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**信息技术---服务管理---**  
**Part2: 服务管理体系应用指南**



Reference number  
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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。ISO 或 IEC 的成员国团体可以通过相应组织为处理技术活动特定领域而建立的技术委员会参与国际标准制定。ISO 和 IEC 技术委员会在双方感兴趣的领域密切合作。与 ISO 和 IEC 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 指引第 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。

ISO 20000-2 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( ISO 20000-2 : 2005 ), 并对其进行了的技术性修订。主要的不同点如下:

- 与 ISO 9001 标准和 ISO 27001 更为一致;
- 术语变化, 以保持和国际惯例的一致;
- 控制第三方所执行的流程的新指导;
- 定义 SMS 范围的更多指导;
- 更多 SMS 与服务的持续改进的指导;
- 更多新服务或变更服务的设计与转换的指导。

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
- 第 3 部分: ISO/IEC 20000-1 范围定义和适用性指南【技术报告】

**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 20000-2 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 and ISO/IEC 27001;
- change of terminology to reflect international usage;
- new guidance on governance of processes operated by other parties;
- more guidance on defining the scope of the SMS;
- more guidance on continual improvement of the SMS and services;
- more guidance on the design and transition of new or changed services.

ISO/IEC 20000 consists of the following parts, under the general title Information technology — Service management:

- Part 1: Service management system requirements
- Part 2: Guidance on the application of service management systems
- Part 3: Guidance on scope definition and applicability of ISO/IEC 20000-1 [Technical Report]
- Part 4: Process reference model [Technical Report]
- Part 5: Exemplar implementation plan for ISO/IEC 20000-1 [Technical Report]

- 第4部分 : 流程参考模型【技术报告】
- 第5部分 : ISO/IEC20000-1实施计划模型【技术报告】

## 介绍Introduction

ISO/IEC20000-2提供了基于ISO/IEC20000-1标准的服务管理体系应用指南。ISO/IEC20000标准的本部分内容相对于ISO/IEC20000-1的规定并没增加任何要求,也没有明确说明如何提供评估或审计的证据。ISO/IEC20000标准的本部分内容的目的是使组织或个人能够更准确地解释ISO20000-1标准,并因此更有效地使用它。

按照ISO/IEC20000-1标准制订的一套SMS会作为管理体系对服务提供者的服务管理活动进行指导、监督和控制。SMS应包括所需要的服务规划、服务设计、服务转换、服务交付和服务改进。它至少要包括服务管理的政策、目标、计划、流程、流程接口、文件和资源。SMS包含了覆盖整个管理体系的所有流程,服务管理流程将作为SMS的一部分。

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。它使组织在共同愿景下有效合作。条款5至9指定的流程操作要求人员要很好地组织与协调。采用适合的工具使服务管理流程有效且高效。最有效的组织会通过服务生命周期(从规划和设计到转换与运行,包括持续改进)考虑SMS的影响。

ISO/IEC20000标准本部分提供的案例与建议,能够使组织解释和应用ISO/IEC20000-1标准,包括引用ISO/IEC20000标准其他部分和其他相关标准。

国际标准的使用者有责任正确应用。使用ISO/IEC20000标准的组织与个人明白以下几点是十分重要的。

- ISO/IEC20000-1并非旨在包括所有必要的法律和法规的要求,或服务提供者的所有合同义务。符合ISO/IEC20000-1本身并不赋予法定义务的豁免权。
- ISO/IEC20000-1是适用于内部和外部、大型和小型、商业和非商业的服务提供者。
- 针对符合服务要求的设计、转换、改进和交付服务,ISO/IEC20000-1提出了一套整合的方法来规划、建立、实施、运行、监视、测量、审查、维护和改善SMS。

## Introduction

This part of ISO/IEC 20000 provides guidance on the application of service management systems (SMS) based on ISO/IEC 20000-1. This part of ISO/IEC 20000 does not add any requirements to those stated in ISO/IEC 20000-1 and does not state explicitly how evidence can be provided to an assessor or auditor. The intent of this part of ISO/IEC 20000 is to enable organizations and individuals to interpret ISO/IEC 20000-1 more accurately, and therefore use it more effectively.

An SMS is defined in ISO/IEC 20000-1 as a management system to direct, monitor and control the service management activities of the service provider. The SMS should include what is required for the planning, design, transition, delivery and improvement of services. At a minimum this includes service management policies, objectives, plans, processes, process interfaces, documentation and resources. The SMS encompasses all the processes as an over-arching management system, with the service management processes as part of the SMS.

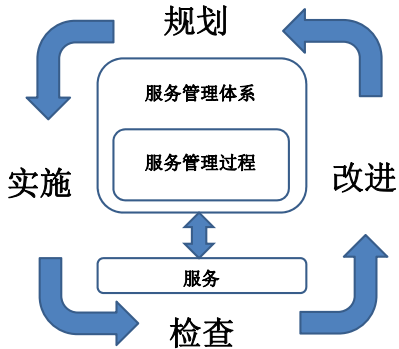
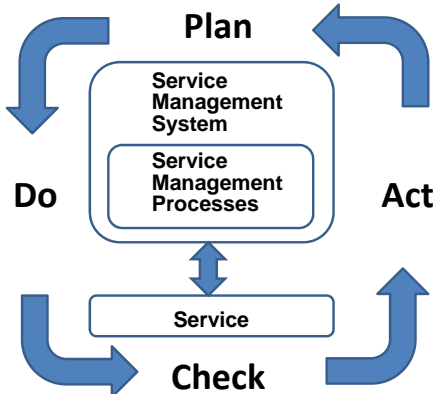
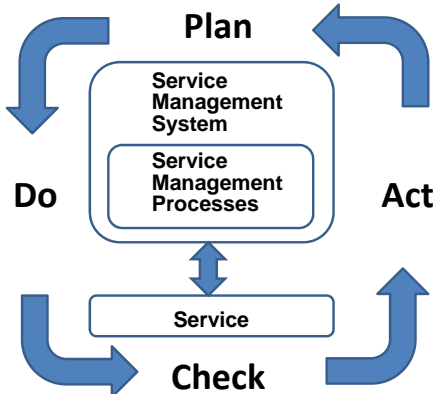
Coordinated integration and implementation of an SMS provides ongoing control, greater effectiveness, efficiency and opportunities for continual improvement. It enables an organization to work effectively with a shared vision. The operation of processes as specified in Clauses 5 to 9 requires personnel to be well organized and coordinated. Appropriate tools may be used to enable the service management processes to be effective and efficient. The most effectual organizations consider the impact of the SMS through all stages of the service lifecycle, from planning and design to transition and operation, including continual improvement.

This part of ISO/IEC 20000 provides examples and suggestions to enable organizations to interpret and apply ISO/IEC 20000-1, including references to other parts of ISO/IEC 20000 and other relevant standards.

Users of International Standards are responsible for their correct application. It is important for organizations and individuals using ISO/IEC 20000 to understand the points listed below.

- ISO/IEC 20000-1 does not purport to include all necessary statutory and regulatory requirements, or all contractual obligations of the service provider. Conformity to ISO/IEC 20000-1 does not of itself confer immunity from statutory obligations.
- ISO/IEC 20000-1 is applicable to internal and external, large and small, and commercial and noncommercial service providers.
- ISO/IEC 20000-1 promotes the adoption of an integrated process approach when planning, establishing, implementing, operating, monitoring, measuring, reviewing, maintaining and improving an SMS for the design, transition, improvement and

<p>ISO/IEC20000提出将业界知名的“规划、实施、检查、改进”(PDCA)方法论应用于SMS和服务。PDCA的方法,如图1所示,可以简单描述为:</p> <p>P-规划(Plan):建立、文件化和协商确定SMS,包括根据业务需求、客户要求和服务提供者的政策,设计和交付的必要的服务政策、目标、计划和流程;</p> <p>D-实施(Do):实施和执行SMS以设计、转换、交付和改进服务;</p> <p>C-检查(Check):根据计划、政策、目标和需求对SMS进行监控、测量和回顾,并报告结果;</p> <p>A-改进(Act):采取措施,以持续改进SMS。它包括服务管理流程与服务。</p> <p>当用于SMS时,下述是整合流程方法和PDCA方法论最重要的方面:</p> <ul style="list-style-type: none"> <li>a) 理解和满足服务需求以达到客户满意;</li> <li>b) 建立服务管理的政策和目标;</li> <li>c) 基于SMS为客户增加价值来设计和交付服务;</li> <li>d) 监控、测量和回顾SMS和服务;</li> <li>e) 基于客观的测量结果以持续改进SMS和服务。</li> </ul> <p>在存在其他管理体系的地方,采用流程方法和PDCA方法实施SMS,能够使服务提供者整合或完全整合组织的管理体系。例如,将ISO/IEC20000与基于ISO9001的质量管理体系和/或基于ISO27001的信息安全管理体系整合是可能的。管理体系整合的方法提高了效率,建立了明确的问责制和可追溯性,加强了组织的计划,沟通和控制。</p>	<p>delivery of services that fulfill service requirements.</p> <p>ISO/IEC 20000 promotes the application of the methodology known as “Plan-Do-Check-Act” (PDCA) to the SMS and the services. The PDCA methodology, shown in Figure 1, can be briefly described as follows:</p> <p>Plan: establishing, documenting and agreeing the SMS including the policies, objectives, plans and processes necessary to design and deliver services in accordance with business needs, customer requirements and the service provider's policies.</p> <p>Do: implementing and operating the SMS for the design, transition, delivery and improvement of the services.</p> <p>Check: monitoring, measuring and reviewing the SMS and the services against the plans, policies, objectives, and requirements and reporting the results.</p> <p>Act: taking actions to continually improve performance of the SMS. This includes the service management processes and the services.</p> <p>When used within an SMS, the following are the most important aspects of an integrated process approach and the PDCA methodology:</p> <ul style="list-style-type: none"> <li>a) understanding and fulfilling the service requirements to achieve customer satisfaction;</li> <li>b) establishing the policy and objectives for service management;</li> <li>c) designing and delivering services based on the SMS that add value for the customer;</li> <li>d) monitoring, measuring and reviewing performance of the SMS and the services;</li> <li>e) continually improving the SMS and the services based on objective measurements.</li> </ul> <p>Where other management systems are present, the implementation of an SMS, with the adoption of a process approach and the PDCA methodology, enables the service provider to align or fully integrate the organization's management systems. For example, it is possible to integrate ISO/IEC 20000 with a quality management system based upon ISO 9001 and/or an information security management system based upon ISO/IEC 27001. An integrated management system approach increases efficiency, establishes clear accountability and traceability and enhances organizational planning, communication and control.</p>
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<div><p>图 1-应用到服务管理的 PDCA 方法</p><p>正如ISO/IEC20000-1的约定：</p><p>ISO/IEC20000能适用于：</p><div><div>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；</div><div>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；</div><div>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；</div><div>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；</div><div>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；</div><div>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。</div></div><p>对于寻求如何改进服务管理 ,但无论是否有意寻求认证的组织 ,可以使用ISO / IEC20000标准本部分内容。</p></div> <td><div><p>Figure 1 — PDCA methodology applied to service management</p><p>As stated in ISO/IEC 20000-1:</p><p>“ISO/IEC 20000 can be used by:</p><div><div>a) an organization seeking services from service providers and requiring assurance that their service requirements will be fulfilled;</div><div>b) an organization that requires a consistent approach by all their service providers, including those in asupply chain;</div><div>c) the service provider that intends to demonstrate its capability for the design, transition, delivery and improvement of services that fulfill service requirements;</div><div>d) a service provider to monitor, measure and review its service management processes and services;</div><div>e) a service provider to improve the design, transition, delivery and improvement of services through the effective implementation and operation of the SMS;</div><div>f) an assessor as the criteria for a conformity assessment of a service provider’s SMS to the requirements in</div></div><p>This part of ISO/IEC 20000 can be used by an organization looking for guidance on how to improve service management, whether or not it is interested in seeking certification.</p></div></td>	<div><p>Figure 1 — PDCA methodology applied to service management</p><p>As stated in ISO/IEC 20000-1:</p><p>“ISO/IEC 20000 can be used by:</p><div><div>a) an organization seeking services from service providers and requiring assurance that their service requirements will be fulfilled;</div><div>b) an organization that requires a consistent approach by all their service providers, including those in asupply chain;</div><div>c) the service provider that intends to demonstrate its capability for the design, transition, delivery and improvement of services that fulfill service requirements;</div><div>d) a service provider to monitor, measure and review its service management processes and services;</div><div>e) a service provider to improve the design, transition, delivery and improvement of services through the effective implementation and operation of the SMS;</div><div>f) an assessor as the criteria for a conformity assessment of a service provider’s SMS to the requirements in</div></div><p>This part of ISO/IEC 20000 can be used by an organization looking for guidance on how to improve service management, whether or not it is interested in seeking certification.</p></div>
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# **信息技术 — 服务管理**

## **Part 2:服务管理体系应用指南**



**1 范围 SCOPE****1.1 总则 GENERAL**

ISO/IEC20000标准本部分提供了基于ISO/IEC 20000-1标准的SMS的应用指南。

ISO/IEC20000标准本部分提供的案例与建议,能够使组织解释和应用ISO/IEC20000-1标准,包括引用ISO/IEC20000标准其他部分和其他相关标准。ISO/IEC20000标准本部分是独立于特定的最佳实践框架,服务提供者可以将普遍接受的指导和自身的技术进行应用结合。

图2 展示的流程是:中央框里是条款6-9的流程。围绕条款6-9的流程是条款5 设计与转换新的服务或变更的服务的流程。它表明新的服务或变更的服务是由中央框里的流程操作的。当没有适用于条款5的新的服务或变更的服务时,所有服务直接由条款6-9交付。

服务管理流程之间的接口和不同的SMS组件之间的关系,可以由不同的服务提供者进行不同地实现。服务提供者和客户之间的关系性质也影响着SMS如何实施以符合ISO / IEC20000-1的要求。由于这些原因,流程之间的接口没有在图2上表示。

**1.2 应用 APPLICATION**

服务提供者是对SMS负责的,因此不能要求另一方履行ISO / IEC20000-1:2011标准条款4的要求。例如,服务提供方既不能要求其他方为其提供高层管理和展示最高管理层的承诺,也不能要求其他方对其流程进行治理。

条款4中的一些活动,可以在服务提供者的管理下由另一方执行。例如,服务提供者可以请其他各方代表他们进行内部审核。另一个例子是,一个服务提供者要求另一方创建初始的服务管理计划。计划一旦创建并通过后,直接由服务提供者负责和维护。在这些例子中,服务提供者对SMS具有责任、权力和义务。因此,服务提供者能证明履行所有ISO/IEC20000-1:2011条款4要求的证据。

服务提供者可以直接证明其满足所有要求的证据,或者可直接证明满足大部分的要求以及对其他各方执行流程管控的证据。如果服务提供者依赖于其他各方执行条款5-9中的大多数流程,服务提供者是不太可能能够证明其对流程的管控。然而,如果只有少数流程由其他各方执行,服务提供者是可以正常履行ISO/IEC20000-1规定的要求。

**1 Scope****1.1 General**

This part of ISO/IEC 20000 provides guidance on the application of an SMS based on ISO/IEC 20000-1. This part of ISO/IEC 20000 provides examples and suggestions to enable organizations to interpret and apply ISO/IEC 20000-1, including references to other parts of ISO/IEC 20000 and other relevant standards. This part of ISO/IEC 20000 is independent of specific best practice frameworks and the service provider can apply a combination of generally accepted guidance and their own techniques.

Figure 2 shows the processes from Clauses 6 to 9 in the central box. The Clause 5 design and transition of new or changed services process surrounds the Clause 6 to 9 processes. This shows that the new or changed services are operated by the processes in the central box. When there are no new or changed services to which Clause 5 applies, all services can be delivered directly by Clauses 6 to 9.

The interfaces between the service management processes and the relationships between different components of the SMS may be implemented differently by different service providers. The nature of the relationship between the service provider and the customer can also influence how the SMS is implemented to fulfill the requirements of ISO/IEC 20000-1. For these reasons the interfaces between processes are not represented in Figure 2.

**1.2 Application**

The service provider is accountable for the SMS and therefore cannot ask another party to fulfill the requirements of Clause 4 of ISO/IEC 20000-1:2011. For example, the service provider cannot ask another party to provide the top management and demonstrate top management commitment or to demonstrate the governance of processes operated by other parties.

Some activities in Clause 4 may be performed by another party under the management of the service provider. For example, service providers can engage other parties to conduct internal audits on their behalf. Another example is where a service provider asks another party to create the initial service management plan. The plan, once created and agreed, is the direct responsibility of and is maintained by the service provider. In these examples, the service provider is using other parties for specific short-term activities. The service provider has accountability, authorities and responsibilities for the SMS. The service provider can therefore demonstrate evidence of fulfilling all of the requirements of Clause 4 of ISO/IEC 20000-1:2011.

The service provider can show evidence of fulfilling all requirements directly or can show evidence of fulfilling most of the requirements directly as well as the governance of processes operated by other parties. If the service provider relies on other parties for operation of the majority of the processes in Clauses 5 to 9, the service provider is unlikely to be able to demonstrate governance of the processes. However, if other parties operate only a minority of the processes, the service provider can normally fulfill the requirements specified

<p>SMS中所定义的、协商的和文档化的权力、责任和义务，对于服务提供者和其他相关各方都是可随时访问的。为了履行ISO/IEC20000-1标准的要求，服务提供者可以协商修改现有合同或其他书面协议的条款。</p> <p>ISO/IEC 20000不包括任何产品或工具的规范或有关的具体指导。然而，组织可以使用ISO/IEC20000标准本部分内容，帮助其使用或开发支持SMS执行的产品或工具。</p>	<p>in ISO/IEC 20000-1.</p> <p>The defined, agreed and documented accountability, authorities and responsibilities for the SMS are readily accessible to both the service provider and other relevant parties. To fulfill the requirements of ISO/IEC 20000-1 the service provider can agree changes to the terms of existing contracts or other documented agreements.</p> <p>ISO/IEC 20000 excludes the specification of, or specific guidance about, any product or tool. However, organizations can use this part of ISO/IEC 20000 to help them use or develop products or tools that support operation of the SMS.</p>
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Figure 2– Service management system

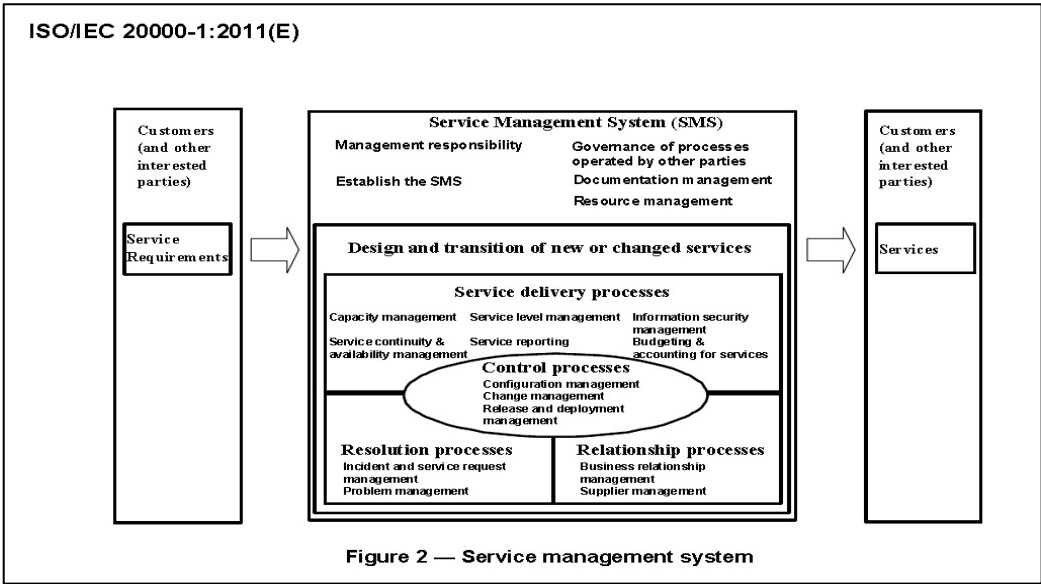
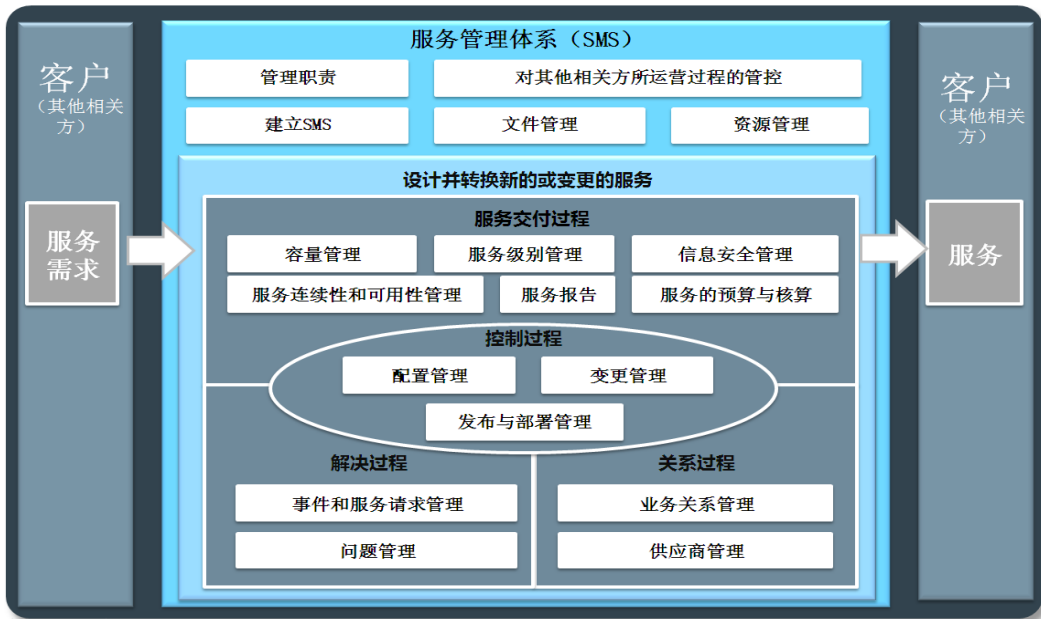


图2 — 服务管理体系



<p><b>2 引用标准 NORMATIVE REFERENCES</b></p> <p>以下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>ISO/IEC 20000-1,信息技术 — 服务管理 — 第1部分:服务管理体系要求</p>	<p><b>2 Normative references</b></p> <p>The following 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>ISO/IEC 20000-1, Information technology — Service management — Part 1: Service management system requirements</p>
<p><b>3 术语和定义 TERMS AND DEFINITIONS</b></p> <p>对本文件的目的,在ISO/IEC 20000-1的条款和定义适用。</p>	<p><b>3 Terms and definitions</b></p> <p>For the purposes of this document, the terms and definitions given in ISO/IEC 20000-1 apply.</p>

<p><b>4 服务管理体系总要求Service management system general requirements</b></p> <p><b>4.1 管理职责 MANAGEMENT RESPONSIBILITY</b></p> <p><b>4.1.1 管理承诺 MANAGEMENT COMMITMENT</b></p> <p><b>4.1.1.1 最高管理层职责 Top management responsibilities</b></p> <p>最高管理层应在最高层面行使对服务提供者的指导、监控和控制的管理职权。</p> <p>最高管理层应该意识到全面满足ISO/IEC 20000-1中的相关要求：</p> <ul style="list-style-type: none"> <li>a) 证明其管理承诺被贯穿于服务管理体系SMS的各个阶段，从服务管理体系SMS的规划和建立开始，继而贯穿服务管理体系的执行、监督、测量、回顾、维护和持续改进等活动；</li> <li>b) 证明其在服务管理体系SMS的职能和责任；</li> <li>c) 确保服务要求、服务管理体系SMS的范围、服务管理方针和目标被服务管理体系所有的相关方知晓并理解；</li> <li>d) 确保服务管理计划被创建、实施、维护并与业务目标保持一致；</li> <li>e) 确保提供足够的资源以满足服务管理目标，同时坚持服务管理方针；</li> <li>f) 确保向最高管理层汇报服务管理体系SMS的绩效信息；</li> <li>g) 实现服务管理目标，包括来自业务需要或服务要求的变化；</li> <li>h) 确保服务风险最小化，例如：评估变更带来的风险并采取行动。</li> </ul> <p>最高管理层还应确保在整个服务生命周期中，按照服务要求定义的服务级别提供服务。服务生命周期包括计划、实施、执行、监督、测量、回顾、维护和持续改善。服务生命周期还应包括对客户或不同各方或最终服务终止的服务转换。</p> <p>最高管理层应意识到其有责任确保SMS和通过SMS交付的服务被评估和回顾。评估工作应包括服务提供者的自我评估、内审以及外审。更多关于管理回顾的信息见本标准第4.5节。</p> <p><b>4.1.1.2 最高管理层承诺的证据 Evidence of top management commitment</b></p> <p>如果没有管理承诺，有可能导致所做出的管理决策</p>	<p><b>4 Service management system general requirements</b></p> <p><b>4.1 Management responsibility</b></p> <p><b>4.1.1 Management commitment</b></p> <p><b>4.1.1.1 Top management responsibilities</b></p> <p>Top management should be the management who direct, monitor and control the service provider at the highest level.</p> <p>Top management should be aware that fulfilling the requirements of ISO/IEC 20000-1 includes:</p> <ul style="list-style-type: none"> <li>a) demonstrating their commitment to be involved at all stages of the SMS, starting with the planning and establishment of the SMS and continuing through the operation, monitoring, measurement, review, maintenance and continual improvement of the SMS;</li> <li>b) demonstrating their accountabilities and responsibilities for the SMS;</li> <li>c) ensuring that the service requirements, scope of the SMS, service management policy and objectives are understood and acknowledged by all interested parties of the SMS;</li> <li>d) ensuring that the service management plan is created, implemented, maintained and aligned with business objectives;</li> <li>e) ensuring the provision of adequate resources to fulfill the service management objectives and to adhere to the service management policy;</li> <li>f) ensuring that the performance of the SMS is reported to the top management level;</li> <li>g) achieving the objectives of service management, including when these vary due to changing business needs or service requirements;</li> <li>h) ensuring that risks to services are minimised, e.g. by assessing risks associated with changes and taking action.</li> </ul> <p>Top management should also ensure that all service lifecycle stages are delivered to the agreed levels, as defined in the service requirements. The service lifecycle includes planning, implementation, operation, monitoring, measurement, review, maintenance and continual improvement. The service lifecycle also includes transfer of the service to a customer or a different party or eventual removal of the service.</p> <p>Top management should be aware that they are accountable for ensuring that the SMS and the services delivered by the SMS are assessed and reviewed. Assessments should include the service provider's own reviews and internal audits, as well as external audits. Further information about management reviews can be found in Clause 4.5 of this part of ISO/IEC 20000.</p> <p><b>4.1.1.2 Evidence of top management commitment</b></p> <p>Without management commitment, it is possible that management decisions can be made that conflict with requirements for an effective SMS. Examples can include</p>
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<p>与有效的SMS要求发生冲突。例如包括：将资源分配到其他项目，缺乏关于SMS和流程设计未解决的冲突的沟通。</p> <p>应具有评审人员审查有效的管理承诺和职责的证据。最高管理层应提供他们所参与的相关记录证据：</p> <ul style="list-style-type: none"> <li>a) 有关SMS的定期沟通会议纪要，例如：最高管理层出席SMS计划会议，以确保SMS与业务需要以及新的或变更的服务的要求相一致；</li> <li>b) 确保SMS包括服务范围、服务管理方针、服务管理目标和服务管理计划的定义；</li> <li>c) 对服务管理方针、服务管理目标和服务管理计划的审批；</li> <li>d) 对支持服务管理方针的流程和程序的审批。</li> </ul> <p>最高管理层对服务管理计划的审批十分重要，因为服务管理计划中包含了对客户的承诺，为供应商规划的活动，以及针对服务改善和其他变更的资源配置。</p> <p>服务政策、流程和程序的一致性使得管理决策得以在所有服务交付人员之间贯彻落实。应确保管理决策和服务交付人员的日常工作保持一致。</p> <p><b>4.1.1.3 最高管理层沟通Top management communications</b></p> <p>最高管理层应积极参与到正在进行的沟通程序中。沟通活动应参照第4.1.3.2节中描述的沟通程序来执行。</p> <p>最高管理层应积极参与到正在进行的沟通程序中，从而说明已建立的SMS如何与业务目标及客户期望保持一致。这是SMS成功的重要因素之一，因为那些理解了SMS目的和重要性的员工相对于缺乏相关知识的员工来说，更加容易接受组织的变革。最高管理层参与SMS的沟通，是服务提供者激励自己组织的一个机会。此外，管理层和员工对SMS重要性了解能够降低决策或交付与SMS相冲突的服务的风险。</p> <p>沟通计划中应说明如下内容：</p> <ul style="list-style-type: none"> <li>a) 组织变革，政策，标准，愿景和使命以及业务目标；</li> <li>b) 业务需要，例如：SMS与服务交付的关系，以及他们如何支持组织既定的目的和目标；</li> <li>c) 已建立的SMS如何与业务目标及客户期望保持一致；</li> <li>d) 服务管理方针、服务管理目标和服务管理计划如何支持服务要求；</li> </ul>	<p>reallocation of resources to other projects, lack of communication about the SMS and unresolved conflicts in process design.</p> <p>There should be evidence of management commitment and accountability available for review by an assessor. Top management should be able to provide evidence based on records of their involvement in:</p> <ul style="list-style-type: none"> <li>a) regular meetings about the SMS, e.g. chairing planning meetings so that the SMS remains aligned with business needs and new or changed service requirements;</li> <li>b) ensuring the SMS includes a definition of the scope, the service management policy, service management objectives and the service management plan;</li> <li>c) approval of the service management policy, service management objectives and of the service management plan;</li> <li>d) approval of processes and procedures consistent with, and supportive of, the SMS policies.</li> </ul> <p>Top management approval of the service management plan is important because the plan can have implications for commitments to the customer, planning activities for suppliers and the allocation of resources for improvements and other changes.</p> <p>The alignment between policies, processes and procedures enables top management direction to be cascaded to all service provider personnel. This should align management decisions with the way the service provider's personnel operate on a day to day basis.</p> <p><b>4.1.1.3 Top management communications</b></p> <p>Top management should be actively involved in an ongoing programme of communications. Communications should be directed by approved communications procedures as described in Clause 4.1.3.2.</p> <p>Top management should be actively involved in an ongoing programme of communications to explain how the established SMS is aligned with business objectives and customer expectations. This is important to the success of the SMS because personnel who understand the purpose and importance of the SMS are less likely to resist changes due to fear or lack of knowledge. Top management communications about the SMS can be an opportunity for the service provider to motivate their own organization. Additionally, an appreciation of the importance of the SMS by both management and personnel, should reduce the risk or likelihood that decisions will be made or solutions delivered that are in contradiction with the SMS.</p> <p>The programme of communications should explain the following:</p> <ul style="list-style-type: none"> <li>a) organizational changes, policies, standards, vision and mission as well as business targets;</li> <li>b) business needs, e.g. the relationship between the SMS and the services delivered, as well as how these support the defined organizational goals and objectives;</li> <li>c) how the established SMS is aligned with business objectives and customer expectations;</li> <li>d) how the service management policy, service management objectives and service management plan</li> </ul>
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<p>e) 客户要求, 例如: 服务目标、基于预计需求的能力要求、信息安全和支持业务连续性的服务连续性;</p> <p>f) 法律法规的要求, 例如: 工作时间, 不同国家对于健康、安全和数据保护方面的要求;</p> <p>g) 监管要求, 例如: 保留特定期限内的记录;</p> <p>h) 合同要求, 例如: 访问服务提供者的信息之前应签署保密协议;</p> <p>i) 与客户签署协议文件;</p> <p>j) 从SMS和服务组件测量流程中收集到的日常分析数据, 例如: 流程有效性测量。</p> <p>另外, 最高管理层参与SMS的沟通, 是服务提供者激励自己组织的一个机会。</p> <p>沟通计划是SMS成功的重要因素之一, 因为那些理解SMS目的和重要性的员工相对于缺乏相关知识的员工而言, 更加容易接受组织的变革。沟通会使管理层和员工赞同SMS的重要性, 从而降低所作决策或交付方案与SMS相冲突的风险或可能性。</p> <p>沟通管理活动的产出成果是使员工明白其在服务管理过程中的角色以及他们为达成服务目标和服务要求所做出的贡献。</p> <p><b>4.1.1.4 服务管理目标Service management objectives</b></p> <p>最高管理层应该定义商定的服务管理目标。该目标应与业务目标和服务管理方针相一致。</p> <p>例如, 一般的服务管理目标包括:</p> <p>a) 通过快速交付新的或变更的服务, 来满足持续增长的业务灵敏性</p> <p>b) 降低非计划的核心业务服务的不可用性</p> <p>c) 有效优化服务运营过程中的服务交付成本</p> <p>d) 在降低服务风险的同时提升服务质量</p> <p>应定义实际的服务管理目标, 以便能准确的测量服务目标的达成情况。同时, 这种测量也提供了进行服务优化改善的机会。</p> <p>服务管理目标是服务管理计划的重要输入。服务管理计划应定义各种活动, 以达成服务目标并与SMS中其他组件保持一致。</p> <p>服务管理目标应定期回顾, 以便最高管理层决策何时或如何对其修改。</p>	<p>support fulfillment of service requirements;</p> <p>e) customer requirements, e.g. service targets, predicted capacity based upon predicted demand, information security and service continuity to support business continuity;</p> <p>f) statutory requirements, such as working hours, health and safety and data protection, which vary by country;</p> <p>g) regulatory requirements, e.g. that records are kept for a specific period of time;</p> <p>h) contractual requirements, e.g. a requirement to sign a non-disclosure agreement before having access to the service provider's information;</p> <p>i) documented agreements with the customer;</p> <p>j) regular analysis of data gathered through measurement of the SMS and components, e.g. process measurements.</p> <p>Additionally, communications can be an opportunity for the service provider to motivate their own organization.</p> <p>A programme of communications is important to the success of the SMS because personnel who understand the purpose and importance of the SMS are less likely to resist changes due to fear or lack of knowledge. Communications should generate an appreciation of the importance of the SMS by both management and personnel and reduce the risk or likelihood that decisions will be made or solutions delivered that are in contradiction with the SMS.</p> <p>The outcome of these communications activities should be that people understand their role in service management and how they contribute to fulfilling the service requirements and meeting the service management objectives.</p> <p><b>4.1.1.4 Service management objectives</b></p> <p>Top management should define the agreed objectives for service management. Objectives should be aligned with the business objectives and with the service management policy.</p> <p>For example, generic service management objectives can include the following:</p> <p>a) enable increased business agility through faster delivery of new or changed services;</p> <p>b) reduce unplanned non-availability for business critical services;</p> <p>c) optimize the cost of the services delivered through operational efficiency;</p> <p>d) increase quality of services while reducing risk.</p> <p>Actual service management objectives should be defined so that achievements against the objectives can be accurately measured. Measurement should also enable opportunities for improvement to be prioritized.</p> <p>Objectives should be a key input into the service management plan. The plan should identify actions for achievement of the objectives and alignment with other components of the SMS.</p> <p>Service management objectives should be reviewed at regular intervals to enable top management to decide how</p>
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<p>服务提供者应确保SMS中各种组件的有效性被测量,以评估服务交付对目标达成的有效性。例如:测量某一特定流程对目标达成的有效性。这种测量也可以用来证明SMS对业务目标支持的价值。</p> <p>服务提供者可以发现衡量个人对目标实现的贡献将非常有价值。这将有利于使所有支持SMS的人员都朝着同一个目标工作。</p> <p><b>4.1.1.5 服务管理计划 Service management plan</b></p> <p>服务管理计划应促进SMS体系中所有行动方案保持协调一致,确保服务管理目标的实现。服务管理计划与服务管理方针也应保持一致。</p> <p>该计划是一个强有力的机制,以确保端到端的可视与控制,同时也能避免相互冲突的行动方案被批准或实施。该计划应确保资源和能力的使用效果和效率最大化。</p> <p>服务管理计划应与所有相关方进行沟通。应确保各方对行动方案的范围、任务、时限和分配的责任有共同的理解。分配的责任应包含对SMS体系中所有人员的绩效测量,也应包含在服务管理计划的所有行动方案中人员的绩效测量。</p> <p>即便SMS已经被实施,服务管理计划也不应该被视为完成。该计划应该持续地被修订,以适应业务需求、客户要求、优先级和服务提供者的不断变化。</p> <p>服务管理计划,可以由一个单一的计划或一个整合的方案构成,该方案一般由集中管理的变更与局部实施的变更协调组成。服务提供者应始终意识到,将所有局部实施的变更置于服务管理计划的整体管理之下。例如:一个流程的改进在本地进行即受控于当地,但同时也包含在集中管理的总体方案中。</p> <p>为特定目的编制的计划,例如针对服务连续性和可用性管理流程,可以被整体服务管理计划参考,而不是包含在整体服务计划之中。专项计划以及其与整体计划的一致性应定期评审,以确定专项计划的变更频率。应至少每年评审一次。</p> <p>由评审、服务要求变更或个别计划导致任何形式的变更应在整体服务管理计划中记录。例如,工作时间变更为24小时运营,替代技术或工作技能的变化。</p> <p>服务管理计划的内容应包括:</p> <ol style="list-style-type: none"> <li>服务管理计划的介绍</li> <li>服务提供者组织功能的描述</li> </ol>	<p>and when they should be revised.</p> <p>The service provider should ensure that the effectiveness of each component of the SMS is measured to assess the effectiveness of support for the service management objectives. For example, measurement of the effectiveness of the support of the objectives by a specific process. The measurements should also demonstrate value of the SMS in supporting the business objectives.</p> <p>The service provider can find it useful to measure the contributions of individuals towards achievement of the objectives. This will facilitate personnel supporting the SMS to work in an integrated way toward the same goals.</p> <p><b>4.1.1.5 Service management plan</b></p> <p>The service management plan should facilitate the coordination of all SMS initiatives to ensure the achievement of the service management objectives. The plan and policies should also be aligned.</p> <p>The plan can be a powerful mechanism for enabling end to end visibility and control. It should also prevent incompatible initiatives from being approved or implemented. The plan should enable the utilization of resources and capabilities to be as efficient and effective as possible.</p> <p>The plan should be communicated to all interested parties. This should ensure a common understanding of the scope of initiatives, the tasks, timeframes and allocated responsibilities. Allocated responsibilities should be included in the performance measurements of everyone involved in the SMS, including those involved in initiatives of the service management plan.</p> <p>The plan should not be considered to be completed when the SMS is implemented. It should exist indefinitely by being amended to accommodate the changing business needs, customer requirements or priorities of the service provider.</p> <p>The service management plan can consist of one single plan or a programme of coordinated changes managed centrally with some changes implemented locally. The service provider should always be aware of the need to keep all changes implemented locally under the overall management of the service management plan. For example, an improvement to a process may be performed locally, under the local control process owner, but it is included in the centrally managed overall programme.</p> <p>Plans for a specific purpose, e.g. for the service continuity and availability management process, may be referenced from the overall service management plan rather than included within it. The specialist plans and their alignment with the overall plan should be reviewed at a frequency that is suitable for the rate of change. This should be at least annually.</p> <p>Any changes resulting from reviews or changes to service requirements or individual plans should be documented in the overall service management plan. For example, office hours changing to full 24 hour operation, replacement technology or changes to skills.</p> <p>The contents of the service management plan should include:</p> <ol style="list-style-type: none"> <li>an introduction;</li> </ol>
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<p>c) 活动的优先级</p> <p>d) 预期成果与业务目标的一致性</p> <p>e) 绩效评估</p> <p>f) 服务目标</p> <p>g) 项目管理计划</p> <p>h) 任务和依赖资源</p> <p>i) 实施改善的预计收益的达成</p> <p>j) 实施计划的时间限制以及个人承担的责任</p> <p>k) 风险和风险缓解方案</p> <p>服务管理计划的风险应被识别、评估和管理,无论是在初始阶段还是作为PDCA循环的一部分。风险评估应涵盖输入,输出,相关活动和减轻风险的责任和职责。服务管理计划的设计也应确保商定的目标和服务要求的实现。</p> <p><b>4.1.1.6 支持服务管理计划的资源Resources to support the service management plan</b></p> <p>达成服务管理目标所必需的资源,应在服务管理计划中记录。应考虑到以下信息:</p> <p>a) 人力资源方面不仅考虑人员的数量,还有考虑员工的技能和经验;</p> <p>b) 技术资源,例如:达成所需性能的基础架构和能力;</p> <p>c) 支持SMS流程的工具;</p> <p>d) 办公场所,其他设施和服务连续性所需的设施;</p> <p>e) 数据和信息,例如:详细的客户要求、客户的业务计划、服务提供者的商业需要、服务管理方针、绩效评估和其他报告;</p> <p>f) 财务资源,足以支持SMS的计划、实施、运营和改善的详细预算;</p> <p>g) 服务提供者人员数量和可用性,以及工作时间;</p> <p>h) 计划对拥有适当技能的人才进行引进、保留和持续管理的流程、程序和时间限制。</p> <p><b>4.1.1.7 服务要求的内容Contents of the service requirements</b></p> <p>根据ISO/IEC 20000-1条款3.34的定义,服务要求包括为业务需要、客户和用户对服务提供者的服务需要。最高管理层有责任确保交付的服务满足商定的服务要求。</p>	<p>b) a description of the organizational functions of the service provider;</p> <p>c) priorities of initiatives;</p> <p>d) expected outcomes aligned to business objectives;</p> <p>e) performance measures;</p> <p>f) service targets;</p> <p>g) project plans;</p> <p>h) tasks and dependencies;</p> <p>i) benefits realization achieved as the result of previously implemented improvements;</p> <p>j) timeframes and persons responsible for carrying out the initiatives of the plan;</p> <p>k) risks and risk mitigation options.</p> <p>Risks to the service management plan should be identified, assessed and managed both initially and as part of the PDCA methodology. The risk assessment should cover the inputs, outputs, activities and the responsibility and accountability for mitigation of risks. The plan should also be designed to ensure the agreed objectives and service requirements will be achieved.</p> <p><b>4.1.1.6 Resources to support the service management plan</b></p> <p>The resources necessary to achieve the service management objectives should be documented in the service management plan. The following should be considered:</p> <p>a) human resourcing should take into account the skills and experience of the individuals and not just be based solely on the number of people;</p> <p>b) technical resources, e.g. infrastructure and capacity to achieve the required performance;</p> <p>c) tools to support the processes in the SMS;</p> <p>d) office accommodation, other facilities and facilities for service continuity;</p> <p>e) data and information, e.g. details of customer requirements, the customer's business plans, the service provider's business needs, service management policies, performance measurements and other reports;</p> <p>f) financial resources, budgeted at a level of detail suitable to manage the planning, implementation, operation and improvement of the SMS;</p> <p>g) quantity and availability of the personnel of the service provider, and their hours worked;</p> <p>h) processes, procedures and timescales for the introduction, retention and succession planning of suitably skilled personnel.</p> <p><b>4.1.1.7 Contents of the service requirements</b></p> <p>Clause 3.34 of ISO/IEC 20000-1 includes the needs of the business, the customer and the users of the service and needs of the service provider in the definition of service requirements. Top management should be responsible for ensuring that the services delivered fulfill the agreed</p>
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<p>业务需要和客户要求都应被记录、监控、回顾和管理, 以便确保其与新的或变更的服务以及现有服务的持续一致性。</p> <p>服务要求应包括服务目标的要求和质量的预期。对服务提供者的要求应包括详细的资源和能力的要求。服务要求是SMS的输入, 如图二所示。</p> <p>服务要求可以包括:</p> <ul style="list-style-type: none"> <li>a) 使用中的服务, 包括服务级别要求</li> <li>b) 设计新的或变更的服务的质量原则</li> <li>c) 服务对业务关键性的优先级排序</li> <li>d) 可用性要求</li> <li>e) 常规要求</li> <li>f) 信息安全要求</li> </ul> <p><b>4.1.1.8在同意和满足服务需求中高级管理层的作用</b> <b>The role of top management in agreeing and meeting service requirements</b></p> <p>最高管理层应确保详细定义服务要求的条款, 包括:</p> <ul style="list-style-type: none"> <li>a) 描述客户预期的结果, 例如: 改善的效益、效率和满意度;</li> <li>b) 服务消除的业务约束;</li> <li>c) 从用户的角度来看服务的功能, 包括用户对服务的需要, 通常被称为“以适合为目的”;</li> <li>d) 服务应该支持的业务活动和需求的模式;</li> <li>e) 确保服务或者产品能够提供或满足明确的商定的服务标准, 通常被称作“服务保证”(warranty)。</li> </ul> <p>服务保证的典型特征是从服务的持续性、可用性、能力和安全性方面进行了定义。例如, 服务保证承诺在由于重大中断或灾难所导致的服务级别下降时仍能满足服务目标的要求。服务保证还应承诺服务的安全性。</p> <p>用户对服务的需要应在客户需要中记录。应描述用户在其工作过程中使用服务的收益。例如:</p> <p>例1 消除约束。通过一项服务变更, 使用户可以远程访问服务, 而不只是在固定的地点访问服务。</p> <p>例2 功能。业务交易处理时间的改善。</p> <p>例3 性能。用户可能需要每分钟处理一件采购交易或每小时处理50件。</p>	<p>service requirements.</p> <p>Both the customer's requirements and the business needs should be documented, monitored, reviewed and managed to ensure ongoing alignment with new or changed services as well as with services in the live environment.</p> <p>Service requirements should include required service targets and quality expectations. The needs of the service provider should include details of resource and capability requirements. The service requirements are an input into the SMS, shown in Figure 2.</p> <p>Examples of service requirements can include:</p> <ul style="list-style-type: none"> <li>a) a service in use, including the service level requirements;</li> <li>b) quality criteria for the design of new or changed services;</li> <li>c) priorities for the business criticality of services;</li> <li>d) requirements for availability;</li> <li>e) regulatory requirements;</li> <li>f) information security requirements.</li> </ul> <p><b>4.1.1.8 The role of top management in agreeing and meeting service requirements</b></p> <p>Top management should ensure that the service requirements are defined in terms of:</p> <ul style="list-style-type: none"> <li>a) desired results that customers expect e.g. improved effectiveness, efficiency, satisfaction;</li> <li>b) the constraints that the service will remove;</li> <li>c) functionality of a service from the customer's perspective, including the needs of the users of the service, often referred to as 'fit for purpose';</li> <li>d) patterns of business activity and demand that the service should support;</li> <li>e) assurance that the service and products will be provided or will meet certain agreed specifications, often referred to as warranty.</li> </ul> <p>A typical characteristic of warranty is that it is defined in terms of service continuity, availability, capacity and security. For example, warranty ensures that the service will remain fit for purpose even at degraded service levels due to major disruptions or disasters. Warranty should also ensure security for the services.</p> <p>The needs of the users of the service should be defined within the context of the needs of the customer. This should describe the benefit a user will gain from using the service as part of performing their work activities. Examples are given below.</p> <p><b>EXAMPLE 1</b> Removing constraints. A desired change to a service may enable users to access a service remotely instead of only from fixed locations.</p> <p><b>EXAMPLE 2</b> Functionality. A desired improvement in the processing time for business transactions.</p> <p><b>EXAMPLE 3</b> Performance. A user may need to process one procurement transaction per minute and 50 transactions</p>
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<p><b>4.1.1.9 服务提供者的需要Service provider's needs</b></p> <p>从服务提供者的角度来看,服务要求应包括下列内容:</p> <ul style="list-style-type: none"> <li>a) 要求,以确保业务需求和服务提供者组织内更广泛的关注点的交付。例如:要求落实政策,标准,法律和法规的要求,以及合同义务。</li> <li>b) SMS的范围,以整体上指导、监控和控制服务管理流程和活动。这包括在服务设计、转换、交付和持续改善过程中对资产、能力和资源需求的要求。例如支持SMS需要的组织单元、人员、流程、信息和技术。</li> <li>c) 已知的SMS的限制,例如人力,技术,信息和金融资源的限制。</li> <li>d) 与确定的业务目标相对比,对服务交付的测量、审计、报告和改善的要求。</li> <li>e) 对SMS有效性的测量、审计、报告和改善的要求。</li> </ul> <p><b>4.1.1.10相互冲突的要求Conflicting requirements</b></p> <p>如果服务提供者制定了相互冲突的要求,应采取适当行动。相互冲突的要求举例如下:</p> <ul style="list-style-type: none"> <li>a) 如果是客户要求和客户业务需要相冲突,这种冲突应由客户解决,例如,客户提出的要求与业务战略相冲突。此外,服务提供者应对差异进行分析,并提出修订的服务要求。</li> <li>b) 当客户要求优先排序、成本和提供资金方面不切实际时,客户要求与服务提供者的业务需要就发生了冲突。冲突的性质和不切实际要求的原因要与客户明确的沟通。</li> <li>c) 应解决服务要求与任何法律法规或合同义务的要求之间的冲突。例如:软件的分发受到许可协议的限制,与客户要求获取新版本软件的冲突。</li> </ul> <p>服务提供者应确保对任何因冲突而产生的风险进行评估和量化,以识别减少风险的方法。评估应包括影响客户满意度的风险和满足顾客要求和目标的能力。</p> <p>冲突及其潜在影响应进行记录,并与客户讨论,使其能够得到解决。如果一个已识别的冲突在服务设计后被接受,该冲突可以被作为纠正措施或改善机</p>	<p>in an hour.</p> <p><b>4.1.1.9 Service provider's needs</b></p> <p>From the service provider's viewpoint, the service requirements should include those listed below.</p> <ul style="list-style-type: none"> <li>a) Requirements to ensure delivery of the business needs and wider interests of the organization that owns the service provider organization. For example, the requirements to fulfil policies, standards, statutory and regulatory requirements, and contractual obligations.</li> <li>b) Scope of the SMS to direct, monitor and control an integrated set of service management processes and activities. This includes the requirements for assets, capabilities and resources required for the design, transition, delivery and improvement of services. For example, the organizational units, people, process, information and technology required to support the SMS.</li> <li>c) Known limitations of the SMS, for example human, technical, information and financial resource constraints.</li> <li>d) Requirements for the measurement, auditing, reporting and improving of services delivered against the defined business objectives.</li> <li>e) Requirements for the measurement, auditing, reporting and improving the effectiveness of the SMS.</li> </ul> <p><b>4.1.1.10 Conflicting requirements</b></p> <p>If the service provider establishes that a conflict in requirements has occurred, action should be taken. Examples of conflicts in requirements include the following.</p> <ul style="list-style-type: none"> <li>a) If there are conflicts between customer requirements and customer business needs, the conflict should be resolved by the customer, e.g. a customer requirement that is in conflict with the strategic direction of the business. Alternatively, the service provider can analyse the differences and propose revised service requirements.</li> <li>b) Conflicts between customer requirements and the service provider's own business needs can occur when customer requirements are unrealistic in terms of priorities, costs or funds available. The nature of the conflict and why requirements are unrealistic should be clearly communicated to the customer.</li> <li>c) Service requirements conflicting with any statutory or regulatory requirements, or contractual obligations should be resolved. For example, the distribution of software can be restricted by a licence agreement in a way not compatible with the customer's requirements for access to new versions of software.</li> </ul> <p>The service provider should ensure that any risks arising from conflicts are assessed and quantified in order to identify methods of minimizing risks. The assessment should include the risk to customer satisfaction and the ability to meet customer requirements and objectives.</p> <p>Conflicts and their potential impact should be documented and discussed with the customer so that they can be</p>
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会来处理。

#### 4.1.1.11 服务的风险 Risks to the service

最高管理层应确保针对SMS和服务的风险被识别、记录和评估。服务的风险包括未能履行法律法规的要求或合同义务的要求。例如，未能满足软件许可要求或未能提供财务诚信证明。

最高管理层还应确保所有识别的风险都已经被管理，应包括：

- a) 开发和记录管理以识别风险的方案
- b) 客户接受的最佳方案
- c) 当需要时实施已商定的风险减轻方案

注 服务提供者会发现ISO31000中提供了对风险管理非常有用的建议。

#### 4.1.2 服务管理方针 SERVICE MANAGEMENT POLICY

##### 4.1.2.1 服务管理方针的指南 Guidelines for the service management policy

服务管理方针应根据服务提供者的具体情况有所不同，同时要以客户为核心。政策不应是一个通用的广泛适用的声明。而应反映出服务提供者的情况和目标。

方针应基于商定SMS范围，并且支持服务提供者的服务管理目标和服务管理计划。

方针应体现出最高管理层为满足服务要求的指导方向和承诺。方针还应该确保满足新的或变更的服务流程中设计和转换的要求，见ISO/IEC 20000-1:2011第五节（Clause 5）。

方针应向服务提供者的管理层和员工明确传达最高管理层的指导方向。

例1 服务应与客户的业务目标相一致。

例2 对流程或程序的变更只能通过变更管理流程执行。

例3 采用持续一致的方法定义和记录服务管理流程中的角色和职责，并测量个人绩效以确认完成其职责的情况。

服务管理方针应结构化，以便它可用来评估服务提供者服务管理目标是否被实现。例如它应该能够表明服务管理方针和实现服务提供者服务管理目标之间的联系。服务管理方针应该构建出遵循测量的方针。

服务提供者也应该能表明服务提供者的目标和服务管理方针之间的关系从服务方针最初同意开始就奏效。

resolved. If a conflict is identified after the design of the service is agreed the conflict should be resolved as a corrective action or as an opportunity for improvement.

#### 4.1.1.11 Risks to the service

Top management should ensure that risks to the SMS and the services are identified, documented and assessed. Risks to a service can include the failure to fulfil regulatory and statutory requirements or contractual obligations. For example, failure to meet software licence requirements or failure to provide proof of financial probity.

Top management should also ensure that all identified risks are managed, including ensuring that:

- a) options are developed and documented to manage identified risks;
- b) preferred options are agreed with the customer;
- c) agreed options for risk mitigation are implemented when necessary.

NOTE The service provider will find the requirements and advice in ISO 31000 on risk management helpful.

#### 4.1.2 Service management policy

##### 4.1.2.1 Guidelines for the service management policy

The service management policy should be specific to the service provider's circumstances and have a customer focus. The policy should not be a generic, broadly applicable statement. Instead, the policy should reflect the circumstances and objectives of the service provider.

The policy should be based on the agreed scope of the SMS and therefore supportive of the service provider's service management objectives and the service management plan.

The policy should represent top management direction and commitment to fulfil service requirements. The policy should also ensure the fulfilment of the requirements for the design and transition of new or changed service process in Clause 5 of ISO/IEC 20000-1:2011.

The policy should give clear top management direction to the service provider's managers and personnel.

EXAMPLE 1 Services are aligned to the business objectives of the customer.

EXAMPLE 2 Changes to processes or procedures are only made through the change management process.

EXAMPLE 3 Roles and responsibilities for the service management processes are defined and documented in a consistent manner and personnel performance is measured against achievement of those responsibilities.

The service management policy should be structured so that it can be used to assess whether the service provider's service management objectives are being fulfilled. For example, it should be possible to demonstrate a link between the service management policy and what is being done to achieve the service provider's service management objectives. The service management policy should be structured to enable measurement of adherence to the policy.

The service provider should also be able to demonstrate that this link between the service provider's objectives and

<p>服务提供者政策应该清晰界定权力级别,如有可能确定是应该通过流程所有者还是最高领导层审批。</p> <p>服务管理方针应在服务提供者自己的组织交流和理解。如果有需求,服务管理方针也可以由客户和供应商一起制定。方针的讨论、理解和适当使用可作为满足这一要求的证据。例如,会议纪要,问卷调查、供应商合同、分包商协议、方针的变更请求或净化请求、在标准和非计划的运营期间方针对于流程、程序和行为的影响、客户调查、提供商调查。</p> <p>最高层领导者应该负责确保服务管理方针适时评审,至少每年一次。评审应识别所有缺陷并确保与业务需求、客户需求保持一致。服务管理方针评审中所应用的质量标准应考虑以下方面:</p> <ul style="list-style-type: none"> <li>a) 基于服务需求的方针的有效性;</li> <li>b) 有足够的评审频率;</li> <li>c) 方针和服务管理目标的一致性;</li> <li>d) 方针和服务管理计划的一致性;</li> <li>e) 方针和服务管理流程的一致性;</li> <li>f) 评审是否记录、批准、跟踪、适当、可行;</li> <li>g) 建立、实施、运行、监控、评审、维护和改进SMS框架的合理性;</li> <li>h) 足够的构架:实施、运作、监控、评审、维护、信息服务系统改进;</li> <li>i) SMS的审核和上一次评审中所识别的纠正和改进活动。</li> </ul> <p><b>4.1.2.2 方针的改进和其他变更Improvements and other changes to the policy</b></p> <p>通过对服务管理方针的评审,最高管理层应该确保对发现的缺陷进行纠正。无论是服务管理目标、计划、过程、程序,只要发现缺陷就要加以纠正。服务管理目标或者SMS的范围改变都应该反应在方针中。</p> <p>该方针应该更新以反映服务目标或者SMS范围的变更。</p> <p><b>4.1.3 职责、权限和沟通 AUTHORITY, RESPONSIBILITY AND COMMUNICATION</b></p> <p><b>4.1.3.1 职责和权限Authority and responsibility</b></p> <p>服务提供者应确保定义了SMS中的所有方面的职责和权限。角色描述应该被确定、分配到个人,并通过文档管理程序保持更新。服务提供者应该保证</p>	<p>the service management policy has been effective since the service management policy was originally agreed.</p> <p>The service management policy should clearly define levels of authority, e.g. making it possible to determine whether an improvement initiative should be approved by an individual process owner or by top management.</p> <p>The service management policy should be communicated and understood within the service provider's own organization. The service management policy can also be made available to the customer and suppliers as required. References to the policy being discussed, understood and used appropriately can be used as evidence of fulfillment of this requirement. For example, meeting minutes, personnel surveys, supplier contracts, sub-contractor agreements, requests for change to the policy or requests for clarification, policy impact on processes, procedures and behaviours during standard and unplanned operations, customer surveys, supplier surveys.</p> <p>Top management should also be responsible for ensuring that the service management policy is reviewed at suitable intervals, at least annually. This should identify any deficiencies and ensure continual alignment with business needs and customer requirements. Quality criteria applied during the review of the service management policy should take into consideration the following:</p> <ul style="list-style-type: none"> <li>a) the validity of the policy against service requirements;</li> <li>b) the adequacy of the review frequency;</li> <li>c) the alignment between the policy and the service management objectives;</li> <li>d) the alignment between the policy and the service management plan;</li> <li>e) the alignment between the policy and the service management processes;</li> <li>f) whether the review is documented, approved, tracked, appropriate and practicable;</li> <li>g) the adequacy of the framework for establishing, implementing, operating, monitoring, reviewing, maintaining and improving the SMS;</li> <li>h) remediation and improvement actions identified in previous reviews and audits of the SMS.</li> </ul> <p><b>4.1.2.2 Improvements and other changes to the policy</b></p> <p>Following a review of the service management policy, if a deficiency is found, top management should ensure that it is corrected. Deficiencies should be corrected either as a change to the policy, service management objectives, plan, processes or procedures.</p> <p>The policy should also be updated to reflect any changes to the service management objectives or to the scope of the SMS.</p> <p><b>4.1.3 Authority, responsibility and communication</b></p> <p><b>4.1.3.1 Authority and responsibility</b></p> <p>The service provider should ensure that the authorities and responsibilities for all aspects of the SMS are defined. Role descriptions should be agreed, allocated to individuals, communicated to all personnel and kept up to date through a document management procedure. The service provider</p>
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鼓励 and 保持所有人员都有此意识,这将有助于服务管理目标实现。

#### 4.1.3.2 沟通程序 Communication procedures

最高管理者负责确保沟通的程序已经被设计、转换、实施和使用。最高管理者可委派他人进行具体的程序设计。然而,他们应批准他们提前执行或强制其使用。最高管理者应积极参与沟通程序。

最高管理者应该理解人员意识、动机、参与有效管理、持续改进的价值。沟通程序应鼓励员工积极参与。例如,员工参与到改进活动中成功结果的沟通可以激发更大的成功。

沟通程序应包括简单的传递方式、时间和/或频率、听众。这个程序还要覆盖升级机制、联络表、分发名单的维护、通信方式、工具和信息访问、时间表和责任。

沟通程序应包括以下：

- a) 传递的方法
- b) 时间和频率
- c) 特别沟通的听众
- d) 升级机制
- e) 听众沟通的联系细节
- f) 分发名单的维护
- g) 交流方法
- h) 工具和信息访问
- i) 时间表和责任

交流可能采用不同的形式,这取决于文化和组织,比如个人之间的沟通、人在组织中的角色。

最高管理者交流方式可以包括人员介绍材料、简报和研讨会、内部刊物、邮件、社交媒体或者论坛反馈。

#### 4.1.4 管理者代表 MANAGEMENT REPRESENTATIVE

##### 4.1.4.1 对权限的理解 Understanding of responsibilities

管理者代表应该是服务提供者的管理团队人员,这个人要有权确定SMS的建立、使用、持续改善并与业务需求的变化保持一致。权限应该包括确保服务

should ensure that all personnel are encouraged to establish and maintain an awareness of how their activities contribute to the achievement of the service management objectives.

#### 4.1.3.2 Communication procedures

Top management should be accountable for ensuring that communication procedures are designed, transitioned, implemented and used. Top management may delegate the actual design of the procedures. However, they should approve them in advance of implementation and enforce their use. Top management should be actively involved in the communication procedures.

Top management should understand the value of personnel awareness, motivation and participation in effective service management and continual improvement. The communication procedures should encourage personnel motivation. For example, communicating the successful results of personnel participation in improvement activities can have a significant motivational effect.

Communication procedures should cover at a minimum the method of delivery, the timing and/or frequency and the audience. The procedures should also cover escalation mechanisms, contact details, distribution list maintenance, communication methods, tools and information access, schedules and responsibilities.

Communication procedures should include the following.

- a) the method of delivery;
- b) the timing and frequency;
- c) the audience for specific communications;
- d) escalation mechanisms;
- e) contact details for audience of communication;
- f) distribution list maintenance;
- g) communication methods;
- h) tools and information access;
- i) schedules and responsibilities.

Communication may take different forms and will be dependent on the culture or the organization, the individual being communicated with and that person's role in the organization.

Top management communications methods can include personnel orientation material, briefings and workshops, internal personnel publications, email, social media, or personnel feedback forums.

#### 4.1.4 Management representative

##### 4.1.4.1 Understanding of responsibilities

The management representative should be the member of the service provider's management team who has the authority to ensure that the SMS is established, used, improved over time and in alignment with the changing needs of the business. This authority should include ensuring the service management processes have appropriate interfaces with one another and are integrated

<p>管理流程与其他流程有适当的接口，同时与SMS其他的流程相整合。</p> <p>服务提供者应明确指定一名人员作为管理代表，同时其理解所赋予的权限级别和职责：</p> <ul style="list-style-type: none"> <li>a) 流程所有者，具有确保流程与其他流程接口并通过SMS集成记录、保持、测量、改进的职责和权限；</li> <li>b) 服务所有者，具有对服务的全生命周期管理的权限和职责，包括设计、转换、实现、改进和退役；</li> <li>c) 其他服务提供人员；</li> <li>d) 内部组织；</li> <li>e) 供应商，包括核心供应商；</li> <li>f) 客户。</li> </ul>	<p>with the rest of the SMS.</p> <p>The service provider should ensure it is clear which person is the management representative and that the management representative's responsibilities and authority levels are understood by:</p> <ul style="list-style-type: none"> <li>a) process owners, who have the authority and responsibility for ensuring that the process, its interfaces to other processes and integration within the SMS are documented, adhered to, measured and improved;</li> <li>b) service owners, who have the authority and responsibility for a service throughout its lifecycle, including design, transition, implementation, improvement, and retirement;</li> <li>c) other service provider personnel;</li> <li>d) internal groups;</li> <li>e) suppliers, including lead suppliers;</li> <li>f) the customer.</li> </ul> <p>NOTE For examples on interfaces between service management processes and integration with other components of the SMS, please see Annex A in this part of ISO/IEC 20000.</p>
<p>注：服务管理流程和SMS其他模块的集成例子请参见ISO/IEC 20000 Annex A 本部分。</p> <p><b>4.1.4.2 权限Responsibilities</b></p> <p>管理者代表应该确保以下实现：</p> <ul style="list-style-type: none"> <li>a) 确保ISO/IEC2000-1中的各方面都应该按照标准进行，包括高层管理人员；</li> <li>b) 服务需求被文档化；</li> <li>c) SMS和范围的确定满足服务提供者的需求及客户的需求、所服务用户的需求；</li> <li>d) 在适当时候检查SMS的范围和细节以保证服务请求被满足，如客户需要进行变更，那么SMS或者SMS的范围也需要变更；</li> <li>e) 服务管理方针和目标要作为一个基础，用于流程的最初策划、运营和流程改进；</li> <li>f) 流程策划最初是定义流程的输入、输出和所有活动；</li> <li>g) 方针和目标决定服务管理流程改善的优先级准则；</li> <li>h) 服务流程管理具有与其他流程相连接的适当且有效的接口，同时，与SMS的其他模块进行集成；</li> <li>i) PDCA模型用于SMS和服务的改进；</li> <li>j) 对SMS的内审和评估应定期进行，以便测量</li> </ul>	<p><b>4.1.4.2 Responsibilities</b></p> <p>The management representative should be responsible for ensuring that the following are achieved:</p> <ul style="list-style-type: none"> <li>a) all aspects of the management responsibilities specified in ISO/IEC 20000-1 are performed, including those required by top management;</li> <li>b) service requirements are documented;</li> <li>c) the SMS and the definition of scope fulfill the service provider's own needs, the needs of the customer and users of the services;</li> <li>d) the scope and details of the SMS are checked at suitable intervals to ensure that the service requirements continue to be fulfilled, e.g. if the needs of the customer change, it is possible that the SMS or the scope of the SMS also needs to change;</li> <li>e) the service management policy and objectives are used as the basis for decisions during initial planning of the processes to the design of the processes and operation and improvement of the processes;</li> <li>f) design of the processes starts with identification of the inputs and outputs and any activities performed as part of the processes;</li> <li>g) the policy and objectives dictate the criteria for prioritizing the improvements to service management processes;</li> <li>h) service management processes have appropriate and effective interfaces with one another and are integrated with the rest of the SMS;</li> <li>i) the PDCA methodology is implemented and used for continual improvement of the SMS and services;</li> <li>j) internal audits and assessments of the SMS are carried out at regular intervals, in order to measure the ability</li> </ul>

<p>SMS实现服务管理目标和服务需求的能力。</p> <p><b>4.1.4.3 资产管理</b> Asset management</p> <p>最高管理者应意识到,ISO/IEC 20000-1要求提供服务所需要的所有资产应通过相关的法律法规、监管要求、财务要求、合同义务来进行管理。资产应该通过有效的流程进行管理。</p> <p>例如,资产应该包括软件、许可证、移动设备、基础设施组成、人员、合约、程序和其他文档。服务提供者应该能够准确确定资产的位置、状态、其他相关细节。</p> <p>最高管理层应该意识到资产管理需要一个准确的配置数据库 ( CMDB ),或者与之等等的记录保持方法,这些方法应被实施和有效使用。CMDB的信息应该通过有效的管理流程保持最新。例如,CMDB的变化应通过变更管理。</p> <p>法律需求可以包括隐私和数据保护法律以及知识产权法和版权法。其他法规要求可能涉及到客户信息资产保护或者财务信息保护。</p> <p>法规需求和合同的要求可以包括保证资产与业务许可需求及标准相一致,例如笔记本电脑中敏感信息的安全标准。</p> <p>注:服务提供者可以在ISO/IEC 19770找到软件资产管理相关内容。</p> <p><b>4.1.4.4 管理代表生成报告</b> Reporting by the management representative</p> <p>向最高层管理者报告,包括但不限于4.1.4.2。例如,报告应该定义通过利用PDCA模型确定持续改进机会。这应该基于对SMS和服务的绩效进行报告。</p> <p>管理代表出具报告的频率和详细程度应适合当前的活动水平、变更分类及管理者代表所识别问题和风险的严重性。应根据优先级选定纠正缺陷的变更选择,并最后由最高管理者决定。</p> <p>向最高管理者的汇报应该明确SMS在支持业务目标中所体现的价值。</p>	<p>of the SMS to achieve service management objectives and to fulfill service requirements.</p> <p><b>4.1.4.3 Asset management</b></p> <p>Top management should be aware that ISO/IEC 20000-1 requires that all assets used to deliver services are managed according to relevant statutory, regulatory and financial requirements and contractual obligations. Assets should be managed by effective procedures.</p> <p>Examples of assets that should be managed include software licences, mobile devices, infrastructure components, people, contracts, procedures and other documents. Service providers should be able to accurately identify the location, status and other relevant details about assets.</p> <p>Top management should be aware that asset management requires an accurate configuration management database (CMDB), or equivalent means of record keeping, to be established and used effectively. Information in the CMDB should be kept current by effective service management processes, e.g. changes to the CMDB to be approved via the change management process.</p> <p>Statutory requirements can include privacy and data protection laws as well as intellectual property and copyright laws. Other statutory requirements can relate to the protection of customer information assets or protection of financial information.</p> <p>Regulatory requirements and contractual obligations can include ensuring assets comply with business licence requirements and standards, e.g. security standards for encryption of sensitive information on laptops.</p> <p>NOTE The service provider will find the ISO/IEC 19770 series on software asset management helpful.</p> <p><b>4.1.4.4 Reporting by the management representative</b></p> <p>Reports to top management should include but not be limited to the topics in Clause 4.1.4.2. For example, the reports should identify continual improvement opportunities achieved using the PDCA methodology. This should be based on reports of the performance of the SMS and services.</p> <p>The frequency and level of detail of reports should be suitable for the level of activity, categories of change and seriousness of any issues and risks identified by the management representative. Options for changes to correct deficiencies should be provided to assist the prioritization of action and the subsequent decision made by top management.</p> <p>Reports to top management should clearly articulate the value delivered by the SMS in support of the business objectives.</p>
<p><b>4.2 其他相关方的流程治理</b> Governance of processes operated by other parties</p> <p><b>4.2.1 其他相关方流程治理指引</b> Guidance on processes operated by other parties</p>	<p><b>4.2 Governance of processes operated by other parties</b></p> <p><b>4.2.1 Guidance on processes operated by other parties</b></p> <p>The service provider should be aware that it can fulfil the requirements of ISO/IEC 20000-1 by demonstrating</p>

<p>服务提供者应意识到通过展示其他运营方流程治理来实现ISO/IEC 20000-1标准的要求。</p> <p>服务提供者应能够识别其他相关方运营的所有的服务管理流程或者部分流程,并且能够对这些在章节5-9中所描述的服务管理流程进行端到端的监控。</p> <p>服务提供者应能在其服务管理体系 (SMS) 中展示对所有相关方运营的流程实施控制的能力,这些控制措施应该得到所有合同或者其他文档化协议的支持。</p> <p><b>4.2.2 其他相关方 OTHER PARTIES</b></p> <p>其他相关方包括 :</p> <ul style="list-style-type: none"> <li>a) 与服务提供者在同一个组织中,但不直接接受服务提供者控制的内部团队,如一个数据中心或者安全专家团队;</li> <li>b) 类似于供应商的客户,如,执行事件和服务请求管理活动的客户;</li> <li>c) 供应商,如,在发布和部署管理流程中提供测试服务的外包供应商,也可以是负责管理分包供应商的主供应商。</li> </ul> <p>供应商同样也可以充当总包商,负责管理分包商。</p> <p><b>4.2.3 职责和权限的示例 DEMONSTRATION OF ACCOUNTABILITY AND AUTHORITY</b></p> <p>服务提供者应通过提供如下的证据来说明流程的职责和权限 :</p> <ul style="list-style-type: none"> <li>a) 服务提供者对包括自己或其他方在内所运营的服务管理流程的有效性负责,例如,在服务提供者组织内部的决策矩阵、权限级别证明。</li> <li>b) 服务提供者拥有遵守流。服务提供者有要求遵守过程的权利。例如,建立信息安全方针,控制的使用,违规检查并发起纠正措施。另外的例子包括提供实际执行已经在服务提供者的要求下变更了的证据。</li> <li>c) 流程记录分析,包括服务提供者进行的测量。例如,即使事件记录已经被另一个事件管理流程运营者所记录,服务提供者仍然需要考虑事件的全部记录或者事件报告,并且基于这些内容来作出决策。</li> <li>d) 定义服务管理体系 (SMS) 中所有的流程控制。包括在第5至第9章节中的任何被其他方运营的流程和各流程之间的接口。例如,文档、协议、操作界面以及变更管理和配置管理流程之间的依赖关系,更多细节见章节</li> </ul>	<p>governance of the processes operated by other parties, for a minority of the processes.</p> <p>The service provider should be able to identify all service management processes or parts of processes that are operated by other parties. The service provider should have end-to-end visibility of the performance of other parties operating any of the processes in Clauses 5 to 9.</p> <p>The service provider should be able to demonstrate control of all parties operating processes in the SMS, and this should be supported by all contracts and other documented agreements.</p> <p><b>4.2.2 Other parties</b></p> <p>Other parties include:</p> <ul style="list-style-type: none"> <li>a) internal groups who are organizational units inside the same organization as the service provider, but not within the direct control of the service provider, e.g. a data centre or a specialist security team;</li> <li>b) a customer acting as a supplier, e.g. the customer performing some of the activities of incident and service request management;</li> <li>c) suppliers, e.g. outsourcing of the testing done as part of the release and deployment management process.</li> </ul> <p>Suppliers can also be lead suppliers with responsibilities for managing sub-contracted suppliers.</p> <p><b>4.2.3 Demonstration of accountability and authority</b></p> <p>The service provider should demonstrate process accountability and authority by providing evidence such as that described below.</p> <ul style="list-style-type: none"> <li>a) The service provider's accountability for effectiveness of the service management processes operated by the service provider or another party, e.g. the matrix of decision makers, proof of authorisation levels within the service provider's own organization.</li> <li>b) That the service provider has the power to require adherence to a process. For example, establishing the information security policy, using controls, detecting breaches and initiating corrective actions. Another example includes providing evidence that practices have been changed at the request of the service provider.</li> <li>c) Analysis of process records, including measurements by the service provider. For example, considering a complete set of incident records or an incident report and taking decisions based on the content, even if the incident records are provided by another party that operates the incident management process.</li> <li>d) Controlling the definition of all processes in the SMS, including any processes in Clauses 5 to 9 operated by other parties. This includes the interfaces between each process. For example, documenting, agreeing and operating the interfaces and dependencies of the change management process with the configuration management process. Additional detail is provided in Clause 4.2.4.</li> </ul>
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<p>4.2.4</p> <p>e) ISO/IEC20000-1:2011标准第4章至第9章中的全部流程的控制计划和改进优先级。例如,即使能力管理流程是由另一方在执行,服务提供者也应该提供在该流程中某项改进的评估和优先级的证据。</p> <p>服务提供者可要求其他方运营由服务提供者设计并文档化的流程,相应地,服务提供者可以批准其他方设计、文档化和执行流程。</p> <p>服务提供者应意识到,如果多数流程依赖于其他方的执行,展示足够的流程治理证据是不可能的。</p> <p>注:流程运营治理其他部分见ISO/IEC TR 20000-3:2009</p> <p><b>4.2.4 流程绩效和合规性 PROCESS PERFORMANCE AND COMPLIANCE</b></p> <p>服务提供者应确保第5章至第9章中描述的每一个流程交付期望的结果,并且有助于满足服务管理目标。被其他方所实施的流程治理应包含一个治理流程的定义,该定义内容应包括:</p> <ul style="list-style-type: none"> <li>a) 流程所有权识别,例如,在服务提供者组织中哪个团队或者经理应对流程本身负责;</li> <li>b) 执行流程治理的职责,例如,哪个团队或经理应对流程的执行负责;</li> <li>c) 流程的目的、产出以及对服务需求和服务管理目的实现的贡献</li> <li>d) 流程的输入、输出以及由哪个部分产生的;</li> <li>e) 同其他流程的接口定义,包括服务管理流程。例如在流程之间传输的数据以及流程中从一个部分向另一个部分移交的活动或者信息;</li> <li>f) SMS中流程和组件之间的接口定义,例如,流程和服务管理方针目标之间的接口定义;</li> <li>g) 每一个流程信息交互的频率和方法;</li> <li>h) 服务提供者对其他方运营或者产生的流程实施治理所需要的文档和记录;</li> <li>i) 所有必要活动的清晰的权责安排。</li> </ul> <p>SMS组件之间的接口定义应该包括服务管理流程建立以及流程持续改进的方法,以支持服务管理方针和目标的实现以及业务变化的需要。例如,SMS组件和流程该如何测量其对服务管理</p>	<p>e) Controlling the planning of and setting priorities for improvements to all processes in Clauses 4 to 9 of ISO/IEC 20000-1:2011. For example, assessing and prioritizing an improvement in the capacity management process, even if the process is operated by another party.</p> <p>The service provider can request other parties to operate processes designed and documented by the service provider. Alternatively, the service provider can approve the processes that the other parties design, document and operate.</p> <p>The service provider should be aware that if it relies on other parties for operation of the majority of its processes, it is unlikely that it will be possible to demonstrate adequate governance of the processes.</p> <p>NOTE The governance of processes operated by other parties is described in ISO/IEC TR 20000-3:2009.</p> <p><b>4.2.4 Process performance and compliance</b></p> <p>The service provider should ensure each process described in Clauses 5 to 9 delivers the desired outcomes and contributes to meeting the service management objectives. Governance of processes operated by other parties should include a definition of the process, including:</p> <ul style="list-style-type: none"> <li>a) identification of process ownership, e.g. what group or manager within the service provider's organization is responsible for the process;</li> <li>b) responsibility for operation, e.g. what group or manager is responsible for the operation of the process;</li> <li>c) the objective of the process, outcomes of the process and contribution to service requirements and service management objectives being met;</li> <li>d) process inputs and outputs and which party generates these;</li> <li>e) definition of the interfaces to other processes, including the service management processes, e.g. data passed between processes or the handover of activities or information from one party to another;</li> <li>f) definition of the interfaces between processes and other components of the SMS, e.g. between the processes and the service management policy and objectives;</li> <li>g) the frequency and method by which information passes to and from each process;</li> <li>h) documents and records required by the service provider for governance of processes operated by other parties and who generates these;</li> <li>i) clear accountabilities and responsibilities for all required activities.</li> </ul> <p>The definition of interfaces between SMS components should include the methods by which the service management processes are established and continually improved to support the service management policy and objectives, and the changing needs of the business. For example, how the SMS components including processes should be measured against their alignment with and support of the service management policy.</p>
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<p>方针的一致性和支持度。</p> <p><b>4.2.5 确定流程的绩效和合规性 DETERMINING PROCESS PERFORMANCE AND COMPLIANCE</b></p> <p>服务提供者应通过以下方面来确保所有流程是有效的：</p> <ul style="list-style-type: none"> <li>a) 与其它相关方文件化并商定向服务提供者和其它相关方提交文件和记录的频率和格式；</li> <li>b) 对流程评价设置评审周期和标准；</li> <li>c) 根据ISO/IEC20000-1标准要求执行流程评价；</li> <li>d) 定义其他相关方在流程审核活动中的义务；</li> <li>e) 流程绩效分析；</li> <li>f) 分析其他相关方所运营的流程或者部分流程之间的接口，及其方针和计划；</li> <li>g) 分析其他相关方所运营的流程或者部分流程同服务管理目标之间的一致性；</li> <li>h) 为完善流程所实施的改进或者纠正行动设置优先级和行动计划。</li> </ul> <p><b>4.2.6 对流程改进的规划和优先级实施控制 CONTROLLING THE PLANNING AND PRIORITIZATION OF PROCESS IMPROVEMENTS</b></p> <p>服务提供者应能展示其对流程改进实施控制的优先级，这些流程包括其他相关方运营的流程在内。</p> <p>示例1：一项针对变更管理流程的改进计划所带来的收益可能比对发布和部署管理流程的优化更大，流程改进的优先级应同业务目标和服务需求相一致。</p> <p>例子2：一项由其他方运营的事件管理流程的改进，应在业务目标和服务提供者或者服务提供者所在组织的服务需求的指引下进行。</p>	<p><b>4.2.5 Determining process performance and compliance</b></p> <p>The service provider should ensure that all processes are effective by:</p> <ul style="list-style-type: none"> <li>a) documenting and agreeing with the other parties the frequency and format of documents and records to be made available to the service provider and to other parties;</li> <li>b) establishing the review cycle and criteria for process assessments;</li> <li>c) conducting an assessment of the process against the requirements of ISO/IEC 20000-1;</li> <li>d) defining the obligations of other parties within the process review activity;</li> <li>e) analysis of process performance;</li> <li>f) analysis of interfaces between processes or parts of processes operated by other parties and processes, as well as policies and plans;</li> <li>g) analysis of alignment between processes or parts of processes operated by other parties and service management objectives;</li> <li>h) setting priorities and planning activities for improvements or corrections to optimize processes.</li> </ul> <p><b>4.2.6 Controlling the planning and prioritization of process improvements</b></p> <p>The service provider should be able to demonstrate that they control the priority given to improvements processes, including those operated by other parties.</p> <p>EXAMPLE 1 A proposed improvement to the change management process can be considered to have greater benefits to the organization than a proposed improvement to the release and deployment management process. prioritization of process improvements should be aligned with the business objectives and the service requirements.</p> <p>EXAMPLE 2 An improvement to the incident management process operated by another party should be directed the business objectives and service requirements of the service provider and the service provider's organization</p>
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<p><b>4.3 文件管理 DOCUMENTATION MANAGEMENT</b></p> <p><b>4.3.1 建立和维护文件 ESTABLISH AND MAINTAIN DOCUMENTS</b></p> <p><b>4.3.1.1 文件证据 Documents as evidence</b></p> <p>服务提供者应确保证据对任何SMS的审计是有效的。许多证据应以文件的形式存在。文件可以是适合其目的任何类型、形式或介质，例如：纸张，电子文件，数据库或文字处理器等。</p> <p>以下文件可以被视为SMS审计的证据：</p>	<p><b>4.3 Documentation management</b></p> <p><b>4.3.1 Establish and maintain documents</b></p> <p><b>4.3.1.1 Documents as evidence</b></p> <p>The service provider should ensure that evidence is available for any audit of the SMS. Much of the evidenceshould exist in the form of documents. Documents may be any type, form or medium suitable for theirpurpose, e.g. paper based, electronic files, in a database or word-processor.</p> <p>The following documents can be considered as evidence for an audit of the SMS:</p>
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<p>a) 服务管理方针、目标与计划；</p> <p>b) 过程与程序文件；</p> <p>c) 服务目录；</p> <p>d) 服务文件，包括设计、要求规范、SLA、验收标准和服务回顾；</p> <p>e) 合同文件，包括要求规范和变更控制；</p> <p>f) 审计计划与报告；</p> <p>g) 文件描述或者与特定变更有关联的文件，例如变更计划活动。</p> <p>服务提供者应知道ISO/IEC 20000-1标准所要求的一些文档如方针，可实现具体流程的要求。此外，一个组织可能会考虑额外的文件，包括方针，以进一步清晰所提供的，或确保有效执行的或改进的SMS和服务交付。</p> <p>记录是一种特殊类型的文件，也应作为证据提供。</p> <p><b>4.3.1.2 文件的产生，包括记录 Production of documents, including records</b></p> <p>服务提供者应该明白，一个有效的程序文件产物是必不可少，包括记录。这包括命名和编码系统的使用，它使文件的目的和历史版本一致。模板和标准化格式的使用可以减少创建、访问、更新和使用文件内容的精力。</p> <p>在SMS中有证据表明，文件验收程序依据文件中确定的角色和责任进行。</p> <p>服务提供者还应该明白一些文件相互依赖，比如SLA、方针和计划。例如：确定什么样的信息可以存储在移动设备里或者支持邮件服务交付的服务器的信息安全策略。当文件进行变更时，应了解和管理这种依赖关系。</p> <p>记录，表明实际已经执行了或发生了什么事，不要总是要求验收程序，例如故障记录。当故障处理进展到关闭时，应更新故障记录。运营事故验收程序时事件记录更新中需要说明事故解决方案不可接受的延期原因。</p> <p>注意：对于SMS，文件和记录不必是唯一的。只要提供的文件符合ISO/IEC20000-1标准的要求，它们也可能覆盖类似ISO9001标准或ISO/IEC27001标准的要求。</p> <p><b>4.3.2 文件控制 CONTROL OF DOCUMENTS</b></p> <p>应当认识到控制文件是必不可少的。控制文件应包括定期回顾，必要的更新或归档。回顾应至少每年一次。文件应该得到保护以免受损害，比如来自恶</p>	<p>a) service management policies, objectives and plans;</p> <p>b) process and procedure documents;</p> <p>c) a catalogue of services;</p> <p>d) service documents including designs, requirements specifications, SLAs, acceptance criteria and servicereviews;</p> <p>e) contractual documents, including specification of requirements and change control;</p> <p>f) audit planning activities and reports;</p> <p>g) documents describing or associated with a particular change, such as change planning activities.</p> <p>The service provider should be aware that some documents, such as policies, are required byISO/IEC 20000-1 to fulfill the requirements of specific processes. In addition, an organization may wish toconsider additional documents, including policies, to provide further clarity or ensure effective operation orimprovement of the SMS and delivery of the services.</p> <p>Records are a special type of document and should also be made available as evidence.</p> <p><b>4.3.1.2 Production of documents, including records</b></p> <p>The service provider should understand that an effective procedure is essential for the production ofdocuments, including records. This includes the use of a naming and numbering system that aligns with thepurpose and revision history of documents. The use of templates and standardised format can reduce theeffort of creating, accessing, updating and using the content.</p> <p>There should be evidence of an acceptance procedure for documents in accordance with the roles and responsibilities for documents defined in the SMS.</p> <p>The service provider should also understand that documents, such as SLAs, policies and plans, can beinterdependent, e.g. an information security policy defining what information can be stored on mobile devicesor a server that supports the delivery of an email service. These interdependencies should be understood andmanaged when changes are made to documents.</p> <p>Records, which show what has actually been done or what has happened, do not always require an acceptance procedure, e.g. an incident record. An incident record should be updated as the incident isprogressed to closure. To operate an acceptance procedure each time an incident record is updated would cause unacceptable delays in the resolution of incidents.</p> <p>NOTE Documents and records need not be unique to the SMS. Provided they meet the requirements ofISO/IEC 20000-1, they may also cover the requirements of standards such as ISO 9001 or ISO/IEC 27001.</p> <p><b>4.3.2 Control of documents</b></p> <p>Control of documents should be recognised as essential. Control of documents should include periodicreview, with updating or archiving if necessary. The review should be at least annual. Documents should beprotected from damage, e.g. due to poor environmental conditions and hardware malfunction.</p>
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<p>劣的环境和硬件的故障。</p> <p>控制能提供对变更影响的可见性，例如：对SLA的变更，它会影响与其他方的合同或可用性要求。服务提供者应确保通过以下内容的使用控制文件：</p> <ul style="list-style-type: none"> <li>a) 版本的命名和编码；</li> <li>b) 分派专人负责撰写、编辑、审查、审批、更新、删除和归档文件；</li> <li>c) 变更记录应表明日期、提交者、变更审批和修订性质；</li> <li>d) 对变更进行评估以识别变更管理流程提前审批的文件；</li> <li>e) 识别SMS中具体文件与其他组件的接口关系；</li> <li>f) 文件的访问控制机制与分配机制；</li> <li>g) 批准文件使用的程序；</li> <li>h) 评审、必要的更新和重新批准文件的程序；</li> <li>i) 需要有一个程序确保服务提供方初期用于策划和运营服务管理体系的外部文件得到识别并在受控状态下分发；</li> <li>j) 确保文件按照信息安全方针和法规法定要求处理的程序；</li> <li>k) 过时文件的归档程序。</li> </ul> <p>为了实现文件控制，可使用来自文件管理、知识管理、变更管理和配置管理的技术，例如：如何表现文件版本的策略。</p> <p>服务提供者应识别出文件控制程序的文件主题。这可以包括类似标准的、法规的或客户的外部文件。服务提供者应区分不同类型加以控制，以适用于不同条目。例如内部与外部来源，或者由于不同的内容所需不同的文件安全要求。</p> <p>应受控的文件包括所有在条款4.3.1.1的那些列表中。许多文件被归类为CIs项，因此也可以通过配置管理流程进行控制。凡通过电子手段实现文件控制的，应特别注意要提供适合的批准、访问、分发、介质和归档程序。</p> <p>注1：服务提供者会发现 ISO9001:2008，条款4.2.3和4.2.4的帮助。</p> <p>注2：如需进一步的信息，请参阅ISO / IEC TR20000-4:2010的条款5.10，信息项目管理流程。</p> <p><b>4.3.2 记录控制 CONTROL OF RECORDS</b></p> <p>SMS相关的记录应遵循ISO / IEC20000-1标准中有关法律和法规的要求及合同义务的要求。例如，</p>	<p>Control can provide visibility of the impacts of changes, e.g. a change to an SLA which impacts contracts with other parties or the availability requirements. The service provider should ensure that documents are controlled through the use of:</p> <ul style="list-style-type: none"> <li>a) version naming and numbering;</li> <li>b) assigned responsibility for writing, editing, reviewing, approving, updating, removing and archiving documents;</li> <li>c) change records that indicate the date, author, approval of change and nature of revisions;</li> <li>d) assessment of changes to identified documents by the change management process prior to approval;</li> <li>e) identification of the relationships between specific documents and other components of the SMS;</li> <li>f) document access control mechanisms and distribution;</li> <li>g) a procedure to approve documents for use;</li> <li>h) a procedure to review and update as necessary and re-approve documents;</li> <li>i) a procedure to ensure that documents of external origin determined by the service provider to be necessary for the planning and operation of the SMS are identified and their distribution controlled;</li> <li>j) a procedure to ensure that documents are disposed of in accordance with the information security policy and regulatory and statutory requirements;</li> <li>k) a procedure for archiving out-of-date documents.</li> </ul> <p>To achieve control of documents, techniques from document management, knowledge management, change management and configuration management can be used, e.g. a policy on how document versions are shown.</p> <p>The service provider should identify those documents subject to the document control procedures. This can include documents of external origin such as standards, regulations or customer documents. The service provider should distinguish between the different types of control to be applied to different types of items, e.g. between those of internal and external origin or documents requiring different security due to the different content.</p> <p>Documents that should be controlled include all those listed in Clause 4.3.1.1. Many documents are classed as CIs, which are therefore also controlled through the configuration management process. Where document control is achieved by electronic means, special attention should be given to appropriate approval, access, distribution, media, and archiving procedures.</p> <p>NOTE 1 The service provider will find ISO 9001:2008, Clauses 4.2.3 and 4.2.4 helpful.</p> <p>NOTE 2 For further information, see ISO/IEC TR 20000-4:2010, Clause 5.10, Information item management process.</p> <p><b>4.3.3 Control of records</b></p> <p>Records associated with the SMS should be aligned to the requirements of ISO/IEC 20000-1, statutory and regulatory requirements and contractual obligations. For example, retention of records, archival and disposal practices. Records that should be retained include the record of</p>
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<p>记录保留、存档和处理措施。应保留的记录,包括文件审查的记录和跟踪评审意见的决议。这些要求和义务应该影响到SMS的设计。</p> <p>任何法律法规的要求或者合同义务和ISO/IEC20000-1标准之间的冲突都应该得到解决。这应该适用于作为SMS部分的所有创建和使用的记录。这包括但不限于文件、日志和数据库记录、已知错误的记录、CIs项、故障记录和变更请求的记录。</p> <p>为提供符合要求和有效运行SMS证据而建立的记录应加以控制。组织应建立一个文件化的程序,以规定对记录的标识、存储、保护、检索、保存和处理所需的控制。记录应保持清晰、易于识别和检索。</p> <p>注:记录管理的进一步信息可在ISO/IEC15489-1中发现。</p>	<p>document reviews and the tracking of review comments to resolution. These requirements and obligations should influence the design of the SMS.</p> <p>Any conflicts between the statutory and regulatory requirements or contractual obligations and the requirements of ISO/IEC 20000-1, should be resolved. This should apply to all records that are created and used as part of the SMS. This includes but is not limited to documentation, logs and database records, known error records, CIs, incident records and request for change records.</p> <p>Records established to provide evidence of conformity to requirements and of the effective operation of the SMS should be controlled. The organization should establish a documented procedure to define the controls needed for the identification, storage, protection, retrieval, retention and disposition of records. Records should remain legible, readily identifiable and retrievable.</p> <p>NOTE Further information on record management can be found in ISO/IEC 15489-1.</p>
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<p><b>4.4 资源管理 RESOURCE MANAGEMENT</b></p> <p><b>4.4.1 资源的提供 PROVISION OF RESOURCES</b></p> <p><b>4.4.1.1 实施SMS的资源 Resources to implement the SMS</b></p> <p>为了建立、实施、维护和改进SMS以及约定的服务,服务提供者应使计划中约定的所有资源有效。至少包括以下资源:</p> <ul style="list-style-type: none"> <li>a) 人力资源,例如:设计、实施和执行SMS的人员,高层管理人员,参与SMS和服务的管理人员;</li> <li>b) 技术资源,例如:要实现服务需求的基础设施和足够能力,支持SMS流程的工具,办公场所和设施,服务持续性设施;</li> <li>c) 信息,例如:具体的客户要求,客户的业务需求和业务计划,服务提供者的业务需求,服务管理方针,措施及其他报告。</li> <li>d) 财务资源,包括项目资金及SMS持续运行的资金。</li> </ul> <p><b>4.4.1.2 审批资源 Approval of resources</b></p> <p>应建立对商定资源使用的审批程序,例如人员、基础设施、工具和资金等资源。这些包括:</p> <ul style="list-style-type: none"> <li>a) 经商定的、预算的推进服务管理计划实施的资金;</li> <li>b) 实施服务管理计划项目和长期持续的、日复一日的流程执行所需的人员分配;</li> <li>c) 技能的鉴定和开发,通过招聘/或培训现有人才的方式进行;</li> </ul>	<p><b>4.4 Resource management</b></p> <p><b>4.4.1 Provision of resources</b></p> <p><b>4.4.1.1 Resources to implement the SMS</b></p> <p>The service provider should make available all resources agreed in the plan to establish, implement, maintain and improve the SMS and the agreed services. The resources include at least the following:</p> <ul style="list-style-type: none"> <li>a) human resources, e.g. people to design, implement and operate the SMS, top management and personnel involved in the management of the SMS and services;</li> <li>b) technical resources, e.g. infrastructure and sufficient capacity to achieve the service requirements, tools to support the processes in the SMS, office accommodation and facilities and service continuity facilities;</li> <li>c) information, e.g. details of customer requirements, the customer's business needs and business plans, the service provider's business needs, service management policies, measures and other reports;</li> <li>d) financial resources, including both funds for projects and funds for continuing operation of the SMS.</li> </ul> <p><b>4.4.1.2 Approval of resources</b></p> <p>Procedures should exist to approve the use of agreed resources, such as people, infrastructure, tools and funds. These include:</p> <ul style="list-style-type: none"> <li>a) funds to be agreed and budgeted in advance of the implementation of the service management plan;</li> <li>b) allocation of people required for the project to implement the service management plan and for the longer term continual improvements and day to day operation of the processes;</li> <li>c) identification and development of skills, approved</li> </ul>
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<p>d) 新角色和新技术的识别、协商和审批；</p> <p>e) 所需的基础设施，包括办公室和数据中心的设施、通讯线路例如局域网和广域网的接入点、服务器、存储设备，和电源与冷却系统；</p> <p>f) 服务管理的工具，可包括监控或测量的工具、具体流程的服务报告或支持。</p> <p>示例：具体的能力模型工具或CMDB的信息可支持资源管理程序。虽然工具并不是ISO/IEC 20000-1标准所要求的，但是它们可以使流程更加有效和高效。工具可以协助提供与ISO/IEC 20000-1标准要求一致的证据。</p> <p><b>4.4.2 人力资源 HUMAN RESOURCES</b></p> <p><b>4.4.2.1 概述 General</b></p> <p>服务提供者承诺提供的资源应包括确定纳入到SMS和服务的每个角色和个体。服务提供者还应该定义并协商每种类型角色的权力和责任的级别。这包括每个角色所需的能力、教育、培训、技能和经验。服务提供者应当定义、协商和沟通服务提供者组织内部的这些信息。认为与其它方相关的，服务提供者还应该与其他方沟通这些信息。</p> <p>服务提供者应该了解哪些有不确定性的角色、有特殊级别和权力与责任类型的个体所产生的风险。当每个角色的权力、职责和责任的级别已界定，这类信息应该集成为SMS的组成部分。服务提供者可以找到责任矩阵，例如：对文件的权限、职责和责任采用RACI法。一旦信息成为SMS的组成部分，就应该被列入SMS的审核周期。</p> <p>资源包括对SMS和SMS交付的服务负有总体责任的高层管理人员。SMS实施项目后，资源要求将继续无限。</p> <p>SMS的每个服务管理流程的权限与责任应包括：</p> <p>a) 流程负责人，负责：</p> <ol style="list-style-type: none"> <li>1) 流程设计；</li> <li>2) 确保遵循流程；</li> <li>3) 流程测量与改进；</li> </ol> <p>b) 流程经理，负责流程执行与对流程资源的管理；</p> <p>c) 个人，执行流程程序；</p> <p>其他角色，具体到个人的服务管理流程的描述，在</p>	<p>recruitment and/or by training existing people;</p> <p>d) identification, agreement and approval of new roles and technologies;</p> <p>e) the required infrastructure which can include office and data centre facilities, telecommunications such as local LAN and WAN access points, servers, storage, and power and cooling distribution;</p> <p>f) service management tools which may include tools for monitoring or measuring and service reporting or support of specific processes.</p> <p>EXAMPLE Resourcing procedures can be supported by specific capacity modelling tools or by information taken from a CMDB. Although tools are not a requirement for ISO/IEC 20000-1 they can make processes more effective and efficient. Tools can assist with providing evidence of conformance to the requirements of ISO/IEC 20000-1.</p> <p><b>4.4.2 Human resources</b></p> <p><b>4.4.2.1 General</b></p> <p>The service provider's commitment to provision of resources should include defining what each role and individual contributes to the SMS and the service. The service provider should also define and agree the levels of authority and responsibility for each type of role. This includes the competence, education, training, skills and experience required for each role. The service provider should define, agree and communicate this information within the service provider's organization. Where it is deemed relevant, the service provider should also communicate this information to other parties.</p> <p>The service provider should understand the risks arising from uncertainty as to which roles, and therefore which individuals, have particular levels and types of authority and responsibility. When the level of authority, accountability and responsibility of each role has been defined, this information should become an integrated component of the SMS. The service provider can find a responsibility matrix, e.g. RACI useful to document authority, accountability and responsibility. Once the information becomes a component of the SMS it should then be included in the SMS review cycle.</p> <p>Resources should include the top management who have overall responsibility and accountability for the SMS and the services delivered by the SMS. This resource requirement will continue indefinitely after the SMS implementation project.</p> <p>The authorities and responsibilities for each service management process in the SMS should include:</p> <p>a) a process owner, responsible for:</p> <ol style="list-style-type: none"> <li>1) the design of the process;</li> <li>2) ensuring adherence to the process;</li> <li>3) the measurement and improvement of the process;</li> </ol> <p>b) a process manager, responsible for the operation of the process and the management of the process management resources;</p> <p>c) personnel who perform the procedures of the process.</p>
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<p>ISO/IEC20000标准本部分的条款5至9。</p> <p>注意：一个人具有多个服务管理角色，特别是针对规模较小的组织，这种做法是可以接受的。</p> <p><b>4.4.2.2能力、技能、培训和经验Competence, skills, training and experience</b></p> <p>角色所需要的能力应基于角色的具体特点与要求进行分析。应包括但不限于：教育、培训、技能和经验。</p> <p>应确定每个角色所需的能力要与履行ISO/IEC 20000-1:2011标准条款4.4.2相关。还应该考虑角色的权限与职责的级别与类型。这包括高层管理人员角色。</p> <p>服务提供者还应该考虑每个角色所涉及的工作量、每个角色如何随时改变。在分配角色和职责时，个人的角色和责任的分配应考虑到角色的各个方面。</p> <p>服务提供者应分配角色给符合能力标准的个人，确保成功地执行角色。</p> <p>有关一个个体适合一个角色的决定，应基于这个角色所需要的能力与实际能力比较。商定的能力要求与即将考虑的个体能力或已经存在的角色之间是有差距的，服务提供者应确保纠正其差距。</p> <p>差距可以有几种纠正的方法，例如：给个人提供教育和培训以纠正差距。此外，服务提供者可以通过让个人与已经有正确技能和经验的另一个人一起工作获得缺失的技能或经验。采取纠正措施以后，服务提供者应该重新评估个人能力或个人，以检查纠正差距的行动。</p> <p>为了实现服务管理目标，服务提供者应使关键绩效指标和/或人员的关键结果一致。这样，不仅使人员意识到自己的义务，而且他们能更好地了解如何贡献所希望的服务成果。</p> <p>服务提供者应建立并保持当前的能力记录，包括教育、培训、技能和经验。服务提供者应确保人员都知道他们如何为服务管理目标的实现作出贡献。</p> <p>应该有一个书面程序确保人员的记录保持最新。</p>	<p>Other roles that are specific to individual service management processes are described in Clauses 5 to 9 of this part of ISO/IEC 20000.</p> <p>NOTE It is acceptable practice for a single individual to have more than one service management role, particularly for smaller organizations.</p> <p><b>4.4.2.2 Competence, skills, training and experience</b></p> <p>The competence required for a role should be based on analysis of the specific characteristics and requirements of that role. This should include but not be limited to: education, training, skills and experience.</p> <p>The competence required for each role relevant to the fulfillment of Clause 4.4.2 of ISO/IEC 20000-1:2011 should be identified. The level and type of responsibility and authority of a role should also be taken into consideration. This includes the roles of top management.</p> <p>The service provider should also give consideration to the workload involved in each role and how each role will change over time. The allocation of roles and responsibilities to individuals should take these aspects of the role into account when allocating roles and responsibilities.</p> <p>The service provider should allocate roles to individuals who meet the capability criteria for that role to be performed successfully.</p> <p>A decision on the suitability of an individual for a role should be based on a comparison of the actual competence and required competence for that role. Where there is a disparity between the agreed competence requirements and the competencies of the individual being considered for, or already in a role, the service provider should ensure that the disparity is corrected.</p> <p>Disparities may be corrected by several methods, e.g. the individual is provided with education and training to correct the disparity. Alternatively, the service provider may allow for missing skills or experience to be gained through the person working with another who already has the correct skills and experience. After this corrective action has been taken, the service provider should re-assess the competence of the individual or individuals to check that the actions taken have corrected the disparity.</p> <p>Service providers should align the key performance indicators and/or key result areas of personnel to the achievement of the service management objectives. By doing this, personnel will not only be made aware of their obligations, but better understand how they can contribute to the desired service outcomes.</p> <p>The service provider should establish and keep current records of competence, including education, training, skills and experience. The service provider should ensure that personnel are aware of how they contribute to the achievement of service management objectives.</p> <p>There should be a documented procedure to ensure that the personnel records are kept up to date.</p>
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<p><b>4.5 建立和改进 SMS ESTABLISH AND IMPROVE THE SMS</b></p> <p><b>4.5.1 定义范围 DEFINE SCOPE</b></p> <p>服务提供者应建立SMS，无论ISO/IEC 20000-1是否能在早期规划阶段的环境中被应用。与此相类似的，服务提供者应在早期规划阶段定义SMS的范围。服务提供者还应意识到忽视这些行动可能导致SMS无法建立或者不充分，不充分的SMS将无法满足ISO/IEC 20000-1标准的要求。</p> <p>为使得所建立的SMS有效，服务提供者应应用PDCA方法论持续改进SMS以及服务。应该在对其实施改进之前理解SMS的范围。在定义SMS的范围时，应该考虑以下方面：</p> <ul style="list-style-type: none"> <li>a) 正在提供服务的组织单元，例如，单一部门、部门群组或者所有部门；</li> <li>b) 提供的服务，例如，单一的、服务组或者所有的服务，金融服务，零售服务，邮箱服务；</li> <li>c) 服务提供者交付服务的地点，例如，一个或者一组办公室，地区，国家或者全球范围；</li> <li>d) 客户以及他们的地点，例如，一个或者许多客户，外部或者内部客户；</li> <li>e) 提供服务的技术。</li> </ul> <p>SMS范围的描述不包括有助于服务交付的其他相关方的名称。</p> <p>服务提供者应参照ISO/IEC TR 20000-3考虑何时用何种方式实现ISO/IEC 20000-1的要求，ISO/IEC TR 20000-3为定义SMS范围以及检查ISO/IEC 20000-1标准在服务提供者的环境中的适用性提供建议。</p> <p><b>4.5.2 SMS 的计划 PLAN THE SMS (PLAN)</b></p> <p><b>4.5.2.1 计划的重要方面 Important planning aspects</b></p> <p>SMS的计划应该涵盖服务管理以及服务交付的所有方面，包含但不限于以下方面的内容：</p> <ul style="list-style-type: none"> <li>a) 服务管理目标。服务提供方优先排序的目标在实施必要改变和改进时需要清晰说明。</li> <li>b) 服务管理计划。必要时，服务管理计划应该分成几个阶段，每一个阶段都标明该阶段的收益。</li> <li>c) 服务提供者的服务管理方针。例如，所有子计划相关的服务管理方针，例如变更管理策略、信息安全策略、服务连续性策略。在规划SMS的早期阶段定义服务管理策略，能使得SMS范围得到界定，并且帮助识别重要的内容。</li> </ul>	<p><b>4.5 Establish and improve the SMS</b></p> <p><b>4.5.1 Define scope</b></p> <p>The service provider should establish whether ISO/IEC 20000-1 is applicable to their circumstances early in the planning stage. Similarly, the service provider should define the scope of the SMS early in the planning stage. The service provider should be aware that neglecting either of these activities can lead to a failed or inefficient SMS that does not fulfill the requirements of ISO/IEC 20000-1.</p> <p>For the SMS to be effective, the service provider should continually improve the SMS and the services using the PDCA methodology. The scope of the SMS should be understood before improving the SMS. When defining the scope of the SMS the following parameters should be considered:</p> <ul style="list-style-type: none"> <li>a) organizational units providing services, e.g. a single department, group of departments or all departments;</li> <li>b) services offered, e.g. a single, group of, or all services, financial services, retail services, email services;</li> <li>c) geographical location from which the service provider delivers the services, e.g. a single office or group of offices, regional, national or global;</li> <li>d) customers and their locations, e.g. one customer, many customers, external or internal customers;</li> <li>e) technology used to provide the services.</li> </ul> <p>The scope statement should not include the names of other parties contributing to the delivery of the service.</p> <p>The service provider should take the guidance of ISO/IEC TR 20000-3 into account when planning how to fulfill the requirements of ISO/IEC 20000-1. This gives advice on defining the scope of the SMS and checking the applicability of ISO/IEC 20000-1 to the service provider's circumstances.</p> <p><b>4.5.2 Plan the SMS (Plan)</b></p> <p><b>4.5.2.1 Important planning aspects</b></p> <p>The plan for the SMS should cover all aspects of service management and delivery of services and include but not be limited to the aspects given below.</p> <ul style="list-style-type: none"> <li>a) The service management objectives. The service provider's prioritized objectives in implementing the necessary changes and improvements should be unambiguous.</li> <li>b) The service management plan. Where possible the plan should be sub-divided into stages, with benefits identified for each stage.</li> <li>c) The service provider's service management policy. For example, policies related to all sub-plans such as change management policies, information security policies, service continuity policies. Defining policies early in the planning of the SMS enables verification of the scope of the SMS and makes it possible to identify important considerations.</li> <li>d) Service requirements. Policies, standards or business</li> </ul>
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<p>d) 服务需求。方针、标准或者关键业务绩效指标应满足客户要求和业务需要。例如，服务需求不应该导出一个同信息安全策略相背离的结果，从而置整个业务于风险之中。</p> <p>e) 已知的可能影响SMS的局限。例如，服务提供者个人实施和管理SMS的技能不足。计划应该识别正确的行为，如提供意识培训、雇佣有相关技能经验的新员工以及使用其他相关方的专家来指导员工。</p>	<p>key performance indicators should be compatible with service requirements and should meet customer requirements and business needs. For example, service requirements should not result in a nonconformity to an information security policy, putting the entire business at risk.</p> <p>e) Known limitations which can impact the SMS. For example, the service provider's personnel having insufficient skills in how to implement and manage the SMS. The plan should identify appropriate actions such as providing training and awareness, hiring new personnel with the relevant skills and experience and using the expertise of other parties to mentor personnel.</p>
<p><b>4.5.2.2 计划和协议保持一致 Alignment of planning and agreements</b></p> <p>服务管理计划应该包含（服务）协议以及服务需求文档。服务目标应该在服务计划和服务提供者与相关方的协议中正式文档化。服务提供者与相关方的协议应该考虑以下方面的内容：</p> <p>a) 客户。例如，服务级别协议（SLAs）、新的或变更的服务请求。即使该客户协议文档不是一个具法律意义的合同，这些内容也应该考虑。</p> <p>b) 内部团队。例如，同基础设施团队、系统开发团队、人力资源团队或者财务管理团队签署的运营级别协议，由于服务提供者和内部团队均为同一个法律实体的一部分，运营级别协议可能并不具备法律效力，然而，内部团队可能并不受服务提供者直线管理部门管辖。内部团队可能是SMS范围定义中的重要方面，因为他们在整个服务中可能发挥重要的作用。</p> <p>c) 服务提供者和主服务提供者。例如，服务或者资源的分包合同方。</p> <p>d) 其他标准、规范以及法律规定。例如，工业规范（化工、汽车、通讯或者有关软件许可的国家法律规定）。</p>	<p><b>4.5.2.2 Alignment of planning and agreements</b></p> <p>The service management plan should include the agreement and documentation of service requirements. The service targets should be documented in both the plan and agreements between the service provider and relevant groups. The agreements should take into consideration the aspects listed below.</p> <p>a) Customer, e.g. SLAs, requirements of new or changed services. This should be considered even if the documented agreement with a customer is not a legally binding contract.</p> <p>b) Internal groups, e.g. operational level agreements with a facilities group, systems development group, human resources group, or finance group. This cannot be a legally binding contract because the service provider and internal groups are part of the same legal entity.</p> <p>c) However, the internal groups may not be part of the service provider's direct line management. Internal groups can be an important aspect of defining the scope of the SMS as they can contribute a significant portion of the overall service.</p> <p>d) Suppliers and lead suppliers, e.g. service or resource subcontracts.</p> <p>e) Other standards, regulatory and statutory requirements, e.g. industry-specific, such as medical, automotive, telecommunications or country-specific compliance to laws for software licensing.</p>
<p><b>4.5.2.3 管理角色、权限和职责 Management roles, authorities and responsibilities</b></p> <p>在SMS的范围中定义的管理角色、权限和职责也应该在服务管理计划、流程文档和相关协议中被文档化。其内容应包括：</p> <p>a) 所有的管理角色，包括个体角色和集体角色；</p> <p>b) 管理者代表，包括角色权限的任何限制，以及这个人所代表的群体与高管层之间的关系；</p> <p>c) 服务或者流程拥有者。</p> <p>SMS应该被检查以确保不存在利益冲突。例如，同</p>	<p><b>4.5.2.3 Management roles, authorities and responsibilities</b></p> <p>The management roles, authorities and responsibilities within the scope of the SMS should be documented in both the service management plan, process documentation and relevant agreements, including:</p> <p>a) all roles for which management are individually or collectively accountable and responsible;</p> <p>b) management representative, including any limits on the authority of this role, and the relationship to the top management that this person represents;</p> <p>c) service or process owners.</p> <p>The authorities and responsibilities for the roles in the SMS should be checked to ensure that there are no conflicts of interest e.g. the same role proposing and also approving a</p>

一个角色既提出变更又批准变更。服务管理计划中的权限、职责和流程角色框架应该包含哪个角色对SMS所有组件负责的详细内容。

#### 4.5.2.4 流程接口 Process interfaces

流程之间的接口信息应包括流程之间传递信息的类别、方法和频率。服务提供者应意识到这是流程定义的重要部分,并且确保流程和SMS运行的效率和效果。

ISO/IEC 20000-1:2011中第5章内容包括第6章至第9章,以及新的服务和变更的服务中流程之间的接口需求。

新的或变更的服务的流程接口需求项目阶段定义,这些阶段包括服务需求定义、何时进行服务设计和转换。

服务提供者应意识到有效的项目管理对管理流程接口非常重要,SMS和任何项目之间的接口都应该在服务管理计划中被定义、协商一致以及记录。

SMS(包括流程、策略、目标和计划)中集成化的组件应该得到评价,以确保SMS和服务的效率和效果被识别、被管理以及持续改进。

为了促进客户和服务提供者的协同和互动,服务提供者可建立标准化的流程描述规范。流程描述定义流程的目的、产出、活动、方针、角色和职责、信息项以及每一个SMS中服务管理流程之间的接口。每一个流程还需要提供文档化的工作程序和作业规范,以进一步定义如何完成流程活动。

服务提供者应该意识到,在对SMS实施改进和由于任何其他原因所引起的SMS变更时,对SMS实施全面的管理和协调是非常重要的。SMS一部分流程的变更应该对其他部分的影响分析结果被充分理解和接受之后进行,这种影响应该包括对其他流程的影响或者对组织服务交付能力的影响。

例子:在事件和服务请求管理流程中改变参数或目标,可能对其他的流程产生意想不到的不利影响,比如服务级别管理(SLM)、服务报告和信息安全管理(ISM)流程。

理解流程间以及SMS中所有组件之间的依赖关系能降低风险,并使得SMS管理更有效。在本指南的附件A中可以找到服务管理流程间接口以及SMS内部集成的例子。

#### 4.5.3 SMS 的实施和运维 IMPLEMENT AND OPERATE THE SMS ( Do )

服务提供者应保持与服务管理计划一致的前提下

change. The framework of authorities, responsibilities and process roles in the plan should include the details of which role is accountable and responsible for all components of the SMS.

#### 4.5.2.4 Process interfaces

The information on interfaces between processes should include the type, method and frequency of information passed from one process to another process. The service provider should be aware that this is an important part of their process definition and ensures that the processes and the SMS will function effectively and efficiently.

Clause 5 of ISO/IEC 20000-1:2011 includes requirements for interfaces between the processes in Clauses 6 to 9 and the design and transition of new or changed services.

Requirements for new or changed services include the project stage at which service requirements are defined and when the service is designed and transitioned.

The service provider should be aware that effective project management is important for managing some interfaces. The interface between the SMS and any projects should be defined, agreed and recorded in the plan.

The integrated components of the SMS, including processes, policies, objectives and plans, should be measured so that the efficiency and effectiveness of the SMS and the services can be identified, managed and improved.

In order to facilitate integration and interoperability between the customer and service provider the service provider can establish standardized process descriptions. Process descriptions define the purpose, outcomes, activities, policies, roles and responsibilities, information items and interfaces for each service management process within the SMS. Each process can also require documented procedures or work instructions to further define how to undertake activities.

The service provider should be aware that overall management and coordination of the SMS is particularly important when it is being improved or changed for any other reason. Changes to the processes that form part of the SMS should only be made after the impact of the change on the rest of the SMS is understood and is considered acceptable. This includes the impact on other processes or the organization's service delivery capability.

EXAMPLE Changes to parameters or targets used in the incident and service request management process can have an unintended and detrimental effect on other processes, such as the service level management (SLM), reporting and information security management (ISM) processes.

Understanding the interdependencies between processes and between all components of the SMS can reduce risk and enable effective management of the SMS. Examples of interfaces between service management processes and of integration within the SMS can be found in Annex A of this part of ISO/IEC 20000.

#### 4.5.3 Implement and operate the SMS (Do)

The service provider should implement and operate the SMS in alignment with the service management plan and as

实施和运维SMS,并作为一种手段实现服务管理目标。

服务提供者应该意识到,确保把服务提供者和客户双方的权限和责任形成文档并就影响双方的活动达成一致,这样做是有益的。

服务提供者应该意识到,服务管理体系SMS的策划、实施、和运营需要不同的技能要求,因此服务管理体系SMS的策划和初期实施者并不一定适合服务管理体系SMS的运营。

#### **4.5.4 SMS 的监视和评审 MONITOR AND REVIEW THE SMS ( CHECK )**

##### **4.5.4.1 总则**

服务提供者应监视和评审服务管理目标及计划必要的活动以确保目标实现。最高管理层应意识到成果评审的重要性。如果变更服务管理计划和目标被认为是必要的,那这些变更应由变更管理流程批准。

根据PDCA方法,服务提供者应该定期识别、收集、分析、报告关于流程和服务交付的信息。这些活动应支持SMS的有效管理和服务,并且应该能客观的展现质量和服务的价值。

注:关于测量的进一步信息请参看ISO/IEC 15939,过程评估和绩效评价请参看ISO/IEC 15504,产品评估请参看ISO/IEC 14598,软件产品测量请参看ISO/IEC 9126 2和3部分。

##### **4.5.4.2 内部审核 Internal audit**

服务提供者应该确保根据所设计的内审程序进行内审,包括内审的权限和职责。负责进行内部审核的人员应具有相应的知识且独立于被审核领域。例如,他们不可以深恨自己的工作。所需的角色应事先确定,可能包括项目经理、赞助商、督导委员会、其他相关各方和独立审核师。

当每个服务和ISO/IEC 20000-1条款被内审时,应制定审核方案。每次审核方案应基本包括为什么服务或者ISO/IEC 20000-1涵盖或者不涵盖条款。考虑的因素包括程序中的风险级别、操作频率和过去历史。

按照一定时间间隔实施的内部审核需要进行策划,审核不能只在知道有风险或出现问题的时候实施。执行周期的选择也应考虑以下内容的变更频率:

a means of achieving the service management objectives.

The service provider should be aware of the benefits of ensuring that the authorities and responsibilities of both the service provider and customer are documented and agreed for activities that impact both parties.

The service provider should be aware that a person who is appropriate for the planning and initial implementation is not always suitable for the operation of the SMS. Different skills are required for planning, implementation and operation.

#### **4.5.4 Monitor and review the SMS (Check)**

##### **4.5.4.1 General**

The service provider should monitor, measure and review the service management objectives and plan the necessary activities to ensure they are being achieved. Top management should be aware of the outcomes of reviews. If changes to the service management plan and objectives are considered necessary, these changes should be approved in accordance with the change management process.

In accordance with the PDCA methodology, the service provider should regularly identify, collect, analyses, and report information on the processes and the services delivered. These activities should support effective management of the SMS and the services, and should enable the ability to objectively demonstrate the quality and value of the services delivered.

NOTE See ISO/IEC 15939 for further information on measurement, ISO/IEC 15504 for process assessment and performance evaluation, ISO/IEC 14598 for product evaluation and ISO/IEC 9126 Parts 2 and 3 for examples of software product metrics.

##### **4.5.4.2 Internal audit**

The service provider should ensure internal audits are performed according to a documented procedure that includes authorities and responsibilities for the audits. Those responsible for carrying out internal audits should be suitably knowledgeable and independent of the areas being audited, e.g. they should not audit their own work. The roles required should be documented. They can include a project manager, the sponsor, the steering committee, other interested parties and the independent auditors.

There should be an agreed internal audit programme identifying when each service and which clauses of ISO/IEC 20000-1 are to be audited. There should be a rationale for the planning decisions, including why services or clauses of ISO/IEC 20000-1 are included or excluded for each internal audit. Factors that should be taken into account include the degree of risk involved in a process, its frequency of operation and its past history.

The intervals at which internal audits are performed should be planned and not only done when there are known risks or other issues. The interval selected should take into account the rate of change of the:

- a) SMS and services;
- b) customer requirements and customer's organization;
- c) service provider personnel and organization;

<p>a) SMS和服务 ;</p> <p>b) 客户需求和客户组织 ;</p> <p>c) 服务提供人员和组织 ;</p> <p>d) 交付服务使用的技术 ;</p> <p>e) 服务管理工具的重大变更 , 如使用工具。</p> <p>管理者应确保审核计划的完成 , 除非因原因而重新安排。</p> <p>SMS的内部审核包括SMS范围的评估和SMS对于交付给客户的服务的有效性评估。这包括检查服务管理方针仍然提供管理的正确方向和是否达到预期的服务目标。内部审核应审查计划并依据SMS的考核指标提供绩效报告。</p> <p>制定与审核频率一致的时间表 , 内部审核人员应对不符合项指出详细细节。服务提供者应分析内部内审结果以识别、确认优先行动。</p> <p>任何前期的审计结果应予以考虑。例如 , 观察项应在下次审核中予以重申。内部审核应检查商定的纠正和预防措施已落实到既定的时间表。内部审核还应检查商定的改进行动真正实现了预期改进。</p> <p>对不符合项进行分析以找到根本原因。审核后活动应包括针对根本原因而采取的预防活动。预防活动应有清晰并明确约定的所有人和时间表 , 以确保其有效并及时完成。后续活动包括对确定的不符合项进行验证。行动报告应交由最高管理层。</p> <p><b>4.5.4.3管理评审Management review</b></p> <p>SMS根据既定的时间间隔进行评审 , 以确保其持续支持变化的业务需求和服务要求。至少每年进行一次。然而 , 一些服务供应商在快速变化的环境中运营 , 故应提高评审频率。评审应包括依据SMS范围确定的实际范围、与当前的客户需求和客户的业务需求相比当前计划的合理性。具体来说 , 可对以下方面进行评审 :</p> <p>a) SMS符合方针、计划和目标的绩效</p> <p>b) KPI测量结果</p> <p>c) 内审、外审结果</p> <p>d) 持续改进活动与业务目标保持一致的检查</p> <p>e) 变更实施后回顾</p> <p>f) 行业最佳实践</p>	<p>d) technology used for delivery of the service;</p> <p>e) major changes to service management tools, when tools are used.</p> <p>Management should ensure that audits are completed to plan, unless rescheduled for documented reasons.</p> <p>Internal audits of the SMS should include an assessment of the scope of the SMS and that the SMS is still effective for delivery of the services agreed with the customer. This should include checking that the service management policy still provides the correct management direction and that the objectives are met within the timescales expected. The internal audit should review the plans and report against the performance of the SMS.</p> <p>Using a timeframe consistent with the audit frequency, the internal auditors should provide details on any nonconformities. The service provider should then use the results of the internal audit to identify and prioritize actions.</p> <p>Any previous audit results should be taken into account. For example, where a concern was identified the plans should include ensuring that the cause of concern be re-audited at the next internal audit. The internal audit should check that any identified and agreed corrective or preventive actions have been implemented to the timescales agreed. The internal audit should also check that the agreed actions have indeed resulted in the predicted improvement.</p> <p>Nonconformities should be analysed to determine any root causes. The actions arising from audits should include preventive actions in respect to any root causes identified. Actions should have clear and agreed owners and timescales, to help ensure that they are completed effectively and on time. Follow up activities on identified nonconformities should include verification that actions have been taken. Results of actions taken should be reported to top management.</p> <p><b>4.5.4.3 Management review</b></p> <p>The SMS should be reviewed at planned intervals to check that the SMS continues to enable the fulfillment of changing business needs and service requirements. This should be performed at least annually. However, some service providers operate in a rapidly changing environment and should review the SMS more frequently. The review should include the actual scope against the defined scope of the SMS, suitability of current plans compared to the current needs of the customer and of the customer's business needs. Specifically, the review can be performed against:</p> <p>a) performance of the SMS against policies, plans and objectives;</p> <p>b) measurement of process key performance indicators (KPIs);</p> <p>c) the results of internal and external audits;</p> <p>d) a review of continual improvement activities aligned with business objectives;</p> <p>e) post implementation reviews of changes;</p> <p>f) industry best practice;</p> <p>g) customer satisfaction survey results;</p>
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<p>g) 客户满意度调查结果</p> <p>h) 预期业务成果</p> <p>注 : 参见ISO/IEC 15504第二第三部分需求和过程评估指南</p> <p><b>4.5.5 SMS 的维护与改进 MAINTAIN AND IMPROVE THE SMS (ACT)</b></p> <p><b>4.5.5.1 概述 General</b></p> <p>通过建立SMS和服务不断持续改进的方针实现服务持续改进的战略。该方针应该包括定义可接受的评估准则和优先的改进机会。</p> <p>交付给客户的所有服务, 服务管理流程, 和SMS整体应该持续进行改善。为了促进这项工作更容易, 服务提供者会发现在服务管理流程文档中建立持续改进活动是有用的。相对持续改进的成果, 服务提供者还会发现这有助于测量SMS组件和人员的绩效目标。</p> <p>通过评估、审计或其他方式所确定的任何不符合项应解决并采取措施, 以消除已识别的和潜在的不符合项的根源。</p> <p><b>4.5.5.2 持续改进的管理 Management of improvements</b></p> <p>持续改进是ISO/ IEC 20000标准的核心概念之一。应该使用文件化的程序明确所有改善活动的部门和责任。该程序应确保对改进机会的有效识别、评估、审核、实施, 管理和测量。</p> <p>管理持续改进的输入应包括 :</p> <ul style="list-style-type: none"> <li>a) 高层管理者的指导 ;</li> <li>b) 所识别的根本原因作为审核和回顾的结果 , 包括对SMS和单个服务 ;</li> <li>c) 来自客户、其他各方和服务提供者内部组织的建议 ;</li> <li>d) 问题记录 ;</li> <li>e) 测试测试, 比如服务持续性测试 ;</li> <li>f) 交付的价值/服务要求, 例如 : 例如基于关键服务业务的优先改善活动;</li> <li>g) 优化资源利用率或降低风险, 例如, 提高效率的机会或自动化改进的机会。</li> </ul> <p>注1 : 进一步的指导可以参考 ISO/IEC TR20000-4</p> <p>注2 : 系统工程和软件开发的过程模型和评估方法在ISO / IEC 15504 , 部分5和6</p>	<p>h) desired business outcomes.</p> <p>NOTE See ISO/IEC 15504 Parts 2 and 3 for requirements and guides for process assessment.</p> <p><b>4.5.5 Maintain and Improve the SMS (Act)</b></p> <p><b>4.5.5.1 General</b></p> <p>A strategic approach to service improvement should be made by establishing a policy on continual improvement of the SMS and the services. The policy should include a definition of the agreed evaluation criteria for accepting and prioritizing improvement opportunities.</p> <p>All of the services delivered to the customer, the service management processes and the SMS in its entirety should be subject to continual improvement. To facilitate this more readily the service provider may find it useful to build continual improvement activities into the service management process documentation. The service provider may also find it helpful to align the measurement of SMS components and personnel performance targets against continual improvement achievements.</p> <p>Any nonconformities identified through assessments, audits or other means should be addressed and actions taken to eliminate the causes of both identified and potential nonconformities.</p> <p><b>4.5.5.2 Management of improvements</b></p> <p>Continual improvement is one of the core concepts of ISO/IEC 20000. A documented procedure identifying the authorities and responsibilities for all improvement activities should be used. This procedure should ensure that opportunities for improvement are effectively identified, evaluated, prioritized, approved, implemented, managed and measured.</p> <p>Inputs to manage continual improvement should include:</p> <ul style="list-style-type: none"> <li>a) relevant directives from top management;</li> <li>b) root causes identified as a result of audits and reviews, both of the SMS and of individual services;</li> <li>c) suggestions from the customer, other parties and from within the service provider's organization;</li> <li>d) problem records;</li> <li>e) tests of plans, e.g. service continuity tests;</li> <li>f) delivery of value/service requirements, e.g. prioritizing improvement activities based upon business criticality of services;</li> <li>g) optimized resource utilization or risk reduction, e.g. opportunities for increased efficiency or improved automation.</li> </ul> <p>NOTE 1 Further guidance can be found in ISO/IEC TR 20000-4.</p> <p>NOTE 2 A process model and assessment method for system engineering and software development is in ISO/IEC 15504, Parts 5 and 6</p>
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