



## JEAN MONNET CHAIR – UNIVERSITY OF GRANADA

### "PM2 by European Commission. Open, free and common project management framework for all European institutions, companies and citizens. – PM2EU+"

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# WHITE PAPER

## Analysis of the new ISO 21502:2020. Comparison with PM2

#### Introduction. Objective of the study

In December 2020 the International Organisation for Standardisation (ISO) released the new ISO 21502:2020, which replaces ISO 21500:2012 in its approach as a high-level standard or guide for project management.

This standard joins the 21500[1] series of standards, which as of today would consist of:

- ISO 21500 (under development) Project, programme and portfolio management Context and concepts.
- ISO 21502:2020 (E) Project, programme and portfolio management «Guidance on project management».
- ISO 21503:2017 Project, programme and portfolio management Guidance on programme management.
- 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.

The new ISO 21500, which is under development, will no longer correspond specifically to project management but will focus on concepts and the definition of the context, linking projects, programmes and portfolios from a strategic perspective.

Project management is currently undergoing a huge transformation process in which ISO has taken the lead at the launch date but which will







soon be accompanied by the seventh edition of PMI's PMBoK, for which profound changes have been announced, both in terms of structure and approach.

Throughout this paper, I will try to unpack the main new features of ISO 21502:2020. Finally, I will reflect on common elements with the PM<sup>2</sup> methodology developed by the European Commission and some personal considerations.

#### ISO 21502:2020 analysis

The core of the main changes and novelties lies in a holistic approach to the project, which requires a contextualisation of the project, beyond the limits of the project itself, of the relations of the project with the organisation that promotes it and the rest of the stakeholders.

The first significant change that can be detected is the structure of the standard itself, which is now presented in narrative form and focused on practices (integrated or not). This totally conditions the proposal, which, although it coincides with the lines of work of the main international project management standards and methodologies, presents a unique proposal including a vocabulary that is sometimes not the same as that of other standards.

The most relevant aspects of the new ISO 21502 are the following:

- Orientation towards results, expected outputs or services; but especially on how projects can be able to generate improvements and benefits for the organisation. In this sense, the definitions established for deliverables, output, outcomes & benefits of the project are interesting:
  - Deliverable: unique and verifiable element that is required to be produced by a project.
  - Output: aggregated tangible or intangible deliverables that form the project result.
  - Outcome: change resulting from the use of the output from a project.
  - Benefit: created advantage, value or other positive effect.
- Definition of Organisational Context as a series of situational factors both internal and external to the organisation that, in conjunction with the objectives and strategies defined by the organisation, can affect the performance, value creation and success of a project, in terms of the realisation of the benefits expected by the organisation.









- Definition of the environment/environment made up of the set of characteristics inherent to the organisation in which a project is to be developed, and which can be classified as: external environment, organisational environment and organisational governance environment.
- Focus on the Project Life Cycle emphasising that its composition should contain several phases and decision points or gates between the phases. The final composition of the project life cycle is defined by the need for a project, influenced by its environment and context.
- Develop a tangible approach to the involvement of roles, responsibilities and competencies, whereby responsibilities, e.g. overseeing and directing the project, are made visible as part of integrated project management practices.
- The competence approach is maintained at the technical level, i.e. project management; at the behavioural level, i.e. personal relationships; and at the business and other organisational and external levels.
- A first approach is proposed through the formulation of eight (8) integrated project management practices considered essential. In these integrated practices, pre-project activities (Pre-project as defined in Prince2® or Pre-project as defined in the PMBOK® guide of the PMI®) and post-project activities have also been incorporated. Other practices correspond to those of initiating, monitoring, directing and controlling a project, as well as managing the delivery and closing a project.
- Subsequent to the formulation of the integrated practices, 17 management practices for a project are incorporated (they could correspond to the subjects of the previous ISO 21500). They include the traditional ones of planning, scope, schedule, cost, quality, etc., adding new ones such as benefits management, organisational and social change management, reporting, information and documentation management, change control, problem management and lessons learned.
- New roles and responsibilities have been included (sponsor organisation and assurance project) that were not defined in the previous version.
- Conditions of constant change and uncertainty are assumed, which advises a flexible and adaptable approach to project management throughout the life cycle of the project, using at all times the tools (traditional, agile or hybrid) that best suit each project.
- This condition is managed through the process of «tailoring» the methodologies in such a way that, in the end, an «ad hoc» tool is available that adjusts to the reality of the project and the organisation in which it is set.







The relationships between the project life cycle, integrated practices and management practices for a specific project are detailed in Figure 1:

| Before the project  | During the project  | After the projec           |
|---|---|----------------------------|
| Project life cycle (4.4)<br>Gates/decision points and<br>phases | te Gate Gate Gate Ga<br>Phase Phase Phase Phase Phase   | to                         |
|   | Initiating<br>a project<br>Overseeing a project<br>Directing a project<br>Controlling a project<br>Managing delivery  | Post-project<br>activities |
| practices for a chan<br>project (7) orga                        | ning, benefits, scope, resources, schedule, cost, risk, iss<br>ge control, quality, stakeholders, communication, mana<br>nizational and societal change, reporting, information<br>document management, procurement, lessons learned. | and                        |
| Delivery approaches   | NOTE Definition of the various types of<br>approaches is out of scope for this d  |                            |

Figure 1 Relationship between project life cycle, integrated project management practices and management practices for a project. Source: ISO 21502:2020.

The relationships between the integrated practices and the associated roles are defined in Figure 2.

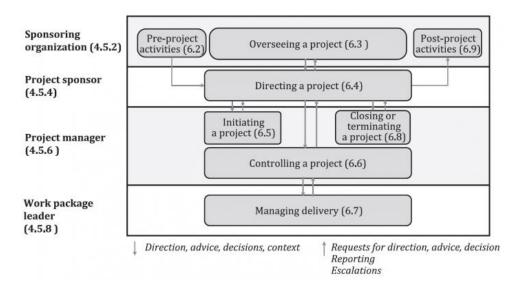


Figure 2: A view of integrated project management practices, relationships and associated roles. Source: ISO 21502:2020.









Analysing these two proposals it is interesting to underline:

- The inclusion of three temporal dimensions in relation to the project, including pre-project and post-project phases.
- The use of the term overseeing to denote one of the integrated practices (6) developed by the sponsor organisation and which would correspond to activities related to involvement in key decisions; periodic reporting; assurance reviews and audits; ad hoc escalations and interventions. This activity can be carried out by a portfolio manager or a programme manager depending on the relative situation of the project in relation to the organisation.
- It does not directly address the planning and execution stages of the project and would include integrated practices of overseeing, directing, controlling and managing delivery.
- The way in which deliverables are developed is outside the scope of the standard (it will depend on the type of project being developed: software, construction, energy, water, services, and so on).
- Gates or control and decision points are included. In this case, the number of gates depends on how the deliverables are developed since, in addition to the gates corresponding to the transitions between pre-project, projects and its integrated practices and post-project activities, it is possible to include more gates or milestones in the project phase in accordance with the work methods used to generate deliverables (iterations, agile approach).

#### ISO 21502:2020 vs PM<sup>2</sup> by EC

In the light of the analysis of ISO 21502:2020, it is clear that there are important differences.

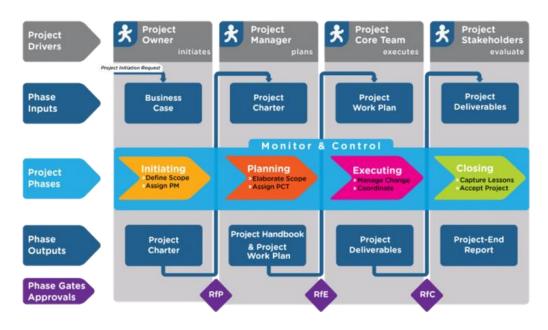
These include those relating to the definitions of the phases of the project life cycle, as well as the establishment of roles and responsibilities. Figures 3 and 4 summarise those proposed in the PM<sup>2</sup> methodology.











# Figure 3: Phases, roles and overview of the PM<sup>2</sup> methodology. Source: PM<sup>2</sup> Guide.

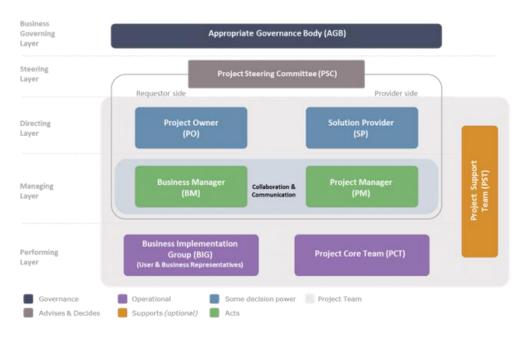


Figure 4: Roles in PM<sup>2</sup> methodology. Source: PM<sup>2</sup> Guide.

The key difference (in addition to the structure of the phases themselves and the use of «integrated practices» as an element that structures the activities to be carried out in the project) is derived from the allocation of roles and responsibilities.









As can be seen in Figure 2, the roles and responsibilities of direction, management and development are compartmentalised in watertight silos that either depend on the organisation's side (sponsor) or on the side of the solution developer (project manager and other roles).

In the case of the PM<sup>2</sup> methodology (figure 4) all these practices and responsibilities are shared by different figures on both the sponsor and solution provider sides.

This difference makes the methodological proposals completely different. It is not causal that the actors involved in the project in the case of ISO 21502:2020 are presented horizontally while in the case of PM<sup>2</sup> they are presented vertically.

In addition to these differences, there are differences in terms of roles. ISO 21502:2020 includes new roles such as Project Assurance. In relation to this role, it could be said that its inclusion as an independent role is not correct, as it is understood that many of the agents present in the project participate in it and it should not fall to just one.

On the other hand, the main similarities between ISO 21502:2020 and  $PM^2$  are as follows:

- Outcomes & benefits orientation.
- The context of the project within the organisation is given importance as an element of value creation, both to the sponsor itself and to the rest of the stakeholders. The holistic approach to the project and its context is currently shared by almost all organisations involved in project management.
- The competencies for project management essentially coincide and it could be stated that both assume those established in the IPMA ICB 4.0.
- The importance of intermediate control points, decision points or transition gates between the different phases.
- The reality of a changing environment is assumed, for which a flexible approach is necessary, incorporating change management, continuous communication and stakeholder management as fundamental elements for the achievement of project success.
- These conditions of constant change and uncertainty advise a flexible and adaptable approach to project management throughout the project life cycle, using at all times the tools (traditional, agile or hybrid) that best suit each project.









• The importance of tailoring, assuming that most organisations demand starting frameworks that are easily adoptable and adaptable to their particular needs.

#### Conclusions

The objective of the International Standards Organisation is to develop standards that «serve as a type, model, norm, standard or reference».

In the field of project management knowledge, there are many institutions and organisations at international level that have been working for many years to propose standards, methodologies, frameworks, methods and tools.

It would have made much more sense to work more collaboratively to try to unify not only frameworks but also terminology.

Soon, with the launch of the new edition of PMboK, the project management community will encounter terminologies such as principles, integrated practices, activities, mindset, etc., which may or may not refer to the same concepts.

This will make it difficult to work in a changing environment, in which the composition, training, culture and location of the agents involved in the management of a project will be very diverse.

Any proposal is valid and respectable, but, without a doubt, and from the position held by ISO, an opportunity has been missed to establish common bases shared by all that would improve understanding, permeability and efficiency in project management.

#### References

ISO (2020) ISO 21502:2020 Project, programme and portfolio management «Guidance on project management». Switzerland.

DIGIT – EC (2018) PM<sup>2</sup> Project Management Methodology. Guide 3.0. Luxembourg, Brussels. ISBN 978-92-79-91829-2. doi: 10.2799/755246

[1] The leap from ISO 21500 to ISO 21502 is not a mistake, as ISO 21501 exists today, although its purpose has nothing to do with project, programme and portfolio management, since its title is Determination of particle size distribution — Single particle light interaction methods — Part 1: Light scattering aerosol spectrometer.

