



IPMA OCB

IPMA Organisational Competence Baseline
– The standard for moving organisations forward



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Foreword

During the last few decades, a majority of organisations of all sizes and in all sectors have given emphasis to the successful delivery of projects. An increasingly complex and dynamic world requires organisations to meet the more demanding expectations of their stakeholders through the better management of projects, programmes and portfolios. These aspirations are despite various constraints such as deadlines or fixed budgets. In addition it is expected that projects should operate effectively and efficiently with optimal use of resources. While it is, of course, necessary to develop the competence of individuals, it is also necessary to analyse and develop the competence of the organisation.

This standard, the IPMA Organisational Competence Baseline (IPMA OCB), introduces the concept of organisational competence in managing projects. It is a holistic approach for organisations to strengthen their management of projects, programmes and portfolios. IPMA OCB is built on the strong heritage of the International Project Management Association (IPMA®), the global leader in competence certification.

IPMA offers a wide range of beneficial services for individuals, projects and organisations, starting with the Four-Level Certification (4-L-C) in PM for individuals and the Two-Level Certification for PM Consultants. In addition, IPMA offers the IPMA Project Excellence Award which annually honours project teams that achieve top performance worldwide. '*Up to the next dimension*', the slogan for IPMA Delta®, is an obvious next step in the service offered by IPMA as well as a next step for all organisations interested in improving their performance in project management. IPMA Delta is a service to assess and certify organisations in a broad and thorough way. It is offered by independent Certification Bodies (CB) of IPMA Member Associations (MA). Three standards are used during the IPMA Delta assessment, the IPMA ICB® to assess selected individuals, the IPMA Project Excellence Model to assess selected projects and/or programmes, and this IPMA OCB to assess the organisation as a whole.

IPMA OCB offers insights for all people interested in understanding how to improve the way projects, programmes and portfolios are managed in an organisation. The main target audiences are top managers, senior executives, executives directing project management activities, line managers working within or interacting with projects and programmes, consultants, trainers and coaches, and project staff. In addition, IPMA OCB provides teachers, coaches and their students' insights into how a project-oriented organisation should look and how the future might be improved through better project management.

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IPMA OCB will help us move the project management profession forward!



Reinhard Wagner

IPMA Vice President for Standards

Executive summary

The importance of effective project management is increasingly understood as essential for delivering an organisation's strategic objectives. Every single project deserves to be run effectively and efficiently. However, a project's success or failure is influenced by the organisation in which it exists. The IPMA Organisational Competence Baseline (IPMA OCB) addresses the ability of organisations to integrate and align people, resources, processes, structures and cultures in projects, programmes and portfolios within a supporting governance and management system.

The main purpose of the IPMA OCB is to show clearly the role that an organisation has in managing its project, programme and portfolio-related work. It describes the concept of organisational competence in managing projects, programmes and portfolio-related work and how this should be used to deliver the organisation's vision, mission and strategic objectives in a sustainable manner. It also demonstrates how the governance and management of projects, programmes and portfolios (PP&P) should be continuously analysed, assessed, improved and further developed.

The IPMA OCB describes the role of key players. Senior executives identify the organisational aspects needing adjustment, they plan investments for development activities and they involve external partners. PP&P managers should understand the organisational context in which they are acting and they identify relevant changes and improvements needed in their projects. For PM consultants, educators, trainers and researchers the IPMA OCB provides a framework for their contributions to the PP&P competence of organisations.

The IPMA OCB describes five groups of organisational competence:

- PP&P Governance is the part of the organisation's corporate governance that deals with projects, programmes and portfolios. It is usually performed by the top management acting in steering boards and provides strategic views, policies, guidelines, decisions, monitoring and control of performance as well as directions for the sustainable development of the PP&P competence.
- PP&P Management is the part of the of the organisation's management system that deals with projects, programmes and portfolios. It is usually performed by management functions on different levels in both permanent and temporary parts of the organisation and provides people, methods, tools, guidelines, decisions, monitoring and control as well as directions for the sustainable development for all competence elements.
- PP&P Alignment addresses the goals and expectations for performance set by top management. It is undertaken by PP&P managers with the support of other management functions. Processes, structures and cultures of PP&P are aligned with those of internal and external parties.
- PP&P Resources addresses the goals and expectations for resource availability and utilisation set by top management and is undertaken by PP&P managers together with support functions such as finance, legal, purchasing, and technology. It provides guidance for defining resource requirements, the acquisition of, and the sustainable development of the PP&P resources.
- PP&P People's Competences deals with the competence, performance and recognition of PP&P people, and is undertaken by PP&P managers supported by human resource management together with other functional management. It provides guidance for the definition of competence requirements, determination of the current state of competences and the sustainable development of, the PP&P competence.

An organisation is successful if it achieves its goals over a long time to the benefit of stakeholders. The IPMA OCB provides a tool for organisations to analyse their context, to identify relevant trends and to develop their strategies, processes, structures, cultures and PP&P competences. Organisational learning assist continuous development and improvement of its competitiveness, effectiveness and efficiency.

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Abbreviations & Acronyms

Abbreviation or Acronym	Explanation
4-L-C	IPMA Universal Four-Level-Certification
CB	IPMA Certification Body
EFQM	European Foundation for Quality Management
HSSE	Health, Safety, Security & Environment
HR	Human Resource
ICB	IPMA Competence Baseline
ICT	Information and Communication Technology
IPMA	International Project Management Association
KPI	Key Performance Indicator
MA	IPMA Member Association
OCB	IPMA Organisational Competence Baseline
PDCA	Plan-Do-Check-Act (Deming Cycle)
PEM	IPMA Project Excellence Model
PM	Project Management
PMO	Project Management Office
PfMO	Portfolio Management Office
PP	Projects and programmes
PP&P	Projects, Programmes and Portfolios
QM	Quality Management
QMS	Quality Management System

Terms & Definitions

Term	Definition
Assessment	Mechanism which evaluates the organisational competences by one or more means such as self-assessments or third party assessments
Certification	A set of activities following the certification scheme within the framework of the certification processes and system [IPMA ICB 3.0]
Competence	Demonstrated ability to apply knowledge and skills [ISO 9000]
Continuous improvement	Recurring activity to increase the ability to fulfil requirements [ISO 9000]
Culture	Set of shared views, values, or beliefs guiding people consciously or unconsciously through their actions
Effectiveness	Extent to which planned activities are realized and planned results achieved [ISO 9000]
Efficiency	Relationship between the result achieved and the resources used [ISO 9000]
Excellence	Performance demonstrated which is exceptionally good and which exceeds ordinary standards
Governance	The system by which organisations are directed and controlled [ISO 38500]
Management	Coordinated activities to direct and control an organisation [ISO 9000]
Management system	System to establish policy and objectives and to achieve those objectives [ISO 9000]
Organisation	Group of people and facilities with an arrangement of responsibilities, authorities and relationships [ISO 9000]
Process	Set of interrelated or interacting activities which transforms inputs into outputs [ISO 9000]
Stakeholder	Any individual, group or organisation who may affect, be affected by, or perceive themselves to be affected by, a decision or activity [ISO 38500]
Strategy	An organisation's overall plan of development, describing the effective use of resources in support of the organisation in its future activities [ISO 38500]
Sustainable development	Development that meets the needs of the present without compromising the ability of future generations to meet their own needs [ISO 26000]
System	Set of interrelated or interacting elements [ISO 9000]
Top management	Person or group of people who directs and controls an organisation at the highest level [ISO 9000]

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1 Introduction

Project management has developed considerably over the past decades. We have a much better understanding today of how we should manage a single project from start to finish, applying state-of-the-art methodology and individual competences as shown in the IPMA Competence Baseline (ICB). Organisations have trained their employees and developed sophisticated PM standards. Nevertheless a fair amount of projects still fail. It is clear that the optimal benefit from the results of the right projects and programmes requires more than competent application of PM standards.

The IPMA OCB adds an important dimension to the world of projects, programmes and portfolios - the concept of organisational competence in managing projects. It sees projects as an integral part of an organisation. Thus, an organisation - a group of people identified by a shared interest or purpose - needs to build competences for managing its portfolio of projects. It is the key task of top management and senior executives to develop the organisation's competence in managing projects in order to deliver the organisation's strategic objectives, in accordance with the organisation's mission, vision and strategy.

Organisational competence in managing projects takes into account the complexity of project-related work. It builds on people and all resources involved and integrates necessary processes, structures and cultures with those of both internal and external partners. It also links project-oriented governance and management systems with the corporate governance and management systems.

This IPMA OCB standard defines the foundations of the concept of organisational competence in project management, its elements and their interactions. It explains what an organisation can do to continuously improve its competence in managing projects. The IPMA OCB provides senior executives, managers and consultants involved in developing project management capability with a standard or baseline from which to start improvement activities. These could also be based on the results of an independent IPMA Delta assessment, using the expertise of national and international assessors.

The IPMA OCB standard is neither a textbook nor a cookbook. It shows WHAT should be done, not HOW to do it. Organisations are responsible for tailoring the concepts to their specific needs possibilities. The continuous development of the organisational competence in managing projects should be an integral part of an organisation's activities.

Following this introduction, Chapter 2 explains the purpose of the document and its intended users. Chapter 3 offers an organisational view of projects. It starts with the major challenges for organisations in managing projects, showing a project-oriented organisation in its context. There follows an explanation of how an organisation could link its mission, vision and strategy to results. It then describes the roles of projects, programmes and portfolios in delivering results. Chapter 4 describes the concept of organisational competence and its relation to managing projects. Chapter 5 describes the concept in detail. It starts with how the competence elements are grouped, defines each element, and then shows the interactions between them. Chapter 6 discusses the development of organisational competence in managing projects. Annex A describes the competence elements in more detail. Annex B shows potential approaches to developing organisational competence in managing projects.

2 Purpose and intended users

This standard was developed by an international community of experts in the field of project, programme and portfolio management. This group has a broad range of experience across many kinds of organisation and cultures. The main purpose of this document is to demonstrate the role of an organisation and its management in project related work, to describe the concept of organisational competence in managing projects and how this can help deliver an organisation's mission, vision and strategy. Furthermore it aims to show how an organisation could develop its competence in a sustainable manner.

The approach in this standard - as in all others - is generic and written for application across all kinds of organisations and cultures. Therefore it is for the user to decide how it could be applied in a context and how it could be tailored to meet the needs of a specific organisation. It could be used as a basis for teaching, training and coaching of people within an organisation. It could also be used to analyse, assess, develop, and continuously improve the management systems for projects, programmes and portfolios (PP&P). The IPMA OCB could also be applied to benchmarking or certification of an organisation's PP&P system.

This standard has identified seven typical user groups, which are discussed below. However, it should be noted that in accordance with the generic nature of this standard that they are for illustrative purposes to indicate a typical organisational structure. Therefore, no attempt is made to define the role of each group in detail. The list of user groups is not intended to be definitive or exhaustive. Nonetheless, the list provides an informative guide which can be adapted to any specific organisation's context:

- a. Senior Executives
- b. Executives
- c. PP&P Managers
- d. Internal or External Consultants
- e. Internal or External Educators, Teachers or Trainers
- f. Certification Bodies and Assessors
- g. PP&P Researchers

a. Senior executives of an organisation could use the standard to understand the role of PP&P for executing and controlling mission, vision and strategy. It can help them understand their own role in the concept of organisational competence in managing projects, to analyse the status of their organisation's competence in managing projects, to identify areas for improvement, and to direct stakeholders, resources and activities for the development of the organisation's capabilities in managing projects. They could use this standard as a basis to engage external partners for benchmarking, assessment, certification and consulting.

b. Executives directing project management activities (e.g. PM Director, PMO Director) could use the standard in a similar way to the Senior Executives. Being directly involved, they can better understand the requirements for change (e.g. resulting from assessments), ensuring that organisational competence in managing projects continually satisfies the organisation's mission, vision and strategy, and that intended results are achieved. The standard should help executives interact more effectively with senior executives (for example, to be able to clearly demonstrate the value of project management), as well as functional, project and external staff through developing a common understanding of PP&P management and the need to implement change identified by assessments or benchmarking.

c. For PP&P managers, this standard shows the context in which they are operating. They need to take this into account whilst managing projects, programmes and portfolios. The standard will assist with their understanding of the concept and their role within organisational competence in managing projects. The standard will help PP&P managers understand how to implement recommendations for change to the most relevant and potentially effective elements of organisational competence in managing projects and to report on the impact of those changes. They could use this standard as a basis to directly improve the management of their projects, programmes or portfolios.

d. Internal or external consultants could use the standard to work with the organisation's top managers, senior executives, PP&P managers and their staff to develop organisational competence in managing projects in a holistic way. Consultants may offer benefits such as specific expertise, independent views and additional capacity and provide services such as benchmarking, training and development.

e. Internal or external educators, teachers or trainers could use the standard as a basis for developing individual competence aligned to the needs of the organisation. Training courses should show the context of project-related activities within organisations and how this should be considered while executing projects, programmes and portfolios. Training courses should also highlight the contribution each individual is able to make for continuous development of organisational competence in managing projects.

f. Certification Bodies and their assessors could use the standard as a baseline for conducting an assessment, certifying organisations against the competences described in the document and deriving recommendations for the organisation to improve organisational competence in managing projects.

g. Researchers could use the standard to support their research proposals and to start practice-based research, using results of assessment or benchmarking activities. The standard could also be used in research to extract data and validate changes against baseline data generated internally or provided externally for trend analysis and continuous improvement, to identify good practice as well as innovation, enabling new research activities in the field of project, programme and portfolio management.

Having discussed the purpose of the IPMA OCB and the intended users we can now consider in Chapter 3, the organisational view of projects.

3 The organisational view of projects

This chapter describes the organisational view of projects. It discusses the challenges faced by organisations in managing their projects in today's increasing complex environment, and the internal and external context of an organisation. It then discusses the importance of an organisation's mission, vision and strategy, and how projects, programmes and portfolios are used as a means for delivering the organisation's goals and results.

3.1 *Challenges for organisations in managing projects*

Work was always organised, but was maybe less structured and formal. Formalising coherent work into projects is increasingly becoming an accepted means of achieving goals. Many organisations deal with an increasing number of projects and programmes in areas like research and development, product creation and marketing, investment, and organisational change. To meet these, and other, complex and dynamic challenges, organisations should focus on project-related competences and develop them in a sustainable manner. However, it is not sufficient to have highly motivated and competent people, today's challenges require organisations to deal with project management competences in a structured way. With the intensified use of PP&P the organisation's demands in terms of complexity increase.

Increasing complexity in all aspects of projects is imposing challenges on project managers. This can include technical complexity, where for example in the automotive industry projects may deal with various hardware components, comprehensive software systems and integrated 'infotainment' tools. This requires all functional departments dealing with specific technologies to be integrated and aligned to overall project goals. The number of internal and external stakeholders involved in projects is rapidly increasing, requiring relationship management, flexible communication, information structures, and optimised interfaces. This is especially important for internationally spread project teams and virtual project teams. These require considerable investment of effort and resources with awareness of cultural sensitivities and differences.

An increasing number of projects and programmes require organisations to balance temporary and permanent parts of an organisation's structure. Specialised units such as Project Management Offices (PMO) emerge, providing a service to project staff, senior executives and governance structures. Portfolios embody projects, programmes and sometimes even sub-portfolios, helping Senior Management to align project activities with the organisation's strategy.

Another challenge for an organisation is to deal with growing expectations of stakeholders. Customers demand high quality deliverables in short lead-times at competitive prices. Employees want to develop their career through projects and expect a competitively attractive work environment. Suppliers and partners require an organisation to build mutually beneficial relationships and cooperate on a fair basis. Project management needs to increasingly deal with human factors - key among these are leadership, motivation, trust, and relationship management. Behavioural competences are increasingly important for project managers, their staff and executives at all levels.

Resource shortages drive many organisations to recognise the need to plan efficiently and deploy scarce resources such as financial assets, personnel, knowledge, facilities, material and equipment in PP&P. Planning and controlling of resources needs to be done from a multi-project perspective (e.g. from a portfolio level) in order to do the right projects right. In a competitive world, organisations constantly need to strive for better performance, maximising opportunities and minimising risks imposed on them.

Sustainable development is increasingly important for organisations operating within modern society. ISO 26000 defines it as integrating the goals of a high quality of life, health and prosperity with social justice and maintaining the earth's capacity to support life in all its diversity. These social, economic and environmental goals are interdependent and mutually reinforcing. Therefore, organisations need to take account of sustainable development in order to meet stakeholder expectations for social responsibility.

Constant changes in society, economies, politics and technology require an organisation to determine continuously their optimal organisational design and then to respond accordingly. It needs to balance stability with flexibility, encouraging employees to be creative and to adapt ways of working, while building on the experiences, rules and regulations derived from the past. As in the natural world, an organisation needs to develop in an evolutionary way, using wisdom and knowledge in order to survive and grow.

These challenges vary from organisation to organisation, depending on their constitution and the environment in which they operate. They need to analyse regularly their situation, identify relevant trends and align their strategies, processes, structures, cultures and competences. Standard solutions might be simple to use but will reach their limits in a challenging world. To succeed in today's environment, an organisation's management need to adopt tailored approaches, building on a long-term mission, vision and strategy, responding flexibly to external challenges and striving to reach excellence.

3.2 *An organisation in its context*

The term 'organisation' is used here in various contexts: public or private, profit or not-for-profit. In a business sense, it usually means a company, a part of a larger corporation or a joint venture of several companies. In addition, there are organisations in the not-for-profit and public sectors as well as in our private lives (e.g. clubs, foundations). Organisations exist to achieve pre-set goals and to generate collective coordinated actions.

In IPMA OCB, we differentiate between two kinds of organisation: a permanent organisation that remains over time and a temporary one, which is used for time-limited projects and programmes, which close at their completion.

The International Standard ISO 9000 describes an organisation as 'people and facilities with an arrangement of responsibilities, authorities and relationships'. The extent of the detail of the structure will depend on the objectives, needs and nature of the organisation.

Figure 3-1 shows an example of a project-oriented organisation. It is composed of temporary project and programme organisations. In addition, there are permanent units to manage multiple projects and/or portfolio management, for strategic and/or top management as well as functional units for product and service delivery. The units interact with each other to achieve the organisation's objectives in an effective and efficient way.

Each organisation can be defined by its internal and external perspectives. The external context of an organisation may include customers, regulators, partners, science, technology, economy, legislation, society and the natural environment. The internal context includes all permanent and temporary organisational units. Permanent units include top management structures and functional departments. In the ICB the following functional departments are referenced: Business, Finance, HSSE, Legal, Personnel Management and Systems, and Products and Technology. In addition, a permanent Portfolio Organisation may be used for coordinating the temporary programme and project organisations.

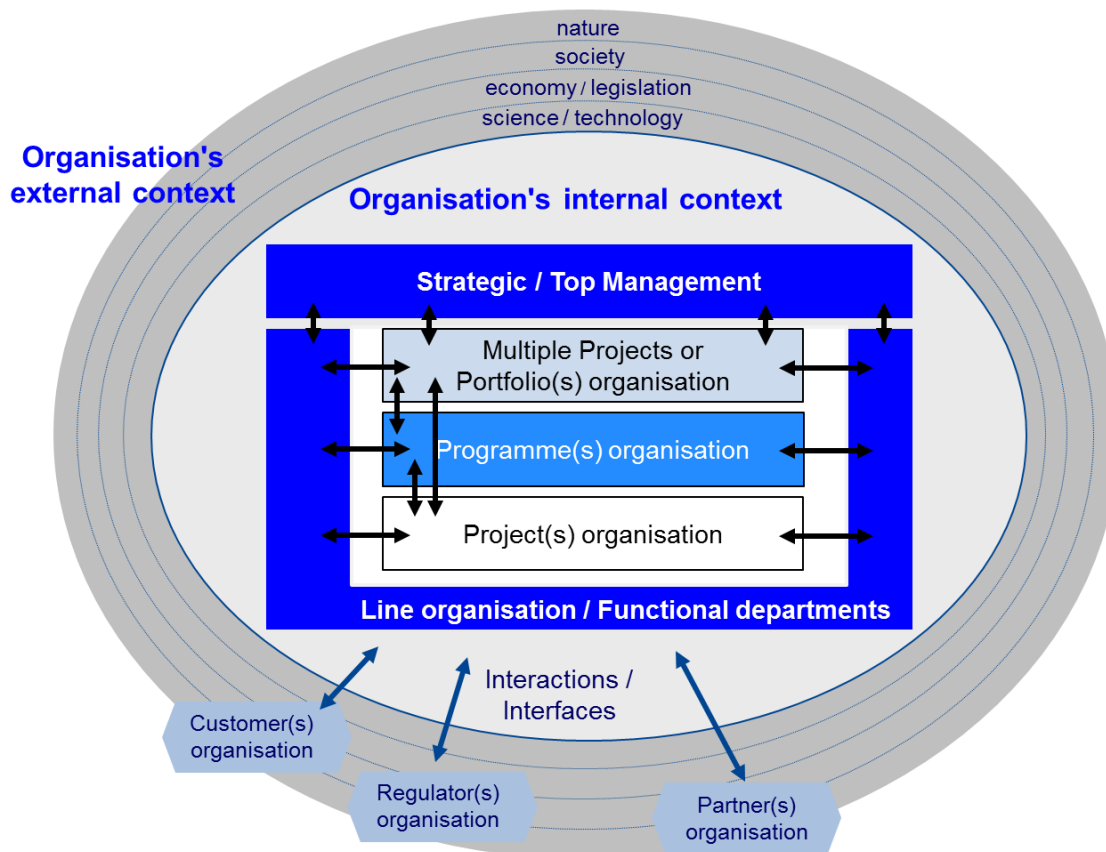


Figure 3-1: A project-oriented organisation in its context

For the purpose of this document, the smallest unit in an organisation is a team with a common goal or task. Several teams, fulfilling a specific function within an organisation, could be grouped into a department. If necessary, departments could be grouped into a division. Organisations can be seen as a group of interrelated organisational units, which are arranged for achieving long-term strategic objectives.

Organisations can be viewed from various perspectives. One is to look at it as an orderly arrangement of structures, typically shown in organisation charts with descriptions of roles, authorities and responsibilities, defining the hierarchy of all people involved. Another perspective is to see an organisation as an arrangement of processes, transforming input into output. The (work) flow of all processes defines the value creation from a customer expectation through to the delivery.

Other perspectives emphasise the communication and information flows between the people in an organisation, or the power and politics, often causing conflicts and disturbances, or the different cultures within or between organisations. This is why organisations are often referred to as 'social systems'.

A further perspective is that of organisational change and the evolutionary development path of an organisation. All perspectives are important to consider while analysing or developing an organisation. Looking only at one perspective (e.g. the process), risks the danger of missing important information and compromising decisions.

3.3 From mission, vision and strategy to results

The employees or members of an organisation need answers to crucial questions such as 'What is the purpose of our organisation?', 'What do we want to achieve?' or 'How do we want to achieve this future state?' This gives orientation and motivation to their work. It is the job of the top management to provide answers to these kinds of questions. Therefore, one of their primary tasks is to develop and communicate the mission, vision and strategy.

A mission defines the fundamental purpose of an organisation, why it exists and what it does. The vision clarifies what the organisation wants to achieve in future. This future state can be mid-term or long-term (five years or more). The vision statement should be formulated positively, attracting or inspiring people to follow. The strategy shows how the vision should be realised. It gives direction and focus to the stakeholders in and around an organisation (e.g. shareholders, customers and partners).

Developing the mission, vision and strategy for an organisation is an intensive process. Key personnel and stakeholders should be engaged in such a process by top management. The process usually starts with a strategic analysis, looking at the present situation, past and future developments in the organisation's context, using scenario modelling techniques or other kinds of method. Next, the organisation's own position and the position of all relevant competitors are analysed and compared, considering current strengths and weaknesses as well as future opportunities and threats in comparison with competitors.

Strategy development can be done in various ways, 'Top-Down' and/or in 'Bottom-Up' approaches or 'Emergent Strategy Development'. At the end of this process it should be clear to all stakeholders how the organisation intends to achieve its vision (see Figure 3-2). Strategies guide day-to-day activities towards the long-term vision.

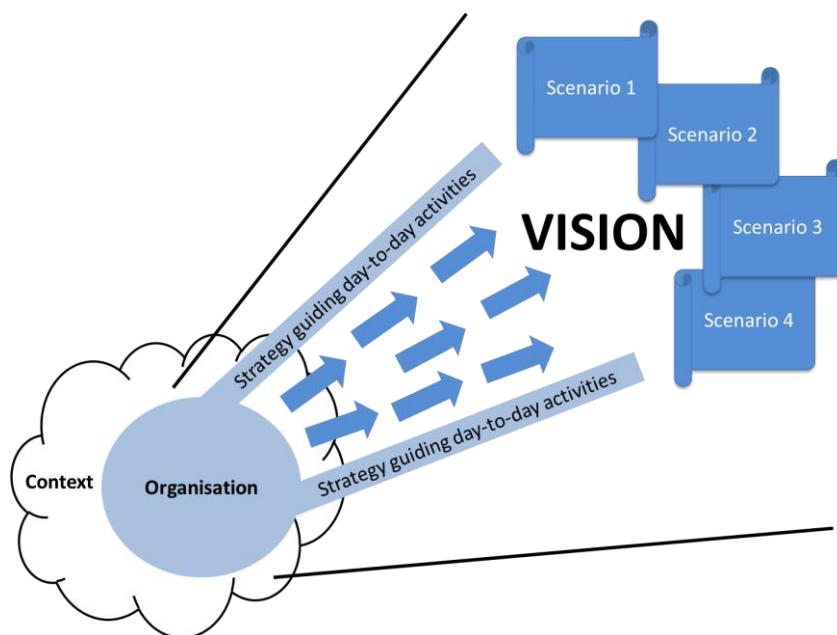


Figure 3-2: Strategy guiding day-to-day activities

Through strategic planning, an organisation defines its strategic objectives, metrics and Key Performance Indicators (KPIs), taking into account available resources and capabilities. Typically, projects and programmes are means for implementing strategies. Therefore, projects and programmes should be aligned with the strategy and the strategic goals. The Balanced Scorecard could be used as a tool for 'translating' the strategic goals from strategy to the project perspective (see Figure 3-3). The same approach is used for monitoring and controlling the strategy implementation in projects as well as performance reporting based on the defined KPIs.

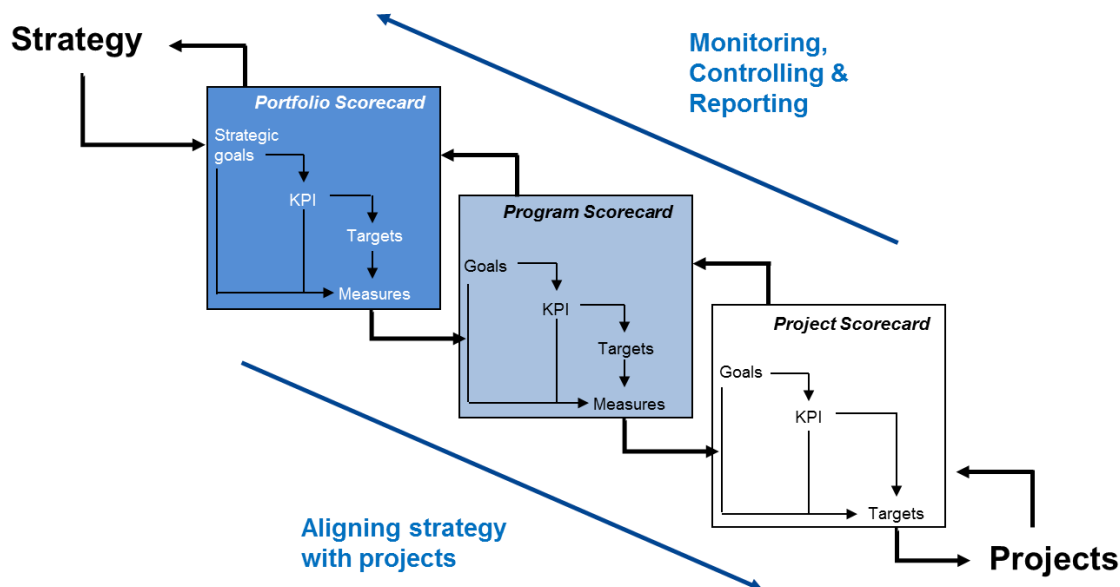


Figure 3-3: Linking projects with strategy using the Balanced Scorecard

Projects are intended to deliver desired outputs. At the end of a project it is normal to check whether the deliverables are consistent with the specification, on time and within budget. But this is not the whole story; there are other questions to ask to see whether the project outputs met the stated objectives as perceived by the stakeholders. Did the project deliver outputs in the most efficient way, using scarce resources effectively? Did the outputs contribute to the overall strategy? Did the project satisfy stakeholders, such as customers, suppliers and employees?

The outputs of projects and programmes (e.g. manufacturing equipment) are often used in an organisation over a long period of time. An organisation's top management needs to look far beyond the end of specific projects and programmes to check whether the desired benefits are achieved and are helping to meet the mission, vision and strategy in a sustainable way. It is also important that effectiveness ('doing the right projects') and efficiency ('doing the projects right') are considered.

3.4 Projects, programmes and portfolios as means for results

The ICB defines a project as a time and cost constrained operation to realise a set of defined deliverables (the scope to fulfil the project's objectives) up to quality standards and requirements. ISO 21500 highlights processes in its definition: 'A project consists of a unique set of processes consisting of coordinated and controlled activities with start and end dates, performed to achieve project objectives'. It defines project management as 'application of methods, tools, techniques and competencies to a project including the integration of the various phases of the project life cycle.'

In the ICB, programmes are seen to be set up for achieving strategic goals. It defines a programme as a 'set of related projects and required organisational changes to reach a strategic goal and to achieve the defined business benefits.' Therefore, programmes are more than the sum of all deliverables of their constituent projects. They are intended to deliver benefits and outcomes on a strategic level. The lifespan of a programme is usually much longer than that of a project. Nevertheless, programmes are managed from start to end in a temporary form of organisation.

Programme Management can be seen as the application of methods, tools, techniques and competences to a programme. Usually programme managers need to deal with much higher complexity than project managers. They have to manage the complexity of all the embodied projects and the interrelations between them, e.g. management of resource constraints needs a lot more attention in a programme than in a project.

Figure 3-4 shows the set-up of an organisation with projects, programmes and portfolios. Projects could be managed as stand-alone or they could be part of a programme. In addition an organisation could organise projects and programmes in portfolios, (the IPMA OCB uses the term 'portfolio' meaning 'project portfolios'). A portfolio is defined by the ICB as 'a set of projects and/or programmes, which are not necessarily related, brought together for the sake of control, coordination and optimisation of the portfolio in its totality.' There could be several portfolios in one organisation, e.g. one portfolio for all ICT-related projects and programmes and one portfolio for all product development projects and programmes. Portfolios could also have sub-portfolios included, e.g. all research-related activities within a product development portfolio.

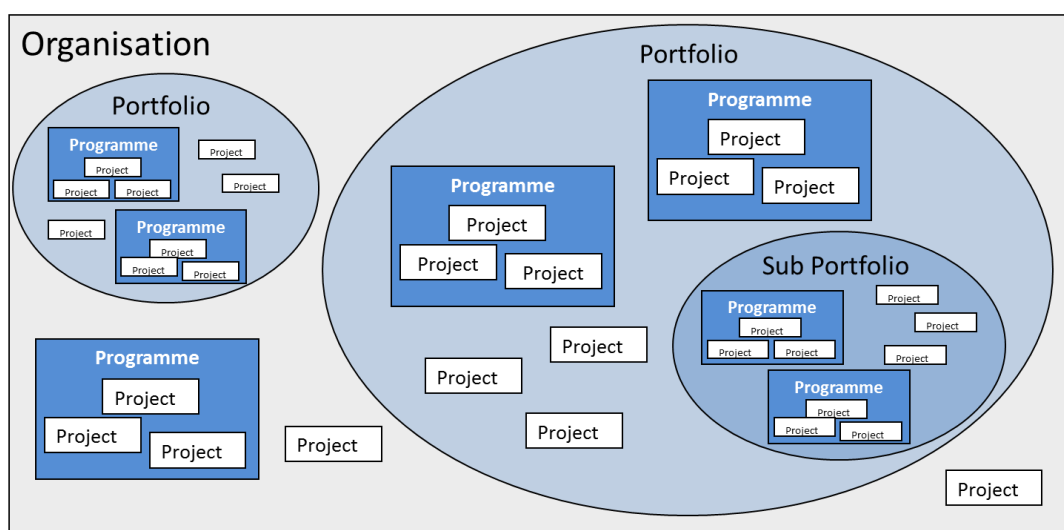


Figure 3-4: Projects, programmes and portfolios in an organisation

Portfolio management is a permanent function, which is usually centralised in order to achieve a better overview of all the related activities to assist optimisation. One of the main tasks of portfolio management is to align projects and programmes with the organisation's strategy, selecting and prioritising them in order to reach the strategic goals in the most effective and efficient way ('doing the right projects right').

In some organisations, projects and programmes are managed through specific departments as part of the permanent organisation. Units such as a Project Management Office (PMO) are used to support the execution of projects and programmes. The role of a PMO is typically to set standards (e.g. methodology, processes, and tools) and guidelines for managers of the projects and programmes, to collect project management information from the projects and to consolidate these in a report for governing bodies. For example, Project Offices or a Programme Office could directly support the project or programme management team.

Governance is another key function to be considered in project, programme and portfolio management. ISO 21500 defines governance in general as a 'framework by which an organisation is directed and controlled.' Project-oriented governance consequently includes those areas of governance that are specifically related to project, programme and portfolio management activities, e.g. definition of policies and management standards, selection of processes, methodologies and tools as well as structures for reporting and decision-making. The governance function could be performed by a senior executive or a steering board.

One of the tasks of such a governing body is to ensure that the desired goals in projects, programmes and portfolios are reached. As shown in Figure 3-3, the Balanced Scorecard could be used to breakdown strategic goals into goals for portfolios, programmes and projects. Reporting would be from bottom-up to the strategic level, using the goals and KPIs defined by the higher management levels. Whilst projects are undertaken to produce outputs/deliverables, programmes are more strategic, intended to deliver strategic outcomes and long-term benefits. Portfolios coordinate the constituent projects and programmes, optimise the use of scarce resources, and align all project-related activities with organisational strategy.

Having described the organisational view of projects, and discussed the challenges, context, the link to mission, vision and strategy, and the role projects, programmes and portfolios have in delivering results, we can now consider in Chapter 4 the concept of organisational competence of managing projects.

4 Organisational competence in managing projects

This chapter describes the concept of organisational competence in general and the concept of organisational competence in managing projects. It includes a high level view of the competence elements and the interaction with, and influence of, an organisation's external and internal contexts. It also discusses the need to monitor the performance of projects and programmes, and how the IPMA Project Excellence Model (PEM) can be used to assess project performance. As mentioned above, IPMA OCB is not a textbook or cookery book - the focus is rather on what to do and not on how to do it. Each organisation needs to tailor the concept to its specific needs and abilities.

4.1 *Concept of organisational competence*

ISO 17024 defines competence as the 'ability to apply knowledge and skills to achieve intended results.' The ICB expands the definition to, 'a competence is a collection of knowledge, personal attitudes, skills and relevant experience needed to be successful in a certain function.' Both definitions are aimed at individuals. Nevertheless, the concept of competence could also be applied to groups of people (e.g. project teams, departments, organisations, networks or societies). In these cases, competence is much more than the collective competence of its individuals. The coherence of that group with all the dynamic interactions between the members and relevant stakeholders constitutes a social system (as discussed in 3.1).

There is a rich heritage that supports the concept of organisational competence. One of these concepts, that of 'core competences', can be summarised as differentiated skills, complementary assets, and routines, providing the basis for a firm's competitive capacities and sustainable advantage. Other concepts highlight the inherent capabilities of an organisation to reach stakeholder-specific and situation-dependent goals, whilst this capability consists of the situation-specific combination of all possible individual-based, structure-based and asset-based attributes manageable by an organisation at a time. Furthermore, the evolutionary development of organisation can be seen as an organisation's ability to integrate, build and reconfigure internal and external resources and competencies to cope with rapidly changing environments.

4.2 *Concept of organisational competence in managing projects*

This standard defines the organisational competence in managing projects as the ability of organisations to integrate people, resources, processes, structures and cultures in projects, programmes and portfolios within a supporting governance and management system. Organisational competence in managing projects is specifically aligned with the mission, vision and strategy of the organisation and is intended to achieve results as well as to ensure continuous organisational development. Figure 4-1 gives an overview of organisational competence in managing projects.

An organisation is shown with boundaries separating it from the external context. In the external perspective, the organisation needs to address the needs of different stakeholders, such as customers, suppliers or service providers, comply with legislation and different regulations, respond to different cultures, markets, the environment, and available resources in order to fulfil operational needs. The activities of the organisation need to be based on a solid understanding of all these contextual factors, which also need to adapt in order to meet the changing external environment.

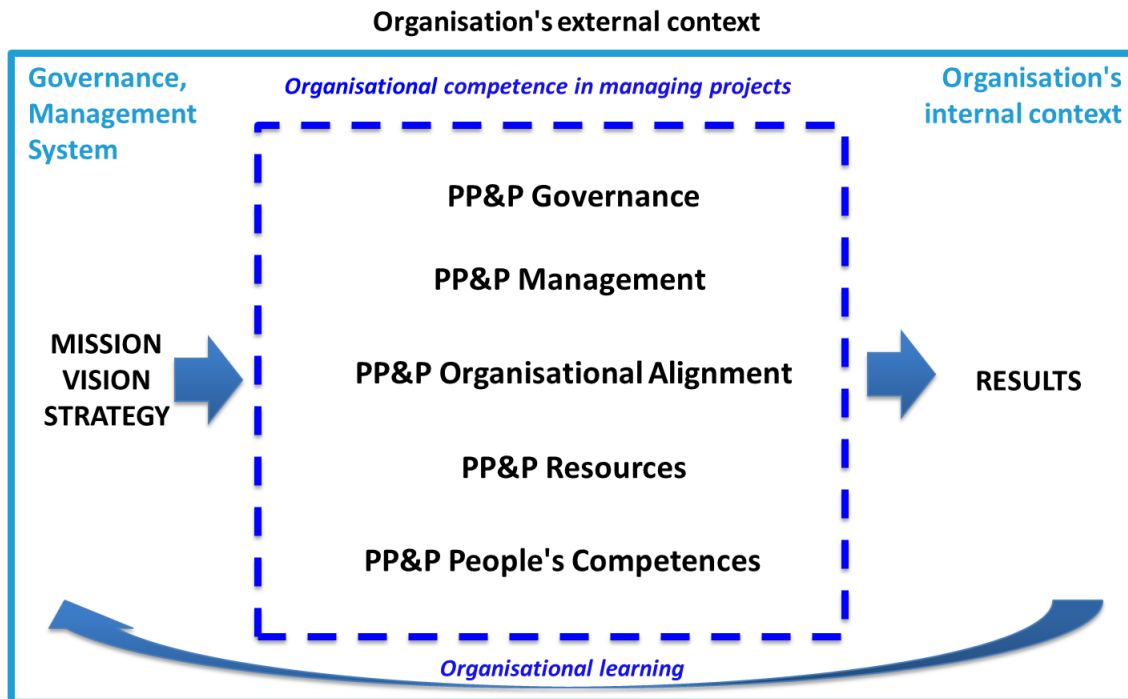


Figure 4-1: Overview of organisational competence in managing projects

Within the organisation's boundaries, the internal context consists of many factors which are needed for organisational competence in managing projects. These include, but are not limited to:

- a. Governance and management systems,
- b. Organisational structure,
- c. Processes,
- d. Culture,
- e. People and teams,
- f. Resources.

a. Governance and management of projects, programmes and portfolios (PP&P) need to be aligned and linked with the organisation's overall governance and management system. The principles of Corporate Governance are translated into the PP&P governance system and all PP&P management functions are linked to the organisation's management system.

b. Organisational Structure. An important aspect of integration in the concept of organisational competence in managing projects is the alignment of organisational structures. Alignment is needed between temporary parts of the organisation (e.g. PP&P functionalities) and the permanent parts, between roles and responsibilities in PP&P and other parts of the organisation, between internal units and units of external partners, as well as alignment of structures for communication, reporting, decision making and escalation. Such alignment will provide smooth and efficient operation through all interfaces.

c. Processes. The integration of internal and external processes in projects, programmes and portfolios is crucial for efficiency: this includes the alignment of product and support processes with processes used in PP&P. Also, PP&P processes need to be aligned with the relevant processes of external partners, such as customers, suppliers or regulators. Process alignment is often achieved through the synchronisation of milestones and/or quality gates.

d. Culture. People naturally develop a certain culture working within a social system. A culture can be defined as: a set of shared views, values, or beliefs, guiding people consciously or unconsciously through their actions. In international projects, the different behaviours of people from other countries can often be observed. This may cause team members to feel uncomfortable or be unsure how to react. The same applies within or between organisations. Organisations develop their own unique corporate culture embedding all the shared views, values, or beliefs of the people involved. Also, within any organisation there will be variants of this corporate culture: in a research department people need to have freedom to be creative; in a temporary organisation such as a project or programme, a project-oriented culture will develop.

Typically a project-oriented culture will have a strong focus on delivery and results, a clear team orientation, a significantly higher tolerance towards ambiguity and failures, extroversion and open exchange of knowledge. People working within a project-oriented culture need to take account of the cultures of internal and external partners in order to build effective working relationships, and avoid conflicts. Top management should seek to encourage a project-friendly corporate culture within an organisation, allowing the temporary project and programme teams to create an effective working environment within the permanent parts of the organisation. Acknowledging the different cultures in an organisation and encouraging communication about the differences will help to develop cultural awareness and to align permanent and temporary parts of the organisation as well achieving better cooperation with external partners.

e. People and Teams. Organisational competence in managing projects is built on the most important assets in an organisation: the people and their individual competences. However, teamwork is essential for effective and efficient project delivery. PP&P managers need to build effective teams of individuals who are competent working in a team environment, and can communicate effectively with internal and external stakeholders. The competence requirements should be defined for all PP&P managers, team members and staff interacting with projects, programmes and portfolios. Recruiting and competence development activities should be based on the defined competence requirements, which support the development of organisational competence in managing projects.

f. Resources relevant to PP&P include, but are not limited to: finance, intellectual property rights, material, equipment, and facilities. Resources, and their availability, need to be taken into account in developing organisational competence in managing projects.

Organisational competence in managing projects develops in response to many factors over time. Triggers could be external events such as economic turbulence or the availability of new methods in the field of project management. An internal occurrence might be, for example, the arrival of a newly hired project management professional who might organise the project in a more effective way. Furthermore, organisational learning and continuous improvement activities may improve organisational competence in managing projects. An organisation will mature through these triggers, following an evolutionary development path.

Top management has a crucial role in analysing the current status quo of organisational competence in managing projects. It needs to set clear objectives for future developments (e.g. strategic goals for project management including those for effectiveness, efficiency and overall performance), and must implement appropriate action. Top management should set, and pro-actively implement, standards for organisational competence in all project management elements. It should monitor and control the application of standards and encourage sustainable development. This includes, but is not limited to, using lessons learned from previous projects, building communities of practice for PP&P personnel, exchanging experiences and benchmarking organisational competence in managing projects with internal and external partner organisations.

Top management should pay particular attention to the results achieved by projects. A tool for measuring achievements in projects is the IPMA Project Excellence Model (IPMA PEM), which is used to assess the performance of projects for the IPMA Project Excellence Award. IPMA PEM is based on the model of European Foundation for Quality Management (EFQM).

Figure 4-2 shows the IPMA PEM model. The left side has five criteria for the application of project management in a project: goal orientation, leadership, people, resources and processes. The right side has criteria for the results in a project. In addition to the direct results, the satisfaction of the customer, people and other stakeholders should be considered. The results of such an assessment can help a project team and the organisation to reflect on its own strengths and potential areas for improvement.

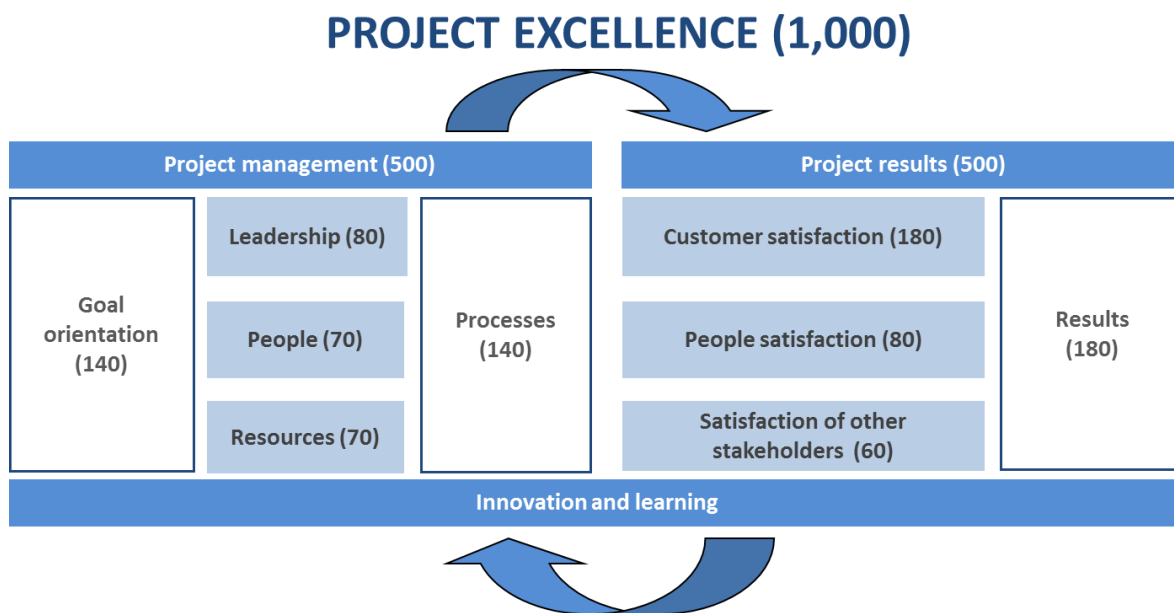


Figure 4-2: IPMA Project Excellence Model

Top management should also monitor and control the mid and long-term results of all programmes (e.g. benefits realisation, organisational changes), and portfolios (e.g. financial results, use of critical resources) in contributing to the mission, vision and strategy of the organisation.

Having described the concept of organisational competence in managing projects, an overview of the competence elements and the influence of, and interaction with, the external and internal context, Chapter 5 discusses the grouping of the competence elements, describes each element and discusses how they interact.

5 Groupings, competence elements and interactions

This chapter starts with a discussion of the grouping of the competence elements. There follows a high-level description of each element and an explanation of how these interact.

5.1 Grouping of competence elements

The grouping of the competence elements is based on the concept of organisational competence in managing projects shown in Figure 4-1. In Figure 5-1, the five groups and their competence elements are shown in context, and are described in more detail below.

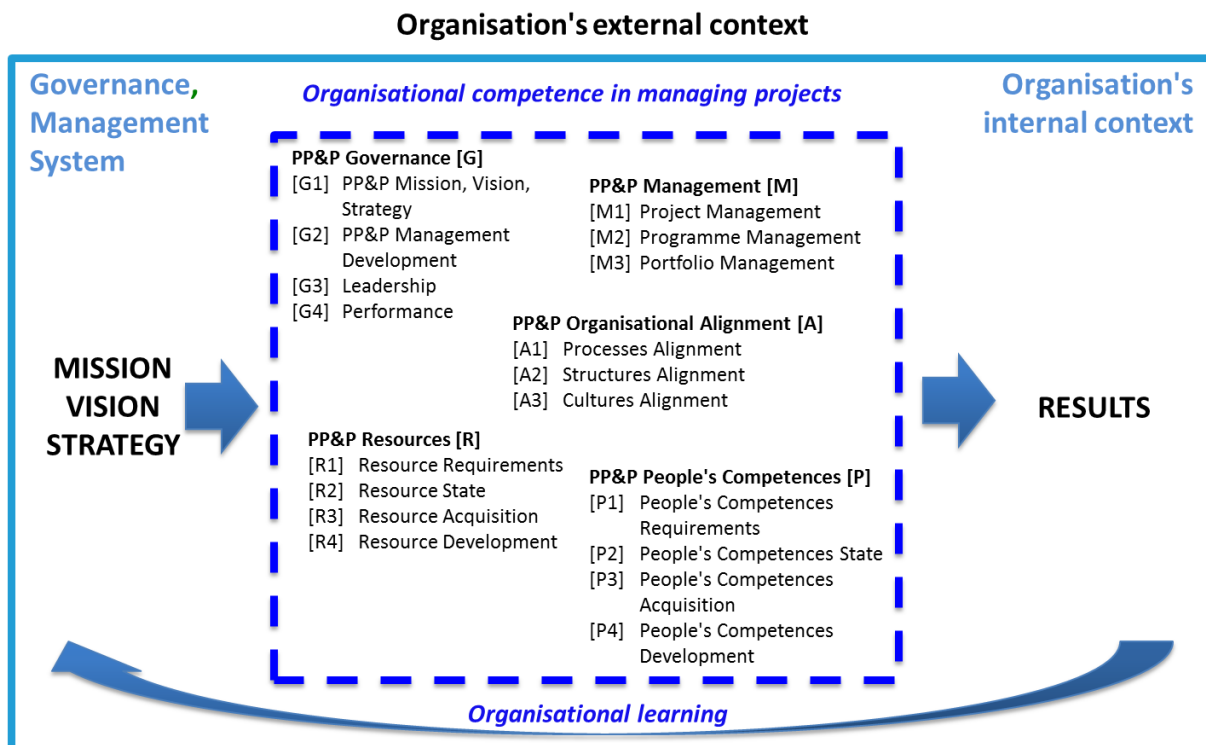


Figure 5-1: Overview of all Competence Elements

The first group of competence elements is PP&P Governance [Group G]. It is that part of Corporate Governance that concerns projects, programmes and portfolios. Usually, PP&P Governance is the responsibility of top management or steering boards. It includes, but is not limited to, the provision and effective communication of strategic views, policies, guidelines, leadership, decisions, monitoring and controlling of performance and direction of sustainable development of the organisational competence in managing projects.

PP&P Governance [Group G] contains

- PP&P Mission, Vision, Strategy [G1];
- PP&P Management Development [G2];
- Leadership [G3];
- Performance [G4];

The second group of competence elements is PP&P Management [Group M]. It is that part of the organisation's management system concerning projects, programmes and portfolios. It is the responsibility of management functions at different levels, either in permanent or temporary parts of the organisation. There are competence elements for the management of projects, programmes and portfolios, which are supported by teamwork and effective communication.

PP&P Management [Group M] contains

- Project Management [M1];
- Programme Management [M2];
- Portfolio Management [M3];

The third group of competence elements is PP&P Organisational Alignment [Group A]. It is a group of competences that relates to ensuring alignment between key organisational and PP&P management elements. It is undertaken by PP&P managers with support of other functional managers. In this group, there are competence elements for the alignment of processes, structures and cultures of PP&P with both internal and external parties. These are supported by teamwork and effective communication.

PP&P Organisational Alignment [Group A] contains

- Processes Alignment [A1];
- Structures Alignment [A2];
- Cultures Alignment [A3];

The fourth group of competence elements is PP&P Resources [Group R]. It relates to top management's overall goals and expectations for resource availability and utilisation. It is undertaken by PP&P management together with other support functions, (e.g. finance, legal, purchasing, technology). In this group, there are competence elements for defining the requirements for resources, the current state of resources, the acquisition of suitable resources and their development.

PP&P Resources [Group R] contains

- Resource Requirements [R1];
- Resource State [R2];
- Resource Acquisition [R3];
- Resource Development [R4];

The fifth group of competence elements is PP&P People's Competences [Group P]. It relates to top management's overall goals and expectations for people competences, including teamwork, communication, performance and recognition. It is undertaken by the PP&P management supported by Human Resource (HR) management together with other functional managers. There are competence elements for the people's competences requirements, the current state of people's competences, the acquisition of suitable competences and their sustainable development.

PP&P People's Competences [Group P] contains

- People's Competences Requirements [P1];
- People's Competences State [P2];
- People's Competences Acquisition [P3];
- People's Competences Development [P4];

5.2 Overview of competence elements

This section presents an overview of the competence elements. More detail is provided at Annex A.

PP&P Mission, Vision, Strategy [G1]

The long-term development of an organisation's competence in managing projects should be directed by its PP&P mission, vision and strategy which are based on the organisation's mission, vision and strategy.

The PP&P mission defines the rationale and purpose of its functions. The vision explains the intended goals and objectives of the PP&P functions, providing direction and focus to its members and other stakeholders. PP&P strategy shows how the vision should be realised.

Top managers together with senior executives and PP&P managers establish, communicate, monitor and control the PP&P mission, vision and strategy. PP&P managers and staff act accordingly.

PP&P Management Development [G2]

PP&P management needs to be continuously developed, responding to changing conditions in the internal and external context and environment. All development activities should be guided by the PP&P mission, vision, strategy and enable the organisation to satisfy stakeholder needs.

PP&P Management can be developed using various methods. These include the reviewing of lessons learned and exchanges of experiences in other projects or programmes. The benchmarking of organisational competence in managing projects using internal and external partners is helpful. Innovation sessions to explore new ideas can be productive.

Top managers together with senior executives set and communicate targets and provide resources and support for the PP&P Management Development. PP&P managers and staff undertake development activities.

Leadership [G3]

Based on the PP&P mission, vision and strategy, all management levels should be actively involved in PP&P management: showing commitment, providing leadership and seeking to continuously developing the PP&P management system and personnel.

An organisation's leadership is shown by defining and communicating clear goals for PP&P. Expectations are clarified for the management of PP&P. The organisation needs to provide the resources for all PP&P activities and establish comprehensive communication with all stakeholders. A robust decision making process with defined regulations and guidelines for issue and decision escalation should be put in place.

Top managers with senior executives provide leadership through effective communication and their governance functions. PP&P managers lead the assigned staff members who then act accordingly.

Performance [G4]

In a competitive environment, organisations strive to achieve a high degree of performance in the management of PP&P. They achieve the PP&P goals in an effective and efficient manner by mobilising people and resources to best effect to meet the organisation's mission, vision and strategy.

PP&P management needs to meet the performance targets set and communicated by top management or senior executives. Targets can focus on the performance in projects, programmes or portfolio as well as the management of PP&P, e.g. through the optimisation of resources between projects. Performance should be monitored and controlled using KPIs. Information and document management systems should support the management and performance reporting of PP&P.

Top managers together with senior executives set performance targets. They monitor and control these targets on a regular basis. PP&P managers and staff act accordingly, record and report back to top management.

Project Management [M1]

An organisation performs projects in order to reach desired results. Therefore, it should have a project management standard (e.g. processes, methods, tools), which enable the PP&P mission, vision, and strategy. These standards are part of the organisation's management system.

Project management is performed by teams of people using effective communication and processes. ISO 21500 describes a full set of such processes from project initiation through to the closing of a project. Each project is unique; therefore project management standards should be tailored to the needs of each project. Specific regulations and guidelines should be available showing PP&P managers and staff how to use the project management standards.

Top managers together with senior executives define and communicate their expectations for project management standards. Often, the executives directing project management activities (e.g. PM Director) are responsible for the development of such standards. PP&P managers and staff act accordingly and participate in continuous improvement.

Programme Management [M2]

An organisation conducts programmes in order to realise benefits. It should have programme management standards (e.g. processes, methods, tools) enabling the PP&P mission, vision, and strategy. These standards are part of the organisation's management system.

Through programme management, constituent projects are coordinated so that the desired benefits of the programme are achieved. This includes, but is not limited to, initiating, planning, controlling and closing of projects as well as allocating the necessary resources. Regulations and guidelines should be available showing PP&P managers and staff how to use and tailor the programme management standards. Teamwork and effective communication are considered to be essential competences.

Top managers together with senior executives define and communicate their expectations for programme management standards. Often the executives directing programme management activities (e.g. PM Director) are responsible for the development of such standards. PP&P managers and staff act accordingly and participate in continuous improvement.

Portfolio Management [M3]

Through portfolios an organisation manages projects and programmes in a coordinated way. It should have portfolio management standards (e.g. processes, methods, tools) which enable the PP&P mission, vision, and strategy. These standards are part of the organisation's management system.

Through portfolio management, the constituent projects, programmes and/or sub-portfolios are coordinated so that the PP&P mission, vision, and strategy are achieved. This includes, but is not limited to, selecting, initiating, monitoring and controlling projects and programmes as well as allocating the necessary resources. Regulations and guidelines should be available showing PP&P managers and staff how to use these portfolio management standards. Teamwork and effective communication are considered to be essential competences.

Top managers together with senior executives define and communicate their expectations for portfolio management standards. Often the executives directing project management activities (e.g. PM Director) are responsible for the development of such standards. PP&P managers and staff act accordingly and participate in continuous improvement.

Process Alignment [A1]

Projects, programmes and portfolios are performed by people using processes. The processes used for the management of PP&P should be aligned with those of relevant internal parties (including operations and support), and external parties (including clients and suppliers). Alignment aims ensure the effective and efficient delivery of PPP goals and performance targets through the co-ordination of processes across relevant internal and external parties. Alignment is supported by teamwork and effective communication.

Internal and external processes relevant to the management of PP&P should be identified to all relevant managers and staff. The organisation should have regulations and guidelines available for the alignment of processes identifying all interfaces (e.g. milestones) and how processes used in PP&P should be aligned. A continuous improvement cycle should be applied to the process alignment.

Top managers together with senior executives define and communicate their expectations for process alignment. Usually, the executives directing project management activities (e.g. PM Director) are responsible for the development of appropriate regulations and guidelines. PP&P managers and staff act accordingly and participate in continuous improvement.

Structural Alignment [A2]

Projects and programmes are typically managed using a temporary organisation whereas portfolios are managed by a permanent function. Organisational units and functions involved with the management of PP&P should be aligned with relevant internal and external parties. Alignment aims to ensure the effective and efficient delivery of PP&P goals and performance targets set by top management. Alignment is supported by teamwork and effective communication.

Internal and external organisational units and functions relevant to the management of PP&P (e.g. PP&P roles, teams, PMO, steering boards) should be identified to PP&P managers and staff. The organisation should have regulations and guidelines available for the alignment and effectiveness of structures identifying all interfaces and how structures used in the management of PP&P should be aligned. Structural alignment should be regularly reviewed and action taken to maintain alignment.

Top managers together with senior executives define and communicate their expectations for structural alignment. Usually, the executives directing project management activities (e.g. PM Director) are responsible for the development of appropriate regulations and guidelines. PP&P managers and staff act accordingly and participate in continuous improvement.

Cultural Alignment [A3]

Projects, programmes and portfolios are performed within a specific cultural environment, which influences the behaviour of the people managing them. PP&P cultures should be aligned with cultures of relevant internal and external parties. Alignment aims to ensure the effective and efficient delivery of PP&P goals and performance targets set by top management. Alignment is supported by teamwork and effective communication.

The cultural environment, (e.g. values, visions, norms, symbols, beliefs and ethics) of internal and external organisational units relevant to the management of PP&P should be identified to PP&P managers and staff. The organisation should have regulations and guidelines available for cultural alignment identifying how cultures could be aligned. Cultural alignment should be regularly reviewed and action taken to maintain alignment.

Top managers together with senior executives define and communicate their expectations for cultural alignment. Usually, the executives directing project management activities (e.g. PM Director) are responsible for the development of appropriate regulations and guidelines. PP&P managers and staff act accordingly and participate in continuous improvement.

People's Competences Requirements [P1]

Projects, programmes and portfolios are performed by people. In order to meet the organisation's PP&P mission, vision and strategy, the competences required of managers, team members and personnel involved with projects, programmes and portfolios should be clearly defined, including teamwork and communication.

People undertaking projects, programmes and portfolios need to meet certain competence requirements. The ICB defines a full set of individual competences for several PP&P roles. An organisation should define the qualitative and quantitative requirements for people's competences (e.g. competence matrix, role description, HR and succession planning) for all people involved in PP&P, based on the PP&P mission, vision and strategy.

Top managers together with senior executives define and communicate their overall goals and expectations for PP&P People's Competence Requirements and set standards. The HR Department is usually responsible for establishing appropriate regulations and guidelines. Together with the executive directing the project management activities, the HR department defines, plans and controls these competence requirements.

People's Competences State [P2]

The current state of an organisation's people's competences should be identified against the defined people's competences requirement. A comparison between the defined requirement and the current state of people's competences will enable strengths and areas for improvement to be identified at individual, team and organisational level.

The organisation should plan how to exploit identified strengths and how to improve others. For an individual this could include training and development, coaching and mentoring. For the organisation, this could include the acquisition of competent staff, as well as training and development programmes for existing staff.

Top managers together with senior executives define and communicate their overall goals and expectations regarding the state of people's competences and set standards. The HR Department is usually responsible for establishing appropriate regulations and guidelines, and conducting competence assessments, typically with the help of the executive directing project management activities and supported by PP&P managers and staff.

People's Competences Acquisition [P3]

Organisations must have the right people with the right competences available for their projects, programmes and portfolios. Therefore, organisations should take appropriate action to acquire people with the right competences to achieve their PP&P mission, vision and strategy.

The organisation should identify suitable sources, internally or externally, from where to acquire the right people with the right competences to fulfil the PP&P mission, vision and strategy. Organisations should ensure their acquisition processes (e.g. recruiting and contracting) are effective and efficient. The people should be selected against pre-defined competence requirements, which should also be used for assignments.

Top managers and senior executives define and communicate their overall goals and expectations for PP&P People's Competences Acquisition. The HR Department is usually responsible for establishing appropriate regulations and guidelines as well as acquisition/recruitment. PP&P managers often support the acquisition/recruitment process.

People's Competences Development [P4]

The competences of people deployed in projects, programmes and portfolios need to be developed against the defined competence requirements in order to achieve the PP&P mission, vision and strategy. Competence development also satisfies people's expectation for personal development.

The organisation should provide a framework together with regulations and guidelines for the development of competences. It should show career development opportunities and the available approaches for developing competences (e.g. coaching, training, mentoring, on-the-job training, simulation and certification). Development targets should be derived from the competence requirements and agreed between an individual and their managers.

Top managers, together with senior executives, define and communicate their overall goals and expectations for PP&P People's Competence Development and provide active support and resources. The HR Department, often supported by the executive directing project management activities, is usually responsible for establishing the framework, regulations, and guidelines, as well as ensuring the provision of development opportunities. PP&P managers should support the competence development of their staff.

Resource Requirements [R1]

Projects, programmes and portfolios require resources (e.g. financial resources, know-how, materials and energy). Resource needs should be clearly defined in order to fulfil the PP&P mission, vision and strategy.

The organisation should identify the short, mid and long-term resource requirements for all projects, programmes and portfolios and compare these needs with currently available resources. The gaps between available and required resources show where effort may be required for resource acquisition and development.

Top managers, together with senior executives, define and communicate their overall goals and expectations for Resource Requirements. Often specific functional departments (e.g. purchasing, finance and legal) are responsible for establishing appropriate regulations and guidelines and for defining the requirements. PP&P managers and staff can support this role.

Resource State [R2]

The current state of available resources should be identified against the defined requirements. A comparison between the identified requirements and the current state of available resources will enable any gaps to be identified.

The organisation should plan how to satisfy the identified resource gaps which could include the acquisition of required resources and the development of existing resources.

Top managers, together with senior executives, define and communicate their overall goals and expectations for identifying the current Resource State. The relevant functional departments are responsible for establishing appropriate regulations and guidelines and identifying the current resource state. PP&P managers and staff can support the identification process.

Resource Acquisition [R3]

Organisations need to have sufficient resources (e.g. financial resources, know-how, assets, and support services) to undertake their projects, programmes and portfolios. Organisations should take the appropriate action for the acquisition of missing resources to achieve their PP&P mission, vision and strategy.

The organisation should identify potential sources (e.g. suppliers and service providers), from which to acquire the resources to fulfil the PP&P mission, vision and strategy. Organisations should ensure their acquisition/contracting processes are efficient and effective. The selection of resources should be based on pre-defined requirements which should also be used to determine the allocation of resources to projects, programmes and portfolios.

Top managers together with senior executives define and communicate their overall goals and expectations for Resource Acquisition. The Purchasing Department, with support of the executive directing project management activities and other functional departments, are usually responsible for establishing appropriate regulations and guidelines as well as performing the acquisition. PP&P managers may support the acquisition process.

Resource Development [R4]

Resources necessary for projects, programmes and portfolios need to be developed in order to meet resource requirements. These are needed to deliver the PP&P mission, vision and strategy. The aim is to secure resource availability and utilisation in a sustainable manner.

The organisation should provide a framework together with regulations and guidelines for developing resources. This could include measures such as integrating external partners into the organisation's supply chain, utilising internal support functions (e.g. financial, legal and ICT functions) as well as acquiring required know-how to implement PP&P.

Top managers together with senior executives define and communicate their overall goals and expectations for Resource Development and provide active support and resources. The relevant functional departments are responsible for establishing regulations and guidelines and developing the required resources. PP&P managers can support the development process.

5.3 Interactions of competence elements

The IPMA OCB is a complex model with various interactions between the component elements. These interactions should be considered whilst developing the organisational competence in managing projects.

An analysis of the interactions has shown that the competence elements 'PP&P Mission, Vision and Strategy', 'PP&P Development' and 'Leadership' have the greatest impact on all other competence elements. They can be seen as the main enablers for an organisation setting the framework and directing activities within projects, programmes and portfolios. The focus for developing organisational competence in managing projects should be on these three competence elements.

The following competence elements were seen to be strongly influenced by others: 'Performance', 'Project Management', 'Programme Management' and 'Portfolio Management'. These need to be constantly reviewed and updated to maintain alignment.

Having described the grouping of the organisational competence elements, each element and how they interact, Chapter 6 discusses the development of organisational competence in managing projects.

6 Development of the organisational competence in managing projects

Organisations are subject to constant change. Change may be caused by external factors (e.g. new technologies, economic cycles and legislation) or internal factors (e.g. new products or services, and mergers and acquisitions). All changes require the organisation to react in order to ensure its long-term survival and success. An organisation is considered successful if it achieves its annual goals over the long term for the benefit of all stakeholders.

Considering an organisation as a social system with evolutionary processes as found in nature is a useful way to explain organisational development. According to the theory of evolution, natural selection drives development in the natural world. In the long run, only those organisms that are able to adjust to their environment survive. The same principles could be applied in the economic world, where organisations must constantly adjust to changing conditions. Only organisations that are successful in adjusting to change by finding solutions to new challenges survive and succeed. These solutions must work within the context and resources available at any point in time.

Therefore, organisations should regularly analyse their context and environment, identify relevant trends and develop their strategies, processes, structures, culture and competences accordingly. Top management's main responsibility, especially in project-oriented organisations, is to identify changes in the environment and to initiate appropriate action to develop the organisation's competence in PP&P, with the support of senior executives, managers and staff.

Chapter 6 describes the relationship between the IPMA OCB and IPMA Delta. The IPMA OCB is a standard which describes organisational competence in managing projects. IPMA Delta is the approach IPMA uses to assess an organisation's development of organisational competence in managing projects. However, it should be noted that although the IPMA Delta approach is IPMA's preferred way to assess and develop organisational competence in managing projects, the description in chapter 6 should be seen as an example only. There may be other assessment approaches that are able to serve the same purpose.

The IPMA OCB and IPMA Delta are both based on the concept of competences. They have been developed to enable organisations to understand the concept of organisational competence in managing projects. They provide a tool to assist the development of an organisation's competence.

The IPMA Delta assessment of an organisation's competence in managing projects is made against a competence class. The competence classification and classes are described at 6.1. The approach used by IPMA Delta for the assessment of an organisation's competence is described at 6.2. Approaches to the development of organisational competence in managing projects are discussed at 6.3, which also addresses innovation and organisational learning.

6.1 Organisational competence development classification

IPMA Delta uses the concept of competence classes to help assess the current project management competence state of an organisation. IPMA Delta follows a similar approach as other assessment systems such as EFQM and CMMI in the definition of the classes. In general, development of competence can be seen to follow a development path from Initial, through Defined, Standardised, Managed and Optimising. However it should be noted that not all organisations need to aspire to the Optimising class. The appropriate class for any particular organisation depends on the business need, and the competitive environment in which it operates.

competence class	criteria for assessment	existence of standards	application of standards	management of standards	stakeholder engagement	results in line with targets	project achievements are likely on
initial		per project	limited	not yet	project owner (PO)	some good results but often challenged targets for time, budget and scope	personal level
defined		partially	per project	limited	PO and essential internal stakeholders	below benchmark	project level
standardised		mostly	partially	per project	PO and all relevant internal stakeholders	at benchmark	projects based on standards and procedures
managed		fully	mostly	partially	PO, all internal stakeholders and all essential external stakeholders	substantially above benchmark portfolio overrun at benchmark	projects in alliance with programmes and/or portfolios
optimising		tailoring to the project	fully	continuously improving	all relevant stakeholders	most projects meet objectives, only very small portfolio overrun	PP&P in alliance with the organisation's strategy, generally achieving their objectives

Table 6.1: Competence class characteristics

a. Initial Class

In the Initial class, the organisational competence in managing projects is primarily focussed on achievements at a personal level. There are individuals and projects performing well, but overall performance is coincidental. Project results often exceed budget and timeframe and deliver only part of the agreed output. No real vision and no processes or structures related to PP&P are present at the level of the organisation. There are almost no formal PP&P standards in place. There might also be a tendency to overburden and / or abandon the management processes for PP&P in times of severe crisis. There may be no ability to repeat successes. In this situation, experienced project managers can have positive effects on PP&P management.

Top management should start development from the Initial Class by initiating a development programme, supported by senior executives, PP&P managers and staff. Executives directing project management activities (e.g. PM Director, PMO Director) can act as project owners for the competence development programme. If such posts do not exist in an organisation, then top management need to appoint a PM Director or allocate the role to existing senior staff. The main enablers for the development programme are leadership support and the ability to lead change. The IPMA OCB can act as a framework (Table 6.1) for developing the organisational competence in managing projects. In the development of organisations from the Initial Class the main focus is on structuring individual projects and developing the PM knowledge of PP&P personnel and their functional line managers. The primary stakeholder, the project owner, needs to be fully engaged in managing stakeholders, both internally and externally, defending and promoting the benefits of the project.

b. Defined Class

In the Defined Class, PP&P standards are partially in place. They are applied for each project but are not yet under management control. Project management is mostly delegated to the various organisational units, and there is no organised development. Functional line managers involved with projects, are generally poorly prepared and facilitated to perform their roles. Project results are below the benchmark of successful projects (in budget, time and performance). Projects are partially planned and executed in accordance with the standards; they deploy competent people having adequate resources to produce controlled outputs. The disciplined application of PM processes helps to ensure that existing practices are maintained during times of stress. With these practices in place, projects are more likely to perform and be managed in accordance with documented plans. The status of these projects is visible to management at defined points (e.g. at major milestones).

Development of organisations from the Defined Class focuses on completing the required PM standards. Improvements are made in the understanding and application of the standards. Management control is initiated at the project level in relation to the development and application of the standards. The organisation starts to define and introduce centralised management structures to govern and manage projects. Key stakeholders, such as the project owner, suppliers and users, need to be engaged in most projects. They manage internal and external stakeholders. They defend the project, promote the benefits and provide the required resources and specifications.

c. Standardised Class

In the Standardised Class, the PP&P standards are mostly in place and have been communicated to all stakeholders. The PP&P standards are partially applied by PP&P staff and are under management control. Governance and management systems are applied to control most individual projects and programmes. Centralised functions for project and programme management are set up, acting as a PP Competence Cluster. Project and programme competence is measured and developed. Functional line management is prepared and facilitated to perform its roles in projects. Resource management is introduced at the project, programme and portfolio levels. Internal stakeholders - the project owner, suppliers, future users and support functions, need to be engaged in managing internal and external stakeholders. They defend the project, promote the benefits, and provide the required resources, specifications and support. Project and programme results meet the benchmark of successful projects and programmes - within budget, on time, to the required performance and to stakeholder's satisfaction.

PM processes, methods and tools are well characterised and understood. These standard processes are used to establish consistency across the organisation and improve collaboration. Projects adapt their own processes based on the organisation's set of standard processes according to tailoring guidelines. All PM is planned and executed in accordance with the standards; they fully deploy competent people who have adequate resources to produce controlled outputs. The standards, structures and processes ensure consistent application throughout the organisation and minimise risk during periods of stress. Project results are at the benchmark with comparable organisations. PP&P are predictable and performing in accordance with documented plans. Top management and all senior management levels are actively involved in PM, demonstrating real commitment.

Development of organisations from the Standardised Class focuses on achieving the full understanding and application of all PP&P standards and the alignment of the organisation with the PP&P environment. PP&P control is fully in place, including management structures to govern and manage projects in portfolios or programmes.

However, further optimisation may be needed. All internal stakeholders, such as the project owner, suppliers, users and support functions, need to be engaged in nearly all projects. They manage internal and external stakeholders. They should be defending the project and promoting the benefits. They should be providing the required resources and specifications. In addition, all critical external stakeholders who could cause significant disruption should also be involved.

d. Managed Class

In the Managed Class, PP&P standards are fully comprehensive, in place, and are largely applied. Governance and management systems are applied to partially control most individual projects, programmes and portfolios as well as their joint outputs and outcomes, against the organisation's strategy. The PP competence cluster acts as a centre of expertise and is seen as a career path for young professionals in the organisation. PP&P competence is developed and aligned with the organisation's needs. Strengths and weaknesses are identified on a regular basis and corrective action taken when needed. HR and senior management are involved in the development of PP&P managers. Functional line management is evaluated and appraised for its role in projects. Resource management is fully aligned with PP&P requirements and teams are reallocated at the end of projects. Project results are substantially above the benchmark of successful projects and programmes - within budget, on time, with high performance and to the satisfaction of stakeholders. Any portfolio budget overrun is limited to the benchmark. In general the tolerance for the portfolio budget variance is much smaller than the tolerances per project.

The objectives for competence are based on the needs of the organisation and stakeholders such as customers, end users, shareholders and employees. Quality is understood and managed for projects, programmes and portfolios. Performance baselines and models are used in order to set quality objectives that help to achieve business objectives.

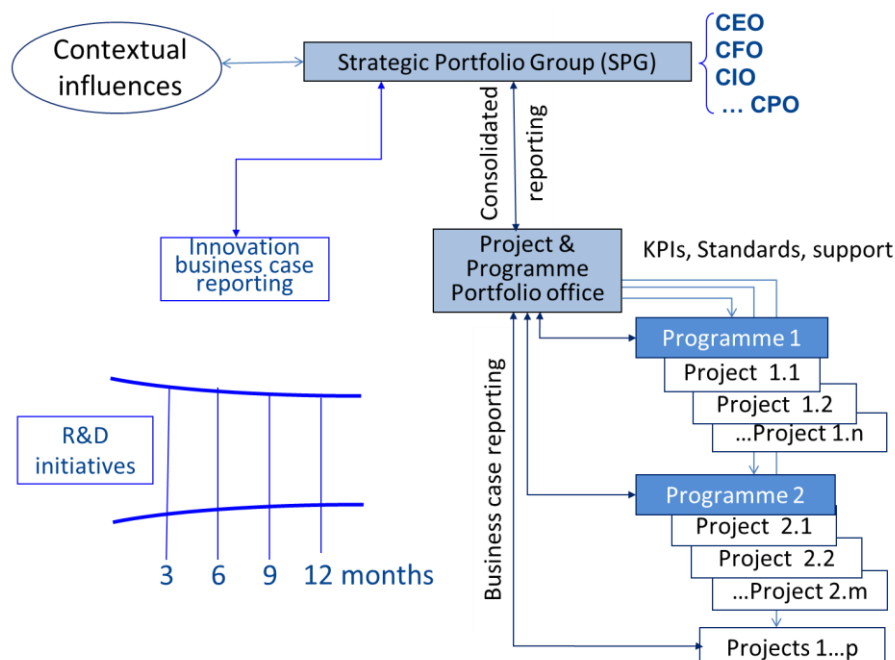


Figure 6-1: Management perspective using PP&P

Development of organisations from the Managed Class focuses on maintaining and applying 'state of the art' PP&P standards. PP&P governance and management systems are well aligned with the permanent organisation, with the PP&P organisation and with the PP&P competence development organisation.

External stakeholders are fully involved with the PP&P management systems which are effective, but may still offer opportunities for efficiency improvement. All internal stakeholders, such as the project owner, suppliers, users and support functions, need to be engaged in all projects. They should be managing the internal and external stakeholders, defending the project and promoting the benefits, and providing the required resources and specifications. In addition all relevant external stakeholders need to be involved, contributing to stakeholder satisfaction.

e. Optimising Class

Optimising is continuous improvement. In the Optimising Class, PM standards, structures and processes are fully implemented and applied within the organisation. The PP&P system as well as the organisation in relation to the PP&P environment is under continuous review and improvement. The PP&P standards and their application are under continuous development within a PP&P support structure. Standards and their application may be tailored to the specific needs of a project or programme.

Top management and all senior management levels are actively involved in PM. There may even be a Chief Projects Officer on board level. Top management and all senior executives set goals for PM and they align vision, mission and strategy with the management of PM. They control all respective activities. Governance focuses on the alignment of projects to organisational vision, mission and strategy and changes in the environment. They take those measures necessary to keep the internal organisation capable of implementing change effectively. An example of this structure is shown in Figure 6-1.

The organisation uses a quantitative approach to understand the variation inherent in the PP&P process and the causes of outcomes. The main tasks at the Strategic Portfolio level are setting KPIs and priorities as well as evaluating consolidated organisational achievements and progress. Management controls individual projects, programmes and portfolios as well as their joint outputs and outcomes, against the organisation's strategy. The PP competence cluster is the centre of expertise and is seen as a career line for young professionals in the organisation. It maintains good relations with all stakeholders involved in PP&P. HR, PP&P competence management, and functional management actively manage PM competence development. All staff members are competent in, and committed to, their roles in projects and continuous personal development. Interrelationships with functional line management roles are well addressed and resource management well aligned to maintain this. Project results fully meet the agreed plans and most projects and programmes are successful with respect to budget, time and performance. Stakeholders are satisfied. Governance and management systems are fully informed, in control of managing priorities, and managing change. Portfolio budget management is within very tight tolerances.

Continuous development of organisations in the Optimising Class focuses on maintaining and applying 'state of the art' ways of working, allowing tailoring for the benefit of specific projects, programmes or portfolios. The organisation's quality and performance objectives are established, and continuously revised to reflect changing context, business objectives and organisational performance. The permanent organisation, the PP&P environment and the PP&P competence development organisation are well aligned, cross evaluate each other and contribute to audits and reviews when requested. The organisation's needs, stakeholder satisfaction and employee satisfaction are the main drivers for continuous development. The organisation is effective and balances efficiency with sustainability.

All internal and external stakeholders need to be effective and efficiently engaged in all projects. They manage the internal and external stakeholders, defend the project and promote the benefits. They assure stakeholders' interests and contribute to the project's success.

6.2 Organisational competence assessment

To assess organisational competence in managing projects, IPMA Delta[®] considers the scope of the organisation to be the collection of people and resources involved in, and connected to, PP&P – those dedicated to achievement of the organisation's PP&P strategy.

The assessment process starts with the competence classification of the organisation in scope. The organisation indicates which class it is in now and which class it would like to achieve in the near future. This indicates to the assessment team which questions from the database are appropriate to use to check the relevant standards, their application and the management surveillance systems. The assessment team requests the organisation's PP&P strategy.

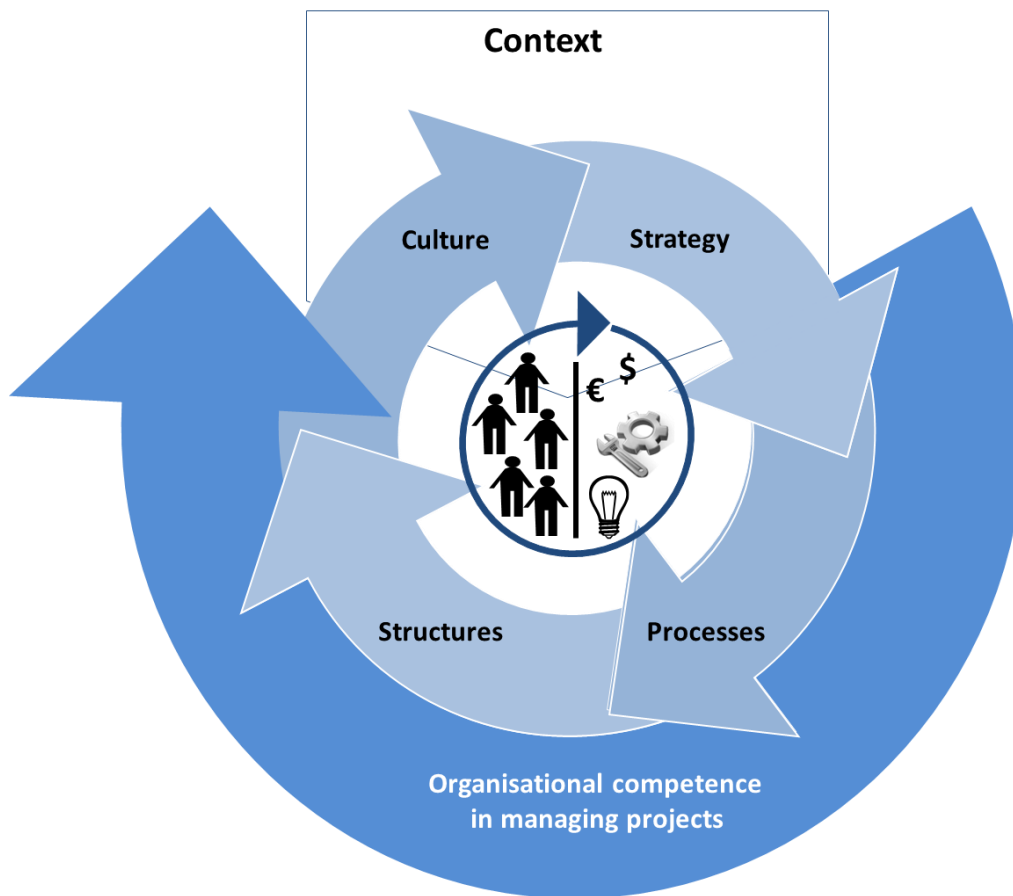


Figure 6-2: IPMA Delta architecture

The concept of IPMA Delta is to provide a 360-degree picture, (Figure 6-2). This concept drove the development of the question set. Assuming an organisation has a clear vision, mission and strategy, the first step is to assess whether this is effectively translated in the PP&P strategy to achieve the goals set by the organisation in relation to its environmental context.

Given a clear PP&P strategy the Delta assessment verifies whether the related processes and structures enable the execution of the PP&P strategy and support further development of this strategy. During the assessment, issues related to having the right resources at the right time at the right place are also verified. The assessment seeks to establish how well the strategy, processes and structures are actually implemented in the organisation, whether staff actually understand and follow it, and whether it is reflected in the PP&P culture of the organisation.

Any gap found between the intended PP&P strategy and its actual implementation, together with the impact of changes in the internal and external environment, drives the need for a revised version of the strategy for PP&P. Evidence of a revised PP&P strategy supports any ambition for further development of the organisation's competence in managing projects.

The IPMA Delta assessment process also considers the competence of individual PP&P staff and the performance of projects and programmes undertaken by the organisation. The assessment team selects a sample of recently completed, or nearly completed, projects and programmes. It takes a sample of PP&P staff involved with them. Assessment of selected projects/programmes and individuals is by self-assessment prior to an on-site assessment of the organisational competence. The results of the project / programme and individual assessments are used by the assessment team to guide the interview questions during the site visit.

IPMA Delta assesses the organisational competence in managing projects with three modules. The I-module is for the self-assessment of individuals, the P-module is for self-assessment of projects and/or programmes, and the O-module is used to guide interviews with selected staff during the onsite visit. The I-module and P-module are used prior to the onsite visit.

The I-module: selected individuals (e.g. project managers, team members, support functions and other stakeholders) are assessed through a self-assessment questionnaire using ICB. There are three types of questions:

- How competent are you?
- Does the organisation recognise your competence and does it support your development?
- Does the project or programme recognise your competence and does it support your development?

The P-module: selected projects and programmes are assessed through a self-assessment questionnaire using IPMA's Project Excellence Model. There are three types of questions:

- How well is the project organised and does it perform?
- Does the organisation support the project/programme to be successful?
- Does the individual show commitment to the project/programme's success?

The results of the I- and the P-questionnaires are analysed by the assessment team to prepare for the site visit with the O-module.

The O-Module: the organisation's executive and senior management, PP&P managers, staff and support functions are assessed during an on-site visit. Every interviewee gets a selection of questions related to the function and role using a multi-dimensional questionnaire. The O-module questionnaire contains questions on the various levels of operation (Strategic, Tactical and Operational) and covers the concept as described before with a large set of questions. The assessment team plans in advance which questions to ask to whom.

In this way the three modules provide a comprehensive picture of the organisation's competence in managing projects, as illustrated in Figure 6-3:

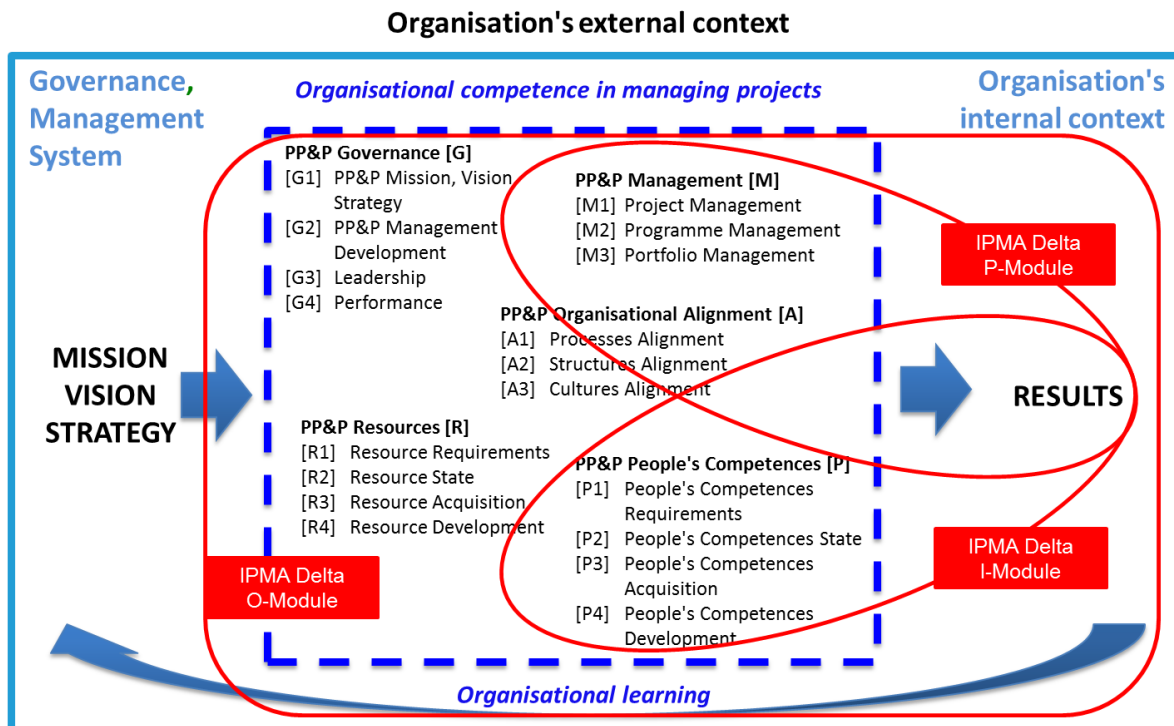


Figure 6-3: Organisational competence in managing projects and IPMA Delta

The assessment report shows the class of competence for each IPMA OCB-competence cluster. The actual class and the difference (Delta) to the desired Competence Class, combined with the detailed findings, can be used to derive development needs and a long-term strategy for organisational development of PP&P. The results can also be used for identifying good practice and for benchmarking against internal or external peers.

6.3 Organisational competence development scheme

Organisational competence development is a combination of organisational learning and innovation applied to the existing PP&P strategy, processes, structures and culture. The fact that the development of organisational competence in managing projects requires strategic commitment at top management level puts a special focus on governance and leadership. Top management needs to set direction, provide sufficient resources and involve all necessary parts of the organisation (permanent and temporary), and stakeholders.

Development of organisational competence in managing projects requires a commitment to continuous development. It is not a just a one-off effort. Typically, on an annual basis, the organisation assesses the current status of PP&P and formulates the goals for the coming budget year. In addition, the organisation should also regularly review its medium term objectives. This considers each of the five competence groups: PP&P Governance, PP&P Management, PP&P Organisational Alignment, PP&P People's Competence and PP&P Resources.

Competence development is directly related to the organisation's annual performance plan in order to achieve the organisation's KPIs and benefits. For each competence group, overall goals set by senior management are broken down into goals and activities. All KPIs should be SMART (Specific, Measurable, Acceptable, Realistic and Time-bound).

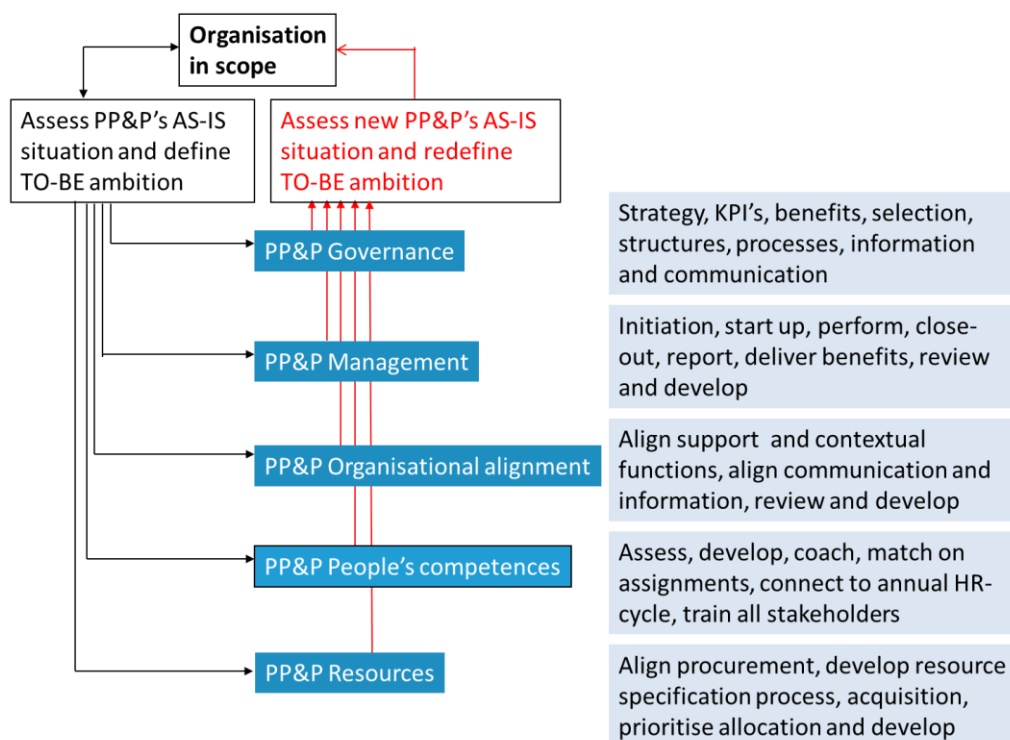


Figure 6-4: Organisational competence development

PP&P competence development should have a permanent place in the organisation. A PP&P competence cluster / organisational unit or a PMO could have responsibility for the development of the organisation's competence in PP&P. The PMO controls and monitors progress against the development plan as well as the management of PP&P in the organisation. It is responsible for consolidating reports to senior management and communicates decisions about necessary changes to the PP&P management. Other tasks include supporting PP&P, managing lessons learned and proposing corrective measures for the development of the organisational competence in PP&P.

Organisational competence in managing projects requires a projects-oriented culture in the organisation, particularly for people and teams who work in and around PP&P. This projects oriented culture needs support at all levels in the organisation and specifically from the PP&P-managers themselves.

Benchmarking against external qualification systems is a key tool for organisational and individual professional development. This is done at an organisation level, at a project / programme level and at an individual PP&P professional level.

To monitor the competence development of an organisation an IPMA Delta® assessment every two to five years can help to assess the current status and advise appropriate short, mid and long-term development measures.

To monitor competence development in conducting projects, an organisation can assess its processes, structures and results. The PEM is a useful tool for this purpose. It is based on the EFQM model and helps to assess how well projects or programmes are performed and whether the results fulfil the expectations of various stakeholders. This assessment can be done either internally (self-assessment), or externally.

Organisations may benefit from participating in the annual IPMA Project Excellence award competition (national or international) in order to acquire independent external feedback. The assessment results can also be used for the purpose of benchmarking. This can be undertaken internally, comparing assessment results from projects and programmes with those of other units within the organisation, or externally comparing the PP performance of different organisations. The organisations chosen for benchmarking can be from the same or different sectors.

To support the competence development of individual PP&P managers, IPMA has developed a certification system. The IPMA four-level certification (4-L-C) program is designed as an on-going competence development process. Every level requires appropriate development in knowledge, experience and assessed competence. While each IPMA Member Association may have different names, and some have additional roles at certain levels, they all use the competence based certification approach, as shown in the model (Figure 6-5).

Project Management Certification



Figure 6-5: IPMA 4-L-C structure

Organisational competence in managing projects is an essential requirement for larger organisations to realise the organisation's strategy. To achieve this, the organisation needs to set up processes and structures to develop projects, programmes and portfolios, and their support facilities. In addition to the certification of project professionals, networking can also assist with the development of the individual as well as the group. Project professionals should continuously develop their competence so that they can deliver the best possible results, satisfying the needs of stakeholders. Personal competence development should be aligned with annual performance and appraisal cycles.

The competence development programme plan should be owned and managed by the organisation itself. Execution can be supported by suitable expert consultants. Annex B provides an outline for such a development programme plan.

Informative annexes

Annex A: Description of competence elements

Annex A provides a more detailed description of the competence elements outlined in paragraph 5.2, including the intended users and their responsibilities, and some key questions that organisations should consider.

1. PP&P Mission, Vision, Strategy [G1]

Project-oriented organisations typically achieve their objectives through projects, programmes and portfolios. The PP&P mission, vision and strategy should direct the long-term development of the organisational competence in managing projects.

The PP&P mission defines the rationale and purpose of the PP&P functions, (e.g. project, programme and portfolio management). An organisation's PP&P vision explains the intended goals and objectives of the PP&P functions, providing direction and focus to the people involved in PP&P and other stakeholders, (e.g. growth rate and intended performance). The PP&P strategy shows how the vision should be realised (e.g. PM functions and competences needed).

The starting point for the development of an organisation's PP&P mission, vision and strategy is the organisation's overall mission, vision and strategy. The latter acts as a framework for PP&P functions and defines the principal goals and requirements. For example, if an organisation intends to do business increasingly on a global scale, the management of projects and programmes needs to deal with an increasingly complex context and therefore needs to develop the respective organisational competences.

The organisation's overall mission, vision and strategy should be updated on a regular basis. Subsequently, the PP&P mission, vision and strategy may also need to be updated. Reasons for updating both the organisation and PP&P missions, visions and strategies, can include: changes in the external and internal context of the organisation, insights and lessons gained through undertaking projects and programmes and the results of an evaluation of the performance of PP&P management.

Management at all levels should collect relevant information for improving the PP&P mission, vision and strategy. Information can be provided by PP&P managers and staff, internal and external consultants and other sources. The information should be analysed and evaluated on a regular basis and used for improving the PP&P mission, vision and strategy.

Intended users' actions:

Usually, top managers together with a team of senior executives define an organisation's mission, vision and strategy. From there they can derive the PP&P mission, vision and strategy, building on information and the support of PP&P managers, consultants and staff.

Senior executives, together with an executive directing the project management activities, may establish, communicate, monitor and control the PP&P mission, vision and strategy based on the directions given by top management. They should ask for information and the support of PP&P managers, consultants and staff.

PP&P managers should use the PP&P mission, vision and strategy to align their activities. They should collect lessons learned from projects and programmes and feed relevant information back to the executive directing project management activities, to enable continuous improvement.

PP&P staff should act in accordance with the PP&P mission, vision and strategy and support all management levels by providing feedback. This should be collected through a rigorous process where lessons learned are reviewed as well as through other continuous improvement activities.

Key questions:

- Does the organisation have a PP&P mission, vision and strategy?
- Is the PP&P mission, vision and strategy aligned with the organisation's overall mission, vision and strategy?
- Does top management effectively communicate the PP&P mission, vision and strategy to all stakeholders and provide the necessary resources?
- Is the PP&P mission, vision and strategy evaluated and updated on a regular basis?
- Does the organisation have a process for collecting, analysing and evaluating information relevant to the PP&P mission, vision and strategy, including a lessons learned process?
- Does top management involve relevant stakeholders (e.g. PP&P managers and staff) while developing or updating the PP&P mission, vision and strategy?

2. PP&P Management Development [G2]

Organisations are facing increasingly changing conditions in their internal and external contexts. For example, suppliers more and more need to demonstrate professional project management in order to acquire new business. This is an example of why organisations need to continuously develop their organisational competence in project management.

The activities to develop PP&P Management should be guided by the PP&P mission, vision, strategy and enable the organisation to satisfy all stakeholder needs (e.g. customers, employees and shareholders). Objectives, aligned with the organisation's overall mission, vision and strategy, should be set and controlled by top management.

The development of PP&P Management is made up of various activities including the use of lessons learned in projects and programmes, the exchange of experience in PM communities, the benchmarking of organisational competence in managing projects with internal and external partners or innovation sessions exploring new ideas.

Intended users' actions:

Usually, top managers together with a team of senior executives define the PP&P mission, vision, strategy. These are aligned with the organisation's mission, vision and strategy. From there they can derive and communicate the objectives for PP&P management development, building on information and the support of PP&P managers, consultants and staff.

Senior executives, together with an executive directing the project management activities, may initiate, facilitate, monitor and control the PP&P management development based on the targets defined by top management. They should establish processes for developing the PP&P management, provide necessary resources and ask for information and the support of PP&P managers, consultants and staff.

PP&P managers should pro-actively support the PP&P management development in accordance with the PP&P mission, vision, strategy and the targets set by top management. For example, they should collect lessons learned from projects and programmes and feed relevant information back to the executive directing project management activities, to enable continuous improvement.

PP&P staff should pro-actively support the PP&P management development, for example by providing feedback from projects and programmes. Feedback should be collected through a process where lessons learned are reviewed as well as other continuous improvement activities.

Key questions:

- Does the organisation have objectives for PP&P management development?
- Are the objectives for PP&P management development aligned with the organisation's PP&P mission, vision and strategy?
- Does top management effectively communicate the PP&P mission, vision and strategy to all stakeholders and provide the necessary resources?
- Are the objectives for PP&P management development updated on a regular basis?
- Does the organisation have a process for developing the PP&P management, collecting, analysing, evaluating and using all relevant information, including a lessons learned process?
- Are all stakeholders (e.g. PP&P managers and staff) actively involved during the PP&P management development?

3. Leadership [G3]

Projects and programmes are undertaken by people. Therefore, leadership is essential for effective PP&P management in organisations. All management levels: top management, senior executives, line managers and PP&P managers, as well as the executive directing the project management activities, should be actively involved in the leadership of PP&P management.

They should clearly demonstrate their commitment to achieve the organisation's PP&P mission, vision and strategy. This should be done through effective communication with all stakeholders, pro-active involvement in PP&P management (e.g. as member of a steering board) and commitment to the continuous development of the organisational competence in project management.

Leadership in PP&P is shown by defining and communicating clear goals for PP&P and clarifying the expectations for the management of PP&P. An organisation's leadership needs to provide sufficient resources for PP&P activities as well as a robust decision making process. This should be based on robust and reliable information (e.g. project reports), linking strategic and operational levels, and it should have defined regulations and guidelines for escalation of issues and decisions.

Leadership also includes establishing effective communication with all stakeholders (e.g. customers, employees and shareholders), using all kinds of media, tools and formats (e.g. face-to-face meetings, telephone conversations, e-mails, internet seminars and social media).

Intended users' actions:

Top managers provide leadership through their governance function. They communicate the organisation's mission, vision and strategy and the PP&P mission, vision, strategy to all stakeholders. It is essential for the success of PP&P management that the top managers demonstrate their commitment and are actively involved in PP&P.

Senior executives provide leadership, also through their governance function. They communicate the PP&P mission, vision and strategy to all stakeholders in their area of responsibility. It is essential for the success of PP&P management that all senior executives

demonstrate their commitment, are actively involved in PP&P and the continuous development of the organisation's competence in managing projects.

The executive directing project management activities communicates the PP&P mission, vision and strategy to all stakeholders. It is essential for the success of PP&P management that this executive helps to clarify the organisation's expectations for PP&P management, is actively involved in PP&P as well as in the development of the organisation's competence in managing projects.

PP&P managers undertake PP&P and lead the assigned staff in accordance with the PP&P mission, vision, strategy, and the targets set by top managers. They are actively involved in PP&P as well as in the development of the organisation's competence in managing projects, and provide feedback to the leadership: top managers and senior executives.

PP&P staff members act in accordance with the leadership provided by all management levels. They should be involved in the development of the organisation's competence in managing projects and provide feedback with respect to the leadership shown in PP&P.

Key questions:

- Do all management levels show commitment and are they actively involved in PP&P?
- Do top managers and senior executives define and communicate goals, and clarify their expectations for PP&P management?
- Does the organisation enable the development of leadership competences in PP&P?
- Do all management levels establish comprehensive communication with, and between, stakeholders of PP&P?
- Are all stakeholders (e.g. PP&P staff) actively providing feedback with respect to the leadership shown in PP&P?
- Does the organisation foster a robust decision making process linking strategic and operational levels?

4. Performance [G4]

Organisations are facing many challenges in today's highly competitive global environment. Business-oriented organisations need to be competitive in their market segment in order to survive. Organisations in the public sector and not-for-profit organisations are required to perform in order to fully satisfy their stakeholders' needs. For PP&P this means to achieve the required goals in an effective and efficient manner, mobilising people and resources to best effect to deliver the organisation's mission, vision and strategy.

Top managers and senior executives set performance targets for PP&P as well as for PP&P management. For PP&P that includes time, cost and quality of the deliverables together with the efficient utilisation of resources. For PP&P management, targets could include progress towards reaching long-term strategic goals together with the efficient utilisation of the resources used for managing PP&P. Performance should be monitored and controlled by using a set of KPIs.

The targets for performance should be derived from the PP&P mission, vision and strategy. Top managers and senior executives should clearly communicate their targets and expectations for performance. KPIs should be used for defining and planning PP&P activities for PP&P management and continuous development of the organisation's competence in managing projects.

Performance should be monitored and controlled on a regular basis, using the KPIs. The executive directing the project management activities should report to the top management

and steering committees for pro-active decision-making and for any required corrective action, including those for the long-term development of the organisation's competence.

Intended users' actions:

Top managers, together with senior executives, set performance targets and KPIs aligned with the PP&P mission, vision and strategy. They communicate those targets, relevant KPIs and their expectations to all stakeholders. They are actively involved in monitoring and controlling performance and deciding on corrective actions.

The executive directing the project management activities plans, implements, monitors and reports on the activities for delivering the performance targets for PP&P management and coordinates them with the PP&P managers. The performance achieved in PP&P as well as PP&P management is monitored, controlled and reported on a regular basis to top management and senior executives. Decisions concerning any corrective actions are implemented by the executive directing project management activities.

PP&P managers perform the PP&P and lead the assigned staff in accordance with the performance targets and KPIs. They pro-actively monitor and control the performance, report to the respective management levels, and implement corrective actions as decided or as is appropriate.

PP&P staff members act according to the leadership from all management levels. They should be involved in monitoring, controlling and reporting performance and providing feedback to PP&P managers.

Key questions:

- Does the organisation have performance targets for PP&P?
- Does the organisation have performance targets for PP&P management?
- Do top managers and senior executives define performance targets (e.g. using KPIs) and clarify their expectations for performance?
- Does the organisation monitor and control performance on a regular basis?
- Do PP&P managers and staff provide feedback on performance?
- Does the organisation implement corrective action where performance targets are not met?

5. Project Management [M1]

Project Management is used in many organisations to achieve results. It varies from organisation to organisation, but typically an organisation performs projects in parallel to other activities. Therefore, it is crucial for the organisation to clearly define what a project is, how it is different from other activities and which processes, methods and tools are used to achieve the desired results in the best possible ways.

Having defined what a project is, and potentially, different categories of projects (e.g. small, medium, large, complex, non-complex), the organisation needs to define the processes, methods and tools used for managing projects of different types. Top managers, together with senior executives, define their expectations for project management standards. Typically, these PM standards are developed by the executive directing the project management activities with the help of internal and external experts. These are often based on internationally accepted standards such as the ISO 21500.

The project management standards should cover the whole life cycle of projects, from initiation to closure. Each project is unique. Therefore project management standards should be tailored to the needs of a specific project, and should include regulations and guidelines for how the standards can be used and tailored appropriately.

These standards should be an integral part of the organisation's management system and be made accessible to all people involved in project management (e.g. using electronic platforms). All users should be familiar with, and appropriately trained in, the use of these standards. This includes external partners, such as suppliers, as appropriate.

To ensure that the standards remain relevant and appropriate over time, the organisation should ensure that all internal and external users provide feedback to enable continuous improvement.

Intended users' actions:

Top managers and senior executives define their expectations for project management standards to meet the PP&P mission, vision and strategy. They set the project management standards, communicate them to all stakeholders, actively monitor and control the application of the standards and decide upon corrective actions.

The executive directing the project management activities, together with internal and any external experts, develops and implements the project management standards. These include a definition and a categorisation system for projects, relevant processes, methods and tools as well as procedures for tailoring the standards. The application of the standards as well as the need for further development needs to be monitored, controlled and reported on a regular basis to top management and senior executives.

PP&P managers support the development of the project management standards and apply them to their projects. They pro-actively monitor and control the application of the standards and support their continuous development.

PP&P staff act in accordance with the standards and the leadership provided by all management levels. They provide feedback on how the standards can be improved and support development activities.

Key questions:

- Does the organisation have a clear definition of what a project is and how projects differ from other activities?
- Does the organisation define different categories of projects (e.g. depending on the complexity of a project)?
- Does the organisation have standards for managing projects (e.g. processes, methods and tools)?
- Does the organisation have procedures for tailoring the PM standards to the specific needs of a project?
- Are the PM standards accessible to, understood and applied by all internal and relevant external PP&P staff and managers?
- Do all users of the PM standards provide feedback and suggestions for continuous improvement?

6. Programme Management [M2]

Programme Management is used in many organisations as a means for realising benefits. Benefits realisation is the main differentiator between programmes and projects. Therefore, it is crucial for the organisation to clearly define what a programme is, how it is different from projects and other activities and which processes, methods and tools, are used for managing programmes and realising benefits in the best possible way.

The top managers, together with senior executives, set the standards for managing programmes and realising benefits. Typically, these standards are developed by the executive directing the programme management activities with the help of internal and external experts, often based on internationally accepted standards.

The programme management standards should cover the whole life cycle of programmes, from initiation to closure, with special emphasis on benefits realisation. Each programme is unique; therefore programme management standards should be able to be tailored to the needs of a specific programme, and should include regulations and guidelines for how the standards can be used and tailored appropriately.

These standards should be an integral part of the organisation's management system and be made accessible to all people involved in programme management (e.g. using electronic platforms). All users should be familiar with, and appropriately trained in, the use of these standards. This includes external partners, depending on their role in a programme.

To ensure that the standards remain relevant and appropriate over time, the organisation should ensure that all internal and external users provide feedback to enable continuous improvement.

Intended users' actions:

Top managers and senior executives define their expectations for programme management standards to meet the PP&P mission, vision and strategy. They set the programme management standards, communicate them to all stakeholders, actively monitor and control the application of the standards, and decide upon corrective actions.

The executive directing the programme management activities. With support of internal and, if required, external experts, develops and implements the programme management standards, including a definition of a programmes, relevant processes, methods and tools as well as procedures for tailoring the standards. The application of the standards, as well as the need for further development, needs to be monitored, controlled and reported on a regular basis to top management and senior executives.

PP&P managers support the development of the programme management standards and apply them to their programmes. They pro-actively monitor and control the application of the standards and support their continuous development.

PP&P staff act in accordance with the standards and the leadership provided by all management levels. They provide feedback on how the standards could be improved and support development activities.

Key questions:

- Does the organisation have a clear definition of what a programme is and how programmes differ from other activities?

- Does the organisation provide a standard for managing programmes (e.g. processes, methods and tools)?
- Does the organisation provide a standard for managing realisation of benefits?
- Does the organisation have procedures for tailoring the programme management standards to the specific needs of a programme?
- Are the programme management standards accessible to, understood, and applied by all internal and relevant external PP&P staff and managers?
- Do all users of the programme management standards provide feedback and suggestions for continuous improvement?

7. Portfolio Management [M3]

Portfolio management is typically a permanent function in organisations managing multiple projects and programmes in a coordinated way. There might be more than one portfolio, depending on the complexity of the organisation or the variety of project types being performed. An organisation should clearly define the role of a portfolio and its contribution to the mission, vision and strategy of both the organisation and PP&P. The organisation needs to define the processes, methods and tools used for managing portfolios, aligning them with the organisation's mission, vision and strategy, and available resources.

The top managers, together with senior executives, set the standard for managing portfolios. Typically, this standard deals with selecting, initiating and prioritising projects and programmes in a defined area of responsibility, and how to monitor, control and report progress. It should also deal with resource prioritisation and allocation, which are crucial issues in portfolio management.

This standard should be an integral part of the organisation's management system and be made accessible to all people involved in portfolio management (e.g. using electronic platforms). All users should be familiar with and appropriately trained in the use of this standard.

To ensure that the standard remains relevant and appropriate over time, the organisation should ensure that all users provide feedback to enable continuous improvement.

Intended users' actions:

Top managers and senior executives define their expectations for portfolio management to meet both the organisation's and the PP&P's missions, visions and strategies. They set the portfolio management standard, communicate it to all stakeholders, actively monitor and control the application of the standard and decide upon corrective actions. Through steering committees or other boards, top managers and senior executives are also actively involved in managing portfolios (e.g. decision-making).

The executive directing the portfolio management activities, with support of internal and any external experts, develops and implements the standard for portfolio management. He or she defines the role of portfolios in the organisation and their contribution to achieving both the organisation's and the PP&P's missions, visions and strategies. The application of the portfolio management standard as well as the need for further development needs to be monitored, controlled and reported on a regular basis to top management and the senior executives.

PP&P managers support the development of the portfolio management standard and apply them to their own portfolio. They pro-actively monitor and control the application of the standard and support its continuous development.

PP&P staff act in accordance with the standard and the leadership provided by all management levels. They provide feedback on how the standard could be improved and support development activities.

Key questions:

- Does the organisation define the role of a portfolio and its contribution to achieve both the organisation's and the PP&P's missions, visions and strategies?
- Does the organisation provide a standard for portfolio management (e.g. processes, methods and tools)?
- Does the organisation ensure that selection and prioritisation of projects and programmes in a portfolio is aligned with the organisation's overall mission, vision and strategy?
- Does the organisation ensure the balancing and prioritisation of all projects and programmes in a portfolio, taking account of the available resources?
- Does the organisation have a process for consolidating progress reports of projects and programmes at a portfolio level and reviewing them on a regular basis?
- Is the portfolio management standard accessible to, understood and applied by all PP&P staff and managers?
- Do all users of the portfolio management standard provide feedback and suggestions for continuous improvement?

8. Process Alignment [A1]

Today's organisations are highly process-driven. All activities transforming input into output using resources could be defined as processes. To be competitive, organisations need to use resources efficiently and effectively and to do so need to ensure optimal alignment of all PP&P processes. Processes used for PP&P, such as delivery processes, support processes and PP&P management processes need to be aligned with each other, both internally and externally with, for example, customers, regulators and partners.

The top managers together with the senior executives set standards for aligning processes. Typically, the executive directing the project management activities with the help of internal, and, if required, external experts develops these standards. They can include a process master plan, an organisation or sector-specific process model and tailoring concepts.

These standards should be an integral part of the organisation's management system and be made accessible to all people involved in PP&P (e.g. using electronic platforms). All internal and external users should be familiar with, and appropriately trained in the use of, these standards.

To ensure that the standards remain relevant and appropriate over time, the organisation should ensure that all internal and external users provide feedback to enable continuous improvement.

Intended users' actions:

Top managers and senior executives define their expectations for PP&P process alignment to meet the PP&P mission, vision and strategy. They set the standards, communicate them to all stakeholders, actively monitor and control the application of the standards and decide upon corrective actions.

The executive directing the project management activities with support of internal and any external experts, develops and implements standards for aligning PP&P internal and external

processes. The application of these standards as well as the need for further development needs to be monitored, controlled and reported on a regular basis to top management and the senior executives.

PP&P managers analyse the processes used within the relevant internal and external context of the organisation and define processes for their PP&P in accordance with the standards. Where necessary, they adapt existing processes, implement, and control process application. They pro-actively monitor and control the application of the standards and support their continuous development.

PP&P staff act in accordance with the standards and the leadership provided by all management levels. They provide feedback on how the standards could be improved and support development activities.

Key questions:

- Does the organisation provide standards for aligning processes in PP&P (e.g. process master plan, an organisation or sector-specific process model, and tailoring concepts)?
- Does the organisation ensure that processes in PP&P are aligned with processes of internal parties (e.g. delivery, support, leadership functions)?
- Does the organisation ensure that processes in PP&P are aligned with processes of external parties (e.g. customers, regulators and partners)?
- Is the process alignment standard accessible to, understood and applied by all PP&P staff and managers?
- Do all users of the process alignment standard provide feedback and suggestions for continuous improvement?

9. Structural Alignment [A2]

Organisations usually perform projects and programmes through a temporary organisation and need to align this temporary organisation with other organisational units. All organisational units and functions involved in the management of PP&P, (e.g. PP&P roles, teams, PMO, steering boards) should be aligned with internal and external units.

The top managers together with senior executives set standards for aligning structures. Typically, the executive directing the project management activities develops these standards with the help of internal and any external experts. They can include an interface diagram, a description of roles and responsibilities (e.g. Responsibility Assignment Matrix) and tailoring concepts.

These standards should be an integral part of the organisation's management system and be made accessible to all people involved in PP&P, (e.g. using electronic platforms). All internal and external users should be familiar with, and appropriately trained in, the use of these standards.

To ensure that the standards remain relevant and appropriate over time, the organisation should ensure that all users provide feedback to enable continuous improvement.

Intended users' actions:

Top managers and senior executives define their expectations for PP&P structural alignment to meet the PP&P mission, vision and strategy. They set the standards, communicate it to all stakeholders, actively monitor and control the application of the standards and decide upon corrective actions.

The executive directing the project management activities with support of internal and, if required, external experts, develops and implements standards for aligning all internal and external organisational units and functions used in PP&P. The application of these standards, as well as the need for further development, needs to be monitored, controlled and reported on a regular basis to top management and the senior executives.

PP&P managers analyse the structures applied within the relevant internal and external context of the organisation, define structures for their PP&P in accordance with the standards, align and implement these structures and control their application. They proactively monitor and control the application of the standards and support their continuous development.

PP&P staff act in accordance with the standards and the leadership provided by all management levels. They provide feedback on how the standards could be improved and support development activities.

Key questions:

- Does the organisation provide standards for aligning structures in PP&P (e.g. interface diagram, description of roles and responsibilities, and tailoring concepts)?
- Does the organisation ensure that organisational functions and roles in PP&P are aligned with functions and roles of internal parties (e.g. delivery, support, leadership functions)?
- Does the organisation ensure that organisational functions and roles in PP&P are aligned with functions and roles of external parties (e.g. customers, regulators, and partners)?
- Is the structural alignment standard accessible to, understood and applied by all PP&P staff and managers?
- Do all users of the structural alignment standard provide feedback and suggestions for continuous improvement?

10. Cultural Alignment [A3]

Organisations are social systems, where personal behaviour is affected by values, visions, norms, symbols, beliefs and ethics, which constitute a specific organisational culture. PP&P are also performed within a specific cultural context influencing the behaviour of people acting in PP&P. Normally each project, programme and portfolio will develop its own culture over time. Potentially this can lead to difficulties with communication and misunderstandings. Therefore, the organisation needs to work to ensure the alignment of PP&P cultures with the cultures of related internal and external parties.

The top managers, together with senior executives, define and foster a specific PP&P oriented culture in the organisation. They set and communicate standards as well as regulations and guidelines for aligning cultures (e.g. Governance Principles, Code of Conduct / Ethics and Training). They should actively monitor and control the application of these standards, regulations and guidelines on cultural alignment and decide upon corrective actions. Typically, the executive directing the project management activities with support of internal, and often external, experts develops and implements these standards.

The standards should be an integral part of the organisation's management system and be made accessible to all people involved in PP&P (e.g. using electronic platforms). All internal and external users should be made familiar with and appropriately trained in the use of these standards.

To ensure that the standards remain relevant and appropriate over time, the organisation should ensure that all internal and external users provide feedback to enable continuous improvement.

Intended users' actions:

Top managers and senior executives define their expectations for PP&P cultural alignment to meet the PP&P mission, vision and strategy. They actively foster a specific PP&P oriented culture and set standards, regulations and guidelines for aligning relevant cultures, communicate them to all stakeholders, actively monitor and control the application of these standards and decide upon corrective actions.

The executive directing the project management activities helps to foster a specific PP&P oriented culture. Together with internal, and often external, experts they develop and implement standards for aligning cultures in PP&P with the cultures of internal and external parties. The application of these standards as well as the need for further development needs to be monitored, controlled and reported on a regular basis to top management and the senior executives.

PP&P managers analyse the existing cultures within their PP&P. They define a specific PP&P oriented culture based on the requirements and stakeholder expectations. They then align their PP&P culture with cultures of all internal and external parties in accordance with the standards, regulations and guidelines set by top management and senior executives. They proactively foster, monitor and control the specific PP&P oriented culture as well as the application of the standards and support their continuous development.

PP&P staff act in accordance with the standards and the leadership provided by all management levels. They provide feedback on how the standards, regulations and guidelines could be improved and support development activities.

Key questions:

- Does the organisation foster a specific PP&P oriented culture?
- Does the organisation provide standards as well as regulations and guidelines for aligning cultures in PP&P (e.g. Governance Principles, Code of Conduct, Code of Ethics)?
- Does the organisation ensure that cultures in PP&P are aligned with cultures of all internal and external parties?
- Are the desired PP&P culture, alignment standards, regulations and guidelines understood and applied by all PP&P staff and managers?
- Do all users of the cultural alignment standards, regulations and guidelines provide feedback and suggestions for continuous improvement?

11. People's Competences Requirements [P1]

Organisations undertake projects, programmes and portfolios with people. They are increasingly dealing with more complexity in their PP&P, highlighting the need to focus on their people's competences requirements. Organisations need to define, plan and control the people's competences requirements to ensure there are sufficient, both in quantity and in quality, available at the required time.

The top managers, together with senior executives, define and communicate their overall goals and expectations for the PP&P people's competences requirements based on the PP&P mission, vision and strategy. They set standards for defining, planning and controlling the requirements, including qualitative requirements (e.g. competence model and job descriptions for all PP&P roles), as well as quantitative requirements (e.g. human resource and succession planning). The human resource department and the executive directing the project management activities support top managers and senior executives in setting standards.

Definition of the qualitative requirements depends on the type and complexity of PP&P undertaken and the competences requirements of all people involved (e.g. PP&P managers, staff, and stakeholders). It is typically aligned with the organisation's overall competence model. Quantitative requirements are defined and planned on the basis of existing and future PP&P, predicted fluctuation rates and succession plans.

To ensure that the people's competences requirements remain relevant and appropriate over time, the organisation should ensure that all users provide feedback to enable continuous improvement.

Intended users' actions:

Top managers and senior executives define and communicate their overall goals and expectations. They set standards for defining, planning and controlling the qualitative and quantitative people's competences requirements based on the PP&P mission, vision and strategy, and other relevant standards. They communicate these standards to all stakeholders, actively monitor and control the application of these standards and decide upon corrective actions. They are also involved with defining, planning and controlling the people's competences requirements.

The executive directing the project management activities, usually with help of the human resource department, defines, plans and controls the qualitative and quantitative people's competences requirements based on the PP&P mission, vision and strategy, standards, regulations and guidelines. The application of these standards, as well as the need for further development, needs to be monitored, controlled and reported on a regular basis to the top managers and the senior executives.

PP&P managers and PP&P staff support the process of defining, planning and controlling the qualitative and quantitative people's competences requirements. They provide feedback on how the standards, regulations and guidelines could be improved and support development activities.

Key questions:

- Does the organisation manage the qualitative people's competences requirements for all the people involved in PP&P (e.g. competence model, job descriptions for all PP&P roles)?
- Does the organisation manage the quantitative people's competences requirements for all the people involved in PP&P (e.g. human resource and succession planning)?

- Does the organisation provide standards, regulations or guidelines for defining, planning and controlling the people's competences requirements?
- Are the standards, regulations and guidelines understood and applied by all PP&P staff and managers?
- Do all PP&P managers and PP&P staff provide feedback and suggestions for continuous improvement of people's competences requirements and the respective standards?

12. People's Competences State [P2]

Organisations need to analyse the current state of their people's competences against the defined people's competences requirement identified in order to achieve the PP&P mission, vision and strategy. A comparison between the defined requirement and the current state will enable an organisation to identify gaps, strengths and weaknesses in people's competences. Appropriate actions can then be planned to exploit any identified strengths and how to address gaps and weakness, such as though people's competences acquisition or development.

The top managers together with senior executives define and communicate their goals and expectations for establishing the current state of PP&P people's competences based on the PP&P mission, vision and strategy. They set standards for analysing, identifying and evaluating the current state versus the qualitative and quantitative requirements (e.g. competence assessments, benchmarking, gap analysis). The Human Resource Department and the executive directing project management activities support top managers and senior executives in setting standards.

Once an organisation has established the current state of the people's competences, this can then be used as a baseline against which to monitor improvements and the impact of future changes.

Because the state of people's competences may change over time, the organisation needs to control and improve the people's competences and the respective standards on a regular basis, asking all managers and people involved for feedback.

Intended users' actions:

Top managers and senior executives define and communicate their overall goals and expectations. They set standards for analysing, identifying and evaluating the state of people's competences based on the PP&P mission, vision and strategy and other relevant standards. They communicate these standards to all stakeholders, actively monitor and control the application of these standards, and decide upon corrective actions. They are also involved with analysing, identifying and evaluating the state of people's competences.

The executive directing the programme management activities, usually with help of the Human Resource Department analyses, identifies and evaluates the state of current people's competences based on the PP&P mission, vision and strategy, standards, regulations and guidelines. The application of these standards, as well as the need for further development, need to be monitored, controlled and reported on a regular basis to the top managers and the senior executives.

PP&P managers and PP&P staff support the process of analysing, identifying and evaluating the state of people's competences. They provide feedback on the state of people's competences as well as how the standards could be improved, and support development activities.

Key questions:

- Does the organisation analyse the current state of the PP&P people's competences (e.g. competence assessments, benchmarking and gap analysis)?
- Does the organisation define corrective action, if the requirements are not met (e.g. people's competences acquisition or development)?
- Does the organisation provide standards, regulations or guidelines for analysing, identifying and evaluating the state of people's competences?
- Are the standards, regulations and guidelines understood and applied?
- Do all PP&P managers and PP&P staff provide feedback concerning the state of people's competences and the respective standards?

13. People's Competences Acquisition [P3]

Having the right people with the right competences available for PP&P is a critical success factor for organisations to achieve the PP&P mission, vision and strategy. Therefore, the organisation should take appropriate action to acquire/recruit people with the required PP&P competences.

The top managers, together with senior executives, define and communicate their goals and expectations for the acquisition of people's competences based on the PP&P mission, vision and strategy. They set standards for identifying, evaluating, selecting and assigning people (e.g. recruiting, assessment centre, job assignments). The human resource department and the executive directing project management activities support top managers and senior executives in setting standards.

Before starting acquisition, the organisation needs to have determined the people's competence requirements, identified the current state and compared the requirement to the current state to identify the gaps/weaknesses to be filled. In addition, the organisation needs to analyse the market for suitable sources. Potential candidates can be acquired from internal or external sources (e.g. job market, contractors or special service providers). Potential candidates should be evaluated, selected and assigned PP&P roles and tasks based on the pre-defined competence requirements. Newly acquired people should undergo a systematic integration process (e.g. induction, training, coaching or mentoring).

To ensure that the people's competences acquisition processes and standards remain relevant and appropriate over time, the organisation should ensure that all users provide feedback to enable continuous improvement.

Intended users' actions:

Top managers and senior executives define and communicate their overall goals and expectations. They set standards for identifying, evaluating, selecting and assigning people based on the PP&P mission, vision and strategy and other relevant standards. They communicate these standards to all stakeholders, monitor and control the application of these standards and decide upon corrective actions. They are also involved with identifying, evaluating, selecting and integrating people.

The executive directing the project management activities with help of the human resource department identifies, evaluates, selects and assigns the people based on the PP&P mission, vision and strategy, standards, regulations and guidelines. The application of these standards, and the need for further development, need to be monitored, controlled and reported on a regular basis to the top managers and the senior executives.

PP&P managers and PP&P staff support the people's competences acquisition process. They provide feedback on the people's competences acquisition process as well as how the standards could be improved, and support development activities.

Key questions:

- Does the organisation provide standards for identifying, evaluating, selecting and assigning people (e.g. recruiting, assessment centre and job assignments)?
- Does the organisation use available internal and external sources for the people's competences acquisition (e.g. job market, contractors and service providers)?
- Does the organisation evaluate the suitability of people against a defined requirement before recruiting and assigning them tasks in PP&P?
- Are the standards, regulations and guidelines understood and applied?
- Do all PP&P managers and PP&P staff provide feedback concerning the people's competences acquisition and the respective standards?

14. People's Competences Development [P4]

Having the right people with the right competences available for PP&P is a critical success factor for organisations to achieve the PP&P mission, vision and strategy. People's competences development enables existing staff to meet the defined PP&P competence requirements. Personal development opportunities to improve competences and skills are important to meet both organisational and personal goals for career progression, job satisfaction and motivation. Therefore, organisations should invest in the development of people's competences to meet the requirements of PP&P.

The top managers, together with senior executives, define and communicate their goals and expectations for people's competences development based on the PP&P mission, vision and strategy. They set standards for selecting, performing and evaluating the people's competences development (e.g. coaching, training and mentoring). The human resources department and the executive directing project management activities support top managers and senior executives in this role.

Before starting development, the organisation needs to have determined the people's competence requirements, identified the current state and compared the requirement with the current state to identify the gaps/weaknesses to be filled. The organisation needs to select the appropriate development methods and providers (e.g. on-the-job training, external training and certification). There should be an agreement between the people and their managers about the objectives and outcomes for the development. At the end of the development activities, the outcomes should be evaluated and documented.

To ensure that the people's competences development processes and standards remain relevant and appropriate over time, the organisation should ensure that all users provide feedback to enable continuous improvement.

Intended users' actions:

Top managers and senior executives define and communicate their overall goals and expectations. They set standards for selecting, performing and evaluating the people's competences development based on the PP&P mission, vision and strategy and other relevant standards. They communicate these standards to all stakeholders, monitor and control the application of these standards and decide upon corrective actions. They are also involved with selecting, performing and evaluating the people's competences development.

The executive directing the project management activities, with the help of the human resource department, selects, conducts and evaluates the people's competences development and the providers based on PP&P mission, vision and strategy, standards, regulations and guidelines. The application of these standards as well as the need for further development needs to be monitored, controlled and reported on a regular basis to the top managers and the senior executives.

PP&P managers and PP&P staff support the people's competences development process. They provide feedback on how the people's competences development process as well as how the standards could be improved, and support development activities.

Key questions:

- Does the organisation provide standards for selecting, performing and evaluating the people's competences development (e.g. coaching, training and mentoring)?
- Does the organisation use the available internal and external providers for the people's competences development (e.g. on-the-job training, external training and certification)?
- Does the organisation evaluate the outcomes of people's competences development?
- Are the standards, regulations and guidelines understood and applied?
- Do all PP&P managers and PP&P staff provide feedback concerning the people's competences development and the respective standards?

15. Resource Requirements [R1]

Organisations perform projects, programmes and portfolios using various resources, (e.g. financial resources, know-how, material, energy). Organisations do not have unlimited resources, and need to deal with scarce resource and shortages in PP&P in order to meet the PP&P mission, vision and strategy. Organisations need to define, plan and control resource requirements to ensure there is sufficient, both in quantity and in quality, available at the right time.

The top managers together with senior executives define and communicate their overall goals and expectations for resource requirements based on the PP&P mission, vision and strategy. They set standards for defining, planning and controlling the qualitative as well as quantitative requirements. Typically, the purchasing department and the executive directing the project management activities support top managers and senior executives in this.

Based on information available from all the PP&P, the organisation should define short, mid and long-term resource requirements for all projects, programmes and portfolios and compare these needs with currently available resources. The gap between available and required resources shows where effort may be required for resource acquisition and development.

To ensure that the resource requirements remain relevant and appropriate over time, the organisation should ensure that all users provide feedback to enable continuous improvement.

Intended users' actions:

Top managers and senior executives define and communicate their overall goals and expectations. They set standards for defining, planning and controlling the qualitative and quantitative resource requirements based on the PP&P mission, vision and strategy and other relevant standards. They communicate these standards to all stakeholders, monitor

and control the application of these standards and decide upon corrective actions. They are also involved with defining, planning and controlling the resource requirements.

The executive directing the project management activities, usually with help of the Purchasing Department defines, plans and controls the resource requirements based on the PP&P mission, vision and strategy, standards, regulations and guidelines. The application of these standards as well as the need for further development needs to be monitored, controlled and reported on a regular basis to the top managers and the senior executives.

PP&P managers and PP&P staff support the process of defining, planning and controlling the qualitative and quantitative resource requirements. They provide feedback on how the resource requirements as well as the standards could be improved and support development activities.

Key questions:

- Does the organisation manage the qualitative requirements for all resources deployed in PP&P?
- Does the organisation manage the quantitative requirements for all resources deployed in PP&P?
- Does the organisation provide standards, regulations or guidelines for defining, planning and controlling the resource requirements?
- Are the standards, regulations and guidelines understood and applied?
- Do all PP&P managers and PP&P staff provide feedback concerning the resource requirements and the respective standards?

16. Resource State [R2]

Organisations need to analyse the current state of the resources deployed in PP&P against the defined resource requirement in order to achieve the PP&P mission, vision and strategy. A comparison between the defined requirement and the current state will enable an organisation to identify gaps, strengths and weaknesses, and to plan appropriate action to exploit any identified strengths and how to address gaps and weakness, such as through resource acquisition or development.

The top managers together with senior executives define and communicate their goals and expectations for establishing the current resource state based on the PP&P mission, vision and strategy. They set standards for analysing, identifying and evaluating the current state versus the requirements (e.g. gap analysis and supply chain analysis). The purchasing department and the executive directing project management activities support top managers and senior executives in this.

Once an organisation has established the current state of the available resources, this can then be used as a baseline against which to monitor improvements and the impact of future changes.

Because the resource state may change over time, the organisation needs to control and improve the resource state and the respective standards on a regular basis, asking all managers and people involved for feedback.

Intended users' actions:

Top managers and senior executives define and communicate their overall goals and expectations. They set standards for analysing, identifying and evaluating the resource state based on PP&P mission, vision and strategy and other relevant standards. They

communicate these standards to all stakeholders, monitor and control the application of these standards and decide upon corrective actions. They are also involved with analysing, identifying and evaluating the resource state.

The executive directing the project management activities, usually with help of the purchasing department analyses, identifies and evaluates the current resource state based on the PP&P mission, vision and strategy, standards, regulations and guidelines. The application of these standards as well as the need for further development needs to be monitored, controlled and reported on a regular basis to the top managers and the senior executives.

PP&P managers and PP&P staff support the process of analysing, identifying and evaluating the resource state. They provide feedback on the resource state as well as the standards could be improved, and support development activities.

Key questions:

- Does the organisation analyse the current state of the resources deployed in PP&P (e.g. gap analysis and supply chain analysis)?
- Does the organisation define corrective actions, if the requirements are not met (e.g. resource acquisition or development)?
- Does the organisation provide standards, regulations or guidelines for analysing, identifying and evaluating the resource state?
- Are the standards, regulations and guidelines understood and applied?
- Do all PP&P managers and PP&P staff provide feedback concerning the resource state and the respective standards?

17. Resource Acquisition [R3]

Having sufficient resources (e.g. financial resources, know-how, material, energy) available for PP&P is a critical success factor for organisations to achieve the PP&P mission, vision and strategy. Therefore, the organisation should take appropriate action to acquire resources to meet the requirements of PP&P.

The top managers, together with senior executives, define and communicate their goals and expectations for the acquisition of resources based on the PP&P mission, vision and strategy. They set standards for identifying, evaluating, selecting and assigning resources and respective suppliers. Typically, the purchasing department and the executive directing project management activities support top managers and senior executives in this role.

Before starting acquisition, the organisation needs to have determined the resource requirements, identified the current state and compared the requirement to the current state to identify the gap/weakness to be filled. In addition, the organisation needs to analyse the market for suitable sources, which could be national and/or international. Suppliers and resources should be evaluated, selected and assigned based on the pre-defined requirements.

Because conditions for resource acquisition may change over time, the organisation needs to control and improve the resource acquisition process and the respective standards on a regular basis, asking all managers and people involved for feedback.

Intended users' actions:

Top managers and senior executives define and communicate their overall goals and expectations. They set standards for identifying, evaluating, selecting and assigning resources based on the PP&P mission, vision and strategy and other relevant standards. They communicate these standards to all stakeholders, monitor and control the application of these standards and decide upon corrective actions. They are also involved with identifying, evaluating, selecting and assigning resources.

The executive directing the project management activities with help of the purchasing and appropriate other functional departments, identifies, evaluates, selects and assigns resources based on the PP&P mission, vision and strategy, standards, regulations and guidelines. The application of these standards, as well as the need for further development, needs to be monitored, controlled and reported on a regular basis to the top managers and the senior executives.

PP&P managers and PP&P staff support the resource acquisition process. They provide feedback on how the resource acquisition process, as well as the standards, can be improved and they support development activities.

Key questions:

- Does the organisation provide standards for identifying, evaluating, selecting and assigning resources?
- Does the organisation use all available national and/or international sources for the resource acquisition?
- Does the organisation evaluate the suitability of resources and their providers before acquiring and assigning the resources in PP&P?
- Are the standards, regulations and guidelines understood and applied?
- Do all PP&P managers and PP&P staff provide feedback concerning resource acquisition and the respective standards?

18. Resource Development [R4]

Having sufficient resources (e.g. financial resources, know-how, material, energy) available for PP&P is a critical success factor for organisations to achieve the PP&P mission, vision and strategy. Certain resources, such as know-how, special facilities, and tools, may not be easy to acquire, and may need to be developed in order to meet the defined resource requirements in a sustainable way. Therefore, organisations should take appropriate action to develop the required resources.

The top managers, together with senior executives, define and communicate their goals and expectations for resource development based on the PP&P mission, vision and strategy. They set the standards for selecting, performing and evaluating the resource development. The executive directing project management activities, together with respective functional departments, supports top managers and senior executives in this role.

Before starting development, the organisation needs to have determined the resource requirements, identified the current state and compared the requirement to the current state to identify the gaps/weaknesses to be filled. The organisation needs to select the appropriate development methods and providers, depending on the resource and the development needs. At the end of the development activities, the outcomes should be evaluated and documented.

Because conditions for resource development may change over time, the organisation needs to control and improve the resource development process and the respective standards on a regular basis, asking all managers and people involved for feedback.

Intended users' actions:

Top managers and senior executives define and communicate their overall goals and expectations. They set standards for selecting, conducting and evaluating the resource development based on the PP&P mission, vision and strategy and other relevant standards. They communicate these standards to all stakeholders, monitor and control the application of these standards and decide upon corrective actions. They are also involved with selecting, conducting and evaluating the resource development.

The executive directing the project management activities, together with respective functional departments, selects, conducts and evaluates the resource development and the providers based on PP&P mission, vision and strategy, standards, regulations and guidelines. The application of these standards as well as the need for further development needs to be monitored, controlled and reported on a regular basis to the top managers and the senior executives.

PP&P managers and PP&P staff support the resource development process. They provide feedback on how the resource development process as well as how the standards could be improved, and support development activities.

Key questions:

- Does the organisation provide standards for selecting, conducting and evaluating resource development?
- Does the organisation use the available internal and external providers for resource development?
- Does the organisation evaluate the outcomes of resource development?
- Are the standards, regulations and guidelines understood and applied?
- Do all PP&P managers and PP&P staff provide feedback concerning the resource development process and the respective standards?

Annex B: Competence development programme

Organisations can develop their own competence in managing projects by defining a competence development programme. Such programmes typically last one year and are aligned with the annual planning cycle of the organisation. At completion, a decision is made to stop the development programme or to define a further year's succession plan.

A programme typically consists of:

- A strategic direction set by top level executives in defining the vision for PP&P and the KPIs to be achieved.
- An assessment of the present situation ('as is') and establishing objectives for desired state and benefits to be achieved at the end of the programme ('to be').
- A set of projects to deliver the required outputs to achieve the desired PP&P state and benefits.
- A set of outputs (e.g. changes in processes, structures and competence of people working in and around projects).
- A business case defining the budget and benefits to be realised by the programme.

This annex provides an example of how to organise a competence development programme. It is not a comprehensive and complete list covering all organisations or situations but simply offers suggestions on factors to consider when reflecting on relevant actions in the different phases. In addition, this annex suggests a number of methods that may be considered and used for a competence development programme but does not exclude any other.

A competence development programme can be defined in four phases: Initiation, Planning, Development and Implementation, and Concluding and Road Ahead for continuous development. The purpose of this annex is to explain for each phase possible Objectives, Deliverables, Scope, Activities, Methods and the Main Persons Responsible that could be involved in developing the organisational competence in managing projects.

These aspects are presented in Table B-1:

Phases	Initiation	Planning	Developing & Implementing	Concluding & Road Ahead
Attributes				
Objectives	Set up a new competence development programme or the next cycle for an existing one	Plan organisational competence development programme	Obtain results through projects, programmes and portfolios	Organise and support continuous development within framework model
Deliverables	<ul style="list-style-type: none"> • Vision statement for PP&P • Programme charter • Appointed programme core team 	Programme structure and project charters	Increasing the organisational competence in managing projects	Increased efficiency, effectiveness and competitiveness
Scope	Develop business case in terms of budget and organisational benefits	Plan projects, changes, resources and align portfolio management	Programme and projects scope	Feedback loop within projects, programme and organisation
Activity	<ul style="list-style-type: none"> • Align vision, mission and strategy • Create a core team • Assess 'as is' • Define objectives 'to be' • Develop business case 	<ul style="list-style-type: none"> • Workshops • Stakeholder meetings • Defining KPIs • From programme to projects charters • From programme to organisational changes 	<ul style="list-style-type: none"> • Implement projects and programmes • People • Culture • Governance • Processes, structures • Business (+KPIs) 	<ul style="list-style-type: none"> • Lessons learned • Learning organisation • Best practice • Project excellence assessment
Methods	<ul style="list-style-type: none"> • Scenario analysis • Communication • Team building • Business case analysis 	<ul style="list-style-type: none"> • Work break-down structure • Network model • Organisational break-down • Responsibility matrix 	<ul style="list-style-type: none"> • IPMA Delta[®] assessment and certification • Competence development methods 	<ul style="list-style-type: none"> • PDCA • Kaizen • Benchmarking • Knowledge management
Main Persons Responsible	<ul style="list-style-type: none"> • Senior executives • PP&P manager • Programme manager 	<ul style="list-style-type: none"> • Programme manager • PP&P manager • Consultants 	<ul style="list-style-type: none"> • Programme manager • Programme core team • PP&P manager 	<ul style="list-style-type: none"> • Senior executives • PP&P manager • Programme manager

Table B.1: Framework for a competence development plan

a. Initiation Phase

The main purpose of the initiation phase is to assess the current state of the organisational competence in managing projects and to develop a joint vision of a desired state, for each of the IPMA OCB's competence groups: PP&P Governance, PP&P Management, PP&P Organisational Alignment, PP&P People's Competences and PP&P Resources. This can be a new programme, started from scratch, or be based on lessons learned from a previous competence development plan or on the findings from an (IPMA Delta) assessment. Figure 6-4 in chapter 6 (see earlier) provides an example of how assessment could be approached.

The organisation commits to achieve this desired state by investing in the necessary resources and allocating responsibilities. In this phase, top management involvement includes setting goals and objectives aligned with the organisation's mission, vision, strategy and the current operation. Senior executives, PP&P managers together with the Programme Manager and relevant staff responsible for competence development define the expected results, required changes, organisational benefits and approval strategy. For each competence group of the IPMA OCB, overall goals need to be set by senior management. These overall goals are broken down into Key Performance Indicators (KPIs). All KPIs should be SMART (Specific, Measurable, Acceptable, Realistic and Time-bound). For each KPI the programme defines how it will be measured, what the 'as is' value is, whether the goal is qualitative, quantitative, a relative improvement (%), or an absolute target.

During the Initiation phase a dedicated programme organisation or an organisational unit such as a portfolio office or a PM Centre of Excellence is given responsibility to undertake the development programme. The competence development programme defines how to transform the organisation's strategy into results, changes and benefits. The KPIs for the programme are set at the Initiation phase and measured during the Development and Implementation phase. At completion of the Concluding and Road Ahead phase the benefits and invested resources are compared. In addition, the overall objectives are reconsidered leading to a decision whether to end the development programme or define a further year's succession programme.

During the Initiation phase a programme team is appointed. This programme team can be staffed with internal and external experts. It is responsible for planning and delivering each phase of the development programme, including drafting the programme charter. It needs to balance its own experiences and views with the ideas of stakeholders in and around the organisation.

Assessment of the 'as is' situation helps top management reflect on the vision, strategy, desired results, and expected benefits at the start of each new development cycle. The evidence supports top management's decision to re-commit to the desired results and benefits, the KPIs, the development process and to allocate the required resources.

b. Planning Phase

The first objective of the planning phase is to establish an overall plan for the programme. The second is to create a development plan for each IPMA OCB competence element, breaking the programme down into interrelated projects with project objectives (including KPIs), deliverables, scope, time schedule, and resources. A third objective is to plan the coordination of the programme. This phase is likely to contain a number of different activities that go beyond the scope of this standard, but would typically include stakeholder meetings, workshops, 'brainstorming' sessions and, if considered necessary, some degree of consultant involvement for tasks that the programme team decides need to be outsourced.

c. Development & implementation Phase

The objective of the Development and Implementation phase is to obtain the desired results from the programme and its constituent projects for the improvement of the organisation's competence in managing projects. During the implementation phase - which often has the longest duration - it is essential to regularly check progress and to report to top management on progress towards the intended results. This helps maintain top management 'buy in' and their on-going commitment.

It is critical for success to obtain the commitment and buy-in of the people across the organisation who will implement and adopt the required changes to their own and the organisation's ways of working. Effective communication and participation are fundamental. Creating an open culture based on trust and collaboration is often found to be far more successful, than a controlling culture for delivering sustainable change and the required results and benefits.

d. Concluding and Road Ahead Phase

The last phase for competence development consolidates the results and benefits of the programme and defines the road ahead. This phase aims at continuously improving efficiency, effectiveness and competitiveness. However, it is necessary to take a holistic view considering all organisational competence elements in order to determine how to prioritise and focus activities.

It is good practice to allocate time and resources to conduct a post project evaluation to identify lessons learned which can be used in future organisational development programmes and projects. Regular reviews throughout the life cycle of each project can contribute to lessons learned and post project/programme evaluation.

An organisation can learn and continuously improve from past experience using lessons learned and a consistent approach to assessment. Similarly, lessons can be learned from external benchmarking with other organisations, both nationally and internationally. It is also possible to benchmark internally by comparing different parts of the organisation.

IPMA Delta offers a consistent assessment approach which can be used to support benchmarking between organisations across the world for the benefit of all.

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