

S01 Identify the context for service management of cloud services	
Description	A cloud service provider should understand the business and technical context for managing and delivering cloud services. A cloud service provider should ensure that its services, including cloud services, achieve business objectives and customer requirements while adhering to the service provider's principles, rules, and necessary statutory requirements, regulatory requirements and contractual obligations.
Outcomes	— The business and technical environment and context for cloud service delivery is defined and communicated.
Applicable clauses in ISO/IEC 20000-1	— Clause 4.1, Management responsibility — Clause 7.1, Business relationship management
S02 Establish strategy and plan for management of cloud services	
Description	The service management plan should define the way the cloud service provider intends to provide services. A service strategy can also define how the cloud service provider intends to provide services to achieve both the desired outcomes for the customer and the service provider's own objectives, within known limitations and documented constraints. The purpose of strategy and planning is to define and plan how the cloud service provider intends to deliver value for its own organization as well as for different customers and interested parties using the service provider's capabilities and resources.
Outcomes	— Service management plans are structured to cascade down from a top-level plan to detailed plans for operation and improvement of the SMS and delivery of the services. — Service management and process specific policies (examples include: information security policy, change management policy, release policy). — Defined and agreed service management objectives.
Applicable clauses in ISO/IEC 20000-1	— Clause 4.1, Management responsibility — Clause 4.3, Documentation management — Clause 4.4, Resource management — Clause 4.5.1, Define scope — Clause 4.5.2, Plan the SMS — Clause 5.2, Plan new or changed services — Clause 6.4, Budgeting and accounting for services — Clause 6.6, Information security management — Clause 7.1, Business relationship management
S03 Provide a catalogue of cloud services	
Description	A catalogue of cloud services should be made available to prospective and existing cloud customers. If applicable, this can also be part of a general catalogue of services. Information should be provided to communicate any relevant options for use of the services. The catalogue can be either specific to cloud services or can include both cloud and other services.
Outcomes	— Catalogue of cloud services that is understandable to the parties involved.
Applicable clauses in ISO/IEC 20000-1	— Clause 4.3, Documentation Management — Clause 6.1, Service level management — Clause 7.1, Business relationship management
S04 Identify and manage service requirements for cloud services	
Description	The service requirements should be identified and documented for the SMS and the cloud services. Activities are identified to manage the service requirements for the service provider and interested parties that have a valid interest in the cloud services.
Outcomes	— The service requirements for the SMS are defined. — The pre-requisites for deployment to the cloud service customer are specified. — The required characteristics and context for the use of cloud services, delivery and operations are specified. — Service requirements are traceable to their source.
Applicable clauses in ISO/IEC 20000-1	— Clause 4, General requirements — Clause 5.2, Plan new or changed services — Clause 5.3, Design and development of new or changed services — Clause 6.1, Service level requirements — Clause 7.1, Business relationship management — Clause 7.2, Supplier management — Clause 9.1, Configuration management — Clause 9.2, Change management
S05 Design and develop a new cloud service	
Description	As with other types of services, a new cloud service should be planned, designed and developed in preparation for transition into the live environment.
Outcomes	— A new cloud service is designed. — Updated catalogue of services, including the new cloud service.

Applicable clauses in ISO/IEC 20000-1	<ul style="list-style-type: none"> — Clause 5.1, General (Design and transition of new or changed services) — Clause 5.3, Design and development of new or changed services — Clause 5.4, Transition of new or changed services — Clause 6.1, Service level management — Clause 6.3, Service continuity and availability management — Clause 6.5, Capacity management — Clause 6.6, Information security management — Clause 7.1, Business relationship management — Clause 7.2, Supplier management — Clause 9.1, Configuration management — Clause 9.2, Change management — Clause 9.3, Release and deployment management
S06	Establish a service relationship with the cloud customer
Description	The relationship between the cloud service provider and the cloud customer should be defined and agreed. A communication procedure should be established and responsibilities for management of customer satisfaction should be assigned. Other relationships between the cloud service provider and interested parties should be defined, agreed and maintained.
Outcomes	<ul style="list-style-type: none"> — Define relationship between the cloud service provider and the different groups of customers. — Communications between the cloud service provider and cloud customer. — Customer satisfaction measurement and identification of opportunities for improvement.
Applicable clauses in ISO/IEC 20000-1	<ul style="list-style-type: none"> — Clause 6.1, Service level management — Clause 7.1, Business relationship management
S07	Establish a cloud service agreement
Description	A subscription to one or more cloud services in the catalogue of services is formally agreed between the cloud service provider and the cloud customer. The subscription includes a documented agreement of terms and conditions for use of the cloud service. For cloud services that are not subscription based, a documented agreement should still be put in place. Examples of non-subscription based services can include private clouds operated by an internal service provider or customized services. The cloud service agreement can include one or more SLAs setting the agreed service targets, workload characteristics and exceptions to be monitored and reported. It can also include other information such as responsibilities of each party, termination conditions and charges.
Outcomes	— Cloud service agreement, signed and agreed by all parties.
Applicable clauses in ISO/IEC 20000-1	<ul style="list-style-type: none"> — Clause 6.1, Service level management — Clause 7.1, Business relationship management — Clause 9.2, Change management.
S08	Onboarding the customer
Description	The cloud service provider should prepare the cloud services and resources for delivery to the cloud customer. The activities should include planning and deploying changes to the SMS, transition plans, the processes and interfaces and the cloud services, if required. In order to manage and administer the cloud services effectively the activities should include registration of users, managing access and knowledge transfer.
Outcomes	<ul style="list-style-type: none"> — The cloud service is configured according to the service requirements; — The cloud customer and users are set up and ready to manage, administer and use the cloud services effectively.
Applicable clauses in ISO/IEC 20000-1	<ul style="list-style-type: none"> — Clause 4.3, Documentation Management — Clause 6.1, Service level management — Clause 6.3, Service continuity and availability management — Clause 6.4, Budgeting and accounting for services — Clause 6.5, Capacity management — Clause 6.6, Information security management — Clause 7.1 Business relationship management — Clause 7.2, Supplier management — Clause 8.1, Incident and service request management — Clause 8.2, Problem management — Clause 9.1, Configuration management — Clause 9.2, Change management — Clause 9.3 Release and deployment management
S09	Deliver and operate the cloud services

Description	<p>Once the onboarding of a cloud service has been completed, the delivery of the cloud service begins.</p> <p>The service should be delivered, used, operated and reported on according to the terms of any agreement and associated SLA to fulfil the service targets.</p> <p>The cloud service provider reports and reviews service achievements as well as any non-conformities against the SLA with the customer and interested parties, such as a cloud service partner. See scenario S10 of this part of ISO/IEC 20000 for monitoring and reporting cloud services.</p> <p>The cloud service provider delivers customer support for service requests from customers, resolves incidents and problems and addresses non-conformities.</p> <p>These activities can include change requests, maintenance and service upgrades.</p>
Outcomes	<ul style="list-style-type: none"> — The cloud service is delivered to the customer to fulfil the service requirements. — Cloud customers receive support for the service as agreed. — The cloud provider reports and reviews the performance of the service and SLAs with the customer. — Activities are performed to maintain and update the cloud services.
Applicable requirements in ISO/IEC 20000-1	<ul style="list-style-type: none"> — Clause 4.2, Governance of processes operated by other parties — Clause 4.3, Documentation management — Clause 4.4, Resource management — Clause 4.5.3, Implement and operate the SMS (Do) — Clause 6.1, Service level management — Clause 6.2, Service reporting — Clause 6.3, Service continuity and availability management — Clause 6.4, Budgeting and accounting for services — Clause 6.5, Capacity management — Clause 6.6, Information security management — Clause 7.1, Business relationship management — Clause 7.2, Supplier management — Clause 8.1, Incident and service request management — Clause 8.2, Problem management — Clause 9.1, Configuration management — Clause 9.2, Change management — Clause 9.3 Release and deployment management
S010	Monitor and report cloud services
Description	<p>The cloud service provider should monitor the fulfilment of the service requirements and objectives agreed in the SLA including service targets, customer satisfaction, workload characteristics and exceptions to the SLA. This includes activities to monitor and report the service performance, capacity, availability, information security and/or continuity of the cloud service.</p>
	<p>The activities include discovering and monitoring resources, monitoring cloud operations and events and generating reports. The monitoring activities can benefit both the service provider itself and the customer. For example, the service provider can use monitoring activities to raise alerts when capacity is nearing a threshold and an action needs to be taken to ensure the service does not become unavailable for customers. The service reporting provided to a cloud customer can indicate the true usage of the cloud services to enable the consideration of any adjustments. These can include improved training and awareness for users, resource optimization, consumption based pricing, or renegotiating the service level agreement to reflect evolving service requirements.</p>
Outcomes	<ul style="list-style-type: none"> — Cloud service performance and aspects of cloud service delivery are reported and available to interested parties. — Measurements of cloud service performance and usage are available to the service provider and interested parties, including the cloud customer. — Abnormal occurrences, events and incidents are visible to interested parties.
Applicable requirements in ISO/IEC 20000-1	<ul style="list-style-type: none"> — Clause 4.3, Documentation management — Clause 4.5.4, Monitor and review the SMS (Check) — Clause 4.5.5, Maintain and improve the SMS (Act) — Clause 6.1, Service level management — Clause 6.2, Service reporting — Clause 6.3, Service continuity and availability management — Clause 6.5, Service capacity — Clause 6.6, Information security management — Clause 8.2, Problem management — Clause 9.1, Configuration management — Clause 9.2, Change management — Clause 9.3, Release and deployment management
S011	Manage resources for cloud services
Description	<p>Within the context of an existing agreement, the cloud customer can request the allocation or release of resources according to the agreement.</p> <p>Resources, as specified in ISO/IEC 20000-1, can include human, technical, financial or information resources.</p>
Outcomes	<ul style="list-style-type: none"> — New configuration of the service with the updated resources. — Updated cost profile.

Applicable clauses in ISO/IEC 20000-1	<ul style="list-style-type: none"> — Clause 4.2, Governance of processes operated by other parties — Clause 4.3, Documentation management — Clause 4.4, Resource management — Clause 4.1.1, Management commitment — Clause 4.5.5.2, Management of improvements — Clause 6.4, Budgeting and accounting for services — Clause 6.5, Capacity management — Clause 8.1, Incident and service request management — Clause 9.1, Configuration management — Clause 9.2, Change management — Clause 9.3, Release and deployment management
S012	Check and improve the SMS and cloud services
Description	<p>The SMS and the cloud services should be reviewed regularly, in order to identify and prioritize opportunities for improvement. Improvements to the SMS can include improvements to the infrastructure, the policies, the agreements and contracts, skills and competencies of personnel, documentation, efficiency and effectiveness of processes or process interfaces, better allocation of resources, etc. Improvements to the cloud service can include improved reliability, functionality, or customer satisfaction. Improvements should be prioritized against defined criteria including business objectives, the cloud service provider's capability and service requirements. Check the fulfilment of cloud service requirements based upon customer feedback, performance measurement, internal audit, management reviews, industry trends or competitive service differentiation, etc.</p> <p>Evaluate service delivery against defined business outcomes and identify opportunities to improve operational efficiency, or realign the services with evolving service targets.</p> <p>Ensure the approved improvements are incorporated into the service management plan.</p> <p>Initiate an improvement project using design and transition of new or changed services process (ISO/IEC 20000-1, Clause 5) or change management process (ISO/IEC 20000-1, 9.2), per criteria defined in change management policy.</p>
Outcomes	<ul style="list-style-type: none"> — Prioritized improvements to services, processes, policies, skills and competencies, technology, communication, etc., in alignment with business objectives and customer requirements.
Applicable clauses in ISO/IEC 20000-1	<ul style="list-style-type: none"> — Clause 4.1.2, Service management policy — Clause 4.2, Governance of processes operated by other parties — Clause 4.3, Documentation management — Clause 4.4.1, Provision of resources — Clause 4.5.4, Monitor and review the SMS (Check) — Clause 4.5.5, Maintain and improve the SMS (Act) — Clause 5, Design and transition of new or changed services — Clause 6.2, Service reporting
S013	Terminate a cloud service contract
Description	<p>The cloud service provider and the cloud customer agree to terminate a cloud service contract and its associated service delivery.</p> <p>The termination of a contract, or early termination, should be managed in accordance with the terms and conditions outlined within the contract, SLA or other agreement.</p>
Outcomes	<ul style="list-style-type: none"> — Termination of the cloud service contract to the mutual satisfaction of the parties. — Orderly termination of the service delivery as defined in the exit procedure.
Applicable clauses in ISO/IEC 20000-1	<ul style="list-style-type: none"> — Clause 4.3, Documentation management — Clause 4.4, Resource management — Clause 5, Design and transition of new or changed services — Clause 6.1, Service level management — Clause 6.4, Budgeting and accounting for services — Clause 6.5, Capacity management; — Clause 6.6, Information security management; — Clause 7.1, Business relationship management — Clause 7.2, Supplier management — Clause 9.1, Configuration management — Clause 9.2, Change management — Clause 9.3, Release and deployment management
S014	Transfer a cloud service
Description	<p>As an alternative to the termination of a cloud service, some cloud service providers offer options regarding the portability or transferability of the service to another cloud service provider or back to the customer.</p> <p>Depending on the type of service, the cloud customer should be able to transfer the service or service components at affordable cost and with minimal disruption. Service components that can be transferred independently of the complete service can include data, applications, knowledge records or entire virtual environments.</p>
Outcomes	<ul style="list-style-type: none"> — Service or service components transferred to another cloud service provider or to the customer.

Applicable clauses in ISO/IEC 20000-1	<ul style="list-style-type: none"> — Clause 4.3, Documentation management — Clause 4.4, Resource management — Clause 5.1, General — Clause 5.2, Plan new or changed services — Clause 5.3, Design and development of new or changed services — Clause 5.4, Transition of new or changed service — Clause 6.1, Service level management — Clause 6.3, Service continuity and availability management — Clause 6.4, Budgeting and accounting for services — Clause 6.5, Capacity management — Clause 6.6, Information security management — Clause 9.1, Configuration management — Clause 9.2, Change management — Clause 9.3, Release and deployment management
S015	Remove a cloud service
Description	The removal of a cloud service can apply to the decommissioning of a service for one or more customers. A cloud service should be retired from the catalogue of services when the service provider no longer offers the service.
Outcomes	<ul style="list-style-type: none"> — Updated catalogue of cloud services. — Reallocation of human, technical or financial resources previously used for the removed service.
Applicable clauses in ISO/IEC 20000-1	<ul style="list-style-type: none"> — Clause 4.3, Documentation management — Clause 4.4, Resource management — Clause 5.1, General — Clause 5.2, Plan new or changed services — Clause 5.3, Design and development of new or changed services — Clause 5.4, Transition of new or changed service — Clause 6.1, Service level management — Clause 6.3, Service continuity and availability management — Clause 6.4, Budgeting and accounting for services — Clause 6.5, Capacity management — Clause 6.6, Information security management — Clause 9.1, Configuration management — Clause 9.2, Change management — Clause 9.3, Release and deployment management