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信息技术----服务管理---
Part1: 服务管理体系要求

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前言 Foreword

ISO (国际标准化组织) 和 IEC (国际电工协会) 构成国际标准化的专业体系。制定国际标准工作通常由 ISO 的技术委员会完成。各成员团体若对某技术委员会确定的项目感兴趣, 均有权参加该委员会的工作。与 ISO 保持联系的各国际组织 (官方的或非官方的) 也可参加有关工作。在信息技术领域, ISO 和 IEC 已经建立了一个联合技术委员会委员, ISO / IEC JTC 1。

国际标准是根据 ISO/IEC 导则第 2 部分的规则起草。

联合技术委员会的主要任务是制定国际标准。由技术委员会通过的国际标准草案需提交各成员团体投票表决。国际标准草案需取得至少 75% 参加表决成员团体的同意, 才能作为国际标准正式发布。

本文件中的某些内容有可能涉及一些专利权问题, 对此应引起注意, ISO/IEC 不负责识别任何这样的专利权问题。

ISO20000-1 由 ISO/IEC JTC 1/SC 7 信息技术联合技术委员会软件和系统工程分会制定。第二版替代第一版标准 (ISO20000-1 : 2005), 并对其进行了的技术性修订。主要的不同点如下:

- 与 ISO9001 标准更为一致;
- 与 ISO27001 标准更为一致;
- 对术语进行了变化, 以保持和国际惯例的一致;
- 新增了许多新的定义, 更新了部分定义并删除了两个旧的定义;
- 引入了术语“服务管理体系 (SMS)”概念;
- 将 ISO/IEC20000-1 2005 版中的条款 3 和 4 进行了合并, 并将所有的管理体系要求纳入到同一个条款中;
- 进一步明确了由相关方所运营流程的管控要求;
- 进一步明确了定义 SMS 范围的要求;
- 进一步明确了将 PDCA 方法应用于 SMS 中, 包括服务管理过程和服务;
- 对设计并转换新的或变更的服务引进了一些新的要求。

ISO/IEC 20000 标准由下列名为“信息技术-服务管理”标准构成, 包括:

- 第 1 部分: 服务管理体系要求
- 第 2 部分: 服务管理体系应用指南¹⁾
- 第 3 部分: ISO/IEC20000-1 范围定义和适用性指南【技术报告】
- 第 4 部分: 过程参考模型【技术报告】
- 第 5 部分: ISO/IEC20000-1 实施计划模型【技术报告】

服务管理的流程评估模型将在不久的将来推出, 作为第 8 部分的一个章节。

Foreword

ISO (the International Organization for Standardization) and IEC (the International Electrotechnical Commission) form the specialized system for worldwide standardization. National bodies that are members of ISO or IEC participate in the development of International Standards through technical committees established by the respective organization to deal with particular fields of technical activity. ISO and IEC technical committees collaborate in fields of mutual interest. Other international organizations, governmental and non-governmental, in liaison with ISO and IEC, also take part in the work. In the field of information technology, ISO and IEC have established a joint technical committee, ISO/IEC JTC 1.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of the joint technical committee is to prepare International Standards. Draft International Standards adopted by the joint technical committee are circulated to national bodies for voting. Publication as an International Standard requires approval by at least 75 % of the national bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO and IEC shall not be held responsible for identifying any or all such patent rights.

ISO/IEC 20000-1 was prepared by Joint Technical Committee ISO/IEC JTC 1, Information technology, Subcommittee SC 7, Software and systems engineering. This second edition cancels and replaces the first edition (ISO/IEC 20000-1:2005), which has been technically revised. The main differences are as follows:

- closer alignment to ISO 9001;
- closer alignment to ISO/IEC 27001;
- change of terminology to reflect international usage;
- addition of many more definitions, updates to some definitions and removal of two definitions;
- introduction of the term “service management system”;
- combining Clauses 3 and 4 of ISO/IEC 20000-1:2005 to put all management system requirements into one clause;
- clarification of the requirements for the governance of processes operated by other parties;
- clarification of the requirements for defining the scope of the SMS;
- clarification that the PDCA methodology applies to the SMS, including the service management processes, and the services;
- introduction of new requirements for the design and transition of new or changed services.

ISO/IEC 20000 consists of the following parts, under

	<p>the general title Information technology — Service management:</p> <p>——Part 1: Service management system requirements</p> <p>——Part 2: Guidance on the application of service management systems¹⁾</p> <p>——Part 3: Guidance on scope definition and applicability of ISO/IEC 20000-1 [Technical Report]</p> <p>——Part 4: Process reference model [Technical Report]</p> <p>——Part 5: Exemplar implementation plan for ISO/IEC 20000-1 [Technical Report]</p> <p>A process assessment model for service management will form the subject of a future Part 8.</p>
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¹即将出版 (对 ISO/IEC20000-2 的技术修订) 。

介绍 Introduction

ISO/IEC20000-1 要求包括设计、转换、交付和改进服务，以满足服务需求并向客户和服务提供者提供价值。ISO/IEC20000-1 要求服务提供者在规划、确立、实施、运行、监控、回顾、维护和持续改进服务管理体系（SMS）时，采用整合的过程方法。

协调一致地整合与实施 SMS 可提供持续的控制和更有效、更高效的持续改进机会。运行 ISO/IEC20000-1 所定义的过程要求组织和协调好相应的人员。适当的工具可用于支持过程的有效和高效执行。

最有效的服务提供者需在服务全生命周期（战略、设计、转换、运行和持续改进）的所有阶段考虑对 SMS 的影响。

ISO/IEC20000-1 要求 SMS 的所有部分和服务都采取业界知名的 PDCA（规划、实施、检查、改进）方法论。ISO/IEC20000-1 采用的 PDCA 方法论，可以简单描述为：

P-规划（Plan）：建立、文件化和协商确定 SMS。SMS 包括满足服务需求的政策、目标、计划和过程；

D-实施（Do）：实施和执行 SMS 以设计、转换、交付和改进服务；

C-检查（Check）：根据政策、目标、计划和服务需求，对 SMS 进行监控、测量和回顾，并报告结果；

A-改进（Act）：采取措施，以持续改进 SMS 和服务的绩效。

当用于 SMS 时，下述是整合过程方法和 PDCA 方法论最重要的方面：

- a)理解和满足服务需求以达到客户满意；
- b)建立服务管理的政策和目标；
- c)基于 SMS 为客户增加价值来设计和交付服务；
- d)监控、测量和回顾 SMS 和服务；
- e)基于客观的测量结果以持续改进 SMS 和服务。

图 1 说明了 PDCA 方法论可被用于 SMS，包括定义于条款 5-9 的服务管理过程和服务。每个 PDCA 方法论的元素是成功实施 SMS 的关键部分。用于 ISO/IEC 20000-1 的改进过程也是基于 PDCA 方法论。

ISO/IEC 20000-1 允许服务提供者在组织中将 SMS 和其他管理体系整合。采用整合的过程方法论和 PDCA 方法论可以使服务提供者能一体化或完全整合多个管理体系标准。例如，SMS 可以与基于 ISO9001 的质量管理体系和基于 ISO27001 的信息安全管理体系整合。

ISO/IEC20000 是特定的独立指南。服务提供者可以结合使用其它普遍接受的指南和自身的经验。

国际标准的使用者对标准的正确应用负责。国际标准并不包括所有必需的法律法规要求和服务提供者的合同义务。对国际标准的遵守并不意味着免除对法律法规的遵从义务。

为促进对服务管理标准的研究，鼓励使用者分享对 ISO/IEC20000-1 的观点和 ISO/IEC20000 其它系列标准修改的优先顺序。

Introduction

The requirements in this part of ISO/IEC 20000 include the design, transition, delivery and improvement of services that fulfil service requirements and provide value for both the customer and the service provider. This part of ISO/IEC 20000 requires an integrated process approach when the service provider plans, establishes, implements, operates, monitors, reviews, maintains and improves a service management system (SMS).

Co-ordinated integration and implementation of an SMS provides ongoing control and opportunities for continual improvement, greater effectiveness and efficiency. The operation of processes as specified in this part of ISO/IEC 20000 requires personnel to be well organized and co-ordinated. Appropriate tools can be used to enable the processes to be effective and efficient.

The most effective service providers consider the impact on the SMS through all stages of the service lifecycle, from strategy through design, transition and operation, including continual improvement.

This part of ISO/IEC 20000 requires the application of the methodology known as “Plan-Do-Check-Act”

(PDCA) to all parts of the SMS and the services. The PDCA methodology, as applied in this part of ISO/IEC 20000, can be briefly described as follows.

Plan: establishing, documenting and agreeing the SMS. The SMS includes the policies, objectives, plans and processes to fulfil the service requirements.

Do: implementing and operating the SMS for the design, transition, delivery and improvement of the services.

Check: monitoring, measuring and reviewing the SMS and the services against the policies, objectives, plans and service requirements and reporting the results.

Act: taking actions to continually improve performance of the SMS and the services.

When used within an SMS, the following are the most important aspects of an integrated process approach and the PDCA methodology:

- a) understanding and fulfilling the service requirements to achieve customer satisfaction;
- b) establishing the policy and objectives for service management;
- c) designing and delivering services based on the SMS that add value for the customer;
- d) monitoring, measuring and reviewing performance of the SMS and the services;
- e) continually improving the SMS and the services based on objective measurements.

Figure 1 illustrates how the PDCA methodology can be applied to the SMS, including the service management processes specified in Clauses 5 to 9, and the services. Each element of the PDCA methodology is a vital part of a successful implementation of an SMS. The

	<p>improvement process used in this part of ISO/IEC 20000 is based on the PDCA methodology.</p> <p>Figure 1 — PDCA methodology applied to service management</p> <p>This part of ISO/IEC 20000 enables a service provider to integrate its SMS with other management systems in the service provider's organization. The adoption of an integrated process approach and the PDCA methodology enables the service provider to align or fully integrate multiple management system standards.</p> <p>For example, an SMS can be integrated with a quality management system based on ISO 9001 or an information security management system based on ISO/IEC 27001.</p> <p>ISO/IEC 20000 is intentionally independent of specific guidance. The service provider can use a combination of generally accepted guidance and its own experience.</p> <p>Users of an International Standard are responsible for its correct application. An International Standard does not purport to include all necessary statutory and regulatory requirements and contractual obligations of the service provider. Conformity to an International Standard does not of itself confer immunity from statutory and regulatory requirements.</p> <p>For the purposes of research on service management standards, users are encouraged to share their views on ISO/IEC 20000-1 and their priorities for changes to the rest of the ISO/IEC 20000 series. Click on the link below to take part in the online survey.</p>
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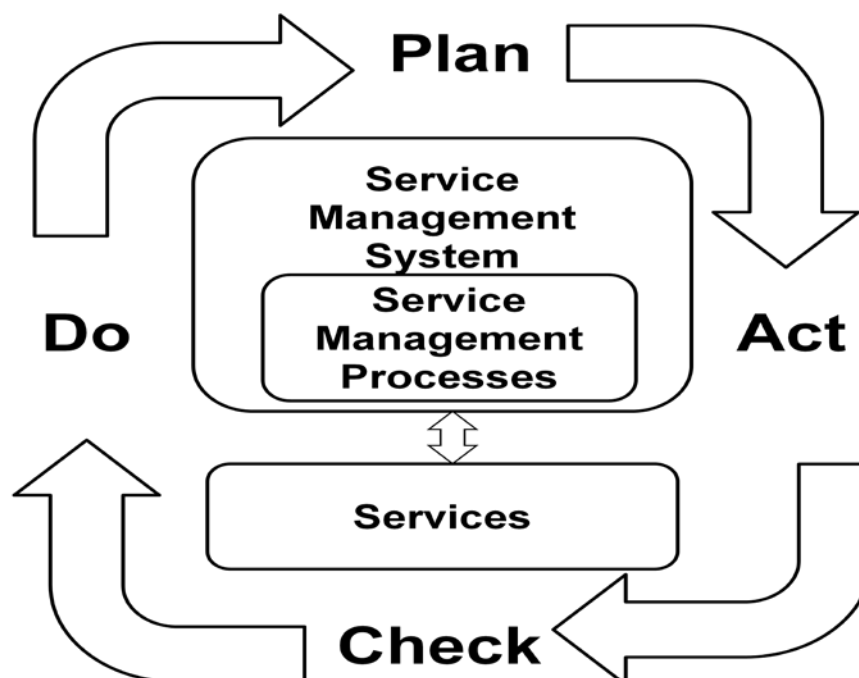


Figure 1 — PDCA methodology applied to service management

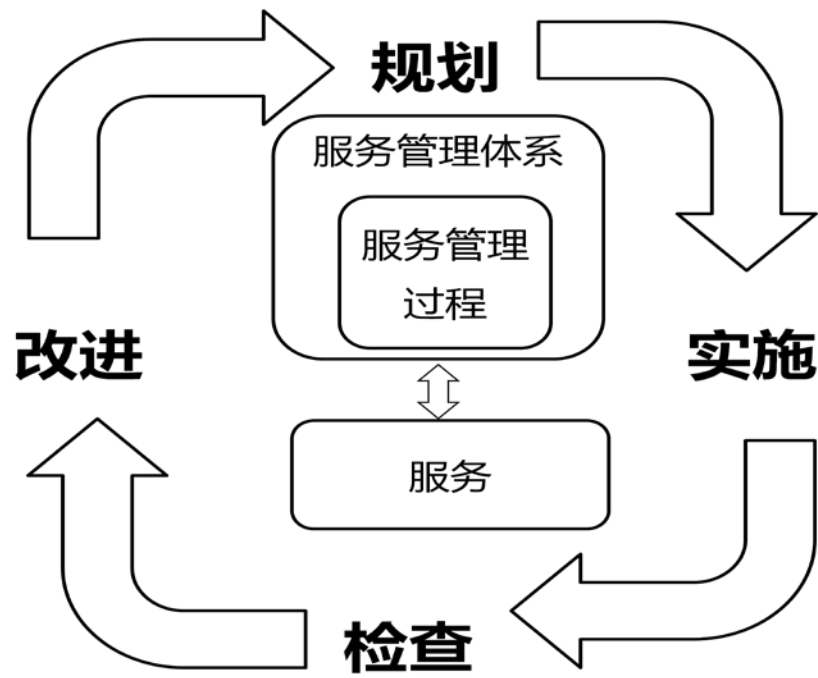


图 1-应用到服务管理的 PDCA 方法

1 范围 Scope**1.1 总则 General**

ISO/IEC 20000-1是服务管理体系（SMS）标准。它阐述了服务提供者规划、建立、实施、运行、监控、回顾、维护和持续改进SMS的具体要求。这些要求包括服务的设计、转换、交付和改进，以满足服务需求。ISO/IEC 20000-1适用于：

- a) 从服务提供者处寻求服务，并需要确保其服务需求被满足的组织；
- b) 要求其所有服务提供者（包括在一个供应链上的）采用一致性的方式的组织；
- c) 希望展现其满足服务需求的服务设计、转换、交付和改进能力的服务提供者；
- d) 为了监控、测量和回顾其服务管理流程与服务的服务提供者；
- e) 通过SMS的有效实施与运行来持续改进服务设计、转换和交付的服务提供者；
- f) 评估师或审核员，将其用于作为评估服务提供者的SMS是否满足ISO/IEC 20000-1要求的符合性评估标准。

图2 展示了服务管理体系（SMS），以及所包括的服务管理过程。不同的服务提供者可采用不同的方式执行服务管理过程及其过程之间的关联关系。服务提供者和客户之间关系的性质将影响服务管理过程如何被实施。

1.2 应用 Application

无论所交付服务的类型、规模和特性，ISO/IEC 20000-1的所有要求是通用的，适用于所有的服务提供者。无论服务提供者组织有任何特性，声明符合ISO/IEC 20000-1要求的服务提供者裁剪条款4-9的任何要求都是不可接受的。

对于条款4所要求的符合性只能由服务提供者展示满足条款4所有要求的证据。对于条款4，服务提供者不能依赖对其他相关方所运行过程的管控证据。

对条款5-9所要求的符合性可以由服务提供者展示其满足所有要求的证据。除此之外，服务提供者也可以展示其满足大多数要求的自身证据，和那些服务提供者不直接运行由其他相关方所运行过程（或过程的部分）的管控证据。

ISO/IEC 20000-1的范围不包括特定的产品或工具。然而，组织可以使用ISO/IEC 20000-1帮助他们开发支持SMS运行的产品或工具。

注：ISO/IEC TR 20000-3部分提供了ISO/IEC 20000-1范围定义和适用性的指南。这包括了关于

1 Scope**1.1 General**

This part of ISO/IEC 20000 is a service management system (SMS) standard. It specifies requirements for the service provider to plan, establish, implement, operate, monitor, review, maintain and improve an SMS. The requirements include the design, transition, delivery and improvement of services to fulfil service requirements.

This part of ISO/IEC 20000 can be used by:

- a) an organization seeking services from service providers and requiring assurance that their service requirements will be fulfilled;
- b) an organization that requires a consistent approach by all its service providers, including those in a supply chain;
- c) a service provider that intends to demonstrate its capability for the design, transition, delivery and improvement of services that fulfil service requirements;
- d) a service provider to monitor, measure and review its service management processes and services;
- e) a service provider to improve the design, transition and delivery of services through effective implementation and operation of an SMS;
- f) an assessor or auditor as the criteria for a conformity assessment of a service provider's SMS to the requirements in this part of ISO/IEC 20000.

Figure 2 illustrates an SMS, including the service management processes. The service management processes and the relationships between the processes can be implemented in different ways by different service providers. The nature of the relationship between a service provider and the customer will influence how the service management processes are implemented.

1.2 Application

All requirements in this part of ISO/IEC 20000 are generic and are intended to be applicable to all service providers, regardless of type, size and the nature of the services delivered. Exclusion of any of the requirements in Clauses 4 to 9 is not acceptable when a service provider claims conformity to this part of ISO/IEC 20000, irrespective of the nature of the service provider's organization.

Conformity to the requirements in Clause 4 can only be demonstrated by a service provider showing evidence of fulfilling all of the requirements in Clause 4. A service provider cannot rely on evidence of the governance of processes operated by other parties for the requirements in Clause 4.

Conformity to the requirements in Clauses 5 to 9 can be demonstrated by the service provider showing evidence of fulfilling all requirements. Alternatively, the service provider can show evidence of fulfilling the majority of the requirements themselves and evidence of the governance of processes operated by other parties for those processes, or parts of processes, that the service provider does not operate directly.

对其他相关方所运营流程的管控的更多解释。	<p>The scope of this part of ISO/IEC 20000 excludes the specification for a product or tool. However, organizations can use this part of ISO/IEC 20000 to help them develop products or tools that support the operation of an SMS.</p> <p>NOTE ISO/IEC TR 20000-3 provides guidance on scope definition and applicability of this part of ISO/IEC 20000. This includes further explanation about the governance of processes operated by other parties.</p>
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Figure 2 – Service management system

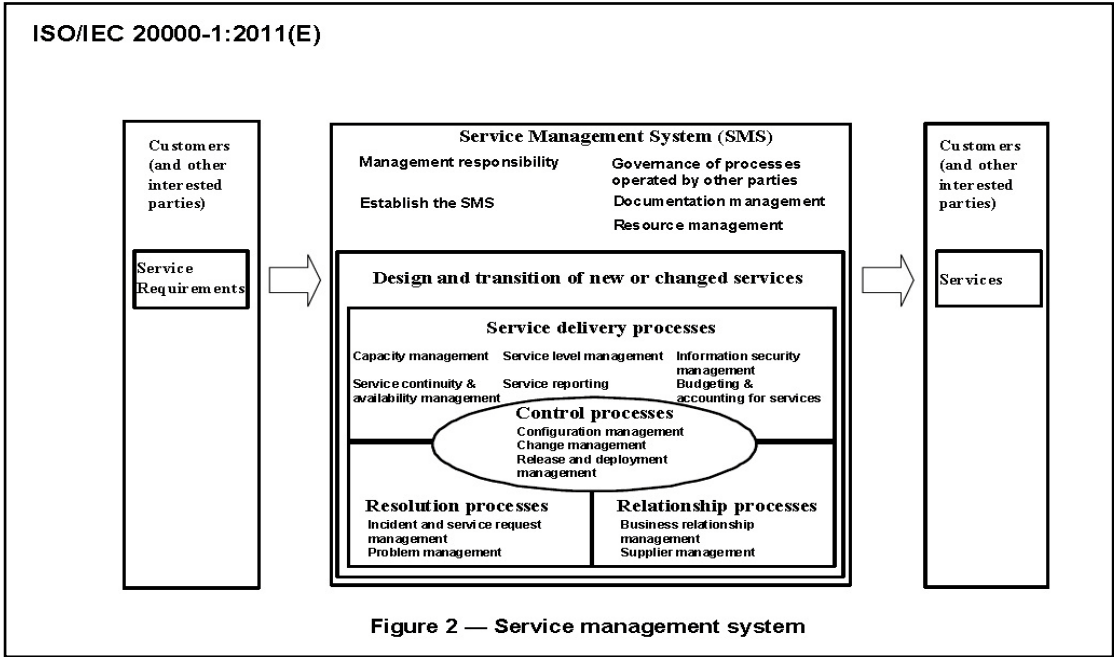
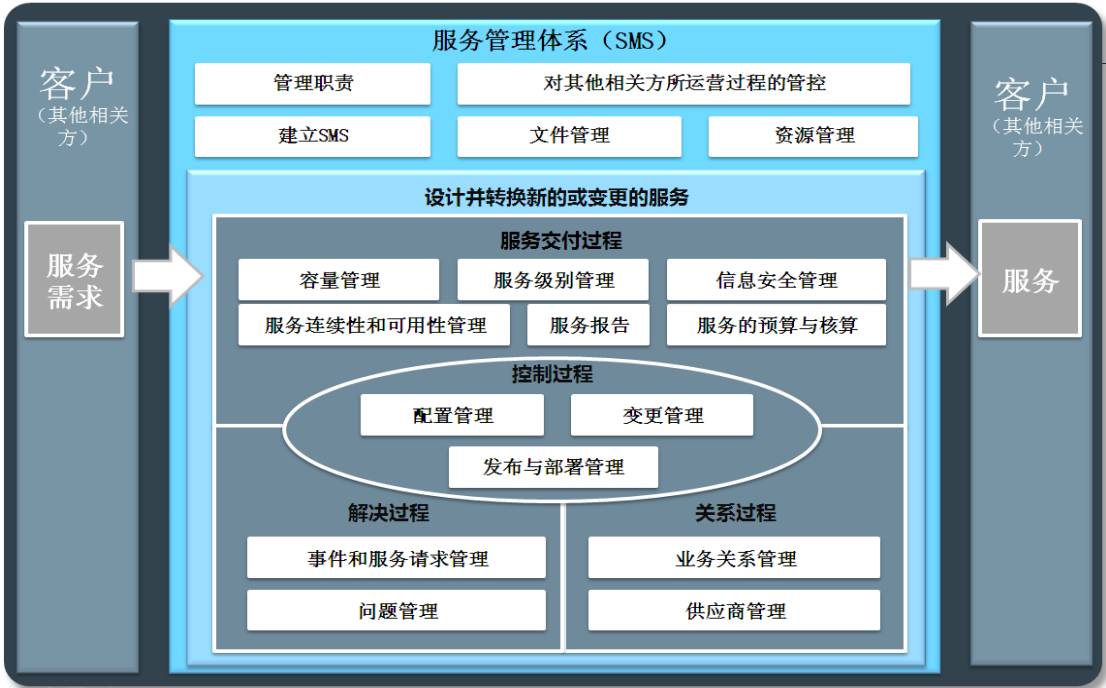


图2 — 服务管理体系



<p>2 引用标准 Normative references</p> <p>以下引用的文件对于本文件的应用是必不可少的。对于有日期标注的引用文件，仅被引用的版本适用。对于没有日期标注的引用文件，被引用文件的最新版本（包括其任何修订）适用。</p> <p>这里没有引用标准文献。本标准包括本条款仅仅为了确保条款号与ISO/IEC 20000-2¹（信息技术 — 服务管理 — 第2部分：服务管理体系应用指南）保持一致。</p>	<p>2 Normative references</p> <p>The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.</p> <p>No normative references are cited. This clause is included in order to ensure clause numbering is identical with ISO/IEC 20000-2:—, Information technology — Service management — Part 2: Guidance on the application of service management systems.</p>
<p>3 术语和定义 Terms and definitions</p> <p>下列术语和定义适用于本文件。</p> <p>3.1 可用性 availability</p> <p>在规定时刻或规定时间段内，组件或服务执行要求功能的能力</p> <p><i>注：可用性通常用一段时间内的百分比计算，该计算通常基于服务或服务组件的用户实际可用时间和协定有效服务时间</i></p> <p>3.2 配置基线 configuration baseline</p> <p>在服务或服务组件的生命周期中，某一时间点被正式指定的配置信息</p> <p><i>注1：配置基线，加上对配置基线的被授权变更，形成了当前的配置信息</i></p> <p><i>注2：改编自 ISO/IEC/IEEE 24765:2010</i></p> <p>3.3 配置项 configuration item (CI)</p> <p>为了交付一项或多项服务而需要被控制的组件</p> <p>3.4 配置管理数据库 configuration management database (CMDB)</p> <p>用于记录配置项全生命周期属性及配置项之间关系的存储数据</p> <p>3.5 持续改进 continual improvement</p> <p>增强满足服务需求能力的循环活动</p> <p><i>注：改编自 ISO 9000:2005</i></p> <p>3.6 纠正措施 corrective action</p> <p>为消除已发现的不合格或其他不期望情况的原因或降低其重复发生的可能性所采取的措施</p> <p><i>注：改编自 ISO 9000:2005</i></p>	<p>3 Terms and definitions</p> <p>For the purposes of this document, the following terms and definitions apply.</p> <p>3.1 availability</p> <p>ability of a service or service component to perform its required function at an agreed instant or over an agreed period of time</p> <p>NOTE Availability is normally expressed as a ratio or percentage of the time that the service or service component is actually available for use by the customer to the agreed time that the service should be available.</p> <p>3.2 configuration baseline</p> <p>configuration information formally designated at a specific time during a service or service component's life</p> <p>NOTE 1 Configuration baselines, plus approved changes from those baselines, constitute the current configuration information.</p> <p>NOTE 2 Adapted from ISO/IEC/IEEE 24765:2010.</p> <p>3.3 configuration item</p> <p>CI</p> <p>element that needs to be controlled in order to deliver a service or services</p> <p>3.4 configuration management database</p> <p>CMDB</p> <p>data store used to record attributes of configuration items, and the relationships between configuration items, throughout their lifecycle</p> <p>3.5 continual improvement</p> <p>recurring activity to increase the ability to fulfil service requirements</p> <p>NOTE Adapted from ISO 9000:2005.</p> <p>3.6 corrective action</p> <p>action to eliminate the cause or reduce the likelihood of recurrence of a detected nonconformity or other undesirable situation</p>

¹ ISO/IEC 20000-2 最新版将发布。

<p>3.7 客户 customer</p> <p>接受一项服务或多项服务的组织或组织的一部分</p> <p>注 1 : 客户可以是服务供应者的内部或外部组织</p> <p>注 2 : 改编自 ISO 9000:2005</p> <p>3.8 文件 document</p> <p>信息及其承载媒体 [ISO 9000:2005]</p> <p>示例 : 策略、计划、流程描述、程序文件、服务水平协议、合同、记录</p> <p>注 1 : 文件可以通过不同类型的媒体进行存储</p> <p>注 2 : 在 ISO/IEC 20000 中, 除记录外, 文件所描述的目的应该达到</p> <p>3.9 有效性 effectiveness</p> <p>计划的活动被实现的程度, 以及计划的结果的达成程度[ISO 9000:2005]</p> <p>3.10 事件 incident</p> <p>计划外的服务中断, 服务质量下降或还未影响服务的事态 (Event)</p> <p>3.11 信息安全 information security</p> <p>保持信息的机密性、完整性和可访问性</p> <p>注 1 : 此外, 其他属性还可包括真实性, 可核查性, 抗抵赖性和可靠性</p> <p>注 2 : 可用性没有被用在这个定义。因为在 ISO/IEC20000-1 可用性是一个已定义的词, 其用于信息安全的定义不适当。</p> <p>注 3 : 改编自 ISO/IEC 27000:2009</p> <p>3.12 信息安全事件 information security incident</p> <p>一个信息安全事件由单个或一系列的有害或意外信息安全事态组成, 它们具有损害业务运作和威胁信息安全的极大的可能性[ISO/IEC 27000:2009]</p> <p>3.13 相关方 interested party</p> <p>与服务提供者活动的业绩或成就有利益关系的个人或团体</p> <p>示例 : 用户、所有者、管理层、服务组织中的员工、供应商、银行、工会或合作伙伴。</p> <p>注 1 : 一个团体可由一个组织或其一部分或多个组织构成。</p> <p>注 2 : 改编自 ISO 9000:2005</p>	<p>NOTE Adapted from ISO 9000:2005.</p> <p>3.7 customer</p> <p>organization or part of an organization that receives a service or services</p> <p>NOTE 1 A customer can be internal or external to the service provider's organization.</p> <p>NOTE 2 Adapted from ISO 9000:2005.</p> <p>3.8 document</p> <p>information and its supporting medium [ISO 9000:2005]</p> <p>EXAMPLES Policies, plans, process descriptions, procedures, service level agreements, contracts or records.</p> <p>NOTE 1 The documentation can be in any form or type of medium.</p> <p>NOTE 2 In ISO/IEC 20000, documents, except for records, state the intent to be achieved.</p> <p>3.9 effectiveness</p> <p>extent to which planned activities are realized and planned results achieved [ISO 9000:2005]</p> <p>3.10 incident</p> <p>Incident unplanned interruption to a service, a reduction in the quality of a service or an event that has not yet impacted the service to the customer</p> <p>3.11 information security</p> <p>preservation of confidentiality, integrity and accessibility of information</p> <p>NOTE 1 In addition, other properties such as authenticity, accountability, non-repudiation and reliability can also be involved.</p> <p>NOTE 2 The term "availability" has not been used in this definition because it is a defined term in this part of ISO/IEC 20000 which would not be appropriate for this definition.</p> <p>NOTE 3 Adapted from ISO/IEC 27000:2009.</p> <p>3.12 information security incident</p> <p>single or a series of unwanted or unexpected information security events that have a significant probability of compromising business operations and threatening information security [ISO/IEC 27000:2009]</p> <p>3.13 interested party</p> <p>person or group having a specific interest in the performance or success of the service provider's activity or activities</p> <p>EXAMPLES Customers, owners, management, people in the service provider's organization, suppliers, bankers, unions or partners.</p> <p>NOTE 1 A group can comprise an organization, a part thereof, or more than one organization.</p> <p>NOTE 2 Adapted from ISO 9000:2005.</p>
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<p>3.14 内部团队 internal group</p> <p>服务提供者组织的一部分，其与服务提供者签署协议，共同参与到服务或服务流程的设计、转换、交付和改进中</p> <p><i>注：内部团队是指服务提供者的 SMS 范围之外的组织</i></p> <p>3.15 已知错误 known error</p> <p>一个已被了解根本原因或可用变通解决方案降低或消除对服务影响的问题</p> <p>3.16 不符合 nonconformity</p> <p>未满足要求</p> <p>[ISO 9000:2005]</p> <p>3.17 组织 organization</p> <p>职责、权限和相互关系得到安排的一组人员及设施</p> <p>示例：公司、集团、商行、企事业单位、研究机构、慈善机构、代理商、社团或上述组织的部分或组合。</p> <p><i>注 1：安排通常是有序的</i></p> <p><i>注 2：组织可以是公有的或私有的</i></p> <p>[ISO 9000:2005]</p> <p>3.18 预防措施 preventive action</p> <p>为避免或消除潜在不符合或其他潜在不希望情况的原因或降低其重复发生的可能性所采取的措施</p> <p><i>注：改编自 ISO 9000:2005</i></p> <p>3.19 问题 problem</p> <p>一个或多个事件的根本原因</p> <p><i>注：在问题记录创建和问题管理流程进一步调查期间，根本原因通常是未知的。</i></p> <p>3.20 程序 procedure</p> <p>为进行某项活动或过程所规定的途径</p> <p>[ISO 9000:2005]</p> <p><i>注：程序可以形成文件，也可以不形成文件。</i></p> <p>3.21 过程/流程 process</p> <p>将输入转化为输出的相互关联的或相互作用的一组活动</p> <p>[ISO 9000:2005]</p> <p>3.22 记录 record</p> <p>阐明所取得的结果或提供所完成活动的证据的文件</p> <p>[ISO 9000:2005]</p> <p>示例：审计报告、事件报告、培训记录或会议记录</p> <p>3.23 发布 release</p> <p>作为一个或多个变更的结果，部署到实际生产环境</p>	<p>3.14 internal group</p> <p>part of the service provider's organization that enters into a documented agreement with the service provider to contribute to the design, transition, delivery and improvement of a service or services</p> <p>NOTE The internal group is outside the scope of the service provider's SMS.</p> <p>3.15 known error</p> <p>problem that has an identified root cause or a method of reducing or eliminating its impact on a service by working around it</p> <p>3.16 nonconformity</p> <p>non-fulfilment of a requirement</p> <p>3.17 organization</p> <p>group of people and facilities with an arrangement of responsibilities, authorities and relationships</p> <p>EXAMPLES Company, corporation, firm, enterprise, institution, charity, sole trader, association, or parts or combination thereof.</p> <p>NOTE 1 The arrangement is generally orderly.</p> <p>NOTE 2 An organization can be public or private.</p> <p>[ISO 9000:2005]</p> <p>3.18 preventive action</p> <p>action to avoid or eliminate the causes or reduce the likelihood of occurrence of a potential nonconformity or other potential undesirable situation</p> <p>NOTE Adapted from ISO 9000:2005.</p> <p>3.19 problem</p> <p>root cause of one or more incidents</p> <p>NOTE The root cause is not usually known at the time a problem record is created and the problem management process is responsible for further investigation.</p> <p>3.20 procedure</p> <p>specified way to carry out an activity or a process [ISO 9000:2005]</p> <p>NOTE Procedures can be documented or not.</p> <p>3.21 process</p> <p>set of interrelated or interacting activities which transforms inputs into outputs [ISO 9000:2005]</p> <p>3.22 record</p> <p>document stating results achieved or providing evidence of activities performed [ISO 9000:2005]</p> <p>EXAMPLES Audit reports, incident reports, training records or minutes of meetings.</p> <p>3.23 release</p> <p>collection of one or more new or changed configuration items deployed into the live environment as a result of one</p>
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<p>的一个或多个新的或变更的配置项的集合</p> <p>3.24 变更请求 request for change</p> <p>对一项服务、服务组件或服务管理体系所做变更的提议</p> <p><i>注：一项服务变更包括提供一项新服务或删除一项不需要的服务。</i></p> <p>3.25 风险 risk</p> <p>对目标不确定性的影响</p> <p><i>注 1：影响可能偏离预期 - 正面的和 / 或负面的</i></p> <p><i>注 2：目标可以有不同的方面（如财务、健康安全以及环境目标），并应用于不同的层次（如战略、组织整体、项目、产品和过程）</i></p> <p><i>注 3：风险常具有潜在事件、后果或二者结合的特征</i></p> <p><i>注 4：经常用一个事件的后果（包括情况变化）和对应的发生可能性这二者的结合来表示风险</i></p> <p>[ISO 31000:2009]</p> <p>3.26 服务 service</p> <p>为了达成客户期望的结果，而向客户交付价值的一种方式</p> <p><i>注 1：服务通常是无形的</i></p> <p><i>注 2：一项服务也可以由服务提供者的供应商、内部团队或扮演供应商角色的客户所交付。</i></p> <p>3.27 服务组件 service component</p> <p>服务的单一单元，该单元与其他单元合并时将提供一个完整的服务</p> <p>示例：硬件、软件、工具、应用、文件、信息、过程或支持的服务。</p> <p><i>注：服务组件可以包括一个或多个配置项</i></p> <p>3.28 服务连续性 service continuity</p> <p>对风险和可能对一项或多项服务产生严重影响的事件进行管理的能力，以便以商定的水平持续提供服务</p> <p>3.29 服务级别协议 service level agreement(SLA)</p> <p>服务提供者和用户之间签署的协议，用以记录既定的服务和服务目标</p> <p><i>注 1：服务级别协议也可以在服务提供者与供应商、内部组织或扮演供应商角色的客户之间签署</i></p> <p><i>注 2：服务级别协议可包括在一个合同中或其他类型的书面协议中</i></p>	<p>or more changes</p> <p>3.24 request for change</p> <p>proposal for a change to be made to a service, service component or the service management system</p> <p>NOTE A change to a service includes the provision of a new service or the removal of a service which is no longer required.</p> <p>3.25 risk</p> <p>effect of uncertainty on objectives</p> <p>NOTE 1 An effect is a deviation from the expected — positive and/or negative.</p> <p>NOTE 2 Objectives can have different aspects (such as financial, health and safety, and environmental goals) and can apply at different levels (such as strategic, organization-wide, project, product and process).</p> <p>NOTE 3 Risk is often characterized by reference to potential events and consequences, or a combination of these.</p> <p>NOTE 4 Risk is often expressed in terms of a combination of the consequences of an event (including changes in circumstances) and the associated likelihood of occurrence.</p> <p>[ISO 31000:2009]</p> <p>3.26 service</p> <p>means of delivering value for the customer by facilitating results the customer wants to achieve</p> <p>NOTE 1 Service is generally intangible.</p> <p>NOTE 2 A service can also be delivered to the service provider by a supplier, an internal group or a customer acting as a supplier.</p> <p>3.27 service component</p> <p>single unit of a service that when combined with other units will deliver a complete service</p> <p>EXAMPLES Hardware, software, tools, applications, documentation, information, processes or supporting services.</p> <p>NOTE A service component can consist of one or more configuration items.</p> <p>3.28 service continuity</p> <p>capability to manage risks and events that could have serious impact on a service or services in order to continually deliver services at agreed levels</p> <p>3.29 service level agreement</p> <p>SLA</p> <p>documented agreement between the service provider and customer that identifies services and service targets</p> <p>NOTE 1 A service level agreement can also be established between the service provider and a supplier, an internal group or a customer acting as a supplier.</p> <p>NOTE 2 A service level agreement can be included in a</p>
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<p>3.30 服务管理 service management</p> <p>一系列的能力和过程，用以指导和控制服务提供者设计、转换、交付和改进服务的活动和资源，以满足服务需求</p> <p>3.31 服务管理体系 service management system(SMS)</p> <p>指导和控制服务提供者服务管理活动的管理体系</p> <p><i>注 1：服务管理体系是由一系列相关或相互影响的元素组成，以建立策略和目标并促进实现目标</i></p> <p><i>注 2：服务管理体系包括所有用于设计、转换、交付和改进服务及满足 ISO/IEC 20000-1 要求所需要的服务管理策略，目标，计划、过程、文件和资源</i></p> <p><i>注 3：改编自 ISO 9000:2005 “质量管理体系”的定义</i></p> <p>3.32 服务提供者 service provider</p> <p>一个组织或组织的一部分，其负责管理或交付一项或多项提供给用户的服务</p> <p><i>注：客户可以是服务供应者的内部或外部组织</i></p> <p>3.33 服务请求 service request</p> <p>用户对信息、建议、服务访问或预授权变更的请求</p> <p>3.34 服务需求 service requirement</p> <p>包括服务级别需求在内的用户和服务使用者的需求，以及服务提供者的需求</p> <p>3.35 供应商 supplier</p> <p>服务提供者之外的组织或组织的一部分，其与服务提供者签署协议，共同参与服务或服务流程的设计、转换、交付和改进中</p> <p><i>注：供应商包括指定的总包商，但不包括他们的分包商</i></p> <p>3.36 高管层 top management</p> <p>指导和管控服务提供者的高层人员或团队</p> <p><i>注：改编自 ISO 9000:2005</i></p> <p>3.37 转换 transition</p> <p>将一项新的或变更的服务移入或移出生产环境的活动</p>	<p>contract or another type of documented agreement.</p> <p>3.30 service management</p> <p>set of capabilities and processes to direct and control the service provider's activities and resources for the design, transition, delivery and improvement of services to fulfil the service requirements</p> <p>3.31 service management system</p> <p>SMS</p> <p>management system to direct and control the service management activities of the service provider</p> <p>NOTE 1 A management system is a set of interrelated or interacting elements to establish policy and objectives and to achieve those objectives.</p> <p>NOTE 2 The SMS includes all service management policies, objectives, plans, processes, documentation and resources required for the design, transition, delivery and improvement of services and to fulfil the requirements in this part of ISO/IEC 20000.</p> <p>NOTE 3 Adapted from the definition of “quality management system” in ISO 9000:2005.</p> <p>3.32 service provider</p> <p>organization or part of an organization that manages and delivers a service or services to the customer</p> <p>NOTE A customer can be internal or external to the service provider's organization.</p> <p>3.33 service request</p> <p>request for information, advice, access to a service or a pre-approved change</p> <p>3.34 service requirement</p> <p>needs of the customer and the users of the service, including service level requirements, and the needs of the service provider</p> <p>3.35 supplier</p> <p>organization or part of an organization that is external to the service provider's organization and enters into a contract with the service provider to contribute to the design, transition, delivery and improvement of a service or services or processes</p> <p>NOTE Suppliers include designated lead suppliers but not their sub-contracted suppliers.</p> <p>3.36 top management</p> <p>person or group of people who direct and control the service provider at the highest level</p> <p>NOTE Adapted from ISO 9000:2005.</p> <p>3.37 transition</p> <p>activities involved in moving a new or changed service to or from the live environment.</p>
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<p>4 服务管理体系总要求 Service management system general requirements</p> <p>4.1 管理职责 Management responsibility</p> <p>4.1.1 管理承诺 Management commitment</p> <p>高管层应通过以下活动，提供对规划、确立、实施、运行、监控、回顾、维护和改进 SMS 与服务所做承诺的证据：</p> <ul style="list-style-type: none"> a) 建立和沟通服务管理的范围、政策和目标； b) 确保服务管理计划被创建、实施和维护，以遵循服务管理政策、实现服务管理目标和满足服务需求； c) 沟通满足服务需求的重要性； d) 沟通满足法律法规要求和合同义务的重要性； e) 确保资源的提供； f) 按规定的時間间隔执行管理评审； g) 确保服务的风险被评估和管理。 <p>4.1.2 服务管理政策 Service management policy</p> <p>高管层应确保服务管理政策：</p> <ul style="list-style-type: none"> a) 符合服务提供者的目标； b) 包括对满足服务需求的承诺； c) 包括按照条款 4.5.5.1 的持续改进政策对持续改进 SMS 和服务有效性的承诺； d) 提供制定和回顾服务管理目标的机制； e) 被传达，并得到员工理解； f) 被回顾以持续适用。 <p>4.1.3 权利、职责和沟通 Authority, responsibility and communication</p> <p>高管层应确保：</p> <ul style="list-style-type: none"> a) 服务管理的权利和职责被定义和维护； b) 文件化的沟通程序被确立和实施。 <p>4.1.4 管理者代表 Management representative</p> <p>高管层应任命一名管理人员，无论其其他方面的职责如何，承担以下职责和权利：</p> <ul style="list-style-type: none"> a) 确保识别、记录和满足服务需求的活动被执行； b) 分配权利和职责，以确保服务管理流程遵循服务管理政策和目标进行设计、实施和改进； c) 确保服务管理流程和 SMS 其他部分进行整合； d) 确保用于交付服务的资产（包括许可证）遵循法律法规要求和合同义务进行管理； e) 向高管层报告 SMS 和服务的执行情况和改进机会。 	<p>4 Service management system general requirements</p> <p>4.1 Management responsibility</p> <p>4.1.1 Management commitment</p> <p>Top management shall provide evidence of its commitment to planning, establishing, implementing, operating, monitoring, reviewing, maintaining, and improving the SMS and the services by:</p> <ul style="list-style-type: none"> a) establishing and communicating the scope, policy and objectives for service management; b) ensuring that the service management plan is created, implemented and maintained in order to adhere to the policy, achieve the objectives for service management and fulfil the service requirements; c) communicating the importance of fulfilling service requirements; d) communicating the importance of fulfilling statutory and regulatory requirements and contractual obligations; e) ensuring the provision of resources; f) conducting management reviews at planned intervals; g) ensuring that risks to services are assessed and managed. <p>4.1.2 Service management policy</p> <p>Top management shall ensure that the service management policy:</p> <ul style="list-style-type: none"> a) is appropriate to the purpose of the service provider; b) includes a commitment to fulfil service requirements; c) includes a commitment to continually improve the effectiveness of the SMS and the services through the policy on continual improvement in Clause 4.5.5.1; d) provides a framework for establishing and reviewing service management objectives; e) is communicated and understood by the service provider's personnel; f) is reviewed for continuing suitability. <p>4.1.3 Authority, responsibility and communication</p> <p>Top management shall ensure that:</p> <ul style="list-style-type: none"> a) service management authorities and responsibilities are defined and maintained; b) documented procedures for communication are established and implemented. <p>4.1.4 Management representative</p> <p>Top management shall appoint a member of the service provider's management who, irrespective of other responsibilities, has the authorities and responsibilities that include:</p> <ul style="list-style-type: none"> a) ensuring that activities are performed to identify, document and fulfil service requirements; b) assigning authorities and responsibilities for ensuring that service management processes are designed, implemented and improved in accordance with the policy and objectives for service management; c) ensuring that service management processes are integrated with the other components of the SMS; d) ensuring that assets, including licences, used to deliver services are managed according to statutory and regulatory requirements and contractual obligations; e) reporting to top management on the performance and opportunities for improvement to the SMS and the services.
<p>4.2 对其他相关方所运营过程的管控 Governance of processes operated by other parties</p> <p>对于条款5-9所包含的过程，服务提供者应识别那些由其他相关方所运营的所有过程或部分过程。其他相关方可能是内部团队、某一客户或某一供应商。服务提供者应通过以下活动显示对其他相关方所运营过程的管控：</p> <ul style="list-style-type: none"> a) 表明对过程的最终负责，并拥有要求相关方遵 	<p>4.2 Governance of processes operated by other parties</p> <p>For the processes in Clauses 5 to 9, the service provider shall identify all processes, or parts of processes, which are operated by other parties. Other parties can be an internal group, a customer or a supplier. The service provider shall demonstrate governance of processes operated by other parties by:</p> <ul style="list-style-type: none"> a) demonstrating accountability for the processes and

<p>循过程的权利；</p> <p>b) 控制过程的定义以及过程与其他过程的接口；</p> <p>c) 确定过程的执行效果和对过程需求的遵循情况；</p> <p>d) 控制过程改进的计划和优先级。当供应商执行部分过程时，服务提供者应通过供应商管理流程管理供应商。当内部团队或客户执行部分过程时，服务提供者应通过服务级别管理流程管理内部团队和客户。</p> <p><i>注：ISO/IEC TR 20000-3提供了对于ISO/IEC 20000-1关于范围的定义和适用性的指导。这包括了对其他相关方所运营过程的管控的进一步解释。</i></p>	<p>authority to require adherence to the processes;</p> <p>b) controlling the definition of the processes, and interfaces to other processes;</p> <p>c) determining process performance and compliance with process requirements;</p> <p>d) controlling the planning and prioritizing of process improvements. When a supplier is operating parts of the processes, the service provider shall manage the supplier through the supplier management process. When an internal group or a customer is operating parts of the processes, the service provider shall manage the internal group or the customer through the service level management process.</p> <p>NOTE ISO/IEC TR 20000-3 provides guidance on scope definition and applicability of this part of ISO/IEC 20000. This includes further explanation about the governance of processes operated by other parties.</p>
<p>4.3 文件管理 Documentation management</p> <p>4.3.1 建立和维护文件 Establish and maintain documents</p> <p>服务提供者应建立和维护文件（包括记录），以确保对SMS进行有效的规划、执行和控制。文件应包括：</p> <p>a) 文件化的服务管理政策和目标；</p> <p>b) 文件化的服务管理计划；</p> <p>c) 本标准所要求的各流程文件化的策略和计划；</p> <p>d) 文件化的服务目录；</p> <p>e) 文件化的SLA；</p> <p>f) 文件化的服务管理流程；</p> <p>g) 本标准所要求的文件化程序和记录；</p> <p>h) 服务提供者认为为确保SMS有效运行和服务交付所需要的其他文件（包括外来文件）。</p>	<p>4.3 Documentation management</p> <p>4.3.1 Establish and maintain documents</p> <p>The service provider shall establish and maintain documents, including records, to ensure effective planning, operation and control of the SMS. These documents shall include:</p> <p>a) documented policy and objectives for service management;</p> <p>b) documented service management plan;</p> <p>c) documented policies and plans created for specific processes as required by this part of ISO/IEC 20000;</p> <p>d) documented catalogue of services;</p> <p>e) documented SLAs;</p> <p>f) documented service management processes;</p> <p>g) documented procedures and records required by this part of ISO/IEC 20000;</p> <p>h) additional documents, including those of external origin, determined by the service provider as necessary to ensure effective operation of the SMS and delivery of the services.</p>
<p>4.3.2 文件的控制 Control of documents</p> <p>SMS所要求的文件应被控制。记录是特定类型的文件也应依照4.3.3条款进行控制。</p> <p>应建立文件化的程序（包括权利和职责）用于定义以下所需的控制：</p> <p>a) 在发布前，创建和批准文件；</p> <p>b) 与相关方沟通关于新的或变更的文件；</p> <p>c) 需要时回顾和维护文件；</p> <p>d) 确保文件的更改和当前的修订状态得到识别；</p> <p>e) 确保适用文件的有关版本在使用时可获得；</p> <p>f) 确保文件清晰，易于识别；</p> <p>g) 确保外来文件得到识别和控制其分发；</p>	<p>4.3.2 Control of documents</p> <p>Documents required by the SMS shall be controlled. Records are a special type of document and shall be controlled according to the requirements given in Clause 4.3.3.</p> <p>A documented procedure, including the authorities and responsibilities, shall be established to define the controls needed to:</p> <p>a) create and approve documents prior to issue;</p> <p>b) communicate to interested parties about new or changed documents;</p> <p>c) review and maintain documents as necessary;</p> <p>d) ensure that changes and the current revision status of documents are identified;</p> <p>e) ensure that relevant versions of applicable documents are</p>

<p>h) 防止作废文件的非预期使用, 若作废文件需要被保留, 应使用适当的标识。</p> <p>4.3.3 记录的控制 Control of records</p> <p>记录应被保存, 以证实符合要求和SMS的有效运行。</p> <p>应建立文件化的程序用于定义记录所需的控制: 标识、存储、保护、检索、保持和废止。记录应清晰、易于识别和检索。</p>	<p>available at points of use;</p> <p>f) ensure that documents are readily identifiable and legible;</p> <p>g) ensure that documents of external origin are identified and their distribution controlled;</p> <p>h) prevent the unintended use of obsolete documents and apply suitable identification to them if they are retained.</p> <p>4.3.3 Control of records</p> <p>Records shall be kept to demonstrate conformity to requirements and the effective operation of the SMS.</p> <p>A documented procedure shall be established to define the controls needed for the identification, storage, protection, retrieval, retention and disposal of records. Records shall be legible, readily identifiable and retrievable.</p>
<p>4.4 资源管理 Resource management</p> <p>4.4.1 资源的提供 Provision of resources</p> <p>服务提供者应决定并提供所需的人员、技术、信息和财务资源, 用以:</p> <p>a) 建立、实施和维护SMS和服务, 并持续改进其有效性;</p> <p>b) 通过交付满足需求的服务, 提升客户满意度。</p> <p>4.4.2 人力资源 Human resources</p> <p>服务提供者的员工应有能力胜任所承担的工作, 以满足服务需求。这些能力应基于适当的教育、培训、技能和经验。服务提供者应:</p> <p>a) 确定人员所需的必要能力;</p> <p>b) 根据需要提供培训或采取其他措施以获得所需的能力;</p> <p>c) 评估采取措施的有效性;</p> <p>d) 确保人员能意识到他们如何对服务管理目标的达成和服务需求的满足做出贡献;</p> <p>e) 维护教育、培训、技能和经验的适当记录。</p>	<p>4.4 Resource management</p> <p>4.4.1 Provision of resources</p> <p>The service provider shall determine and provide the human, technical, information and financial resources needed to:</p> <p>a) establish, implement and maintain the SMS and the services, and continually improve their effectiveness;</p> <p>b) enhance customer satisfaction by delivering services that fulfil service requirements.</p> <p>4.4.2 Human resources</p> <p>The service provider's personnel performing work affecting conformity to service requirements shall be competent on the basis of appropriate education, training, skills and experience. The service provider shall:</p> <p>a) determine the necessary competence for personnel;</p> <p>b) where applicable, provide training or take other actions to achieve the necessary competence;</p> <p>c) evaluate the effectiveness of actions taken;</p> <p>d) ensure that its personnel are aware of how they contribute to the achievement of service management objectives and the fulfilment of service requirements;</p> <p>e) maintain appropriate records of education, training, skills and experience.</p>
<p>4.5 建立和改进 SMS Establish and improve the SMS</p> <p>4.5.1 定义范围 Define scope</p> <p>服务提供者应在服务管理计划中定义和包含SMS的范围。范围应以提供服务的组织单位名称和所交付服务的名称加以界定。</p> <p>服务提供者也应考虑其他影响所交付服务的因素, 包括:</p> <p>a) 服务提供者交付服务的地理位置;</p> <p>b) 客户和他们的所在地;</p>	<p>4.5 Establish and improve the SMS</p> <p>4.5.1 Define scope</p> <p>The service provider shall define and include the scope of the SMS in the service management plan. The scope shall be defined by the name of the organizational unit providing the services, and the services to be delivered.</p> <p>The service provider shall also take into consideration other factors affecting the services to be delivered including:</p> <p>a) geographical location(s) from which the service provider delivers the services;</p> <p>b) the customer and their location(s);</p>

<p>c) 提供服务所使用的技术。</p> <p><i>注：ISO/IEC TR 20000-3提供了对于ISO/IEC 20000-1关于范围的定义和适用性的指导。</i></p> <p>4.5.2 规划 SMS Plan the SMS (Plan)</p> <p>服务提供者应创建、实施和维护服务管理计划。计划应考虑服务管理政策、服务需求和ISO/IEC 20000-1的要求。服务管理计划应具有或包括至少以下参考内容：</p> <ul style="list-style-type: none"> a) 服务提供者期望获得的服务管理目标； b) 服务需求； c) 可能影响SMS的已知限制； d) 政策、标准、法律法规要求和合同义务； e) 权利、职责和流程角色的框架； f) 规划、服务管理流程和服务的权利和职责； g) 实现服务管理目标所需的人员、技术、信息和财务资源； h) 在设计并转换新的或变更的服务过程中，与其他相关方协同工作所采用的方法； i) 服务管理流程和SMS其他组成部分集成所采用的方法； j) 风险管理和风险接受标准所采用的方法； k) 用于支持SMS所使用的技术； l) 如何测量、审核、报告和改进SMS和服务的有效性。 <p>为特定流程所创建的计划应与服务管理计划相一致。服务管理计划和为特定流程所创建的计划应按计划的时间间隔进行回顾和（若需要的话）更新。</p> <p>4.5.3 实施和执行 SMS Implement and operate the SMS (Do)</p> <p>服务提供者应实施和执行SMS，依照服务管理计划进行设计、转换、交付和改进服务，其中的活动至少包括：</p> <ul style="list-style-type: none"> a) 资金和预算的分配和管理； b) 责任、权利和流程角色的分配； c) 人员、计划和信息资源的管理； d) 识别、评估和管理服务的风险； e) 服务管理流程的管理； f) 监控和报告服务管理活动的执行情况。 	<p>c) technology used to provide the services.</p> <p>NOTE ISO/IEC TR 20000-3 provides guidance on scope definition and applicability of this part of ISO/IEC 20000.</p> <p>4.5.2 Plan the SMS (Plan)</p> <p>The service provider shall create, implement and maintain a service management plan. Planning shall take into consideration the service management policy, service requirements and requirements in this part of ISO/IEC 20000. The service management plan shall contain or include a reference to at least the following:</p> <ul style="list-style-type: none"> a) service management objectives that are to be achieved by the service provider; b) service requirements; c) known limitations which can impact the SMS; d) policies, standards, statutory and regulatory requirements and contractual obligations; e) framework of authorities, responsibilities and process roles; f) authorities and responsibilities for plans, service management processes and services; g) human, technical, information and financial resources necessary to achieve the service management objectives; h) approach to be taken for working with other parties involved in the design and transition of new or changed services process; i) approach to be taken for the interfaces between service management processes and their integration with the other components of the SMS; j) approach to be taken for the management of risks and the criteria for accepting risks; k) technology used to support the SMS; l) how the effectiveness of the SMS and the services will be measured, audited, reported and improved. <p>Plans created for specific processes shall be aligned with the service management plan. The service management plan and plans created for specific processes shall be reviewed at planned intervals and, if applicable, updated.</p> <p>4.5.3 Implement and operate the SMS (Do)</p> <p>The service provider shall implement and operate the SMS for the design, transition, delivery and improvement of services according to the service management plan, through activities including at least:</p> <ul style="list-style-type: none"> a) allocation and management of funds and budgets; b) assignment of authorities, responsibilities and process roles; c) management of human, technical and information resources; d) identification, assessment and management of risks to the services; e) management of service management processes;
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<p>4.5.4 监控和回顾 SMS Monitor and review the SMS (Check)</p> <p>4.5.4.1 总要求 General</p> <p>服务提供者应采用适宜的方法监控和测量SMS和服务。这些方法应包括内部审核和管理评审。</p> <p>所有内部审核和管理评审的目标应被文档化。内部审核和管理评审应证实SMS和服务用以实现服务管理目标和满足服务需求的能力。不满足本标准要求、服务提供者所提出的SMS要求或服务需求的不符合项应被识别。</p> <p>内部审核和管理评审的结果，包括不符合项、关注点和识别的改进行动应被记录。结果和行动应与相关方沟通。</p> <p>4.5.4.2 内部审核 Internal audit</p> <p>服务提供者应按照计划的时间间隔执行内部审核，以确定SMS和服务是否：</p> <ul style="list-style-type: none"> a) 满足本标准的要求； b) 满足服务需求和服务提供者所提出的SMS要求； c) 有效被实施和维护。 <p>应有文件化的程序，包括权利和责任，用以计划和执行审核、报告结果和维护审核记录。</p> <p>审核方案应被策划。应考虑被审核的流程和领域的状态和重要程度，以及以往的审核结果。审核标准、范围、频率和方法应文件化。</p> <p>审核人员的选择和审核的执行应确保客观性和公正性。审核人员不应审核自身的工作。</p> <p>不符合项应被沟通，进行优先级排序，改进活动应分配到责任人。负责被审核领域的管理者应确保任何改进行为和和改进活动无延误地被执行以消除不符合项和其原因。后续活动应包括对所采取行为的验证和其结果的报告。</p> <p>注：参考ISO19011关于管理体系审核的指南。</p> <p>4.5.4.3 管理评审 Management review</p> <p>高管层应按照计划的时间间隔回顾SMS和服务，以确保其持续适用和有效。回顾应评估SMS的改进机会和变更需求，包括服务管理的政策和目标。</p> <p>管理评审的输入应至少包括以下信息：</p>	<p>f) monitoring and reporting on performance of service management activities.</p> <p>4.5.4 Monitor and review the SMS (Check)</p> <p>4.5.4.1 General</p> <p>The service provider shall use suitable methods for monitoring and measuring the SMS and the services. These methods shall include internal audits and management reviews.</p> <p>The objectives of all internal audits and management reviews shall be documented. The internal audits and management reviews shall demonstrate the ability of the SMS and the services to achieve service management objectives and fulfil service requirements. Nonconformities shall be identified against the requirements in this part of ISO/IEC 20000, the SMS requirements identified by the service provider or the service requirements.</p> <p>The results of internal audits and management reviews, including nonconformities, concerns and actions identified, shall be recorded. The results and actions shall be communicated to interested parties.</p> <p>4.5.4.2 Internal audit</p> <p>The service provider shall conduct internal audits, at planned intervals, to determine whether the SMS and the services:</p> <ul style="list-style-type: none"> a) fulfil the requirements in this part of ISO/IEC 20000; b) fulfil the service requirements and the SMS requirements identified by the service provider; c) are effectively implemented and maintained. <p>There shall be a documented procedure including the authorities and responsibilities for planning and conducting audits, reporting results and maintaining audit records.</p> <p>An audit programme shall be planned. This shall take into consideration the status and importance of the processes and areas to be audited, as well as the results of previous audits. The audit criteria, scope, frequency and methods shall be documented.</p> <p>The selection of auditors and conduct of audits shall ensure objectivity and impartiality of the audit. Auditors shall not audit their own work.</p> <p>Nonconformities shall be communicated, prioritized and responsibility allocated for actions. The management responsible for the area being audited shall ensure that any corrections and corrective actions are taken without undue delay to eliminate nonconformities and their causes. Follow-up activities shall include the verification of the actions taken and the reporting of results.</p> <p>NOTE See ISO 19011 for guidance on management systems auditing.</p> <p>4.5.4.3 Management review</p> <p>Top management shall review the SMS and the services at planned intervals to ensure their continued suitability and effectiveness. This review shall include assessing opportunities for improvement and the need for changes to the SMS, including the policy and objectives for service management.</p>
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<p>a) 客户反馈；</p> <p>b) 服务和流程的执行情况和符合性；</p> <p>c) 当前和预测的人员、技术、信息和财务资源水平；</p> <p>d) 当前和预测的人员和技术能力；</p> <p>e) 风险；</p> <p>f) 来自审核的结果和后续行动；</p> <p>g) 以往管理评审的结果和后续行动；</p> <p>h) 预防和纠正措施的进展情况；</p> <p>i) 可能影响SMS和服务的变更；</p> <p>j) 改进的机会。</p> <p>管理评审的记录应被维护。</p> <p>管理评审的记录应至少包括相关资源、SMS有效性的改进和服务的改进的有关决策和行动。</p> <p>4.5.5 维护和改进 SMS Maintain and improve the SMS (Act)</p> <p>4.5.5.1 总要求 General</p> <p>应有SMS和服务的持续改进政策。政策应包括对改进机会的评估标准。</p> <p>应有文件化的程序（包括权利和责任）用以识别、记录、评估、批准、划分优先级、管理、测量和报告改进措施。</p> <p>改进机会（包括改进和预防措施）应被文件化。</p> <p>识别的不符合项的原因应被纠正。纠正措施应用以消除所识别的不符合项的原因，以防止再次发生。应采取预防措施，以消除潜在的不符合项的原因，以防止其发生。</p> <p><i>注：了解更多关于改进和预防措施的信息，请参考 ISO 9001:2008中的8.5条款。</i></p> <p>4.5.5.2 管理改进 Management of improvements</p> <p>改进机会应划分优先级。当决策改进机会时，服务提供者应采用服务政策中持续改进的评估标准。</p> <p>批准的改进应被规划。</p> <p>服务提供者应管理改进活动，至少包括：</p> <p>a) 设定改进目标，包括质量、价值、能力、成本、生产力、资源使用和风险降低中的一项或几项；</p> <p>b) 确保批准的改进活动被实施；</p> <p>c) 需要的情况下，更新服务管理政策、计划、流程和程序；</p> <p>d) 基于设定的目标，测量已实施的改进活动，若</p>	<p>The input to management reviews shall include at least information on:</p> <p>a) customer feedback;</p> <p>b) service and process performance and conformity;</p> <p>c) current and forecast human, technical, information and financial resource levels;</p> <p>d) current and forecast human and technical capabilities;</p> <p>e) risks;</p> <p>f) results and follow-up actions from audits;</p> <p>g) results and follow-up actions from previous management reviews;</p> <p>h) status of preventive and corrective actions;</p> <p>i) changes that could affect the SMS and the services;</p> <p>j) opportunities for improvement.</p> <p>Records of management reviews shall be maintained.</p> <p>The records from the management review shall include at least decisions and actions related to resources, improvement of the effectiveness of the SMS and improvement of the services.</p> <p>4.5.5 Maintain and improve the SMS (Act)</p> <p>4.5.5.1 General</p> <p>There shall be a policy on continual improvement of the SMS and the services. The policy shall include evaluation criteria for the opportunities for improvement.</p> <p>There shall be a documented procedure including the authorities and responsibilities for identifying, documenting, evaluating, approving, prioritizing, managing, measuring and reporting of improvements.</p> <p>Opportunities for improvement, including corrective and preventive actions, shall be documented.</p> <p>The cause of identified nonconformities shall be corrected. Corrective actions shall be taken to eliminate the cause of identified nonconformities in order to prevent recurrence. Preventive actions shall be taken in order to eliminate the cause of potential nonconformities in order to prevent occurrence.</p> <p>NOTE For more information on corrective and preventive action, see ISO 9001:2008, Clause 8.5.</p> <p>4.5.5.2 Management of improvements</p> <p>Opportunities for improvement shall be prioritized. The service provider shall use the evaluation criteria in the policy on continual improvement, when making decisions on opportunities for improvement.</p> <p>Approved improvements shall be planned.</p> <p>The service provider shall manage improvement activities that include at least:</p> <p>a) setting targets for improvements in one or more of quality, value, capability, cost, productivity, resource utilization and risk reduction;</p>
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<p>未达到目标，采取必要的行动；</p> <p>e) 报告被实施的改进活动。</p>	<p>b) ensuring that approved improvements are implemented;</p> <p>c) revising the service management policies, plans, processes and procedures, where necessary;</p> <p>d) measuring implemented improvements against the targets set and where targets are not achieved, taking necessary actions;</p> <p>e) reporting on implemented improvements.</p>
<p>5 设计并转换新的或变更的服务 Design and transition of new or changed services</p> <p>5.1 总要求 General</p> <p>服务提供者应使用此过程来管理所有对服务或客户存在潜在的重大影响的新服务和服务的变更。条款5范围内的变更应由协商确定的变更管理策略决定，变更管理策略作为变更管理流程的一部分。</p> <p>评估、批准、日程安排和回顾条款5范围内的新的和变更的服务应由变更管理流程控制。条款5范围内新的或变更的服务所影响的配置项（CIs）应由配置管理流程控制。</p> <p>服务提供者应评审新服务或变更的服务的规划和设计活动的输出，评审应依据协商确定的服务需求和条款5.2、5.3相关的要求。基于评审的结果，服务提供者应接受或拒绝规划和设计活动的输出。服务提供者应采取必要的行动以确保新服务或变更的服务的开发和转换能被有效执行，并运用了已被接受的规划和设计活动输出。</p> <p><i>注：新服务或服务的变更需求来源于客户、服务提供者、内部团队或供应商，其目的是满足业务需求或者改进服务效果。</i></p> <p>5.2 规划新的或变更的服务 Plan new or changed services</p> <p>服务提供者应识别新的或变更的服务的需求。应对新的或变更的服务进行规划以满足服务需求。新的或变更的服务的规划应同客户和利益相关方达成一致。</p> <p>作为规划的输入，服务提供者应考虑交付新的或变更的服务对财务、组织和技术的潜在影响。同时，服务提供者也应考虑新的或变更的服务对服务管理体系（SMS）的潜在影响。</p> <p>新的或变更的服务规划应至少具有或者包括以下内容：</p> <p>a) 设计、开发和转换活动的权利和职责；</p> <p>b) 服务提供者以及其他相关方执行的活动，包括横跨服务提供者和其他相关方界面的活动；</p> <p>c) 同利益相关方的沟通；</p> <p>d) 人员、技术、信息以及财务资源；</p> <p>e) 活动的时间进度；</p>	<p>5 Design and transition of new or changed services</p> <p>5.1 General</p> <p>The service provider shall use this process for all new services and changes to services with the potential to have a major impact on services or the customer. The changes that are in the scope of Clause 5 shall be determined by the change management policy agreed as part of the change management process.</p> <p>Assessment, approval, scheduling and reviewing of new or changed services in the scope of Clause 5 shall be controlled by the change management process. The CIs affected by new or changed services in the scope of Clause 5 shall be controlled by the configuration management process.</p> <p>The service provider shall review outputs from the planning and design activities for new or changed services against the agreed service requirements and the relevant requirements given in Clauses 5.2 and 5.3. Based on the review, the service provider shall accept or reject the outputs. The service provider shall take necessary actions to ensure that the development and transition of the new or changed services can be performed effectively, using the accepted outputs.</p> <p>NOTE The need for a new service or a change to a service can originate from the customer, the service provider, an internal group or a supplier in order to satisfy business needs or to improve the effectiveness of the services.</p> <p>5.2 Plan new or changed services</p> <p>The service provider shall identify the service requirements for the new or changed services. New or changed services shall be planned to fulfill the service requirements. Planning for the new or changed services shall be agreed with the customer and interested parties.</p> <p>As input to planning, the service provider shall take into consideration the potential financial, organizational, and technical impact of delivering the new or changed services. The service provider shall also take into consideration the potential impact of the new or changed services on the SMS.</p> <p>Planning for the new or changed services shall contain or include a reference to at least the following:</p> <p>a) authorities and responsibilities for design, development and transition activities;</p> <p>b) activities to be performed by the service provider and other parties including activities across interfaces from the service provider to other parties;</p> <p>c) communication to interested parties;</p>

<p>f) 风险的识别、评估和管理；</p> <p>g) 同其他服务的依从关系；</p> <p>h) 新的或变更的服务的测试需求；</p> <p>i) 服务接受准则；</p> <p>j) 以可测量的术语表述的交付新的或变更的服务的预期结果。</p> <p>针对将要被撤销的服务，服务提供者应做好撤销计划。撤销计划应包括撤销日期、存档、数据文档以及服务组件的销毁或迁移。服务组件可以包括基础设施及具有授权许可的应用。</p> <p>服务提供者应识别有助于为新的或变更的服务提供服务组件的其他相关方。服务提供者应评估他们满足服务需求的能力。评估结果应被记录并采取必要的行动。</p> <p>5.3 设计和开发新的或变更的服务 Design and development of new or changed services</p> <p>应设计新的或变更的服务，设计文件至少包括以下内容：</p> <p>a) 交付新的或变更的服务的权力和职责；</p> <p>b) 交付新的或变更的服务提供者、客户以及其他相关方执行的活动；</p> <p>c) 新的或变更的服务对人力资源的需求，包括适当的教育、培训、技能和经验需求；</p> <p>d) 交付新的或变更的服务的财务资源需求；</p> <p>e) 支持新的或变更的服务交付所需要的新的或变更的技术；</p> <p>f) 本标准所要求的新的或变更的计划和策略；</p> <p>g) 新的或变更的合同和其他文件化的协议，以保持与服务需求的变化一致；</p> <p>h) 对SMS的变更；</p> <p>i) 新的或变更的SLAs；</p> <p>j) 服务目录的更新；</p> <p>k) 用于交付新的或变更的服务的程序、测量方式和信息。</p> <p>服务提供者应确保所设计的新的或变更的服务能满足服务需求。</p> <p>新的或变更的服务应依照设计文件进行开发。</p> <p>注：关于服务设计的更多信息，请参照 ISO9001:2008 条款7.3的“设计开发过程”内容，</p>	<p>d) human, technical, information and financial resources;</p> <p>e) timescales for planned activities;</p> <p>f) identification, assessment and management of risks;</p> <p>g) dependencies on other services;</p> <p>h) testing required for the new or changed services;</p> <p>i) service acceptance criteria;</p> <p>j) expected outcomes from delivering the new or changed services, expressed in measurable terms.</p> <p>For services that are to be removed, the service provider shall plan for the removal of the service(s). Planning shall include the date(s) for the removal, archiving, disposal or transfer of data, documentation and service components. The service components can include infrastructure and applications with associated licences.</p> <p>The service provider shall identify other parties who will contribute to the provision of service components for the new or changed services. The service provider shall evaluate their ability to fulfil the service requirements. The results of the evaluation shall be recorded and necessary actions taken.</p> <p>5.3 Design and development of new or changed services</p> <p>The new or changed services shall be designed and documented to include at least:</p> <p>a) authorities and responsibilities for delivery of the new or changed services;</p> <p>b) activities to be performed by the service provider, customer and other parties for delivery of the new or changed services;</p> <p>c) new or changed human resource requirements, including requirements for appropriate education, training, skills and experience;</p> <p>d) financial resource requirements for delivery of the new or changed services;</p> <p>e) new or changed technology to support the delivery of the new or changed services;</p> <p>f) new or changed plans and policies as required by this part of ISO/IEC 20000;</p> <p>g) new or changed contracts and other documented agreements to align with changes in service requirements;</p> <p>h) changes to the SMS;</p> <p>i) new or changed SLAs;</p> <p>j) updates to the catalogue of services;</p> <p>k) procedures, measures and information to be used for the delivery of the new or changed services.</p> <p>The service provider shall ensure that the design enables the new or changed services to fulfill the service requirements.</p> <p>The new or changed services shall be developed in accordance with the documented design.</p> <p>NOTE For further information about design, see the design</p>
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<p>或参照ISO/IEC 15288:2008条款6.4.3的“架构设计流程”内容。</p> <p>5.4 新的或变更的服务的转换 Transition of new or changed services</p> <p>新的或变更的服务应被测试，以验证其能否满足服务需求以及设计文件。</p> <p>新的或变更的服务应依照服务提供者和利益相关方事先确定的服务接受准则进行验证。如果不符合服务接受准则，服务提供者和利益相关方应决定采取必要的行动和部署措施。</p> <p>发布和部署管理流程应被用于部署已批准的新的或变更的服务到实际运行环境中。</p> <p>转换活动结束后，服务提供者应向利益相关方报告所取得的结果，并与预期结果进行对比。</p>	<p>and development process in ISO 9001:2008, Clause 7.3 or the architectural design process in ISO/IEC 15288:2008, Clause 6.4.3.</p> <p>5.4 Transition of new or changed services</p> <p>The new or changed services shall be tested to verify that they fulfill the service requirements and documented design.</p> <p>The new or changed services shall be verified against service acceptance criteria agreed in advance by the service provider and interested parties. If the service acceptance criteria are not met, the service provider and interested parties shall make a decision on necessary actions and deployment.</p> <p>The release and deployment management process shall be used to deploy approved new or changed services into the live environment.</p> <p>Following the completion of the transition activities, the service provider shall report to interested parties on the outcomes achieved against the expected outcomes.</p>
<p>6 服务交付过程 Service delivery processes</p> <p>6.1 服务级别管理 Service level management</p> <p>服务提供者应与客户协商确定所要交付的服务。</p> <p>服务提供者应与客户协商确定服务目录。服务目录应包括服务与服务组件之间的依赖关系。</p> <p>对于所交付的每项服务，应与客户协商确定一个或多个服务级别协议（SLAs）。当创建 SLAs 时，服务提供者应考虑服务需求。SLAs 应包括协商确定的服务目标、工作量特性和例外。</p> <p>服务提供者应按计划的时间间隔与客户回顾服务与 SLAs。</p> <p>对文件化的服务需求、服务目录、SLAs 和其他文件化协议的变更都应在变更管理流程的控制之下。服务目录应随服务和 SLAs 的变更进行维护以确保相互间保持一致。</p> <p>服务提供者应按计划的时间间隔对照服务目标监控趋势与效果。结果应被记录和回顾，以识别不符合的原因和改进机会。</p> <p>对于由内部团队或客户提供的服务组件，服务提供者应开发、协商确定、回顾和维护一个文件化的协议，以确定双方间的活动与接口。服务提供者应按计划的时间间隔监控内部团队或客户相对服务约定目标和其他约定承诺的效果。结果应被记录和回顾，以识别不符合的原因与改进机会。</p>	<p>6 Service delivery processes</p> <p>6.1 Service level management</p> <p>The service provider shall agree the services to be delivered with the customer.</p> <p>The service provider shall agree a catalogue of services with the customer. The catalogue of services shall include the dependencies between services and service components.</p> <p>For each service delivered, one or more SLAs shall be agreed with the customer. When creating SLAs, the service provider shall take into consideration the service requirements. SLAs shall include agreed service targets, workload characteristics and exceptions.</p> <p>The service provider shall review services and SLAs with the customer at planned intervals.</p> <p>Changes to the documented service requirements, catalogue of services, SLAs and other documented agreements shall be controlled by the change management process. The catalogue of services shall be maintained following changes to services and SLAs to ensure that they are aligned.</p> <p>The service provider shall monitor trends and performance against service targets at planned intervals. Results shall be recorded and reviewed to identify the causes of nonconformities and opportunities for improvement.</p> <p>For service components provided by an internal group or the customer, the service provider shall develop, agree, review and maintain a documented agreement to define the activities and interfaces between the two parties. The service provider shall monitor performance of the internal group or the customer against agreed service targets and other agreed commitments, at planned intervals. Results shall be recorded and reviewed to identify the causes of nonconformities and opportunities for improvement.</p>
<p>6.2 服务报告 Service reporting</p> <p>每一个服务报告的描述，包括报告的标识、目的、</p>	<p>6.2 Service reporting</p> <p>The description of each service report, including its</p>

<p>目标读者、频率和数据源的详细信息，应被文件化并在服务提供者和利益相关方间协商一致。</p> <p>针对服务，应使用服务交付和SMS活动（包括服务管理过程）中产生的各类信息生成服务报告。服务报告应至少包括：</p> <ul style="list-style-type: none"> a) 相对服务目标的服务绩效； b) 显著事态的相关信息，至少包括重大事件，新的或变更的服务的部署和被触发的服务连续性计划； c) 工作量特征，包括容量和负载的周期性变化； d) 相对于本标准的要求、SMS要求或服务需求所发现的不符合项以及识别出的原因； e) 趋势信息； f) 客户满意度测量、服务投诉以及满意度测量和投诉的分析结果。 <p>服务提供者应基于服务报告的结果做出决定与采取行动。协商确定的行动应与利益相关方沟通。</p>	<p>identity, purpose, audience, frequency and details of the data source(s), shall be documented and agreed by the service provider and interested parties.</p> <p>Service reports shall be produced for services using information from the delivery of services and the SMS activities, including the service management processes. Service reporting shall include at least:</p> <ul style="list-style-type: none"> a) performance against service targets; b) relevant information about significant events including at least major incidents, deployment of new or changed services and the service continuity plan being invoked; c) workload characteristics including volumes and periodic changes in workload; d) detected nonconformities against the requirements in this part of ISO/IEC 20000, the SMS requirements or the service requirements and their identified causes; e) trend information; f) customer satisfaction measurements, service complaints and results of the analysis of satisfaction measurements and complaints. <p>The service provider shall make decisions and take actions based on the findings in service reports. The agreed actions shall be communicated to interested parties.</p>
<p>6.3 服务连续性和可用性管理 Service continuity and availability management</p> <p>6.3.1 服务连续性和可用性需求 Service continuity and availability requirements</p> <p>服务提供者应评估和记录服务连续性和可用性的风险。服务提供者应与客户和相关各方识别和协商确定服务连续性和可用性需求。协商确定的需求应考虑适用的业务计划、服务需求、SLA和风险。</p> <p>协商确定的服务连续性和可用性需求应至少包括：</p> <ul style="list-style-type: none"> a) 服务的访问权限； b) 服务响应时间； c) 端到端的服务可用性。 <p>6.3.2 服务连续性和可用性计划 Service continuity and availability plans</p> <p>服务提供者应建立、实施和维护服务连续性计划和可用性计划。这些计划的变更应在变更管理流程的控制之下。</p> <p>服务连续性计划至少应包括：</p> <ul style="list-style-type: none"> a) 服务重大损失情况下执行的程序，或引用的程序； b) 当计划被启用时的可用性目标； c) 恢复要求； d) 恢复到正常工作环境的方法。 <p>当访问正常的服务地点受阻时，应能访问到服务连续性计划、联系人名单和 CMDB。</p>	<p>6.3 Service continuity and availability management</p> <p>6.3.1 Service continuity and availability requirements</p> <p>The service provider shall assess and document the risks to service continuity and availability of services. The service provider shall identify and agree with the customer and interested parties service continuity and availability requirements. The agreed requirements shall take into consideration applicable business plans, service requirements, SLAs and risks.</p> <p>The agreed service continuity and availability requirements shall include at least:</p> <ul style="list-style-type: none"> a) access rights to the services; b) service response times; c) end to end availability of services. <p>6.3.2 Service continuity and availability plans</p> <p>The service provider shall create, implement and maintain a service continuity plan(s) and an availability plan(s). Changes to these plans shall be controlled by the change management process.</p> <p>The service continuity plan(s) shall include at least:</p> <ul style="list-style-type: none"> a) procedures to be implemented in the event of a major loss of service, or reference to them; b) availability targets when the plan is invoked; c) recovery requirements; d) approach for the return to normal working conditions. <p>The service continuity plan(s), contact lists and the CMDB shall be accessible when access to normal service locations</p>

<p>可用性计划至少应包括可用性需求和目标。</p> <p>服务提供者应评估变更请求对服务连续性计划和可用性计划的影响。</p> <p><i>注：服务连续性计划和可用性计划可以合并为一个文件。</i></p> <p>6.3.3 服务连续性和可用性的监控与测试 Service continuity and availability monitoring and testing</p> <p>应监控服务的可用性，记录其结果并与协商确定的目标进行比较。应调查非计划性的不可用并采取必要的行动。</p> <p>应依据服务连续性需求来测试服务连续性计划。应依据可用性需求来测试可用性计划。在服务提供者运营的服务环境发生重大变更后，应重新测试服务连续性和可用性计划。</p> <p>应记录测试结果。在每次测试之后和启用服务连续性计划之后，应进行回顾。发现不足时，服务提供者应采取必要的行动并报告所采取的行动。</p>	<p>is prevented.</p> <p>The availability plan(s) shall include at least availability requirements and targets.</p> <p>The service provider shall assess the impact of requests for change on the service continuity plan(s) and the availability plan(s).</p> <p>NOTE The service continuity plan(s) and availability plan(s) can be combined into one document.</p> <p>6.3.3 Service continuity and availability monitoring and testing</p> <p>Availability of services shall be monitored, the results recorded and compared with agreed targets. Unplanned non-availability shall be investigated and necessary actions taken.</p> <p>Service continuity plans shall be tested against the service continuity requirements. Availability plans shall be tested against the availability requirements. Service continuity and availability plans shall be re-tested after major changes to the service environment in which the service provider operates.</p> <p>The results of the tests shall be recorded. Reviews shall be conducted after each test and after the service continuity plan has been invoked. Where deficiencies are found, the service provider shall take necessary actions and report on the actions taken.</p>
<p>6.4 服务的预算与核算 Budgeting and accounting for services</p> <p>服务的预算与核算流程和其他财务管理流程应有明确的接口。</p> <p>对于下列内容，应有策略和文件化的程序：</p> <p>a) 对服务组件的预算与核算至少应包括：</p> <ol style="list-style-type: none"> 1) 用于提供服务的资产（包括许可证）； 2) 共享的资源； 3) 管理费用； 4) 资本与运营支出； 5) 外部供应的服务； 6) 人员； 7) 设施。 <p>b) 为服务分摊间接成本和分配直接成本，为每一项服务计算总成本；</p> <p>c) 有效的财务控制与审批。</p> <p>为了对交付服务进行有效的财务控制和制定决策，应对成本进行预算。</p> <p>服务提供者应依据预算来监控和报告成本，审核财务预测并管理成本支出。</p> <p>应向变更管理流程提供信息，以支持对变更请求的成本管控。</p> <p><i>注：许多服务提供者会对服务进行计费。但服务的</i></p>	<p>6.4 Budgeting and accounting for services</p> <p>There shall be a defined interface between the budgeting and accounting for services process and other financial management processes.</p> <p>There shall be policies and documented procedures for:</p> <p>a) budgeting and accounting for service components including at least</p> <ol style="list-style-type: none"> 1) assets — including licences — used to provide the services, 2) shared resources, 3) overheads, 4) capital and operating expenses, 5) externally supplied services, 6) personnel, 7) facilities; <p>b) apportioning indirect costs and allocating direct costs to services, to provide an overall cost for each service;</p> <p>c) effective financial control and approval.</p> <p>Costs shall be budgeted to enable effective financial control and decision-making for services delivered.</p> <p>The service provider shall monitor and report costs against the budget, review the financial forecasts and manage costs.</p> <p>Information shall be provided to the change management process to support the costing of requests for change.</p> <p>NOTE Many service providers charge for their services.</p>

预算与核算流程的范围不包括计费。	The scope of the budgeting and accounting for services process excludes charging.
<p>6.5 容量管理 Capacity management</p> <p>服务提供者应与客户和相关方识别和协商确定容量和性能要求。</p> <p>服务提供者应创建、实施和维护一个容量计划，该计划考虑人员、技术、信息和财务等资源。容量计划的变更应由变更管理流程进行控制。</p> <p>容量计划应至少包括：</p> <ul style="list-style-type: none"> a) 当前及预测的服务需求； b) 协商确定的容量和性能要求对可用性、服务连续性和服务级别的预期影响； c) 服务容量升级的时间跨度、阈值和成本； d) 法律、法规、合同或组织变化的潜在影响； e) 新技术和新工艺的潜在影响； f) 使其能够进行预测性分析的方式方法，或者其引用。 <p>服务提供者应监控容量的使用、分析容量数据并调整性能。服务提供者应提供充足的容量以满足协商确定的容量和性能需求。</p>	<p>6.5 Capacity management</p> <p>The service provider shall identify and agree capacity and performance requirements with the customer and interested parties.</p> <p>The service provider shall create, implement and maintain a capacity plan taking into consideration human , technical, information and financial resources. Changes to the capacity plan shall be controlled by the change management process.</p> <p>The capacity plan shall include at least:</p> <ul style="list-style-type: none"> a) current and forecast demand for services; b) expected impact of agreed requirements for availability, service continuity and service levels; c) time-scales, thresholds and costs for upgrades to service capacity; d) potential impact of statutory, regulatory, contractual or organizational changes; e) potential impact of new technologies and new techniques; f) procedures to enable predictive analysis, or reference to them. <p>The service provider shall monitor capacity usage, analyse capacity data and tune performance. The service provider shall provide sufficient capacity to fulfil agreed capacity and performance requirements.</p>
<p>6.6 信息安全 管理 Information security management</p> <p>6.6.1 信息安全方针 Information security policy</p> <p>具有适当授权的管理者应在考虑服务需求、法律法规要求和合同要求的基础上审批信息安全方针，管理者应：</p> <ul style="list-style-type: none"> a) 与服务提供者、客户和供应商等相关人员沟通信息安全方针和人员遵守方针的重要性； b) 确保信息安全管理目标被确立； c) 定义信息安全风险管理和风险接受原则所采用的方法； d) 确保定期执行信息安全风险评估； e) 确保执行信息安全内部审计； f) 确保对审计结果进行回顾以识别改进的机会。 <p>6.6.2 信息安全控制 Information security controls</p> <p>服务提供者应实施和运行物理的、管理的和技术的</p>	<p>6.6 Information security management</p> <p>6.6.1 Information security policy</p> <p>Management with appropriate authority shall approve an information security policy taking into consideration the service requirements, statutory and regulatory requirements and contractual obligations. Management shall:</p> <ul style="list-style-type: none"> a) communicate the information security policy and the importance of conforming to the policy to appropriate personnel within the service provider, customer and suppliers; b) ensure that information security management objectives are established; c) define the approach to be taken for the management of information security risks and the criteria for accepting risks; d) ensure that information security risk assessments are conducted at planned intervals; e) ensure that internal information security audits are conducted; f) ensure that audit results are reviewed to identify opportunities for improvement. <p>6.6.2 Information security controls</p> <p>The service provider shall implement and operate physical,</p>

<p>信息安全控制以：</p> <ul style="list-style-type: none"> a) 保护信息资产的机密性、完整性和可访问性； b) 履行信息安全方针的要求； c) 实现信息安全管理目标； d) 管理信息安全相关风险。 <p>信息安全控制措施应文件化，同时应描述控制措施相关的风险，以及控制措施的运行和维护。</p> <p>服务提供者应对信息安全控制的有效性进行评估。同时，应采取必要的改进措施，并报告所采取的措施。</p> <p>服务提供者应识别具有访问、使用或管理服务提供者信息或服务需要的外部组织。服务提供者应记录、协商和实施对外部组织的信息安全控制。</p> <p>6.6.3 信息安全的变更和事件 Information security changes and incidents</p> <p>应对变更请求进行评估，以识别：</p> <ul style="list-style-type: none"> a) 新的或变更的服务的信息安全风险； b) 对现有信息安全方针和控制的潜在影响。 <p>信息安全事件应通过事件管理程序进行管理，并对信息安全风险进行适当的优先级排序。服务提供者应分析安全事件的类型、数量和影响。同时，信息安全事件应被报告和检查，以识别改进的机会。</p> <p><i>注：ISO/IEC 27000标准家族描述了详细的要求并提供指南以支持信息安全管理体系的实施和运行。</i></p>	<p>administrative and technical information security controls in order to:</p> <ul style="list-style-type: none"> a) preserve confidentiality, integrity and accessibility of information assets; b) fulfil the requirements of the information security policy; c) achieve information security management objectives; d) manage risks related to information security. <p>These information security controls shall be documented and shall describe the risks to which the controls relate, their operation and maintenance.</p> <p>The service provider shall review the effectiveness of information security controls. The service provider shall take necessary actions and report on the actions taken.</p> <p>The service provider shall identify external organizations that have a need to access, use or manage the service provider's information or services. The service provider shall document, agree and implement information security controls with these external organizations.</p> <p>6.6.3 Information security changes and incidents</p> <p>Requests for change shall be assessed to identify:</p> <ul style="list-style-type: none"> a) new or changed information security risks; b) potential impact on the existing information security policy and controls. <p>Information security incidents shall be managed using the incident management procedures, with a priority appropriate to the information security risks. The service provider shall analyse the types, volumes and impacts of information security incidents. Information security incidents shall be reported and reviewed to identify opportunities for improvement.</p> <p>NOTE The ISO/IEC 27000 family of standards specifies requirements and provides guidance to support the implementation and operation of an information security management system.</p>
<p>7 关系过程 Relationship process</p> <p>7.1 业务关系管理 Business relationship management</p> <p>服务提供者应识别并记录服务的客户、用户及相关方。</p> <p>对于每一个客户，服务提供者应指定专职人员管理客户关系和客户满意度。</p> <p>服务提供者应与客户建立沟通机制。沟通机制应促进对服务运行的业务环境的理解以及对新的或变更的服务需求的理解。相关信息应促使服务提供者响应这些需求。</p> <p>服务提供者应与客户按照计划的时间间隔回顾所提供服务的执行情况。</p> <p>对文件化的服务需求的变更应通过变更管理流程控制。对 SLAs 的变更应与服务级别管理流程相协调。</p> <p>服务投诉的定义应与客户协商确定。应有文件化的程序管理来自于客户的服务投诉。服务提供者应记录、调查、采取措施、报告和关闭服务投诉。当服务投诉不能通过常规渠道解决时，应向客户提供升</p>	<p>7 Relationship processes</p> <p>7.1 Business relationship management</p> <p>The service provider shall identify and document the customers, users and interested parties of the services.</p> <p>For each customer, the service provider shall have a designated individual who is responsible for managing the customer relationship and customer satisfaction.</p> <p>The service provider shall establish a communication mechanism with the customer. The communication mechanism shall promote understanding of the business environment in which the services operate and requirements for new or changed services. This information shall enable the service provider to respond to these requirements.</p> <p>The service provider shall review the performance of the services at planned intervals, with the customer.</p> <p>Changes to the documented service requirements shall be controlled by the change management process. Changes to the SLAs shall be co-ordinated with the service level</p>

<p>级渠道。</p> <p>服务提供者应按照计划的时间间隔，基于对服务的客户和用户进行有代表性的抽样，调查客户满意度。应对结果进行分析和回顾以识别改进机会。</p>	<p>management process.</p> <p>The definition of a service complaint shall be agreed with the customer. There shall be a documented procedure to manage service complaints from the customer. The service provider shall record, investigate, act upon, report and close service complaints. Where a service complaint is not resolved through the normal channels, escalation shall be provided to the customer.</p> <p>The service provider shall measure customer satisfaction at planned intervals based on a representative sample of the customers and users of the services. The results shall be analysed and reviewed to identify opportunities for improvement.</p>
<p>7.2 供应商管理 Supplier management</p> <p>服务提供者可以将服务管理流程的一部分交由供应商去实施和运行。供应链关系示例如图3。</p> <p>对于每一个供应商，服务提供者应有一个指定的人员负责管理供应商关系、合同和绩效。</p> <p>服务提供者应与供应商签署文件化的合同。合同应具有或包括以下参考内容：</p> <ul style="list-style-type: none"> a) 供应商所交付服务的范围； b) 服务、流程和相关方之间的依赖关系； c) 供应商所需满足的要求； d) 服务目标； e) 供应商和其他相关方所执行服务管理流程之间的接口； f) 将供应商活动整合到 SMS 中； g) 工作量特性； h) 合同例外及其如何处理； i) 服务提供者和供应商的权利和职责； j) 供应商所需提供的报告和交流信息； k) 收费依据； l) 合同预期结束或提前结束并向其他方转移服务的活动和职责。 <p>服务提供者应与供应商就服务级别达成一致，以支持和保证服务提供者和客户之间的服务级别协议。</p> <p>服务提供者应确保主供应商与分包商之间的职责和关系文件化。服务提供者应核实主供应商为满足合同义务而对其分包商进行管理。</p> <p>服务提供者应按照计划的时间间隔监控供应商的绩效。绩效应依据服务目标和其他合同义务进行测量。结果应被记录和评审以识别不符合的原因和改进机会。评审也应确保合同反映了当前的要求。</p> <p>合同的变更应通过变更管理流程控制。</p> <p>应具备管理服务提供者和供应商之间合同纠纷的文件化程序。</p> <p><i>注 1：供应商管理流程的范围不包括供应商的选择和服务的采购。</i></p> <p><i>注 2：供应链关系的更进一步的示例在 ISO/IEC TR 20000-3 中展示。</i></p>	<p>7.2 Supplier management</p> <p>The service provider may use suppliers to implement and operate some parts of the service management processes. An example of supply chain relationships is illustrated in Figure 3.</p> <p>For each supplier, the service provider shall have a designated individual who is responsible for managing the relationship, the contract and performance of the supplier.</p> <p>The service provider and the supplier shall agree a documented contract. The contract shall contain or include a reference to:</p> <ul style="list-style-type: none"> a) scope of the services to be delivered by the supplier; b) dependencies between services, processes and the parties; c) requirements to be fulfilled by the supplier; d) service targets; e) interfaces between service management processes operated by the supplier and other parties; f) integration of the supplier's activities within the SMS; g) workload characteristics; h) contract exceptions and how these will be handled; i) authorities and responsibilities of the service provider and the supplier; j) reporting and communication to be provided by the supplier; k) basis for charging; l) activities and responsibilities for the expected or early termination of the contract and the transfer of services to a different party. <p>The service provider shall agree with the supplier service levels to support and align with the SLAs between the service provider and the customer.</p> <p>The service provider shall ensure that roles of, and relationships between, lead and sub-contracted suppliers are documented. The service provider shall verify that lead suppliers are managing their sub-contracted suppliers to fulfil contractual obligations.</p> <p>The service provider shall monitor the performance of the supplier at planned intervals. The performance shall be</p>

	<p>measured against service targets and other contractual obligations. Results shall be recorded and reviewed to identify the causes of nonconformities and opportunities for improvement. The review shall also ensure that the contract reflects current requirements.</p> <p>Changes to the contract shall be controlled by the change management process.</p> <p>There shall be a documented procedure to manage contractual disputes between the service provider and the supplier.</p> <p>NOTE 1 The scope of the supplier management process excludes the selection of suppliers and the procurement of services.</p> <p>NOTE 2 Further examples of supply chain relationships are shown in ISO/IEC TR 20000-3.</p>
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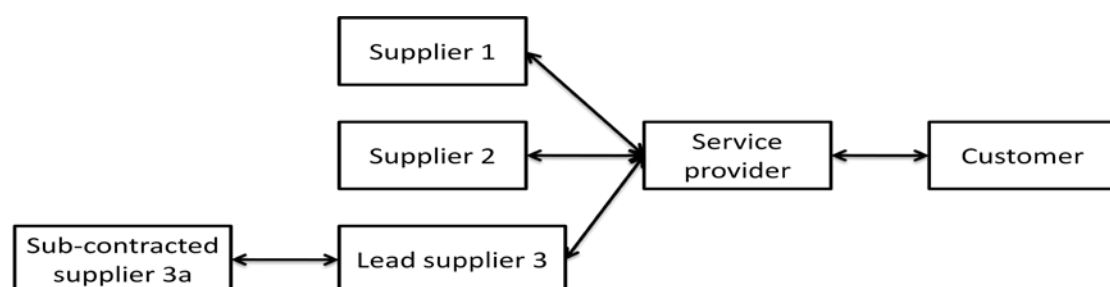


Figure 3 —Example of supply chain relationships

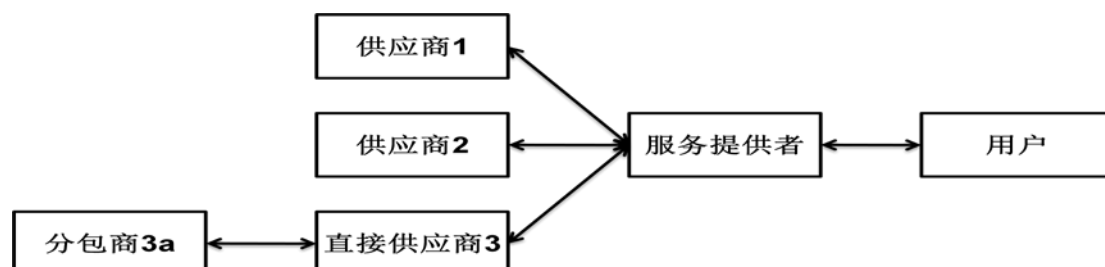


图3-供应链关系示例

<p>8 解决过程 Resolution processes</p> <p>8.1 事件和服务请求管理 Incident and service request management</p> <p>对所有事件应有一套文件化的程序用于定义：</p> <ul style="list-style-type: none"> a) 记录； b) 优先级分配； c) 分类； d) 记录更新； e) 升级； f) 解决； 	<p>8 Resolution processes</p> <p>8.1 Incident and service request management</p> <p>There shall be a documented procedure for all incidents to define:</p> <ul style="list-style-type: none"> a) recording; b) allocation of priority; c) classification; d) updating of records;
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<p>g) 关闭。</p> <p>应有一个文件化的程序用于管理服务请求从记录到关闭的完成。事件和服务请求应遵循这些程序进行管理。</p> <p>在确定事件和服务请求优先级时，服务提供者应考虑事件和服务请求的影响和紧急程度。</p> <p>服务提供者应确保事件和服务请求管理流程相关的人员能够访问和使用相关信息。相关信息应包括服务请求管理程序、已知错误（Known Error）、问题解决方案和配置管理数据库（CMDB）。来自发布和部署管理流程的有关发布是否成功以及计划的发布日期等信息应用于事件和服务请求管理流程。</p> <p>服务提供者应保持通知客户他们所报告的事件或服务请求的处理进展情况，如果服务的目标未达成，服务提供者应告知客户和利益相关方，并依照程序进行升级。</p> <p>服务提供者应文件化并与客户就重大事件的定义达成一致。重大事件应进行分类并依照程序进行管理。高管层应被告知重大事件。高管层应确保有指定的人员负责管理所分派的重大事件。在协商确定的服务被恢复后，应对重大事件进行回顾以识别改进的机会。</p>	<p>e) escalation;</p> <p>f) resolution;</p> <p>g) closure.</p> <p>There shall be a documented procedure for managing the fulfilment of service requests from recording to closure. Incidents and service requests shall be managed according to the procedures.</p> <p>When prioritizing incidents and service requests, the service provider shall take into consideration the impact and urgency of the incident or service request.</p> <p>The service provider shall ensure that personnel involved in the incident and service request management process can access and use relevant information. The relevant information shall include service request management procedures, known errors, problem resolutions and the CMDB. Information about the success or failure of releases and future release dates, from the release and deployment management process, shall be used by the incident and service request management process.</p> <p>The service provider shall keep the customer informed of the progress of their reported incident or service request. If service targets cannot be met, the service provider shall inform the customer and interested parties and escalate according to the procedure.</p> <p>The service provider shall document and agree with the customer the definition of a major incident. Major incidents shall be classified and managed according to a documented procedure. Top management shall be informed of major incidents. Top management shall ensure that a designated individual responsible for managing the major incident is appointed. After the agreed service has been restored, major incidents shall be reviewed to identify opportunities for improvement.</p>
<p>8.2 问题管理 Problem management</p> <p>应有文件化的程序以识别问题和最小化或避免事件和问题的影响。程序应定义：</p> <p>a) 识别；</p> <p>b) 记录；</p> <p>c) 优先级分配；</p> <p>d) 分类；</p> <p>e) 记录更新；</p> <p>f) 升级；</p> <p>g) 解决；</p> <p>h) 关闭。</p> <p>问题应遵循程序进行管理。</p> <p>服务提供者应分析事件和问题的数据和趋势，以识别根本原因（root causes）和潜在的预防措施。</p> <p>需要对某一CI进行变更的问题应提交变更请求予以解决。</p> <p>当已识别问题的根本原因，但还未被永久解决时，</p>	<p>8.2 Problem management</p> <p>There shall be a documented procedure to identify problems and minimize or avoid the impact of incidents and problems. The procedure shall define:</p> <p>a) identification;</p> <p>b) recording;</p> <p>c) allocation of priority;</p> <p>d) classification;</p> <p>e) updating of records;</p> <p>f) escalation;</p> <p>g) resolution;</p> <p>h) closure.</p> <p>Problems shall be managed according to the procedure.</p> <p>The service provider shall analyse data and trends on incidents and problems to identify root causes and their potential preventive action.</p> <p>Problems requiring changes to a CI shall be resolved by raising a request for change.</p> <p>Where the root cause has been identified, but the problem</p>

<p>服务提供者应识别降低或消除问题对服务影响的行动。已知错误应被记录。</p> <p>问题解决方案的有效性应被监控、回顾和报告。</p> <p>已知错误和问题解决方案的最新更新信息应提供给事件和服务请求管理流程。</p>	<p>has not been permanently resolved, the service provider shall identify actions to reduce or eliminate the impact of the problem on the services. Known errors shall be recorded.</p> <p>The effectiveness of problem resolution shall be monitored, reviewed and reported.</p> <p>Up-to-date information on known errors and problem resolutions shall be provided to the incident and service request management process.</p>
<p>9 控制过程 Control processes</p> <p>9.1 配置管理 Configuration management</p> <p>每一类型的 CI 应有文件化的定义。每个 CI 所记录的信息应确保做到有效控制，且至少包括：</p> <ul style="list-style-type: none"> a) CI 的描述； b) CI 和其他 CI 之间的关系； c) CI 和服务组件之间的关系； d) 状态； e) 版本； f) 位置； g) 相关的变更请求； h) 相关的问题和已知错误。 <p>CI 应被唯一识别并记录到 CMDB 中。应管理 CMDB，包括对数据更新的访问控制，以确保其可靠性和准确性。</p> <p>应有文件化的程序来记录、控制和跟踪CI的版本。基于服务需求和CI相关的风险的考虑，控制的程度应能维护服务和服务组件的完整性。</p> <p>服务提供者应按照计划的时间间隔审核存储在 CMDB 中的记录。当发现缺陷时，服务提供者应采取必要的行动并报告所采取的行动。</p> <p>CMDB 的信息应提供给变更管理流程，以支持变更请求的评估。</p> <p>CI 的变更应可追踪和可审核，以确保CI和CMDB数据的完整性。</p> <p>受影响的配置项的基线应在将发布部署到实际运行环境之前确定。</p> <p>CMDB 中被记录的CI的原始拷贝应存储在安全的物理库或电子库中，被配置记录所引用。原始拷贝至少应包括文件、许可证信息、软件，如有可能，还包括硬件配置图片。</p> <p>配置管理流程和财务资产管理流程之间应有清晰的接口。</p> <p><i>注：财务资产管理不属于配置管理流程的范围。</i></p>	<p>9 Control processes</p> <p>9.1 Configuration management</p> <p>There shall be a documented definition of each type of CI. The information recorded for each CI shall ensure effective control and include at least:</p> <ul style="list-style-type: none"> a) description of the CI; b) relationship(s) between the CI and other CIs; c) relationship(s) between the CI and service components; d) status; e) version; f) location; g) associated requests for change; h) associated problems and known errors. <p>CIs shall be uniquely identified and recorded in a CMDB. The CMDB shall be managed to ensure its reliability and accuracy, including control of update access.</p> <p>There shall be a documented procedure for recording, controlling and tracking versions of CIs. The degree of control shall maintain the integrity of services and service components taking into consideration the service requirements and the risks associated with the CIs.</p> <p>The service provider shall audit the records stored in the CMDB, at planned intervals. Where deficiencies are found, the service provider shall take necessary actions and report on the actions taken.</p> <p>Information from the CMDB shall be provided to the change management process, to support the assessment of requests for change.</p> <p>Changes to CIs shall be traceable and auditable to ensure integrity of the CIs and the data in the CMDB.</p> <p>A configuration baseline of the affected CIs shall be taken before deployment of a release into the live environment.</p> <p>Master copies of CIs recorded in the CMDB shall be stored in secure physical or electronic libraries referenced by the configuration records. This shall include at least documentation, licence information, software and, where available, images of the hardware configuration.</p> <p>There shall be a defined interface between the configuration management process and financial asset management process.</p> <p>NOTE The scope of the configuration management process</p>

	excludes financial asset management.
<p>9.2 变更管理 Change management</p> <p>应建立变更管理策略，以定义：</p> <p>a) 变更管理控制下的 CI；</p> <p>b) 对服务或客户有潜在重大影响的变更的判断标准。</p> <p>服务的撤销应归类为对服务有潜在的重大影响的变更。将服务从服务提供者转移到客户或不同方应被归类为对服务有潜在的重大影响的变更。</p> <p>应有文件化的程序以记录、分类、评估和批准变更请求。</p> <p>服务提供者应记录与与客户协商确定紧急变更的定义。应有文件化的程序用于管理紧急变更。</p> <p>对服务或服务组件的所有变更应通过变更请求发起。变更请求应有明确的范围。</p> <p>所有的变更请求应被记录和分类。对服务或客户有潜在重大影响的变更请求应通过设计和转换新或变更的服务流程进行管理。对在变更管理策略中所定义 CI 的所有其他变更请求应通过变更管理流程进行管理。</p> <p>变更请求应被评估，使用来自变更管理流程和其他流程的信息进行评估。</p> <p>服务提供者和利益相关方应对变更请求是否接受做出决策。决策应考虑风险、对服务和客户的潜在影响、服务需求、业务利益、技术可行性和财务影响。</p> <p>经批准的变更应被开发和测试。</p> <p>应建立变更日程安排，内容包含被批准实施的变更详细信息及其建议的实施日期，并与利益相关方进行沟通。变更日程安排应作为部署规划的基础。</p> <p>回退或补救不成功变更所需的活动应被规划，可能的话，进行测试。如果变更不成功，应进行变更回退或补救。不成功的变更应被调查和采取协商确定的行动。</p> <p>变更成功部署后，应随之更新CMDB记录。</p> <p>服务提供者应评审变更的有效性，并实施与相关方协商确定的行动。</p> <p>应按照计划的时间间隔分析变更请求以识别趋势。分析所得的结果和结论应被记录和回顾以识别改进机会。</p>	<p>9.2 Change management</p> <p>A change management policy shall be established that defines:</p> <p>a) CIs which are under the control of change management;</p> <p>b) criteria to determine changes with potential to have a major impact on services or the customer.</p> <p>Removal of a service shall be classified as a change to a service with the potential to have a major impact. Transfer of a service from the service provider to the customer or a different party shall be classified as a change with potential to have a major impact.</p> <p>There shall be a documented procedure to record, classify, assess and approve requests for change.</p> <p>The service provider shall document and agree with the customer the definition of an emergency change. There shall be a documented procedure for managing emergency changes.</p> <p>All changes to a service or service component shall be raised using a request for change. Requests for change shall have a defined scope.</p> <p>All requests for change shall be recorded and classified. Requests for change classified as having the potential to have a major impact on the services or the customer shall be managed using the design and transition of new or changed services process. All other requests for change to CIs defined in the change management policy shall be managed using the change management process.</p> <p>Requests for change shall be assessed using information from the change management process and other processes.</p> <p>The service provider and interested parties shall make decisions on the acceptance of requests for change. Decision-making shall take into consideration the risks, the potential impacts to services and the customer, service requirements, business benefits, technical feasibility and financial impact.</p> <p>Approved changes shall be developed and tested.</p> <p>A schedule of change containing details of the approved changes and their proposed deployment dates shall be established and communicated to interested parties. The schedule of change shall be used as the basis for planning the deployment of releases.</p> <p>The activities required to reverse or remedy an unsuccessful change shall be planned and, where possible, tested. The change shall be reversed or remedied if unsuccessful. Unsuccessful changes shall be investigated and agreed actions taken.</p> <p>The CMDB records shall be updated following the successful deployment of changes.</p> <p>The service provider shall review changes for effectiveness and take actions agreed with interested parties.</p> <p>Requests for change shall be analysed at planned intervals to detect trends. The results and conclusions drawn from the analysis shall be recorded and reviewed to identify</p>

	opportunities for improvement.
<p>9.3 发布与部署管理 Release and deployment management</p> <p>服务提供者应建立并与客户协商确定发布策略，发布策略描述发布的频率和类型。</p> <p>服务提供者应与客户和相关方对新的或变更的服务和服务组件部署到实际运行环境进行规划。规划应与变更管理流程协调一致，并包含对相关的变更请求、已知错误和通过该发布所关闭问题的引用。规划应包括每个发布的部署日期、交付物和部署方式。</p> <p>服务提供者应记录并与客户协商确定紧急发布的定义。紧急发布应通过文件化的程序进行管理，该程序与紧急变更程序相关联。</p> <p>发布在部署前应被构建和测试。受控的验收测试环境应被用于发布的构建和测试。</p> <p>发布的接受标准应与客户和利益相关方协商确定。发布应依据协商确定的接受标准进行验证，并在部署前被批准。如果未能满足验收标准，服务提供者应与利益相关方决定采取必要的行动和部署措施。</p> <p>发布应部署到实际运行环境中，以使硬件、软件和其他服务组件的完整性在发布的部署过程中得到维护。</p> <p>回退或补救不成功的部署所需的活动应被规划，可能的话，进行测试。如果部署不成功，应进行回退或补救。不成功的发布应被调查和采取协商确定的行动。</p> <p>发布的成功或失败应被监控和分析。测量内容应包括发布在部署之后某段时间内与发布有关的事件。分析应包括发布对客户的影响评估。发布的结果和分析所得的结论应被记录和回顾以识别改进机会。</p> <p>应将发布成功与否和未来发布日期的信息传递给变更管理流程、事件和服务请求管理流程。</p> <p>信息应提供给变更管理流程以支持评估变更请求对发布和部署计划的影响。</p>	<p>9.3 Release and deployment management</p> <p>The service provider shall establish and agree with the customer a release policy stating the frequency and type of releases.</p> <p>The service provider shall plan with the customer and interested parties the deployment of new or changed services and service components into the live environment. Planning shall be coordinated with the change management process and include references to the related requests for change, known errors and problems which are being closed through the release. Planning shall include the dates for deployment of each release, deliverables and methods of deployment.</p> <p>The service provider shall document and agree with the customer the definition of an emergency release. Emergency releases shall be managed according to a documented procedure that interfaces to the emergency change procedure.</p> <p>Releases shall be built and tested prior to deployment. A controlled acceptance test environment shall be used for the building and testing of releases.</p> <p>Acceptance criteria for the release shall be agreed with the customer and interested parties. The release shall be verified against the agreed acceptance criteria and approved before deployment. If the acceptance criteria are not met, the service provider shall make a decision on necessary actions and deployment with interested parties.</p> <p>The release shall be deployed into the live environment so that the integrity of hardware, software and other service components is maintained during deployment of the release.</p> <p>The activities required to reverse or remedy an unsuccessful deployment of a release shall be planned and, where possible, tested. The deployment of the release shall be reversed or remedied if unsuccessful. Unsuccessful releases shall be investigated and agreed actions taken.</p> <p>The success or failure of releases shall be monitored and analysed. Measurements shall include incidents related to a release in the period following deployment of a release. Analysis shall include assessment of the impact of the release on the customer. The results and conclusions drawn from the analysis shall be recorded and reviewed to identify opportunities for improvement.</p> <p>Information about the success or failure of releases and future release dates shall be provided to the change management process, and incident and service request management process.</p> <p>Information shall be provided to the change management process to support the assessment of the impact of requests for change on releases and plans for deployment.</p>