *[ITIL 2011 - Service Strategy: p144, 145]* [Expected Result 2]

NOTE 11: Clear (and SMART) objectives facilitate consistent decision-making, minimizing later conflicts.

ITSSM.BP6: Strategy generation - Determine service provider's vision and mission statements
Define the overall direction, values, beliefs and purpose, and at a high level, how the service provider intends to achieve these. *[ITIL 2011 - Service Strategy: p148]* [Expected Result 2]

ITSSM.BP7: Strategy generation - Form strategic position(s)
Define what service will be provided, to what level and to which customers, and how the service provider will be differentiated from other service providers (if any) in the industry. *[ITIL 2011 - Service Strategy: p149]* [Expected Result 3]

NOTE 12: Positioning is based on the analysis of market spaces and strategic industry factors. Apart from the cost and quality of services, there are four broad types of position: Variety-based positioning, Needs-based positioning, Access-based positioning and Demand-based positioning.

ITSSM.BP8: Strategy generation - Craft strategic plan(s)
Document the way the service provider will achieve its objectives, perspective and position(s) in one or more strategic plans (long term plans), which should be concise and readable. *[ITIL 2011 - Service Strategy: p152]* [Expected Result 4, 6]

NOTE 13: Often several strategic plans are developed, especially when the service provider is pursuing more than one position or more than one market space.

ITSSM.BP9: Strategy generation - Adopt patterns of action
Establish and use patterns of action (to be executed within the service provider) that the executives believe will be efficient and effective means of both achieving objectives and dealing with the dynamic nature of organizations. *[ITIL 2011 - Service Strategy: p155]* [Expected Result 5, 6]

NOTE 14: The patterns of action are usually defined and documented in the form of management system, organizational structures, policies, processes, procedures, budgets, schedules... but they can also be less formal and less tangible. There are four types of patterns of action that are helpful in defining and executing service management strategies: "How to" patterns, Boundary patterns, Priority patterns and Timing patterns.

ITSSM.BP10: Strategy execution - Communicate the strategic plan(s)
Ensure that the strategic plan(s) is (are) communicated to executives and key stakeholders, and that the key aspects of the strategy (vision, mission and main objectives) are presented and visible to everyone in the organization. *[ITIL 2011 - Service Strategy: p157]* [Expected Result 4, 5, 6]

NOTE 15: In case of an internal service provider, the strategic plan should be presented and made visible for the business as well.

	ITSSM.BP11: Strategy execution - Enable alignment of assets with customer outcomes Ensure that the service assets are coordinated, controlled and deployed so that they can provide the appropriate service at the agreed levels. *[ITIL 2011 - Service Strategy: p158]* [Expected Result 5, 6] NOTE 16: The deployment of Service Portfolio Management, Capacity Management, Availability Management, Service Level Management and/or Service Asset and Configuration Management processes are possible means to enable alignment with customer outcomes. **ITSSM.BP12: Strategy execution - Prioritize investments** Prioritize project and service investments based on criteria such as customer needs, identified opportunities, and the potential to differentiate in the market spaces. *[ITIL 2011 - Service Strategy: p159]* [Expected Result 6] **ITSSM.BP13: Measurement and evaluation - Monitor and evaluate strategy effectiveness** Identify and analyze areas that are performing below or beyond expectations, and changes to relevant aspects of the internal environment that impact the achievement of the strategy. *[ITIL 2011 - Service Strategy: p160]* [Expected Result 2, 4, 6] NOTE 17: These areas may cover policies adherence, plan execution, patterns of action appropriateness, service asset performance, CSFs achievement... NOTE 18: Since the organization operates in (and is itself) a continuously changing environment, the strategy (and the strategic plans) need to be regularly assessed and revised. These activities set the baseline for the next round of strategy assessments. NOTE 19: This practice should be supported by the Seven-Step Improvement process. **ITSSM.BP14: Measurement and evaluation - Identify opportunities for improvement, expansion and growth** Identify opportunities for improvement (at a strategic level), growth, and/or expansion within current and prospected market spaces. *[ITIL 2011 - Service Strategy: p161]* [Expected Result 1, 2, 3] NOTE 20: Successful expansion and growth strategy are often based on leveraging existing service assets and customer portfolios to drive new growth and profitability.

Input Work Product		
ID	**Name**	**Expected results and related BPs**
03_04	Customer business plan	[Expected Result 1, 2, 3, 5, 6] [ITSSM.BP2, 3, 4, 5, 6, 7, 11, 12, 14]
01_03	Service portfolio	[Expected Result 1, 2, 3, 5, 6] [ITSSM.BP1, 3, 4, 5, 6, 7, 11, 12, 14]
06_18	Business impact analysis report	[Expected Result 1, 2, 3, 5, 6] [ITSSM.BP2, 3, 4, 5, 6, 7, 11, 12, 14]
06_14	Forecast and predictive report	[Expected Result 1, 2, 3, 4, 5, 6] [ITSSM.BP1, 2, 3, 4, 5, 6, 7, 11, 12, 13, 14]

02_24	Differentiated offerings	[Expected Result 1, 2, 3, 6] [ITSSM.BP1, 3, 4, 5, 6, 7, 12, 14]
02_29	Customer portfolio	[Expected Result 1, 2, 3, 6] [ITSSM.BP1, 2, 3, 4, 5, 6, 7, 14]
02_21	Patterns of Business Activity (PBA) catalogue	[Expected Result 1, 2, 3, 6] [ITSSM.BP2, 3, 4, 5, 6, 7, 14]
08_01	Service Level Agreement (SLA)	[Expected Result 1, 2, 3, 5, 6] [ITSSM.BP1, 2, 3, 4, 5, 6, 7, 11]
08_14	Critical Success Factors (CSFs)	[Expected Result 1, 2, 3, 6] [ITSSM.BP2, 3, 5, 6, 7, 12]
03_22	IT service strategic plan	[Expected Result 1, 2, 3, 4, 5, 6] [ITSSM.BP10, 11, 12, 13, 14]
01_09	Service assets and components	[Expected Result 1, 2, 3, 5, 6] [ITSSM.BP1, 3, 4, 5, 6, 7, 11]
06_05	Customer satisfaction survey	[Expected Result 1, 2, 3, 4, 5, 6] [ITSSM.BP1, 2, 3, 4, 5, 6, 7, 11, 12, 13]
06_37	Service Investment analysis	[Expected Result 2, 3, 6] [ITSSM.BP5, 6, 7, 12]

Output Work Product		
ID	**Name**	**Expected results and related BPs**
06_18	Business impact analysis report	[Expected Result 1, 3] [ITSSM.BP2]
08_14	Critical Success Factors (CSFs)	[Expected Result 1, 6] [ITSSM.BP4]
02_25	Market spaces description	[Expected Result 1, 2, 3] [ITSSM.BP3, 14]
02_30	Vision and mission statements	[Expected Result 2, 3] [ITSSM.BP5, 6, 7]
03_09	IT service strategic policies	[Expected Result 3, 5, 6] [ITSSM.BP7, 9]
03_22	IT service strategic plan	[Expected Result 1, 2, 3, 4, 6] [ITSSM.BP8, 14]
03_29	IT service tactical plan	[Expected Result 1, 2, 3, 5, 6] [ITSSM.BP9, 11, 14]
05_19	CSI register	[Expected Result 1, 2, 3, 4, 5, 6] [ITSSM.BP11, 12, 13, 14]

IV.1.2 Service Portfolio Management

Process ID	**SPM**
Process Name	**Service Portfolio Management**
Process Purpose	The purpose of the Service Portfolio Management process is to support the service provider in making strategic decisions for achieving the right mix of services and balancing the investment in IT with the ability to meet business outcomes (i.e. provide business value). *[ITIL 2011 - Service Strategy: p170]* NOTE 1: Service portfolio = pipeline + service catalogue + retired services
Process Expected Results	As a result of successful implementation of the Service Portfolio Management process: 1. Services to be provided are investigated and decided upon based on analysis

	of the potential return and acceptable level of risk; NOTE 2: The services that are under consideration or development (but not yet available to customers) represent the service pipeline. 2. Services are evaluated to determine how they enable the service provider to achieve its strategy and respond to changes in its internal or external environments; NOTE 3: Service Portfolio Management evaluates the value of services throughout their lifecycle. SPM must be able to compare what new services offer over the retired services they have replaced. 3. The service portfolio, articulating the business needs that each service meets and the business outcomes it supports, is established and maintained; 4. The selection of services offered, the conditions under which they are offered and the level of investment at which they are offered, are controlled; 5. The implementation of the service provider's strategy through service investments and its execution against that strategy is evaluated; 6. The services that are no longer viable are identified and their retirement is planned.
Base Practices	**SPM.BP1: Describe the existing services in the service portfolio** Describe the existing IT services of the portfolio from a high level, strategic perspective. *[ITIL 2011 - Service Strategy: p87; 183-184]* [Expected Result 3, 4] NOTE 4: For each IT service, the description should include: its purpose, customer and consumers, its service model (structure and dynamics of how the service is operated and managed), high-level performance and regulatory requirements, which business activity is supported (market space), which business outcomes are supported, other stakeholders, major inputs and outputs, and anticipated level of investments. **SPM.BP2: Centralize suggestions for new or changed services** Maintain a central record of all plans, requests, and suggestions for new or changed services that might be integrated in the service portfolio. *[ITIL 2011 - Service Strategy: p181-183]* [Expected Result 1] NOTE 5: New services and changes to existing services can be initiated from different sources such as: Business Relationship Management, IT Service Strategy Management, Seven-Step Improvement, or any other service management processes. NOTE 6: Any suggestion that Change Management considers to be strategic should be immediately referred to Service Portfolio Management. This means that Service Portfolio Management and Change Management should define thresholds for what constitutes a strategic issue. **SPM.BP3: Evaluate the impact of changes to existing services** Evaluate the impact of any service change on the service portfolio (existing utility, warranty and investment in the service, etc.) and the existing service models (model dynamics, flow of data and information, new or changed components, etc.). Evaluate the possibility to combine this changed service with existing

services to deliver the required utility and warranty. *[ITIL 2011 - Service Strategy: p185]* [Expected Result 1, 2, 3]

SPM.BP4: Evaluate the impact of new services

Analyze the impact of a new service (based on its high level description, and its service model, if any) on the service portfolio and the existing service models. Determine which existing service assets can be used to support the new service (i.e. evaluate the possibility to combine this new service with existing services to deliver the required utility and warranty). *[ITIL 2011 - Service Strategy: p185]* [Expected Result 1, 2, 3]

NOTE 7: If a service model does not exist for a service in the pipeline, Service Portfolio Management will ensure that one is defined. *[ITIL 2011 - Service Strategy: p179]*

SPM.BP5. Prioritize and schedule the service investments

Prioritize the investments in the services based on objective factors, such as: the relative value of the impacted service(s) (compared to the value of the other services), its strategic category, the potential return on investment (value-to-cost ratio), and some other factors such as mission imperative, compliance, trends, intangible benefits, strategic fit, social responsibilities and innovation. *[ITIL 2011 - Service Strategy: p186-190]* [Expected Result 1, 2, 4, 5]

NOTE 8: The option space tool is useful for making decisions on the timing and sequencing of investments in a service portfolio.

SPM.BP6: Articulate value proposition into business case

For each new or changed service (i.e. each service investment) document a business case describing: the opportunity, what the service expected to achieve, the business outcomes the service will be designed to meet and the investment that will be made in the service and its strategic category ('Run the business', 'grow the business' or 'transform the business'). *[ITIL 2011 - Service Strategy: p190]* [Expected Result 1, 4, 5]

NOTE 9: This activity should be performed in collaboration with the IT Service Financial Management process, through the quantification of the value (customer standpoint), cost and revenue of each service and through the understanding of the mapping of service assets to service, and of service to business outcomes.

NOTE 10: The business case is the justification for pursuing a course of action to meet stated organizational goals and acts as the link back to service strategy and funding.

SPM.BP7: Analyze the feasibility of new or changed services

Analyze which aspects of the anticipated future state of the new or changed service are feasible (based on the business case) from both a customer/business perspective (e.g. achievability of the business outcomes) and a service provider perspective (e.g. ability to deliver the service with an acceptable ROI). *[ITIL 2011 - Service Strategy: p190-192]* [Expected Result 1, 2, 4, 5]

NOTE 11: In order to save time and effort, Service Portfolio Management should eliminate any work it already knows will have a negative outcome.

SPM.BP8. Submit service change proposals to and get approval from Change Management

Define and submit service change proposals to Change Management that will perform a detailed assessment and then confirm whether or not the service is feasible (i.e. technically compatible with the existing environment). *[ITIL 2011 - Service Strategy: p192-193]* [Expected Result 2, 4]

NOTE 12: The service change proposal will be treated in almost the same way as an RFC, except that the activity is focused on investigating what the new or changed service will look like and what resources it will take to design, build and deploy it.

NOTE 13: If service change proposal is accepted then the detailed design and deployment of the new or changed service is initiated; If it is rejected, Service Portfolio Management will have to notify all stakeholders and work with them to devise a plan to continue without the proposed (changed) service.

SPM.BP9: Document and communicate service charters

Based on the feedback collated by Change Management, document service charters and communicate them to all stakeholders, development, testing and deployment staff members to ensure a common understanding of what will be built, by when, and how much it will cost. *[ITIL 2011 - Service Strategy: p193-195]* [Expected Result 4]

NOTE 14: Usually the service changes are managed through a project management process, for which the service charter is a major input.

SPM.BP10. Track new or changed service progress

Notify the stakeholders of the progress achieved on the service (including any delay or exception) from the time it is chartered to the time the service has been deployed. Reflect the progress of the project into the service portfolio in order to track the cost of the service against the estimated level of investment and decide to increase the level of investment (or discontinue the project) if necessary. *[ITIL 2011 - Service Strategy: p195]* [Expected Result 5]

SPM.BP11: Verify the success of the new or changed service implementation

Check if the new or changed service deployed has met the requirements of the strategy and is contributing to the achievement of business outcomes as specified by the stakeholders. *[ITIL 2011 - Service Strategy: p195]* [Expected Result 4, 5]

NOTE 15: This check is similar to the Post-Implementation Review (PIR) in Change Management, except it is broader in scope.

SPM.BP12: Review the service portfolio

Regularly review existing services (i.e. the services in the service catalogue 'part' of the service portfolio) to determine whether they still meet their objectives and estimated ROI, and whether they are still appropriate for the IT service strategy (if not, they should be redesigned or retired). The services in the service pipeline are also reviewed to ensure that they are properly defined, analyzed, approved and chartered. *[ITIL 2011 - Service Strategy: p186]* [Expected Result 3, 5, 6]

	SPM.BP13: Plan service retirements Communicate service retirements decisions and ensure that the services to be retired are effectively removed from service catalogue and live use through the service transition processes. Services planned for retirement should be early identified as such in the service catalogue. *[ITIL 2011 - Service Strategy: p195-196]* [Expected Result 3, 5, 6] NOTE 16: Retired services are usually maintained (on standby) in case a business need arises that the service can meet or in case the original business requirements re-emerge.

Input Work Product		
ID	**Name**	**Expected results and related BPs**
03_22	IT service strategic plan	[Expected Result 1, 2, 3, 4, 5, 6] [SPM.BP1, 3, 4, 5, 13]
01_03	Service portfolio	[Expected Result 1, 2, 3, 4, 5, 6] [SPM.BP1, 3, 4, 12]
02_20	Service-oriented financial information	[Expected Result 1, 2, 3, 4, 5] [SPM.BP1,5,6]
03_04	Customer business plan	[Expected Result 3, 4, 5, 6] [SPM.BP1, 12]
05_19	CSI register	[Expected Result 1] [SPM.BP2]
06_30	Total Cost of Utilization (TCU)	[Expected Result 2] [SPM.BP6]
06_37	Service investment analysis	[Expected Result 2] [SPM.BP6]
08_09	Environment requirements and specifications	[Expected Result 1, 2, 3, 4] [SPM.BP1, 2, 3, 4]
07_01	Customer complaints and compliments	[Expected Result 1] [SPM.BP2]
07_02	Request for Change (RFC)	[Expected Result 1, 2, 5, 6] [SPM.BP2, 13]
02_26	Change proposal	[Expected Result 4] [SPM.BP9]
06_32	Change evaluation report	[Expected Result 1, 4] [SPM.BP9, 10, 11]
02_32	Service charter	[Expected Result 4, 5] [SPM.BP9, 10, 11]
08_07	Service model	[Expected Result 1, 2, 3] [SPM.BP3, 4]
02_02	Service catalogue	[Expected Result 3, 5, 6] [SPM.BP13]

Output Work Product		
ID	**Name**	**Expected results and related BPs**
01_03	Service portfolio	[Expected Result 3, 4, 5, 6] [SPM.BP1, 10, 12, 13]
06_37	Service investment analysis	[Expected Result 1, 2, 4, 5] [SPM.BP5]
02_26	Change proposal	[Expected Result 2, 4] [SPM.BP8]
02_32	Service charter	[Expected Result 4] [SPM.BP9]
08_07	Service model	[Expected Result 3, 4] [SPM.BP1]

IV.1.3 IT Service Financial Management

Process ID	**ITSFM**
Process Name	**IT Service Financial Management**
Process Purpose	The purpose of the IT Service Financial Management process is to secure the appropriate level of funding to design, develop and deliver services that meet the strategy of the organization. *[ITIL 2011 - Service Strategy: p201]* NOTE 1: Controlling the cost of services is a prerequisite to secure the appropriate level of funding. NOTE2: The financial management for the service provision is compatible with the organization's financial policies and practices, and has to comply with the regulatory and legislative requirements.
Process Expected Results	As a result of successful implementation of the IT Service Financial Management process: 1. The cost of providing services is understood, under control and communicated to relevant stakeholders; 2. The funding necessary to manage the provision of services is secured, enabling to meet the commitments to customers; 3. The relationship between expenses and incomes is understood; 4. The expenditure for the creation, delivery and support of services is managed and accounted for; 5. The financial impact of new or changed strategies and services on the service provider is evaluated; 6. The costs of service provision are recovered from the customer (where appropriate).
Base Practices	**ITSMF.BP1: Accounting - Understand the cost items, categories and structure for the IT services** Understand how the service-related costs are allocated (by service, location, department, business unit …), how the costs are broken down into cost items and what is the classification of each cost item. *[ITIL 2011 - Service Strategy: p208-227]* [Expected Result 1, 4, 6] NOTE 3: The breakdown structure of costs should include several levels of cost item. For example, “People” may be a high-level cost item and “Payroll”, “Travel”, “Training” and “Overtime” may be the sub-items of this high-level cost item. NOTE 4: The cost items should be classified as one or the other of each of the following three pairs: Capital or operational, direct or indirect, fixed or variable. **ITSFM.BP2: Accounting - Define chart of accounts**

Create the detailed chart of accounts for IT services based on the cost structure and the classification previously defined. *[ITIL 2011 - Service Strategy: p227]* [Expected Result 1, 4]

NOTE 5: The chart of accounts consists of balance sheet accounts (assets, liabilities, and stockholders' equity) and income statement accounts (revenues, expenses, gains, losses).

ITSFM.BP3: Accounting - Analyze and report the financial information on IT services
Analyze and report the financial information on IT services in order to understand budget deviation and enable the business and other interested parties to understand the service provider's income, expenses and investments. *[ITIL 2011 - Service Strategy: p227-230]* [Expected Result 1, 3, 4]

ITSFM.BP4: Accounting - Correct or mitigate budget deviation, if needed
Define and trigger an appropriate action plan to correct budget deviations, or agree with the stakeholders to change the original financial plans and targets (e.g. level of cost and/or incomes, level of service utilization). *[ITIL 2011 - Service Strategy: p231-232]* [Expected Result 4]

ITSFM.BP5: Budgeting - Establish the budget
Formalize the list of estimated costs and incomes of the organization over a specific period of time and how it will be spread over this period, based on the analysis of previous budget, plans, expected changes to funding and spending. *[ITIL 2011 - Service Strategy: p232-234]* [Expected Result 2, 3]

NOTE 6: Typical plans that should be analyzed include: strategy, project plans, planned changes in the customer environment, planned new services (pipeline) and retired services, availability and capacity plans and Service Improvement Plans (SIPs).

ITSFM.BP6: Evaluate financial impact of new or changed strategies and services
Evaluate the financial impact of changing strategic direction and impact of new or changed services on the budget, costs and incomes. *[ITIL 2011 - Service Strategy: p201]* [Expected Result 5]

ITSFM.BP7: Charging - Decide chargeable items
Decide the items to be charged that both have to be as related as possible to the business deliverables and can be controlled by the customer (e.g. business transaction). The chargeable items have to be defined on the basis of the previously defined cost items to be effectively and accurately charged. *[ITIL 2011 - Service Strategy: p237]* [Expected Result 3, 6]

NOTE 7: For example, if the chargeable item is a stock exchange transaction, the business will be able to control its costs by managing the way the bank employees place their orders.

ITSFM.BP8: Charging - Determine service prices
Based on the cost recovery policy, the chargeable items and related cost items, expected service sales and service consumption trends, determine how much customers is charged for each IT service. *[ITIL 2011 - Service Strategy: p238]* [Expected

	Result 2, 3, 6] NOTE 8: The cost recovery policy should define what level of cost recovery needs to be achieved: nothing (notional charging), break-even or with a given margin. The differential charging can also be used to influence customer behavior during critical periods (e.g. peak daytime processing periods). **ITSFM.BP9: Charging - Issue and track service-related invoices** Produce and present the service-related invoices to the customers and track them until effective payment of the invoices. *[ITIL 2011 - Service Strategy: p239]* [Expected Result 6]

Input Work Product		
ID	**Name**	**Expected results and related BPs**
01_03	Service portfolio	[Expected Result 1, 2, 4] [ITSFM.BP1]
02_31	Cost model	[Expected Result 1, 3, 4, 6] [ITSFM.BP2, 7]
05_05	Configuration Management System (CMS)	[Expected Result 1, 2, 5] [ITSFM.BP1]
03_22	IT service strategic plan	[Expected Result 1, 2, 5] [ITSFM.BP6]
02_18	Service valuation	[Expected Result 1, 2, 3, 5] [ITSFM.BP8]
02_20	Service-oriented financial information	[Expected Result 1, 2, 3, 4] [ITSFM.BP4, 5]
05_14	Chart of accounts for IT services	[Expected Result 1, 2, 3, 4, 5, 6] [ITSFM.BP1, 2, 3, 4, 5, 6, 7, 8, 9]
03_02	Capacity plan	[Expected Result 2] [ITSFM.BP5]
03_18	Availability plan	[Expected Result 2] [ITSFM.BP5]
08_15	Funding requirements	[Expected Result 2] [ITSFM.BP5]
03_31	Budget for IT services	[Expected Result 2, 3] [ITSFM.BP4, 5, 6]
03_01	Service Improvement Plan (SIP)	[Expected Result 2, 5] [ITSFM.BP6]
02_26	Change proposal	[Expected Result 5] [ITSFM.BP6]

Output Work Product		
ID	**Name**	**Expected results and related BPs**
02_31	Cost model	[Expected Result 1, 4] [ITSFM.BP1]
05_14	Chart of accounts for IT services	[Expected Result 3, 4] [ITSFM.BP2, 3, 4]
06_30	Total Cost of Utilization (TCU)	[Expected Result 1, 2] [ITSFM.BP3, 6]
02_18	Service valuation	[Expected Result 1, 2, 3] [ITSFM.BP3, 6]
06_37	Service investment analysis	[Expected Result 1, 3, 5] [ITSFM.BP3, 4, 6]
02_20	Service-oriented financial information	[Expected Result 1, 3, 4] [ITSFM.BP3]

06_33	Financial analysis report for IT services	[Expected Result 1, 3, 4, 5] [ITSFM.BP3, 4, 6]
02_19	Service Provisioning Optimization (SPO)	[Expected Result 2] [ITSFM.BP4]
08_15	Funding requirements	[Expected Result 1, 2] [ITSFM.BP5]
03_31	Budget for IT services	[Expected Result 2, 3] [ITSFM.BP4, 5]
02_23	Service pricing policies	[Expected Result 3, 6] [ITSFM.BP7, 8]
05_15	Service-related invoice	[Expected Result 6] [ITSFM.BP7, 9]

IV.1.4 Demand Management

Process ID	**DEMM**
Process Name	**Demand Management**
Process Purpose	The purpose of the Demand Management process is to understand, anticipate and influence customer demand for IT services to ensure the provision of capacity to meet this demand. *[ITIL 2011 - Service Strategy: p133]* NOTE 1: Demand Management should work with Capacity Management to ensure that the provision of capacity can meet the customer demand.
Process Expected Results	As a result of successful implementation of the Demand Management process: 1. The future levels of demand for a service are understood; 2. The typical profiles of demand for services from different types of users are understood; 3. Patterns of Business Activity (PBAs) are used to design new or changed services for supporting business outcomes; 4. Adequate resources are available at the appropriate levels of capacity and tuned to meet the fluctuating demand for services; NOTE 2: This should be done in collaboration with Capacity Management and IT Service Financial Management to ensure a balance between the cost of service and the value that it achieves. 5. Situations where demand for a service exceeds the available capacity are anticipated and prevented or managed.
Base Practices	**DEMM.BP1: Identify sources of demand forecasting** Identify any documents, reports or information that can provide insight into the business activity and its impact on demand for services and thus can assist organization in forecasting the levels of demand. *[ITIL 2011 - Service Strategy: p248]* [Expected Result 1, 2, 4, 5] **DEMM.BP2: Identify and analyze Patterns of Business Activity (PBAs)** Identify Patterns of Business Activity that define dynamics of a business including interactions with customers, suppliers, partners and others stakeholders. Analyze

them to anticipate the demand for IT services over time. *[ITIL 2011 - Service Strategy: p248, 249]* [Expected Result 1, 2, 3, 5]

DEMM.BP3: Define User Profiles (UPs)
Define User Profiles for people, business processes and applications in order to understand the typical profiles of demand for IT services. *[ITIL 2011 - Service Strategy: p250]* [Expected Result 2]

NOTE 3: User Profiles are defined based on roles and responsibilities within customer's organizations for people, and based on functions and operations for processes and applications.

DEMM.BP4: Associate UPs with PBAs
Associate each User Profile with one or more Patterns of Business Activity, allowing aggregations and relations between diverse PBAs, in order to understand the business activity for each User Profile. *[ITIL 2011 - Service Strategy: p250]* [Expected Result 2, 3]

DEMM.BP5: Translate business activities into demand patterns
Translate the business activity and plans (for each customer) into patterns that are meaningful from an ITSM perspective (i.e. demand patterns), in order to understand and predict (based on plans) the impact of business activity on the IT resources and capabilities required to deliver and support the IT services. *[ITIL 2011 - Service Strategy: p251]* [Expected Result 1, 3, 4]

NOTE 4: The result of this practice is a major input for the Capacity Management process.

NOTE 5: For example, if a customer's business plan calls for additional human resources, this should be translated into additional incidents and service requests to be managed by the service desk, additional working stations to be managed, additional server disk space...

DEMM.BP6: Develop differentiated offerings
Based on the identified PBAs and UPs, develop service packages in order to offer a cost-effective solution to each specific type of customer need or to underpin specific business outcomes. *[ITIL 2011 - Service Strategy: p100, 252]* [Expected Result 3, 5]

NOTE 6: A service package is a collection of two or more services that have been combined to provide a defined level of utility and warranty.

NOTE 7: The service offerings should be defined in collaboration with Service Portfolio Management.

NOTE 8: For example, if a business activity has some peak times, two differentiated offerings should be proposed to deal with these 2 different PBAs.

DEMM.BP7: Manage or influence the demand for over-utilized services
Manage or influence the demand for over-utilized services or resources to avoid burning out these resources and think about a mechanism to prevent such situation in the future (e.g. differential charging during peak times). *[ITIL 2011 - Service Strategy: p252]* [Expected Result 4, 5]

	NOTE 9: The over-utilized resources should be identified by the Capacity Management process.

Input Work Product		
ID	**Name**	**Expected results and related BPs**
03_04	Customer business plan	[Expected Result 1] [DEMM.BP1, 2]
06_14	Forecast and predictive report	[Expected Result 1, 2, 3, 4] [DEMM.BP1, 2, 5]
02_29	Customer portfolio	[Expected Result 1, 2] [DEMM.BP1, 2, 3]
08_01	Service Level Agreement (SLA)	[Expected Result 1, 2] [DEMM.BP1, 2, 3, 6, 7]
02_21	Patterns of Business Activity (PBA) catalogue	[Expected Result 1, 2, 3] [DEMM.BP2, 4, 5, 6]
02_22	User Profiles (UP) catalogue	[Expected Result 1, 2, 3] [DEMM.BP3, 4, 6]
01_03	Service portfolio	[Expected Result 3] [DEMM.BP6]
03_02	Capacity plan	[Expected Result 3, 4, 5] [DEMM.BP1, 5]
05_09	Capacity Management Information System (CMIS)	[Expected Result 3, 4, 5] [DEMM.BP5]
06_12	Workload analysis report	[Expected Result 4, 5] [DEMM.BP5, 7]
06_06	Exception report	[Expected Result 4, 5] [DEMM.BP5, 7]
06_13	Ad hoc capacity and performance report	[Expected Result 4, 5] [DEMM.BP5]
02_23	Service pricing policies	[Expected Result 5] [DEMM.BP6, 7]
02_20	Service-oriented financial information	[Expected Result 4, 5] [DEMM.BP6, 7]

Output Work Product		
ID	**Name**	**Expected results and related BPs**
06_14	Forecast and predictive report	[Expected Result 1] [DEMM.BP1, 5]
02_21	Patterns of Business Activity (PBA) catalogue	[Expected Result 1, 2] [DEMM.BP2, 4]
02_22	User Profiles (UP) catalogue	[Expected Result 2] [DEMM.BP3, 4]
02_03	Service package	[Expected Result 3] [DEMM.BP6]
08_08	Service options	[Expected Result 3, 4] [DEMM.BP6]
02_23	Service pricing policies	[Expected Result 4, 5] [DEMM.BP6, 7]
02_24	Differentiated offerings	[Expected Result 3, 5] [DEMM.BP6, 7]
03_30	Demand management policies for over-utilized resources	[Expected Result 4, 5] [DEMM.BP7]

IV.1.5 Business Relationship Management

Process ID	**BRM**

Process Name	**Business Relationship Management**
Process Purpose	The purpose of the Business Relationship Management process is to establish and maintain a business relationship between the service provider and the customer based on understanding the customer and their changing business needs to ensure that the service provider is able to meet these needs. *[ITIL 2011 - Service Strategy: p256]* NOTE 1: Despite similarities between SLM and BRM, these two processes have a different purpose and operate at a different level. While the BRM process focuses on the strategic and tactical levels (overall relationship between the service provider and their customer, and which services the service provider will deliver to meet customer needs), the SLM process focuses on the tactical and operational levels (reaching agreement on the level of service that will be delivered and whether the service provider was able to meet those agreements). NOTE 2: The BRM process consists of activities in every stage of the service lifecycle and is rarely executed as a single end-to-end process.
Process Expected Results	As a result of successful implementation of the Business Relationship Management process: 1. A constructive relationship between the service provider and the customer, based on understanding the customer and their business drivers, is established and maintained; 2. The changing environment of the customers, technology trends and customer's perspective of service are taken into account for adapting the service offer; 3. High levels of customer satisfaction and business value are ensured, indicating that the service provider is meeting the customer's business needs.
Base Practices	**BRM.BP1: Record and document each customer** Gather and maintain information on each customer through a customer portfolio in such a way that you can understand the business, context, current and future commitments (in terms of service), investments and risks relative to each customer. *[ITIL 2011 - Service Strategy: p260]* [Expected Result 1, 3] **BRM.BP2: Centralize and monitor progress of all requests from customers for new or changed services** Ensure that customers have a single point of contact for dealing with any kind of requirement for new or changed services and ensure that these requirements are effectively taken into account (i.e. passed to the appropriate service provider's process to manage them further). *[ITIL 2011 - Service Strategy: p269]* [Expected Result 1, 2, 3] NOTE 3: Conflicting requirements for services (if any) should be mediated. **BRM.BP3: Define, clarify and maintain business requirements for services** Investigate changing business needs, customer's requirements, expectations and

opportunities, and validate them. For each service, define a business case and evaluate both the warranty and utility needed. *[ITIL 2011 - Service Strategy: p256, 265]* [Expected Result 1, 2, 3]

NOTE 4: BRM should work with customers to ensure that services and services levels are able to deliver value.

NOTE 5: The service provider is able to prioritize its services and service assets appropriately based on a good understanding of the customer's perspective of service.

BRM.BP4: Maintain services aligned with the changing customer environment
Identify changes to customer environment that can potentially impact the type, level or utilization of the services provided and take them into account. *[ITIL 2011 - Service Strategy: p256, 266]* [Expected Result 2, 3]

BRM.BP5: Support and facilitate SLA negotiations
Support and facilitate the SLA negotiations (done by the Service Level Management process) thanks to a strong customer relationship and a good understanding of customer context, needs, requirements and satisfaction. *[ITIL 2011 - Service Strategy: p275]* [Expected Result 1, 2, 3]

BRM.BP6: Perform regular survey to measure customer and user satisfaction
Design and perform customer and user satisfaction survey on a regular basis in order to get their perception on the service quality at every level and identify trends of customer and user satisfactions over time. *[ITIL 2011 - Service Strategy: p256, 259, 262]* [Expected Result 1, 3]

NOTE 6: Both customer and user satisfaction are important since both can influence decisions about which services are used and which service provider can deliver those services.

NOTE 7: The customer and user satisfaction survey may include the following points: appropriateness of SLA targets, support team member behavior, reactiveness level in case of major incident or unpredictable events.

BRM.BP7: Investigate any significant variation in customer and user satisfaction
Compare the measured satisfactions with satisfaction targets and previous scores, and investigate any significant variation so that the reasons are understood. *[ITIL 2011 - Service Strategy: p262, 277]* [Expected Result 1, 3]

BRM.BP8: Handle customer complaints and compliments
Log and handle the service complaints coming from customers, from the time they are made to the time they have been dealt with (whatever the responsible process or function) and ensure communication with customers during the progress. Log compliments and communicate them to the relevant parties. *[ITIL 2011 - Service Strategy: p263, 268, 270]* [Expected Result 1, 3]

BRM.BP9: Maintain on-going communication and liaisons with the customers
Plan and attend regular meetings with the customers to maintain good customer relationship, discuss service performance, customer satisfaction and new service development, coordinate any customer involvement that is required during the

	service lifecycle, and entertain customer relationship in case of escalation. *[ITIL 2011 - Service Strategy: p269, 273]* [Expected Result 1, 2, 3] **BRM.BP10: Contribute to the Service Improvement Plan (SIP)** Identify areas for service improvement coming from customers (e.g. through customer satisfaction survey and discussions), from changing customer environments, and from new technologies. *[ITIL 2011 - Service Strategy: p262, 271, 277]* [Expected Result 2, 3] NOTE 8: These areas for service improvement should provide valuable input to the Seven-Step Improvement process.

Input Work Product		
ID	**Name**	**Expected results and related BPs**
03_04	Customer business plan	[Expected Result 1, 3] [BRM.BP1, 4, 5, 9, 10]
03_22	IT service strategic plan	[Expected Result 1, 2, 3] [BRM.BP1, 2, 8]
02_25	Market spaces description	[Expected Result 1, 3] [BRM.BP1, 3, 4]
01_03	Service portfolio	[Expected Result 1, 2, 3] [BRM.BP1, 2, 3, 9]
08_01	Service Level Agreement (SLA)	[Expected Result 1, 2, 3] [BRM.BP5]
02_21	Patterns of Business Activity (PBA) catalogue	[Expected Result 1, 3] [BRM.BP1, 3]
02_22	User Profiles (UP) catalogue	[Expected Result 1, 3] [BRM.BP1, 3, 6, 9]
02_23	Service pricing policies	[Expected Result 2, 3] [BRM.BP5, 6]
02_24	Differentiated offerings	[Expected Result 1, 3] [BRM.BP5, 6]
07_04	Customer request	[Expected Result 1, 2, 3] [BRM.BP2, 3, 6, 9, 10]
06_05	Customer satisfaction survey	[Expected Result 1, 2, 3] [BRM.BP3, 4, 5, 7, 10]
07_01	Customer complaints and compliments	[Expected Result 1, 3] [BRM.BP3, 5, 6, 7, 8, 10]
02_29	Customer portfolio	[Expected Result 1, 2, 3] [BRM.BP1, 3, 5, 8]

Output Work Product		
ID	**Name**	**Expected results and related BPs**
02_29	Customer portfolio	[Expected Result 1, 2, 3] [BRM.BP1]
02_26	Change proposal	[Expected Result 2, 3] [BRM.BP2]
08_02	Service Level Requirement (SLR)	[Expected Result 1, 2, 3] [BRM.BP3, 4, 5]
06_31	Service review meeting minutes	[Expected Result 1, 2, 3] [BRM.BP5]
06_05	Customer satisfaction survey	[Expected Result 1, 3] [BRM.BP6, 7]
03_28	Schedule of customer activity in the service lifecycle	[Expected Result 1, 3] [BRM.BP2, 9]
07_01	Customer complaints and compliments	[Expected Result 1, 3] [BRM.BP8]

05_19	CSI Register	[Expected Result 2, 3] [BRM. BP4, 7, 8, 9, 10]

IV.2 SERVICE DESIGN

IV.2.1 Service Design Coordination

Process ID	**SDC**
Process Name	**Service Design Coordination**
Process Purpose	The purpose of the Service Design Coordination process is to coordinate the design of service solutions that meet the current and future needs of the business through all activities and processes within the Service Design stage of the service lifecycle. *[ITIL 2011 - Service Design: p86]* NOTE 1: The triggers for the Service Design Coordination process are changes in the business requirement and services, and therefore the main triggers are change proposals and the creation of new programs and projects. Another major trigger for the review of design coordination activities would be the revision of the overall IT strategy.
Process Expected Results	As a result of successful implementation of the Service Design Coordination process: 1. The design of services, service management information systems, architectures, technology, processes and metrics is consistent; 2. Design activities are scheduled and coordinated across projects, changes, suppliers and support teams; 3. The resources and capabilities required to design new or changed services are planned and coordinated; 4. The quality criteria, requirements, risks, and issues are controlled; 5. Service models and service solution designs conform to strategic, architectural, governance and other corporate requirements; 6. Service solution designs produced based on service charters and change requests are handed over to Service Transition as agreed.
Base Practices	**SDC.BP1: Define and maintain design coordination policies and methods** Define and maintain a set of architectural documents and principles for the design of service solutions and the production of Service Design Packages (SDPs). Agree, use and manage the quality criteria, requirements, interfaces and handovers between the Service Design stage and other stages, particularly Service Strategy and Service Transition. *[ITIL 2011 - Service Design: p86]* [Expected Result 1, 4, 6] NOTE 2: This includes the definition of the level of design coordination needed for different types of projects and changes. **SDC.BP2: Plan and monitor individual designs**

For each individual project or change, plan the design activities (focusing on ensuring that the resulting design can support the required business outcomes) and monitor each on-going design effort to ensure that there is adherence to agreed methods and that design milestones are being met. *[ITIL 2011 - Service Design: p92-93]* [Expected Result 2, 3, 5]

SDC.BP3: Coordinate individual designs
Coordinate both the service provider and customer resources to ensure involvement of the right people at the right time to create an accurate and complete SDP. *[ITIL 2011 - Service Design: p93]* [Expected Result 2, 3]

NOTE 3: Design activities must consider service functionality (utility), service warranty, requirements to establish the service in effective use in the organization, and, requirement to operate, maintain, and support the service on an on-going basis (in other words, the full SDP).

SDC.BP4: Plan design resources and capabilities across projects and changes
Plan, prioritize and schedule all service design resources and capabilities to ensure that competing demands from projects and changes can be managed at the same time. *[ITIL 2011 - Service Design: p91]* [Expected Result 2, 3]

NOTE 4: Service Design Coordination needs to be well informed regarding activities in the service portfolio (particularly the service pipeline) as well as in the Change Management process (by maintaining regular communication with business relationship managers and service owners).

SDC.BP5: Coordinate all design activities across projects and changes
Coordinate all design activities and manage resource conflicts (if any) across projects, changes, supplier and support teams so that all designs are moving forward in the most effective and efficient manner. *[ITIL 2011 - Service Design: p91]* [Expected Result 2, 3]

NOTE 5: Coordinate all design activities across projects and changes should ensure:
- a good communication between the various design activities and all concerned parties,
- that the latest versions of all appropriate business and IT plans and strategies are available (to all designers),
- that all architectural documents, service models, service solution designs and SDPs conform to strategic, architectural, governance, and other corporate documents, as well as IT policies and plans,
- a good communication and coordination with Service Transition processes (to ensure proper handover of this stage).

SDC.BP6: Identify, manage and report design risks
Use risk assessment and management techniques to identify and manage risks associated with design activities and so reduce the number of issues that can subsequently lead to poor designs. Report service design issues, risks and deviations to the appropriate stakeholders and decision makers. *[ITIL 2011 - Service Design: p92]* [Expected Result 4]

SDC.BP7: Review and verify designs

	Perform a final review of the designs for compliance with standards and conventions to ensure that all agreed requirements for the SDP have been completed correctly. Document issues and determine whether they require revisiting any part of the service design, or whether they can be addressed as part of the plan for service transition. Verify that the development of a comprehensive design that will support the achievement of the required business outcomes is taking place. *[ITIL 2011 - Service Design: p93]* [Expected Result 1, 5] **SDC.BP8: Ensure handover of Service Design Package** Once all required criteria have been met, change the status of the service in the service portfolio so that the SDP can be officially handed over to Service Transition (via the Transition Planning and Support process). *[ITIL 2011 - Service Design: p93]* [Expected Result 6]

Input Work Product		
ID	**Name**	**Related expected results and BPs**
02_32	Service charter	[Expected Result 2, 3, 5] [SDC.BP2, 3]
02_26	Change proposal	[Expected Result 2, 3, 5] [SDC.BP2, 3]
05_11	Change documents and records	[Expected Result 1, 2, 3, 5] [SDC.BP2, 3, 7]
03_04	Customer business Plan	[Expected Result 1, 4, 5, 6] [SDC.BP1, 7]
03_22	IT service strategic plan	[Expected Result 1, 4, 5, 6] [SDC.BP1, 7]
03_31	Budget for IT services	[Expected Result 2, 3] [SDC.BP2, 4]
06_18	Business impact analysis report	[Expected Result 1, 5] [SDC.BP7]
06_17	Risk assessment report	[Expected Result 1, 5] [SDC.BP7]
01_03	Service portfolio	[Expected Result 2, 3, 5] [SDC.BP2, 3, 4, 5]
03_15	Change Schedule (CS)	[Expected Result 2, 3, 5] [SDC.BP2, 3, 4, 5]
05_05	Configuration Management System (CMS)	[Expected Result 1, 2, 3, 5] [SDC.BP2, 4, 7]
02_13	Service Design Package (SDP)	[Expected Result 1, 5, 6] [SDC.BP7, 8]

Output Work Product		
ID	**Name**	**Related expected results and BPs**
04_03	Service design policies and procedures	[Expected Result 1, 4, 6] [SDC.BP1]
02_13	Service Design Package (SDP)	[Expected Result 1, 2, 3, 5, 6] [SDC.BP3, 5, 7, 8]
06_18	Business impact analysis report	[Expected Result 4] [SDC.BP6]
06_17	Risk assessment report	[Expected Result 4] [SDC.BP6]
01_03	Service portfolio	[Expected Result 6] [SDC.BP8]
05_11	Change documents and records	[Expected Result 1, 2, 3, 5] [SDC.BP3, 5, 7]

IV.2.2 Service Catalogue Management

Process ID	**SCM**
Process Name	**Service Catalogue Management**
Process Purpose	The purpose of the Service Catalogue Management process is to provide and maintain a single source of consistent information on all agreed services, the service catalogue being widely available to those who are authorized to access it. *[ITIL 2011 - Service Design: p97]* NOTE 1: Agreed services means operational services and those being prepared to be operational. NOTE 2: The boundaries between Service Portfolio Management and Service Catalogue Management should be clearly defined and agreed.
Process Expected Results	As a result of successful implementation of the Service Catalogue Management process: 1. The service catalogue accurately reflects the current details, status, interfaces and dependencies of all services that are being run, or being prepared to run, in the live environment; NOTE 3: The service provider should manage two views of its service catalogue: a customer-facing services view (the business service catalogue), and a supporting services view (the technical service catalogue). 2. A description of customer-facing services that contribute to business outcomes is shared with the customers; 3. A common understanding on how the IT services (both customer facing and supporting services) contribute to business outcomes is fostered amongst all service provider staff; 4. The service catalogue supports the evolving needs for information of all other service management processes, including all interfaces and dependency information; 5. The service catalogue is made available to those approved to access it in a manner that supports their effective (and efficient) use of service catalogue information.
Base Practices	**SCM.BP1: Document and agree on a definition and a description for each service** Document and agree with all relevant parties on a business definition of each service to ensure a common understanding of what is that service within the service provider organization and how that service map onto and support the business. Define details of each IT service that will be recorded in the service catalogue and the valid statuses for a service. *[ITIL 2011 - Service Design: p99]* [Expected Result 1, 2, 3] NOTE 4: This activity should be done in conjunction with the Service Portfolio

	Management process. **SCM.BP2: Identify which business processes use the customer-facing services** Identify, for each service contained in the customer-facing services view of the service catalogue, the business units and their business processes that use that service. *[ITIL 2011 - Service Design: p99-101]* [Expected Result 1, 2, 3] NOTE 5: This activity should be done in conjunction with the business and the IT Service Continuity Management process. **SCM.BP3: Identify the interfaces and dependencies of customer-facing services with the supporting services** Identify with the support teams, suppliers, and Service Asset and Configuration Management, the interfaces and dependencies between the customer-facing services and the supporting services, components and CIs contained within the service catalogue. *[ITIL 2011 - Service Design: p99-101]* [Expected Result 1, 3] **SCM.BP4: Describe and record all services in the service catalogue** Record the descriptions of services being run or being prepared to run in the live environment, with their service levels and all their interfaces and dependencies, in the service catalogue. *[ITIL 2011 - Service Design: p100-101]* [Expected Result 1, 2, 3, 4] NOTE 6: The collected information used to fill the service catalogue should come from Business Relationship Management, Service Portfolio Management, Service Level Management and the business. **SCM.BP5: Maintain the customer-facing services part of the service catalogue** Maintain the customer-facing services part of the service catalogue (i.e. the business service catalogue) regularly in conjunction with Service Level Management and Business Relationship Management to ensure that the information it contains is aligned to the business and the business processes. *[ITIL 2011 - Service Design: p98-99, 101]* [Expected Result 1, 2, 3, 4] **SCM.BP6: Maintain the supporting services part of the service catalogue** Maintain the supporting services part of the service catalogue (i.e. the technical service catalogue) regularly in conjunction with Change Management and Service Asset and Configuration Management to ensure that the information it contains is aligned to the supporting services, technical components and CIs. *[ITIL 2011 - Service Design: p98-99, 101]* [Expected Result 1, 3, 4] **SCM.BP7: Make available the service catalogue** Make the service catalogue available to those approved to access it. *[ITIL 2011 - Service Design: p97]* [Expected Result 5]

Input Work Product		
ID	**Name**	**Expected results and related BPs**
03_22	IT service strategic plan	[Expected Result 1, 2, 3] [SCM.BP1, 2, 3, 4]

03_29	IT service tactical plan	[Expected Result 1, 2, 3] [SCM.BP1, 2, 3, 4]
02_20	Service-oriented financial information	[Expected Result 1, 2, 3] [SCM.BP1, 2, 3, 4]
03_31	Budget for IT services	[Expected Result 1, 2, 3] [SCM.BP1, 2, 3, 4]
03_04	Customer business plan	[Expected Result 1, 2, 3] [SCM.BP1, 2, 3, 4]
01_03	Service portfolio	[Expected Result 1, 2, 3] [SCM.BP1]
05_05	Configuration Management System (CMS)	[Expected Result 1, 2, 3] [SCM.BP1, 2, 3]
05_12	Supplier and Contract Management Information System (SCMIS)	[Expected Result 1, 2, 3] [SCM.BP1]
06_18	Business impact analysis report	[Expected Result 1, 2, 3] [SCM.BP2, 3]
06_10	Service report	[Expected Result 1, 2, 3] [SCM.BP1]
02_02	Service catalogue	[Expected Result 1, 2, 3, 4, 5] [SCM.BP5, 6, 7]
07_02	Request for Change (RFC)	[Expected Result 1, 2, 3, 4] [SCM.BP5,6]

Output Work Product		
ID	**Name**	**Expected results and related BPs**
02_12	Service definition documentation	[Expected Result 1] [SCM.BP1]
06_18	Business impact analysis report	[Expected Result 1, 2, 3] [SCM.BP2, 3]
02_02	Service catalogue	[Expected Result 1, 2, 3, 4] [SCM.BP2, 3, 4, 5, 6]
01_03	Service portfolio	[Expected Result 1, 2, 3, 4] [SCM.BP5, 6]

IV.2.3 Service Level Management

Process ID	**SLM**
Process Name	**Service Level Management**
Process Purpose	The purpose of the Service Level Management process is to ensure that all current and planned IT services are delivered to agreed achievable targets. *[ITIL 2011 - Service Design: p106]* NOTE 1: This is accomplished through a constant cycle of negotiating, agreeing, monitoring, reporting on and reviewing IT service targets and achievements, and through instigation of actions to correct or improve the level of service delivered.
Process Expected Results	As a result of successful implementation of the Service Level Management process: 1. IT and the customers have a common, clear and unambiguous understanding of the levels of service to be delivered; 2. IT services are delivered at levels agreed with the customers;

	3. A close relationship with business and customers is maintained (in conjunction with Business Relationship Management); 4. Specific and measurable targets are developed for all IT services; 5. Customer satisfaction regarding service levels is monitored and improved; 6. The levels of service delivered are subject to cost-effective continual improvement.
Base Practices	**SLM.BP1: Determine, document and agree on Service Level Requirements (SLRs)** Determine, document and agree on service level requirements for services being developed, changed or procured. The SLRs should be an integral part of the overall service design criteria which also include the functional or "utility" specifications. *[ITIL 2011 - Service Design: p112]* [Expected Result 1] NOTE 2: Representatives of other processes need to be consulted to determine which targets can be realistically achieved. **SLM.BP2: Negotiate, document and agree upon Service Level Agreements (SLAs) for operational services** Draft, negotiate, and then agree on SLAs, detailing the service level targets to be achieved and specifying the responsibilities of both the IT service provider and the customer. *[ITIL 2011 - Service Design: p113]* [Expected Result 1, 2, 3] **SLM.BP3: Monitor service performance against SLAs** Monitor and measure service performance achievements of all operational services against targets within SLAs. *[ITIL 2011 - Service Design: p114]* [Expected Result 1, 2, 4] NOTE 3: Monitoring capabilities are established, reviewed and upgraded to assist with the service performance measurement. **SLM.BP4: Minimize occurrence and impact of SLA breaches** Ensure that corrective actions are taken (by the relevant processes) to prevent SLA breaches and minimize their impact on the business operations. *[ITIL 2011 - Service Design: p108]* [Expected Result 2] **SLM.BP5: Provide service reporting to customers** Produce and communicate service reports to customer, based on agreed mechanisms, report format, and intervals (service achievement report, operational reports, and where possible, exception reports should be produced whenever an SLA has been broken). *[ITIL 2011 - Service Design: p116]* [Expected Result 1, 2, 3] NOTE 4: Service reports should be reviewed with the customer on a regular basis. **SLM.BP6: Conduct service reviews and discuss improvements** Hold review meetings on a regular basis with customers to review the service achievement in the past period, to anticipate any issues for the coming period and to identify potential improvements. *[ITIL 2011 - Service Design: p116]* [Expected

	Result 1, 2, 3, 6] **SLM.BP7: Review SLAs, OLAs, and UCs** Review SLAs and service scope periodically (at least annually), to ensure that they are still aligned to business needs and strategy. Ensure that service levels defined in Operational Level Agreements (OLAs) and Underpinning Contracts (UCs) are kept aligned. *[ITIL 2011 - Service Design: p118]* [Expected Result 1, 3, 6] NOTE 5: SLRs and SLAs should be reviewed jointly. NOTE 6: SLM should assist Supplier Management with the review of all supplier agreements and UCs to ensure that targets are aligned with SLA targets. **SLM.BP8: Handle service level complaints and compliments** Log and handle service level complaints originating from users and customers, from the time they are made to the time they have been dealt with. Log and communicate compliments to the relevant parties. *[ITIL 2011 - Service Design: p120]* [Expected Result 2, 3, 5, 6] NOTE 7: This work represents a significant contribution to the overall customer satisfaction work being done in the Business Relationship Management process. **SLM.BP9: Monitor and take into account customer satisfaction** Monitor customer perception of service levels provided and take it into account in the SLA, OLA, and UC reviews and the Service Improvement Plan (SIP). *[ITIL 2011 - Service Design: p117]* [Expected Result 1, 3, 5, 6] **SLM.BP10: Instigate service level improvements** Analyze and use the results of service and SLA reviews, complaints, compliments and customer perception on service levels to instigate service improvements for implementation through a SIP (via Seven-Step Improvement process). *[ITIL 2011 - Service Design: p117]* [Expected Result 2, 4, 5, 6]

Input Work Products		
ID	**Name**	**Expected results and related BPs**
02_21	Patterns of Business Activity (PBA) catalogue	[Expected Result 1, 2, 3] [SLM.BP1, 2]
02_22	User Profile (UP) catalogue	[Expected Result 1, 2, 3] [SLM.BP1, 2]
08_08	Service options	[Expected Result 1, 2, 3] [SLM.BP2, 7]
01_03	Service portfolio	[Expected Result 1, 3, 6] [SLM.BP1, 2, 7, 10]
08_02	Service Level Requirements (SLR)	[Expected Result 1, 3, 4, 5, 6] [SLM.BP2, 7, 10]
08_01	Service Level Agreement (SLA)	[Expected Result 1, 2, 3, 4, 5, 6] [SLM.BP3, 5, 6, 7, 9, 10]
08_03	Operational Level Agreement (OLA)	[Expected Result 1, 2, 4, 5, 6] [SLM.BP2, 6, 7, 10]
08_04	Underpinning Contract (UC) / supplier agreement	[Expected Result 1, 2, 4, 5, 6] [SLM.BP2, 6, 7, 10]

06_26	Service/supplier performance reports	[Expected Result 1, 2, 4, 6] [SLM.BP3, 4, 6, 7, 10]
07_01	Customer complaints and compliments	[Expected Result 1, 3, 5, 6] [SLM.BP1, 2, 5, 7, 9, 10]
06_05	Customer satisfaction survey	[Expected Result 1, 3, 5, 6] [SLM.BP1, 2, 5, 6, 7, 9, 10]

Output Work Products		
ID	**Name**	**Expected results and related BPs**
08_02	Service Level Requirements (SLR)	[Expected Result 1] [SLM.BP1]
08_01	Service Level Agreement (SLA)	[Expected Result 1, 3, 6] [SLM.BP2, 7]
08_03	Operational Level Agreement (OLA)	[Expected Result 1, 4, 6] [SLM.BP7, 10]
08_04	Underpinning Contract (UC) / supplier agreement	[Expected Result 1, 4, 6] [SLM.BP7, 10]
06_10	Service report	[Expected Result 1, 2, 3] [SLM.BP3, 5]
06_31	Service review meeting minutes	[Expected Result 1, 2, 3, 6] [SLM.BP6]
06_11	SLA review meeting minutes	[Expected Result 1, 3, 6] [SLM.BP7]
07_01	Customer complaints and compliments	[Expected Result 3, 5] [SLM.BP8]
06_05	Customer satisfaction survey	[Expected Result 1, 3, 5] [SLM.BP9]
03_01	Service Improvement Plan (SIP)	[Expected Result 3, 5, 6] [SLM.BP6, 10]
03_32	Service Quality Plan	[Expected Result 3, 5, 6] [SLM.BP6, 10]

IV.2.4 Availability Management

Process ID	**AM**
Process Name	**Availability Management**
Process Purpose	The purpose of the Availability Management process is to ensure that the level of availability delivered in all IT services meets the agreed availability needs and/or service level targets in a cost-effective and timely manner. *[ITIL 2011 – Service Design: p125]* NOTE 1: Availability Management is concerned with meeting both the current and future availability needs of the business. NOTE 2: IT Service Continuity Management (ITSCM) and Availability Management have a close relationship, particularly in the management of risks and in the implementation of risk reduction and resilience measures.
Process Expected Results	As a result of successful implementation of the Availability Management process: 1. An availability plan is produced and maintained to reflect the current and

	future needs of the business; 2. The availability of both services and resources enables to meet all the availability targets agreed in SLAs and to meet future availability needs; 3. The impact of all changes on the availability plan and the availability of all services and resources is assessed and addressed; 4. Advice and guidance on all availability-related issues are provided to all other areas of the business and IT; 5. Cost-justifiable measures to improve the availability of services are implemented.
Base Practices	**AM.BP1: Determine current and future availability requirements** Analyze Vital Business Functions (VBFs), business plans, SLAs, SLRs, and trends on service and component availability to determine the current and future availability requirements. *[ITIL 2011 – Service Design: p126, 131, 141]* [Expected Result 1, 2] NOTE 3: The identification of the VBFs should be done in conjunction with the business and the ITSCM process. **AM.BP2: Define availability measurement mechanisms and service and resource availability targets** Define availability measurement mechanisms for all services and critical components, and define related availability targets. *[ITIL 2011 – Service Design: p129, p132]* [Expected Result 2, 3, 4] NOTE 4: The availability measures should be incorporated into SLAs, OLAs and underpinning contracts. **AM.BP3: Monitor the service components availability and identify and resolve any service or component unavailability** Monitor all aspects of availability, reliability and maintainability of resources and IT services components, with appropriate events, alarms, and escalation. Assist with the identification and resolution of any exception event, incident and problem associated with service or component unavailability. *[ITIL 2011 – Service Design: p125-126, 132, 134]* [Expected Result 2, 4] **AM.BP4: Estimate impact of service changes on required availability** Model and trend the predicted changes in IT services (including service retirements) to identify the changes that need to be made to services and components of IT infrastructure and applications to ensure that appropriate resource is or remains available. *[ITIL 2011 – Service Design: p125]* [Expected Result 1, 2, 3] **AM.BP5: Produce and use an availability plan** Produce, maintain and use (e.g. for decision making) an availability plan that reflects all trends, predicted changes, future requirements and plans (e.g. from service portfolio and SLRs) in order to enable the service provider to deliver services in line with availability targets defined in SLAs with a reasonable

anticipation on future expectations. *[ITIL 2011 – Service Design: p125, 132]* [Expected Result 1, 2, 3, 4, 5]

AM.BP6: Provide advice and guidance on availability issues
Provide advice and guidance to all other areas of the business and IT on all availability related issues. *[ITIL 2011 – Service Design: p125, 131, 134, 141, 151]* [Expected Result 2, 4]

NOTE 5: In particular, Availability Management should be involved in defining SLRs and SLAs, designing new or changed service (availability and recovery design criteria), and 38analyzing change impact.

AM.BP7: Measure service availability from the business and user perspective
Measure the availability of IT services that reflects the experience of the business and users, based on the measured availability of service components. *[ITIL 2011 – Service Design: p126, 130, 132]* [Expected Result 1, 2, 3, 4]

NOTE 6: The user and business views of availability are influenced by:
- frequency of downtime
- duration of downtime
- business impacts

AM.BP8: Perform risk assessment and management activities
Identify and quantify risks, determine the impact arising from IT service and component failure and, where appropriate, implement countermeasures to ensure the prevention and/or recovery from service and component unavailability. *[ITIL 2011 – Service Design: p126, 132, 149]* [Expected Result 1, 2, 3, 5]

NOTE 7: The risk assessment and management activities should be conducted in conjunction with the IT Service Continuity Management and the Information Security Management processes.

AM.BP9: Test all resilience and fail-over components and mechanisms
Schedule and perform tests for all resilience and fail-over components and mechanisms to ensure their effectiveness. *[ITIL 2011 – Service Design: p126, 151]* [Expected Result 2, 5]

AM.BP10: Identify and instigate cost-justifiable improvement of service availability
Actively seek to improve service or component availability wherever it is cost-justifiable and meets the needs of the business. *[ITIL 2011 – Service Design: p125, 132, 152]* [Expected Result 2, 5]

Input Work Products		
ID	**Name**	**Expected results and related BPs**
03_04	Customer business plan	[Expected Result 1] [AM.BP1, 5, 7]
06_18	Business impact analysis report	[Expected Result 1] [AM.BP1, 2, 6, 7, 8]

06_17	Risk assessment report	[Expected Result 1] [AM.BP6, 8, 9, 10]
01_03	Service portfolio	[Expected Result 1, 3] [AM.BP1, 2, 5, 7]
05_05	Configuration Management System (CMS)	[Expected Result 1, 3] [AM.BP2, 3, 6]
08_01	Service Level Agreement (SLA)	[Expected Result 1, 3] [AM.BP1, 2, 5, 6, 7]
05_07	Incident record	[Expected Result 1, 3] [AM.BP3, 8]
02_26	Change proposal	[Expected Result 1, 2, 3] [AM.BP4, 6, 8, 10]
05_10	Availability Management Information System (AMIS)	[Expected Result 1, 2, 3, 4, 5] [AM.BP1, 2, 3, 4, 5, 6, 7, 8, 9, 10]
03_18	Availability plan	[Expected Result 1, 2, 4] [AM.BP1, 5]
03_02	Capacity plan	[Expected Result 1, 4] [AM.BP5, 6, 8]
01_07	Availability measures, targets and unacceptable levels	[Expected Result 1, 3] [AM.BP2, 3, 8]
06_15	Availability exception report	[Expected Result 1, 3] [AM.BP8, 10]
06_14	Forecast and predictive report	[Expected Result 1, 2, 3] [AM.BP1, 5, 6, 8, 10]
03_03	Availability test schedule	[Expected Result 1, 4] [AM.BP9]
06_07	Availability test report	[Expected Result 1, 4] [AM.BP8, 10]
02_20	Service-oriented financial information	[Expected Result 1, 3, 4] [AM.BP10]

Output Work Products		
ID	**Name**	**Expected results and related BPs**
05_10	Availability Management Information System (AMIS)	[Expected Result 1, 2] [AM.BP1, 2, 3, 5, 7, 8, 9]
01_07	Availability measures, targets and unacceptable levels	[Expected Result 1, 2] [AM.BP1, 2, 6]
03_18	Availability plan	[Expected Result 1, 2, 4] [AM.BP1, 5]
06_15	Availability exception report	[Expected Result 1, 3] [AM.BP3, 6]
06_16	Ad hoc availability and performance report	[Expected Result 3] [AM.BP6]
06_14	Forecast and predictive report	[Expected Result 1, 3] [AM.BP1]
06_17	Risk assessment report	[Expected Result 1, 3] [AM.BP8]
03_03	Availability test schedule	[Expected Result 1, 2] [AM.BP8]
06_07	Availability test report	[Expected Result 1, 2] [AM.BP9]
05_19	CSI register	[Expected Result 1, 4] [AM.BP1, 10]

IV.2.5 Capacity Management

Process ID	**CAPM**

Process Name	**Capacity Management**
Process Purpose	The purpose of the Capacity Management process is to ensure that the capacity of IT services and the IT infrastructure meet the agreed current and future capacity-and-performance-related requirements in a cost-effective and timely manner. *[ITIL 2011 – Service Design: p158]*
Process Expected Results	As a result of successful implementation of the Capacity Management process: 1. A capacity plan is produced and maintained to reflect the current and future needs of the business; 2. The capacity and performance of both services and resources enable to provide services as agreed in SLAs and to meet future needs; 3. The impact of all changes on the capacity plans and on the performance and capacity of all services and resources is assessed and addressed; 4. Advice and guidance on all capacity- and performance-related issues are provided to all other areas of the business and IT; 5. Cost-justifiable measures to improve the capacity and performance of services are implemented.
Base Practices	**CAPM.BP1: Determine the current and future needs for resources and IT services** Analyze Patterns of Business Activity (PBAs), patterns of demand, SLAs and trends on current resource utilization to determine the current and future short-, medium- and long-term needs for resources and IT services. *[ITIL 2011 – Service Design: p158, 161, 171, 173]* [Expected Result 1, 2] **CAPM.BP2: Define service and resource capacity measures and related thresholds** Document and agree capacity measures for all services and critical resources, and define thresholds beyond which actions should be taken, based on the technical limits and constraints of the individual services and components and on the analysis of recorded data. *[ITIL 2011 – Service Design: p163, 167, 169]* [Expected Result 2, 3, 4] NOTE 1: The biggest challenge facing Capacity Management is to translate the business requirements and workload in terms of the impact on the IT service and infrastructure workloads and resource utilization, so that appropriate thresholds can be set. NOTE 2: The thresholds should be set below the level at which the component or service is over-utilized or below the targets in the SLAs. **CAPM.BP3: Monitor the service components capacity and identify and treat any capacity-related events** Collect information on current utilization of resources and services workload (e.g. response time), compare it against the capacity thresholds, and respond to all capacity-related events by instigating corrective actions. *[ITIL 2011 – Service Design:*

p163, 169] [Expected Result 2, 4]

NOTE 3: The identification of capacity-related events should be under the responsibility of the Event Management process (if such process exists).

CAPM.BP4: Estimate impact of service changes on required capacity
Model and trend the predicted changes in IT services (including service retirements) to identify the changes that need to be made to services and components of IT infrastructure and applications to ensure that appropriate resource is or remains available. *[ITIL 2011 – Service Design: p159, 160, 162, 166]* [Expected Result 1, 2, 3]

CAPM.BP5: Produce and use a capacity plan
Produce, maintain and use (e.g. for decision making) a capacity plan that reflects current demand (BP1), trends, predicted changes (BP4), future requirements and plans (BP1) (e.g. from service portfolio and SLRs) in order to enable the service provider to deliver services of the quality defined in SLAs with a reasonable anticipation on future expectations. *[ITIL 2011 – Service Design: p159, 161, 163]* [Expected Result 1, 2, 3, 4, 5]

CAPM.BP6: Provide advice and guidance on capacity and performance issues
Provide advice and guidance to all other areas of the business and IT on all capacity and performance related issues. *[ITIL 2011 – Service Design: p165, 172, 173]* [Expected Result 2, 4]

NOTE 4: In particular, Capacity Management should be involved in defining SLRs and SLAs, designing new or changed service, 41analyzing41 change impact and application sizing.

NOTE 5: In particular, Capacity Management should assist with the identification and resolution of any incidents and problems associated with the capacity or performance of a service or component.

CAPM.BP7: Optimize the capacity and performance of existing services and resources
Identify areas of the configuration that can be optimized, and undertake cost-justifiable tuning activities to better utilize the service, system and component resources or to improve the capacity and the performance of the services. *[ITIL 2011 – Service Design: p163, 171]* [Expected Result 2, 5]

CAPM.BP8: Identify and instigate cost-justifiable improvement of service capacity and performance
Actively seek to improve service or component capacity and performance wherever it is cost-justifiable and meets the needs of the business. *[ITIL 2011 – Service Design: p 162, 167]* [Expected Result 2, 3, 5]

NOTE 6: The identification of improvement opportunities should be based on the analysis of new techniques, new technologies, and the relationship between business capacity, service capacity and component capacity (amongst others elements).

Input Work Products		
ID	**Name**	**Expected results and related BPs**
03_22	IT service strategic plan	[Expected Result 1, 2] [CAPM.BP1, 4, 5]
02_20	Service-oriented financial information	[Expected Result 2, 5] [CAPM.BP5, 8]
01_03	Service portfolio	[Expected Result 2, 3, 4] [CAPM.BP1, 4, 5, 6]
08_01	Service Level Agreement (SLA)	[Expected Result 2, 3, 4] [CAPM.BP1, 2, 4, 5]
05_05	Configuration Management System (CMS)	[Expected Result 2, 3, 4] [CAPM.BP2, 3, 6]
05_06	Event record	[Expected Result 4] [CAPM.BP2, 3, 6]
05_07	Incident record	[Expected Result 4, 5] [CAPM.BP2, 6]
03_04	Customer business plan	[Expected Result 1, 2, 3] [CAPM.BP1, 2]
02_21	Patterns of Business Activity (PBA) catalogue	[Expected Result 1, 2, 3] [CAPM.BP1, 5]
02_26	Change Proposal	[Expected Result 3] [CAPM.BP4, 5, 6]
05_09	Capacity Management Information System (CMIS)	[Expected Result 1, 2, 3, 4, 5] [CAPM.BP1, 2, 3, 4, 5, 6, 7, 8]
03_02	Capacity plan	[Expected Result 3, 5] [CAPM.BP1, 5]
02_08	Capacity measures and thresholds	[Expected Result 2, 4, 5] [CAPM.BP2, 3, 7]
06_06	Exception report	[Expected Result 4, 5] [CAPM.BP2, 6]

Output Work Products		
ID	**Name**	**Expected results and related BPs**
05_09	Capacity Management Information System (CMIS)	[Expected Result 1, 2, 3, 4] [CAPM.BP1, 2, 3, 6]
02_08	Capacity measures and thresholds	[Expected Result 2] [CAPM.BP2]
03_02	Capacity plan	[Expected Result 1] [CAPM.BP1, 5]
06_14	Forecast and predictive report	[Expected Result 3, 4] [CAPM.BP1, 4, 6]
06_12	Workload analysis report	[Expected Result 3, 4] [CAPM.BP4, 6]
06_13	Ad hoc capacity and performance report	[Expected Result 2, 4] [CAPM.BP3, 4]
06_06	Exception report	[Expected Result 4] [CAPM.BP3, 6]
05_19	CSI register	[Expected Result 2, 5] [CAPM.BP8]

IV.2.6 IT Service Continuity Management

Process ID	**ITSCM**
Process Name	**IT Service Continuity Management**
Process Purpose	The purpose of the IT Service Continuity Management process is to support the overall Business Continuity Management (BCM) process by ensuring that the IT

	service provider can provide minimum agreed business continuity-related service levels. *[ITIL 2011 – Service Design: p179]* NOTE 1: IT Service Continuity Management focuses on events that have significant impact on the business (including social movements, epidemics …). Less significant events will be treated as part of Event or Incident Management processes. *[ITIL 2011 – Service Design: p180]* NOTE 2: IT Service Continuity Management and Availability Management have a close relationship, particularly in the management of risks and in the implementation of risk reduction and resilience measures.
Process Expected Results	As a result of successful implementation of the IT Service Continuity Management process: 1. A set of IT service continuity plans that support the overall business continuity plans of the organization is produced and maintained in line with changing business context; 2. Agreed IT service continuity-related service levels are constantly met or can rapidly be restored in case of significant event or disaster; 3. IT service-related risks are managed according to agreed levels of business risk; NOTE 3: Risk Management activities are performed in conjunction with the business, as well as with the Availability Management, and the Information Security Management processes. *[ITIL 2011 – Service Design: p180]* 4. The impact of all changes on the IT service continuity plans and supporting methods and procedures is assessed and addressed; 5. Advice and guidance on all IT service continuity-related issues are provided to all other areas of the business and IT; 6. IT service continuity plans are tested and exercised to ensure their adequacy to respond to the agreed business continuity expectations; 7. Cost-justifiable measures to ensure the continuity of IT services are implemented.
Base Practices	**ITSCM.BP1: Define the scope of IT Service Continuity Management** Determine and agree on the scope of IT Service Continuity Management with the customers through the identification of critical business processes and the analysis and coordination of the required technology and supporting IT services. *[ITIL 2011 – Service Design: p182]* [Expected Result 1] NOTE 4: In particular, when to invoke the IT service continuity plan and which business activities should be safeguarded have to be agreed with the customers. **ITSCM.BP2: Perform Business Impact Analysis** Perform a Business Impact Analysis to quantify the impact to the business that loss of IT service would have and prioritize IT service recovery accordingly. *[ITIL 2011 – Service Design: p185]* [Expected Result 3, 4]

NOTE 5: BIA exercises are regularly performed to ensure that all continuity plans are maintained in line with changing business impact and requirements.

ITSCM.BP3: Perform risk assessment
Perform a risk assessment to determine the level of threat and the extent to which an organization is vulnerable to that threat. *[ITIL 2011 – Service Design: p183]* [Expected Result 3, 4]

NOTE 6: Risk assessment exercises are regularly performed to ensure that all continuity plans are maintained in line with changing business impact and requirements.

ITSCM.BP4: Define risk reduction measures and recovery options
Define cost-justifiable risk reduction measures and recovery options resulting from risk assessment and BIA. *[ITIL 2011 – Service Design: p185]* [Expected Result 2, 3, 7]

NOTE 7: Preventive measures need to be adopted with regard to those processes and services with earlier and higher impacts, whereas greater emphasis should be placed on continuity and recovery measures for those where the impact is lower and takes longer to develop. A balanced approach of both measures should be adopted to those in between.

NOTE 8: This activity consists in defining and reviewing the IT Service Continuity strategy.

ITSCM.BP5: Produce and use IT service continuity plans
Produce, maintain and use (e.g. in case of significant event or service disruption) IT service continuity plans and procedures, supporting the business continuity plans, in order to ensure that the required IT services, facilities and resources are kept available and usable at an acceptable level, and are 'fit for purpose' as agreed by the business. Assess impacts of all changes on the IT service continuity plans, and ensure that authorized changes are reflected in these plans. Review regularly the whole IT service continuity plans to ensure that they remain current and effective. *[ITIL 2011 – Service Design: p189, 192]* [Expected Result 1, 5]

ITSCM.BP6: Implement risk reduction measures and recovery arrangements
Implement the predefined risk reduction measures in order to reduce continuity risks exposure. Acquire or negotiate contracts for the provision of the recovery capability necessary to put the IT service continuity plans into practice. *[ITIL 2011 – Service Design: p191]* [Expected Result 2, 3, 7]

NOTE 9: Risk reduction measures are usually undertaken in conjunction with Availability Management, and contracts are negotiated and agreed with suppliers in conjunction with the Supplier Management process.

ITSCM.BP7: Educate and train staff
Ensure that all staff are aware of the implications of business and service continuity and consider them as part of their normal activities, and that everyone involved in the plan has been trained and has exercised how to implement these plans in case of significant event or disruption. *[ITIL 2011 – Service Design: p192]* [Expected Result 2, 4, 5]

ITSCM.BP8: Plan and conduct continuity plans tests

	Establish a program of regular testing for the IT service continuity plans, in line with business (continuity plans) needs or legal requirements. Define continuity test scenarios, objectives and CSFs, and conduct tests to ensure that the IT service continuity plans work as intended in case of significant event or disruption. In particular, test all IT service continuity plans after every major business or IT change. *[ITIL 2011 – Service Design: p191]* [Expected Result 1, 4, 6] NOTE 10: Continuity plans tests should be performed at least annually. Four types of tests can be undertaken: - walk-through tests, - full tests, - partial tests, - scenario tests. NOTE 11: Continuity tests failures should be investigated and corrected by instigating remedial actions. **ITSCM.BP9: Provide advice and guidance on IT service continuity issues** Provide advice and guidance to all other areas of the business and IT on all IT service continuity related issues. *[ITIL 2011 – Service Design: p180]* [Expected Result 5, 6] NOTE 12: In particular, IT Service Continuity Management should be involved in defining SLRs and SLAs (particularly the Minimum Business Continuity Objective), designing new or changed service (availability and recovery design criteria), and 45analyzing45 change impact.

Input Work Product		
ID	**Name**	**Related expected results and BPs**
03_04	Customer business plan	[Expected Result 1, 3, 4, 5] [ITSCM.BP1, 2, 3, 4]
03_07	IT service continuity plan	[Expected Result 5] [ITSCM.BP5, 7, 9]
06_19	Continuity test report	[Expected Result 5, 6] [ITSCM.BP9]
08_01	Service Level Agreement (SLA)	[Expected Result 1, 5] [ITSCM.BP1, 5, 9]
03_25	Business continuity strategy and plans	[Expected Result 1, 5] [ITSCM.BP5]
03_22	IT service strategic plan	[Expected Result 1, 5] [ITSCM.BP5]
03_31	Budget for IT services	[Expected Result 3, 4] [ITSCM.BP2, 3]
02_26	Change proposal	[Expected Result 5] [ITSCM.BP9]
03_15	Change Schedule (CS)	[Expected Result 5] [ITSCM.BP9]
02_02	Service catalogue	[Expected Result 1, 5] [ITSCM.BP1, 5, 9]
01_03	Service portfolio	[Expected Result 1, 5] [ITSCM.BP1, 5, 9]
08_02	Service Level Requirement	[Expected Result 5, 6] [ITSCM.BP9]
08_03	Operational Level Agreement (OLA)	[Expected Result 5, 6] [ITSCM.BP9]
05_05	Configuration Management System (CMS)	[Expected Result 1, 5] [ITSCM.BP5]
03_26	Business continuity test schedule	[Expected Result 1, 4, 6] [ITSCM.BP8]
03_03	Availability test schedule	[Expected Result 1, 4, 6] [ITSCM.BP8]

03_02	Capacity plan	[Expected Result 1, 3, 4] [ITSCM.BP1, 2, 3]
03_24	Supplier (or partner) IT service continuity plans	[Expected Result 1, 5] [ITSCM.BP5]
06_25	Supplier (or partner) IT service continuity test reports	[Expected Result 1, 4, 5, 6] [ITSCM.BP5, 8]

Output Work Product		
ID	**Name**	**Related expected results and BPs**
03_06	IT service continuity strategy	[Expected Result 3, 4] [ITSCM.BP2, 3]
06_18	Business Impact Analysis report	[Expected Result 3, 4] [ITSCM.BP2]
06_17	Risk assessment report	[Expected Result 3, 4] [ITSCM.BP3]
03_07	IT service continuity plans	[Expected Result 1, 5, 6] [ITSCM.BP5]
03_05	IT service continuity test schedule	[Expected Result 1, 4, 6] [ITSCM.BP8]
03_13	IT service continuity test scenarios	[Expected Result 1, 4, 6] [ITSCM.BP8]
06_19	Continuity test report	[Expected Result 1, 4, 6] [ITSCM.BP8]
08_01	Service Level Agreement (SLA)	[Expected Result 5, 6] [ITSCM.BP9]
06_20	Ad hoc continuity and recovery report	[Expected Result 5, 6] [ITSCM.BP9]

IV.2.7 Information Security Management

Process ID	**ISM**
Process Name	**Information Security Management**
Process Purpose	The purpose of the Information Security Management process is to ensure that the confidentiality, integrity and availability of the organization's information, data and IT services always match the agreed security needs of the business. *[ITIL 2011 – Service Design: p196]* NOTE 1: ISO/IEC 27001 and/or any legal framework defining specific requirements related to the management of information security may be used as a reference to establish an Information Security Management System (ISMS).
Process Expected Results	As a result of successful implementation of the Information Security Management process: 1. The IT and business security contexts (both internal and external) are understood and taken into account; 2. Information is observed by or disclosed to only those who have a right to know (confidentiality); 3. Information is complete, accurate and protected against unauthorized modification (integrity);

	4. Information is available and usable when required, and the systems that provide it can appropriately resist attacks and recover from or prevent failures (availability); 5. Business transactions, as well as information exchanges between enterprises, or with partners, can be trusted (authenticity and non-repudiation).
Base Practices	**ISM.BP1: Determine the current and future security needs of the business** Determine the needs for information security based on the business operations, business security policies, business plans and dedicated regulation. Identify security obligations and responsibilities contained within SLAs and contracts (with customers and suppliers). *[ITIL 2011 – Service Design: p198-199]* [Expected Result 1] **ISM.BP2: Produce, promote and enforce information security policies** Produce an overall information security policy and a set of underpinning specific policies to address the IT and business security requirements. Make them available to all interested parties including customers and users, and refer to their compliance in all SLRs, SLA, OLAs and UCs. *[ITIL 2011 – Service Design: p197-198]* [Expected Result 1, 2, 3, 4, 5] **ISM.BP3: Assess the information-related risks** Identify the information-related risks, evaluate their likelihood of occurrence, and estimate their (business) impact, in order to both be aware of those risks, and manage them in an effective way. *[ITIL 2011 – Service Design: p198-199]* [Expected Result 1] NOTE 2: The risk assessment (and management) activities should be conducted in conjunction with the IT Service Continuity Management and the Availability Management processes. **ISM.BP4: Implement a set of security controls and measures** Implement a set of security controls that enforce the information security policy and minimize the identified threats. Implement a set of security measures in order to both prevent the occurrence of information-related risks and mitigate their impacts. *[ITIL 2011 – Service Design: p201-203]* [Expected Result 2, 3, 4, 5] NOTE 3: The kinds of measures to be implemented should depend on the importance attached to the information, and include: Preventive, Reductive, Detective, Repressive, and Corrective measures. NOTE 4: The kinds of security controls to be implemented should include: - administrative controls (also called procedural controls), which consist of approved written policies, procedures, standards, and guidelines, - logical controls (also called technical controls), which use software and data to monitor and control access to information and computing systems, - physical controls, which monitor and control the environment of the work place and computing facilities. **ISM.BP5: Provide advice and guidance on information security-related issues** Provide advice and guidance to all other areas of the business and IT on all

information security-related issues. *[ITIL 2011 – Service Design: p201, 203]* [Expected Result 2, 3, 4, 5]

NOTE 5: In particular, Information Security Management System should be referred to when defining SLRs and SLAs, designing new or changed service, and 48analyzing48 change impact.

ISM.BP6: Resolve information security related incidents and problems
Ensure the identification and resolution of any information security related incidents. Study all breaches of security (security incidents), and 48analyze the statistics on security events in order to implement actions focused on the reduction of the impact and volume of security breaches and incidents. *[ITIL 2011 – Service Design: p203]* [Expected Result 2, 3, 4, 5]

ISM.BP7: Perform security audits and tests
Schedule and carry out regular security audits to check compliance with the information security policies and security requirements. Schedule and perform security tests in order to gain a full picture of the effectiveness of the security measures as a whole. *[ITIL 2011 – Service Design: p199-201]* [Expected Result 1, 2, 3, 4, 5]

NOTE 6: Security tests should be based on one or more of the several following techniques:

- review techniques, which include documentation, log, rule set, and system configuration review; network sniffing; and file integrity checking,
- target identification and analysis techniques, which include network discovery, network port, and service identification, vulnerability scanning, wireless scanning, and application security examination,
- target vulnerability validation techniques, which include password cracking, penetration testing, social engineering, and application security testing.

ISM.BP8: Maintain and review the information security policies, controls, and measures
Assess the impact of all changes on the information security policies, controls and measures, and ensure that those elements are adjusted accordingly. Review regularly the information security policies, controls, and measures to ensure that they remain up-to-date and effective. *[ITIL 2011 – Service Design: p198-200]* [Expected Result 1, 2, 3, 4, 5]

ISM.BP9: Identify and instigate cost-justifiable improvement of information security
Actively seek to improve information security wherever it is cost-justifiable and meets the needs of the business. *[ITIL 2011 – Service Design: p200-201]* [Expected Result 1, 2, 3, 4, 5]

Input Work Products		
ID	**Name**	**Expected results and related BPs**
03_04	Customer business plan	[Expected Result 1] [ISM.BP1, 2]

01_03	Service portfolio	[Expected Result 1] [ISM.BP1, 5, 7]
02_02	Service catalogue	[Expected Result 1] [ISM.BP1, 5, 7]
08_01	Service Level Agreement (SLA)	[Expected Result 1] [ISM.BP1, 5, 6, 7]
08_03	Operational Level Agreement (OLA)	[Expected Result 1] [ISM.BP1, 5, 6, 7]
08_04	Underpinning Contract (UC) / supplier agreement	[Expected Result 1] [ISM.BP1, 5, 6, 7]
03_29	IT service tactical plan	[Expected Result 1] [ISM.BP1, 2, 5]
03_22	IT service strategic plan	[Expected Result 1] [ISM.BP1, 2, 5]
03_31	Budget for IT services	[Expected Result 1] [ISM.BP1, 2, 5]
06_24	Security incident report	[Expected Result 2, 3, 4, 5] [ISM.BP7, 8, 9]
03_08	Information security policies	[Expected Result 1] [ISM.BP4, 5, 7, 8, 9]
02_10	Security controls documentation	[Expected Result 2, 3, 4, 5] [ISM.BP5, 6, 7, 8, 9]
06_17	Risk assessment report	[Expected Result 1] [ISM.BP4, 5, 6, 7, 8, 9]
02_26	Change proposal	[Expected Result 1, 2, 3, 4, 5] [ISM.BP5, 8]
05_05	Configuration Management System (CMS)	[Expected Result 1] [ISM.BP1, 2, 3, 4, 5, 6, 7, 9]
01_04	Information Security Management System (ISMS)	[Expected Result 1] [ISM.BP7, 8, 9]
05_07	Incident record	[Expected Result 2, 3, 4, 5] [ISM.BP6]

Output Work Products		
ID	**Name**	**Expected results and related BPs**
03_08	Information security policies	[Expected Result 1] [ISM.BP2, 8]
06_21	Information security risks report	[Expected Result 1] [ISM.BP3]
02_10	Security controls documentation	[Expected Result 2, 3, 4, 5] [ISM.BP4]
06_23	Security audit report	[Expected Result 1] [ISM.BP7]
06_17	Risk assessment report	[Expected Result 1] [ISM.BP3]
06_24	Security incident report	[Expected Result 2, 3, 4, 5] [ISM.BP6]
01_04	Information Security Management System (ISMS)	[Expected Result 2, 3, 4, 5] [ISM.BP4, 8]
03_12	Test plan	[Expected Result 1, 2, 3, 4, 5] [ISM.BP7]
05_19	CSI register	[Expected Result 1, 2, 3, 4, 5] [ISM.BP9]

IV.2.8 Supplier Management

Process ID	**SUPM**
Process Name	**Supplier Management**
Process Purpose	The purpose of the Supplier Management process is to ensure that all contracts

	and agreements with suppliers efficiently support the needs of the business, and that all suppliers meet their contractual commitments. *[ITIL 2011 – Service Design: p207]*
Process Expected Results	As a result of successful implementation of the Supplier Management process: 1. The relationships and communication with suppliers are managed; 2. Contracts and agreements with suppliers are aligned with business needs by supporting the targets agreed in SLAs; NOTE 1: This should be done in conjunction with Service Level Management. 3. The contribution of suppliers (and sub-contracted suppliers) to the business value creation is determined; 4. The suppliers achieve the performance targets defined in their contracts and agreements.
Base Practices	**SUPM.BP1: Define new supplier and contract requirements** Define the detailed requirements for new suppliers or new contracts with existing suppliers based on a business case, including costs, timescales, targets, benefits and risk assessment. *[ITIL 2011 – Service Design: p212-213]* [Expected Result 2] NOTE 2: Determining to what extent the contribution of suppliers would bring value to all or part of the new or changed service and the decision to outsource should be done beforehand. **SUPM.BP2: Evaluate and select suppliers** Evaluate the supplier proposals based on objective evaluation criteria in order to finally select the best suitable suppliers for the business needs. *[ITIL 2011 – Service Design: p213]* [Expected Result 1, 2, 4] NOTE 3: Supplier-related risks should be part of selection criteria. **SUPM.BP3: Establish new supplier contracts** Define, negotiate and agree contracts and agreements with each new supplier, including the description of service(s) provided, the related targets, the terms and conditions, and the documented responsibilities. In case of underpinning contracts (between the service provider ad its suppliers), the agreed targets have to be determined in such a way that the service provider is able to achieve the existing SLA targets. *[ITIL 2011 – Service Design: p218]* [Expected Result 1, 2] **SUPM.BP4: Categorize existing suppliers** Categorize the existing suppliers based on objective criteria such as: the risks and impact associated with using the supplier, and the value and importance of the supplier to the business. *[ITIL 2011 – Service Design: p215]* [Expected Result 2, 3] NOTE 4: The amount of time and effort spent managing the supplier and the relationship should be appropriate to its categorization (strategic, tactical, operational, and commodity).

SUPM.BP5: Define and agree on interfaces with suppliers
Define and agree on interfaces with suppliers to establish functional boundaries between the service provider, their suppliers and the suppliers' sub-contractors. This should also include escalation routes in case issues are raised. *[ITIL 2011 – Service Design: p219]* [Expected Result 1, 3]

NOTE 5: The definition of interfaces should enable to get a global view on the supply chain and so control that the overall business service levels are achieved.

SUPM.BP6: Monitor and review suppliers' performance
Monitor and report on suppliers' performance, and hold formal individual performance review meeting (at a detailed operational level) on a regular basis. *[ITIL 2011 – Service Design: p219-222]* [Expected Result 4]

NOTE 6: The level of detail and the frequency of the performance reviews should depend on the category of the supplier.

SUPM.BP7: Review, renew or terminate supplier contracts
Review supplier contracts and agreements (at a strategic level) on a regular and agreed basis to ensure that contracts remain aligned to business needs. When appropriate, prepare renewal or termination of supplier contracts and agreements. *[ITIL 2011 – Service Design: p222]* [Expected Result 1, 2, 3]

NOTE 7: The renewal and termination terms should be considered (in conjunction with procurement and legal department) at the time the original contract is established.

SUPM.BP8: Manage contractual dispute (if needed)
In case of contractual disputes with a supplier, actions should be taken to make sure that there is no or limited impact on the service and/or the business. *[ITIL 2011 – Service Design: p208, 210]* [Expected Result 1]

Input Work Product		
ID	**Name**	**Expected results and related BPs**
03_04	Customer business plan	[Expected Result 2, 3] [SUPM.BP1, 4]
03_17	Supplier and contracts policy	[Expected Result 2, 3] [SUPM.BP1, 4]
05_12	Supplier and Contract Management Information System (SCMIS)	[Expected Result 1, 2, 3, 4] [SUPM.BP2, 6, 7, 8]
05_05	Configuration Management System (CMS)	[Expected Result 1, 2, 3, 4] [SUPM.BP4, 5, 6,7]
01_03	Service portfolio	[Expected Result 1, 2, 3] [SUPM.BP1, 3, 4, 5, 7]
08_01	Service Level Agreement (SLA)	[Expected Result 1, 2, 4] [SUPM.BP1, 3, 5, 6]
08_05	Statement of Requirements (SOR)	[Expected Result 1, 2, 4] [SUPM.BP2]
08_06	Invitations to Tender (ITT)	[Expected Result 1, 2, 4] [SUPM.BP2]
02_11	Supplier evaluation criteria	[Expected Result 1, 2, 4] [SUPM.BP2]

08_04	Underpinning Contract (UC) / supplier agreement	[Expected Result 1, 2, 3, 4] [SUPM.BP2, 6, 7, 8]
06_26	Service/Supplier performance reports	[Expected Result 1,2, 3, 4] [SUPM.BP2,7]

Output Work Product		
ID	**Name**	**Expected results and related BPs**
05_12	Supplier and Contract Management Information System (SCMIS)	[Expected Result 1, 2, 3, 4] [SUPM.BP2, 3, 4, 5, 6, 7, 8]
08_05	Statement of Requirements (SOR)	[Expected Result 2] [SUPM.BP1]
08_06	Invitations to Tender (ITT)	[Expected Result 2] [SUPM.BP1]
02_11	Supplier evaluation criteria	[Expected Result 2] [SUPM.BP1]
08_04	Underpinning Contract (UC) / supplier agreement	[Expected Result 2, 3] [SUPM.BP3, 5, 7]
06_26	Service/Supplier performance reports	[Expected Result 1, 2, 4] [SUPM.BP6]
06_27	Performance and contract review meeting minutes	[Expected Result 2, 4] [SUPM.BP6, 7]
05_19	CSI register	[Expected Result 4] [SUPM.BP6]
05_13	Contractual dispute record	[Expected Result 1] [SUPM.BP8]

IV.3 SERVICE TRANSITION

IV.3.1 Transition Planning and Support

Process ID	**TPS**
Process Name	**Transition Planning and Support**
Process Purpose	The purpose of the Transition Planning and Support process is to provide overall planning and coordinate the resources required by all activities and processes of the Service Transition stage. *[ITIL 2011 – Service Transition: p51]* NOTE 1: Transition Planning and Support is not responsible for detailed planning of the build, test and deployment of individual changes or releases; these activities are carried out as part of Change Management and Release and Deployment Management.
Process Expected Results	As a result of successful implementation of the Transition Planning and Support process: 1. New or changed services are transitioned into supported environments within the predicted cost, quality, and time frames; NOTE 2: New or modified management information systems and tools, technology and management architectures, service management processes, and measurement methods and metrics can be implemented to meet the requirements established during the Service Design stage of the lifecycle; 2. Transition activities are scheduled and coordinated across projects, changes,

	suppliers and service teams, so that multiple transitions can be managed concurrently; 3. The resources and capabilities required to transition new or changed services are planned and coordinated; 4. The quality criteria, requirements, risks, and issues are controlled; 5. The requirements gathered during Service Design (to reflect the Service Strategy) are effectively realized in Service Operation.
Base Practices	**TPS.BP1: Define and maintain service transition policies and methods** Decide the most appropriate approach to Service Transition based on the size and nature of the services, the number and frequency of releases required, and any special needs of the users. Define and maintain a set of architectural documents and principles for the transition of services. *[ITIL 2011 – Service Transition: p54-56]* [Expected Result 1, 2, 3, 4, 5] **TPS.BP2: Plan and coordinate individual transitions** For each individual project or change, plan the transition activities (focusing on ensuring that the resulting transition can support the required business outcomes) and monitor and coordinate each on-going transition effort to ensure that transition objectives and milestones are being met. *[ITIL 2011 – Service Transition: p56]* [Expected Result 3, 4] **TPS.BP3: Plan transition resources and capabilities across projects and changes** Plan, prioritize and schedule all service transition resources and capabilities to ensure that competing transitions (from projects and changes) can be managed at the same time. *[ITIL 2011 – Service Transition: p55-56]* [Expected Result 4] NOTE 3: In many cases the transition plans should be amended for them to be aligned with a reality that has changed since design. **TPS.BP4: Coordinate all transition activities across projects and changes** Coordinate all transition activities and manage resource conflicts (if any) across projects, changes, suppliers and service teams so that all transitions move forward in the most effective and smoothest manner. *[ITIL 2011 – Service Transition: p51]* [Expected Result 1, 2, 3] **TPS.BP5: Identify, manage and report transition risks** Use risk assessment and management techniques to identify and manage risks associated with transition activities so that the likelihood of failure and disruption across transition activities is minimized. Report service transition issues, risks and deviations to the appropriate stakeholders and decision makers. *[ITIL 2011 – Service Transition: p58]* [Expected Result 4] **TPS.BP6: Communicate and report on service transition activities** Communicate regularly on the progress (against the plans) of each individual service transition to relevant stakeholders (list defined in service design). Report to management the status of each transition to identify when there are significant

	variances from plan and decisions have to be made accordingly. *[ITIL 2011 – Service Transition: p58]* [Expected Result 1, 2] **TPS.BP7: Coordinate the handover to Service Operation** Coordinate the pilots, early life supports and finally the handovers of new or changed services to Service Operation. Update the status of new or changed services in the service portfolio (and the service catalogue). *[ITIL 2011 – Service Transition: p59]* [Expected Result 4, 5]

Input Work Product		
ID	**Name**	**Related expected results and BPs**
02_13	Service Design Package (SDP)	[Expected Result 3, 4] [TPS.BP2]
03_22	IT service strategic plan	[Expected Result 1, 2, 3, 4, 5] [TPS.BP1]
03_31	Budget for IT services	[Expected Result 1, 2, 4] [TPS.BP1, 3, 7]
02_26	Change proposal	[Expected Result 1, 3, 4] [TPS.BP2]
03_15	Change Schedule (CS)	[Expected Result 1, 2, 3, 4, 5] [TPS.BP2, 3, 6, 7]
03_11	Release and deployment plans	[Expected Result 1, 2, 3, 4, 5] [TPS.BP2, 3, 6, 7]
03_20	Integrated set of Service Transition plans	[Expected Result 4] [TPS.BP3]

Output Work Product		
ID	**Name**	**Related expected results and BPs**
03_19	Transition strategy	[Expected Result 1, 2] [TPS.BP1]
06_17	Risk assessment report	[Expected Result 4] [TPS.BP5]
03_20	Integrated set of Service Transition plans	[Expected Result 4] [TPS.BP3]
01_03	Service portfolio	[Expected Result 1, 5] [TPS.BP1, 3, 7]
05_11	Change documents and records	[Expected Result 3, 4, 5] [TPS.BP2, 5, 7]

IV.3.2 Change Management

Process ID	**CHGM**
Process Name	**Change Management**
Process Purpose	The purpose of the Change Management process is to control the lifecycle of all changes, enabling beneficial changes to be made with minimum disruption to IT services. *[ITIL 2011 – Service Transition: p61]*
Process Expected Results	As a result of successful implementation of the Change Management process: 1. All change requests are recorded and addressed;

	2. Risk level, business value, and urgency of change requests are understood and taken into account during the change lifecycle; 3. Change records are maintained all along the change lifecycle; 4. Changes are successfully implemented after formal approval by the appropriate change authority; 5. All modifications to configuration items resulting from changes are tracked.
Base Practices	**CHGM.BP1: Review and filter the change requests** Review the Request For Changes (RFCs) filtering out those that seem to be impractical, duplication of previous RFCs, or incomplete. *[ITIL 2011 – Service Transition: p73]* [Expected Result 1, 2, 3] NOTE 1: Any suggestion that Change Management considers to be strategic should be immediately referred to Service Portfolio Management. This means that Service Portfolio Management and Change Management should define thresholds for what constitutes a strategic issue. **CHGM.BP2: Document and maintain change details in a change record** Record the changes with appropriate information and keep change documentation up to date as changes progress throughout their lifecycle. *[ITIL 2011 – Service Transition: p69]* [Expected Result 1, 3] NOTE 2: A change record is created/updated on the basis of one or more RFC(s). **CHGM.BP3: Assess impact and resources for each change** Understand the potential impact of (successful and unsuccessful) changes on the infrastructure, services and business, and assess the resources required to implement the changes. *[ITIL 2011 – Service Transition: p73]* [Expected Result 2, 4] NOTE 3: The use of the seven Rs of Change Management may be helpful to make this impact analysis: Raised, Reason, Return, Risks, Resources, Responsible, and Relationship. NOTE 4: If needed, submit a request for evaluation to trigger the Change Evaluation process. If that evaluation is not needed, then the change will be evaluated by the appropriate change authority. **CHGM.BP4: Authorize the change build and test** Authorize changes (through their RFCs) by the appropriate change authority, and communicate the decision (go/no go) to stakeholders. *[ITIL 2011 – Service Transition: p78]* [Expected Result 2, 3, 4] NOTE 5: The appropriate change authority can be the CAB, eCAB, board of directors, depending on the type, size, risk and potential business impact of the change. **CHGM.BP5: Schedule authorized changes with the business** Include the authorized changes into the schedule of changes taking account of the business constraints. *[ITIL 2011 – Service Transition: p77]* [Expected Result 2, 4] **CHGM.BP6: Coordinate the change build and test**

	Coordinate the design, build, and tests of the changes in collaboration with technical teams external to Change Management. *[ITIL 2011 – Service Transition: p79]* [Expected Result 3, 4] NOTE 6: Change Management is responsible for the coordination of changes not for the implementation itself. **CHGM.BP7: Authorize the change deployment** Evaluate the design, build, and testing of the change to ensure that risks have been managed (i.e. remediation) and that predicted and tested performance match the business requirements. *[ITIL 2011 – Service Transition: p79]* [Expected Result 2, 4] **CHGM.BP8: Coordinate the change deployment** Coordinate the resources and capabilities required to deploy the change as scheduled. *[ITIL 2011 – Service Transition: p79]* [Expected Result 1, 3, 4] **CHGM.BP9: Review the change implementation** Review the results of the change to ensure that the change has had the desired benefits and met its objectives with minimized side effects. *[ITIL 2011 – Service Transition: p79]* [Expected Result 2, 3, 4] NOTE 7: A Post Implementation Review (PIR) should be performed to confirm the effectiveness of the solution prior to closure. **CHGM.BP10: Close the changes** Verify that the entire documentation related to the change is available in the change record, update the Configuration Management System (CMS) and then close RFCs and related change records, no matter the change result (implemented or abandoned). *[ITIL 2011 – Service Transition: p79]* [Expected Result 3, 5]

Input Work Product		
ID	**Name**	**Related expected results and BPs**
03_27	Policy and strategies for change and release	[Expected Result 1, 2, 3, 4] [CHGM.BP1, 2, 3, 5]
07_02	Request for Change (RFC)	[Expected Result 1, 3] [CHGM.BP1]
02_26	Change proposal	[Expected Result 2, 4] [CHGM.BP3, 4]
03_10	Transition plan	[Expected Result 2, 3, 4] [CHGM.BP5, 6, 8]
03_11	Release and deployment plans	[Expected Result 2, 3, 4] [CHGM.BP5, 6, 8]
03_12	Test plan	[Expected Result 2, 3, 4] [CHGM.BP5, 6, 8]
03_14	Remediation plan	[Expected Result 2, 3, 4] [CHGM.BP5, 8]
03_15	Change Schedule (CS)	[Expected Result 1, 3, 4, 5] [CHGM.BP5, 6, 8]
03_16	Projected Service Outage (PSO)	[Expected Result 1, 3, 4, 5] [CHGM.BP5, 6, 8]
02_27	Change models	[Expected Result 2, 4] [CHGM.BP3]

06_32	Change evaluation report	[Expected Result 2, 4, 5] [CHGM.BP4, 9]
05_05	Configuration Management System (CMS)	[Expected Result 2, 4, 5] [CHGM.BP3, 10]
02_09	Configuration baseline	[Expected Result 2, 4, 5] [CHGM.BP3, 10]
06_22	Change test report	[Expected Result 2, 4] [CHGM.BP4, 7, 9]

Output Work Product		
ID	**Name**	**Related expected results and BPs**
05_11	Change documents and records	[Expected Result 1, 2, 3, 5] [CHGM.BP1, 3, 4, 7, 10]
03_15	Change Schedule (CS)	[Expected Result 1, 2, 4] [CHGM.BP5]
03_16	Projected Service Outage (PSO)	[Expected Result 1, 2, 4] [CHGM.BP5]
03_14	Remediation plan	[Expected Result 1, 3] [CHGM.BP1]
06_03	Post implementation report	[Expected Result 2, 3, 4] [CHGM.BP9]

IV.3.3 Service Asset and Configuration Management

Process ID	**SACM**
Process Name	**Service Asset and Configuration Management**
Process Purpose	The purpose of the Service Asset and Configuration Management process is to ensure that the assets required to deliver services are properly controlled by keeping accurate and reliable information about those assets available when and where it is needed. *[ITIL 2011 – Service Transition: p89]* NOTE 1: The assets of a service provider include any resource and capability that could contribute to the delivery of a service. Assets may be one of the following types: management, organization, process, knowledge, people, information, applications, infrastructure or financial capital.
Process Expected Results	As a result of successful implementation of the Service Asset and Configuration Management process: 1. Service assets that need to be managed in order to deliver the services are identified, controlled and cared for throughout their lifecycle; NOTE 2: Such service assets are known as Configuration Items (CIs). 2. Information about CIs including versions, status, baselines, constituent components, attributes and relationships is identified, recorded and maintained; NOTE 3: This is usually achieved by establishing and maintaining an accurate and complete Configuration Management System (CMS). 3. The integrity of service configurations is managed and protected through the service lifecycle;

	NOTE 4: This should be done in conjunction with Change Management to ensure that only authorized components are used and only authorized changes are made. 4. Historical and current accurate information on CIs and service configurations is kept available to any stakeholder as necessary.
Base Practices	**SACM.BP1: Define and maintain the service configuration logical model** Define the service configuration logical model of the services, identifying relevant Configuration Items (CIs), their granularity levels, types and relationships. Review the CI granularity level and relationships regularly to confirm that information down to the lowest level is still valuable and useful. *[ITIL 2011 – Service Transition: p92]* [Expected Result 1, 2] NOTE 5: The Configuration logical model is the single common representation used by all parts of IT Service Management, and beyond, such as HR, finance, suppliers and customers. NOTE 6: Choosing the right CI granularity level is a matter of achieving a balance between information availability, the right level of control and the resources and effort needed to maintain it. CI information is valuable only if it facilitates the management of change, helps with the diagnosis of incidents and problems or the control of assets that can be independently moved, copied or changed. NOTE 7: Typical CIs types are service, hardware, software, documentation, and staff. Typical CI status are drafted, accepted, installed, and withdrawn. **SACM.BP2: Implement a Configuration Management System (CMS)** Design and implement a supporting system (the CMS) to manage information related to IT services, CIs and configurations, in accordance with the configuration logical model defined. The CMS relies on one or more CMDBs and a Definitive Media Library (DML). *[ITIL 2011 – Service Transition: p94]* [Expected Result 1, 2, 3, 4] NOTE 8: The Definitive Media Library (DML) is the secure library in which the definitive authorized versions of all media CIs are stored and protected. Only media CIs from the DML is acceptable to use in releases. **SACM.BP3: Ensure recording and maintenance of CI and configuration information** Ensure the initial recording of the CI and configuration information (according to CI types) and then ensure that this information is maintained as each CI progresses through its lifecycle (i.e. status changes). *[ITIL 2011 – Service Transition: p104]* [Expected Result 1, 2, 3, 4] NOTE 9: The SACM process has to ensure that the initial recording and maintenance of CI information is done, but usually it is effectively done by people from other ITSM processes (e.g. release and deployment staff members). **SACM.BP4: Reference physical CIs in the CMS** Label the physical CIs with a unique tag ID and make sure that it is recorded in the CMS in order to establish the connection between these physical assets and their related records in the CMS. *[ITIL 2011 – Service Transition: p104]* [Expected Result 1, 2, 3,

	4] **SACM.BP5: Establish configuration baselines** Establish the configuration baselines through formal agreements at specific points in time and use them as departure points for the formal control of a configuration. *[ITIL 2011 – Service Transition: p96]* [Expected Result 1, 2] NOTE 10: A configuration baseline captures the structure, contents and details of a configuration and represents a set of configuration items that are related to each other. For example, it can be used as part of a back-out plan to enable the IT infrastructure to be restored to a known configuration if a change or release fails. **SACM.BP6: Ensure CI and configuration control** Implement adequate mechanisms over CIs to control addition, modification, replacement and removal of CIs and assets while maintaining a record of changes to CIs, versions, location, relationships, and ownership. *[ITIL 2011 – Service Transition: p109]* [Expected Result 1, 3] NOTE 11: These control mechanisms should prevent mismatch between the CMS and the physical world. **SACM.BP7: Provide CI and configuration information** Provide historical and current accurate information on CIs and/or service configurations to the other ITSM processes, according to their needs. *[ITIL 2011 – Service Transition: p110]* [Expected Result 2, 4] NOTE 12: For example status reports of assets for software license holdings are often required by IT Service Financial Management, for budgeting, accounting and charging. **SACM.BP8: Perform CI and configuration audits** Perform regular and ad-hoc configuration audits to check that the CI and configuration information recorded in the CMS is consistent with the physical state of all assets, and vice versa. *[ITIL 2011 – Service Transition: p111]* [Expected Result 2, 3] NOTE 13: For example, audits could be conducted in order to: - ensure the conformity between the documented baselines and the actual business environment, - verify the physical existence of CIs, - check that release and configuration documentation is present.

Input Work Product		
ID	**Name**	**Related expected results and BPs**
02_13	Service Design Packages (SDP)	[Expected Result 1, 2, 3, 4] [SACM.BP3, 6]
07_02	Request for Change (RFC)	[Expected Result 1, 2, 3, 4] [SACM.BP3, 4, 6]
01_08	Configuration Items (CI)	[Expected Result 1, 2, 3, 4] [SACM.BP2, 3, 4, 5, 6]
05_05	Configuration Management System (CMS)	[Expected Result 1, 2, 3, 4] [SACM.BP6, 8]

02_14	Asset-related documentation and information	[Expected Result 1, 2, 3, 4] [SACM.BP3]
07_03	Service request	[Expected Result 1, 2, 3, 4] [SACM.BP3, 7]
03_15	Change Schedule (CS)	[Expected Result 1, 2, 3, 4] [SACM.BP3, 4]
02_09	Configuration baseline	[Expected Result 1, 2, 3, 4] [SACM.BP3, 6]
02_15	Configuration model	[Expected Result 1, 2, 3, 4] [SACM.BP1, 6]
08_16	Fixed asset register	[Expected Result 1, 2, 3, 4] [SACM.BP3, 5, 6]

Output Work Product		
ID	**Name**	**Related expected results and BPs**
02_15	Configuration model	[Expected Result 1, 2] [SACM.BP1]
05_05	Configuration Management System (CMS)	[Expected Result 1, 2, 3, 4] [SACM.BP2, 6]
02_09	Configuration baseline	[Expected Result 1, 2] [SACM.BP5]
08_16	Fixed asset register	[Expected Result 1, 2, 3, 4] [SACM.BP6]
06_34	Configuration reports	[Expected Result 2, 4] [SACM.BP7]
06_08	Configuration audit reports	[Expected Result 2, 3] [SACM.BP8]

IV.3.4 Release and Deployment Management

Process ID	**RDM**
Process Name	**Release and Deployment Management**
Process Purpose	The purpose of the Release and Deployment Management process is to deploy the authorized changes into the live environment while maximizing value for the business and protecting the integrity of other existing services. *[ITIL 2011 – Service Transition: p114]* NOTE 1: Maximizing value for the business covers achieving the correct balance between cost, service stability and agility.
Process Expected Results	As a result of successful implementation of the Release and Deployment Management process: 1. Changes are delivered in a way that minimize risk and support the business goals; 2. The integrity of release packages, related and others services is maintained; NOTE 2: A release package may be a single release unit or a structured set of release units. 3. The new or changed services can effectively be used by customers and users; 4. The service capabilities and resources required to operate and support the new or changed service are available.

Base Practices	**RDM.BP1: Define and agree release and deployment plans with customers and stakeholders** Define release and deployment plans (part of the overall service transition plans) and agree them with customers and stakeholders. *[ITIL 2011 – Service Transition: p123]* [Expected Result 1, 2] NOTE 3: Release and deployment plans should be based on service models (which show how the service assets should interact with customer assets to create value), on the documented utility and warranty requirements for the service, and on technical data about the components that make up the new, changed or retired service. **RDM.BP2: Prepare for release build and test** Establish the approach to building, testing and maintaining the controlled environments prior to live use, schedule all the build and test activities, and assign resources, roles, and responsibilities. *[ITIL 2011 – Service Transition: p124]* [Expected Result 1, 2] **RDM.BP3: Create and document the release packages** Verify, assemble and integrate CIs or release components in a controlled manner to create release packages, and create the build and release documentation. *[ITIL 2011 – Service Transition: p131; 132]* [Expected Result 1, 2] NOTE 4: "*verify*" means confirm, through the provision of objective evidence, that specified requirements have been fulfilled. NOTE 5: CIs and release components may come from different origins, such as: projects, suppliers, partners, and development groups. NOTE 6: Each release should take the defined release units into account when designing the contents of the release package. NOTE 7: The release documentation should include procedures to back out releases. **RDM.BP4: Verify and test the release packages** The release packages are tested and verified before being placed in the DML under the control of Service Asset and Configuration Management. *[ITIL 2011 – Service Transition: p133]* [Expected Result 2] **RDM.BP5: Ensure that service testing is performed** Ensure that service testing is performed, ideally by Service Validation and Testing process, in order to build confidence in the service capability and decide whether the service is suitable or not to go into production. *[ITIL 2011 – Service Transition: p133]* [Expected Result 1, 2, 3] NOTE 8: Service testing may include pilots and/or service rehearsal. The difference between a rehearsal and a pilot is that the rehearsal remains a closed test whereas the pilot is shown to the final users. **RDM.BP6: Plan and prepare for deployment** Prepare the service provider and customer organizations so that the deployment

	capabilities, procedures, systems and groups can deploy, install, commission and decommission the release package and resultant new or changed service in the production environment. *[ITIL 2011 – Service Transition: p137]* [Expected Result 1, 2] NOTE 9: Readiness assessment of both parties should be performed to identify: - issues and risks in delivering the current services that may affect the deployment, - anticipated impacts (e.g. on the organizational structure, service environment, customers and users, partners, suppliers), - gaps that need to be filled. **RDM.BP7: Deploy the release packages** Deploy release packages from the DML to the live environment following an agreed plan and schedule. *[ITIL 2011 – Service Transition: p73]* [Expected Result 1, 2] NOTE 10: CIs can be transferred, deployed and/or retired to effectively deploy release packages. **RDM.BP8: Verify that users can use the service as expected** Verify that users are capable of using the service as expected to support their business activities. *[ITIL 2011 – Service Transition: p141]* [Expected Result 3] **RDM.BP9: Assure Early Life Support (ELS)** Ensure that skills and knowledge are transferred to Service Operation functions to enable them to effectively and efficiently deliver, support and maintain the service according to required warranties and service levels. *[ITIL 2011 – Service Transition: p143]* [Expected Result 3, 4] NOTE 11: ELS assists with the transitioning of the new or changed service to Service Operation in a controlled manner and establishes the new service capability and resources. **RDM.BP10: Review and close the release deployments** Check the effectiveness and efficiency of capability and resources, check documentation (e.g. known errors and workarounds) for completeness,… and finally check that the service is ready for transition from Early Life Support (support by deployment group) to Service Operation. *[ITIL 2011 – Service Transition: p145]* [Expected Result 1, 4] NOTE 12: A post implementation review of a deployment is conducted through the Change Management process.

Input Work Product		
ID	**Name**	**Related expected results and BPs**
08_08	Service options	[Expected Result 1, 2, 4] [RDM.BP1, 2, 5, 9, 10]
02_03	Service package	[Expected Result 1, 2] [RDM.BP1, 2, 3]
02_13	Service Design Package (SDP)	[Expected Result 1, 2, 4] [RDM.BP1, 2, 5, 10]
03_07	IT service continuity plans	[Expected Result 1, 2] [RDM.BP6]

01_09	Service assets and components	[Expected Result 1, 2] [RDM.BP3, 4]
02_14	Asset-related documentation and information	[Expected Result 1, 2] [RDM.BP3, 4]
02_28	Build models and plans	[Expected Result 1, 2] [RDM.BP2, 3, 4]
08_09	Environment requirements and specifications	[Expected Result 1, 2, 3, 4] [RDM.BP6, 7, 8]
03_27	Policy and strategies for change and release	[Expected Result 1, 2] [RDM.BP1, 2, 6, 10]
08_10	Release design	[Expected Result 1, 2] [RDM.BP1, 4, 6, 7]
08_11	Release and deployment models	[Expected Result 1, 2] [RDM.BP1, 4, 6, 7]
05_11	Change documents and records	[Expected Result 1, 2] [RDM.BP1, 2, 3]
03_15	Change Schedule (CS)	[Expected Result 1, 2] [RDM.BP1, 2, 6]

Output Work Product		
ID	**Name**	**Related expected results and BPs**
03_11	Release and deployment plans	[Expected Result 1, 2] [RDM.BP1]
01_11	Release package	[Expected Result 1, 2] [RDM.BP3]
02_03	Service package	[Expected Result 1, 2, 3, 4] [RDM.BP4, 5]
08_08	Service options	[Expected Result 1, 2] [RDM.BP6]
05_08	Service notification	[Expected Result 1, 3, 4] [RDM.BP6, 7]
08_13	Service management documentation	[Expected Result 1, 2, 3, 4] [RDM.BP6, 8, 9, 10]
08_07	Service model	[Expected Result 3, 4] [RDM.BP1, 9]
06_10	Service report	[Expected Result 3, 4] [RDM.BP8, 9]
06_28	Service Transition report	[Expected Result 1, 2, 4] [RDM.BP3, 10]

IV.3.5 Service Validation and Testing

Process ID	**SVT**
Process Name	**Service Validation and Testing**
Process Purpose	The purpose of the Service Validation and Testing process is to ensure that a new or changed IT service matches its design specifications and will meet the needs of the business. *[ITIL 2011 – Service Transition: p150]*
Process Expected Results	As a result of successful implementation of the Service Validation and Testing process: 1. Assurance is provided that services are 'fit for purpose', and so that they will deliver the required utility; 2. Assurance is provided that services are 'fit for use', and so that they will

	deliver the agreed warranty; 3. Each release creates a new or changed service that delivers value for the customers within the projected costs, capacity and constraints; 4. Errors or variances regarding customer and stakeholders requirements are remedied early in the service lifecycle.
Base Practices	**SVT.BP1: Plan and design tests** Plan and design tests based on Service Design Packages and reusable test models. Ensure that the test coverage is appropriate according to the risk profile and business impact of the new or changed service. *[ITIL 2011 – Service Transition: p161-170]* [Expected Result 1, 2, 3] NOTE 1: This activity should include the translation of Service Acceptance Criteria (defined in the SDPs) into entry and exit criteria at each level of testing. NOTE 2: Tests of a service must be designed and carried out by people who have not been involved in other design or development activities for this service. **SVT.BP2: Prepare the test environment** Prepare the test environment by using the existing build and test environments (used by Release and Deployment Management) and capture a configuration baseline of the initial test environment in order to ensure that tests are executed in a repeatable and manageable way. *[ITIL 2011 – Service Transition: p170]* [Expected Result 1, 2, 3] NOTE 3: The test environment must consider the current and anticipated live environment for the period of its expected operation. **SVT.BP3: Perform tests** Carry out the tests using manual or automated techniques, tools and procedures, and record test results. *[ITIL 2011 – Service Transition: p170]* [Expected Result 1, 2, 3] **SVT.BP4: Analyze and document test issues** Analyze the issues identified during the tests and document the results as known errors when possible. *[ITIL 2011 – Service Transition: p170]* [Expected Result 1, 2, 3, 4] **SVT.BP5: Take actions to resolve test issues** Ensure that appropriate actions are taken to resolve issues discovered during service tests, or to mitigate them to an acceptable level of margin for errors (based on Service Acceptance Criteria). *[ITIL 2011 – Service Transition: p170]* [Expected Result 4] NOTE 4: When part of a test fails, appropriate re-test should be performed after resolution or mitigation. **SVT.BP6: Analyze and report test results** Compare the actual test results to the expected results and interpret them in terms of pass/fail (based on exit criteria), risk to the business/service provider, or change in projected value. Summarize the results of the tests in a report. *[ITIL 2011*

	– Service Transition: p170] [Expected Result 3] **SVT.BP7: Clean up the test environments** Ensure that the test environments are cleaned up or initialized. *[ITIL 2011 – Service Transition: p170]* [Expected Result 3, 4]

Input Work Product		
ID	**Name**	**Related expected results and BPs**
02_13	Service Design Package (SDP)	[Expected Result 1, 2, 3] [SVT.BP1, 2]
08_12	Service Acceptance Criteria (SAC)	[Expected Result 3, 4] [SVT.BP 5, 6]
08_08	Service options	[Expected Result 1, 2, 3] [SVT.BP 1]
01_10	Service capability and environment	[Expected Result 1, 2, 3] [SVT.BP1, 2, 3]
03_11	Release and deployment plans	[Expected Result 1, 2, 3] [SVT.BP1]
03_12	Test plan	[Expected Result 1, 2, 3] [SVT.BP3]
07_02	Request for Change (RFC)	[Expected Result 3, 4] [SVT.BP 5, 6]

Output Work Product		
ID	**Name**	**Related expected results and BPs**
03_12	Test plan	[Expected Result 1, 2, 3] [SVT.BP1]
03_28	Schedule of customer activity in the service lifecycle	[Expected Result 1, 2, 3] [SVT.BP1]
06_29	Testing report	[Expected Result 1, 2, 3] [SVT.BP3, 4, 5, 6]
05_16	Information for the Service Knowledge Management System (SKMS)	[Expected Result 1, 2, 3, 4] [SVT.BP4, 5]
05_01	Problem record	[Expected Result 4] [SVT.BP5]
05_17	Test incident record	[Expected Result 1, 2, 3, 4] [SVT.BP4, 5]
05_18	Test error record	[Expected Result 1, 2, 3, 4] [SVT.BP4, 5]
05_19	CSI Register	[Expected Result 4] [SVT.BP5]

IV.3.6 Change Evaluation

Process ID	**CHGE**
Process Name	**Change Evaluation**
Process Purpose	The purpose of the Change Evaluation process is to provide a consistent and standardized means of determining the performance of significant service changes in the context of likely impacts on business outcomes, and on existing and proposed services and IT infrastructure. *[ITIL 2011 – Service Transition: p175]*

	NOTE 1: Evaluation is required before each change authorization, to provide the change authority with advice and guidance. NOTE 2: Each organization should define what they consider being significant changes, and so decide which changes should use this formal change evaluation, and which can be evaluated as part of the Change Management process.
Process Expected Results	As a result of successful implementation of the Change Evaluation process: 1. Stakeholder expectations and related acceptance criteria are correctly set to make sure that changes are transitioned accordingly; 2. Both intended and unintended effects of a service change are evaluated; 3. Effective and accurate information is provided to Change Management to support decision making at each point at which authorization is required; 4. Risks and issues related to the change are identified and managed.
Base Practices	**CHGE.BP1: Ensure the clarity of customer expectations and requirements** Ensure that customer expectations and requirements (including acceptance criteria) are not in any way unclear or ambiguous. *[ITIL 2011 – Service Transition: p175]* [Expected Result 1] **CHGE.BP2: Understand the intended effect of a change** Analyze carefully the details of the service change, customer requirements, and Service Design Packages to fully understand the purpose of the change and the expected benefit of its implementation. *[ITIL 2011 – Service Transition: p176]* [Expected Result 2] **CHGE.BP3: Identify and consider the unintended effect of a change** Identify additional effects, which were not expected or planned for, and take them into account to understand the full impact of a service change. *[ITIL 2011 – Service Transition: p177]* [Expected Result 2] NOTE 3: One of the most effective ways of identifying such effects is by discussion with stakeholders (customers and users of the service). NOTE 4: Factors to consider when assessing the effects of a service change should be the following: service provider capability, tolerance (ability of a service to absorb a service change), organizational settings, resources, modeling & measurement, people, utility & warranty. **CHGE.BP4: Evaluate the predicted performance and risks** Estimate the predicted performance of the service (using the intended and unintended effects of the change) and compare it with acceptance criteria to assess risks. *[ITIL 2011 – Service Transition: p178]* [Expected Result 3, 4] **CHGE.BP5: Evaluate the actual performance and risks** Measure the actual performance of the service (via the Service Validation and Testing process) and compare it with acceptance criteria to assess risks. *[ITIL 2011 –*

	Service Transition: p178] [Expected Result 3, 4] **CHGE.BP6: Manage the identified risks** Based on the results of performance and risk assessments, take mitigation actions to reduce risks to a level acceptable for the expected benefits and the business appetite for risk. *[ITIL 2011 – Service Transition: p179]* [Expected Result 4] NOTE 5: Each organization should determine its own acceptable level of risk. **CHGE.BP7: Provide Change Management process with the results of the evaluation of the change** Provide the change authority with guidance and advice so that the Change Management process can expedite effective decisions about whether or not a service change is to be authorized. *[ITIL 2011 – Service Transition: p175]* [Expected Result 3]

Input Work Product		
ID	**Name**	**Related expected results and BPs**
02_03	Service package	[Expected Result 1, 2] [CHGE.BP1, 2, 3]
02_13	Service Design Package (SDP)	[Expected Result 1, 2] [CHGE.BP1, 2, 3]
08_12	Service Acceptance Criteria (SAC)	[Expected Result 1, 3, 4] [CHGE.BP1, 4, 5]
02_26	Change proposal	[Expected Result 2, 4] [CHGE.BP2, 3, 4]
05_11	Change documents and records	[Expected Result 2, 4] [CHGE.BP2, 3, 4]
06_29	Testing report	[Expected Result 3, 4] [CHGE.BP5, 6]
06_32	Change evaluation report	[Expected Result 3] [CHGE.BP7]

Output Work Product		
ID	**Name**	**Related expected results and BPs**
06_32	Change evaluation report	[Expected Result 3] [CHGE.BP2, 3, 4, 5, 7]

IV.3.7 Knowledge Management

Process ID	**KM**
Process Name	**Knowledge Management**
Process Purpose	The purpose of the Knowledge Management process is to ensure that the right information is delivered to the appropriate place or person at the right time, to enable informed decision and to reduce the cost of service. *[ITIL 2011 – Service Transition: p181]*
Process	As a result of successful implementation of the Knowledge Management process:

Expected Results	1. Decision-making is supported with the provision of reliable and secure knowledge, information, and data available throughout the service lifecycle; 2. The need to (re)discover knowledge is reduced; 3. Relevant data, information and knowledge are gathered, maintained, and used throughout the service lifecycle; NOTE 1: This is usually achieved by establishing and maintaining a Service Knowledge Management System (SKMS). 4. Knowledge transfer is performed at specific points of the service life cycle.
Base Practices	**KM.BP1: Make all staff support and deliver knowledge** Ensure that the benefits of Knowledge Management are understood and embraced by the all services stakeholders. *[ITIL 2011 – Service Transition: p193]* [Expected Result 2, 3] NOTE 2: The scope of Knowledge Management should cover direct IT staff, users, third party support and others likely to contribute or make beneficial use of the knowledge. *[ITIL 2011 – Service Transition: p185]* **KM.BP2: Establish knowledge needs** Determine what data and information are necessary to support decision making and to improve the efficiency and cost-effectiveness of the service and its related business outcomes. *[ITIL 2011 – Service Transition: p189]* [Expected Result 1, 3, 4] **KM.BP3: Define the information architecture** Define an information architecture matched to the organizational situation and knowledge needs in order to support the capture, the maintenance and the effective use of data and information. *[ITIL 2011 – Service Transition: p189]* [Expected Result 1, 3] **KM.BP4: Identify existing data and information** Determine what data and information are available or could be captured. *[ITIL 2011 – Service Transition: p188]* [Expected Result 2, 3] NOTE 3: Rejecting possible data capture may trigger justification for expenditure or changes in the working practices designed to facilitate the capture of relevant data. *[ITIL 2011 – Service Transition: p188]* **KM.BP5: Generate, capture, and make available new data and information** Generate and capture new data and information, according to knowledge needs, and make them easily available to relevant stakeholders. *[ITIL 2011 – Service Transition: p190-191]* [Expected Result 1, 3, 4] **KM.BP6: Assess the usefulness of the data and information** Measure the usage of the data and information and identify any data and information that are no longer relevant to the organization's knowledge requirements. *[ITIL 2011 – Service Transition: p191]* [Expected Result 1, 2, 3]

	KM.BP7: Archive obsolete data and information Archive data and information that are no longer used and safely dispose of unwanted, invalid or unverifiable information. *[ITIL 2011 – Service Transition: p191]* [Expected Result 1, 3] NOTE 4: This should be done in accordance with the data and information management plan and should comply with the legal requirements about information retention. **KM.BP8: Determine the knowledge gap between the person (or entity) needs and the knowledge actually possessed by this person (or entity)** Research and establish the knowledge gap by direct investigation of staff's understanding of the knowledge requirements for them to deliver their responsibilities compared to their actual observed knowledge. *[ITIL 2011 – Service Transition: p187]* [Expected Result 3, 4] **KM.BP9: Transfer the knowledge to the demanding entities** Implement knowledge transfer by using transfer techniques appropriate to the audience (age, culture and personality) and to the knowledge to be transferred. *[ITIL 2011 – Service Transition: p187]* [Expected Result 1, 4] NOTE 5: The best method of transferring and maintaining knowledge within the service management and user community will need to be established in order to respect the differences on how different people learn. *[ITIL 2011 – Service Transition: p187]*

Input Work Product		
ID	**Name**	**Related expected results and BPs**
03_21	Overall organization's knowledge strategy	[Expected Result 1, 2, 3, 4] [KM.BP1, 3, 5, 6, 7, 9]
05_16	Information for the Service Knowledge Management System (SKMS)	[Expected Result 1, 3] [KM.BP3, 4]
01_12	Service Knowledge Management System (SKMS)	[Expected Result 1, 2, 3, 4] [KM.BP5, 6 7]
05_05	Configuration Management System (CMS)	[Expected Result 1, 3, 4] [KM.BP3, 4, 5, 7]

Output Work Product		
ID	**Name**	**Related expected results and BPs**
01_12	Service Knowledge Management System (SKMS)	[Expected Result 1, 2, 3] [KM.BP3, 4, 5, 7]
05_16	Information for the Service Knowledge Management System (SKMS)	[Expected Result 1, 3] [KM.BP4, 5, 7]
03_23	Communication plan	[Expected Result 1, 3, 4] [KM.BP1, 8, 9]
01_06	Training	[Expected Result 1, 3, 4] [KM.BP8, 9]

IV.4 SERVICE OPERATION

IV.4.1 Event Management

Process ID	**EVTM**
Process Name	**Event Management**
Process Purpose	The purpose of the Event Management process is to ensure that any event that has significance for the management of CIs and IT services is dealt with. *[ITIL 2011 – Service Operation: p58]*
Process Expected Results	As a result of successful implementation of the Event Management process: 1. All changes of state that have significance for the management of a CI or IT service are detected and logged as an event; 2. The significance of each event is understood; 3. The appropriate response actions for each event are determined and communicated to the appropriate target group.
Base Practices	**EVTM.BP1: Define events to be generated** Identify any change of state of Configuration Items (CIs) that has significance for the management of IT infrastructure or IT services and accordingly define the types of events to be generated and the information to be communicated in each event. *[ITIL 2011 – Service Operation: p61, 65]* [Expected Result 1, 2] **EVTM.BP2: Implement event notification facilities** Specify and implement technical means to ensure that the event notifications on infrastructure, services and business will be appropriately routed through the IT infrastructure. *[ITIL 2011 – Service Operation: p63, 65]* [Expected Result 1] **EVTM.BP3: Detect, filter and record the events** Detect events, filter event notifications and then record relevant event information in the event management system. *[ITIL 2011 – Service Operation: p61, 65]* [Expected Result 1, 2] NOTE 1: The purpose of filtering is to decide whether to communicate the event to a management tool or to ignore it. If ignored, the event will usually be recorded in a log file on the device, but no further action will be taken. **EVTM.BP4: Establish the significance and meaning of the events** Establish the significance and, if required, the meaning of an event by comparing this event with a set of criteria and/or business rules. *[ITIL 2011 – Service Operation: p60, 66]* [Expected Result 2] NOTE 2: Significance is defined as the quality of being worthy of attention. The three usual categories of significance are: - informational - warning

	- exception NOTE 3: The meaning of the event should be determined for events that may represent some impact on the business (i.e. events classified in a "warning"- or "exception"-like category. **EVTM.BP5: Select the appropriate response** Select one or more response options according to the event significance and meaning, and trigger the response actions accordingly. *[ITIL 2011 – Service Operation: p67, 68]* [Expected Result 3] NOTE 4: Possible response options include: - event logged - auto response - alert and human intervention - open a RFC - open an incident record - open or link to a problem record - special types of incident (not directly impacting IT services) **EVTM.BP6: Review the actions** Check that any significant events (i.e. warning) or exceptions have been handled appropriately. *[ITIL 2011 – Service Operation: p69]* [Expected Result 3] NOTE 5: Action reviews can be done automatically and should not duplicate any review done as part of the Incident, Problem or Change Management processes. **EVTM.BP7. Track the event-related trends** Track significant events trends (e.g. counts of event types). *[ITIL 2011 – Service Operation: p69]* [Expected Result 1, 2, 3] **EVTM.BP8: Close the events** Close all recorded events and if necessary link them to the generated incident, problem or change record. *[ITIL 2011 – Service Operation: p69]* [Expected Result 3]

Input Work Product		
ID	**Name**	**Expected results and related BPs**
05_05	Configuration Management System (CMS)	[Expected Result 1, 2] [EVTM.BP2, 3, 5]
08_01	Service Level Agreement (SLA)	[Expected Result 2, 3] [EVTM.BP1, 5]
02_08	Capacity measures and thresholds	[Expected Result 1, 3] [EVTM.BP1]
01_07	Availability measures, targets and unacceptable levels	[Expected Result 1, 3] [EVTM.BP1]
01_01	Event management tool	[Expected Result 1, 2, 3] [EVTM.BP2, 3, 5, 6, 7, 8]
04_02	Event filtering rules	[Expected Result 1, 2] [EVTM.BP2, 3]
02_05	Event categories	[Expected Result 2] [EVTM.BP4, 5]

06_02	Event notification	[Expected Result 1, 2, 3] [EVTM.BP3, 4, 5]
06_01	Event trends and patterns report	[Expected Result 1, 2, 3] [EVTM.BP7, 8]

Output Work Product		
ID	**Name**	**Expected results and related BPs**
06_02	Event notification	[Expected Result 1] [EVTM.BP1, 2]
05_06	Event record	[Expected Result 1, 2] [EVTM.BP3, 4, 6, 8]
06_06	Exception report	[Expected Result 2, 3] [EVTM.BP3, 5]
05_07	Incident record	[Expected Result 3] [EVTM.BP5]
05_01	Problem record	[Expected Result 3] [EVTM.BP5]
07_02	Request for Change (RFC)	[Expected Result 3] [EVTM.BP5]
06_01	Event trends and patterns report	[Expected Result 1, 2, 3] [EVTM.BP7]

IV.4.2 Incident Management

Process ID	**INCM**
Process Name	**Incident Management**
Process Purpose	The purpose of the Incident Management process is to restore normal service operation as quickly as possible within agreed levels of service quality, and minimize the adverse impact on business operations. *[ITIL 2011 – Service Operation: p73]* NOTE 1: "Normal Service operation" is defined as an operational state where services and CIs are performing within their agreed service and operational levels.
Process Expected Results	As a result of successful implementation of the Incident Management process: 1. Incidents and their resolution are recorded; 2. Incident management priorities are aligned with those of the business; 3. Incidents are resolved within agreed service levels to restore the normal service operation; 4. The incident impact on the business is minimized; 5. Incidents are tracked through each stage of their lifecycle; 6. Interested parties are kept informed of incidents' progress and corresponding service level targets.
Base Practices	**INCM.BP1: Detect and log the incidents** Record relevant information on the incident whatever the way of logging, reopen an existing incident (in accordance with reopening rules), or redirect misrouted

incidents (e.g. requests or RFCs) to appropriate processes. *[ITIL 2011 – Service Operation: p76, 83]* [Expected Result 1, 5]

INCM.BP2: Categorize the incidents
Categorize the incident based on a set of commonly understood incident categories. *[ITIL 2011 – Service Operation: p76]* [Expected Result 1, 3]

INCM.BP3: Prioritize the incidents
Prioritize the incident according to commonly understood prioritizing criteria (such as business impact and urgency). *[ITIL 2011 – Service Operation: p79]* [Expected Result 1, 2, 3, 4]

INCM.BP4: Provide initial diagnosis and support for the incidents
Assess the incident details to find a solution to restore service operation, via a degraded mode or a temporary resolution if needed. *[ITIL 2011 – Service Operation: p80]* [Expected Result 1, 3, 4, 5]

NOTE 2: Diagnosis scripts and existing information on incidents, problems, known errors and changes should be used to provide the initial support to a new incident.

NOTE 3: If BP4 enables to find a solution to restore service operation, then INCM.BP5, 6 & 7 are not applicable.

INCM.BP5: Escalate the incidents to specialized support teams or to higher levels of authority if needed
Route the incident to the appropriate level of support, i.e. second line, or third line if needed. Escalate the incident to a higher hierarchical level if SLA is broken or potential impact on the business is high. *[ITIL 2011 – Service Operation: p80]* [Expected result 2, 3, 4, 5, 6]

INCM.BP6: Investigate and diagnose the incidents
Analyze and investigate incidents by the appropriated support line(s) if first line support failed to restore service. *[ITIL 2011 – Service Operation: p82]* [Expected Result 3, 5]

NOTE 4: The investigation should include actions such as:
- establishing exactly what has gone wrong or what is being sought by the user,
- identifying any event that could have triggered the incident,
- understanding the chronological order of events,
- confirming the full impact of the incident, including the number and range of users affected,
- searching incident/problem records and/or known error databases (KEDBs) or manufacturers'/suppliers' error logs or knowledge database.

INCM.BP7: Select the best potential resolution
Identify and test potential resolutions to ensure that the one chosen will enable to fully restore the service while preventing side effects and adverse impact on the business. *[ITIL 2011 – Service Operation: p82]* [Expected Result 1, 3, 4]

INCM.BP8: Keep incident records up-to-date
Track the incident statuses until closure and update incident records to document

	resolution progress. *[ITIL 2011 – Service Operation: p75, 82]* [Expected Result 1, 5] **INCM.BP9: Implement the incident resolution** Implement incident resolution that enables to resume business activities. *[ITIL 2011 – Service Operation: p82]* [Expected Result 2, 3, 4] **INCM.BP10: Communicate on incident resolution progress** Communicate on the incident resolution progress (and particularly on timescales for all incident-handling stages), or on the service level breaches to all impacted parties. *[ITIL 2011 – Service Operation: p73, 74]* [Expected Result 4, 6] **INCM.BP11: Close the incidents** Check that the incident is fully resolved and that the users are satisfied. Then close the incident if agreed. *[ITIL 2011 – Service Operation: p82]* [Expected Result 1, 5, 6]

Input Work Product		
ID	**Name**	**Expected results and related BPs**
05_06	Event record	[Expected Result 1, 3, 5] [INCM.BP1, 6]
05_05	Configuration Management System (CMS)	[Expected Result 1, 3, 4, 5] [INCM.BP6, 7]
08_01	Service Level Agreement (SLA)	[Expected Result 1, 2, 3, 5, 6] [INCM.BP3,5, 10]
05_03	Known Error Database (KEDB)	[Expected Result 1, 3, 4, 5] [INCM.BP4,6]
05_04	Incident knowledge base	[Expected Result 3, 4, 5] [INCM.BP6]
05_02	Problem knowledge base	[Expected Result 3, 4, 5] [INCM.BP6]
01_02	Incident management tool	[Expected Result 1, 3, 5, 6] [INCM.BP1,2,10]
02_06	Incident model	[Expected Result 1, 2, 3, 5] [INCM.BP2, 3, 6]
02_07	Incident categories	[Expected Result 1, 3] [INCM.BP2]

Output Work Product		
ID	**Name**	**Expected results and related BPs**
05_07	Incident record	[Expected Result 1, 2, 3, 4, 5, 6] [INCM.BP1, 2, 3, 4, 9, 10, 11]
05_04	Incident knowledge base	[Expected Result 1, 3, 4, 5] [INCM.BP9,11]
01_02	Incident management tool	[Expected Result 1, 5] [INCM.BP1, 8]
02_07	Incident categories	[Expected Result 1, 3] [INCM.BP2]
06_05	Customer satisfaction survey	[Expected Result 6] [INCM.BP10]
07_02	Request for Change (RFC)	[Expected Result 3, 5] [INCM.BP9]

IV.4.3 Request Fulfilment

Process ID	**REQF**
Process Name	**Request Fulfilment**
Process Purpose	The purpose of the Request Fulfilment process is to manage the lifecycle of all service requests from the users. NOTE 1: The term 'service request' is used as a generic description for many different type of requests that are placed upon the IT organization by the users. Many of these are typically requests for small changes that are low risk, frequently performed, and/or low cost; or may be just a request for information, complaints or compliments. *[ITIL 2011 – Service Operation: p87]* NOTE 2: Complaints and compliments, though they do not trigger the implementation of technical activities, are traditionally introduced through the same channel.
Process Expected Results	As a result of successful implementation of the Request Fulfilment process: 1. All service requests are handled and effectively fulfilled; 2. A channel is provided for users to request and receive services for which a predefined authorization and qualification process exists; NOTE 3: The service catalogue should provide information to users and customers about the available services. 3. Request fulfilment priorities are aligned with those of the business; 4. Service requests are tracked through each stage of their lifecycle and communicated to users accordingly.
Base Practices	**REQF.BP1: Log and filter the service requests** Record relevant information on the request so that involved support groups have the needed information to treat it, redirect misrouted requests (e.g. incidents or RFCs) to appropriate processes, and reject invalid requests. *[ITIL 2011 – Service Operation: p91]* [Expected Result 1, 2] NOTE 4: The definition of a valid request should depend on the requester and the nature of the request. **REQF.BP2: Categorize the service requests** Categorize the requests based on commonly understood classification categories. *[ITIL 2011 – Service Operation: p92]* [Expected Result 1, 3] **REQF.BP3: Prioritize the service requests** Prioritize the requests, according to well defined prioritizing criteria (such as business impact and urgency). *[ITIL 2011 – Service Operation: p92]* [Expected Result 1, 3] **REQF.BP4: Authorize the service requests** Get authorization from appropriate authorities (e.g. financial authority and/or Access Management) according to the request source, type and scope. *[ITIL 2011 –*

	Service Operation: p93] [Expected Result 1, 2] NOTE 5: Authorization (or rejection) should be documented in the request record and, in case of rejection the submitter should be informed of the reasons. **REQF.BP5: Route the service requests to appropriate group** Review the request to assign it to the proper function or group that will perform specialized activities to fulfil the request. *[ITIL 2011 – Service Operation: p93]* [Expected Result 1] NOTE 6: In many cases the Service Desk function may perform all needed fulfilment activities. **REQF.BP6: Fulfil the service requests** Undertake a consistent set of actions, based on the appropriate request model, to effectively fulfil the request. *[ITIL 2011 – Service Operation: p92]* [Expected Result 1, 2] **REQF.BP7. Monitor and communicate the service request progress** Monitor the service request progress all along its lifecycle, update the request record accordingly (including status), and keep users informed of the progress of their service requests. *[ITIL 2011 – Service Operation: p93]* [Expected Result 1, 4] **REQF.BP8: Close the service requests** Check that the service request has been fulfilled and that the users are satisfied and agree to close the request. *[ITIL 2011 – Service Operation: p92]* [Expected Result 1] NOTE 7: If charging is in place, the requester should be billed for costs incurred by the request fulfilment activities.

Input Work Product		
ID	**Name**	**Expected results and related BPs**
05_05	Configuration Management System (CMS)	[Expected Result 1, 2] [REQF.BP6]
01_05	Request fulfilment management tool	[Expected Result 1, 2, 4] [REQF.BP1, 2, 3, 5, 7, 8]
02_01	Request model	[Expected Result 1, 2] [REQF.BP4,5,6]
07_02	Request for Change (RFC)	[Expected Result 1, 2] [REQF.BP1]
04_01	Standard fulfilment procedure	[Expected Result 1, 2] [REQF.BP4,5,6]
07_03	Service request	[Expected Result 1, 2] [REQF.BP1]
05_20	Request record	[Expected Result 1, 4] [REQF.BP7]

Output Work Product		
ID	**Name**	**Expected results and related BPs**
05_20	Request record	[Expected Result 1, 2] [REQF.BP1, 2, 3, 8]
07_02	Request for Change (RFC)	[Expected Result 1, 2] [REQF.BP1, 6]

05_07	Incident record	[Expected Result 1, 2] [REQF.BP1]
06_05	Customer satisfaction survey	[Expected Result 1] [REQF.BP8]
06_35	Request fulfilment status report	[Expected Result 1, 4] [REQF.BP7]

IV.4.4 Problem Management

Process ID	**PRBM**
Process Name	**Problem Management**
Process Purpose	The purpose of the Problem Management process is to prevent problems and the resulting incidents from happening, to eliminate recurring incidents, and to minimize their impact on the business. *[ITIL 2011 – Service Operation: p97]* NOTE 1: In order to achieve this, Problem Management seeks to find the root cause of incidents, document and communicate known errors, and initiate actions to improve or correct the situation.
Process Expected Results	As a result of successful implementation of the Problem Management process: 1. Problems are identified and recorded; 2. Problems are resolved to minimize potential impact on the business; 3. Recurring incidents are eliminated; 4. Impact of unresolved problems is minimized.
Base Practices	**PRBM.BP1: Detect the problems** Detect the problem, by using reactive problem management triggers or proactive problem management triggers. *[ITIL 2011 – Service Operation: p103]* [Expected Result 1] NOTE 2: Reactive problem management triggers include: suspicion or detection of a cause of one or more incidents by the service desk, analysis of an incident by a technical support group, automated detection of an infrastructure or application fault, or a notification from a supplier or contractor. NOTE 3: Proactive problem management triggers include: trending of historical incident and event records, or activities taken to improve the quality of a service. **PRBM.BP2: Log the problems** Log all the relevant details of the problem within a problem record (with date and time stamp). *[ITIL 2011 – Service Operation: p103]* [Expected Result 1] **PRBM.BP3: Categorize the problems** Categorize the problem, based on a set of commonly understood categories (also used for incident categorization) *[ITIL 2011 – Service Operation: p103]* [Expected Result 1] **PRBM.BP4: Prioritize the problems** Prioritize the problem according to commonly understood prioritizing criteria

	(which combines incident impact with urgency to give an overall priority level). *[ITIL 2011 – Service Operation: p104]* [Expected Result 1, 4] NOTE 4: The problem priority should depend on the frequency and impact of the related incidents. **PRBM.BP5: Investigate the problem and diagnose** Conduct investigation to diagnose the root cause of the problem. *[ITIL 2011 – Service Operation: p99, 100, 101, 104]* [Expected Result 1, 2, 3, 4] NOTE 5: Investigate problems by using such techniques as chronological analysis, pain value analysis, Kepner and Tregoe, Brainstorming, Ishikawa diagrams, Pareto analysis. **PRBM.BP6: Find a workaround for the problem, if needed** Find a workaround (a temporary way of overcoming the difficulties) to circumvent the incidents caused by the problem (and minimize their impact) and restore the service more quickly. *[ITIL 2011 – Service Operation: p104]* [Expected Result 4] **PRBM.BP7: Raise and maintain a known error record** Update the known error knowledge base with a new known error record, as soon as the diagnosis is complete, and particularly where a workaround has been found, and maintain it until problem closure. *[ITIL 2011 – Service Operation: p104]* [Expected Result 1] **PRBM.BP8: Implement the problem resolution** Perform problem resolution actions through the Change Management process if necessary, or implement a workaround. *[ITIL 2011 – Service Operation: p105]* [Expected Result 2, 3, 4] **PRBM.BP9: Close the problems** Close the problem record once a final resolution has been applied, and update the status of any related known error record. *[ITIL 2011 – Service Operation: p105]* [Expected Result 1] NOTE 6: In case of RFC rising, problem should be closed when the change has been completed, successfully reviewed and the resolution has been applied. NOTE 7: Problem Management should participate in the Post Implementation Review (PIR) with the Change Management to review changes related to major problems.

Input Work Product		
ID	**Name**	**Expected results and related BPs**
05_02	Problem knowledge base	[Expected Result 1, 2, 3] [PRBM.BP5]
05_03	Known Error Database (KEDB)	[Expected Result 1, 2, 3] [PRBM.BP5]
05_04	Incident knowledge base	[Expected Result 1, 2, 3] [PRBM.BP5]
05_05	Configuration Management System (CMS)	[Expected Result 1, 2, 3] [PRBM.BP5]

05_07	Incident record	[Expected Result 1] [PRBM.BP1]
02_16	Problem categories	[Expected Result 1] [PRBM.BP3]
05_06	Event record	[Expected Result 1] [PRBM.BP1]
06_36	Incident trends	[Expected Result 1] [PRBM.BP1]
02_33	Problem models	[Expected Result 1, 2, 3] [PRBM.BP3, 4, 5]

Output Work Product		
ID	**Name**	**Expected results and related BPs**
05_01	Problem record	[Expected Result 1] [PRBM.BP2]
05_02	Problem knowledge base	[Expected Result 1] [PRBM.BP7]
05_03	Known Error Database (KEDB)	[Expected Result 1, 4] [PRBM.BP7, 9]
07_02	Request for Change (RFC)	[Expected Result 1, 2, 3] [PRBM.BP8]
06_36	Incident trends	[Expected Result 1] [PRBM.BP9]

IV.4.5 Access Management

Process ID	**ACCM**
Process Name	**Access Management**
Process Purpose	The purpose of the Access Management process is to grant authorized users the right to use a service or group of services, while preventing access to non-authorized users. *[ITIL 2011 – Service Operation: p110]* NOTE 1: Access Management is executing the policies and actions defined in Information Security Management.
Process Expected Results	As a result of successful implementation of the Access Management process: 1. Access to services is managed according to established security policies and practices; NOTE 2: These security policies and practices should be defined in Information Security Management. 2. Users have access to authorized services (only) as defined and when expected; 3. Unauthorized users are prevented from using the services; 4. Access to services is overseen to ensure that rights provided are not improperly used.
Base Practices	**ACCM.BP1: Collect the access requests** Collect the access requests (or restriction) through an established mechanism. *[ITIL*

	2011 – Service Operation: p111] [Expected Result 1] NOTE 3: Mechanisms for access request may be: - a standard request generated by HR system - a RFC - a service request submitted via the request fulfilment system - executing a pre-authorized script or option NOTE 4: Rules for requesting access may be documented as part of the service catalogue. **ACCM.BP2: Verify the access requests** Verify the identity and legitimacy of all users concerned for every single request for access to IT services. *[ITIL 2011 – Service Operation: p111]* [Expected Result 1, 2, 3] **ACCM.BP3: Provide access rights** Provide the authorized user with rights to use the requested service(s) according to established security policies. *[ITIL 2011 – Service Operation: p113]* [Expected Result 1, 2, 3, 4] NOTE 5: These security policies should be defined by Information Security Management. **ACCM.BP4: Define roles and monitor identity status** Define and maintain a catalogue of roles and/or groups of users (with their associated rights). Monitor identity status to keep up-to-date the role(s) associated with each user. *[ITIL 2011 – Service Operation: p113]* [Expected Result 4] NOTE 6: Careful creation of roles and groups should prevent role conflicts. **ACCM.BP5: Remove or restrict access rights** Revoke the rights to use a service or provide tighter restrictions (reducing the level, time or duration of access) according to changing identity status or decisions made by managers. *[ITIL 2011 – Service Operation: p114]* [Expected Result 1, 2, 3, 4] NOTE 7: Access rights should be changed to reflect the changing user roles, taking security policies into account. **ACCM.BP6: Log and track access** Log access to services and applications by the users, and record access information to use it as evidence in case of need. *[ITIL 2011 – Service Operation: p114]* [Expected Result 1, 4] **ACCM.BP7: Escalate abuse of access rights** Identify abuse of access rights and ensure that actions are taken to manage these exceptions (i.e. through Incident Management). *[ITIL 2011 – Service Operation: p114]* [Expected Result 1, 2, 3, 4]

Input Work Product		
ID	**Name**	**Expected results and related BPs**

03_08	Information security policies	[Expected Result 1, 2, 3, 4] [ACCM.BP2, 3]
07_02	Request for Change (RFC)	[Expected Result 1, 2, 3] [ACCM .BP1, 2]
07_03	Service request	[Expected Result 1, 2, 3] [ACCM .BP1, 2]
02_04	Catalogue of user roles	[Expected Result 1, 2, 3, 4] [ACCM .BP3, 4, 5]
08_02	Service Level Requirements (SLR)	[Expected Result 1, 2, 3, 4] [ACCM.BP3]
08_03	Operational Level Agreement (OLA)	[Expected Result 1, 2, 3, 4] [ACCM.BP3]

Output Work Product		
ID	**Name**	**Expected results and related BPs**
02_04	Catalogue of user roles	[Expected Result 4] [ACCM .BP4]
06_04	Access log	[Expected Result 1, 4] [ACCM .BP6]
06_09	Roles conflict report	[Expected Result 4] [ACCM .BP4]
05_07	Incident record	[Expected Result 1, 2, 3, 4] [ACCM .BP7]
06_24	Security incident report	[Expected Result 1, 2, 3, 4][ACCM .BP7]
05_21	Access management records and history	[Expected Result 1, 4] [ACCM .BP6]

IV.5 CONTINUAL SERVICE IMPROVEMENT

IV.5.1 Seven-Step Improvement

Process ID	**SSI**
Process Name	**Seven-Step Improvement**
Process Purpose	The purpose of the Seven-Step Improvement process is to align IT services with changing business needs by identifying and implementing improvements to IT services that support business outcomes, looking for ways to improve service, process and cost effectiveness. *[ITIL 2011 – Continual Service Improvement: p4]* NOTE 1: The Seven-Step Improvement process includes analysis of the performance and capabilities of services, processes throughout the lifecycle, partners and technology. It includes the continual alignment of the portfolio of IT services with the current and future business needs. NOTE 2: In order to identify improvement opportunities, the measurement of current performance is an important factor.
Process Expected Results	As a result of successful implementation of the Seven-Step Improvement process: 1. Monitoring and reporting of services and processes are performed throughout all lifecycle stages; 2. Opportunities for service improvements are identified;

	NOTE 3: these opportunities may include improvements of organizational structures, processes, resourcing capabilities, partners, technology, staff skills, training, and communications. 3. Services remain continuously aligned to business needs; 4. Service quality is improved gradually and continually; 5. Cost effectiveness of services is controlled and gradually improved; NOTE 4: Improving cost effectiveness should not negatively impact the service delivery or quality in such a way that the overall impact may be neutral or even negative.
Base Practices	**SSI.BP1: Identify the strategy for improvement** Analyze the business and IT strategies and plans for the coming period to identify where the service provider needs to focus its improvement efforts in such a way that IT services enable the business and IT visions to be achieved. *[ITIL 2011 – Continual Service Improvement: p49]* [Expected Result 2, 3, 4, 5] **SSI.BP2: Establish measurement capabilities** Compile a list of what should be measured from the business and IT points of view, independently of the capability of the service provider to actually measure it. Compile a list of what can currently be measured within the service provider's organization. Combine these two lists to define the additional measurement capabilities that are needed. *[ITIL 2011 – Continual Service Improvement: p50]* [Expected Result 1, 2] NOTE 5: Measurement should focus on what matters most for improvement and avoid being distracted by far too many things that have little or no value. For example, in addition to SLAs, measuring customer satisfaction can be more valuable than measuring plenty of technical metrics that will not be used for improvement. NOTE 6: It is possible that new tools, data, or HR resources are required to be able to measure at least what is critical. **SSI.BP3: Gather the data** Gather data from systems, monitoring capabilities and reports keeping in mind the mission, goals and objectives of service improvement. *[ITIL 2011 – Continual Service Improvement: p53]* [Expected Result 1] NOTE 7: Ensure that data entered manually by people are supported and framed by policies or standards in order to ensure the quality and the standardization of this kind of data. For example, having three different ways of entering the same name would slow down trend analysis and will severely impede any data analysis. **SSI.BP4: Process the data** Convert the collected raw data in the required format and for the required audience in order to provide an effective means to 82analyze the information and data. *[ITIL 2011 – Continual Service Improvement: p55]* [Expected Result 3, 4, 5] NOTE 8: There are usually three distinct audiences: - the Business: focus on understanding whether IT delivered the Service (level)

promised, and if not, on understanding the corrective actions being implemented to improve the situation,
- senior (IT) management: focus on the results surrounding CSFs and KPIs such as, customer satisfaction, actual vs. plan, costing and revenue targets,
- internal IT: focus on KPIs and activity metrics that help them to plan, coordinate, schedule and identify incremental improvement opportunities.

SSI.BP5: Analyze the information and data

Compare the data and information on the actual performance of IT services and processes against the expected goals, objectives (e.g. SLA targets) and plans (e.g. financial, availability and capacity plans). Identify trends, compare them to plans, and 83analyze them in order to identify the underlying causes and the potential improvement opportunities. *[ITIL 2011 – Continual Service Improvement: p58]* [Expected Result 2, 3, 4, 5]

SSI.BP6: Present and use the information

Present to the various stakeholders an accurate analysis of the current status of IT services (and processes) in a form and manner that reflects theirs needs and assist them in taking strategic, tactical and operational decisions (i.e. determining the next steps). *[ITIL 2011 – Continual Service Improvement: p60]* [Expected Result 1, 2]

NOTE 9: Understand the target audience and the reporting purpose should avoid usual gap between what IT reports and what business needs. For example, availability is often reported in percentages when the business is interested in knowing the number, duration and impact of outages.

SSI.BP7: Implement the improvements

Identify, prioritize, and perform the activities that will improve the quality, the performance, and the cost effectiveness of IT services and processes. Ensure the effectiveness of implemented improvements against improvement objectives. *[ITIL 2011 – Continual Service Improvement: p62]* [Expected Result 3, 4, 5]

NOTE 10: The improvement activities are the operational expression of the improvement opportunities identified during the data and information analysis.

NOTE 11: Improvement objectives may be driven by customer satisfaction, regulatory requirements, changes in competition, or political decision, amongst others.

Input Work Product		
ID	**Name**	**Expected results and related BPs**
03_04	Customer business plan	[Expected Result 2, 3, 4, 5] [SSI.BP1]
03_22	IT service strategic plan	[Expected Result 2, 3, 4, 5] [SSI.BP1]
02_30	Vision and mission statements	[Expected Result 2, 3, 4, 5] [SSI.BP1]
02_25	Market spaces description	[Expected Result 2, 3, 4, 5] [SSI.BP1]
06_37	Service investment analysis	[Expected Result 2, 3, 4, 5] [SSI.BP1]
01_03	Service portfolio	[Expected Result 1, 2, 3, 4, 5] [SSI.BP1, 2, 3, 4]

06_11	SLA review meeting minutes	[Expected Result 1, 2, 3, 4, 5] [SSI.BP 2, 3, 4, 5]
08_02	Service Level Requirement (SLR)	[Expected Result 1, 2, 3, 4, 5] [SSI.BP 2, 3, 4, 5]
05_05	Configuration Management System (CMS)	[Expected Result 1, 2, 3, 4, 5] [SSI.BP 2, 3, 4, 5]
05_09	Capacity Management Information System (CMIS)	[Expected Result 1, 2, 3, 4, 5] [SSI.BP3, 4, 5]
05_10	Availability Management Information System (AMIS)	[Expected Result 1, 2, 3, 4, 5] [SSI.BP3, 4, 5]
05_12	Supplier and Contract Management Information System (SCMIS)	[Expected Result 1, 2, 3, 4, 5] [SSI.BP3, 4, 5]
01_04	Information Security Management System (ISMS)	[Expected Result 1, 2, 3, 4, 5] [SSI.BP3, 4, 5]
01_12	Service Knowledge Management System (SKMS)	[Expected Result 1, 2, 3, 4, 5] [SSI.BP3, 4, 5]
05_19	CSI register	[Expected Result 1, 2, 3, 4, 5] [SSI.BP3, 4, 5, 6]
06_10	Service report	[Expected Result 1, 2, 3, 4, 5] [SSI.BP3, 4, 5]
06_01	Event trends and patterns report	[Expected Result 1, 2, 3, 4, 5] [SSI.BP3, 4, 5]
06_05	Customer satisfaction survey	[Expected Result 1, 2, 3, 4, 5] [SSI.BP3, 4, 5]
06_12	Workload analysis report	[Expected Result 1, 2, 3, 4, 5] [SSI.BP3, 4, 5]
06_14	Forecast and predictive report	[Expected Result 1, 2, 3, 4, 5] [SSI.BP3, 4, 5]
06_26	Service/Supplier performance reports	[Expected Result 1, 2, 3, 4, 5] [SSI.BP3, 4, 5]
06_27	Performance and contract review meeting minutes	[Expected Result 1, 2, 3, 4, 5] [SSI.BP3, 4, 5]
03_01	Service Improvement Plan (SIP)	[Expected Result 3, 4, 5] [SSI.BP7]
01_13	Service measurement capabilities	[Expected Result 1] [SSI.BP3]

Output Work Product		
ID	**Name**	**Expected results and related BPs**
01_13	Service measurement capabilities	[Expected Result 1, 2] [SSI.BP2]
06_38	Service measurement report	[Expected Result 1, 2] [SSI.BP5, 6]
05_19	CSI register	[Expected Result 1, 2] [SSI.BP6]
03_01	Service Improvement Plan (SIP)	[Expected Result 1, 2] [SSI.BP6]

V Process maturity indicators for level 1 to 5

V.1 FOREWORD

This section presents the process maturity indicators related to the process attributes associated with maturity levels 1 to 5 defined in part 2 of ISO/IEC 15504. Process maturity indicators are the means of achieving the capabilities addressed by the considered process attributes. Evidence of process maturity indicators supports the judgment of the degree of achievement of the process attribute.

V.2 LEVEL 1: PERFORMED PROCESS

PA 1.1: Process Performance attribute

The Process Performance attribute is a measure of the extent to which the process purpose is achieved.

As a result of full achievement of this attribute:

a) The process achieves its defined expected results.

Generic practices for PA 1.1

GP 1.1.1 Achieve the process expected results [PA 1.1 : a]

- Perform the intent of the base practices.
- Produce work products that evidence the process expected results.

NOTE: The assessment of a performed process is based on process Base Practices and Work Products, which are defined in the previous section of this document.

Generic work products for PA 1.1

01_00 Object [PA 1.1: a]
- Work products exist that provide evidence of the achievement of the process expected results.

V.3 LEVEL 2: MANAGED PROCESS

The performed process is now implemented in a managed fashion (planned, monitored and adjusted) and its work products are appropriately established, controlled and maintained.

The following attributes of the process demonstrate the achievement of this level:

PA 2.1: Performance Management attribute

The Performance Management attribute is a measure of the extent to which the performance of the process is managed.

As a result of full achievement of this attribute:

a) Objectives for the performance of the process are identified.

b) Performance of the process is planned and monitored.

c) Performance of the process is adjusted to meet plans.

d) Responsibilities and authorities for performing the process are defined, assigned and communicated.

e) Resources and information necessary for performing the process are identified, made available, allocated and used.

f) Interfaces between the involved parties are managed to ensure both effective communication and clear assignment of responsibility.

Generic practices for PA 2.1

GP 2.1.1 Identify the objectives for the performance of the process [PA 2.1 : a]

NOTE: Performance objectives may include: (1) quality of the artifacts produced, (2) process cycle time or frequency, (3) resource usage and (4) boundaries of the process.

- Performance objectives are identified based on process requirements and customer requirements.
- The scope of the process performance is defined.
- Assumptions and constraints are considered when identifying the performance objectives.

GP 2.1.2 Plan and monitor the performance of the process to fulfil the identified objectives [PA 2.1 : b]

- Plan(s) for the performance of the process are developed. The process performance cycle is defined.
- Key milestones for the performance of the process are established.
- Estimates for process performance attributes are determined and maintained.
- Process activities and tasks are defined.
- Schedule is defined and aligned with the approach to performing the process.
- Process work product reviews are planned.
- The process is performed according to the plan(s).
- Process performance is monitored to ensure planned results are achieved.

GP 2.1.3 Adjust the performance of the process [PA 2.1 : c]

- Process performance issues are identified.
- Appropriate actions are taken when planned results and objectives are not achieved.
- The plan(s) are adjusted, as necessary.
- Rescheduling is performed as necessary.

GP 2.1.4 Define responsibilities and authorities for performing the process [PA 2.1 : d]

- Responsibilities, commitments and authorities to perform the process are defined, assigned and communicated.
- Responsibilities and authorities to verify process work products are defined and assigned.
- The needs for process performance experience, knowledge and skills are defined.

GP 2.1.5 Identify and make available resources to perform the process according to plan [PA 2.1 : e]

- The human and infrastructure resources necessary for performing the process are identified, made available, allocated and used.
- The information necessary to perform the process is identified and made available.

GP 2.1.6 Manage the interfaces between involved parties [PA 2.1 : f]

- The individuals and groups involved in the process performance are determined.
- Responsibilities of the involved parties are assigned.
- Interfaces between the involved parties are managed.
- Communication is assured between the involved parties.
- Communication between the involved parties is effective.

Generic work products for PA 2.1

03_00 Plan [PA 2.1: a, b, c, d, e, f]
- Defines objectives to perform the process.
- Describes assumptions and constraints considered in defining the objectives.
- Includes milestones and timetable to produce the work products of the process.
- Identifies tasks, resources, responsibilities and infrastructure needed to perform the process.
- Considers risks related to fulfil defined objectives.
- Identifies stakeholders and communication mechanisms to be used.
- Describes how the plan is controlled and adjusted when needed.

05_00 Record [PA 2.1: c, d, e, f]
- States results achieved or provides evidence of activities performed in a process.
- Provides evidence of communication, meetings, reviews and corrective actions.
- Contains status information about corrective actions; schedule and work breakdown structure.
- Monitors identified risks.

06_00 Report [PA 2.1: b, c]
- Monitors process performance against defined objectives and plans.
- Identifies deviations in process performance.
- Describes results and status of the process.
- Provides evidence of management activities.

PA 2.2: Work Product Management attribute

The Work Product Management attribute is a measure of the extent to which the work products produced by the process are appropriately managed.

NOTE 1: Requirements for documentation and control of work products may include requirements for the identification of changes and revision status, approval and re-approval of work products, and the creation of relevant versions of applicable work products available at points of use.

NOTE 2: The work products referred to in this clause are those that result from the achievement of the process expected results.

As a result of full achievement of this attribute:

a) Requirements for the work products of the process are defined.

b) Requirements for documentation and control of the work products are defined.

c) Work products are appropriately identified, documented, and controlled.

d) Work products are reviewed in accordance with planned arrangements and adjusted as necessary to meet requirements.

Generic practices for PA 2.2

GP 2.2.1 Define the requirements for the work products [PA 2.2 : a] • The requirements for the work products to be produced are defined. Requirements may include defining contents and structure. • Quality criteria of the work products are identified. • Appropriate review and approval criteria for the work products are defined.
GP 2.2.2 Define the requirements for documentation and control of the work products [PA 2.2 : b] • Requirements for the documentation and control of the work products are defined. Such requirements may include requirements for (1) distribution, (2) identification of work products and their components (3) traceability • Dependencies between work products are identified and understood. • Requirements for the approval of work products to be controlled are defined.
GP 2.2.3 Identify, document and control the work products [PA 2.2 : c] • The work products to be controlled are identified. • Change control is established for work products. • The work products are documented and controlled in accordance with requirements. • Versions of work products are assigned to product configurations as applicable. • The work products are made available through appropriate access mechanisms. • The revision status of the work products may readily be ascertained.
GP 2.2.4 Review and adjust work products to meet the defined requirements [PA 2.2 : d] • Work products are reviewed against the defined requirements in accordance with planned arrangements. • Issues arising from work product reviews are resolved.

Generic work products for PA 2.2

01_00 Object [PA 2.2: c, d]
- Demonstrates process specific work products to be managed.

03_00 Plan [PA 2.2: b]
- Expresses selected policy or strategy to manage work products.
- Describes requirements to develop, distribute, and maintain the work products.
- Defines quality control actions needed to manage the quality of the work product.

05_00 Record [PA 2.2: c, d]
- Demonstrates work product reviews and contributes to traceability.
- Describes non-conformance detected during work product reviews.
- Provides evidence that the changes are under control.
- Records the status of documentation or work product.
- Contains and makes available work products and/or configuration items.
- Supports monitoring of changes to work products.

8-00 Specification [PA 2.2: a, b]
- Defines the functional and non-functional requirements for work products.
- Identifies work product dependencies.
- Identifies approval criteria for documents.
- Defines the attributes associated with a work product to be created.

V.4 LEVEL 3: ESTABLISHED PROCESS

The managed process is now implemented using a standard process definition capable of achieving its process expected results.

The following attributes of the process demonstrate the achievement of this level:

PA 3.1: Process Definition attribute

The Process Definition attribute is a measure of the extent to which a standard process is defined and maintained to support the deployment of the process.

As a result of full achievement of this attribute:

a) A standard process, including appropriate tailoring guidelines, is defined that describes the fundamental elements that must be incorporated into a deployed process.

b) The sequence and interaction of the standard process with other processes are determined.

c) Required competencies and roles for performing a process are identified as part of the standard process.

d) Required infrastructure and work environment for performing a process are identified as part of the standard process.

e) Suitable methods for monitoring the effectiveness and suitability of the process are determined.

Generic practices for PA 3.1

GP 3.1.1 Define the standard process that will support the deployment of the process [PA 3.1 : a] • A standard process is developed that includes the fundamental process elements. • The standard process identifies the deployment needs and deployment context. • Guidance and/or procedures are provided to support implementation of the process as needed. • Appropriate tailoring guideline(s) are available as needed.
GP 3.1.2 Determine the sequence and interaction between processes so that they work as an integrated system of processes [PA 3.1 : b] • The standard process' sequence and interaction with other processes are determined. • Deployment of the standard process maintains integrity of processes.
GP 3.1.3 Identify the roles and competencies for performing the standard process [PA 3.1 : c] • Process performance roles are identified. • Competencies for performing the process are identified.
GP 3.1.4 Identify the required infrastructure and work environment for performing the standard process [PA 3.1 : d] • Process infrastructure components are identified (facilities, tools, networks, methods, etc.). • Work environment requirements are identified.
GP 3.1.5 Determine suitable methods to monitor the effectiveness and suitability of the standard process [PA 3.1 : e] • Methods for monitoring the effectiveness and suitability of the process are determined. • Appropriate criteria and data needed to monitor the effectiveness and suitability of the

process are defined.
- The need to establish the characteristics of the process is considered.
- The need to conduct internal audit and management review is established.
- Process changes are implemented to maintain the standard process.

GP 3.1.6 [ITIL 2011: Service Reporting] Define and agree upon the content of service management reports [PA 3.1 : e]
- Define and agree with the stakeholders the lay out, the contents and frequency of the service management reports.

Generic work products for PA 3.1

02_00 Description [PA 3.1: a, b, c, e]
- Describes the standard process, including the fundamental process elements, interactions with other processes and appropriate tailoring guidelines.
- Addresses the performance, management and deployment of the process, as described by maturity levels 1 and 2 and the PA 3.2 Process deployment attribute.
- Addresses methods to monitor process effectiveness and suitability.
- Identifies data and records to be collected when performing the standard process, in order to improve the standard process definition.
- Identifies and communicates the personnel competencies, roles and responsibilities for the standard process.
- Identifies the personnel performance criteria for the standard process.
- Identifies the tailoring guidelines for the standard process.

03_00 Plan [PA 3.1: c, d]
- Identifies approaches for defining, maintaining and supporting a standard process, including infrastructure, work environment, training, internal audit, reporting and management review.

04_00 Procedure [PA 3.1: b, c, d, e]
- Provides evidence of organizational commitment to maintain a standard process to support the deployment of the standard process definition.

05_00 Record [PA 3.1: d]
- Is used to support and maintain the standard process assets.

8-00 Specification [PA 3.1: a]
- Provides reference for the standards used by the standard process and identification about how they are used.

PA 3.2: Process Deployment attribute

The Process Deployment attribute is a measure of the extent to which the standard process is effectively deployed to achieve its process expected results.

NOTE 1: Competency results from a combination of knowledge, skills and personal attributes that are gained through education, training and experience.

As a result of full achievement of this attribute:

a) A standard process is deployed based upon an appropriately selected and/or tailored standard process definition.

b) Required roles, responsibilities and authorities for performing the standard process are assigned and communicated.

c) Personnel performing the standard process are competent on the basis of appropriate education, training, and experience.

d) Required resources and information necessary for performing the standard process are made available, allocated and used.

e) Required infrastructure and work environment for performing the standard process are made available, managed and maintained.

f) Appropriate data are collected and 91analyzed as a basis for understanding the 91behavior91 of, and to demonstrate the suitability and effectiveness of the process, and to evaluate where continuous improvement of the process can be made.

Generic practices for PA 3.2

GP 3.2.1 Deploy a standard process that satisfies the context-specific requirements from the standard process definition [PA 3.2 : a] • The standard process is appropriately selected and/or tailored from the standard process definition. • Conformance of deployed process with standard process requirements is verified.
GP 3.2.2 Assign and communicate roles, responsibilities and authorities for performing the standard process [PA 3.2 : b] • The roles for performing the standard process are assigned and communicated. • The responsibilities and authorities for performing the standard process are assigned and communicated.
GP 3.2.3 Ensure necessary competencies for performing the standard process [PA 3.2 : c] • Appropriate competencies for assigned personnel are identified. • Suitable training is available for those deploying the standard process.
GP 3.2.4 Provide resources and information to support the performance of the standard process [PA 3.2 : d] • Required human resources are made available, allocated and used. • Required information to perform the process is made available, allocated and used.
GP 3.2.5 Provide adequate process infrastructure to support the performance of the standard process [PA 3.2 : e] • Required infrastructure and work environment is available. • Organizational support to effectively manage and maintain the infrastructure and work environment is available. • Infrastructure and work environment is used and maintained.
GP 3.2.6 Collect and 91analyze data about the performance of the process to demonstrate its suitability and effectiveness [PA 3.2 : f] • Data required to understand the behavior, suitability and effectiveness of the standard process are identified. • Data are collected and 91analyzed to understand the behavior, suitability and

effectiveness of the standard process. • Results of the analysis are used to identify where continual improvement of the standard process can be made.
GP 3.2.7 [ITIL 2011: Service Reporting] Produce and publish service management reports [PA 3.2 : f] • Collate data. • Translate data (into meaningful business views). • Produce service management reports according to service reporting policies and rules. • Communicate service management reports to stakeholders.

Generic work products for PA 3.2

02_00 Description [PA 3.2: a]
- Describes the deployed process for use by the project.
- Describes the verification activities needed to ensure the conformance of the project's deployed process with the organization's standard process.
- Represents the interactions of the project's deployed process with other processes.

03_00 Plan [PA 3.2: a, b, f]
- Expresses the strategy for the organizational support, allocation and use of the process infrastructure.
- Describes the project's resources and the elements of the infrastructure needed to deploy the standard process.
- Expresses the strategy to satisfy the project's training needs.
- Identifies process improvement proposal(s) based on analysis of suitability and effectiveness.

05_00 Record [PA 3.2: a, b, c, d, e, f]
- Provides evidence that the project's deployed process performance data were collected.
- Provides evidence that the project personnel possess the required authorities, skills, experience and knowledge.
- Provides evidence that project personnel have received the required training to satisfy the needs of the project.
- Provides evidence that project infrastructure and working environment are made available and maintained for performing the standard process.
- Records the status of required corrective actions.
- Captures the project's work breakdown structure needed to define the tasks and their dependencies.
- Provides evidence that information is made available for performing the standard process.

06_00 Report [PA3.2: f]
- Provides results of the analysis, recommended corrective action, feedback to the process owner and to the organization's standard process.
- Identifies improvement opportunities of the standard process.
- Provides evidence on the suitability and effectiveness of the standard process.

V.5 LEVEL 4: PREDICTABLE PROCESS

The established process now operates within defined limits to achieve its process expected results.

The following attributes of the process demonstrate the achievement of this level:

PA 4.1: Process Measurement attribute

The Process Measurement attribute is a measure of the extent to which measurement results are used to ensure that performance of the process supports the achievement of relevant process performance objectives in support of defined business goals.

NOTE 1: Information needs may typically reflect management, technical, project, process or product needs.

NOTE 2: Measures may be either process measures or product measures or both.

As a result of full achievement of this attribute:

a) Process information needs in support of relevant business goals are established.

b) Process measurement objectives are derived from identified process information needs.

c) Quantitative objectives for process performance in support of relevant business goals are established.

d) Measures and frequency of measurement are identified and defined in line with process measurement objectives and quantitative objectives for process performance.

e) Results of measurement are collected, 93analyzed and reported in order to monitor the extent to which the quantitative objectives for process performance are met.

f) Measurement results are used to characterize process performance.

Generic practices for PA 4.1

GP 4.1.1 Identify process information needs, in relation with business goals [PA 4.1 : a] • Business goals relevant to establishing quantitative process measurement objectives for the process are identified. • Process stakeholders are identified and their information needs are defined. • Information needs support the relevant business goals.
GP 4.1.2 Derive process measurement objectives from process information needs [PA 4.1 : b] • Process measurement objectives to satisfy standard process information needs are defined.
GP 4.1.3 Establish quantitative objectives for the performance of the standard process, according to the alignment of the process with the business goals [PA 4.1 : c] • Process performance objectives are defined to explicitly reflect the business goals. • Process performance objectives are verified with organizational management and process owner(s) to be realistic and useful.
GP 4.1.4 Identify product and process measures that support the achievement of the quantitative objectives for process performance [PA 4.1 : d] • Detailed measures are defined to support monitoring, analysis and verification needs of process and product goals. • Measures to satisfy process measurement and performance objectives are defined. • Frequency of data collection is defined. • Algorithms and methods to create derived measurement results from base measures are

defined, as appropriate. • Verification mechanism for base and derived measures is defined.
GP 4.1.5 Collect product and process measurement results through performing the standard process [PA 4.1 : e] • Data collection mechanism is created for all identified measures. • Required data are collected in an effective and reliable manner. • Measurement results are created from the collected data within defined frequency. • Analysis of measurement results is performed within defined frequency. • Measurement results are reported to those responsible for monitoring the extent to which qualitative objectives are met.
GP 4.1.6 Use the results of the defined measurement to monitor and verify the achievement of the process performance objectives [PA 4.1 : f] • Statistical or similar techniques are used to quantitatively understand process performance and capability within defined control limits. • Trends of process behavior are identified.

Generic work products for PA 4.1
02_00 Description [PA 4.1: a, d]
- Defines information needs for the process.
- Specifies candidate measures.

03_00 Plan [PA 4.1: b, c]
- Defines quantitative objectives for process performance.
- Specifies measures for the process.
- Defines tasks and schedules to collect and 94analyze data.
- Allocates responsibilities and resources for measurement.

05_00 Record [PA 4.1: e]
- Defines data to be collected as specified in plans and measures.

06_00 Report [PA 4.1: e, f]
- Provides results of process data analysis to identify process performance parameters.
- Monitors process performance based on results of measurement.

8-00 Specified [PA 4.1: a, b, d]
- Describes information needs and performance objectives.
- Provides a basis for 94analyzing94 process performance.
- Defines explicit criteria for data validation.
- Defines frequency of data collection.

PA 4.2: Process Control attribute

The Process Control attribute is a measure of the extent to which the process is quantitatively managed to produce a process that is stable, capable, and predictable within defined limits.

As a result of full achievement of this attribute:

a) Suitable analysis and control techniques where applicable, are determined and applied.

b) Control limits of variation are established for normal process performance.

c) Measurement data are 95analyzed for special causes of variation.

d) Corrective actions are taken to address special causes of variation.

e) Control limits are re-established (as necessary) following corrective action.

Generic practices for PA 4.2

GP 4.2.1 Determine analysis and control techniques, appropriate to control the process performance [PA 4.2 : a] • Process control analysis techniques are defined. • Selected techniques are validated against process control objectives.
GP 4.2.2 Define parameters suitable to control the process performance [PA 4.2 : b] • Standard process definition is modified to include selection of parameters for process control. • Control limits for selected base and derived measurement results are defined.
GP 4.2.3 Analyze process and product measurement results to identify variations in process performance [PA 4.2 : c] • Measures are used to analyze process performance. • All situations are recorded when defined control limits are exceeded. • Each out-of-control case is 95analyzed to identify potential cause(s) of variation. • Assignable causes of variation in performance are determined. • Results are provided to those responsible for taking action.
GP 4.2.4 Identify and implement corrective actions to address assignable causes [PA 4.2 : d] • Corrective actions are determined to address each assignable cause. • Corrective actions are implemented to address assignable causes of variation. • Corrective action results are monitored. • Corrective actions are evaluated to determine their effectiveness.
GP 4.2.5 Re-establish control limits following corrective action [PA 4.2 : e] • Process control limits are re-calculated (as necessary) to reflect process changes and corrective actions.

Generic work products for PA 4.2

02_00 Description [PA 4.2: b, e]
- Defines parameters for process control.
- Defines and maintains control limits for selected base and derived measurement results.

03_00 Plan [PA 4.2: a]
- Defines analysis methods and techniques at detailed level.

05_00 Record [PA 4.2: a, b, c, d, e]
- Provides measurement data to identify special causes of variation.
- Provides information on defects and problems.
- Records the changes.
- Documents corrective actions to be implemented.

- Monitors the status of corrective actions.
- Collects the data and provides the basis for analysis, corrective actions and results reporting.

06_00 Report [PA 4.2: a, c, d, e]
- Provides 96analyzed measurement results of process performance.
- Identifies corrective actions to address assignable causes of variation.
- Ensures that selected techniques are effective and measures are validated.

V.6 LEVEL 5: OPTIMIZING PROCESS

The predictable process is continuously improved to meet relevant current and projected business goals.

The following attributes of the process demonstrate the achievement of this level:

PA 5.1: Process Innovation attribute

The Process Innovation attribute is a measure of the extent to which changes to the process are identified from analysis of common causes of variation in performance, and from investigations of innovative approaches to the definition and deployment of the process.

As a result of full achievement of this attribute

a) Process improvement objectives for the process are defined that support the relevant business goals.

b) Appropriate data are 96analyzed to identify common causes of variations in process performance.

c) Appropriate data are 96analyzed to identify opportunities for best practice and innovation.

d) Improvement opportunities derived from new technologies and process concepts are identified.

e) An implementation strategy is established to achieve the process improvement objectives.

Generic practices for PA 5.1

GP 5.1.1 Define the process improvement objectives for the process that support the relevant business goals [PA 5.1 : a] • Directions to process innovation are set. • New business visions and goals are 96analyzed to give guidance for new process objectives and potential areas of process change. • Quantitative and qualitative process improvement objectives are defined and documented.
GP 5.1.2 Analyze measurement data of the process to identify real and potential variations in the process performance [PA 5.1 : b] • Measurement data are 96analyzed and made available. • Causes of variation in process performance are identified and classified. • Common causes of variation are 96analyzed to get quantitative understanding of their impact.
GP 5.1.3 Identify improvement opportunities of the process based on innovation and best

practices [PA 5.1 : c] • Industry best practices are identified and evaluated. • Feedback on opportunities for improvement is actively sought. • Improvement opportunities are identified.
GP 5.1.4 Derive improvement opportunities of the process from new technologies and process concepts [PA 5.1 : d] • Impact of new technologies on process performance is identified and evaluated. • Impact of new process concepts are identified and evaluated. • Improvement opportunities are identified. • Emergent risks are considered in identifying improvement opportunities.
GP 5.1.5 Define an implementation strategy based on long-term improvement vision and objectives [PA 5.1 : e] • Commitment to improvement is demonstrated by organizational management and process owner(s). • Proposed process changes are evaluated and piloted to determine their benefits and expected impact on defined business objectives. • Changes are classified and prioritized based on their impact on defined improvement objectives. • Measures that validate the results of process changes are defined to determine expected effectiveness of the process change. • Implementation of the approved change(s) is planned as an integrated program or project. • Implementation plan and impact on business goals are discussed and reviewed by organizational management.

Generic work products for PA 5.1

02_00 Description [PA 5.1: c, d]
- Identifies potential areas of innovation and new technology.
- Incorporates approaches to root cause analysis.

03_00 Plan [PA 5.1: a, e]
- Defines improvement objectives for the process
- Allocates resources for improvement activities.
- Schedules activities for root cause analysis.
- Defines an approach to implementing selected improvements.
- Identifies scope of pilot improvement activities.

04_00 Procedure
- Establishes expectations for conduct and evaluation of pilot improvements.

05_00 Record [PA 5.1: b, c, d]
- Provides analytical data to identify common causes of variation.
- Provides analytical data to identify opportunities for best practice and innovation.
- Records data relevant to root cause analysis.
- Identifies potential improvement opportunities.
- Records information on new technology and techniques.

06_00 Report [PA 5.1: b, d]

- Identifies potential innovations and process changes.
- Provides information for an analysis to identify common causes of variation in performance.
- Identifies common causes of defects and appropriate corrective actions.

PA 5.2: Process Optimization attribute

The Process Optimization attribute is a measure of the extent to which changes to the definition, management and performance of the process result in effective impact that achieves the relevant process improvement objectives.

As a result of full achievement of this attribute:

a) The impact of all proposed changes is assessed against the objectives of the defined standard process.

b) The implementation of all agreed changes is managed to ensure that any disruption to the process performance is understood and acted upon.

c) The effectiveness of process change on the basis of actual performance is evaluated against the defined product requirements and process objectives to determine whether results are due to common or special causes.

Generic practices for PA 5.2

GP 5.2.1 Assess the impact of each proposed change against the objectives of the defined standard process [PA 5.2 : a]

- Objective priorities for process improvement are established.
- Specified changes are assessed against product quality and process performance requirements and goals.
- Impact of changes to other defined standard processes is considered.

GP 5.2.2 Manage the implementation of agreed changes to selected areas of the defined standard process according to the implementation strategy [PA 5.2 : b]

- A mechanism is established for incorporating accepted changes into the defined standard process (es) effectively and completely.
- The factors that impact the effectiveness and full deployment of the process change are identified and managed, such as:
  - Economic factors (productivity, profit, growth, efficiency, quality, competition, resources, and capacity);
  - Human factors (job satisfaction, motivation, morale, conflict / cohesion, goal consensus, participation, training, span of control);
  - Management factors (skills, commitment, leadership, knowledge, ability, organizational culture and risks);
  - Technology factors (sophistication of system, technical expertise, development methodology, need of new technologies).
- Training is provided to users of the process.
- Process changes are effectively communicated to all affected parties.
- Records of the change implementation are maintained.

GP 5.2.3 Evaluate the effectiveness of process change on the basis of actual performance against process performance and capability objectives and business goals [PA 5.2 : c]

- Performance and capability of the changed process are measured and compared with

historical data.
- A mechanism is available for documenting and reporting analysis results to management and owners of standard process.
- Measures are 99analyzed to determine whether results are due to common or special causes.
- Other feedback is recorded, such as opportunities for further improvement of the standard process.

Generic work products for PA 5.2

02_00 Description [PA 5.2: b]
- Documents changes as a result of process improvement actions.

03_00 Plan [PA 5.2: a, b]
- Defines activities and schedule for pilot change implementation.
- Allocates resources for pilot implementation.
- Assigns responsibility for pilot implementation.
- Defines activities and schedule for organizational implementation of process change.
- Allocates resources and responsibilities for organizational implementation.
- Specifies scope of pilot implementation of proposed change.

05_00 Record [PA 5.2: b]
- Contains records of all completed and in-progress pilot implementations.
- Records history of and justification for changes.

06_00 Report [PA 5.2: a, b]
- Describes results of pilot implementation of process change.
- Evaluates effectiveness of process compared to process improvement objectives.
- Provides details on implementation of organizational changes.
- Describes proposed changes to standard process.

VI Work Product Characteristics

Work product characteristics listed in this section can be used when reviewing potential inputs and outputs of process implementation. The characteristics are provided as guidance for the attributes to look for, in a particular sample work product, to provide objective evidence supporting the assessment of a particular process. A documented process and assessor judgment is needed to ensure that the process context (application domain, business purpose, size of the organization, etc.) is considered when using this information. Work products and their characteristics should be considered as a starting point for considering whether, given the context, they are contributing to the intended purpose of the process, not as a check-list of what every organization must have.

Work product identifier	An identifier number for the work product which is used to reference the work product.
Work product name	Provides an example of a typical name associated with the work product characteristics. This name is provided as an identifier of the type of work product the practice or process might produce. Organizations may call these work products by different names. The name of the work product in the organization is not significant. Similarly, organizations may have several equivalent work products which contain the characteristics defined in one work product type. The formats for the work products can vary. It is up to the assessor and the organizational unit coordinator to map the actual work products produced in their organization to the examples given here.
Work product description	Provide an example of a typical description associated with the work product.
Work product characteristics	Provides examples of the potential characteristics associated with the work product types. The assessor may look for these in the samples provided by the organizational unit.

VI.1 GENERIC WORK PRODUCTS

The Generic Work Product Indicators are sets of characteristics that would be expected to be evident in work products of a generic type as a result of achievement of an attribute. The generic work products form the class structure of the work products defined as process performance indicators. These work product types are basic input types to process owners of all types of processes.

ID	Name	Description	Characteristics
01_00	Object	An entity created to serve a purpose, or created in the course of serving that purpose. Its existence is observable and rationalized by its material or behavioral characteristics. It may exist as a complete, partial or exemplifying realization of a product, be a subordinate part of a product, be a by-product or be a part of an enabling system.	- identity, name of object - purpose, value that caused its creation - ownership and responsibility for object - status, state and classification of object - distinguishing observable qualities and properties - functional and behavioral characteristics - dimensional and parametric characteristics - relationship with and dependencies on surroundings - observable interactions or effects on other objects - interfaces, connections to surroundings - location, position in surroundings - safety, security, privacy and environmental regulations
02_00	Description	An account or representation of a proposed or actual object or concept. It may be a textual, pictorial, graphical or mathematical representation. It may be in a standardized form for human or machine interpretation. It may be a static or dynamic model or a simulation representing reality. It may establish order, structure, grouping or classification.	- object, subject or class represented - purpose and applicability of description - concerned parties, viewpoints, views - range of use, and validity of description - accuracy, detail and abstraction level - model dimensions, degrees of freedom - description language, notation, nomenclature - description standards, formats and styles - representations of function, attributes, properties - descriptions of architecture, arrangement, interfaces - depiction of composition or form - definition of classification, category, ranking, type
03_00	Plan	A proposed scheme or systematic course of action for achieving a declared purpose. It predicts how to successfully accomplish objectives in terms of specific actions, undertaken at defined times and employing defined resources. It may apply to technical, project or enterprise actions. At a high level of abstraction it may be a policy or, with reference to assets	- definition of undertaking, purpose and objectives of plan - strategy and policy guiding plan - plan owner, stakeholders, responsible parties and their authorities - plan status, version, reviews and modifications - proposed events, actions and tasks - predicted timescales, durations, dates of actions

ID	Name	Description	Characteristics
		and their disposition, a strategy.	- assumed dependencies, conditions, constraints, risks - allocated resources, labor, facilities, materials - planned budget, cost, expenditures - defined milestones, results and progress targets - decision points and authorization gates - options and contingency actions
04_00	Procedure	A declared way of formally conducting a customary course of action. It defines an established and approved way or mode of conducting business in an organization. It may detail permissible or recommended method in order to achieve technical or managerial goals or outcomes.	- purpose, outcomes and results of performing actions - issuing authority and controls - roles, responsibilities and duties - actors, their competence and proficiency - dependency on requirements, standards and directives - achievement, goals, completion criteria - definition of transformations and their products - work definitions, instructions to act - progression and dependencies of action - guiding method and practices - enabling tools and infrastructure
05_00	Record	A permanent, readable form of data, information or knowledge. Accessible and maintained evidence of the existence or occurrence of facts, events or transactions. It may take the form of a journal chronicle, register or archive. It may contain the information to confirm achievement of performance, fiscal or legal conditions or obligations.	- record identity or title - content, description and reason for record - ownership, origin and authorship - practices, agreements, commitments and regulations applying to record - authorities and condition of storage, retrieval, replication and deletion - medium and format of record - location, conditions and periods of storage - applicable information privacy, security and integrity - declaration of status, configuration and baseline information - information on audit, validity and history
06_00	Report	An account prepared for interested parties in order to communicate status, results or outcomes. It is a result of information gathering, observation, investigation or assessments, and it may impart situation, affects, progress or achievement. It serves to inform so that decisions or subsequent actions can be taken.	- purpose or benefit of report - source, author and authority to report - interested parties, recipients, distribution - knowledge, understanding communicated - information, data, facts and evidence contained - analysis, inspections and audits employed - timing, validity, condition of information use - dependence on circumstances, constraints and assumptions - reported status, results, achievements,

ID	Name	Description	Characteristics
			conformance, compliance or outcomes - identified faults, failings or errors - inferred patterns, trends or predications - conclusions, recommendations, rationale
07_00	Request	A communication that initiates a defined course of action or change in order to fulfil a need. This may originate or control on-going action based on an agreed plan or procedure. It may result in a proposal or plan of action. It may take the form of a solicitation, requisition, instruction or demand for a resource, product, service or an approval to act.	- objective, purpose or outcome of request - expression of a demand, need or desire - communication of enquiry, solicitation or an order to provide - initiation of supply, provision or support - definition of action, change or exchange - identification of required products, services, capability or resources - authorization of tasking or commitments - specified terms, conditions to act, agreement conveyed - required availability of requested provision communicated
08_00	Specification	Criteria or conditions that place limits or restrictions on actions, attributes or qualities. It establishes measures or qualities for determining acceptability, conformance or merit. It may be required as part of an agreement or contract.	- definition of needs, wishes and - circumstances - statement of requirements - definition of constraints and conditions - standards and regulations invoked - dimensions of achievement and outcome - criteria of conformance, correctness and compliance - definition of measures, indicators, - limitations, values, and thresholds - statements of action and conduct - required functions, performance, - behavior or service levels - definitions of interfaces, interaction, - location and connection - conditions of acceptance, permissible - exceptions and deviations - conditions of change and variation

VI.2 GENERIC AND SPECIFIC WORK PRODUCTS

Specific work product types are typically created by process owners and applied by process deployers in order to satisfy an expected result of a particular process purpose.

NOTE: Generic work product types are included in the list for completeness.

ID	Name	Description	Characteristics
01_00	Object	An entity created to serve a purpose, or created in the course of serving that purpose. Its existence is observable and rationalized by its material or behavioral characteristics. It may exist as a complete, partial or exemplifying realization of a product, be a subordinate part of a product, be a by-product or be a part of an enabling system.	See section VI.1
01_01	Event management tool	A tool where Event Records are recorded.	These events can be recorded either manually or automatically detected. The automatic detection is related to the monitoring.
01_02	Incident management tool	Tool to record and follow up incidents.	It contains information about: - incident and problem history - incident categories - actions taken to resolve incidents - diagnostic scripts for operators
01_03	Service portfolio	The complete set of Services that are managed by a Service provider.	It includes three categories of services: - service pipeline - service catalogue - retired services
01_04	Information Security Management System (ISMS)	The framework of policy, processes, functions, standards, guidelines and tools that ensures an organization can achieve its information security management objectives.	It includes a set of tools, data and information that is used to support information security management.
01_05	Request fulfilment management tool	A tool that allows users to capture their own requests by themselves.	It could be a web application using a menu-type selection so that the users can select and input details of service requests from a predefined list.
01_06	Training	Formal classroom training is used for knowledge transfer.	It includes: - on the job training, when employees receive training whilst remaining in the workplace - off-the-job training, when employees are taken away from their place of work to be trained
01_07	Availability measures, targets and	The availability measurement mechanisms for all services and critical components, and their related availability targets.	The availability measures should be incorporated into SLAs, OLAs and underpinning contracts.

ID	Name	Description	Characteristics
	unacceptable levels		
01_08	Configuration Items (CI)	It is an asset, service component or other item that is under the control of Configuration Management. There can be many different types of CIs such as: - Service lifecycle CIs - Service CIs - Organization CIs - Internal CIs - External CIs - Interface CIs	Each CI includes: - unique identifier - CI type - name/description - version - location - supply date - license details - owner/custodian - status - supplier/source - related document masters - related software masters - historical data - relationship type - applicable SLA
01_09	Service assets and components	A service asset (or simply “asset”) is any resource or capability including anything that could contribute to the delivery of a service. Component is a general term that is used to mean one part of something more complex.	Types of assets: - management - organization - process - knowledge - people - information - applications - infrastructure - financial capital
01_10	Service capability and environment	The service with its modified capability and the new (modified) environment resulting of the new release	It includes: - SLA - other agreements and contracts - changed organization - competent and motivated people - established business and Service management processes - installed applications - converted databases - technology infrastructure - products and facilities
01_11	Release package	A set of configuration items that will be built, tested and deployed together as a single release. Each release package will usually include one or more release units.	If possible, they should be designed in such a way that they can be removed if they cause issues during testing.
01_12	Service Knowledge Management System (SKMS)	A set of tools and databases that are used to manage knowledge and information. It stores, manages, updates, and presents all information that an IT Service Provider needs to manage the full lifecycle of IT services	It includes the Configuration Management System. It requires: - data and information requirements - information architecture - data and Information management procedures

ID	Name	Description	Characteristics
01_13	Service measurement capabilities	All technical means used to measure relevant elements and activities related to the design, transition and operation of the IT services.	
02_00	Description	An account or representation of a proposed or actual object or concept. It may be a textual, pictorial, graphical or mathematical representation. It may be in a standardized form for human or machine interpretation. It may be a static or dynamic model or a simulation representing reality. It may establish order, structure, grouping or classification.	See section VI.1
02_01	Request model	Pre-defined models that can be applied to requests that occur frequently and that are handled in a consistent manner.	They typically include some form of pre-approval by Change Management.
02_02	Service catalogue	It is a key document containing valuable information on the complete set of services offered. It contains the details and the current status of every live service provided by the service provider or service being transitioned into the live environment, together with the interfaces and dependencies. The service catalogue includes information about deliverables, prices, contact points, ordering and request process.	The service catalogue is the only part of the service portfolio published to customers and is used to support the sale and delivery of IT services.
02_03	Service package	A detailed description of an IT service that is available to be delivered to customers.	It includes a Service Level Package and one or more core services and supporting services.
02_04	Catalogue of user roles	A catalogue of all the roles in the customer's organizations and which services support each role.	It should be compiled and maintained by Access Management in conjunction with Human Resources and will often be automated in the Directory Services tools.
02_05	Event categories	Groups of events that have something in common.	The three usual categories of events are: - informational - warning - exception
02_06	Incident model	A way of pre-defining the steps that should be taken for dealing with a particular type of incident in an agreed way.	The incident model includes: - the steps that should be taken to handle the incident - the chronological order these steps should be taken in, with any dependencies or co-processing defined - responsibilities; who should do what - timescales and thresholds for completion of the actions - escalation procedures; who should

ID	Name	Description	Characteristics
			be contacted and when - any necessary evidence-preservation activities (particularly for security- and capacity-related incidents)
02_07	Incident categories	Groups of incidents that have something in common.	
02_08	Capacity measures and thresholds	The capacity measurement mechanisms for all services and critical components, and their related capacity targets.	The capacity measures should be incorporated into SLAs, OLAs and underpinning contracts.
02_09	Configuration baseline	It is the configuration of a service, product or infrastructure that has been formally reviewed and agreed on, that thereafter servers as the basis for further activities and that can be changed only through formal change procedures.	It contains the structure, contents and details of a configuration and represents a set of CIs that are related to each other.
02_10	Security controls documentation	It describes the security controls, together with details of the related operation and maintenance and their associated risks.	It includes information about the type of controls: - preventive - reductive - detective - repressive - corrective
02_11	Supplier evaluation criteria	Criteria used to evaluate the suppliers.	Criteria for evaluating and selecting suppliers are usually based on: - importance and impact - risk - costs
02_12	Service definition documentation	A database or structured document with information about all live IT services, including those available for deployment.	It includes information about deliverables, prices, contact points, ordering and request processes. It is the only part of the Service Portfolio published to customers.
02_13	Service Design Package (SDP)	Documentation defining all aspects of an IT service and its requirements through each stage of its lifecycle. A service design package is produced for each new IT service, major change, or IT service retirement.	Includes the service model and the Service Acceptance Criteria (SAC)
02_14	Asset-related documentation and information	The documentation and information related to the assets and their relationships.	For example: the manufacturer guide of a physical asset
02_15	Configuration model	It is THE model of the services, assets, and infrastructure that is used by all parts of ITSM.	It records the relationships between configuration items. Examples of types of relationships: - a CI is a part of another CI - a CI is connected to another CI - a CI uses another CI - a CI is installed on another CI

ID	Name	Description	Characteristics
02_16	Problem categories	Groups of problems that have something in common.	Usually, the problem categorization is broken down into between two and four sub-categories and is similar to the incident categorization.
02_17			
02_18	Service valuation	A measurement of the total cost of delivering an IT service, and the total value to the business of that IT service. It is used to help the business and the IT service provider agree on the value of the IT service.	Service valuation quantifies, in financial terms, the funding sought by the business and IT for service delivered, based on the agreed value of those services.
02_19	Service Provisioning Optimization (SPO)	Analyzing the finances and constraints of an IT service to decide if alternatives should be explored relating to how a service can be provisioned differently to make it more competitive in terms of cost or quality.	
02_20	Service-oriented financial information	Information about factors of demand and supply in order to model anticipated usage by the business, and provisioning requirements by IT.	It allows to identify funding requirements, variation and drivers of those variations, and to assist in the management of service demand.
02_21	Patterns of Business Activity (PBA) catalogue	A PBA is a workload profile of one or more business activities. PBAs are used to help the IT service provider understand and plan for different levels of business activity.	- interact with customers remotely (frequency) - interact with customer on-site (frequency) - archive or handle customer information - process sensitive information (privacy) - generate confidential information - provide technical support (frequency) - seek technical assistance - network bandwidth requirements - data storage requirements (volume) - tolerance for delay in service response - seasonal variations in activity - print documents and images - mailing of documents using third-party systems - process transactions with wireless mobile device - email using wireless device - access work systems during domestic and overseas travel
02_22	User Profiles (UP) catalogue	A user profile is a pattern of user demand for IT services.	Each user profile includes one or more patterns of business activity.
02_23	Service pricing policies	Policies, defined by the office of the CFO or financial controller, and determining how service pricing will work. The first policy	These can be summarized as: - cost recovery or break-even - recovery with an additional margin

ID	Name	Description	Characteristics
		decision is to decide whether or not to charge. Then, the second decision is what level of cost recovery needs to be achieved.	- cross-subsidization - notional charging
02_24	Differentiated offerings	Service packages defined with service portfolio management to meet the variations in Patterns of Business Activity (PBA). For example, a mobile telecommunications company will provide one type of service but they may gear the types of telephone, number of lines, data limits etc. towards different types of consumer. Although the service is essentially the same, each type of consumer will require a different level of warranty and utility.	
02_25	Market spaces description	The description of the opportunities that an IT service provider could exploit to meet the business needs of customers. Market spaces identify the possible IT services that an IT service provider may wish to consider delivering. A market space is defined by a set of business outcomes, which can be facilitated by a service. Where ever there is a need for a business outcome and the potential for a supplier to deliver a service capable of helping to achieve that business outcome, we have a market space.	
02_26	Change proposal	A document that includes a high level description of a potential service introduction or significant change, along with a corresponding business case and an expected implementation schedule. Change proposals are normally created by the service portfolio management process and are passed to change management for authorization. Once the change proposal has been authorized, service portfolio management will charter the service.	A change proposal includes: - description of the change at a business level - contact and details of the requester - impacted services - full business case - affected baseline/release - expected implementation dates - high-level risk assessment - back-out or remediation plan - impact on continuity, capacity, security… plans - change authority - change decisions (approval/reject) and rationale - authorization date and signature(s)
02_27	Change Models	A repeatable way of dealing with a particular category of change. A change model defines specific agreed steps that will be followed for a change of this category. Change models may be very complex with many steps that require	A change model includes: - steps that should be taken to handle the change, including handling unexpected events - the chronological order in which these steps should be taken, with any

ID	Name	Description	Characteristics
		authorization (e.g. major software release) or may be very simple with no requirement for authorization (e.g. password reset).	dependences or co-processing defined - responsibilities – who should do what (e.g. change approval and change evaluation) - timescales and thresholds for completion of the actions - escalation procedures – who should be contacted and when
02_28	Build models and plans	The models and plans used for assembling a number of Configuration Items to create part of an IT Service. The term Build is also used to refer to a Release that is authorized for distribution. For example Server Build or laptop Build.	
02_29	Customer portfolio	It is a database or a structured document used to record all customers of the IT service provider.	For each customer: - customer name - authorized customer representative - business relationship manager - customer's business description - key business outcomes - list of services provided (link to service portfolio) - historic and projected revenue - list of regular meetings and agendas - description of reports, audiences and actions - schedule of service performance reviews - overview of past performance, major issues and responses - outline of planned future services for this customer - schedule of agreement or contract reviews (with SLM)
02_30	Vision and mission statements	The vision statement articulates what it is the service provider aims to achieve (i.e. look at a desired state to be achieved at some time in the future). The mission statements articulate the basic purpose and values of the organization and its operation (i.e. how the organization will make its vision a reality).	
02_31	Cost model	A Framework which allows the service provider to determine the costs of providing services, understand the impact of proposed service changes, and ensure that they are allocated correctly.	A cost model defines: - how expenditure items will be recorded and tracked - how each item will be classified in accounting terms - how costs will be allocated to services and/or customers - how costs will be reported

ID	Name	Description	Characteristics

02_32	Service charter	A document that contains details of a new or changed service. New service introductions and significant service changes are documented in a charter and authorized by service portfolio management. Service charters are passed to the service design lifecycle stage where a new or modified service design package will be created. The term charter is also used to describe the act of authorizing the work required by each stage of the service lifecycle with respect to the new or changed service.	The minimum information that should be included in a service charter is:
			- overview:
			  - description of the service being developed or changed
			  - background providing the reasons for the work
			  - project scope and objectives
			  - any assumptions
			  - sponsorship
			  - glossary of technical and business terms if necessary
			- approach:
			  - project deliverables and quality requirements
			  - organizations and responsibilities
			  - resources allocated
			  - risks and constraints
			  - stages
			  - schedule
			  - project control
			- project authority:
			  - this identifies who is responsible for the project, who is funding it, and who will be able to sign off on the deliverables

02_33	Problem model	A repeatable way of dealing with a particular category of problem. This is very similar to the concepts of incident or request models.	The problem model includes: - the steps that should be taken to handle the problem - the chronological order these steps should be taken in, with any dependencies or co-processing defined - responsibilities; who should do what - timescales and thresholds for completion of the actions - escalation procedures; who should be contacted and when - any necessary evidence-preservation activities
03_00	Plan	A proposed scheme or systematic course of action for achieving a declared purpose. It predicts how to successfully accomplish objectives in terms of specific actions, undertaken at defined times and employing defined resources. It may apply to technical, project or enterprise actions. At a high level of abstraction it may be a policy or, with reference to assets and their disposition, a strategy.	See section VI.1
03_01	Service	An overall program or plan of prioritized	

ID	Name	Description	Characteristics
	Improvement Plan (SIP)	improvement actions, encompassing all services and all processes, together with associated impacts and risks. It should be used to manage the progress of agreed improvement actions. The target of a SIP could be the service provider's activities or those performed by one of its suppliers.	
03_02	Capacity plan	It is acted on by the IT service provider and senior management of the organization to plan the capacity of the IT infrastructure. It provides planning input to many other areas of IT and business. It contains information on the current usage of service and components, and plans for the development of IT capacity to meet the needs in the growth of both existing service and any agreed new services. The Capacity plan should be actively used as a basis for decision-making.	It includes: - management summary - business scenarios - scope and terms of reference - methods used - assumptions made - service summary - resource summary - options for service improvement - cost forecast - recommendations
03_03	Availability test schedule	Schedule for testing all availability and resilience mechanisms. The test schedule should also document the number of testers available for testing.	
03_04	Customer business plan	A business plan is a formal statement of a set of business goals, the reasons they are believed attainable, and the plan for reaching those goals. It may also contain background information about the organization or team attempting to reach those goals.	
03_05	IT service continuity test schedule	Schedule for testing all the resilience and recovery mechanisms. The test schedule should also document the number of testers available for testing.	
03_06	IT service continuity strategy	The strategy for IT service continuity built on the results of the Business Impact Analysis and the Risk Analysis and that establishes an optimum balance of risk reduction and recovery or continuity options.	It includes consideration of the relative service recovery priorities and the changes in relative service priority for the time of day, day of the week, and monthly and annual variations.
03_07	IT service continuity plans	A set of plans defining the steps required to recover one or more IT services. Each plan will also identify the triggers for invocation, people to be involved, communications, etc. The IT service continuity plans should be part of a business continuity plan.	IT service continuity plan typically includes the following information: - details of the combined component RTOs and RPOs and inclusion of the IT Requirements Gap Analysis - IT architecture - roles and responsibilities - invocation procedures - damage assessment - escalation and process flow charts

ID	Name	Description	Characteristics
			- procedures specifying how to recover each component of the IT system - test plans specifying how to test that each component has been recovered successfully - incident logs - contact details - fail-back procedures - IT test plan
03_08	Information security policies	They define the organization's attitude and governance on security matters. They should be organization-wide documents, not just applicable to the IT service provider.	The set of security policies includes: - an overall information security policy - use and misuse of IT assets policy - an access control policy - a password control policy - an e-mail policy - an internet policy - an anti-virus policy - an information classification policy - a document classification policy - a remote access policy - a policy with regard to supplier access of IT service, information and components - an asset disposal policy
03_09	IT service strategic policies	A set of architectural documents and principles supporting the achievement of the IT service strategy. They set the service provider's overarching direction and drive the way you do business.	
03_10	Transition plan	It should include the milestone activities to acquire the release components, package the release, build, test, deploy, evaluate and proactively improve the service through early life support. It will also include the activities to build and maintain the services and IT structure, systems and environments, and the measurement system to support the transition activities.	The tasks included in a transition plan are the following: - work environment and infrastructure for the Service Transition - schedule of milestones, handover and delivery dates - activities and tasks to be performed - staffing, resource requirements, budgets and time-scales at each stage - issues and risks to be managed - lead times and contingency
03_11	Release and deployment plans	Plans for creating and deploying the release. They should be authorized through the Change Management process.	They define: - scope and content of the release - risk assessment and risk profile for the release - organizations and stakeholders affected by the release - stakeholders that approved the change request for the release and/or the deployment - team responsible for the release

ID	Name	Description	Characteristics
			- approach to working with stakeholders and deployment groups to determine the: - delivery and deployment strategy - resources for the release and deployment - amount of change that can be absorbed - pass/fail criteria - building and test plans - planning of pilots - planning of release package and build activities - deployment planning - logistical and delivery planning - financial and commercial planning
03_12	Test plan	A test plan can be defined as a document describing the scope, approach, resources, and schedule of intended testing activities. It identifies test items, the features to be tested, the testing tasks, who will do each task, and any risks requiring contingency planning.	It includes: - resourcing - hardware, networking, staff numbers and skills and capacity - business/customer resources required - supporting services including access, security, catering, and communications - schedule of milestones, handover and delivery dates - agreed time for consideration of reports and other deliverables - point and time of delivery and acceptance - financial requirements
03_13	IT service continuity test scenarios	A detailed description of the tasks that will be undertaken whilst conducting IT service continuity test. The test scenarios detail the scope of the test and define the success criteria.	
03_14	Remediation plan	Actions taken to recover after a failed change or release. Remediation may include back-out, invocation of service continuity plans, or other actions designed to enable the business process to continue. A back-out plan aims at restoring the organization to its initial situation, often through the reloading of a baselined set of CIs (i.e. backups). If a change is not reversible, then a work-around should be found and documented.	
03_15	Change Schedule (CS)	Contains details of all the changes authorized for implementation and their proposed implementation dates, as well as	

ID	Name	Description	Characteristics
		the estimated dates of longer-term changes. A change schedule is sometimes called a forward schedule of change, even though it also contains information about changes that have already been implemented.	
03_16	Projected Service Outage (PSO)	Contains details of changes to agreed SLAs and service availability because of the current planned change schedule in addition to planned down time from other causes such as planned maintenance and data backup. The down time has to be communicated by the Service Desk to the users.	Agreed with - Service Level Management - Service Desk - Availability Management
03_17	Supplier and contracts policy	It covers the sourcing policy of the service provider and the types of suppliers and contracts used. It is produced by the service strategy processes.	
03_18	Availability plan	A plan to ensure that existing and future availability requirements for IT Services can be provided cost effectively.	It should have aims, objectives and deliverables and should consider the wider issues of people, processes, tools and techniques as well as having a technology focus. It should cover a period of one to two years, with a more detailed view and information for the first six months.
03_19	Transition strategy	Defines the overall approach to organizing Service Transition and allocating resources.	Aspects to consider: - purpose, goals and objectives of Service Transition - context (service customer, contract portfolios) - scope (inclusions and exclusions) - applicable standards, agreements, legal, regulatory, and contractual requirements - organization and stakeholders involved in transition - framework for Service Transition (policies, processes, practices, roles and responsibilities, resource planning…) - criteria (entry and exit criteria for each release stage, criteria for stopping/re-starting transition activities, success and failure criteria) - identification of requirements and content of the new or changed service - people - deliverables from transition activities - schedule of milestones

ID	Name	Description	Characteristics
			- financial requirements
03_20	Integrated set of service transition plans	Set of plans whose goal is to deploy a release across distributed environments and locations into production successfully.	These plans should be maintained and linked to lower-level plans such as release, build, and test plans. These plans should be integrated with the change schedule, release and deployment plants.
03_21	Overall organization's knowledge strategy	An organizational approach of knowledge management that exists in the organization beyond the ITSM.	
03_22	IT service strategic plan	Long-term planning to achieve the overall vision.	It includes: - the long-term goals of the service organization - service required to meet those goals - capacities and resources required for the organization to achieve those services - how will service organization get there?
03_23	Communication plan	It answers the questions: How should information be delivered? What actions could be taken before the communication that will increase the understanding and the acceptance of the information give? How and when will groups be involved during the cascading of the communication information to other levels in the organization? Are the communications successful in overcoming the particular communications barriers on this Service Transition? Is there consideration to address the communication needs of other stakeholders in the project?	Contents of the communication plan: - ownership - style - delivery mechanisms - competences – skills, training - other related on-going activities - audiences: internal and external - involve staff at all levels - timescales - key success factors - monitor audience feedback - ensure the right message meets the right people at the right time
03_24	Supplier (or partner) IT service continuity plans	A set of plans defining the steps required by the supplier to recover one or more IT services. Each plan will also identify the triggers for invocation, people to be involved, communications, etc.	
03_25	Business continuity strategy and plans	Business continuity strategy: the strategy for business continuity based on the results of the Business Impact Analysis and the risk analysis. It should establish an optimum balance of risk reduction and recovery or continuity options. Business continuity plans: a set of plans defining the steps required to restore business processes following a disruption.	

ID	Name	Description	Characteristics
		The plan also identifies the triggers for invocation, people to be involved, communications etc. IT service continuity plans form a significant part of business continuity plans.	
03_26	Business continuity test schedule	Schedule for testing all business continuity mechanisms.	
03_27	Policy and strategies for change and release	Defines the overall approach to organize the management of service changes and releases and to allocate the resources needed.	Topics to be included: - zero tolerance for unauthorized changes - alignment of Change Management process with business and project management processes - prioritization of change - establishing accountability and responsibilities for changes - segregation of duty controls - single focal point for changes - granting access to the production environment only to people authorized to perform changes - integration with other ITSM processes in order to establish traceability of change, detect unauthorized change and identify change related incidents - change windows - performance and risk evaluation of all changes that impact service capability - performance measures for the process
03_28	Schedule of customer activity in the service lifecycle	The schedule defines where the customer has to be involved during the development of new service or the maintenance of existing services. For example, when the customer has to perform some activities during the service validation and testing process.	
03_29	IT service tactical plan	Tactical plans that identify how the service strategy (and related strategic plans) will be executed.	
03_30	Demand management policies for over-utilized resources	Policies for how to deal with situations where service or resources utilization is higher (or lower) than anticipated by the service provider.	
03_31	Budget for IT services	The budget represents the optimal levels of expenditure to achieve a specific set of	

ID	Name	Description	Characteristics
		business outcomes. It includes cost projections and workload forecasting for the next financial year, against which actual costs and revenues will be tracked, compared and adjusted.	
03_32	Service quality plan	A document containing all management information on the measurement of service quality (upon the basis of Performance Indicators) and the contribution by internal and external suppliers for the provision of these services.	For each service: - agreed service levels - performance indicators - measurement procedures - relationships to other SLAs - required internal services - required externally procured services
04_00	Procedure	A declared way of formally conducting a customary course of action. It defines an established and approved way or mode of conducting business in an organization. It may detail permissible or recommended method in order to achieve technical or managerial goals or outcomes.	See section VI.1
04_01	Standard fulfilment procedure	Procedure for each of the services being requested.	It includes all procurement policies and the ability to generate purchase orders and work orders.
04_02	Event filtering rules	Rules that allow to decide whether an event is communicated to a management tool or to ignore it.	Rules might not apply to certain CIs.

04_03	Service Design policies and procedures	A set of architectural documents and principles for the design of service solutions and the production of SDPs.	The design coordination policies should include:
			- adherence to corporate standards and conventions
			- explicit attention to governance and regulatory compliance in all design activities
			- standards for elements of a comprehensive design for new or changed services such as:
			  - document templates
			  - documentation plans
			  - training, communication and marketing plans
			  - measurement and metrics plans
			  - testing plans
			  - deployment plans
			- criteria for resolving conflicting demands for service design resources
			- standard cost models.

05_00	Record	A permanent, readable form of data, information or knowledge. Accessible and maintained evidence of the existence or occurrence of facts, events or transactions. It may take the form of a journal chronicle,	See section VI.1

ID	Name	Description	Characteristics
		register or archive. It may contain the information to confirm achievement of performance, fiscal or legal conditions or obligations.	
05_01	Problem record	A record containing the details of a problem. Each problem record documents the lifecycle of a single problem.	Typically, it includes details such as: - user details - service details - equipment details - date/time initially logged - priority and categorization details - incident description - details of all diagnostic or attempted recovery actions taken
05_02	Problem knowledge base	Database containing all the problems and their resolution.	Part of the Service Knowledge Management System (SKMS)
05_03	Known Error Database (KEDB)	It stores details of previous incident and problems and their resolutions so that any recurrences can be more quickly diagnosed and fixed.	It is able to categorize and quickly retrieve previous known errors, using pattern matching and keyword searching against the detected effects. Management of the KEDB lays on Problem Management but the Service Desk uses it to help speed incident handling.
05_04	Incident knowledge base	A database containing the knowledge gathered from incidents (i.e. how they were solved and their impacts).	Part of the Service Knowledge Management System (SKMS)
05_05	Configuration Management System (CMS)	The CMS holds all the information for CIs within the designated scope. It maintains the relationships between all service components and any related incidents, problems, known errors, change and release documentation and may also contain corporate data about employees, suppliers, locations and business units, customers and users.	CMS is composed of layers: - data layer: raw data, CMDBs, incidents records, problem records, change records, release records… - information integration layer: data analysis, reconciliation, mining transformation… - knowledge processing layer - presentation layer
05_06	Event record	The record resulting of logging the event. It can be logged in the event management tool or it can simply be left as an entry in the system log of the device or application generating the event.	There is no standard event record. The exact contents of the record depend on the tools used and what is monitored. However it should include at least the following information: - device - component - type of failure - date/time - parameters in exception - value
05_07	Incident record	It contains the details of an incident. Each incident record documents the lifecycle of a single incident.	It includes the following data: - unique reference number - incident classification

ID	Name	Description	Characteristics
			- date and time of recording and any subsequent activities - name and identity of the person recording and updating the incident record - name/organization/contact details of affected user(s) - descriptions of incident symptoms - details of any actions taken to try to diagnose, resolve or re-create the incident - incident category, impact, urgency and priority - relationship with other incidents, problems, changes or known errors - closure details, including time, category, action taken and identity of person closing the record
05_08	Service notification	It informs relevant parties that the release package is available for installation and use.	
05_09	Capacity Management Information System (CMIS)	It holds the information needed by all sub-processes within Capacity Management. For example, the data monitored and collected on components and services utilization is used to determine what infrastructure components or upgrades to components are needed and when.	
05_10	Availability Management Information System (AMIS)	A virtual repository of all availability management data, usually stored in multiple physical locations.	It includes the following information: - IT availability metrics - measurements - targets and documents - including the availability plan - availability measurements - achievement sports - service Failure Analysis (SFA)
05_11	Change documents and records	A record containing the details of a change. Each change record documents the lifecycle of a single change. A change record is created for every Request for Change (RFC) that is received, even those that are subsequently rejected. Change records should reference the configuration items that are affected by the change. Change records may be stored in the CMS or elsewhere in the SKMS.	A change record includes: - reference to related RFC - detailed description of the change - impacted CIs and services - reason for change - effect of not implementing the changes - change category/priority - predicted timeframe - risk assessment - back-out or remediation plan - resource/cost/benefits evaluation - change authority - change decisions (approval/reject) and rationale

ID	Name	Description	Characteristics
			- authorization date and signature(s) - scheduled implementation time - reference to related release(s) - contact person for change implementation - change test results - change implementation details - implementation date and time - reference to change evaluation report - change implementation review
05_12	Supplier and Contract Management Information System (SCMIS)	A set of tools, data and information that is used to support supplier management. The SCMIS contains details of the organization's suppliers, together with details of the products and services that they provide to the business, together with details of the contracts. Ideally the SCMIS should be contained within the overall CMS.	The SCMIS contains supplier details, a summary of each product/service, information on the ordering process and, where applicable, contract details.
05_13	Contractual dispute record	A record containing the information about a contractual dispute with an external supplier and all actions taken to resolve it.	
05_14	Chart of accounts for IT services	A list of all accounts that are used to record income and expenses related to IT services. They are aligned with its own cost models, services and expenditure and compatible with the corporate financial accounting rules.	
05_15	Service-related invoice	Documents produced during the "billing" activity, as part of the charging process. It is used for recovering money from customers of the services.	An invoice should list the items to be charged. The chargeable items have to be defined on the basis of the defined cost items to be effectively and accurately charged.
05_16	Information for the Service Knowledge Management System (SKMS)	Updated data, information and knowledge to be added to the service knowledge management system.	It can include: - errors and workarounds - testing techniques - analysis methods
05_17	Test incident record	Record of incidents occurring during the service testing activities.	
05_18	Test error record	Record of errors identified during the service testing activities (unexpected test results).	
05_19	CSI register	A database or structured document used to record and manage improvement opportunities throughout their lifecycle.	For each improvement opportunities: - recording date - raised by - description - scope - timescale

ID	Name	Description	Characteristics
			- priority - benefits - person in charge - deadline
05_20	Request record	It contains the details of a (service) request. Each request record documents the lifecycle of a single (service) request.	
05_21	Access management records and history	Access management records and history where access has been denied and the reasons for the denial.	
06_00	Report	An account prepared for interested parties in order to communicate status, results or outcomes. It is a result of information gathering, observation, investigation or assessments, and it may impart situation, affects, progress or achievement. It serves to inform so that decisions or subsequent actions can be taken.	See section VI.1
06_01	Event trends and patterns report	A document containing details on events trends (event count by type of event, by day, etc.) and that look for patterns of events.	
06_02	Event notification	A notification generated by a CI when certain conditions are met.	Event notifications can be in either proprietary or standard (e.g. SNMP) formats. The more meaningful the data it contains and the more targeted the audience, the easier it is to make decisions about the event.
06_03	Post implementation report	It is the output of a post implementation review (PIR) and states the extent to which a service change has met its objectives and the initiator and stakeholders are happy with the results, and identify the unexpected side-effects.	This report should establish that: - change has had the desired effect - users, customers and other stakeholders are content with the results - there are no unexpected or undesirable side-effects - resources used to implement the change were as planned - release and deployment plan worked correctly - the change was implemented on time and to cost - the remediation plan functioned correctly, if needed
06_04	Access log	Any physical or electronic access should be recorded for a number of reasons, including: - can be used as input for security audits - can be used as input for forensic investigations	

ID	Name	Description	Characteristics
		- can be used by problem management to research the root cause of incidents	
06_05	Customer satisfaction survey	It is the most common form of measuring customer satisfaction. It checks whether the service achieves its objectives at every level, from a customer standpoint. They should be conducted periodically.	
06_06	Exception report	A document containing details of one or more KPIs or other important targets that have exceeded defined thresholds. For example, SLA targets are being missed or a performance metric indicating a potential capacity problem.	
06_07	Availability test report	A report on the tests done for all resilience and fail-over components and mechanisms.	
06_08	Configuration audit report	A report on the configuration audits done to ensure that the customer's environment matches the CMS.	
06_09	Roles conflict report	Document describing the role conflict, often caused by policies and decisions made outside of service operation or by the business or by different project teams working during service design. This report should be escalated to the stakeholders to resolve.	
06_10	Service report	It provides details of the service levels achieved in relation to the targets contained within SLAs.	It includes: - details of all aspects of the service and its delivery - current and historical performance - breaches - weaknesses - major events - changes panned - current and predicted workloads - customer feedback - improvement plan and activities
06_11	SLA review meeting minutes	Summary of agreed actions and revisions to SLAs and service scope.	
06_12	Workload analysis report	It used by IT operations to assess and implement changes in conjunction with capacity Management to schedule or reschedule when services or workloads are run, to ensure that the most effective and efficient use is made of the available resources.	
06_13	Ad hoc capacity and	It is used by all areas of Capacity Management, IT and business to analyze	

ID	Name	Description	Characteristics
	performance report	and resolve service and performance issues.	
06_14	Forecast and predictive report	It is used by all areas to analyze, predict and forecast particular business and IT scenarios and their potential solutions.	
06_15	Availability exception report	A document containing details of one or more availability-related KPIs or other availability targets that have exceeded defined thresholds.	
06_16	Ad hoc availability and performance report	It is used by all areas of Availability Management, IT and business to analyze and resolve service unavailability.	
06_17	Risk assessment report	Risk is defined as the likelihood that a disaster or other serious service disruption will actually occur. This report includes the results of the risk assessment.	
06_18	Business impact analysis report	Result of the activity that identifies Vital Business Functions and their dependencies. BIA defines the recovery requirements for IT services.	The dependencies may include suppliers, people, other business processes, IT services, etc. The requirements include Recovery Time Objectives (RTO), recovery point objectives and minimum service level targets for each IT service
06_19	Continuity test report	A report on the tests done for all continuity and recovery mechanisms.	
06_20	Ad hoc continuity and recovery report	It is used by all areas of IT Service Continuity Management, IT and business to analyze and resolve all IT service continuity related issues.	
06_21	Information security risks report	A report that identify the information-related risks, that evaluate their likelihood of occurrence, and that estimate their (business) impact, in order to both be aware of those risks, and manage them in an effective way.	
06_22	Change test report	A report on the testing of the change, to ensure that risks have been managed and that predicted and actual performance match the business requirements.	
06_23	Security audit report	A report on the results of the security audits.	
06_24	Security incident report	A report on the security incidents that happened and how they have been dealt with.	
06_25	Supplier (or partner) IT service continuity test	A report on the tests done for all IT service continuity and recovery mechanisms implemented by one of the supplier (or partner).	

ID	Name	Description	Characteristics
	reports		
06_26	Service/Supplier performance reports	A report on the performance of a service or of a supplier. They are produced on a regular basis, based on the category of supplier, and should form the basis of service review meetings. The more important the supplier, the more frequent and extensive the reports and reviews should be.	
06_27	Performance and contract review meeting minutes	They are produced to record the minutes and actions of all review meetings with supplier (i.e. supplier performance review and contract review).	
06_28	Service Transition report	Summarizes the outcomes of the transition activities.	
06_29	Testing report	This is report is a result of the tests and is delivered to Service Evaluation.	This report includes: - configuration baseline of the testing environment - testing carried out (including options chosen and constraints encountered) - results from those tests - analysis of the results
06_30	Total Cost of Utilization (TCU)	A methodology used to help make investment and service sourcing decisions. TCU assesses the full lifecycle cost to the customer of using an IT service.	
06_31	Service review meeting minutes	They are produced to record the minutes and actions of all service review.	These minutes include: - meeting agenda - brief of discussions - new actions - previous actions progress - schedule of next meetings
06_32	Change evaluation report	After the evaluation an evaluation report is produced that covers the results of the evaluation.	A change evaluation report contains the following sections: - risk profile - deviations report - a qualification statement - a validation statement - a recommendation
06_33	Financial analysis report for IT services	Report that provides information on the financial management for the IT services covering the budgeting, accounting and charging activities.	This report can include: - budget planning compared with the real spending - modification of the user behaviors following the introduction of the charging - user satisfaction with the charging method
06_34	Configuration	Varied reports on service configuration	

ID	Name	Description	Characteristics
	report	information and/or management, produced according to the needs of the others ITSM processes.	
06_35	Request fulfilment status report	A report that reflect the past and current request status.	
06_36	Incident trends	Analysis of data to identify time-related patterns, common failures or fragile configuration items, and deficiencies in IT service management processes.	
06_37	Service Investment analysis	Analysis of financial information to determine the money spent for developing and operating a service and compare it to the value that the business has realized in using the service to achieve their desired outcomes. This analysis identified the level of investment on a service and the return on that investment.	
06_38	Service measurement report	It presents the measures on the actual performance of IT services and the analysis of those measures against expectations. This report can have different formats according to the needs of the different audiences identified.	
07_00	Request	A communication that initiates a defined course of action or change in order to fulfil a need. This may originate or control on-going action based on an agreed plan or procedure. It may result in a proposal or plan of action. It may take the form of a solicitation, requisition, instruction or demand for a resource, product, service or an approval to act.	See section VI.1
07_01	Customer complaints and compliments	Complaints and compliments about the service or the relationship with the service provider.	
07_02	Request for Change (RFC)	A formal proposal for a change to be made. An RFC includes details of the proposed change, and may be recorded on paper or electronically. The term RFC is often misused to mean a change record, or the change itself.	A Request For Change includes: - change initiator - date and time of recording - reason for change - impacted service(s) - initial risk vs. benefit assessment - suggested implementation timeframe
07_03	Service request	A request from a user for information, or advice or for a standard change or for access to an IT service (e.g. providing standard IT services for a new user). They are handled by a Service Desk and not require an RFC to be submitted.	

ID	Name	Description	Characteristics
07_04	Customer request	A high level request from a customer for a new service or a significant change to an existing service.	
08_00	Specification	Criteria or conditions that place limits or restrictions on actions, attributes or qualities. It establishes measures or qualities for determining acceptability, conformance or merit. It may be required as part of an agreement or contract.	See section VI.1
08_01	Service Level Agreement (SLA)	An agreement between an IT service provider and a customer. The SLA describes the IT service, documents service level targets, and specifies the responsibilities of the IT service provider and the customer. A SLA may cover multiple IT services or multiple customers.	Each SLA includes: - service description - scope of the agreement - service hours - service availability - reliability - customer support - contact points and escalation - batch turnaround times - change management - service continuity - security - responsibilities - charging (if applicable) - service reporting and reviewing - glossary - amendment
08_02	Service Level Requirement (SLR)	A SLR is a customer requirement for an aspect of an IT service. SLRs are based on business objectives and are used to negotiate agreed service level targets.	
08_03	Operational Level Agreement (OLA)	An agreement between an IT service provider and another part of the same organization. An OLA supports the IT service provider's delivery of IT services to customers. The OLA defines the goods or services to be provided, and the targets and responsibilities that are required to meet agreed service level targets in an SLA.	Each OLA includes: - support service description - scope of the agreement - service hours - service targets - contact points and escalation - service desk, incident and problem response times and responsibilities - change, release and configuration management interface and responsibilities - information security responsibilities - availability, continuity and capacity interface and responsibilities - service level management responsibilities - supplier management responsibilities - glossary - amendment
08_04	Underpinning Contract (UC) /	A contract (agreement) between an IT service provider and a third party. The	

ID	Name	Description	Characteristics
	supplier agreement	third party provides goods or services that support delivery of an IT service to a customer. The Underpinning Contract (agreement) defines targets and responsibilities that are required to meet agreed service levels targets in an SLA.	
08_05	Statement of Requirements (SOR)	A document containing all requirements for a product purchase or a new or changed IT service.	It includes: - description of the services, products or components required - all relevant technical specifications, details and requirements - an SLR where applicable - availability, reliability, maintainability and serviceability requirements - details of performance criteria to be met by the equipment and the supplier - details of all standard to be complied with (internal, external, national, international) - legal and regulatory requirements - details of quality criteria - contractual timescales, details and requirements, terms and conditions - all commercial considerations: cost, charges, bonus and penalty payments and schedules - interfaces and contacts required - reporting, monitoring and reviewing procedures and criteria to be used during and after the implementation - supplier requirements and conditions - sub-contractor requirements - details of planned and possible growth - procedures for handling changes - supplier response requirements
08_06	Invitations to Tender (ITT)	A document inviting short-listed suppliers to 'tender their services' through a formal, written document that is evaluated against specific criteria.	
08_07	Service model	A model that shows how service assets interact with customer assets to create value. Service models describe the structure of a service (how the configuration items fit together) and the dynamics of the service (activities, flow of resources and interactions). A service model can be used as a template or blueprint for multiple services.	
08_08	Service options	A set of choices of utility and warranty	

ID	Name	Description	Characteristics
		offered to customer by a core service or service package. Each service option is designed to meet the needs of a particular pattern of business activity (PBA).	
08_09	Environment requirements and specifications	It includes environmental requirements and specifications for build, test, release, training, disaster recovery, pilot and deployment.	
08_10	Release design	Architectural design of a release package. It should take into account the current and target baselines and consider all the impacted CIs and services.	
08_11	Release and deployment models	They include the approach, mechanisms, processes, procedures and resources required to build and deploy the release on time and within budget.	They define: - release structure - exit and entry criteria including mandatory and optional deliverables - controlled environments required - the roles and responsibilities - release promotion and configuration baseline model - template release and deployment schedules - supporting systems, tools and procedures for documenting and tracking all the related activities - handover activities
08_12	Service Acceptance Criteria (SAC)	A set of criteria used to ensure than an IT service meets its functionality and quality requirements and that the IT service provider is ready to operate the new IT Service when it has been deployed.	
08_13	Service management documentation	New or changed service management documentation	
08_14	Critical Success Factors (CSFs)	Critical Success Factors are defined for every market space and determine the success or failure of a service strategy. CSFs are also referred as strategic industry factors (SIF)	- defined in terms of capabilities and resources - proven to be key determinants of success by industry leaders - defined by market space levels, not peculiar to any one firm - basis for competition among rivals - altered or influenced by customers, competitors, suppliers and regulators
08_15	Funding requirements	A translation of the service demand planning to financial terms.	
08_16	Fixed asset register	A list of fixed assets that includes their ownership and value. Fixed assets are assets which have a financial value, can be used by the organization to help create products or services and have long-term	

ID	Name	Description	Characteristics
		useful life. It may include data centers, power distribution, servers, software licenses, network components…	