



## Chapter 4 Project Integration Management

### ( 第 4 章 项目综合管理 )

Project Integration Management includes the processes required to ensure that the various elements of the project are properly coordinated. It involves making trade-offs among competing objectives and alternatives in order to meet or exceed stakeholder needs and expectations. While all project management processes are integrative to some extent, the processes described in this chapter are primarily integrative. Figure 4-1 provides an overview of the following major processes:

项目综合管理包括使项目的各种要素相互协调的过程。它涉及在竞争性目标和方案选择中进行平衡，以满足或超过利害关系者的需求和期望。虽然所有的项目管理过程在某种程度上都是综合一体的，本章介绍的过程着重于它们的综合性。图 4-1 提供了下面主要过程的概述：

**4.1 Project Plan Development**—taking the results of other planning processes and putting them into a consistent, coherent document.

项目计划建立 - 使用其它计划过程的结果并将它们编制成一个一致的、连贯的文档。

**4.2 Project Plan Execution**—carrying out the project plan by performing the activities included therein.

项目计划执行 - 执行工序来实施项目计划。

**4.3 Overall Change Control**—coordinating changes across the entire project.

整体变更控制 - 协调整个项目的变更。

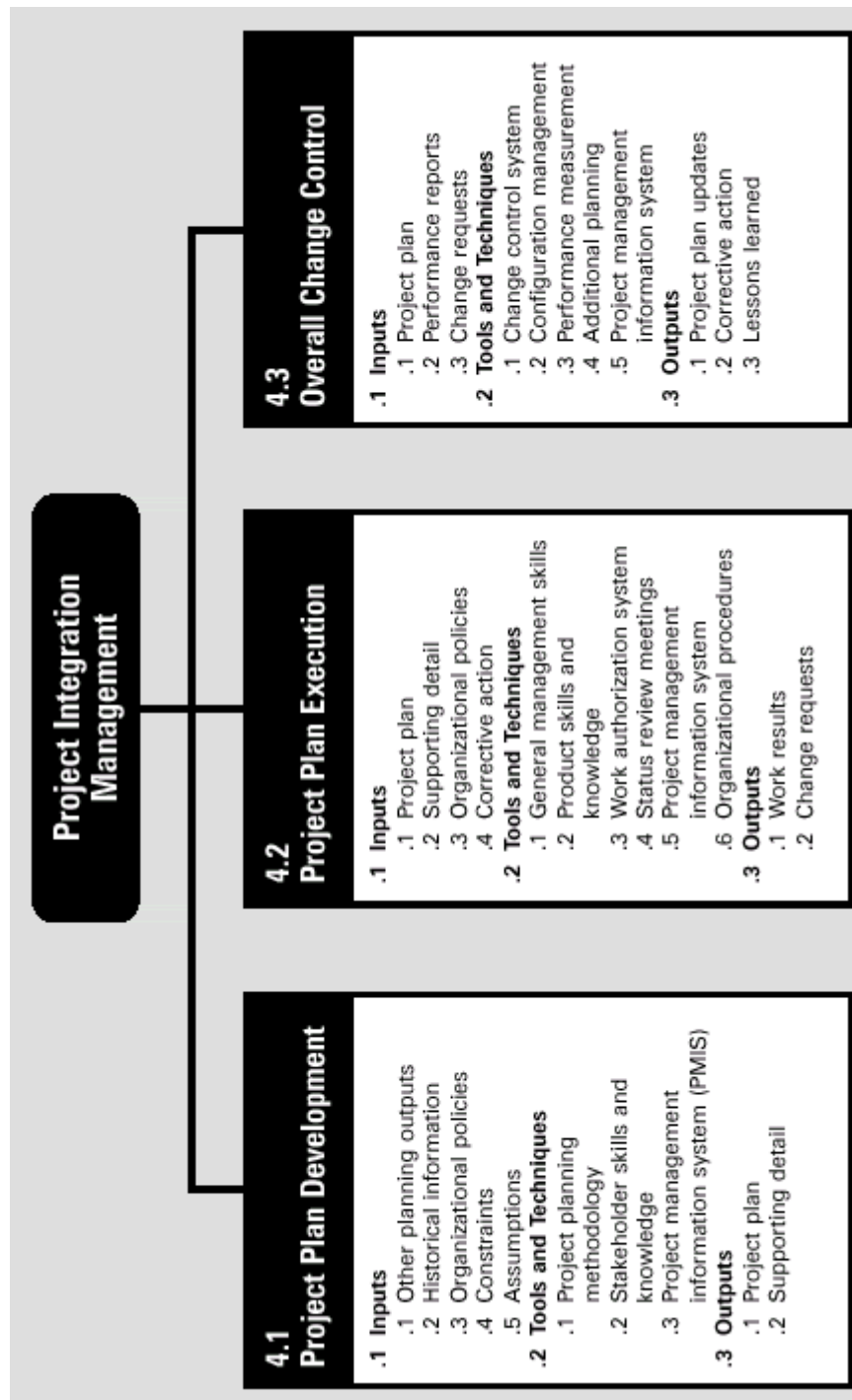


Figure 4-1 Project Integration Management Overview

These processes interact with each other and with the processes in the other



knowledge areas as well. Each process may involve effort from one or more individuals or groups of individuals based on the needs of the project. Each process generally occurs at least once in every project phase.

这些过程相互之间以及同其它知识领域的过程交互作用。每个过程包含了基于项目需求的个人或集体的努力。每个过程在每个项目阶段一般至少发生一次。

Although the processes are presented here as discrete elements with well-defined interfaces, in practice they may overlap and interact in ways not detailed here. Process interactions are discussed in detail in Chapter 3.

尽管这里描述的过程有定义很好的接口，并且是独立、离散的要素，实际上它们以这里未描述的方式重叠和交互作用。第3章中详细讨论过程的交互作用。

The processes, tools, and techniques used to integrate *project management* processes are the focus of this chapter. For example, project integration management comes into play when a cost estimate is needed for a **contingency**<sup>1</sup> plan or when risks associated with various staffing alternatives must be identified. However, for a project to be completed successfully, integration must also occur in a number of other areas as well. For example:

本章焦点在于介绍用于集成项目管理过程的过程、工具和技术。例如，当一个应急计划需要成本估算时，或者与人员变化相关的风险要求被识别时，项目综合管理开始派上用场了。但为了项目成功，综合管理同样也发生在其它的许多领域。例如：

- The work of the project must be integrated with the ongoing operations of the performing organization.  
项目工作必须同执行组织的连续业务集成。
- Product scope and project scope must be integrated (the difference between product and project scope is discussed in the introduction to Chapter 5).

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<sup>1</sup> n.事故，意外事件



产品范围和项目范围必须集成（两者区别见第 5 章 - 介绍）。

- Deliverables from different functional specialties (such as civil, electrical, and mechanical drawings for an engineering design project) must be integrated.

来自不同专业的可交付成果（例如一个工程设计项目的土木、电子和机械绘图）必须集成。

## 4.1 Project Plan Development ( 项目计划建立 )

Project plan development uses the outputs of the order planning processes to create a consistent, coherent document that can be used to guide both project execution and project control. This process is almost always iterated several times. For example, the initial draft may include **generic**<sup>2</sup> resources and undated duration while the final plan reflects specific resources and explicit dates. The project plan is used to:

项目计划建立使用其它计划工程的输出创建一个一致的、连贯的文档，用于指导项目执行和项目控制。这个过程几乎要重复很多次。例如，最初的计划草稿可能包含一般的资源和未定的持续时间，而最后的计划反映了具体的资源和确定的日期。项目计划用于：

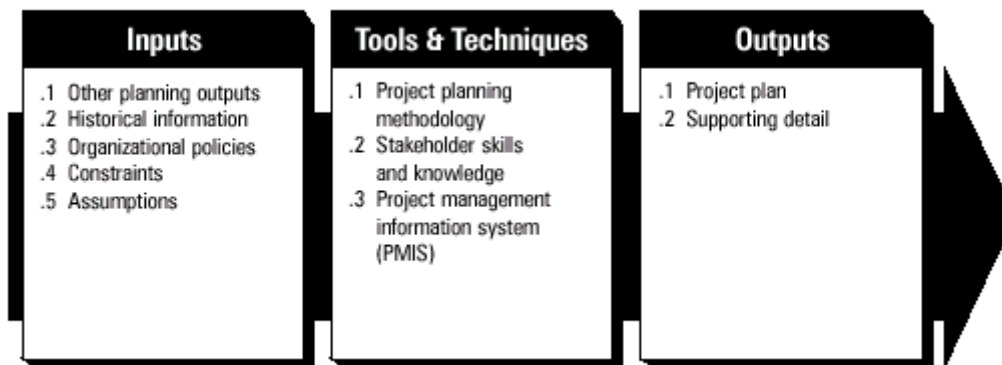
- Guide project execution.  
指导项目执行。
- Document project planning assumptions.  
证实项目计划假设。
- Document project planning decisions regarding alternatives chosen.

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<sup>2</sup> a. 一般的，普通的

对于不同方案，证实项目计划决策。

- Facilitate communication among stakeholders.  
促进项目利害关系者之间的沟通。
- Define key management reviews **as to** content, extent, and timing.  
定义关于内容、程度范围、时间方面的关键管理回顾。
- Provide a baseline for progress measurement and project control.  
为衡量项目进展和项目控制提供基准。



#### 4.1.1 Inputs to Project Plan Development ( 项目计划建立的输入 )

*.1 Other planning outputs.* All of the outputs of the planning processes in the other knowledge areas (Section 3.3 provides a summary of these project planning processes) are inputs to developing the project plan. Other planning outputs include both base documents such as the work breakdown structure as well as the supporting detail. Many projects will also require application area-specific inputs (e.g., most construction projects will require a cash flow forecast).

*.1 其它计划输出。* 其它知识领域 ( 3.3 节提供这些项目计划过程的摘要 ) 的计划过程的输出都是项目计划过程建立的输入。其它计划输出包括基本文档，如工作分解结构，也包括一些辅助细节等。许多项目也需要特定应用领域的输入( 例如，大多数项目需要一个资金流预测 )。



.2 *Historical information.* The available historical information (e.g., estimating databases, records of past project performance) should have been **consulted** during the other project planning processes. This information should also be available during project plan development to assist with verifying assumptions and assessing alternatives that are identified as part of this process.

.2 **历史信息。** 有用的历史信息应该在其它项目计划过程编制期间作为参考。  
在项目计划建立期间，这些信息用来证实假定和评定本过程确定的替代方案。

.3 *Organizational policies.* Any and all of the organizations involved in the project may have formal and informal policies whose effects must be considered. Organizational policies which typically must be considered include, but are not limited to:

.3 **组织政策。** 参与项目的任何一个或所有组织都有其正式或非正式的政策，它们的影响应当被予以考虑。组织政策包括，但不限于：

- Quality management—process audits, continuous improvement targets.  
质量管理 - 过程审定，持续发展目标。
- Personnel administration—hiring and firing guidelines, employee performance reviews.  
人员管理 - 雇用和解雇指导方针，雇员表现考察。
- Financial controls—time reporting, required expenditure and **disbursement**<sup>3</sup> reviews, accounting codes, standard contract provisions.  
财务控制 - 定时报告，必须的开支和支出审核，会计代码，标准合同条款。

.4 *Constraints.* Constraints are factors that will limit the project management team's options. For example, a predefined budget is a constraint that is highly likely to limit the team's options regarding scope, staffing, and schedule.

.4 **限制。** 限制是指限制项目管理队伍进行选择的因素。例如，一个预先定

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<sup>3</sup> a. 支付，支出



义的预算很可能使队伍在范围、人员和进度方面的考虑有所限制。

When a project is performed under contract, contractual provisions will generally be constraints.

当项目以合同形式执行时，合同条款一般要成为限制。

*.5 Assumptions.* Assumptions are factors that, for planning purposes, will be considered to be true, real, or certain. For example, if the date that a key person will become available is uncertain, the team may assume a specific start date. Assumptions generally involve a degree of risk.

*.5 假定。*对于计划而言，假定是被认为正确的、真实的或确定的要素。例如，如果一个关键人物就位的时间不确定，那么队伍将假定一个具体的开始时间。假定通常包含一定程度的风险。

#### 4.1.2 Tools and Techniques for Project Plan Development( 项目计划建立的工具和技术 )

*.1 Project planning methodology.* A project planning methodology is any structured approach used to guide the project team during development of the project plan. It may be as simple as standard forms and templates (whether paper or electronic, formal or informal) or as complex as a series of required simulations (e.g., Monte Carlo analysis of schedule risk). Most project planning methodologies make use of a combination of “hard” tools such as project management software and “soft” tools such as facilitated start-up meetings.

*.1 项目计划方法学。*项目计划方法学是指在项目计划建立期间用于指导项目队伍的任何一个结构化方法。它可能如标准表格和模板（无论是纸的形式还是电子文档的形式，也不管是正式的还是非正式的）一样简单，也可能如必须的模拟（比如进度风险分析的蒙特卡罗模拟）一样复杂。大多数项目计划方法学使用



硬工具（如项目管理软件）和软工具（如推动立项会议）的结合。

*.2 Stakeholder skills and knowledge.* Every stakeholder has skills and knowledge which may be useful in developing the project plan. The project management team must create an environment in which the stakeholders can contribute appropriately (see also Section 9.3, Team Development). Who contributes, what they contribute, and when will vary. For example:

*.2 项目利害关系者的技能和知识。* 每个项目利害关系者都有有助于项目计划建立的技能和知识。项目管理队伍必须创造一个有助于项目利害关系者做出贡献的环境（也可参见 9.3 节，队伍建设）。由谁贡献，贡献什么和何时发生变化。

例如：

- On a construction project being done under a lump sum contract, the professional cost engineer will make a major contribution to the profitability objective during proposal preparation when the contract amount is being determined.

在一个以总价合同形式执行的建设合同中，当合同数量已经确定时，在方案准备阶段，专职的成本工程师将对项目的利润目标有着主要的贡献。

- On a project where staffing is defined in advance, the individual contributors may contribute significantly to meeting cost and schedule objectives by reviewing duration and effort estimates for reasonableness.

在一个人员事先已经确定的项目中，通过合理的考察工作时间和成绩评估，个人对于达到成本和进度目标有着重大的贡献。

*.3 Project management information system (PMIS).* A project management information system consists of the tools and techniques used to gather, integrate, and disseminate the outputs of the other project management processes. It is used to support all aspects of the project from initiating through closing and generally





includes both manual and automated systems.

.3 项目管理信息系统。一个项目管理信息系统由用于收集、综合和分发其它项目管理过程的输出结果的工具和技术组成。它用于支持项目从立项到收尾等各个方面，一般包括手工和自动系统。

#### 4.1.3 Outputs from Project Plan Development (项目计划建立的输出)

.1 *Project Plan*. The project plan is a formal, approved document used to manage and control project execution. It should be distributed as defined communications management plan (e.g., management of the performing organization may require broad **coverage**<sup>4</sup> with little detail, while a contractor may require complete details on a single subject). In some application areas, the term *integrated project plan* is used to refer to this document.

.1 项目计划。项目计划是一个正式、被批准的文件，用于管理和控制项目执行。它们应该象沟通管理计划中定义的那样分发（比如，执行组织的管理需要更大的覆盖面，并不追求细节，而对承包商来讲则需要某个主题完整的细节）。在一些应用领域，术语**集成化项目计划**也指的是本部分。

A clear distinction should be made between the project plan and the project performance measurement baselines. The project plan is a document or collection of documents that should be expected to change over time as more information becomes available about the project. The performance measurement baselines represent a *management control* that will generally change only intermittently and then generally only **in response to** an approved scope change.

应该清楚地区分项目计划和项目执行情况衡量基准。项目计划是一个文件或一组文件，随着有关项目的有用信息越来越多，它不断发生变化。而项目执行情

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<sup>4</sup> n.范围，规模



况衡量基准表示一种 *管理控制*，它通常断断续续变化，然后响应被批准的范围变更。

There are many ways to organize and present the project plan, but it commonly includes all of the following (these items are described in more detail elsewhere):

有很多方法组织和表示项目计划，但项目计划一般包括下面的所有内容（其它地方有更详细的讨论）：

- Project **charter**.  
项目章程。
- A description of the project management approach or strategy (a summary of the individual management plans from the other knowledge areas).  
项目管理方法或战略的描述（来自其它知识领域的单个管理计划的概括）。
- Scope statement, which includes the project deliverables and the project objectives.  
范围说明，包括项目可交付成果和项目目标。
- Work Breakdown Structure (WBS) to the level at which control will be exercised.  
采取控制的工作分解结构层次。
- Cost estimates, **scheduled** start dates, and responsibility assignments to the level of the WBS at which control will be exercised.  
成本估算、预定的开始日期、采取控制的工作分解结构层次上的职责分配。
- Performance measurement baselines for schedule and cost.  
进度和成本的执行情况衡量基准。
- Major milestones and target dates of each.



主要的里程碑及其目标日期。

- Key or required staff.  
关键或必需的人员。
- Key risks, including constraints and assumptions, and planned responses for each.  
主要风险，包括限制和假定及其计划应对措施。
- **Subsidiary**<sup>5</sup> management plans, including scope management plan, schedule management plan, etc.  
辅助管理计划，包括范围管理计划、进度管理计划等。
- Open issues and **pending**<sup>6</sup> decisions.  
未定的问题和决策。

Other project planning outputs should be included in the formal plan based upon the needs of the individual project. For example, the project plan for a large project will generally include a project organization chart.

按照每个项目的需要，正式的计划中应包括其它项目计划输出。例如，一个大项目的项目计划一般包括项目组织图。

.2 *Supporting detail*. Supporting detail for the project plan includes:

.2 **辅助细节**。项目计划的辅助细节包括：

- Outputs from other planning processes that are not included in the project plan.  
项目计划中没有包括的来自其它项目计划过程的输出。
- Additional information or documentation generated during development of the project plan (e.g., constraints and assumptions that were not previously known).  
项目计划制定过程中产生的附加信息和文档（比如，事先未知的限制和

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<sup>5</sup> a. 辅助的

<sup>6</sup> a. 悬而未决的



假定 )。

- Technical documentation such as requirements, specifications and designs.  
技术文档，比如需求、规格和设计。
- Documentation of relevant standards.  
相关标准文档。

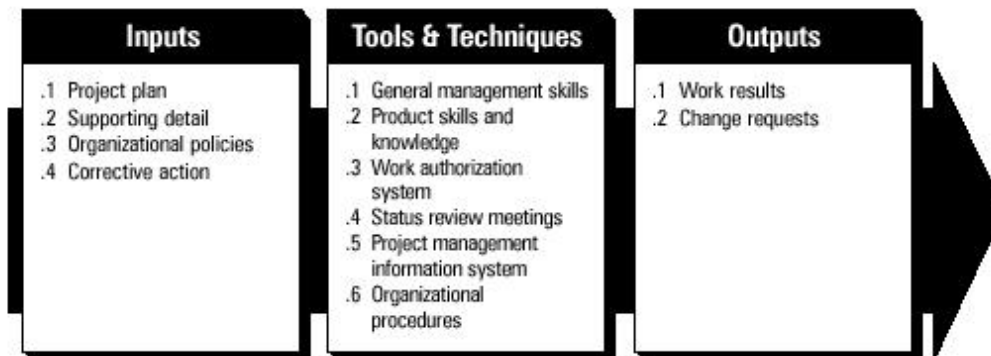
This material should be organized as needed to facilitate its use during project plan execution.

以上这些材料应很好地组织，增强它们在项目计划执行过程中的应用效果。

## 4.2 Project Plan Execution ( 实施项目计划 )

Project plan execution is the primary process for carrying out the project plan—the vast majority of the project's budget will be expended in performing this process. In this process, the project manager and the project management team must coordinate and direct the various technical and organizational interfaces that exist in the project. It is the project process that is most directly affected by the project application area in that the product of the project is actually created here.

实施项目计划是执行项目计划的主要过程 - 项目预算的大部分在此花费。在此过程中，项目经理和项目管理队伍必需协调一致，指导存在于项目中的各种技术和组织接口。这个过程最直接受到项目应用领域的影响，项目产品实际在此产生。



#### 4.2.1 Inputs to Project Plan Execution ( 实施项目计划的输入 )

*.1 Project plan.* The project plan is described in Section 4.1.3.1. The subsidiary management plans (scope management plan, risk management plan, procurement management plan, etc.) and the performance measurement baselines are key inputs to project plan execution.

*.1 项目计划。* 项目计划见 4.1.3.1 节。辅助管理计划（范围管理计划、风险管理计划、采购管理计划等）和执行情况衡量基准是实施项目计划的主要输入。

*.2 Supporting detail.* Supporting detail is described in Section 4.1.3.2.

*.2 辅助细节。* 辅助细节见 4.1.3.2 节。

*.3 Organizational policies.* Organizational policies are described in Section 4.1.3.3. Any and all of the organizations involved in the project may have formal and informal policies which may affect project plan execution.

*.3 组织政策。* 组织政策见 4.1.3.3 节。参与项目的任何一个和所有组织都有影响项目计划实施的正式和非正式的政策。

*.4 Corrective action.* Corrective action is anything done to bring expected future project performance into line with the project plan. Corrective action is an output of the various control processes—as an input here it completes the **feedback** loop needed to ensure effective project management.

*.4 纠正措施。* 纠正措施是确保项目按计划执行所采取的措施。纠正措施是



各种控制过程的输出 - 在此作为输入，它完成反馈循环以确保有效的项目管理。

#### 4.2.2 Tools and Techniques for Project Plan Execution ( 实施项目计划的工具和技术 )

*.1 General management skills.* General management skills such as leadership, communicating, and negotiating are essential to effective project plan execution. General management skills are described in Section 2.4.

*.1 一般管理技能。* 诸如领导才能、沟通和谈判等的一般管理技能是有效实施项目计划的基本条件。一般管理技能见 2.4 节。

*.2 Product skills and knowledge.* The project team must have access to an appropriate set of skills and knowledge about the project product. The necessary skills are defined as part of planning (especially in resource planning, Section 7.1) and are provided through the staff acquisition process (described in Section 9.2).

*.2 产品技能和知识。* 项目队伍必需对产品的技能和知识有适当的了解。这些必备的技能作为计划的一部分（特别在资源计划中，见 7.1 节）并通过人员招募过程（见 9.2 节）提供。

*.3 Work authorization system.* A work authorization system is a formal procedure for **sanctioning** project work to ensure that work is done at the right time and in the proper sequence. The primary mechanism is typically a written authorization to begin work on a specific activity or work package.

*.3 工作授权系统。* 工作授权系统是一个批准项目工作的正式程序，用来确保工作适时而有序地进行。主要的机制是用一个典型的书面授权，从一个具体的工序或工作包开始工作。

The design of a work authorization system should balance the value of the control provided with the cost of that control. For example, on many smaller projects,



verbal authorizations will be adequate.

一个授权系统的设计应当使控制价值和成本控制成本相平衡。例如，对于许多小项目，口头授权就足够了。

*.4 Status review meetings.* Status review meetings are regularly scheduled meetings held to exchange information about the project. On most projects, status review meetings will be held at various frequencies and on different levels (e.g., the project management team may meet weekly by itself and monthly with the customer).

*.4 情况总结会议。* 情况总结会议定期举行用于项目的信息交流。对于大多数项目，情况总结会议以不同频率和不同层次进行（比如，项目管理队伍每周碰头一次，而同用户每月一次）。

*.5 Project management information system.* Project management information system is described in Section 4.1.2.3.

*.5 项目管理信息系统。* 项目管理信息系统见 4.1.2.3 节。

*.6 Organizational procedure.* Any and all of the organizations involved in the project may have formal and informal procedures useful during project execution.

*.6 组织程序。* 在项目实施期间，参与项目的任何一个和全部组织都有正式和非正式的组织过程。

#### 4.2.3 Outputs from Project Plan Execution（实施项目计划的输出）

*.1 Work results.* Work results are the outcomes of the activities performed to accomplish the project. Information on work results—which deliverables have been completed and which have not, to what extent quality standards are being met, what costs have been **incurred**<sup>7</sup> or committed, etc.—is collected as part of project plan execution and **fed** into the performance reporting process (see Section 10.3 for a more detailed discussion of performance reporting).

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<sup>7</sup> v.招致，承受



.1 **工作结果**。工作结果是为完成项目所执行活动的各种结果。工作结果的信息 - 哪些可交付成果已完成、哪些未完成、满足质量标准的程度、哪些成本发生或提交等等 - 作为项目计划实施的一部分并加入到执行情况报告过程中 ( 10.3 节详细讨论执行情况报告 )。

.2 *Change requests*. Change requests (e.g., to expand or contract project scope, to modify cost or schedule estimates, etc.) are often identified while the work of the project is being done.

.2 **变更请求**。变更请求 ( 比如扩大或缩小项目范围、修改成本或进度评估等等 ) 经常在项目工作进行时被确定。

## 4.3 Overall Change Control ( 整体变更控制 )

Overall change control is concerned with (a) influencing the factors which create changes to ensure that changes are beneficial, (b) determining that a change has occurred, and (c) managing the actual changes when and as they occur. Overall change control requires:

整体变更控制所关心的是：(a)产生有益变更的影响因素，(b)决定变更已经发生，(c)管理实际发生的变更。整体变更控制需要：

- Maintaining the integrity of the performance measurement baselines—all proved changes should be reflected in the project plan, but only project scope changes will affect the performance measurement baselines.

保持执行情况衡量基准的整体性 - 所有被证实的变更应反映到项目计划中，只有项目范围变更会影响执行情况基准。

- Ensuring that changes to the product scope are reflected in the definition of the project scope (the difference between product and project scope is

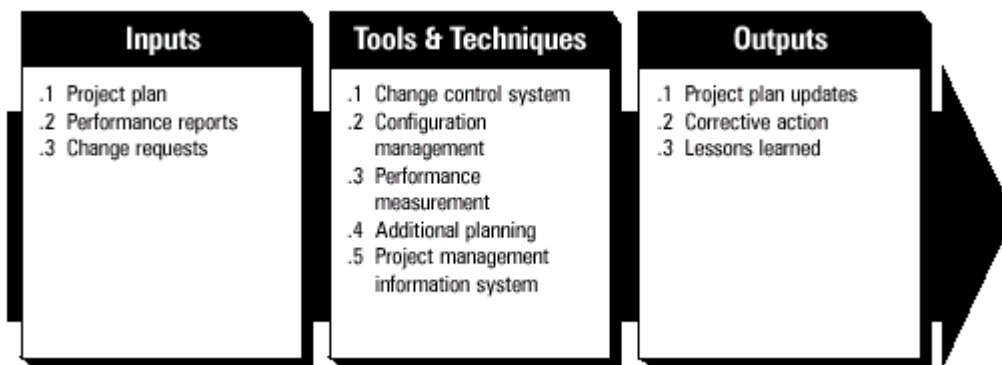


discussed in the introduction to Chapter 5).

确保产品范围变更反映到项目范围定义中 ( 产品范围和项目范围的区别见第 5 章 - 介绍 )

- Coordinating changes across knowledge areas as illustrated in Figure 4-2. For example, a proposed schedule change will often affect cost, risk, quality, and staffing.

协调跨知识领域的变更，见图 4-2。例如，一个被提议的进度变更常会影响成本、风险、质量和人员构成。



#### 4.3.1 Inputs to Overall Change Control ( 整体变更控制的输入 )

.1 *Project plan*. The project plan provides the baseline against which changes will be controlled (see Section 4.1.3.1).

.1 *项目计划*。项目计划提供变更控制的基准 ( 见 4.1.3.1 节 )

.2 *Performance reports*. Performance reports (described in Section 10.3) provide information on project performance. Performance reports may also alert the project team to issue which may cause problems in the future.

.2 *执行情况报告*。执行情况报告 ( 见 10.3 节 ) 提供项目执行情况的信息。

执行情况报告也提醒项目队伍注意未来可能产生的问题。

.3 *Change requests*. Change requests may occur in many forms—oral or written,

direct or indirect, externally or internally initiated, and legally mandated or optional.

.3 变更请求。变更请求有很多形式 - 口头的或书面的、直接的或间接的、内部或外部开始的、法律强制的或随意的。

4.2.3.2 节中说明变更请求( 比如扩大或缩小项目范围、修改成本或进度评估等等) 经常在项目工作进行时被确定。

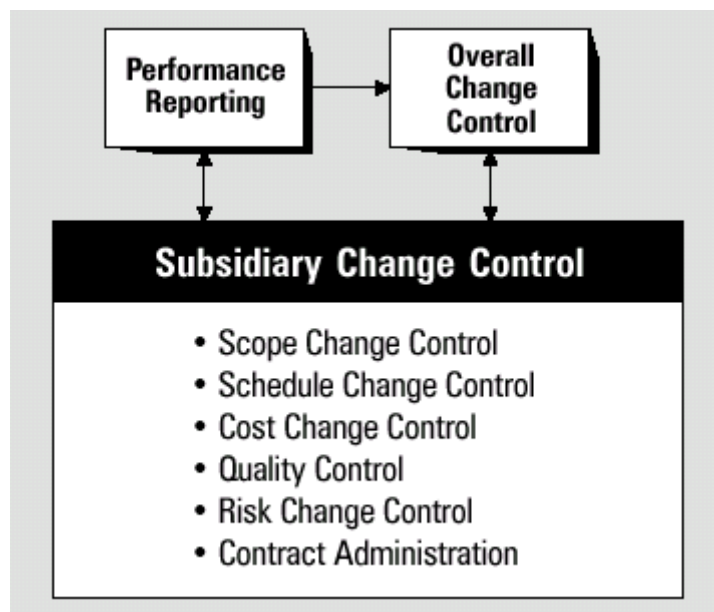


Figure 4-2 Coordinating Changes Across the Entire Project

#### 4.3.2 Tools and Techniques for Overall Change Control ( 整体变更控制的工具和技术 )

.1 *Change control system.* A change control system is a collection of formal, documented procedures that defines the steps by which official project documents may be changed. It includes the **paperwork**, tracking systems, and approval levels necessary for authorizing changes.

.1 变更控制系统。一个变更控制系统是正式的、文档化程序的集合，它定义了正式的项目文档变更的步骤。它包括日常文书工作、跟踪系统和用于授权变



更的批准级别。

In many cases, the performing organization will have a change control system that can be adopted “as is” for use by the project. However, if an appropriate system is not available, the project management team will need to develop one as part of the project.

许多情况下,执行组织所拥有的变更系统可以被项目作适当修改采用。但是,如果没有合适的变更系统,项目管理队伍需要开发一套作为项目的一部分。

Many change control systems include a *change control board(CCB)* responsible for approving or rejecting change requests. The powers and responsibilities of a CCB should be well-defined and agreed upon by key stakeholders. On large, complex projects, there may be multiple CCBs with different responsibilities.

许多变更控制显然包括一个 *变更控制委员会 (CCB)*, 它负责批准或否决项目变更请求。变更控制委员会的权力和责任应妥善定义并被主要利害关系者所认可。在大的、复杂的项目中,可能有许多不同责任的变更控制委员会。

The change control system must also include procedures to handle changes which may be approved without prior review; for example, as the result of emergencies. Typically, a change control system will allow for “automatic” approval of defined categories of changes. These changes must still be documented and captured so that they do not cause problems later in the project.

变更控制系统也必需包括处理事先未审核就被批准的变更的程序,比如紧急事件的结果。典型地,变更控制系统允许对已定义变更的“自动”批准。这些变更仍必须被归档和处理不至于以后造成问题。

.2 *Configuration management*. Configuration management is any documented procedure used to apply technical and administrative direction and *surveillance*<sup>8</sup> to:

.2 *配置管理*。配置管理是一些文档化程序,它将技术和行政指导可监督应

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<sup>8</sup> n. 监督



用于：

- Identify and document the functional and physical characteristics of an item or system.  
确定和证实一个题目或系统的功能性和物理性特征。
- Control any changes to such characteristics.  
控制这些特征的任何变更。
- Record and report the change and its implementation status.  
记录和报告变更及其实现情况。
- **Audit**<sup>9</sup> the items and system to verify **conformance**<sup>10</sup> to requirements.  
通过审计题目和系统来验证是否满足需求。

In many application areas, configuration management is a subset of the control system and is used to ensure that the description of the project product is correct and complete. However, in some application areas, the term *configuration management* is used to describe any rigorous change control system.

在许多应用领域中，配置管理是变更控制系统的子集，用于确保项目产品描述的正确和完整。但是在某些应用领域，术语**配置管理**用来描述严格的变更控制系统。

.3 *Performance measurement.* Performance measurement techniques such as earned value (described in Section 10.3.2.4) help to assess whether variances from the plan require corrective action.

.3 **执行情况衡量。** 诸如赢得值的执行情况衡量技术帮助评定计划偏差是否需要纠正措施。

.4 *Additional planning.* Projects seldom run exactly according to plan. **Prospective**<sup>11</sup> changes may require new or **revised**<sup>12</sup> cost estimates, modified activity

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<sup>9</sup> v.审核

<sup>10</sup> n.相符，一致

<sup>11</sup> a.预期的，将来的



sequences, analysis of risk response alternatives, or other adjustments to the project plan.

.4 *另外的计划*。项目很少精确按计划执行。预期的变更可能需要新的或修正的成本评估、修改的工序顺序、风险应对方案的分析、或其它对项目计划的调整。

.5 *Project management information system*. Project management information system is described in Section 4.1.2.3.

.5 *项目管理信息系统*。项目管理信息系统见 4.1.2.3 节。

### 4.3.3 Outputs from Overall Change Control ( 整体变更控制的输出 )

.1 *Project plan updates*. Project plan updates are any modification to the contents of the project plan or the supporting detail (described in Sections 4.1.3.1 and 4.1.3.2 respectively). Appropriate stakeholders must be notified as needed.

.1 *项目计划更新*。项目计划更新是对项目计划或辅助细节 ( 分别见 4.1.3.1 节和 4.1.3.2 节 ) 的任何修改。如有需要 , 应通知适当的利害关系者。

.2 *Corrective action*. Corrective action is described in Section 4.2.1.4.

.2 *纠正措施*。纠正措施见 4.2.1.4 节。

.3 *Lessons learned*. The causes of variances, the reasoning<sup>13</sup> behind the corrective action chosen, and other types of lessons learned should be documented so that they become part of the historical database for both this project and other projects of the performing organization.

.3 *得到的教训*。产生偏差的原因、选择纠正措施的推理以及其它类型的教训都应记录下来 , 它们成为执行组织的这个项目和其它项目的历史数据库。

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<sup>12</sup> v.修正

<sup>13</sup> n.推论 , 推理