



## **Material Use Rules**

Global Trust Association S.A.C. and the "RECEIVER", who by consulting this document assumes the commitment to use the educational material provided by GTA IBEROAMERICA.

## First Clause - Intellectual Property and Confidentiality.

The content of the texts and images of the training materials provided by **GTA IBEROAMERICA** which are accessed by the "RECEIVER", are the property of Computerworld University, a brand of IDG Communications, which enables their management to **GTA IBEROAMERICA** and have a confidential classification.

All this educational material is protected by the applicable intellectual and confidential property legislation in each region and its misuse will be subject to legal and even criminal penalties.

Consultation to training materials is for certification training development purposes only.

**GTA IBEROAMERICA**, are responsible for the exclusive exercise of their exploitation rights in any way, and especially the rights of reproduction, distribution, public communication and transformation.

### Second Clause - Commitment.

The "RECEIVER" assumes a commitment to use the training material already described in Clause One and to belong to GTA IBEROAMERICA; in this way, the "RECEIVER" undertakes not to disclose it to third parties or make it available to the public, make it public or accessible in any way, except with the prior written consent of GTA IBEROAMERICA.

### Third Clause - Duration.

This use agreement will come into effect from the date of consultation of the material and will be valid for a period of 10 years after the date of the training for certification.

## Fourth Clause - Liability.

Failure to comply with any of the obligations contained in this agreement will hold the "RECEIVER" responsible for the damages or penalties stipulated for crimes against copyright and crimes against industrial property according to each region. The "RECEIVER" manifests and fully recognizes the content of this commitment, and that it fully understands the scope and the obligations, both direct and subsequent, that derive from it, for the record and acceptance of which is subscribed.











## **About Us**

**GTA (Global Trust Association®)** is an independent startup, with the aim of providing tools to the training industry so that through professional certifications, both professionals and organizations can obtain greater recognition and value, enhancing talent.

Through our rigorous certification scheme aligned with ISO/IEC 17024, GTA ensures that professionals who pass our certification exams actually have relevant knowledge regarding each subject evaluated.

After passing the audits by BSI (British Standards Institution) GTA has the ISO 20000, ISO 27001 and ISO 9001 certifications supporting its accreditation, management, support and attention processes, the management of certification exams and professional training through its digital platform, the development of content, exams and training structures of a professional nature.



## **Digital** Immersion

Has your organization already started its "Digital Transformation Journey"?

Practices and Processes that **provide**Professionals in all fields, with **knowledge and skills** necessary in **Digital Technologies**.







## **Digital** Immersion

## Digital Transformation, a reality.

Undoubtedly, **Digital Transformation** is part of the social, political and above all business language. **Digital Transformation** is an absolutely **TANGIBLE** reality for any organization.

Digital Transformation involves, in addition to extensive use of technology, a change in culture of companies.

According to the IDG report "State of Digital Business Transformation" (2019), of the 8 main factors detected as challenges by respondents, 3 originate in people, 3 in technology and 2 in other aspects. The management of cultural change (people factor) and the adequacy of the workforce, therefore, should be weighed, at least, on a par with the management of technological change, or even more.



## **Digital** Immersion

## Has your organization already started its "Digital Transformation Journey"?

According to IDG's "State of Digital Business Transformation" report (2019), only 48% of companies have adopted a "1st Digital Approach", and 24% are in the execution phase.

As an organization, whether public or private but more intensely in private organizations, enduring over time is an essential goal along with maximizing profits. For this, and given the current conditions in all sectors of activity, planning and starting the "Digital Transformation Journey" is a basic need, which does not admit more delay.

Within the **digital ecosystem**, people are the fundamental pillar that supports the rest

Companies, Organizations, Institutions and Technology, rest on the pillar of people, therefore "Digital Transformation is only possible through People"







## **Digital** Immersion

## Digital Immersion of people, the basis of the Digital Transformation of companies.

Having teams with the right knowledge, competencies and skills is essential for the "Digital Transformation Journey" to be quickly adopted in the organization ensuring the success of the Digital Strategy.

Leveraging the Transformation with professionals outside the organization who act as catalysts is as important as implementing a Digital Immersion program for the people who make up the organization, since they are the ones who "live the culture" in addition to being responsible for the support of all the internal and external processes of the organization.



## **Digital** Immersion



## The **Professionals** with the best **future**.

Today's work environment, which encompasses professionals and organizations, is very competitive and volatile. According to Dell's "EMERGING TECHNOLOGIES IMPACT ON SOCIETY & WORK IN 2030" (2020) report, 85% of the jobs that will be available in 2030 have not yet been invented.

The prediction of professions that will disappear in the coming years, although imprecise due to the volume of predictions of different institutions, becomes a reality.

According to the World Economic Forum's **Future of Jobs Report 2020**, these are the professions that are increasing in demand and those that are declining.

That is why the debate between whether a generalist professional is better than a specialized one, or vice versa, finds the answer in **T-Shaped professionals**.

https://www.imf.org/external/pubs/ft/fandd/2020/12/WEF-future-of-jobs-report-2020-zahidi.htm







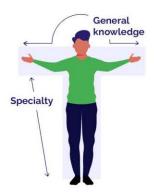


## **Digital** Immersion

## What characterizes a **T-Shaped** professional?

T-Shaped professionals are fundamentally characterized by having general knowledge in different areas, but being specialized in one in particular.

Therefore, they are **professionals who**, although they have very specific knowledge, skills and competences in an area, **can**, in the same way, **contribute** and **collaborate in areas that are not of their specialty**.





## **Digital** Immersion

### **GTA Digital Immersion**.

To help you **Lead** the "Digital Transformation Journey" of your organization, and start your **Digital Immersion** as a professional, whatever your field, we have designed a set of professional routes in order to help you choose the training and certification that best suits your interest.

## Digital Inmersión Leader.

At **GTA** we have considered all these factors and created the **"Digital Immersion Leader"** certifications.

As a professional, these certifications enable you to lead the Digital Transformation in your organization.

**As an organization** you need **qualified professionals** to lead the necessary changes in the multiple areas in which **Digital Transformation** has an impact.

Find out which certifications will automatically provide you with a "Digital Immersion Leader" certificate.







Digital Transformation for organizations.
 Digital Immersion for people.

**99** 

All the information and routes of Digital Immersion in...



https://globaltrustassociation.org/digital-immersion/







## GTA Certified Cyber Security Management Professional (ISO27032)

## PROJECT MANAGEMENT PROFESSIONAL ISO 21502

Content	Page
Module 01. General Introduction	8
Introduction to project management	8
Exploring ISO 21502	15
Module 02. Context and Environment for Project Management	23
Context of a Project	23
Project Governance	32
Project Life Cycle	35
Definition of the Environment for Project Management	39
Module 03. Organization, Roles and Competences for The Management of Projects	46
Project Organization	46
Roles and Competencies of Project Personnel	51
Module 04. Integrated Project Management Practices	64
Pre-project activities	68
Overseeing a project	71
Directing a project	74
Initiating a project	76
Controlling a project	81
Managing delivery	86
Closing or terminating a project	89
Post-project activities	93





Content	Slide
Module 05. Management Practices for a Project	95
Planning, Benefit management and Managing organizational and societal change	98
Scope management, Resources management and Procurement	113
Schedule management, Cost management y Quality management	130
Risk management, Issues management and Change control.	150
Stakeholder engagement and y Communication management	163
Reporting, Information and documentation management and Lessons learned	172
Certification	183

# PROJECT MANAGEMENT PROFESSIONAL ISO 21502

**Global Trust Association®** 





## Module 01

## **General Introduction**

GTA Certified Project Management Professional (ISO 21502)

PROJECT MANAGEMENT PROFESSIONAL ISO 21502

Module 01

**General Introduction** 

## Introduction to Project Management.

GTA Certified Project Management Professional (ISO 21502)





Project Definition - Compliant with ISO 21502, clause 3.20, based on ISO/TR 21506:2018:

"Temporary effort to achieve one or more defined objectives".



## Introduction to Project Management

## **Definition of a Project - According to other sources:**

- ISO 21500:2012: "A project is a single set of processes consisting of coordinated and controlled activities, with start and end dates, that are carried out to achieve project objectives".
- PMBOK® Guide Sixth Edition: "A project is a temporary effort undertaken to create a unique product, service or outcome.".
- Managing Successful Projects with Prince2® 2017 Edition: "A temporary organization that is created for the purpose of delivering one or more commercial products in accordance with an agreed business case.".





### ISO 21502, clause 4: Project Management Concepts

- Describes the concepts related to the general and individual practices applied in project management.
   As described in clauses 6 and 7 of the standard.
- A project can be stand-alone or part of a programme or portfolio, and can cross boundaries within an organization and between organizations.



PROJECT
MANAGEMEN
PROFESSIONAL
ISO 21502

## Introduction to Project Management

## ISO 21502, clause 4.1.2: Projects

Organizations perform work to achieve specific objectives. Generally, this work can be classified into operations or projects. Operations and projects basically differ in the following ways:

### Projects:

 Projects are temporary and focus on retaining or adding value or capacity for a sponsoring organization, stakeholder or client.

### Operations:

 operations are conducted through continuous activities and can focus on sustaining the organization, e.g., by delivering repeatable products and services.





ISO 21502, clause 4.1.2: Projects

### The objective of a project:

May be accomplished through a combination of deliverables, outputs, outcomes and benefits, depending on the context of the project and the direction provided through governance.

Should contribute to outcomes and benefit realization for stakeholders, including the sponsoring organization, other internal and external organizational stakeholders, customers and their stakeholders.



MANAGEMEN PROFESSIONAL ISO 21502

## Introduction to Project Management

## ISO 21502, clause 4.1.2: Projects

## Characteristics and Factors that Differentiate Projects

Although many projects have similar characteristics, each project is unique.

Differences between projects can occur in factors such as, but are not limited to:

- objectives:
- context;
- desired results;
- outputs provided;
- affected stakeholders:
- resources used:
- complexity;
- constraints;
- processes or methods used.





## ISO 21502, clause 4.1.3: Project Management

Project management integrates the practices included in this document to direct, initiate, plan, monitor, control and close the project, manage the resources allocated to the project and motivate the people involved in the project to achieve the project objectives.

Project management should be performed through a set of processes and methods that should be designed as a system and should include the necessary practices for a specific project as described in this document.



PROFESSIONAL ISO 21502

## Introduction to Project Management

## **Project Management - According to other sources**

- PMBOK® Guide Sixth Edition: "Project management is the application of knowledge, skills, tools and techniques to project activities to meet project requirements. It is achieved through the proper application and integration of the project management processes identified for the project. Project management enables organizations to execute projects effectively and efficiently".
- Managing Successful Projects with Prince2® 2017 Edition: "Project management is the planning, delegation, monitoring and control of all aspects of the project, and the motivation of those involved, to achieve the project objectives within the expected performance targets for time, cost, quality, scope, benefits and risks".





### ISO 21502, Clause 4: Project Management Concepts

Describes the concepts related to the general and individual practices applied in project management. As described in clauses 6 and 7 of the standard.

A project can be stand-alone or part of a programme or portfolio, and can cross boundaries within an organization and between organizations.



## PROFESSIONAL ISO 21502

## Introduction to Project Management

## ISO 21502, Clause 4: Project Management Concepts

Organizational strategy should be used to identify, document and evaluate opportunities, threats, weaknesses and strengths, which can help inform future actions. Selected opportunities and threats can be further examined and justified in a business case.

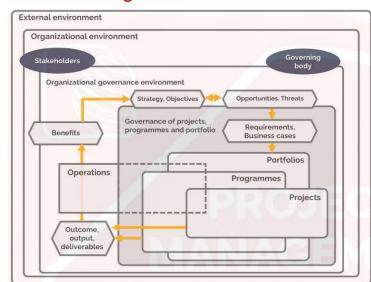
A business case may result in the initiation of one or more projects.

Project outputs are expected to generate results, which should generate benefits for the sponsoring organizations, as well as for internal or external stakeholders.





Project Management in the Context of Government and Programme and Portfolio Management



The figure illustrates a context and environment within which a project can exist

Dashed lines in the table of operations indicate that operations may extend to projects, programs and portfolios (dashed lines may be referred to as "other related work").

Nota: Adaptado de la ISO 21502:2020 (p. 5)

PROFESSIONAL ISO 21502

GTA Certified Project Management
Professional (ISO 21502)





## Module 01

**General Introduction** 

## **Exploring ISO 21502**

GTA Certified Project Management Professional (ISO 21502)

MANAGEMENT PROFESSIONAL ISO 21502

## **Exploring ISO 21502**

ISO 21502

"Provides guidance on project management concepts and practices that are important and impact the successful execution of a project".







### To whom the standard is addressed

Target Audience	Interest
Executive Management/Senior Management.	Proporcionar una mejor comprensión de la gestión de proyectos y ayudarles a prestar el apoyo y la orientación adecuados a los gestores de proyectos y a las personas que trabajan en ellos;
Individuos con responsabilidad sobre:	Governance, direction, assurance, audit and management of projects, such as project sponsors, project boards, auditors and project managers;
Project managers and project team members.	To have a common basis on which to understand, carry out, compare, evaluate and communicate the practices used in your project;

## PROFESSIONAL ISO 21502

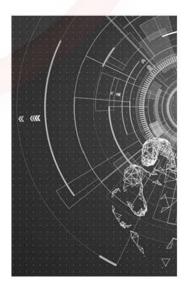
**General Introduction** 

## **Exploring ISO 21502**

## **Utility for Stakeholders**

In addition, this document may also be useful for people involved in supporting:

- The governance, direction and management of portfolios and programs;
- Project teams, programme and project offices or similar organizational structures;
- The academic study of project, programme and portfolio management;
- Functions related to project management, such as finance, accounting, human resource management, procurement and legal.





### Structure of ISO 21502

Clauses		
Introduction (vii)	6 Integrated Project Management Practices (18)	
1 Scope (1)	6.1 Overview   6.2 Pre-Project Activities   6.3 Overseeing a Project	
2 Normative references (1)	6.4 Directing a Project   6.5 Initiating a Project   6.6 Controlling a	
3 Terms and definitions (1)	Project   6.7 Managing Delivery   6.8 Closing or terminating a a Project   6.9 Post-Project Activities	
4 Project Management Concepts (4)	7 Management Practices for a Project (26)	
4.1 Overview   4.2 Context   4.3 Project Governance   4.4 Project Life Cycle   4.5 Project Organization and Roles   4.6 Competencies of project personnel	7.1 General Review   7.2   7.3 Benefits Management   7.4 Scope Management   7.5 Resource Management   7.6 Schedule Management   7.7 Cost Management   7.8 Risk Management   7.9	
5 Prerequisites for formalizing project management (16)	Issues Management   7.10 Change Control   7.11 Quality Management   7.12 Stakeholder engagement   7.13 Communication Management   7.14 Managing Organizational and societal change   7.15 Reporting   7.16 Information and Documentation Management 7.17 Procurement   7.18 Lessons Learned	
5.1 General Review   5.2 Considerations for Implementing Project Management   5.3 Continuous Improvement of the Project Management Environment   5.4 Alignment with Organizational Processes and Systems	Annex A Project management processes based on practices	

## PROFESSIONAL ISO 21502

## **Exploring ISO 21502**

## Scope - Clause 1

This document provides:

- High-level descriptions of practices that are considered to work well and produce good results in the context of project management.
- This document does not provide guidance on the management of programmes or portfolios. Topics relating to general management are addressed only within the context of project management.







## Scope - Clause 1

Provides guidelines for project management. It is applicable to any type of organization:

- Public.
- Private.
- Charitable.

It is applicable to any type of project, regardless of its:

- Purpose and delivery approach.
- Life cycle model used.
- Complexity and size.
- Cost or duration



PROFESSIONAL ISO 21502

## **Exploring ISO 21502**

## Scope - Clause 1

Consider that the "delivery approach" may refer to any method or process appropriate to the type of results, as follows:

- Predictive.
- Incremental.
- Iterative.
- Adaptive.
- Hybrid.
- Including agile approaches.







### **Terms and Definitions - Clause 3**

Description of basic project management concepts used in the standard:

<ul> <li>Governance</li> </ul>	<ul> <li>Principles, policies and framework by which an organization is directed and controlled.</li> </ul>
Project governance	<ul> <li>Principles, policies and procedures by which a project is authorized and directed to accomplish agreed objectives</li> </ul>
Business case	<ul> <li>Documented justification to support decision making about the commitment to a project, programme or portfolio.</li> </ul>
<ul> <li>Benefits</li> </ul>	Created advantage, value or other positive effect.
<ul> <li>Project assurance</li> </ul>	<ul> <li>Planned and systematic actions necessary to provide confidence to the sponsoring organization and project sponsor that a project is likely to achieve its objectives.</li> </ul>
Stakeholder	<ul> <li>Person, group or organization that has interests in, or can affect, be affected by, or perceive itself to be affected by, any aspect of a project, programme, or portfolio.</li> </ul>
<ul> <li>Sponsor</li> </ul>	Person responsible for obtaining the resources and executive decisions to enable success.

## PROFESSIONAL ISO 21502

## Exploring ISO 21502

## **Terms and Definitions - Clause 3**

Description of basic project management concepts used in the standard:

<ul> <li>Portfolio</li> </ul>	<ul> <li>Collection of portfolio components, grouped to facilitate their management to meet strategic objectives.</li> </ul>
Portfolio component	Project, programme, portfolio or other related work.
<ul><li>Programme</li></ul>	Group of program components managed in a coordinated way to realize benefits
Programme Component	Project, programme or other related work.
<ul><li>Project</li></ul>	Temporary endeavour to achieve one or more defined objectives.
Project life cycle	Defined set of phases from the start to the end of a project.
Project management	<ul> <li>Coordinated activities to direct and control the accomplishment of agreed objectives.</li> </ul>





### **Terms and Definitions - Clause 3**

Description of basic project management concepts used in the standard:

<ul> <li>Project scope</li> </ul>	Authorized work to accomplish agreed objectives.
Critical path	Sequence of activities that determine the earliest possible completion date for a project or phase.
Baseline	<ul> <li>Reference basis for comparison against which performance is monitored and controlled.</li> </ul>
<ul> <li>Opportunity</li> </ul>	Risk occurrence that would have a favourable impact.
<ul><li>Threat</li></ul>	Risk occurrence that would have a negative impact.
<ul> <li>Work Breakdown Structure (WBS)</li> </ul>	<ul> <li>Decomposition of the defined scope of a project or programme into progressively lower levels consisting of elements of work.</li> </ul>
<ul> <li>Work package</li> </ul>	Group of activities that have a defined scope, deliverable, timescale and cost.

## PROFESSIONAL ISO 21502

## Exploring ISO 21502

## **Terms and Definitions - Clause 3**

Description of basic project management concepts used in the standard:

<ul><li>Control</li></ul>	<ul> <li>comparison of actual performance with planned performance, analysing variances and taking appropriate corrective and preventive action as needed.</li> </ul>
<ul> <li>Configuration management</li> </ul>	<ul> <li>Application of procedures to control, correlate and maintain documentation, specifications and physical attributes.</li> </ul>
<ul> <li>Change request</li> </ul>	Documentation that defines a proposed alteration to a project.
<ul><li>Issue</li></ul>	Event that arises during a project requiring resolution for the project to proceed.
Corrective action	Direction and activity for modifying the performance of work to bring performance in line with a plan.
Preventive action	<ul> <li>Action to eliminate the cause of a potential nonconformity or other potential undesirable situation.</li> </ul>
<ul> <li>Deliverable</li> </ul>	Unique and verifiable element that is required to be produced by a project.
<ul> <li>Output</li> </ul>	Aggregated tangible or intangible deliverables that form the project result.
<ul> <li>Outcome</li> </ul>	Change resulting from the use of the output from a project.





## **ANNEX A - Project Management Process Based on Practices**

Provides information regarding:

- a) How this document evolved from ISO 21500: 2012 by providing a mapping between the process-based framework in ISO 21500: 2012 and the practice-based framework in this document (see Table A.1). It also shows the processes and concepts of ISO 21500 with equivalent references to ISO 21502.
- b) How this document can be used as a basis for developing a process-based project management framework, assuming a one-to-one correspondence between the processes in ISO 21500: 2012 and the practices in this document (see Table A.2).



PROFESSIONAL ISO 21502

## **Exploring ISO 21502**

## **Complementary Standards**

Complementary Standa	rds
• ISO 21500:2021	Project, programme and portfolio management — Context and concepts
• ISO 21502:2020	Project, programme and portfolio management — Guidance on project management
■ ISO 21503:2017	<ul> <li>Project, programme and portfolio management — Guidance on programme management</li> </ul>
■ ISO 21504:2015	Project, programme and portfolio management — Guidance on portfolio management
■ ISO 21505:2017	Project, programme and portfolio management — Guidance on governance
■ ISO/TR 21506:2018	Project, programme and portfolio management — Vocabulary
■ ISO 21508:2018	Earned value management in project and programme management
■ ISO 21511:2018	Work breakdown structures for project and programme management
■ ISO/WD TS 21512	<ul> <li>Earned Value Management (EVM) in Project and Programme Management — Implementation Guide</li> </ul>
■ ISO 10006:2017	Quality management — Guidelines for quality management in projects



GTA Certified Project Management Professional (ISO 21502)



PROJECT
MANAGEMENT
PROFESSIONAL
ISO 21502

**Global Trust Association®** 





## Module 02

## Context and Environment for Project Management

GTA Certified Project Management Professional (ISO 21502)

PROJECT MANAGEMENT PROFESSIONAL ISO 21502

Module 02

**Context and Environment for Project Management** 

## Context of a Project

GTA Certified Project Management Professional (ISO 21502)



## This is just a sample of the official manual

ISO 21502

Global Trust Association<sup>®</sup>

