Praxis and ISO21500

Introduction

ISO21500 is a high level guide to project management, very similar in structure to the Project Management Institute's (PMI®) Guide to the Project Management Body of Knowledge (PMBoK®).

It is important to note that ISO21500 is not a standard against which organisations can be accredited. It is purely a guide to good practice. The aim of this article is to demonstrate that all the good practice defined in ISO21500 is also covered by Praxis. Therefore, any organisation that implements Praxis can do so in a way that is ISO21500 compliant.

Inevitably, there are differences. Some key ones are described below:

- ISO21500 is specific to project management, whereas Praxis also covers programmes and portfolios. An obvious consequence of this is that Praxis includes change management and benefits management. These are excluded from ISO21500.

- Praxis is hierarchical whereas ISO21500 has a flat structure. This means that when describing equivalences, Praxis sometimes refers to top level functions, sometimes secondary level functions and sometimes steps in a functional procedure (the latter indicated by italics in the detailed comparisons).

- Praxis adopts the ISO10006 approach to quality. As a result there is no separate section for quality management which is seen as being inherent in all other functions.

When comparing the two documents, sections 3.6, 3.9 and 4 of ISO21500 are the most relevant.

Section 3.6 addresses project governance and this is mainly addressed by the Praxis processes.

Section 3.9 makes reference to the competency groupings defined by the International Competency Baseline (ICB) published by the International Project Management Association (IPMA) although it does state that these are one example of how competencies can be categorised. In the Praxis competency framework, competencies are categorised as delivery, inter-personal and process.

Section 4 describes process groups and subject areas as shown in the table below. The subject area titles are annotated with the main equivalent Praxis functions or processes. The following sections describe these equivalences in more detail.

Subject groups	Process groups				
	Initiating	Planning	Implementing	Controlling	Closing
Integration (Life cycle processes)	4.3.2 Develop project charter	4.3.3 Develop project plans	4.3.4 Direct project work	4.3.5 Control project work 4.3.6 Control changes	4.3.7 Close project phase or project 4.3.8 Collect lessons learned
Stakeholder (Stakeholder management)	4.3.9 Identify stakeholders		4.3.10 Manage stakeholders		
Scope (Scope management)		4.3.11 Define scope 4.3.12 Create work breakdown structure 4.3.13 Define activities		4.3.14 Control scope	
Resource (Organisation management and resource management)	4.3.15 Establish project team	4.3.16 Estimate resources 4.3.17 Define project organisation	4.3.18 Develop project team	4.3.19 Control resources 4.3.20 Manage project team	
Time (Schedule management)		4.3.21 Sequence activities 4.3.22 Estimate activity durations 4.3.23 Develop schedule		4.3.24 Control schedule	
Cost (Financial management)		4.3.25 Estimate costs 4.3.26 Develop budget		4.3.27 Control costs	
Risk (Risk management)		4.3.28 Identify risks 4.3.29 Assess risks	4.3.30 Treat risks	4.3.31 Control risks	
Quality (Inherent in all Praxis functions)		4.3.32 Plan quality	4.3.33 Perform quality assurance	4.3.34 Perform quality control	
Procurement (Resource management)		4.3.35 Plan procurements	4.3.36 Select suppliers	4.3.37 Administer procurements	
Communication (Stakeholder management and information management)		4.3.38 Plan communications	4.3.39 Distribute information	4.3.40 Manage communications	

Integration

The integration subject group in ISO21500 is, in effect, a set of life cycle processes. Since pretty much all authorities agree on the basic phases of a life cycle, this is the common theme between not only ISO21500 and Praxis but also ISO21500 and PRINCE2, not to mention any other set of project or programme management processes.

		Process groups				
		Initiating	Planning	Implementing	Controlling	Closing
Integration	ISO21500	4.3.2 Develop project charter	4.3.3 Develop project plans	4.3.4 Direct project work	4.3.5 Control project work 4.3.6 Control changes	4.3.7 Close project phase or project 4.3.8 Collect lessons learned
	Praxis	• Identification process	• Definition process	• Sponsorship process • Delivery process • Develop products • Manage boundaries process • Realise benefits		• Closure process

Initiating:

The Project Charter is broadly similar in content to a brief in Praxis, as are the purposes of 4.3.2 Develop project charter and the goals of the identification process. These two processes are pretty much serving the same purpose in the same way.

Planning:

The outputs of 4.3.3 Develop project plans are the Project plan and the Project management plan. These equate to the delivery plans and management plans in Praxis, so the two processes are effectively the same.

Implementing and Controlling:

The three ISO21500 processes collectively perform the same activities as the first three Praxis processes. There is no clear one-to-one correlation but collectively they do the same job.

ISO21500 does not explicitly support the creation of stages within the delivery phase although it does recognise the creation of sub-projects and work packages. Therefore, there is no equivalent of the manage boundaries process and reduced versions of 4.3.3 Develop project plans and 4.3.7 Close project phase or project would be combined instead.

As with most guides to project management, ISO21500 deems that projects do not manage the realisation of benefits and so this aspect is omitted.

Closing:

The closing process and 4.3.7 Close project phase or project are the same in respect of closing a project. Aspects of 4.3.7 are included in Praxis's manage boundaries process in respect of stages.

4.3.8 Collect lessons learned is covered by the review activity in the closure process.

Stakeholders

The Praxis approach to stakeholder management is very similar to the corresponding ISO21500 subject group with one difference. Praxis includes stakeholder communication within the stakeholder management function while ISO21500 has a separate communication subject group.

While Praxis has a communication function, that addresses the interpersonal skill of personal communication rather than dissemination of information.

Furthermore, Praxis has a separate information management function which overlaps with ISO21500's stakeholder management group.

The comparison table therefore combines the stakeholder and communication subject groups from ISO21500 and maps these steps from the Praxis procedures for stakeholder management and information management.

		Process groups				
		Initiating	Planning	Implementing	Controlling	Closing
Stakeholder and communication	ISO21500	4.3.9 Identify stakeholders	4.3.38 Plan communications	4.3.10 Manage stakeholders 4.3.39 Distribute information	4.3.40 Manage communications	
	Praxis	• *Identify*	• *Assess* • *Plan communications*	• *Engage* • *Access and disseminate*		

Initiating:

4.3.9 Identify stakeholders and the identify step in the stakeholder management procedure have the same purpose.

Planning:

The assessment step in Praxis's stakeholder management procedure is really about planning for stakeholder engagement. However, ISO21500 includes this in 4.3.10 Manage stakeholders.

ISO21500 covers the preparation of a communications plan in 4.3.38 Plan communications rather than as part of stakeholder management.

Implementing and controlling:

4.3.10 Manage stakeholders covers both the assessment of stakeholder interests and the engagement with stakeholders according to the communications plan. In Praxis this is covered by the engagement step in the stakeholder management procedure.

4.3.39 Distribute information is covered by the access and distribution step from the Praxis information management procedure.

4.3.40 Manage communications is covered in Praxis by the engagement step from stakeholder management and the access and distribution step from the information management procedure.

Scope

The main difference between scope in ISO21500 and Praxis is that ISO21500 excludes the possibility of projects incorporating the realisation of benefits.

				Process groups		
		Initiating	Planning	Implementing	Controlling	Closing
Scope	ISO21500		4.3.11 Define scope 4.3.12 Create work breakdown structure 4.3.13 Define activities		4.3.14 Control scope	
	Praxis		• Manage requirements • Develop solution • Scope management • Schedule management	• Scope management • Benefits management • Change management	• Change control • Configuration management	

Planning:

4.3.11 Define scope is a very broad process. Its outputs are requirements and a scope statement. In Praxis this requires the application of two functions. Requirements management contains a procedure that captures stakeholder want and needs, and then develops a baseline set of requirements. This baseline is used by solutions development to create a specification (equivalent to a scope statement).

In ISO21500 the scope statement is the basis for creating a work breakdown structure and defining the work activities that will achieve the project objectives. In Praxis these processes are incorporated within scope management and schedule management respectively.

Implementing:

In ISO21500 there are no scope implementation processes but it reasonable to assume that these are covered by 4.3.5 Control project work. In Praxis the implementation of scope is equally covered by the delivery process and the develop products process, although in scope management there is specific reference to an 'implement solution' step.

Since Praxis recognises that scope may include benefits, the benefits management and change management functions are also about scope implementation.

Controlling:

The 4.3.14 Control change process is covered by the change control and configuration management function in Praxis.

Resource

The resources subject group in ISO21500 combines the management organisation and internally sourced delivery resources. Praxis separates these out into two functions. Organisation management deals with the management organisation of projects, programmes and portfolios while the procurement of internal and external delivery resources is covered by resource management.

In ISO21500, the procurement of external resources is covered in the procurement subject group.

		Process groups				
		Initiating	Planning	Implementing	Controlling	Closing
Resource	ISO21500	4.3.15 Establish project team	4.3.16 Estimate resources 4.3.17 Define project organisation	4.3.18 Develop project team	4.3.19 Control resources 4.3.20 Manage project team	
	Praxis	• Organisation management • Resource management	• Resource scheduling • Organisation management • Stakeholder management	• Leadership • Teamwork	• Schedule management • Leadership • Teamwork	• Mobilisation

Initiating:

The 4.3.15 Establish project team is a very wide ranging process that should be seen as being required throughout the life cycle. It does not chronologically precede the planning processes. The broad goals and application of this process are covered by organisation management and resource management in Praxis.

Planning:

4.3.16 Estimate resources relates to delivery resources and these matters are covered by the resource scheduling function in Praxis.

4.3.17 Define project organisation is most relevant to the management organisation but also makes reference to internal delivery resources and stakeholders. It therefore draw on aspects that Praxis covers in resource scheduling, organisation management and stakeholder management.

Implementing:

The 4.3.18 Develop project team process should "enhance team motivation and performance". Praxis treats these as interpersonal skills of the manager rather than processes. They are primarily covered by leadership and teamwork but are supported by other skills such as delegation, conflict management and influencing.

Controlling:

4.3.19 Control resources deals with monitoring and reviewing the resource aspect of the project schedule. These areas are covered by the schedule management function in Praxis.

4.3.20 Manage project team has very similar outputs to 4.3.18 Develop project team. These two processes appear to simply represent what needs to be managed at different stages of a team's development cycle (such as Tuckman). They are therefore deemed broadly equivalent to teamwork and leadership in Praxis.

Closing:

In ISO21500 the demobilisation of the project organisation is not covered by a specific closing process for resources. In Praxis this is covered by the mobilisation functions (which includes demobilisation).

Time

The timings in a project schedule depend upon the availability of resources as well as the estimated durations of activities. Therefore, Praxis combines these in the schedule management section which includes time scheduling and resource scheduling.

Process groups						
		Initiating	Planning	Implementing	Controlling	Closing
Time	ISO21500		4.3.21 Sequence activities 4.3.22 Estimate activity durations 4.3.23 Develop schedule		4.3.24 Control schedule	
	Praxis		• Schedule management • Time scheduling • Resource scheduling • Planning		• Control	

Planning:

4.3.21 Sequence activities is covered by time scheduling with numerous detailed references in the encyclopaedia.

Estimating applies to many aspects of a project so Praxis deals with it in a generic sense in the planning function. Specific techniques relevant to 4.3.22 Estimate activity durations are mentioned in time scheduling and explained in detail in the encyclopaedia.

There are many aspects to developing a schedule and while there are references to this throughout Praxis, the main coverage is in the time scheduling and resource scheduling functions.

Controlling:

The detail of 4.3.24 Control schedule is covered by the control function in Praxis. This works in close conjunction with the delivery process at the life cycle level.

Cost

The corresponding section in Praxis is called financial management because it covers more general issues than just cost, such as investment appraisal and funding.

		Process groups				
		Initiating	Planning	Implementing	Controlling	Closing
Cost	ISO21500		4.3.25 Estimate costs 4.3.26 Develop budget		4.3.27 Control costs	
	Praxis		• Planning • Budgeting and cost control		• Control • Budgeting and cost control	

Planning:

In Praxis the general principles of estimating are covered in the planning function. These are then developed in specific ways by other functions such as budgeting and cost control. These two functions therefore cover the ground described by 4.3.25 Estimate costs and 4.3.26 Develop budget.

Controlling:

The same logic applies to the ISO21500 process 4.3.27 Control costs. This is covered by the Praxis functions for control and budgeting and cost control.

Risk

The risk management processes in ISO21500 have a close correlation to the steps in the risk management procedure in Praxis.

The techniques used in these processes are covered by the risk techniques function and in Praxis.

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<tr><td>Praxis</td><td></td><td>• *Identify*
• *Assess*</td><td>• *Plan responses*
• *Implement responses*</td><td></td><td></td></tr>
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Planning:

4.3.28 Identify risks and 4.3.29 Assess risks are equivalent to the identification and assessment steps in the Praxis risk management procedure.

Implementing:

The ISO process 4.3.30 Treat risks is equivalent to the response planning and implementation steps in the Praxis procedure.

Controlling:

Praxis deems 4.3.31 Control risks to be simply a repetition of the risk management procedure, i.e. new risks are continually identified and assessed with new responses being planned and implemented. Once implementation plans are incorporated into the general delivery plans, their control is covered by the control function and delivery process.

Procurement

Praxis treats procurement as a component of resource management. This includes the procurement of internal resources as well as external (contracted) resources.

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	Praxis		• Procurement • Solutions development	• Procurement	• Contract management	

Planning:

The 4.3.35 Plan procurements process is primarily covered by the plan, research and tender steps in Praxis's procurement procedure.

The make or buy decision is made as part of solutions development.

Implementing:

The 4.3.36 Select suppliers process is covered by the tender step in Praxis's procurement procedure.

Controlling:

4.3.37 Administer procurements in ISO21500 is equivalent to contract management in Praxis.