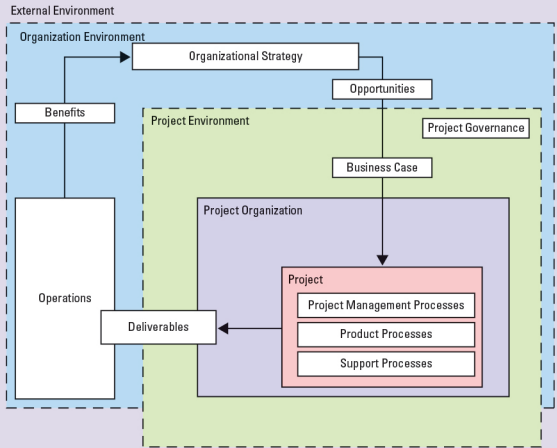


# ISO 21500

## Guidance on project management

### A Pocket Guide



Anton Zandhuis



ISO 21500  
GUIDANCE ON PROJECT MANAGEMENT  
A POCKET GUIDE

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# ISO 21500

## Guidance on project management

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# A P O C K E T G U I D E

Anton Zandhuis, PMP  
Rommert Stellingwerf, MSc, PMP



# Colophon

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For any further enquiries about Van Haren Publishing, please send an e-mail to: [info@vanharen.net](mailto:info@vanharen.net)

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# Preface

Project management is one of the key skill sets demanded by organizations around the world. Some facts:

- One-fifth of the world's GDP, or more than \$12 trillion, will be spent on projects each year in the decade 2010-2020<sup>1</sup>.
- In the coming years many skilled project management practitioners will be leaving the workforce due to retirement – a trend which will have a major strategic impact for over 60% of the organizations worldwide<sup>2</sup>.

Consequently there is a great demand for knowledgeable project managers.

The intention of this pocket guide is to provide you with a quick introduction to one of the latest developments in the project management profession: ISO 21500 'Guidance on project management' being the *first really globally accepted standard on project management*. This guide contains a brief and straightforward introduction and high level summary of ISO 21500, with tips for its practical application. It is therefore key knowledge for a project manager who is ready for the future.

It will enable and support you, your organization and all project stakeholders to speak 'one language' in project environments, even cross-borders, with multiple nationalities and multiple organizations involved. It will explain ISO 21500, its background and its practical application.

In 2006 ISO recognized the organizational need for knowledgeable project managers and decided that organizations could benefit from some guidance in this area. An international

team of over one hundred experts in project management worked for five years to develop a globally accepted guideline on project management. This development didn't start from scratch; instead it integrated the knowledge from reputable representatives in the project management profession from all over the world, like PMI and IPMA. All this work resulted in a rather slim document. However the impact of ISO 21500 on the project management profession is huge. Committing to ISO 21500 means that all of the stakeholders in project environments speak the same language and work with the same 'big picture' in mind, thus improving communication. ISO 21500 is, therefore, a fundamental input when cooperating in projects and jointly striving for project success.

With ISO 21500 being the first guidance on project management that is accepted and recognized by most of the international organizations which represent and contribute to the project management profession, it will become the *key reference* for future developments in this profession. This fact is already confirmed by e.g. the latest (fifth) edition of PMI's PMBOK Guide (2013), which shares exactly the same structure with only slightly different names for some processes, and which overlaps with more than 95% of the processes mentioned in ISO 21500. Other globally applied standards, like IPMA's Competency Baseline 4.0 (due in Autumn 2014), already plan to follow the same direction.

Is it important for you to know? Well, nowadays every organization has projects, whether formally recognized as such or not. Projects are mostly aimed at achieving new organizational capabilities, for meeting new demands, driven by the increased pace of change in the organization's environment, or for realizing

new opportunities. So it is more than likely that at some point in time during your professional career you will have a role to play in these projects. For that reason it is important for you to have some basic understanding of project management. No matter what your role in the project is, project manager, project sponsor, project team member: all stakeholders speaking the same language in projects is key to facilitating communication, and increasing the speed, quality and chances of project delivery.

We would also like to underline that all these projects represent large investments by organizations, as we have mentioned in the beginning. But moreover, think about the time and effort spent by scarce resources. For organizations it has become essential to deliver their projects successfully to ensure a sustainable future. That takes more than a skilled, experienced, knowledgeable and competent project manager. It requires basic project management knowledge from all project stakeholders and some well-defined processes, applied in practice, to facilitate real cooperation and ensure realizing the drive to make it happen. If this teamwork is based on a (well) defined, shared and well understood approach, it will increase the success rate of projects, delivering or even exceeding the expected benefits.

**We encourage you, your project management community and project stakeholders collectively, to become familiar with ISO 21500, its concepts, subject groups (themes) and its processes, in order to increase successful project delivery!**

May 2013,

Anton Zandhuis  
Rommert Stellingwerf

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We are grateful for the cooperation of BSI and their permission to use parts of the BS ISO 21500:2012 document.

We have been inspired by some of the analysis work of the 'ISO 21500 interest group' especially for chapter 7, where we compare ISO 21500 with other standards and methods. This interest group was initially formed in 2009 to review the usability of the forthcoming ISO 21500 guideline in the Netherlands, and is sponsored by IPMA-NL and PMI Netherlands Chapter. Given the enthusiasm of its members for the development of the project management profession, and the open discussions and sharing of ideas and insights, it is now continuing as 'ISO for projects' in order to further contribute to the promotion and practical implementation of the ISO 21500 guideline, as well as to assess the application of the new ISO documents for program and portfolio management and for project governance, which are all under development at the time of writing.

We also appreciate that the reviewers spent time to read our manuscript and forward their comments to us. We have incorporated their valuable input where applicable in the final manuscript.

And last but not least, we would like to thank our partners and children for not complaining when we could not share quality time with them because of our commitment to the planning and the writing of this book.

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# 1 Introduction

## 1.1 Purpose of this pocket guide to ISO 21500

ISO 21500 provides **generic guidance on the concepts and processes of project management** that are important for the successful realization of projects. This pocket guide is intended as a brief reference to assist in quickly understanding the purpose, background and key elements.

What is the value of ISO 21500? This new globally accepted project management standard is recognized as a foundational reference for the application of project management knowledge and good practices. Research has confirmed that, when managing projects, the structured application of this fundamental knowledge and good practices clearly enhances successful delivery. Project environments that consistently apply this fundamental project management good practice approach not only show better project performance in terms of lower costs and shorter delivery times, but they also demonstrate higher levels of customer satisfaction. The application of the project management good practices, as described in ISO 21500, will support you in realizing these benefits.

In addition to the above, when working in a project management environment, for which the organization is far more dynamic than 'normal' operations, there is an increased need for good communication. To achieve this, it is important to use 'one common language' within your project management environment, which is understood by everyone involved, particularly the key stakeholders of the project. This pocket guide aims to quickly establish a shared vocabulary and terminology on the project management fundamentals and create a common

understanding about the basic project management processes together with the key roles and responsibilities. Moreover the guide provides a high level description of how the ISO 21500 guideline can be applied in practice, using a ‘generic’ project life cycle as a reference.

What it’s not? It is definitely not ‘the’ solution for all challenges when managing projects. The project manager and the team remain ultimately responsible for deciding what good practices shall be applied to the specific project at hand, in close cooperation with the project sponsor and the management of the line organization or sponsoring entity.

In a nutshell, this pocket guide is intended as a key contributor and tangible asset when introducing and reinforcing concepts of project management in your organization for improved communication and cooperation. It supports an organization-wide implementation of a project management culture, bringing you the benefits of ‘your projects executed right the first time’! At the organizational level this can be enhanced by implementing a project management approach, based on these good practices.

## **1.2 Practical tips for using this pocket guide**

On the fold out at the back cover of this book, all subject areas and applicable processes and chapter numbers are listed. Key project management terms and definitions are explained in the Glossary of the ISO 21500 terminology, in Appendix B.

## **1.3 Why apply project management?**

Every organization has its unique culture and faces diverse challenges. Also, organizations start with a different situation and set of problems to be resolved. In order to define the value

of project management, we firstly need to define exactly what is meant by project management, as this is a broad concept. Then we can look at the various aspects of project management and show the value associated with each aspect.

*Project management – ISO 21500 definition:*

Project management is the application of methods, tools, techniques and competences to a project. Project management includes the integration of the various phases of the project life cycle. Project management is accomplished through processes.

Research shows that, with the increasing complexity and faster changing environments that businesses are faced with, projects managed by the structured application of good practice-based processes show consistently better performance in areas such as, but not limited to:

- ‘Deliver as promised’ by realistic expectation-setting through up-front project definition, planning, and estimation;
- Faster delivery through the reuse of common and known project management processes;
- Less ‘surprises’ during project execution, utilizing proactive project management processes;
- Improved customer satisfaction and less rework by delivering the right product or service, right, the first time.

These opportunities together with the savings offered by organizational project management excellence are all tangible. But the value proposition for project management is much greater and also includes less tangible benefits like:

- A highly committed and motivated team that can work together through effective communication and goal setting;



- An inspiring project environment with a ‘can-do’ mentality through ambitious yet realistic commitments;
- Transparent and improved decision-making at all organizational levels through more effective communication.

These qualitative benefits will even reinforce the quantitative advantages, which will guarantee that an organization is able to excel.

Many organizations have built a good reputation for being able to consistently deliver top quality projects. However, a majority of organizations are still struggling with this. Do you recognize the following characteristics?

- Projects mostly deliver late, over-budget, or without meeting the functionality requirements of the project sponsor and end-users;
- Project managers do it ‘their way’ as there are no, or poor, standards for project management processes and techniques;
- Project management is regarded as an overhead instead of being recognized as providing business value;
- The project work undertaken by resources from within the line organization is not carefully planned for as part of the operations planning, but is typically regarded as ‘next to your primary function’;
- Project budgets do not include the cost of the internal workforce as they are ‘already paid for’;
- There is no overall insight available on all the projects being undertaken in the organization, nor their cost versus the added value;

- The required work for managing projects proactively is not included in the project plan;
- Projects may be somehow ‘successful’ in the end but only through heavy stress and overtime work.

*Do you recognize the above in your project environments? Having more disciplined project management is the way to overcome these shortcomings. The value of a good project management practice, using common project management processes, will enable better communication to deal with contingencies pro-actively. This will substantially and continuously increase the chances of project success. It will establish new management procedures and processes. It will enable you to run your organization as an economic enterprise.*

## 1.4 Successfully fulfilling your role as project sponsor, project manager or project team member

Understanding your role in a project and acting accordingly is vital for project success. Therefore we highlight the three key roles which are the major contributors in realizing a successful project:

- 1 The **project sponsor** acts as the continuous link between the funding organization(s) and the project. It is the sponsor who is responsible at the start for defining the Business case for the project; why should we be doing this project; what are the organization’s needs? When the project is approved, the project manager takes over the responsibility for ‘delivery

of the defined project objective'. The sponsor still fulfills an ever-important role for ensuring the project objective is aligned to the project goal. The sponsor should, amongst other things, ensure that the organization sticks to its initial decisions regarding goal setting, thus preventing constant priority changes based on daily operational issues. The project sponsor, therefore, plays an important role in ensuring that there is sufficient support from functional and operational management, which in turn fulfills a key role in assigning the appropriate resources to the project team. The sponsor should also support the organization's readiness to effectively deal with the project objective when it is delivered, as this is where the benefits realization, and consequently increased business value, will start. In order to achieve this, the project sponsor must work closely together with the project manager. The fluent communication between these two roles is crucial for both the project and organizational success.

- 2 The **project manager** is ultimately responsible for the delivery of the defined project objective. Key elements in this role are stakeholder management, and guiding the project team and the appropriate stakeholders in selecting and applying the right project management processes at the right time. But everything must be undertaken with an eye on the delivery of the project objective. The project manager must take advantage of the project sponsor's business knowledge and influential position, and escalate all issues or business-related problems that cannot be solved by the project management team.
- 3 The **project (management) team member** is typically responsible for delivering the expertise and work needed

to create the project result. During the initial phases of the project, their focus is on defining the best approach and developing a feasible high-level plan for the project; in other words, the planning. During the execution phases, based on their expertise, they realize the project objective and specific subcomponents. It is essential to ensure that the organization which takes over the responsibilities at the end of the project is adequately represented within the project team. This will facilitate a smoother transition of the project objective to the operational or sponsoring organization.

In every project these key roles that are needed for the successful delivery of the project should be clearly described and understood, so that all stakeholders can act accordingly.

Figure 1.1 clearly describes the common relationships between the sponsor organization/entity and the project organization, and shows where each role is positioned.

Note: The sponsor organization/entity should be interpreted in the widest sense to cater for the differences in the various environments in which projects are undertaken.

Projects can run in one single organization, such as one company, business or governmental department. In that case the project results (or deliverables) are normally accepted by Operations in the line organization. However, projects can also be executed by more than one organization (e.g. a joint venture) or in the case of large investment projects they can act more or less independently, like a temporary organization (e.g. for the construction of a railway). In the latter cases we do not have a single sponsor organization, but a sponsor entity, that eventually accepts the

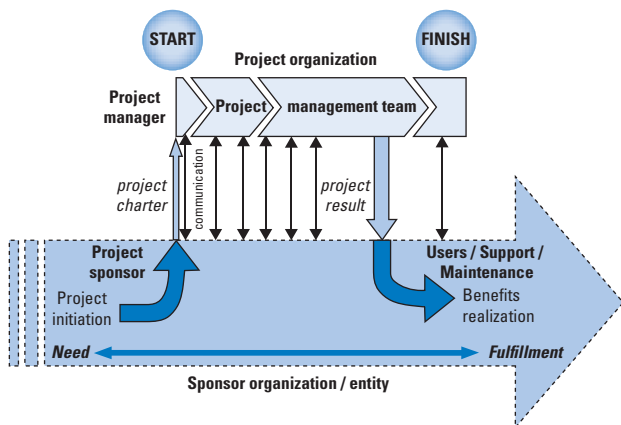


Figure 1.1 Common relationships between sponsor organization/entity and project organization

project results. Clearly the project governance is also more complex in the latter cases.

## 1.5 Frequently asked questions

We have identified some typical questions that one could ask when first confronted with project management or the ISO 21500 guideline.

## What is a project?

### *Project – ISO 21500 definition:*

A project is a unique set of processes consisting of coordinated and controlled activities with start and finish dates, undertaken to achieve an objective. Achievement of the project objective requires deliverables conforming to specific requirements, including multiple constraints such as time, cost and resources.

- This means: It has a defined start and finish, therefore a project is temporary;
- ‘Something’ is finished when the project is finished; it creates an end deliverable, the project objective;
- It is not business as usual, and as a consequence does not follow normal procedures, because there is something unique to it;
- Given the above, it needs a specific organization for the coordination and control of this unique set of processes.

Although within an organization some projects may be similar, each project is actually unique as differences may occur e.g. in the deliverables provided by the project, the stakeholders influencing the project, the resources used, the way processes are adapted to create the deliverables, etc.. Because there are projects of all types and levels of complexity, the project management activities and the underlying processes should be geared to the project at hand. But it’s the organization’s responsibility to firstly decide if the desired objective should be realized through undertaking a project. If that is the case, then the project should be organized accordingly.

## **Is ‘project management’ a profession?**

While there is no agreed definition of a ‘profession’, you could describe it as:

‘A disciplined group of individuals who adhere to defined ethical standards and uphold themselves to the public as having specific knowledge and skills in a generally recognized, organized body of learning, derived from education and training, and who apply this knowledge and these skills in the interest of others.’

With projects getting more and more complex, the demands on a project manager’s competence are also increasing. For example, everyone can apply a bandage to a wound but that does not make everyone a doctor. The need to obtain specific skills, knowledge and education, in order to successfully fulfill the role of project manager, is generally recognized. This is even confirmed in the academic world where Masters degrees in project management are now available.

Characteristics of a professional discipline also include the use of a common vocabulary. The ISO 21500 terms and definitions provide a foundational professional vocabulary of specific project management terms, in addition to commonly used terminology, which is already defined in the Oxford Dictionary.

Given the fact that, due to the ISO processes being followed for the creation and global acceptance of the content of ISO 21500, apparently there is consensus about what can be regarded as a set of foundational:

- Terms and definitions;
- Concepts, including competences;
- Processes.

ISO 21500 also states that successful management of projects requires people who are competent in project management principles and processes. ISO 21500 defines, but does not limit, at least three categories of project management competences which are needed in order to apply project management:

- Technical competences, for delivering projects through applying the project management processes in a structured way;
- Behavioral competences which refer to the capabilities required to build and reinforce relationships, beneficial to the project, within the organizational environment;
- Contextual competences, which relate to adjusting the project management processes to the organizational environment.

One can, therefore, safely conclude that ‘project management’ has matured into a profession.

### **Can you manage a line organization (operations) effectively without projects?**

Line organizations are typically function-centric and, in general, focus on ongoing day-to-day operations, while ‘doing their thing better’. Operations can therefore become resistant to (major) changes, particularly when the driver for such a change lies outside their own functional responsibilities and needs.

Projects and project management, on the other hand, are all about implementing necessary changes in operations, in order to stay in business. The realization of the project’s objective and its application in operations might even threaten the effectiveness and efficiency of specific operational entities (e.g. departments, business units), but is nevertheless executed to enable whole organization to perform more effectively.