PfM²
PORTFOLIO
MANAGEMENT GUIDELINES

PM²
FOUNDATION

PfM² Guide for Portfolio Management – v0.9.3

January 2022

The PM² Foundation Methodologies & Publications

Author: Nicos Kourounakis

Acknowledgement of Contributors and Reviewers
is found in the Appendix A

About the Author

Nicos Kourounakis is a Management Consultant, Trainer and Author. Over the past 10 years, he has been leading consulting projects at major EU Institutions such as the European Commission, the European Parliament, the European Council, the European Central Bank, the European Investment Bank, and several EU Agencies.

Nicos has also been involved in many international projects in Canada, the United States, the United Kingdom, and across Europe, working both with large organizations as well as with smaller ventures and start-ups.

He is the Author of the PfM² Guide for Portfolio Management (December 2021) and the PgM² Guide for Programme Management (March 2022).

He is also the Co-Author of several European Commission Publications such as the PM² Project Management Methodology Guide (2012, 2016, 2018), the Agile PM² Guide (2014), the PM²-PPM Portfolio Management Guide (2017), and the ITSRM Guide on IT Security Risk Management (2020).

He holds an MBA from McGill University, Montreal, Canada, a MASc in Electrical Engineering from the University of Victoria, Canada, and a BSc in Physics from the Aristotle University of Thessaloniki, Greece. He has also achieved several Certifications such as PMP, PRINCE2, IPMA-D, PM² and Agile PM².

Table of Contents

1 Introduction

As the number of programmes, projects and services within an organisation increases, it becomes necessary to streamline the identification, selection, monitoring, control, and reporting of the results of these initiatives in a standardised and efficient way.

By applying Portfolio Management, an organisation is in a better position to optimise its investments by composing portfolios that will contribute the most to the implementation of its Strategy, given its resource capacity, capability and budgetary or other constraints. The resulting set of portfolios provides an aggregated and holistic view of all of an organisation's initiatives, both planned and ongoing, which will facilitate the effective achievement of its strategic objectives.

The application of the PfM² Methodology within an organisation formalises its Portfolio Orientation. It helps to define the governance, processes, documentation, and techniques required to:

- maintain a link between the organisation's strategy implementation and resource allocation.
- select and follow up on the portfolio components effectively.
- realign the portfolio to address changes in its environment.
- escalate portfolio issues for resolution.
- support the implementation of the organisation's Strategic Plans and resulting Work Programmes.

1.1 About this Publication

The PfM² Portfolio Management Guide presents an effective standalone portfolio management methodology. The PfM² Guide encapsulates globally accepted best practices from other methods and standards from organisations such as PMI, AXELOS, IPMA, and the European Commission, as well as the contributions of experts, practitioners, and the broader open community over many years. The strategy chosen is to provide a set of portfolio management guidelines that are lean, user-centric and that effectively communicate the PfM² Model to a broad and varied audience.

This publication provides:

- A presentation of the PfM² Model for Portfolio Management.
- Implementation guidelines which are simple and usable.
- A portfolio vocabulary (glossary) that can become a common point of reference within organisations.
- A basis which organisations can use to build their own tailored portfolio approach.

Intended Audience

The PfM² Guide provides guidelines on portfolio governance, processes, and artefacts. These guidelines are relevant to anyone involved in the management of portfolios, and members of Portfolio Support Offices (PfSOs), but also to Programme Managers (PgMs), Project Managers (PMs), Service Managers (SMs), Product Managers (PdMs), and staff who wish to learn more about portfolio management.

This Guide is for:

- Senior Managers and staff who want to learn more about Portfolio Management.
- Senior and Middle Managers who want to implement portfolio management within their organisation.
- Portfolio Managers (PfMs) who want to follow an effective methodology.
- Component Managers (and their teams) who want to know how their work fits into a Portfolio, and how their management layers interact (i.e., interaction between roles, lifecycles, processes, artefacts, etc.).
- Members of a Portfolio Support Office (PfSO) who support portfolio management.
- Management Consultants who help their clients implement portfolio management in their organisations.
- Trainers who offer training in portfolio management.
- Candidates for the PfM² Certification.

How to read this Guide

This guide can be read cover to back, or it can be read like a manual, jumping from section to section exploring the portfolio management guidelines that are most relevant to your needs.

1.2 About the Suite of Squared Methodologies

The Suite of Squared Methodologies comprises publications that describe methods that help organisations implement Project, Programme and Portfolio Management by providing them with concise and complete user guidelines, as well as artefact templates.

The publications of the Suite of Squared Methodologies share a common philosophy and presentation style, but most importantly, they are free, open, user-centric, and lean. They incorporate elements from a wide range of globally accepted management best practices, operational experience from European Union Institutions and other organisations, as well as contributions from the open community.

The Squared Methodologies present management approaches which are compatible with **Projectized**, **Matrix and Functional Organisations**, and which can be further tailored and adapted to an organisation's specific needs.

Each of the Squared Methodologies provides:

- a governance structure.
- a management lifecycle/process model.
- guidelines for management processes and activities.
- artefact templates with supporting guidelines.
- a set of effective mindsets.
- a concise glossary.

1.3 The PM² Foundation

The PM² Foundation (https://pm2-foundation.org) provides the global community with current project, programme, and portfolio management knowledge. From the basics to the most advanced topics, the PM² Foundation provides a one-stop location for the Squared Methodologies.

A range of users, such as the staff of Portfolio (Support) Offices (PfSOs), Programme or Project Support Offices (PSOs), portfolio managers, programme managers, project managers, and project teams can find the resources they need to develop their competence and effectively integrate management best practices into their organisations and professional lives.

Through the resources it has developed, its network of partners and contributors, the PM² Foundation's growing library of resources and knowledge is made openly available to all through an open and free Creative Commons licence.

This page is intentionally left blank

2 About Portfolio Management

This section introduces basic portfolio management concepts and provides the context for a better understanding of the PfM² methodology to portfolio management.

2.1 Portfolios and Portfolio Management

Portfolios are constructs that group together investments. In the case of PfM², these **investments** can be organisational programmes or projects, but also relate to investments required to operationally support and exploit the results of these programmes and projects.

The entities that represent these investments are referred to as portfolio components. They capture effort and financial investments in creating a change or building, maintaining, or operating products or services with a view of creating value for the organisation.

Therefore, a PfM² **portfolio is a collection of components** which, though not necessarily interrelated or interdependent, contribute together to the achieving of a specific set of strategic value-creation objectives, which form the basis of the portfolio's objectives.

All portfolio components are managed individually and independently through appropriate programme, project, service, or product management practices and processes. However, an additional layer of management (i.e. portfolio management) provides better strategic, financial and value creation focus for the portfolio as a whole.

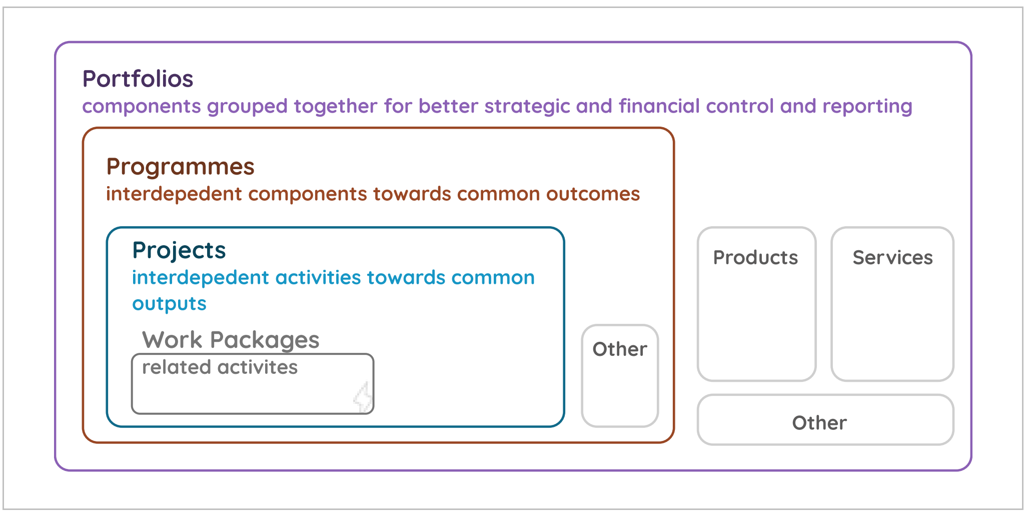


Fig 2.1: Representation of the relation of the Portfolio and various component types.

Portfolios, as well as their components (e.g. programmes, services, etc.) are all constructs used to facilitate the better definition and management of organisational investments aiming to achieve desired results. However, each one of these constructs achieve this through a different focus and are managed with their own management structures and methods.

From a strategic and governance point of view, portfolios are higher-level constructs than programmes, projects, or services; they sit closer to an organisation's strategic layer. In addition, portfolio management focuses more on achieving organisational effectiveness (i.e. selecting the right investments), while the management of components focuses more on efficiency (i.e. delivering the component's results efficiently).

Therefore, it is important that the differences between the constructs of portfolios, programmes, groups of projects and individual projects are well defined and understood. This will enable organisations and teams to:

- clarify the often blurred boundaries between these management constructs.
- use them optimally and with maximum complementarity.
- establish proper management practices.
- allow for effective and synergistic collaboration between the various component management layers.

It is also observed that, the way the portfolio construct is defined, used, and managed can vary depending on an organisation's structure, maturity, and specific needs.

In some cases, portfolios are defined with a strong mandate to achieve specific strategic objectives by managing their own budget to initiate new investments. In other cases, portfolios are created reactively in an effort to group existing organisational investments for a much simpler purpose: to facilitate the consolidation of the organisation's components for financial and progress reporting purposes. PfM² is flexible enough to accommodate the whole range of cases that exist between these two extreme scenarios.

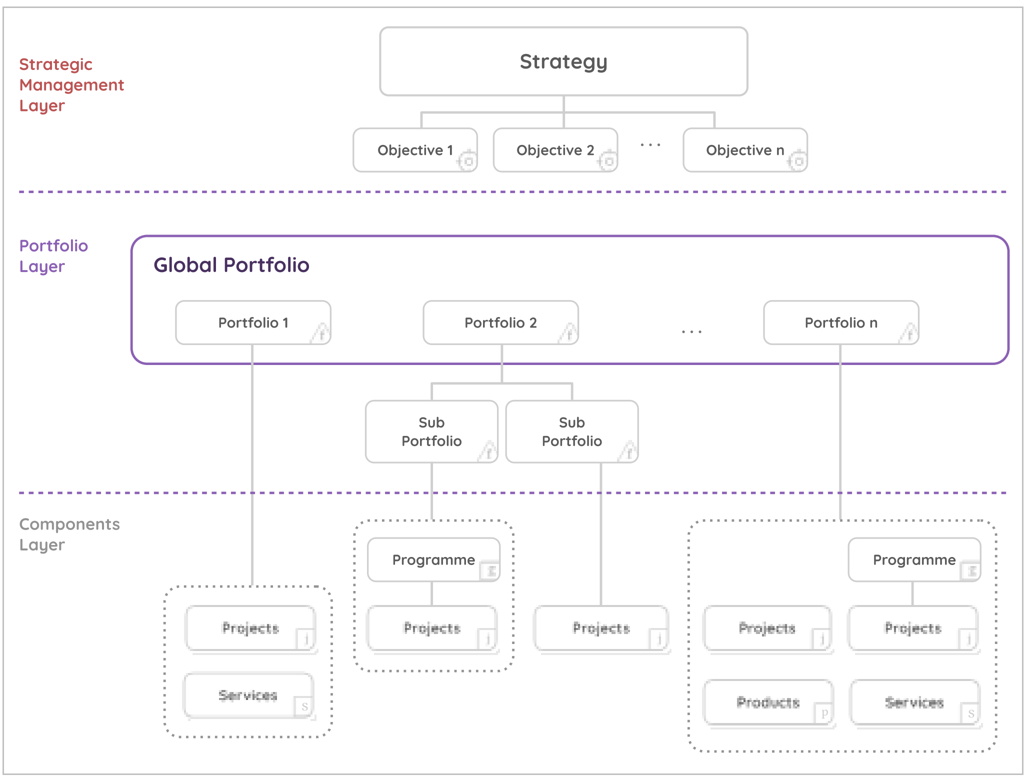


Fig 2.2: Example of a PfM² Portfolio

In a traditional sense, each component can only belong to one portfolio. This is to avoid the duplication of investments or overlaps between them, but also to facilitate accurate financial consolidation, reporting and monitoring.

However, alternative portfolio views can also be defined which group portfolio components in many different ways to allow for specific analyses or reporting (e.g. grouping by business domain, component type or size, risk, value, etc.).

Portfolios and Organisational Strategy

As organisations set out to achieve their strategic objectives via the implementation of various types of investments, it is important to be able to optimise these efforts by maintaining an ongoing connection with the desired strategic outcomes and benefits of the work performed and the deliverables produced.

Organisations define their strategic objectives and use programmes, projects, but also services and products as vehicles for achieving these objectives, also continually improving, and developing their ongoing operational activities so as to best exploit opportunities for growth with a balanced risk.

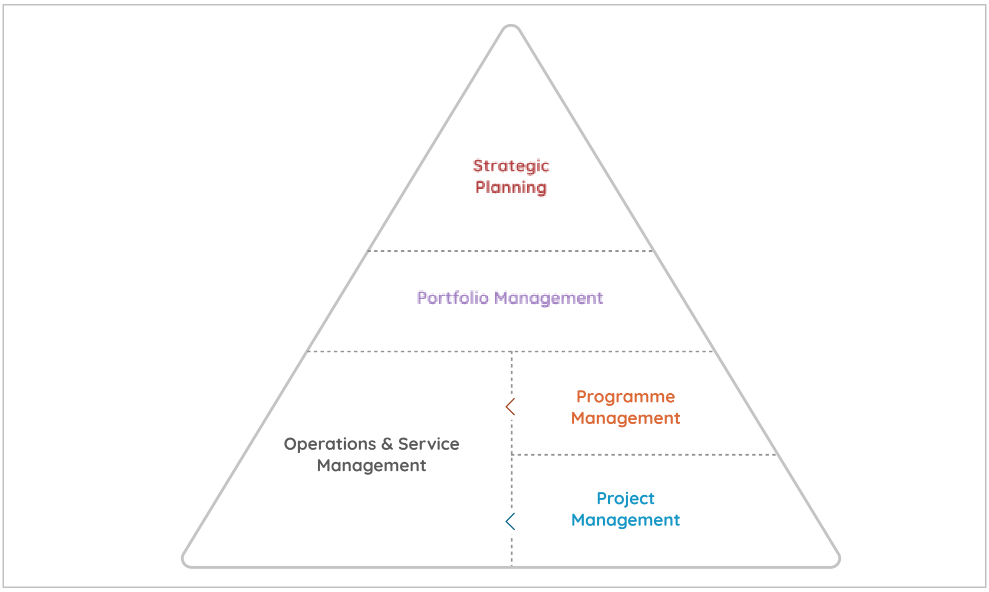


Fig 2.3: Relationships between Portfolio Management and other management layers

Portfolios provide an organisation with a complete and holistic view of its financial and human resource investments. To be effective, portfolios must be comprised of the right components and aim to maximise the use of the available capacity and capability of the organisation. Portfolio management includes all the necessary management processes and activities for identifying, evaluating, prioritising, approving, monitoring, and reporting on the status of the portfolio components and the performance of the overall portfolio.

Portfolio Management is an important performance enabler for the entire organisation, from the strategic layer to the components and operational layers.

The implementation of portfolio management helps organisations to:

- align the organisation's investments with the organisation's strategic objectives.
- build discipline into the evaluation and selection process for new initiatives.
- prioritise investments on the basis of common criteria rather than subjective perceptions of value.

- link portfolio management objectives to organisational priorities.
- link the portfolio management activities to other management activities and systems.
- optimise resource allocation on the basis of strategic priorities.
- manage the overall portfolio risk.
- gather reliable, consistent, and standardised information that can be used to report on portfolio performance and benefits realisation.

2.2 Portfolio Orientation

Portfolio Orientation is the degree to which an organisation is oriented towards effectively harnessing the value of Portfolio Management. The necessary conditions for Organisational Portfolio Orientation are:

- strong organisational commitment to strategic effectiveness, operational efficiency, risk management, accountability, and transparency.
- viewing all work performed as an organisational investment in operations or transformations.
- organisation-wide recognition of the value of portfolio management as a performance enabler.
- seamless integration of portfolio management processes and mindsets into the everyday work done across the organisation.
- strong Portfolio Governance based on data-driven decision-making and integrated reporting from all levels.

The degree to which an organisation satisfies the above conditions determines the level of its portfolio orientation (strong, weak, or none at all). This in turn determines the effectiveness of the application of portfolio management within the organisation.

2.3 Agile Portfolio Management

When it comes to implementing portfolio management, organisations typically base their approach on a generic portfolio management methodology. However, as a strategic and high-value organisational process, portfolio management needs to be well aligned with the organisation's strategy, management processes, systems, and culture.

This means that a level of tailoring should always be done to the portfolio methodology adopted, adjusting the governance, processes, and artefacts, and defining the rigour and frequency the portfolio management process are executed, monitored, and controlled.

More specifically, organisations that aim to achieve an increased level of **agility**, would need to further harmonise their overall portfolio management approach to the agile practices and principles embraced by the organisation. This will result an Agile Portfolio Management approach, which will be able to accommodate:

- the inclusion of portfolio components which are defined and managed with an agile approach (i.e. agile projects).
- the execution of the portfolio processes in shorter iterations of increased frequency.
- the efficient adjustment of the portfolio objectives and composition to address changes to the organisational strategy or to the portfolio environment.

- the efficient adjustment of the portfolio processes based on emerging management needs, portfolio performance and the lessons learned collected.

Depending on the **agility aspirations** of the organisation, a portfolio management process that is leaner and more dynamic can indeed be implemented. However, this should be done after a deep appreciation of the portfolio management purpose is achieved, while also ensuring the required process quality. Otherwise, organisations are in danger of becoming victims of *agile washing,* where ad hoc and poorly thought-out portfolio management processes are presented as agile with potentially very negative consequences to the organisation and the value of portfolio management, both actual and perceived.

To accommodate Agile Portfolio Management, the appropriate provisions need to be made through the Portfolio Framework Definition process and documented in the Portfolio Handbook.

2.4 Portfolio Management Maturity

Advancing on an evolution journey towards higher levels of portfolio management performance involves being able to define as-is and to-be states of performance and implementing continual improvements of the organisation's capability and capacity in portfolio management.

Maturity Models provide a map consisting of a sequence of maturity levels, which show a typical evolution path represented in discrete stages of organisational performance in a specific management domain. As such, they become important instruments which organisations can use to assess themselves, identify gaps towards their desired state of portfolio management effectiveness (i.e. maturity) and plan for their improvement.

The lower levels of maturity stand for states that characterize organisations having initially low capability in the domain. In contrast, the higher levels represent a state of higher maturity and excellence in the domain.

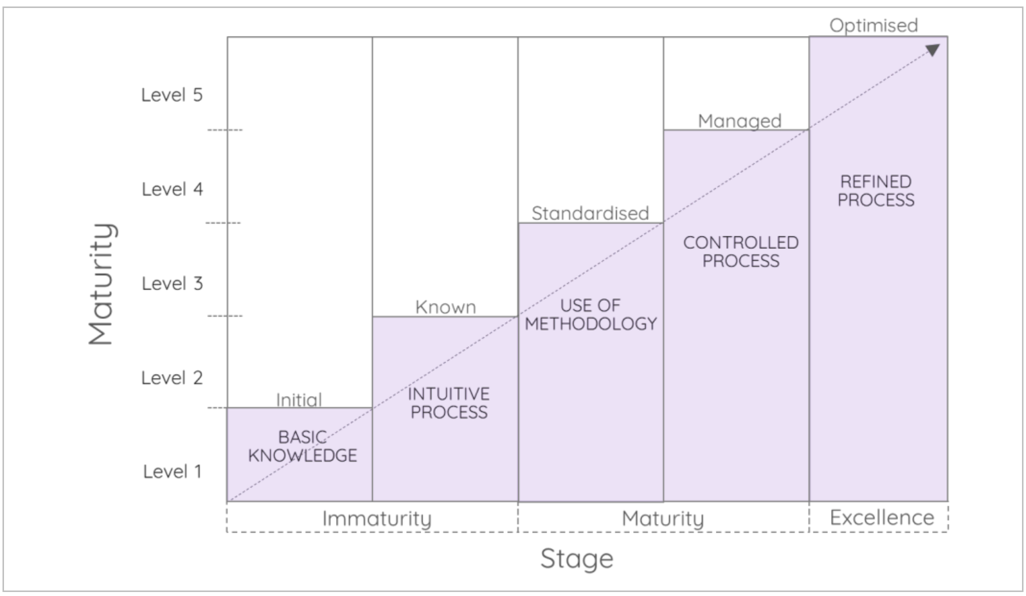


Fig 2.4: Maturity Model for PfM² Portfolio Management

In the lower levels, the visible cost of portfolio management is seemingly low, but the hidden opportunity costs and risks associated with ad hoc and uncontrolled approaches are notably high. In contrast, in higher levels of maturity, the cost of portfolio management is seemingly higher, but the opportunity cost and aggregated inefficiency cost, and risk are low, making the investment in reaching the higher levels of portfolio management maturity a smart and well worth investment.

Maturity assessments can be conducted by organisations to determine their maturity level and further identify the criteria and characteristics they need to fulfil in order to reach a new desired level of maturity associated with an improved level of performance in Portfolio Management. Assessments can be conducted both before embarking on a journey to implement Portfolio Management and afterwards feeding the continual improvement cycle.

Low levels of portfolio management maturity are characterised by low awareness and only **basic knowledge** of the concepts of portfolio management, and no clear appreciation of its value. Any efforts in establishing a portfolio are based on ad hoc efforts usually aiming at simply creating an inventory of ongoing organisational initiatives. But the results are often partial and of low quality and value. Due to the lack of a process, the portfolio activities are often one-off, the portfolios are not maintained, and they very quickly become out of date and irrelevant (or damaging) to management decisions as they can provide a partial (or false) representation of reality. This state is often reinforced by management deficiency and lack of management accountability towards poor organisational performance.

As some portfolio management domain knowledge is developed, simple portfolio management processes may be followed, but they are usually introduced and applied as the result of the initiative of individuals with some prior experience in the domain. However, the processes followed are **intuitive** and not clearly defined, neither are they repeatable, measurable, or common within the organisation. The quality of portfolio management is varied, and depends greatly on the efforts, interest and expertise of the people involved. Furthermore, the portfolio composition is simplistic, without adequate and objective criteria for evaluation, selection, prioritisation, and capacity planning. Finally, there is no clear definition and allocation of roles, responsibilities, and accountabilities, namely who does what and who is accountable for the results (i.e. success or failure).

The intermediate levels of maturity are characterised by good knowledge of portfolio management within the organisation, and a clear portfolio orientation. **Standardised** portfolio management processes are available for use organisation-wide, which is the result of an investment towards defining a portfolio management approach. A portfolio culture becomes gradually embedded within the organisation, with the buy-in and the involvement of both senior management, programme, projects practitioners as well as service, products, and operations management, while the management processes used in these domains are beginning to be aligned with one another. However, while the accountability of the management of portfolios and their results are recognised and clearly assigned, there are no defined metrics to assess the performance of the portfolio management process itself, and therefore no managed continual improvement goals or possibility exists.

At the higher levels of maturity, organisation-wide portfolio management is achieved to a considerable extent, while the results of portfolios (and their components) influence many management processes and decisions within the organisation. A portfolio culture is well established in the organisation and driven by all management levels, while the portfolio, the programme, project, service, product development and operational lifecycles are well integrated. In addition, effective performance KPIs are set to measure the quality of the various portfolio management processes as well as their results. At this level, the portfolio management process is now considered to be **managed**.

Based on the analysis of the performance data collected from portfolio systems and stakeholders, process improvement actions can be devised, and their execution formally and systematically planned and controlled. Improvement becomes primarily process and data driven and decreasingly dependent on the initiatives and ideas of the people involved. This is part of the continual improvement process which assures the increased quality and effectiveness of the portfolio management process and its outputs. The result is a high performance and holistic portfolio management approach, with aligned systems, tools, and experts collaborating across organisational departments and disciplines. At this highest level of maturity, portfolio management is **optimised** to the needs of the organisation and its artefacts and outputs provide adequate assurance that the organisation's portfolio management is fulfilling its purpose.

2.5 Portfolio Management Competences

The processes and activities outlined in the PfM² Methodology are important for managing portfolios. However, experience shows that a methodology and a manager's technical ability are not sufficient in themselves since portfolio management involves much more than simply running a few processes.

Portfolio Managers (PfMs) must have a wide range of skills and will need to draw on their own toolbox of management skills and techniques to complete the job. These include understanding strategy, managing politics, interacting with senior management, managing conflicts, negotiating, managing stakeholders, etc.

Knowing how to deal with organisational matters and balance priorities is a crucial aspect of the job. Time and resource constraints, as well as the dynamic nature of the portfolio component's priorities, mean that managers need to take difficult decisions about what to focus on throughout the portfolio lifecycle.

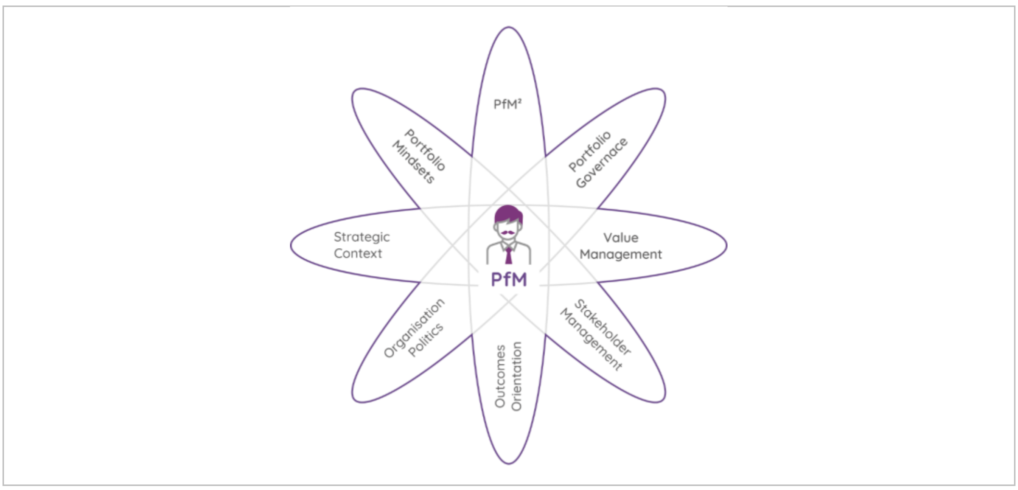


Fig 2.5: What Portfolio Managers (PfMs) should understand.

To develop the competences required to manage portfolios effectively, Portfolio Managers (PfMs) need to:

- understand how portfolios are set up and managed within the organisation.
- understand how portfolio components are initiated and managed within the organisation.

- review the methodologies and tools that are available within the organisation.
- consult with more experienced Portfolio Managers (PfMs) about how they run their portfolios.
- follow relevant training courses and get certified (e.g., PfM² Methodology).
- explore the additional resources provided at http://www.PfM2.website.

Although the role of an organisation's Senior Management and Human Resources departments is essential in developing organisation-wide management methods and competences, an interest on the part of the portfolio management professionals themselves in acquiring and developing the necessary personal and professional skills is indispensable.

Portfolio Managers (PfMs) need to master the portfolio management methodology used and have the competences required to effectively execute the portfolio management processes to manage the portfolios.

They also need the skills to work effectively with people from many different levels of an organisation. These include the contextual and behavioural skills necessary to manage portfolios within organisations with complex politics and power-structures, and/or with diverse teams and stakeholder groups which have pluralistic and potentially conflicting priorities and interests.

Portfolio Managers (PfMs) therefore also need to:

- communicate, lead, motivate, negotiate, solve problems and deal with issues, conduct meetings and workshops, report on portfolio performance, etc.
- understand the strategic context and general portfolio environment (i.e., sociocultural, political, physical, etc.)
- apply organisational policies and standards (e.g., strategic management, budgeting cycles, audits, etc.)

The table below lists the main portfolio management competences:

People Competences	Perspective Competences
• Self-Reflection and Self-Management • Personal Integrity and Reliability • Communication • Relationships and Engagement • Leadership • Teamwork • Conflict and Crisis • Resourcefulness • Negotiation • Results Orientation	• Strategy • Governance, Structure and Processes • Compliance, Standards and Regulation • Power and Interest • Culture and Values • Change and Transformation *Source: IPMA-ICB (adapted)*

Table 2-1: Competences for Portfolio Management

Above all, It is each one's personal and professional values and ethics that guide them on how to effectively apply their competencies in any given situation, decision, or action.

2.6 Critical Success Factors in Portfolio Management

The successful implementation of Portfolio Management within an organisation requires appropriate sponsorship to be in place. Sponsorship is needed to promote a shift towards a productive portfolio orientation across the whole organisation.

Two additional factors that need to be taken into consideration are the organisation's management maturity and its culture; if these are not aligned with the desired level of portfolio orientation, they can pose significant challenges to the implementation of portfolio management.

Therefore, a well-thought-out plan needs to be in place to manage the necessary organisational change, given that the challenges of implementing portfolio management within an organisation mostly relate to the organisational changes required.

Experience has also shown the following to be Critical Success Factors (CSFs) in the **effective rollout** and execution of Portfolio Management within an organisation:

- Viewing all transformational work performed as organisational investments.
- Maintaining senior management sponsorship and stakeholder engagement.
- Tailoring a methodology to the appropriate level.
- Applying the methodology across the organisation.
- Achieving the correct balance between processes, people, and tools.
- Dealing with organisational politics and competing priorities.
- Ensuring that the portfolio objectives are visible across the organisation.
- Keeping an open communication with stakeholders.
- Establishing a single version of the truth regarding portfolio performance.
- Increasing awareness of management competence and maturity.
- Connecting portfolio management practices and benefits into everyday work practices.
- Establishing clear Governance and data-driven decision-making.

Note that avoiding *big bang* implementations will minimise adoption resistance as well as the impact on ongoing operations. The recommended approach is to start with a specific type or limited number of portfolio components, and then incorporate more types and gradually increase the number of components. Start small and educate portfolio stakeholders to begin the journey towards the implementation of portfolio management in the organisation.

2.7 Portfolio Management Information Systems (PfMIS)

A Portfolio Management Information System (PfMIS) supports and automates the processes, tools, and techniques of portfolio management. A PfMIS is used to support all aspects of portfolio management, from portfolio composition to realisation, including portfolio monitoring, reporting, and stakeholder management. A PfMIS thus becomes an enabler for better portfolio governance, increasing transparency, communication and accountability within the portfolio and the organisation.

A PfMIS facilitates:

- the categorisation, evaluation, selection etc. of portfolio components.
- the automation of workflows and other manual processes (e.g., documentation approvals).
- resource capacity management.
- easy access to current (and historical) information on portfolio and component information.
- automation of Portfolio Logs and Reports.
- integration with other enterprise-level applications such as financial management systems, scheduling tools, and enterprise resource planning tools.
- the generation of portfolio views dynamically which can help facilitate management decisions.
- connection with an online document repository.
- dynamic reporting and views (portfolio dashboards, etc.).

An effective PfMIS also provides the organisation with an integrated system for reporting on the progress of all portfolio components and can be integrated into other information-gathering and administration systems, or interface with other automated organisational systems and business management tools (e.g. the organisation's enterprise resource planning system, financial systems, etc.). When properly implemented, the collaboration between the PfMIS and other management tools or systems can enable the management of complicated resource dependencies and risks across multiple portfolio components.

However, it should be noted that a PfMIS is not a panacea: it is a support tool that can help model the organisation's portfolio management processes. It is therefore imperative that the organisation implements the portfolio management processes first, integrates them into existing organisational processes where needed, and only then proceed with the significant investments in time and resources required to automate them with a PfMIS tool.

During the early stages of the implementation of a portfolio methodology, the PfMIS can be a simple (or a more sophisticated) integration of spreadsheets and other existing data sources. However, as the organisation's portfolio management maturity and process complexity increase beyond the capabilities of integrated spreadsheets, it is time to consider an appropriately sized PfMIS systems. Given that a PfMIS can be a major investment financially and in terms of time and effort, especially the initial setting-up and customisation phase, its business case must be well developed and evaluated just as any other portfolio component.

Clearly, priority should be given to implementing and maturing the organisation's portfolio processes, before investing in a PfMIS. The implementation of a portfolio methodology will help the organisation identify the most important requirements, and thus to avoid adopting costly and oversophisticated custom or commercial off-the-shelf solutions that offer rich and complicated functionality that is unnecessary and eventually not used.

3 Overview of PfM²

PfM² is a method for portfolio management which is open, effective, and lean. It incorporates elements from a wide range of globally accepted portfolio management best practices, as well as operational experience from within the European Union Institutions and other organisations, and contributions from the open community.

The purpose of PfM² is to help organisations implement portfolio management by providing them with a concise and complete framework within which effective portfolio management can take place.

PfM² presents a management approach which is compatible with **Projectized**, **Matrix** and **Functional** Organisations.

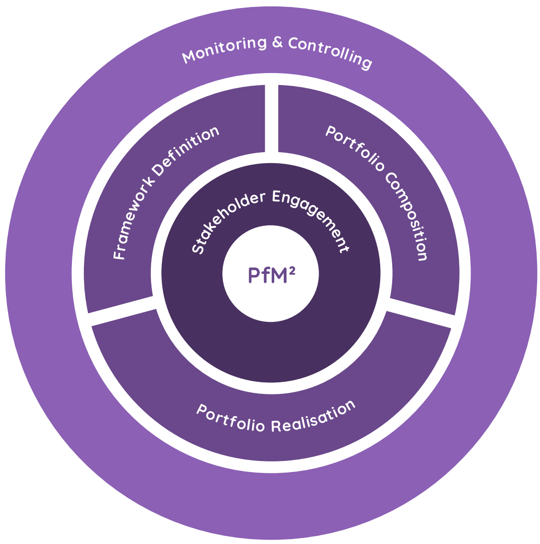


Fig 3.1: The PfM² Processes Model

The PfM² Methodology provides:

- a portfolio governance structure
- a portfolio process model
- portfolio management activities and execution guidelines
- portfolio artefacts and use guidelines
- a set of effective portfolio mindsets
- a concise glossary.

The following sub-sections provide an overview of the PfM² processes, governance, artefacts, and mindsets, which are then further elaborated in their own dedicated section.

3.1 PfM² Processes

The PfM² Portfolio Management model describes the different portfolio management activities and organises them into five processes:

1. Portfolio Framework Definition.
2. Portfolio Composition.
3. Portfolio Realisation.
4. Portfolio Monitoring & Controlling, and
5. Portfolio Stakeholder Engagement & Communication.

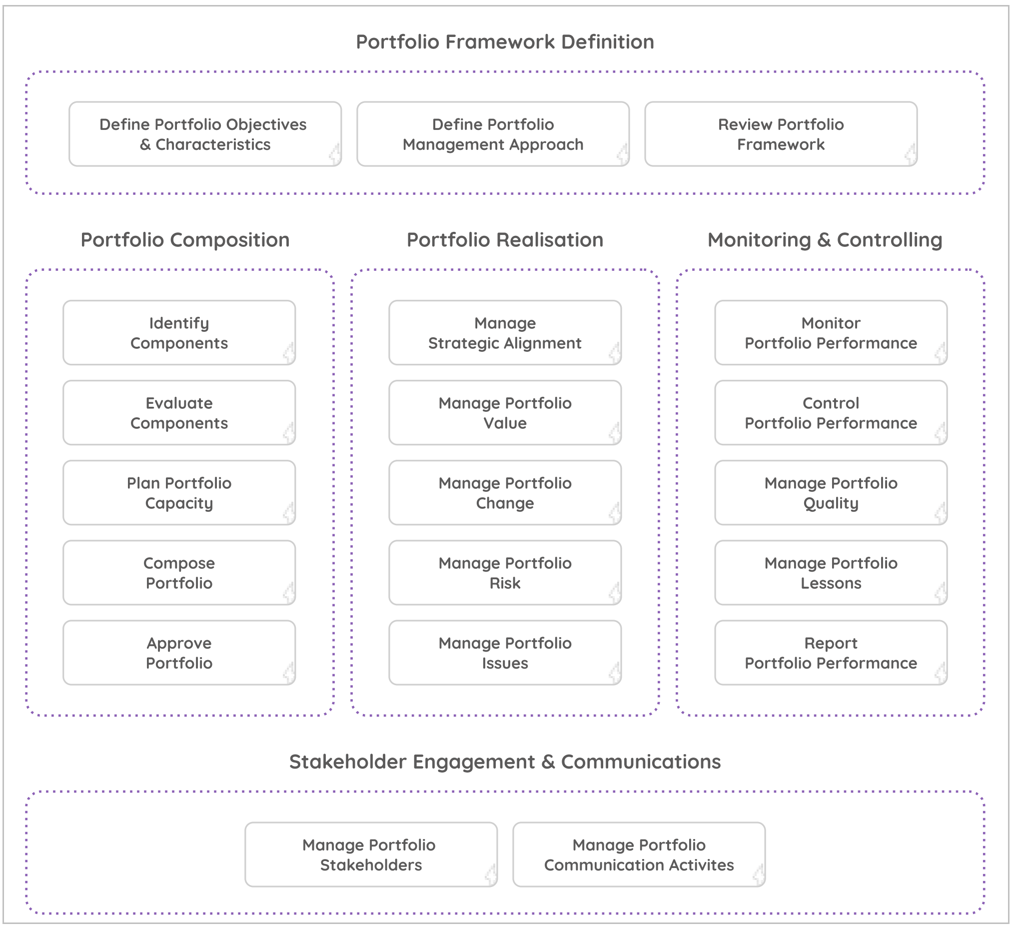


Fig 3.2: Overview of the PfM² processes and their activities

Note that portfolio management is an iterative process and PfM² processes and activities interact with one another.

Portfolio Framework Definition

This process includes the activities related to the definition of the portfolio objectives, characteristics, and management approach, including the definition of the governance bodies (roles) and their responsibilities, the management competences required, the management processes, and the portfolio artefacts. The Portfolio Framework Definition defines all portfolio processes. The framework is initially developed with the implementation of portfolio management in the organisation; it can then be tailored further, if necessary, for each new portfolio. The framework should be periodically reviewed and can be adjusted in response to changes in the portfolio environment or because improvement is needed.

Portfolio Composition

This process includes the activities related to identifying and evaluating portfolio candidates with a view to making investment decisions and allocating organisational resources. These are recurring activities based on the periodic needs of the portfolio and the organisation. Portfolio Composition is usually aligned with an organisation's budgeting and multi-annual planning cycle but can also be triggered by other portfolio processes (e.g. Monitoring & Controlling). New portfolio component candidates are evaluated based on their contribution to the portfolio objectives, but also their impact on the existing portfolio components. The Portfolio Composition process requires as input information and artefacts created during the initiation of the components.

Portfolio Realisation

This process includes the activities related to ensuring that the portfolio realises its objectives. It achieves this through activities that are concerned with the continual alignment of the portfolio to the organisation's strategic objectives, the managing of the portfolio value, and the managing of change, risk, and issues. Although portfolio components such as programmes and projects are temporary and thus will exit the portfolio at some point, Portfolio Realisation activities are performed throughout the entire life of the portfolio until the portfolio is closed.

Portfolio Monitoring & Controlling

This process runs throughout the portfolio's lifecycle and in parallel with all other portfolio processes. It includes the periodic collection and analysis of information that helps establish the portfolio's performance based on pre-defined targets or indicators. It also includes identifying and implementing corrective actions to address deviations from defined target performances.

Stakeholder Engagement & Communication

This process includes the activities related to effectively engaging stakeholders throughout the entire portfolio management process. It involves analysing and interacting with the different stakeholders to assess how portfolio decisions will affect them or be affected by them, and to ensure the stakeholders' effective involvement in the composition and realisation of the portfolio. Stakeholder Engagement & Communication process runs throughout the portfolio's lifecycle and in parallel with all other portfolio processes.

Sections 5 to **9** of this Guide describe in more detail the activities of the five PfM² processes.

3.2 PfM² Governance

Portfolio governance is the framework within which portfolio management decisions are made. It defines all portfolio management roles and their associated responsibilities. The Roles are essentially defined by the management responsibilities assigned to them, whereas responsibilities describe what each role needs to be concerned with, their domain of (management) work and level of authority.

Fig 3.3: PfM² Portfolio Governance Model

The PfM² Roles for the Portfolio Management Layer are:

Portfolio Directing Group (PfDG): Is the ultimate decision-making body for a portfolio and is accountable for the effective implementation of portfolio management. It maintains a high-level view of all portfolio and sub-portfolios and provides strategic direction and leadership.

Portfolio Manager (PfM): Is responsible for the portfolio management activities and focuses on achieving the portfolio objectives and portfolio management goals. Portfolio Managers (PfMs) are advised by the Portfolio Advisory Committee (PfAC) and report to the Portfolio Directing Group (PfDG).

Portfolio Advisory Committee (PfAC): Provides information and insights from the perspective of the portfolio components. It advises the Portfolio Manager (PfM) on the management of portfolio. It comprises representatives of the components layer, technical and business domain experts, and others.

Portfolio Support Office (PfSO): Provides administrative, communication and process support to the Portfolio Manager (PfM). Also maintains the portfolio artefacts, produces the portfolio reports, and interfaces with the programme or project support offices.

The complete PfM² Governance Model, with a more elaborate description of the Roles and their composition, is presented in *Section 4: Portfolio Governance—Roles & Responsibilities.*

3.3 PfM² Artefacts

Portfolio management is supported by documentation throughout its lifecycle. Portfolio documentation is produced from the initiation of a portfolio through to its completion. Portfolio documentation should be standardised within an organisation (i.e., PfM² Artefacts), but above all it should serve the information and communication needs of the portfolio and its stakeholders.

Artefacts play an important role in the management of a portfolio, since they:

- provide portfolio stakeholders with a clear picture of the portfolio's objectives and achievements.
- facilitate communication with internal and external groups.
- provide a baseline for monitoring and controlling a portfolio's progress.
- provide a record of important decisions.
- support transparency and traceability while providing the records required by audits.
- support organisational memory and act as an historical reference.
- are essential for the improvement of the portfolio management process and future portfolios.

Portfolio documentation should adhere to the quality standards of the organisation; above all else, the documentation should be clear, easy to understand, and add value as it performs its purpose.

There are four types of PfM² Artefacts which:

- define the portfolio **objectives** and **management** approach (i.e., the Portfolio Handbook).
- capture the **composition** and **performance** of the portfolio (i.e., Portfolio Composition & Analysis Report, Benefits Matrix).
- facilitate **monitoring & controlling** (i.e., Portfolio Logs) and **stakeholder engagement** (i.e., Communications Plan and Stakeholders Log).
- provide input to the portfolio layer from the **Strategic** Layer (i.e., Strategic Plans) and the **Components** Layer (i.e., Component Descriptions and Status Reports).

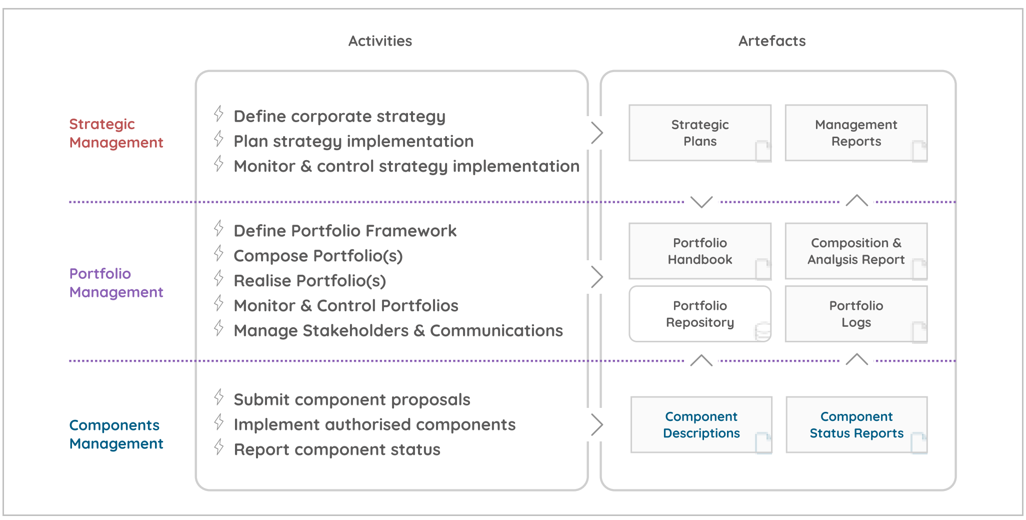


Fig 3.4: High-level representation of the key Artefacts for the various management domains

3.4 PfM² Mindsets

While plans and processes help us with what we could refer to as the structured side of portfolio management, the right Mindsets help us navigate the complex reality of portfolio management.

Portfolio Mindsets are an essential part of any portfolio methodology: just as we establish processes to help us manage a portfolio better, so we define portfolio mindsets to help us develop the attitudes and behaviours that will allow us to contribute to the portfolio's success. They provide us with a common set of beliefs and values that become the glue which holds management processes and practices together across the organisation's portfolios.

To start developing the right Mindsets, we should ask ourselves the following **Infrequently Asked Questions (IAQs)**:

- **Do we know what we are doing?** Tip: Develop a clear portfolio vision and define portfolio objectives that clearly connect to organisational strategy. Establish success criteria by defining upfront the benefits we expect the portfolio to bring to the organisation.
- **Do we know how we are doing it?** Tip: Establish a portfolio management approach that acts as a performance enabler rather than another layer of control and bureaucracy. Implement portfolio management at all levels as a fractal organisation and ensure that the management methods used at the portfolio components level are standardised and aligned with the portfolio methods.
- **Do we know how much we can do?** Tip: Be realistic about portfolio investment requirements and acknowledge organisational capacity and capability constraints. Ensure adequate resources, capabilities and skills are allocated to the portfolio and its components to provide the time, skills and support infrastructure needed for their management.
- **Does anyone care? Tip:** Establish and maintain strong senior management sponsorship and organisation-wide buy-in. Make sure your portfolio's performance matters, and that your portfolio reporting serves a range of informational needs.
- **Are the right people involved?** Tip: The primary criterion for assigning portfolio management roles should be to serve the needs and objectives of the portfolio, not other criteria such as organisational politics, the career needs of the functional hierarchy, etc.
- **Do we know who is doing what?** Tip: Clearly define portfolio governance and understand portfolio roles, responsibilities, and accountabilities. Know what you should be doing and make sure others know what they should be doing, too.
- **Deliver at any cost or risk?** Tip: Show respect for people's efforts and organisational funds. Always remember that it is not just about the end-result; how you get there matters, too. Pursue the interests of the portfolio and the organisation by embracing positive values and principles.
- **Is this important?** Tip: Everything is NOT equally important. Identify your portfolio's Critical Success Factors (CSFs) and allocate your attention and effort accordingly.
- **Is this a task for them or for us?** Tip: Understand and respect the difference between functional roles and authority on the one hand, and portfolio management roles,

responsibility, and goals on the other. Make the performance of portfolio components visible but focus on overall portfolio performance.

- **Should I be involved?** Tip: Contribute from any position. Be proud of the skills, value, and positive attitude you bring to the portfolio. Help everyone who needs to be involved to get involved. Foster clear, effective, and frequent communication and facilitate the engagement of all portfolio stakeholders.
- **Have we improved?** Tip: Commit to ongoing professional and organisational improvement by sharing knowledge and lessons learned. Follow portfolio procedures but challenge wasteful practices and update the portfolio management framework when/if needed. Become more effective by adjusting methods and behaviours accordingly.

Portfolio teams that practice PfM² portfolio management:

1. **Apply** PfM² best practices to manage their portfolios.
2. **Remain mindful** that portfolio management processes are there to serve the portfolio and organisational objectives, not the other way around.
3. Maintain an **outcomes orientation** towards all portfolio management activities.
4. Commit to delivering portfolio results with **maximum value**, rather than simply following procedures and plans. Manage the portfolio **holistically** by **optimising** the whole portfolio, not just parts of it.
5. **Provide strategic direction** and support to the component levels to ensure their continued alignment with the objectives. However, do this **without interfering** in their daily management or causing new coordination and reporting overheads.
6. **Foster** a culture of cross-organisational **collaboration**, clear communication, and **accountability**.
7. Encourage the delegation and management of issues and decisions at **the lowest possible governance level**, while providing clear escalation channels and procedures.
8. Assign portfolio roles to the **most appropriate people** for the long-term **benefit** of the portfolio and the organisation.
9. **Balance** in the most **productive way** the often conflicting management priorities of Process, People, Pleasure/Pain, Progress, Participation, Perception, Power, Politics and Peace.
10. **Invest** in developing technical and behavioural **competences** to become better portfolio contributors.
11. **Engage** portfolio stakeholders and involve them in maximising the **value** the portfolio produces.
12. **Share knowledge**, actively manage Lessons Learned, and contribute to the **improvement** of portfolio management within organisations.
13. **Draw inspiration** from the PfM² Guidelines on **Ethics** and Professional **Virtues**.

Working with these Mindsets enhances the effectiveness of portfolio management and thus increases the likelihood of a portfolio achieving its goals. Beyond that, applying the Mindsets consistently across sub-portfolios helps to build capacity within the organisation over time; management maturity is achieved as the methodology and Mindsets are embedded in an organisation's working practices.

Mindsets help us discern the value and impact of every attitude, decision, and action on both the portfolios and the organisation's strategic objectives. They offer the lenses through which we can see the true colours of the different elements that together compose the picture of PfM². This allows us to tell whether an element fits into the picture we envision, or not. Mindsets not only make for a more colourful everyday reality; they also enable us to all see the same colours. When everyone across our entire organisation acquires a common clear view of reality, there are efficiency and effectiveness gains beyond the portfolios themselves.

3.5 Tailoring PfM²

The PfM² Methodology has been created to address the portfolio management needs of any organisation. However, as with any methodology, PfM² should be tailored so it can be used in the most effective and efficient way, given specific organisational conditions and constraints.

Tailoring is not about deciding which processes or activities will be included and which will be left out. Rather, it is about defining the appropriate level of prescriptive rigour in the application of the methodology, while ensuring that the intended outcome of every element of the methodology is still achieved.

Tailoring should consider organisational environmental factors and constraints, existing governance bodies and management processes, policies, and organisational culture. All tailoring decisions should be documented in the Portfolio Handbook (see *Section 10 - Portfolio Artefacts*).

When tailoring the PfM² Methodology, the following best practices should be followed:

- First and foremost, understand the purpose and value of the methodological element to be tailored before proceeding with its tailoring.
- Remember that the methodology works as an integrated whole, so avoid simplifying it by eliminating whole parts; instead, scale the scope of that part up (or down).
- Consider the effort, cost, and complexity of maintaining a significantly tailored version over the benefits achieved.
- Balance the level of rigour of application of the methodology decided, with the resources and risk of the additional complexity such rigour requires.
- Maintain a lean approach but remain aligned with the PfM² best practices and mindsets.

3.6 PfM² Quick Start Tips

The purpose of this section is to help you get started with using PfM² for your portfolio management. Naturally, you will want to learn more about the PfM² Methodology but remember you do not need to become an expert before you initiate your first portfolios.

Below, you will find a number of PfM² Quick Start Tips, which aim to help kick-start you and your organisation in starting a portfolio with the PfM² Methodology:

1. **Discover the available PfM² resources:**
   - Review the PfM² Guide.
   - Consult the resources available online (PfM² articles, templates, discussion fora, etc.).
   - Follow a training course.
   - Share the resources you discover within your organisation, teams, and stakeholders.

2. **Develop a higher degree of portfolio orientation:**
   - Understand the benefits of establishing and managing portfolios.
   - Understand the distinct focus of portfolios (compared to programmes and projects).
   - Take the PfM² Mindsets on board.
   - Get your organisation, teams, and stakeholders on board.

3. **Organise a kick-off meeting:**
   - Formally kick off the process of using PfM² for a new (or existing) portfolio.
   - Ensure the right people are involved.
   - Ensure that the basics of PfM² and portfolio management are clear to all the parties involved.

4. **Clearly define the Portfolio's Governance:**
   - Discuss the Portfolio Governance and assign the Portfolio Management Roles.
   - Review the Portfolio Management Responsibilities and achieve clarity.
   - Clearly distinguish the Portfolio Roles/Responsibilities from the Programme and Project Roles/Responsibilities, while also relating the two groups to each other.

5. **Document the portfolio's objectives, management approach, and documentation needs:**
   - Tailor the PfM² to the specific organisational needs.
   - Capture the portfolio's objectives.
   - Define the portfolio management framework.
   - Define what documentation is required (i.e. portfolio artefacts and reports).

6. **Produce the key portfolio artefacts:**
   - Set up the Portfolio Logs (Change, Issues, Risk, Decisions, Stakeholders and Lessons Logs).
   - Define the structure of the Portfolio Composition & Analysis Report.
   - Create the Portfolio Handbook and document the objective, approach, and tailoring decisions in the appropriate sections.

7. Plan the Portfolio's Monitor & Control activities:

- Understand the portfolio's monitoring and controlling needs.
- Align portfolio monitoring and controlling activities with programme and project reporting cycles.
- Put in place the information-gathering infrastructure required for portfolio reporting.

8. Select appropriate PfMIS tools.

- Automate key portfolio management processes.
- Use a central document and knowledge-management repository.
- Connect with corporate systems and component management tools.

9. Develop a plan on how to keep the Portfolio Stakeholders engaged and informed:

- Identify the key Portfolio Stakeholders.
- Devise a communications and stakeholders engagement strategy.
- Involve stakeholders and keep them informed from the beginning.

4 Portfolio Governance - Roles & Responsibilities

Governance is one of the pillars of effective portfolio management. Portfolio governance is the framework within which portfolio management decisions are made. It defines the portfolio roles and their associated responsibilities, while also describing reporting and escalation lines.

The PfM² Governance Model provides a structured and effective framework that is logical, robust and flexible enough to facilitate the governance of portfolios regardless of their type, size or other characteristics.

The PfM² Governance Model also defines the distribution of the management responsibilities to the various portfolio roles, so it is known *who has to do what* in relation to all the portfolio management activities described in the methodology. This is done in a clear and effective way, without leaving any gaps or creating any overlaps in the allocation of these responsibilities.

A portfolio organisation chart shows the relations between the various portfolio roles but may also show their connection to other temporary or permanent roles within the organisation, such as those at the strategic management or portfolio component levels.

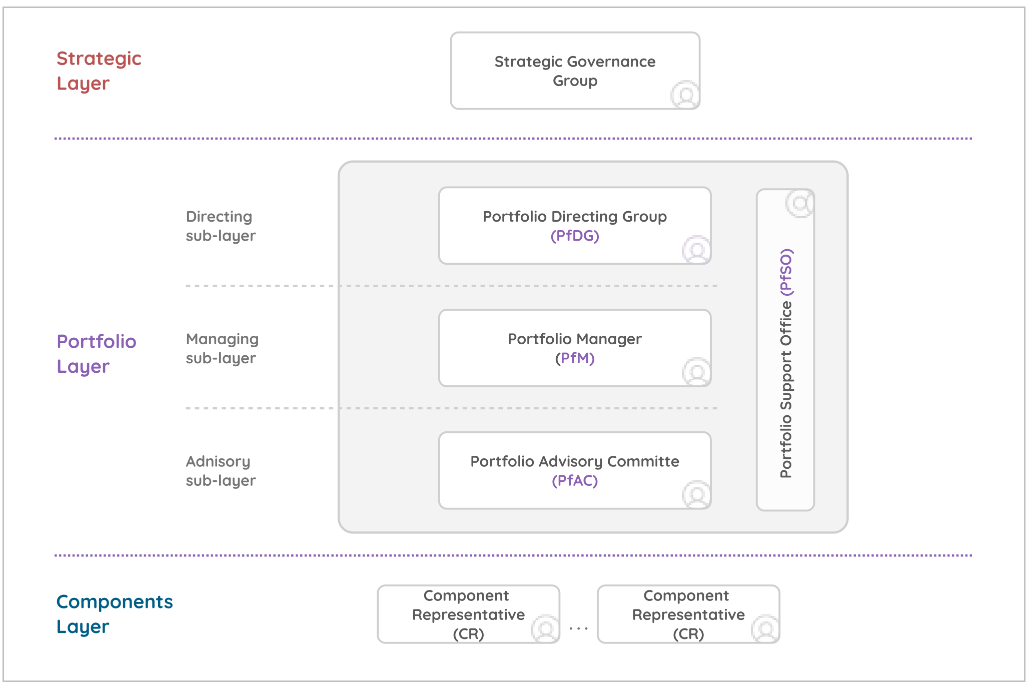


Fig 4.1: Portfolio Management Governance: Layers and Roles

Note that the PfM² Governance Model is fractal in nature, which means that it has the same structure and is equally applicable to the highest-level portfolio as to the lowest level (sub)portfolios.

Strategic Layer

The Strategic Layer resides above the Portfolio Layer; it is where the strategic objectives are defined. It comprises those roles in the organisation which are responsible for developing strategy and monitoring its execution. The Strategic Layer provides the necessary senior management direction for defining the portfolio-level objectives, which can be short, medium, and long-term in terms of their realisation timeframe.

Portfolio Layer

The Portfolio Layer connects the Strategy Layer with the Components Layer. It exists to facilitate the implementation of strategy through the selection and execution of portfolio components. It comprises four sub-layers:

- Portfolio Directing sub-layer
- Portfolio Managing sub-layer
- Portfolio Advisory sub-layer
- Portfolio Support sub-layer

Components Layer

The Components Layer is where the decisions are taken in relation to the management of the specific portfolio components. The strategic direction of the Strategic Layer and the performance and results of the Components Layer all are inputs into the Portfolio Layer, and drive portfolio-level decisions.

Note that the Roles in the Portfolio Layer often plays the role of the Governing Layer (i.e. the Appropriate Governance Body (AGB)) of the programme or project components (see PgM² and PM² Governance Models).

Portfolio Governance Objectives

Putting in place a Portfolio Governance is a best practice that should always be followed. However, the Portfolio Governance truly achieves its purpose when:

- the governance in place is accepted, presenting clear lines of communication, particularly for large portfolios with many stakeholders. The same should be true for the governance of the components.
- roles are assigned to members of the organisation who have the necessary management experience, qualifications, knowledge, skills, and authority to execute their responsibilities effectively.
- the necessary actions are taken to avoid any overlaps in responsibilities between portfolio roles and those of existing bodies (e.g. management committees, other steering groups, etc.).
- those who hold a role in portfolio management have sufficient time to perform their duties; that is, they make themselves available and set aside the necessary time to fulfil all their responsibilities.
- those involved in portfolio management ensure that they develop the relevant portfolio management competences. These can be acquired by receiving relevant training, coaching, or mentoring.
- appropriate portfolio management support structures are in place (e.g. a Portfolio Support Office (PfSO)).

4.1 Portfolio Directing Group (PfDG)

The Portfolio Directing Group (PfDG) is the ultimate authority in the portfolio organisation. On the recommendation of the Portfolio Manager (PfM), and with the support of the Portfolio Support Office (PfSO), it approves the Portfolio Framework (i.e. the portfolio objectives and management approach), the Portfolio Composition and other important management decisions.

The Portfolio Directing Group (PfDG) holds the most strategic role in the Portfolio Layer. It acts as the Sponsor of the Portfolio within the organisation and ensures that decision-makers throughout the organisation support and appreciate the portfolio's strategic importance and benefits. It approves portfolio decisions while committing the necessary organisational resources and maintains the big-picture view of all the (sub)portfolios across the organisation. It is also accountable for effectively communicating the overall portfolio performance and decisions to the Strategic Layer and other portfolio stakeholders, such as senior managers.

The Portfolio Directing Group (PfDG) consists of Senior Management representatives plus the Portfolio Manager (PfM). Representatives from other Portfolios, Finance, HR, Legal, and other functional or advisory roles may also participate in the meetings of the Portfolio Directing Group (PfDG), either as permanent members or on an *ad hoc* basis, as long as they can contribute to the decision-making process.

Responsibilities

- Accountable for portfolio management within the organisation.
- Approves the Portfolio Framework and Portfolio Handbook.
- Approves the Portfolio Governance and the distribution of portfolio management responsibilities.
- Approves the portfolio composition.
- Accountable for portfolio performance and adherence to the defined Portfolio Framework.
- Accountable for the effectiveness of the Portfolio Framework—it authorises Portfolio Framework improvements as recommended by the Portfolio Manager (PfM).
- Approves the resolution of escalated issues.
- Relies on input provided by the Portfolio Managers (PfM) and the Portfolio Support Office (PfSO) to make informed decisions.

4.2 Portfolio Manager (PfM)

The Portfolio Manager (PfM) is responsible for managing the portfolio in line with the procedures defined in the Portfolio Handbook. Portfolio Managers (PfMs) manage the execution of all the activities involved in portfolio composition, realisation, and stakeholder management.

They also monitor the portfolio performance and take appropriate decisions and measures to keep it on track, always taking into consideration the insights and advice of the Portfolio Advisory Committee (PfAC).

Portfolio Managers (PfMs) report to the Portfolio Directing Group (PfDG) on the overall performance of their portfolio(s), which also acts as a point of escalation for important portfolio issues and for the approval of decisions.

Responsibilities

- Keeps the portfolio oriented towards realising its objectives and benefits.
- Sets up the Portfolio Handbook and other portfolio artefacts.
- Manages the portfolio according to the methodology.
- Coordinates portfolio composition and realisation.
- Validates the alignment of portfolio components with the portfolio objectives.
- Analyses dependencies, overlaps, synergies, constraints, issues, and risks within the portfolio; uses this analysis to implement actions that optimise the portfolio.
- Identifies portfolio risks and devises plans to overcome them.
- Implements portfolio management decisions.
- Resolves portfolio-level issues that may compromise portfolio delivery and the realisation of strategic benefits; escalates unresolvable issues to the Portfolio Directing Group (PfDG).
- Communicates portfolio performance reports to the portfolio stakeholders.
- Identifies and suggests potential improvements to the portfolio management approach.
- Provides leadership and strategic direction for the components in the portfolio.
- Chairs the meetings of the Portfolio Advisory Committee (PfAC).

4.3 Portfolio Advisory Committee (PfAC)

The Portfolio Advisory Committee (PfAC) is a tactical, non-decision-making body. It plays an important role in bringing those points of view together which are necessary for the effective management of the portfolio. It provides a forum for discussing issues relating to the composition and realisation of the specific portfolio and the performance of the components therein. It is composed of representatives of the components layer, technical and business domain experts, and others; its composition may vary depending on the topic to be discussed.

For the Portfolio Advisory Committee (PfAC) to execute its responsibilities, it needs to be kept informed about the portfolio's performance. However, it should be noted that the Portfolio Advisory Committee (PfAC) only advises on portfolio issues and does not interfere in the responsibilities of the Portfolio Manager (PfM), who remains responsible for the overall management of the portfolio.

The Portfolio Advisory Committee (PfAC) consists of the Portfolio Manager (PfM), who chairs the committee, Component Representatives (CRs), and other roles. Those other roles are defined in the Portfolio Handbook, and include experts, representatives, finance, HR, etc., and others, if required.

Responsibilities

- Provides an informed perspective on the goals, issues and performance of the portfolio components.
- Helps to ensure that the portfolio components comply with organisational and portfolio standards and practices.
- Advises on portfolio composition and the implementation of decisions.
- Stays up-to-date with the portfolio's performance and advises on preventative or corrective measures to keep the portfolio on track.
- Supports on the management of portfolio risks and the resolution of issues.
- Provides input for the identification and management of portfolio changes.
- Assesses the impact of portfolio decisions on the portfolio's components and facilitates their communication and implementation.
- Assesses the impact of the early termination of a portfolio component.
- Can propose improvements (relating to both the composition of the portfolio and its management).

4.4 Portfolio (Support) Office (PfSO)

The Portfolio (Support) Office (PfSO) supports all portfolio management activities. It supports data collection and reporting, and it prepares the consolidated views that will enable the Portfolio Manager (PfM) and the Portfolio Directing Group (PfDG) to make data-driven decisions regarding the portfolio.

In large or distributed organisations, the Portfolio (Support) Office (PfSO) can also provide guidance to the various Local Support Offices (LSOs).

The Portfolio (Support) Office (PfSO) also supports the establishment and evolution of portfolio management with the organisation.

Responsibilities

- Supports strategic planning and other governance meetings.
- Collects component descriptions and other documentation necessary to facilitate the portfolio composition process.
- Supports strategic and portfolio communications within the organisation.
- Consolidates resource demand & supply, identifies gaps and over-allocations.
- Collects information regarding the portfolio components to support portfolio analysis and create dashboards.
- Supports the Portfolio Managers (PfM), Portfolio Advisory Committees (PfAC) and Portfolio Directing Group (PfDG) in their portfolio management activities.
- Defines the training needs for the improvement and development of portfolio management capacity, capabilities, or other competencies

- Maintains the portfolio repository (i.e. the database of portfolio artefacts, reports, Logs, etc.)
- Plays a Quality Assurance role to ensure that Portfolio Management procedures are appropriately applied.
- Works with the Local Support Offices (LSOs) to improve processes, methodologies and tools supporting effective management.
- Analyses component End-Reports and collects and consolidates ideas for improvements to the portfolio framework.

4.5 Local Support Office (LSO)

A Local Support Office (LSO) provides administrative support and assistance for the management of components. It has an advisory role and supports components in relation to methodology, tools, and quality assurance. Examples of such offices are Programme Support Offices (PgSOs), Project Support Offices (PSOs), Service Management Offices (SMOs), etc.

Responsibilities

- Assists with scheduling, resource planning, administration, and support tools.
- Administers steering meetings and gathers lessons learned from component experiences.
- Maintains local component repositories (e.g. artefacts, changes, risks, issues, lessons learned) and coordinates configuration management activities.
- Monitors adherence to methodology guidelines and other organisational standards.
- Establishes the tools, procedures and methods which will be used.
- Participates in the continual improvement of Portfolio Management within the organisation.

4.6 Component Representatives (CRs)

Component Representatives (CRs) have been delegated authority to represent the interests and point of view of a portfolio component. The components can be represented by any role described in the component governance, and so could be the Portfolio Manager (PfM) of a sub-portfolio, a Programme Owner (PgO), a Project Owner (PO), a Programme Manager (PgM), a Project Manager (PM), a Service Manager (SM), a Product Manager (PdM), et al.

4.7 Assigning Responsibilities—RAM/ARSCI

Portfolio Roles and Responsibilities need to be clearly defined and assigned to everyone involved in Portfolio Management.

Responsibility is not an on/off concept. Rather, there are five different degrees of management responsibility, with the highest degree of responsibility being *Accountable* and the second highest being *Responsible*. Lower degrees of responsibilities are *Support*, *Consulted* and *Informed*.

The ARSCI model is an effective way of assigning management responsibilities to the various Roles:

The Role that is Accountable (**ARSCI:A**) is ultimately answerable for the success or failure of what they are accountable for. They need to provide the resources, leadership and support required for everyone else to perform their responsibilities. There is always a single Role Accountable for any given management activity or artefact, so one must be nominated.

The Role that is Responsible (**ARSCI:R**) is responsible for delivering the work . It is a singular role and there must be one nominated. Often, others may also be responsible for doing part of the work. However, it should be noted that only work can be fully delegated; the responsibility itself cannot. When work is delegated, the delegator becomes accountable for the results delivered by the responsible delegate.

As part of a team, those with the Support (**ARSCI:S**) role also work with the person Responsible to complete the given management activity or artefact. There is no restriction to how many people can be ARSCI:S.

As part of a team, those with the Consulted (**ARSCI:C**) role need to provide information or insights to the person Responsible, so they can complete a given management activity or artefact. The Consulted responsibility is not simply a right, it is also an obligation. There is no restriction on how many people can be ARSCI:C.

Finally, those with the Informed (**ARSCI:I**) role need to be kept informed of the progress or/and the end result of the activity or artefact. As with the Consulted responsibility, the Informed responsibility is not simply a right; it also carries an obligation to remain informed. There is no restriction on how many people can be ARSCI:I.

Note that the higher degrees of responsibility (i.e. ARSCI:A/R/S) also inherit the ARSCI:C/I responsibilities, that is, they are also Consulted and Informed.

Documenting Responsibility Assignments

A Responsibility Assignment Matrix (RAM) and the ARSCI model are used to assign the responsibilities in the management of portfolios to all roles. The consolidated PfM² RAM/ARSCI table for each Portfolio Management activity of the 5 Portfolio Management processes and the Portfolio Artefacts is presented below.

Portfolio Framework Definition	**PfDG**	**PfM**	**PfAC**	**PfSO**	**CRs**	**LSO**
Define Portfolio Objectives & Characteristics	A	R	C	S	I	I
Define Portfolio Management Approach	A	R	C	S	I	I
Review Portfolio Framework	A	R	C	S	C	C
Portfolio Composition	**PfDG**	**PfM**	**PfAC**	**PfSO**	**CRs**	**LSO**
Identify Components	A	R	C	S	C	C
Evaluate Components	A	R	C	S	C	C
Plan Portfolio Capacity	A	R	C	S	C	C
Compose Portfolio	A	R	C	S	I	I
Approve Portfolio	A	R	I	S	I	I

Portfolio Realisation	PfDG	PfM	PfAC	PfSO	CRs	LSO
Manage Strategic Alignment	A	R	C/S	S	I	I
Manage Portfolio Value	A	R	C/S	S	C	I
Manage Portfolio Change	A	R	C/S	S	C	I
Manage Portfolio Risk	A	R	C/S	S	C	I
Manage Portfolio Issues	A	R	C/S	S	C	I
Portfolio Monitoring & Controlling	**PfDG**	**PfM**	**PfAC**	**PfSO**	**CRs**	**LSO**
Monitor Portfolio Performance	A	R	C	S	C	S
Control Portfolio Performance	A	R	C	S	C	C
Manage Portfolio Quality	A	R	C	S	C	C
Manage Portfolio Lessons	A	R	C	S	C	S
Report Portfolio Performance	A	R	C	S	C	I
Stakeholder Engagement & Communication	**PfDG**	**PfM**	**PfAC**	**PfSO**	**CRs**	**LSO**
Manage Portfolio Stakeholders	A	R	C	S	I	I
Manage Portfolio Communications	A	R	C	S	I	I
Portfolio Artefacts	**PfDG**	**PfM**	**PfAC**	**PfSO**	**CRs**	**LSO**
Portfolio (Management) Handbook	A	R	C	S	I	I
Portfolio Communications Plan	A	R	C	S	I	I
Portfolio Composition & Analysis Report	A	R	C	S	I	I
Benefits Matrix	A	R	S	S	C	C
Portfolio Logs	A	R	C	S	C	C

ARSCI = Accountable, Responsible, Supports, Consulted, Informed

PfDG Portfolio Directing Group

PfM Portfolio Manager

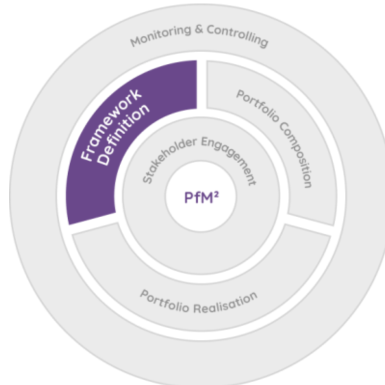
PfAC Portfolio Advisory Committee

PfSO Portfolio (Support) Office

CRs Component Representatives

LSO Local Support Office

5 Portfolio Framework Definition



For a new portfolio to be created, its objectives, characteristics, structure, and management approach need to be defined. The Portfolio Framework Definition process establishes the overall management framework, the processes, activities, governance bodies, artefacts and specific metrics, techniques, and tools to be used for its management.

The portfolio framework should be tailored to reflect the organisation's specific portfolio and portfolio management needs, but also the culture and maturity of the organisation. At the same time, it must also remain aligned with the spirit and key elements of management systems and other corporate methodologies.

In time, the effectiveness of the framework should also be reviewed in the light of the experience of managing the portfolio and of any lessons that have been captured. If required, the framework can be updated to address evolving portfolio management needs.

It is also important to estimate the cost and effort of managing the portfolio, and to reserve the resources and budget needed to cover them. This management cost will depend on the size of the portfolio, the frequency of the portfolio activities, and the number of people involved in governance and support roles (e.g. Portfolio Support Office (PfSO) staff).

The Portfolio Framework process comprises 3 activities:

- Define Portfolio Management Approach
- Define Portfolio Objectives & Characteristics
- Review Portfolio Framework

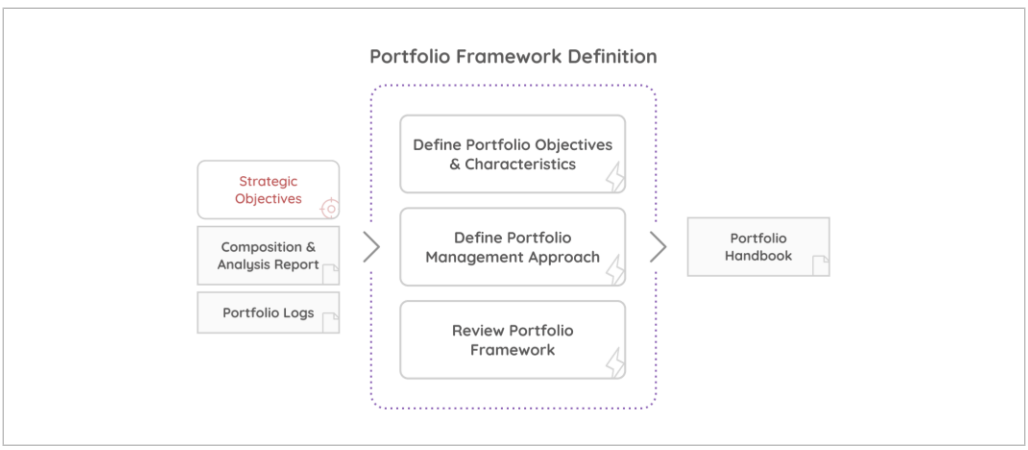


Fig 5.1: Portfolio Framework Definition activities and key input/output artefacts

Portfolio Framework Definition Objectives

Running the indicated management activities and producing the recommended Artefacts are best practices that should be followed. However, Portfolio Framework Definition achieves its purpose when:

- the people involved recognise the value of doing the upfront work that will set-up the infrastructure needed to initiate a portfolio.
- it is run early in the life of a portfolio (ideally as the first process to be executed).
- it enables the effective capturing of the portfolio's objectives.
- it creates the foundations on which portfolios can be effectively managed by establishing realistic and tailored management processes that are aligned with the goals and level of maturity of the organisation.
- defines an effective governance which is not in conflict with other corporate structures and systems.
- the results of the process are documented in the Portfolio Handbook at an adequate level of detail.
- it is reviewed and improved to address any shortcomings or the emerging portfolio management needs.

The consolidated responsibilities of the Roles involved in the Portfolio Framework Definition activities are shown in the RAM/ARSCI table below.

Portfolio Framework Definition	PfDG	PfM	PfAC	PfSO	CRs	LSO
Define Portfolio Objectives & Characteristics	A	R	C	S	I	I
Define Portfolio Management Approach	A	R	C	S	I	I
Review Portfolio Framework	A	R	C	S	C	C

The following sections provide a description of the Portfolio Framework Definition activities along with useful guidelines for their execution.

5.1 Define Portfolio Objectives & Characteristics

Through this activity, the specific portfolio objectives are described, and the characteristics of the portfolio defined. The portfolio objectives and characteristics essentially define the portfolio. Together they provide the main input for defining the criteria and evaluation **metrics** used to select which portfolio candidates to include in the portfolio and which to reject.

This activity also involves defining the portfolio components' attributes & lifecycle. The outputs of this activity are documented in the Portfolio Handbook and later on referenced in the Portfolio Composition & Analysis Report.

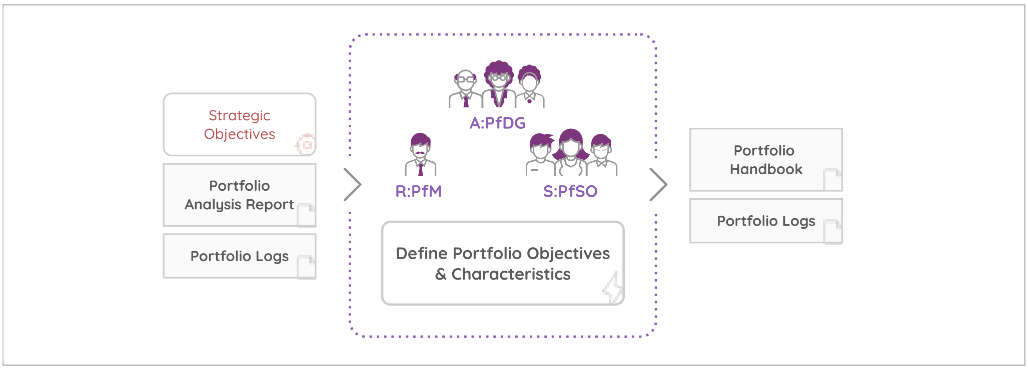


Fig 5.2: Define Portfolio Objectives & Characteristics activity - key input/output artefacts & main roles.

Portfolio Framework Definition	PfDG	PfM	PfAC	PfSO	CRs	LSO
Define Portfolio Objectives & Characteristics	A	R	C	S	I	I

Defining Portfolio Objectives

The portfolio objectives define the reason why the portfolio exists. These objectives are directly related to one or more of the organisation's specific strategic and operational objectives and guide the composition and realisation of the portfolio.

There should be a clear link between the portfolio objectives and the objectives found in the organisation's Strategic Plans (e.g., in the Annual Work Plans). They essentially drive decisions related to the management of the portfolio and play a role in the selection of the appropriate management approach.

The budget of the Portfolio (the capacity and funds allocated to this portfolio) is also an important objective since the portfolio aims to achieve its goals within a budget. The high-level portfolio budget is, therefore, defined through this activity and documented in the Portfolio Handbook. It is then specified in more detail through the multiple iterations of the Portfolio Composition process and Monitored & Controlled through the relevant process. The portfolio budget target and consumption are reported in the Portfolio Composition & Analysis Report (see *Section 8.5 - Report Portfolio Performance*).

Defining the Portfolio Characteristics

Before any request can be considered as a candidate for a portfolio, there needs to be some basic predefined criteria that qualify it for potential inclusion in the portfolio, and which make it possible to evaluate it and compare it to other candidates.

Portfolio characteristics define the **component types** that are qualified to be part of the portfolio along with their attributes. Typical types of components are programme, project, service, product or system, operation, work activity, or other. For instance, a pure project portfolio will comprise only component types which are projects or programmes.

Each component type is defined by a set of **attributes**. These attributes can relate to **category** (e.g. agile projects, R&D, IT, compliance, etc.), size, duration (i.e. time to maturity), cost, urgency, risk, etc. and are captured through the component description forms provided by the portfolio which can be different for each component type.

During its **lifecycle**, a portfolio component goes through different ***states***. The changes in the state of a component are the result of portfolio management decisions. These states are also defined in the Portfolio Handbook. During the Portfolio Composition process, the candidate component is *identified*, *evaluated*, and *prioritised*. At some point, a decision is taken to *approve* or *reject* the candidate. As soon as the approved portfolio component starts, it enters the *running* state. The last state in the lifecycle of a portfolio component is *completed*. During the life of a portfolio, a portfolio component can be *suspended* temporarily. Components can also go through an early termination when they are judged to be non-performing or when their Business Case is no longer valid. *Completed*, *terminated*, or *rejected* are the three possible final states of a component.

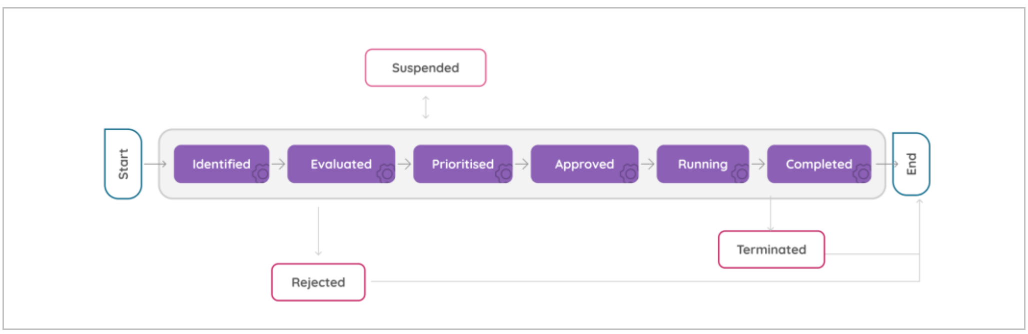


Fig 5.3: PfM² Portfolio Component Lifecycle (state diagram)

Defining Component Evaluation Metrics

Organisations don't have unlimited delivery capacity, therefore, the components that comprise a portfolio need to be carefully selected. To facilitate the selection process, specific metrics and techniques that will be used to evaluate the portfolio components should be defined and documented in the Portfolio Handbook.

Typical evaluation metrics include alignment with strategic objectives, value creation potential, resource requirements (financial and human), compliance with regulations, strategic risk, realisation risk, necessity, urgency, etc. A scoring scale, weight and method should also be defined for each criterion.

The same criteria and scoring models should be applied to every candidate of the same component type within the portfolio; this allows for an objective and fact-based composition process.

5.2 Define Portfolio Management Approach

This activity defines the approach for performing effective portfolio management. The Define Portfolio Management Approach activity includes defining (or tailoring) the portfolio management processes, the governance and artefacts, aligning the portfolio processes with existing organisational procedures and approvals, defining the portfolio Mindsets, and defining the resource capacity, capability and competences required for portfolio management.

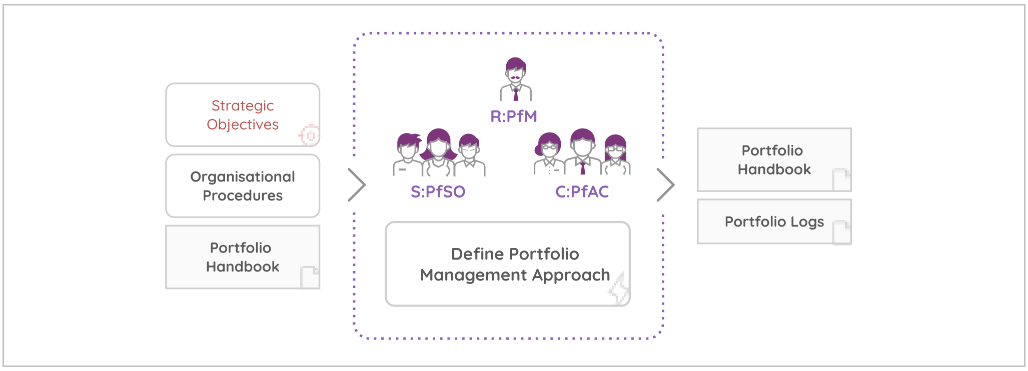


Fig 5.4: Define Portfolio Management Approach activity - key input/output artefacts and main roles.

Portfolio Framework Definition	PfDG	PfM	PfAC	PfSO	CRs	LSO
Define Portfolio Management Approach	A	R	C	S	I	I

Defining the Portfolio Management Processes, Governance and Artefacts

The portfolio management processes that compose, realise, monitor, and control the portfolio, and help manage portfolio stakeholders need to be defined. The latter three processes are executed continuously throughout the life of the portfolio. However, the Portfolio Framework Definition and Composition processes are not continuous; they recur with a frequency that is defined within the portfolio framework or are triggered as required.

Typically, the portfolio composition cycle (i.e. adding new or/and removing portfolio components) is aligned to the organisation's budgetary and planning cycle (e.g. annual cycle). However, specific characteristics of the components within the portfolio may also determine the composition cycle. For instance, a portfolio that contains **agile components**, or components of short duration (i.e. short time to maturity) may require a more frequent (re)composition cycle.

The required governance structure, Roles and Responsibilities should also be defined and assigned. These Roles are often assigned to existing management committees; however, it is important to ensure that their additional portfolio management responsibilities are understood as being separate to their other role(s) and furthermore executed effectively.

It is also necessary to define/tailor the specific portfolio artefacts to be used for the portfolio. These can be defined as standalone documents or as part of a tailored PfMIS (Portfolio Management Information System). Forms, templates, naming conventions, document storage locations etc. should also be defined upfront.

Aligning Portfolio Processes with Organisational Procedures and Approvals

The purpose of any approval procedure is to provide a means of better financial and strategic control over where (and when) organisational resources are being invested, to facilitate better management of the overall organisational capacity, and to ensure that the various initiatives do not deviate from their scope, cost, time, and quality objectives, or without such deviations being formally discussed and accepted.

This activity is concerned with aligning the portfolio processes and the needs for formal approvals with pre-existing organisational approval procedures and criteria which are beyond the control of the portfolio (e.g. annual planning processes, procurement processes, IT Governance, HR processes, etc.)

Note that no methodology can presume to capture in its model the highly varied approval procedures and criteria set within each organisation. It is therefore necessary for these approval procedures to be identified and documented during the Portfolio Framework Definition process, even if this requires additional tailoring to the portfolio framework.

Conversely, it can be agreed to change or adapt (within acceptable limits) specific organisational procedures to accommodate the portfolio's management needs and constraints. A typical case is the need to align component approval procedures with the Portfolio Composition process.

Defining Portfolio Mindsets

An important element in effective portfolio management is defining productive portfolio mindsets and adhering to them. These designate the attitude and behaviour for everyone who participates in the management of portfolios and the implementation of portfolio components. The mindsets help those involved in the portfolio to focus and align their management priorities and style to the portfolio goals. Together with the appropriate procedures, they help professionals to navigate the many complexities of managing portfolios within an organisation. The mindsets are documented, along with all the decisions of this Portfolio Framework Definition Process, in the Portfolio Handbook.

Defining Portfolio Management Resource Capacity, Capability & Competences

Even though portfolio management responsibilities are often assigned to existing committees and simply treated as additional agendas items to their regular meetings, the additional capacity, capability, and effort needed to manage a portfolio effectively should not be underestimated, particularly in the case of large portfolios.

Based on the characteristics of the portfolio and the maturity of the organisation, both the management resources and competences needed for the effective management of the portfolio should be identified.

The required competences relate to the general portfolio management domain, but are also specific to the chosen methodology, the structure of the portfolio, and the various tools and techniques used.

If portfolio management capacity, capabilities or other competencies are missing, the necessary skills and resources should be acquired, or/and an appropriate training plan should be developed and executed through focused trainings and workshops. The need can be identified by the Portfolio Support Office (PfSO) and delivered by expert portfolio management trainers.

A high-level budget and capacity plan should be developed on the basis of estimates of the involvement of the various roles in the management of the portfolio. Note that this plan relates exclusively to the management activities, and not to the budget, capacity and capabilities needed to implement the portfolio components (see also *Section 6 - Portfolio Composition* and the *Plan Portfolio Capacity* activity).

5.3 Review Portfolio Framework

In the context of continual improvement, a portfolio framework should be periodically reviewed to evaluate its effectiveness. Lessons learned should be collected, assessed, and used to define improvement actions. The framework should be adapted where necessary to maximise its effectiveness while minimising bureaucracy. This should be done periodically, or as opportunities for improvements are identified.

The Portfolio Advisory Committee (PfAC) and the representatives of the portfolio components play an important role in identifying weaknesses in the portfolio framework and in recommending improvements.

The Review the Portfolio Framework activity involves defining the review process, reviewing, and improving the portfolio framework. It also includes the activity of closing the portfolio. Note that for **agile portfolios**, the Review Portfolio Framework activity is usually leaner and is executed more frequently.

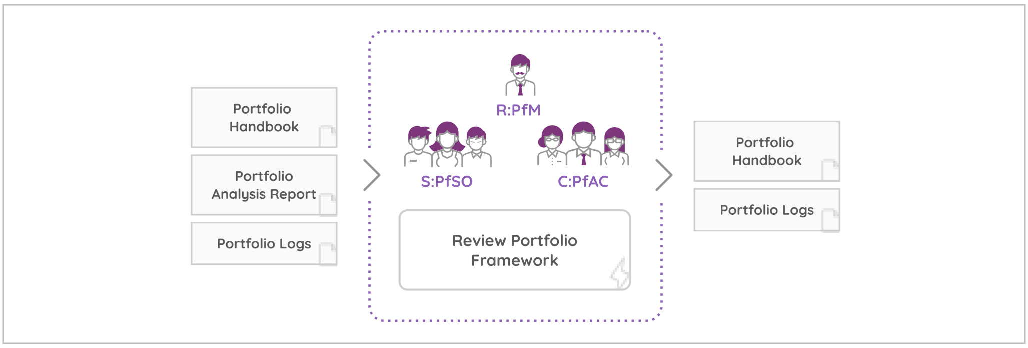


Fig 5.5: Review Portfolio Framework activity - key input/output artefacts and main roles.

Portfolio Framework Definition	PfDG	PfM	PfAC	PfSO	CRs	LSO
Review Portfolio Framework	A	R	C	S	C	C

Defining the Review Approach

This activity defines and documents in the Portfolio Handbook the goals, steps, roles involved, techniques used, and the frequency of (or trigger conditions for) a framework review. They are tailored to address the specific needs of the Portfolio and the Organisation.

Reviewing and Improving the Portfolio Framework

Based on the review process, the performance of the portfolio framework and overall portfolio management efficacy are analysed objectively, and areas of **improvements** are identified. An important input into this activity is the output of the Manage Portfolio Lessons activity and the Lessons Log. The review and analysis of the portfolio framework should consider multiple perspectives from the various portfolio management layers and stakeholders. The Portfolio Advisory Committee (PfAC) and the Portfolio Support Office (PfSO) play a critical role in ensuring that high-quality data are available (e.g. in the Portfolio Analysis Report, the Lessons Log, etc.).

Based on the analysis and recommendations, the portfolio framework is updated and new metrics for measuring its performance are defined and captured in the Portfolio Handbook.

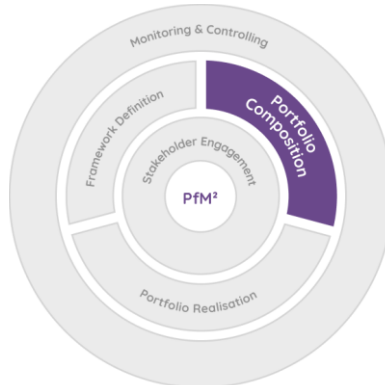
Note that this activity relates to reviewing and improving the portfolio framework and management approach, not to improving the portfolio itself, which is done via the Portfolio Composition process.

Closing the Portfolio

When a portfolio has achieved its objectives, or is no longer relevant to the organisation, the portfolio needs to be formally closed. In this case, the portfolio organisation needs to be dissolved and any portfolio components that have not been completed have to be merged into other active portfolios. It is also useful to capture final lessons learned in the Learning Log and to archive the portfolio artefacts properly.

The recommendation for closing a portfolio can come from the Portfolio Manager (PfM), but the decision to do so will come from the Portfolio Directing Group (PfDG).

6 Portfolio Composition



The purpose of the Portfolio Composition process is to facilitate the composition of an optimal portfolio by following a pre-defined process and component selection criteria.

The composition process comprises the activities necessary to identify and evaluate candidate portfolio components, to select the right mix of portfolio components, and commit the necessary organisational resources for their management and implementation.

Portfolio Composition is a rigorous and time consuming process, however, it needs not be a singular annual event, although this is often the case when it is aligned with other annual planning activities.

Depending on the needs and agility aspirations of the organisation, a portfolio management process that is leaner and more dynamic can be defined. This will result in a more **agile portfolio** management approach that is based on frequent performance reviews and (re)composition cycles. However, this needs to be done in a disciplined and effective way so as to also make this an efficient process.

Note that (re)composing a portfolio simply because it was poorly composed in the first place, causes great inefficiencies, may trigger unproductive office politics, and cause frictions with negative consequences to both portfolio management effectiveness and to the organisation as a whole.

The Portfolio Composition process comprises 5 activities:

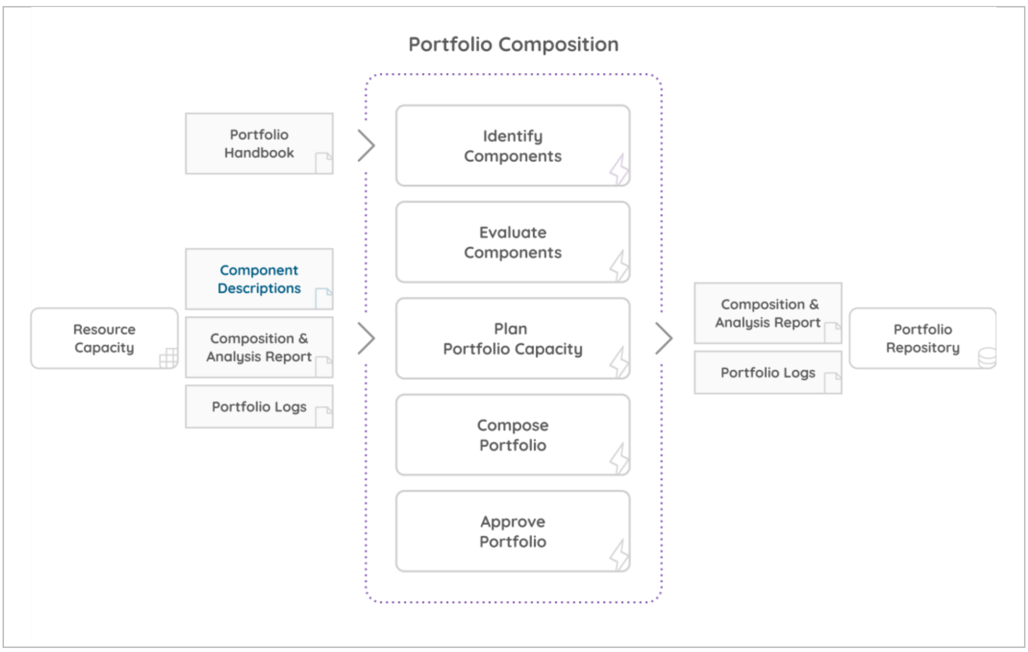


Fig 6.1: Portfolio Composition activities and key input/output artefacts

Portfolio Composition Objectives

Running the indicated management activities and producing the recommended Artefacts are best practices that should be followed. However, Portfolio Composition achieves its purpose when it:

- is done through repeatable and well executed management activities.
- achieves the qualification, evaluation and prioritisation of portfolio components based on objective and well thought-out criteria.
- results in a well balance portfolio which satisfies the portfolio objectives, while being in line with available capacity and the risk appetite of the organisation.
- establishes a productive Portfolio Advisory Committee (PfAC) that will contribute with input and advice for the effective management of the portfolio.
- achieves the approval of the portfolio.
- is not done just once, but whenever necessary to address changes and the emerging needs of the portfolio.

The consolidated responsibilities of the Roles involved in the Portfolio Composition activities are shown in the RAM/ARSCI table below.

Portfolio Composition	PfDG	PfM	PfAC	PfSO	CRs	LSO
Identify Components	A	R	C	S	C	C
Evaluate Components	A	R	C	S	C	C
Plan Portfolio Capacity	A	R	C	S	C	C
Compose Portfolio	A	R	C	S	I	I
Approve Portfolio	A	R	I	S	I	I

The following sections provide a description of the Portfolio Composition activities along with useful guidelines for their execution.

6.1 Identify Components

The purpose of this activity is to identify existing and new components and to qualify them as candidates for a portfolio. Information on each candidate component is collected, and an initial eligibility check is performed.

Categorising the components makes it easier to compare candidates, and later on, to ensure that the portfolio contains a well-balanced mix of components from various categories. The predefined criteria for each category will support the selection, prioritisation, and optimisation process.

The output of this activity will be a list of the candidate components for the specific portfolio plus their descriptions. The list will exclude candidates that do not comply with the portfolio component definition as defined in the portfolio characteristics section of the Portfolio Handbook.

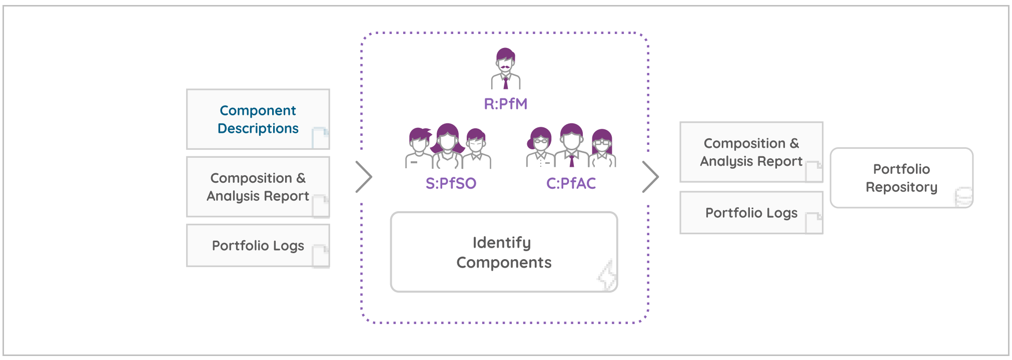


Fig 6.2: Identify Components activity - key input/output artefacts and main roles.

Guidelines

- **Document portfolio candidates:** Collect candidate information using standardised component description forms (e.g. the Initiation Request for project or programme components).
- **Ensure both top-down and bottom-up contributions:** Ensure the identification of a broad spectrum of candidate components to cover both the strategic and the operational domains.
- **Qualify portfolio candidates:** Check the eligibility of candidates based on the pre-defined criteria (as per the portfolio characteristics). Note that this step only qualifies eligible candidates. Their evaluation will take place in the subsequent activity.
- **Categorise candidates**: Place candidates in different categories, as different evaluation criteria will be applied to different types of candidates (e.g. project or programme components will have different qualification and evaluation criteria from service or product components).
- **Identify relationships**: Sometimes it makes more sense for components to be included in a portfolio as a group instead of as individual components. Therefore, such relationships or dependencies between candidates should be documented as they will help better assess the impact of qualifying or rejecting a candidate.

- **Create candidate lists:** Create an inventory of eligible and non-eligible portfolio candidates, grouped into categories and sub-categories.

Portfolio Composition	PfDG	PfM	PfAC	PfSO	CRs	LSO
Identify Components	A	R	C	S	C	C

Note that the definition and description of components take place at the respective component level, that is, component definition is not a portfolio level activity, but a component level activity.

6.2 Evaluate Components

The purpose of this activity is the evaluation of portfolio candidates based on pre-defined criteria that allow the objective scoring of candidate components. The evaluation activity results in a relative scoring of the candidates' relevance and value to the portfolio. The results of the evaluation activity are inputs to the subsequent portfolio composition activities.

Those involved in the evaluation of components should be able to develop a holistic view of the components' cost, risk, value, and overall impact on the organisation, as well as their interdependencies and synergies with other portfolio candidates.

Various tools and techniques (e.g. visual representations, qualitative evaluations, etc.) can be used to support the evaluation process. However, despite the results of this activity and the value of each component, the portfolio composition will always be constrained by resource capacity (human and financial resources) as well as other organisational factors.

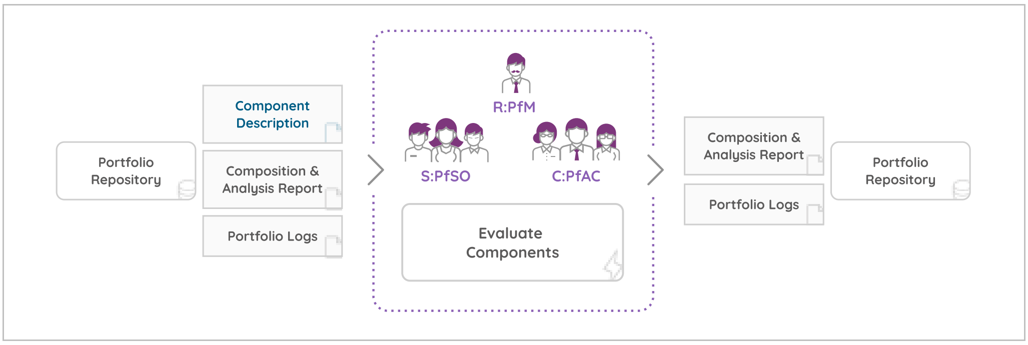


Fig 6.3: Evaluate Components activity - key input/output artefacts and main roles.

Guidelines

- **Confirm a candidate's relevance**: Confirm the candidate's relevance to the portfolio through the assessment of the component's description and the provided business justification.
- **Score candidates**: Score each candidate component against the pre-defined portfolio selection criteria (e.g. alignment with strategic objectives, value creation, resource usage, strategic risk, realisation risk, urgency, etc.). Assign a score to each candidate based on the defined scoring model.
- **Develop a prioritised list of candidates**: Based on the evaluation results, develop a ranked list of candidates (e.g. from higher to lower).
- **Prepare the evaluation results**: Update the Composition and Analysis Report with the evaluation results and prepare a summary of each evaluation.

Portfolio Composition	PfDG	PfM	PfAC	PfSO	CRs	LSO
Evaluate Components	A	R	C	S	C	C

6.3 Plan Portfolio Capacity

Capacity Management is the activity of assessing whether sufficient resource capacity is available to the portfolio for a given period of time. It also includes planning the actions required to adapt the existing capacity to the demand or vice versa, until they are balanced.

Once the portfolio candidates are qualified, an analysis is performed of their financial and human resources capacity needs. The resource needs of both the running portfolio and the new portfolio candidates should be taken into consideration in the light of the organisation's resource inventory and capacity.

Note that **capacity** constraints are not determined solely in relation to the overall needs and availability of funds and resources, but also in relation to when they are needed (e.g. cashflow or schedule constraints). Capacity should also not be seen as a simple numbers exercise. The **capability** of the available resources must also be factored in, including all appropriate knowledge, experience, qualifications, and other criteria that may be required for success.

Therefore, although the portfolio components may not have all developed detailed schedules at this stage, a high-level portfolio delivery plan (i.e. a plan of when new portfolio components can start and are expected to finish) still needs to be developed based on preliminary timelines (or assumptions).

The portfolio's resource capacity plan may have to be reworked several times as the various portfolio composition scenarios may impact significantly on the portfolio's resource needs.

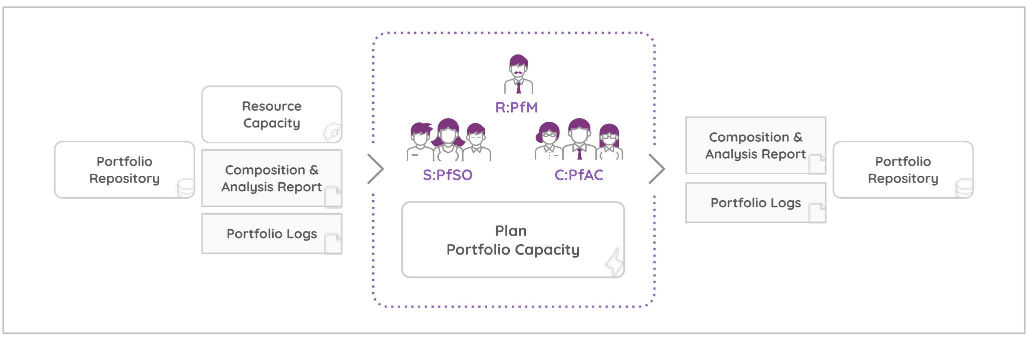


Fig 6.4: Plan Portfolio Capacity activity - key input/output artefacts and main roles.

Guidelines

- **Assess financial capacity**: Analyse the approved financial commitments as well as the proposed financial needs within the portfolio. Consider both the overall financial needs, but also the time they are needed (e.g. cashflow needs based on implementation schedules for components).
- **Assess human resource needs:** Understand the portfolio's ongoing and future needs in terms of human resources (capacity and capabilities). Identify missing resources and competencies, as well as any conflicts between the needs of the portfolio components, and plan how these needs can be satisfied; consider both insourcing and outsourcing strategies. Historical information taken from the Portfolio Composition & Analysis Report can be used to forecast the resource demands.
- **Assess demand for organisational assets**: Assess the demand for other organisational assets within the portfolio, such as information systems, services, communications, office space, equipment, etc. Consider potential synergies or conflicts between

resources in the various scenarios and consider any existing contractual relationships which could be a potential asset or a constraint.

- **Develop a capacity plan**: Based on both the overall resources and asset needs, but also the time frames in which they are needed (i.e. based on the various component schedules), develop a portfolio capacity plan. Also identify risks relating to the availability of key resources and establish appropriate reserves for the overall portfolio.
- **Optimise resource use**: Resources should be assigned against priorities; however, unused resources also introduce inefficiencies. In order to optimise the portfolio and the utilisation of all available resources, it is acceptable to consider lower-priority components that have a more optimal resource fit, if this provides an overall net gain to the portfolio.

Portfolio Composition	PfDG	PfM	PfAC	PfSO	CRs	LSO
Plan Portfolio Capacity	A	R	C	S	C	C

6.4 Compose Portfolio

This activity generates a list of portfolio components presented as the proposed portfolio composition. This should be the result of iteratively considering various combinations of the prioritised portfolio components until an optimal composition can be proposed.

Note that the resource capacity and capability needs of each portfolio scenario can be different, so it may be necessary to run the *Plan Portfolio Capacity* activity every time a new scenario is explored.

The Portfolio Manager (PfM) consults with the Portfolio Advisory Committee (PfAC) to develop the proposal before bringing it to the Portfolio Directing Group (PfDG) for the composition to be approved.

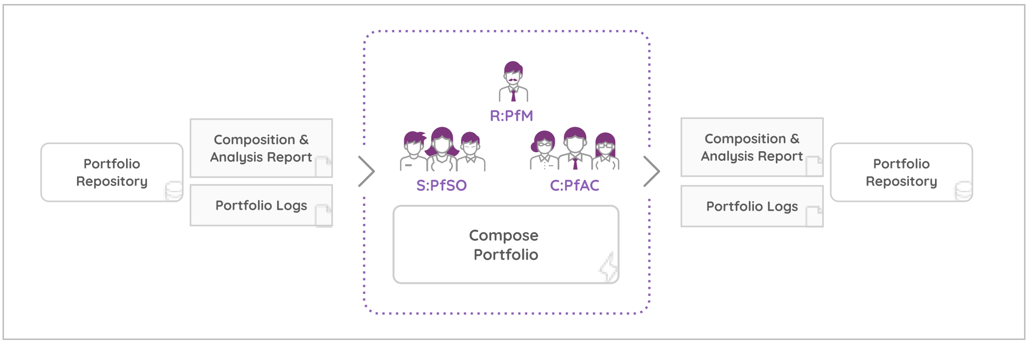


Fig 6.5: Compose Portfolio - key input/output artefacts and main roles.

Guidelines

- **Develop multiple portfolio views**: Visualise the contribution of each candidate as well as groups of candidates to the portfolio using various filtering criteria and visualisation techniques (e.g. bubble diagrams). Understand how interdependent portfolio components fit together and analyse the various scenarios using both quantitative and qualitative techniques.
- **Optimise portfolio:** Multiple portfolio compositions may satisfy the portfolio objectives and respect the constraints of the portfolio; it may thus take several iterations of assessing alternative scenarios to reach a proposal. A good portfolio contains an optimal mix of components which maximise the portfolio's expected value for a given risk, while being balanced in terms of the types and categories of components it contains, their resource utilisation, time to maturity, etc.
- **Develop a portfolio proposal**: Develop the portfolio composition based on an optimised mix of components. The proposal is documented in the Portfolio Composition & Analysis Report, which includes the list of portfolio components, a snapshot of the portfolio performance in terms of its ongoing components, and a portfolio delivery plan.
- **Update the Portfolio Logs:** Capture identified risks, issues, decisions, changes, and lessons learned.

Portfolio Composition	PfDG	PfM	PfAC	PfSO	CRs	LSO
Compose Portfolio	A	R	C	S	I	I

6.5 Approve Portfolio

The Portfolio Manager (PfM) presents the new (or updated) portfolio composition to the Portfolio Directing Group (PfDG) for approval. Based on their decision, funds and resources are allocated to the portfolio and its components via the organisation's budgetary procedures.

Note that the Portfolio Directing Group (PfDG) and other key stakeholders should be kept informed and even involved throughout the portfolio composition process and not just at the time of approval (see also *Section 9 - Stakeholder Engagement & Communication*).

The results of the approval meeting should be communicated to the portfolio stakeholders; they should also be reminded of the portfolio objectives, expectations, risks, and interdependencies, the chosen management approach, as well as the templates and tools that will be used for monitoring and reporting the progress of the portfolio and its components.

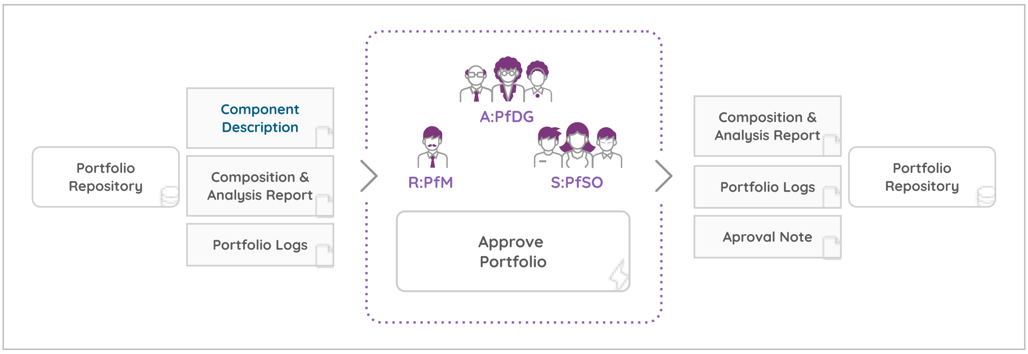


Fig 6.6: Portfolio Approval activity - key input/output artefacts and main roles.

Guidelines

- **Prepare for the approval meeting**: Prepare the Portfolio Composition & Analysis Report and the relevant Portfolio Logs in advance and provide access to the Portfolio Directing Group (PfDG) to these artefacts along with any other additional documents. Develop a well-structured Meeting Agenda with clearly defined decisions to be taken.
- **Run the approval meeting**: Conduct the meeting in line with the formality and rigour these meetings require within the organisation or portfolio. During the meeting, present an overview of the proposed portfolio, including the portfolio objectives, expected benefits, risk level, synergies, and dependencies. Visual representations of the portfolio composition and multiple views are important instruments for creating consensus. Keep notes of decisions, important points of discussion or requests for additional information.
- **Achieve portfolio approval**: The output decisions of this meeting may include the approval (final or conditional), rejection, suspension, or termination of the proposed portfolio. The result of an approval will be the allocation of funds and resources to the approved portfolio components as per the proposed time plan.
- **Update the Portfolio Artefacts**: Update the Portfolio Composition & Analysis Report to reflect the approved composition. Add the new components and remove any components that have been suspended or terminated from the Portfolio Repository. Decisions should be clearly documented in the Decision Log, or when required, in an Approval Note. When allocating financial resources, the full lifecycle of the component

should be considered, and the allocation should be performed using milestones/stage-gate decisions.

- **Communicate decisions to portfolio stakeholders**: Communicate the portfolio decisions and new composition to the relevant stakeholders. Key portfolio artefacts use for this are the Portfolio Composition & Analysis Report, the relevant Minutes of Meeting, and the Portfolio Logs.

Portfolio Composition	**PfDG**	**PfM**	**PfAC**	**PfSO**	**CRs**	**LSO**
Approve Portfolio	A	R	I	S	I	I

7 Portfolio Realisation

The Portfolio Realisation process encompasses all the management activities which seek to maximise the likelihood of the portfolio achieving its goals while minimising the risk of failure. Although portfolio management is not about managing the components themselves, it is through the successful completion of the approved portfolio components that the portfolio will realise its objectives. Therefore, the performance of portfolio components in line with their timelines, budgets and benefit objectives is of primary concern to the Portfolio Manager (PfM).

Portfolio Realisation comprises the activities concerned with managing the portfolio's value and strategic alignment, and managing change, risks and issues. Although each of the portfolio components is temporary in nature, the portfolio realisation activities are performed throughout the entire life of the portfolio.

The Portfolio Realisation process comprises 5 activities:

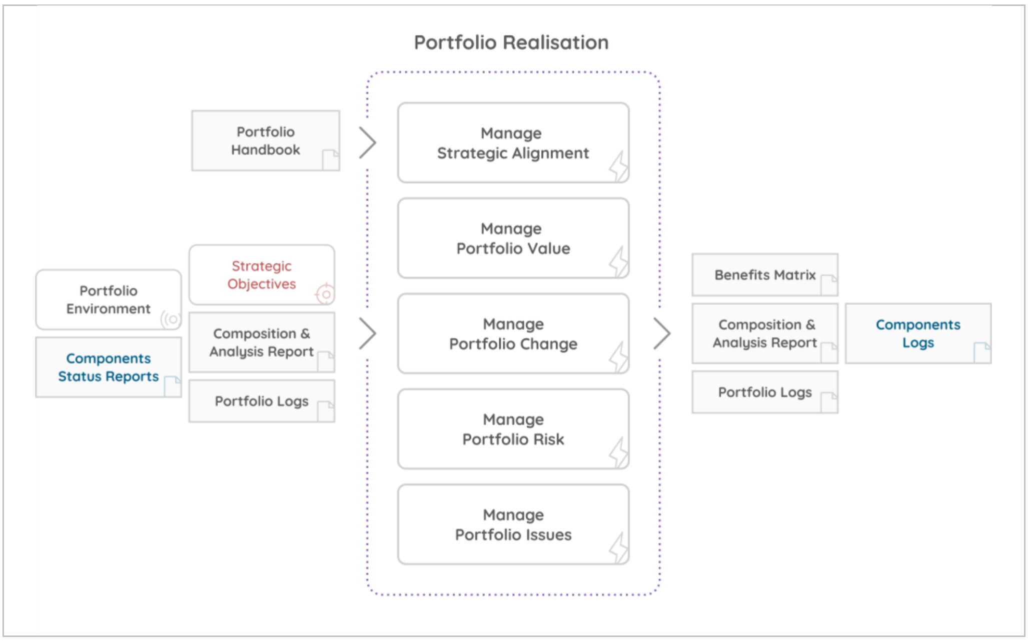


Fig 7.1: Portfolio Realisation activities and key input/output artefacts

Portfolio Realisation Objectives

Running the indicated management activities and producing the recommended Artefacts are best practices that should be followed. However, Portfolio Realisation achieves its purpose when it:

- enables the sustainment or even the strengthening of the alignment of the portfolio objectives to the organisational strategy.

- achieves maximisation of the value delivered by the portfolio.
- facilitates the identification and the management of change in the portfolio environment and its components and its effective management for the benefit of the portfolio.
- facilitates the management of unforeseen events which could be threats or opportunities for the portfolio in a systematic and efficient way and in line with the organisation's risk appetite.
- enables the effective management of portfolio issues.
- facilitates the achievement of the portfolio objectives to the best extent possible.

The consolidated responsibilities of the Roles involved in the Portfolio Realisation activities are shown in the RAM/ARSCI table below.

Portfolio Realisation	PfDG	PfM	PfAC	PfSO	CRs	LSO
Manage Strategic Alignment	A	R	C/S	S	I	I
Manage Portfolio Value	A	R	C/S	S	C	I
Manage Portfolio Change	A	R	C/S	S	C	I
Manage Portfolio Risk	A	R	C/S	S	C	I
Manage Portfolio Issues	A	R	C/S	S	C	I

The following sections provide a description of the Portfolio Realisation activities along with useful guidelines for their execution.

7.1 Manage Strategic Alignment

The Manage Strategic Alignment activity ensures that the portfolio performance is aligned with its objectives, as these are defined in the Portfolio Handbook, as well as with the strategic priorities of the organisation. This is needed because organisational portfolios typically have a multi-year maturity horizon, while portfolio environments are not static and can change, and in some cases significantly and rapidly.

Ensuring the portfolio's strategic alignment will also require executing other portfolio management activities and may even have a trickle-down impact on the objectives of some portfolio components.

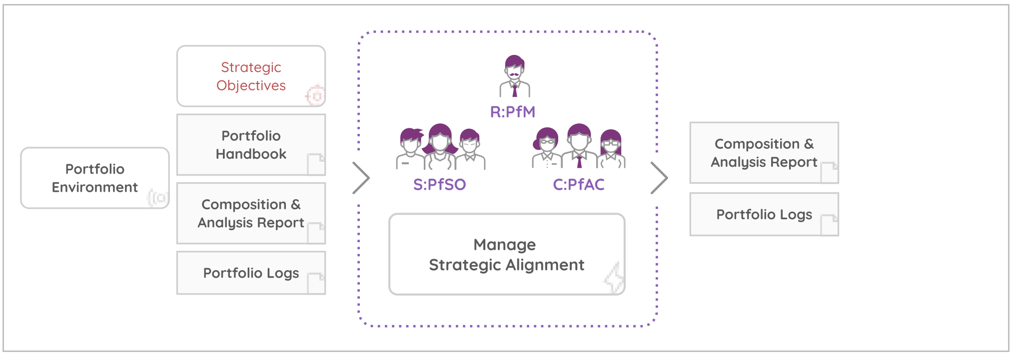


Fig 7.2: Manage Strategic Alignment activity—Input, output, and main roles.

Guidelines

- **Involve stakeholders:** There is a breadth of portfolio stakeholders who should be involved in ensuring the strategic alignment of the portfolio. Therefore, identify and involve the appropriate portfolio stakeholders.
- **Establish the portfolio environment:** Establish what constitutes the portfolio environment — e.g. the business, financial, political environments, the organisation's management structure, the management methods, etc.
- **Identify and assess changes of the organisation's strategic objectives:** Identify any changes to the organisation's strategy. Perform a preliminary assessment of the impact these changes may have on the strategic alignment of the portfolio.
- **Identify and assess changes to the portfolio environment:** Identify changes to the portfolio environment and perform a preliminary assessment of the impact these changes may have on the current portfolio objectives.
- **Trigger the appropriate processes or activities:** The resulting assessment of potential strategic misalignments should not result in direct or immediate action; rather, it should trigger one or more portfolio management processes or activities, such as the Manage Portfolio Value activity, the Manage Portfolio Change activity, or any of the other portfolio processes such as the Monitoring & Controlling Process, the Portfolio Composition process, etc.

Portfolio Realisation	PfDG	PfM	PfAC	PfSO	CRs	LSO
Manage Strategic Alignment	A	R	C/S	S	I	I

This page is intentionally left blank

7.2 Manage Portfolio Value

One of the key responsibilities of the Portfolio Manager (PfM) is to manage the realisation of portfolio value through the consolidation of the benefits that each of the portfolio components aims to achieve. Value is always contextual, and so the value of a portfolio depends on how relevant it is to, and impactful it is on, the organisation's strategy.

The monitoring of the aggregated component benefits provides the necessary input to determine if the planned investment value is being achieved through the implementation of the portfolio's current component mix and their performance. It also allows the Portfolio Manager (PfM) to proactively manage the risk of deviation from the portfolio objectives. In some cases, negative benefits (dis-benefits) may also be factored in, for instance, the costs or potential penalties for not delivering a component required by legal, regulatory or risk mitigation strategies, etc.

Intangible value cannot be directly measured, and proxy measures will need to be defined. Tangible value is much easier to measure, in which case organisations will use metrics and techniques such as ROI, CBA, TCO, NPV, IRR, etc. to measure the value of their portfolio investments.

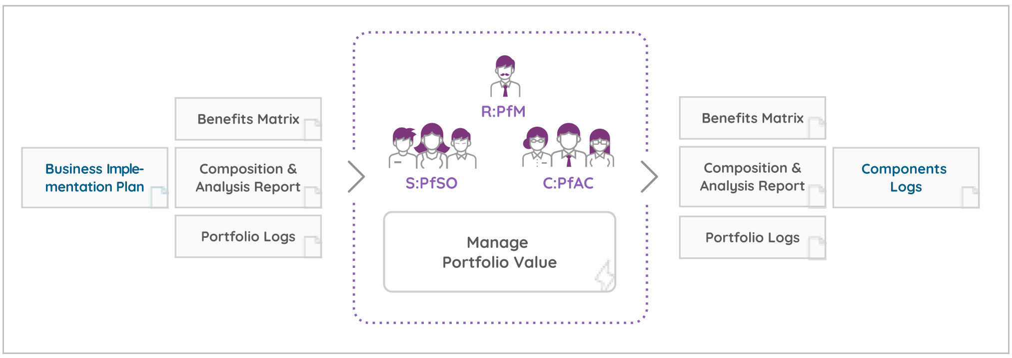


Fig 7.3: Manage Portfolio Value—Input, output, and main roles.

Guidelines:

- **Elaborate on the expected portfolio benefits**: Document the expected benefits based on the portfolio objectives and the components evaluation. Consolidate these in the portfolio's Benefits Matrix.
- **Define and track KPIs**: Determine how the achievement of each benefit will be measured by defining one or more Key Performance Indicators (KPIs). Set the target values for each KPI and baseline their starting values. Collect information regarding the benefits realisation of the portfolio components using the predefined metrics.
- **Evaluate the realisation of the benefits**: Evaluate the progress made towards the realisation of the benefits. There are several inputs that should be used, including the Business Implementation Plans and the Progress Reports of the portfolio components.
- **Identify significant deviations**: identify and analyse significant deviations from the realisation of the expected benefits. Involve people from the components layer to validate any assumptions and determine the cause of deviations.
- **Trigger other portfolio management processes**: The identification of significant deviations from the realisation of the expected portfolio value should trigger other portfolio management process and activities to devise corrective actions or changes.

- **Trigger the Manage Risk, Change, or Issues activities**: Before formalising any proposed remediation actions, trigger the Manage Risk, Change, or Issues activity, to assess any potential impact on the portfolio as a whole or its components.
- **Coordinate the development of any corrective actions**: Consult the representatives of the components to ensure that the effort/cost of the implementation of corrective actions are realistically estimated and are within the components' scope, resources, and funding capacity.

Portfolio Realisation	PfDG	PfM	PfAC	PfSO	CRs	LSO
Manage Portfolio Value	A	R	C/S	S	C	I

7.3 Manage Portfolio Change

Managing portfolio change relates to identifying and managing changes to the portfolio's objectives, its composition, or changes to its components. Change can come from the portfolio's environment (e.g. changes in the organisation's strategy or objectives), or it can come in the form of changes to the definition, planning, execution or expected results of the portfolio components.

Changes that may affect the portfolio's composition (e.g. candidates emerging outside the regular composition cycle, or components being eliminated due to early termination, etc.), or which impact on the strategic objectives or overall portfolio value, should be managed by triggering the relevant portfolio management process (i.e. the Monitoring & Controlling process, or the Portfolio Composition process), and the relevant Portfolio Realisation activities (i.e. Manage Strategic Alignment, Manage Portfolio Value).

The Portfolio Directing Group (PfDG) and Portfolio Advisory Committee (PfAC) play an important role in bringing information related to changes to the attention of the Portfolio Manager (PfM). All changes should be documented in the Portfolio Change Log, so they can be assessed, and appropriate decisions and actions taken.

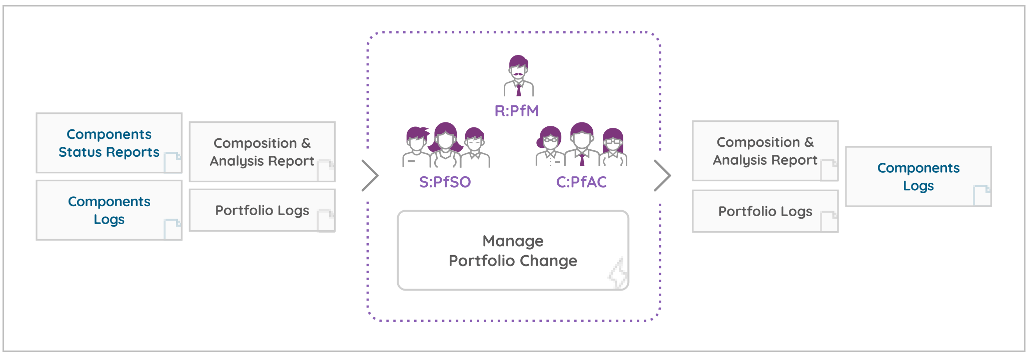


Fig 7.4: Manage Portfolio Change activity—Input, output, and main roles.

Guidelines:

- **Assess the impact of any changes in the portfolio environment**: Such changes will be identified by the *Manage Strategic Alignment* activity and may be precursors to changes in the portfolio or its components.
- **Identify component changes:** Identify changes in the portfolio's components such as significant changes in their scope, timeline, or even cancelation or termination of a component. The component level should communicate these to the portfolio level, via their Component Representative (CRs) and through the regular Status Meetings and Reports and the components Change Logs.
- **Assess the changes and recommend actions**: Assess whether the identified changes have an impact (or potential impact, i.e. risk) on the portfolio, and recommend actions to avoid or reduce their negative impact and/or to maximise their positive impact. Discuss and agree on the required actions with the relevant stakeholders.
- **Update the portfolio Change Log**: A Portfolio Change Log should be used to document portfolio changes and actions, providing a single source of reference for this information. When documenting the required actions, the steps, deliverables, cost, time, action owner and resources involved should be described.

- **Trigger other portfolio management process**: Trigger, as necessary, other portfolio management process, and activities to assess the potential impact of the recommended actions (e.g. Manage Risk activity), and to implement the changes (e.g. Portfolio Composition process if (re)composition is required).
- **Communicate portfolio changes**: Communicate changes to the Portfolio Directing Group (PfDG) and the Portfolio Advisory Committee (PfAC), giving them a clear understanding of the changes' impact on the components and on the portfolio objectives.
- **Monitor portfolio change implementation**: Monitor the implementation of the remediation actions and validate their implementation status. Agree on a predefined frequency if these actions are bringing the expected results.

Portfolio Realisation	PfDG	PfM	PfAC	PfSO	CRs	LSO
Manage Portfolio Change	A	R	C/S	S	C	I

7.4 Manage Portfolio Risk

Portfolio risk management aims to proactively manage uncertain events which may impact positively (i.e. opportunities) or negatively (i.e. threats) on the achievement of the portfolio objectives.

Portfolio risk management concerns the identification, assessment, and management of portfolio risks in line with the organisation's risk appetite for a specific portfolio (i.e. the amount of risk that an organisation is willing to take to pursue the specific portfolio benefits).

Portfolio risks may have their origins internally, within the portfolio, or be external to the portfolio or even the organisation. Portfolio risks may relate directly to the portfolio's composition, e.g. to the mix of high-risk and low-risk portfolio components (i.e. component business risks), which also define the risk exposure of the portfolio itself.

External factors beyond the sphere of influence of the portfolio or the organisation may also be a source of portfolio risks — e.g. factors such as legislation, compliance, technology, the political or economic environment, etc.

Risks from the components level should also be monitored because severe individual risks, or the combined effect of many seemingly unrelated or insignificant component risks, may also lead to serious portfolio-level risks with a high impact on portfolio objectives.

In contrast, some serious component-level risks may be acceptable at the portfolio level if they are counterbalanced by the anticipation of a great reward, or if they are associated with another positive risk (opportunity) which will offset any potential negative impact. It is also useful to establish a management reserve to deal with unforeseen risks (e.g. force majeure, black swans etc.).

The portfolio risk management approach (e.g. steps, techniques, risk categories, etc.) is defined and updated through the Portfolio Framework Definition process and is documented in the Portfolio Handbook.

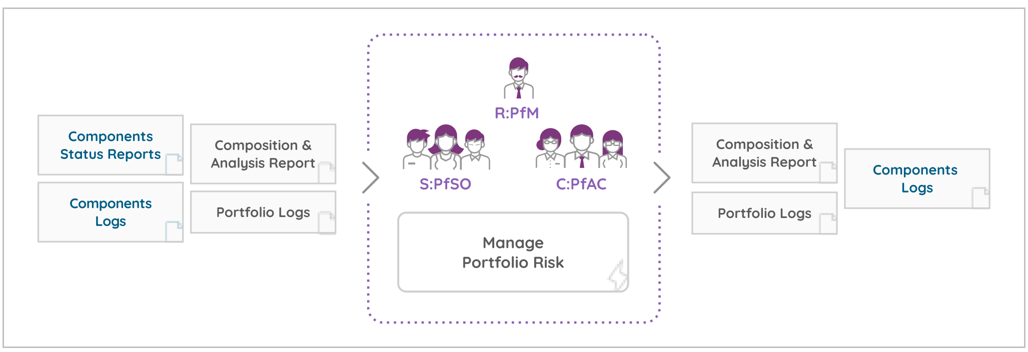


Fig 7.5: Manage Portfolio Risk activity—Input, output and main roles.

Guidelines:

- **Identify portfolio risks:** Involve the appropriate stakeholders in order to identify portfolio risks and document them in the Portfolio Risk Log. Consider past trends and use desk reviews, questionnaires, interviews, root-cause analysis, risk breakdown structures and other techniques.
- **Assess and prioritise portfolio risks:** Produce a prioritised list of risks based on their likelihood of occurrence, the impact on the portfolio's objectives, and their proximity

(time). Risk prioritisation can be the result of either qualitative (e.g. using risk matrices) and/or quantitative risk assessment (e.g. through simulations). The risk management maturity of the organisation, and the type of the portfolio components, will guide the selection of the appropriate assessment approach.

- **Develop risk responses:** Select the appropriate risk response strategy and actions on the basis of a cost-benefit analysis and the organisational risk appetite. Document them and in the Risk Log detailing the target dates and expected results. Also identify any secondary and/or residual risks.
- **Monitor and control risks**: Monitor the implementation of risk responses and the consumption of the contingency and management reserves, updating the Risk Log regularly or as needed. If a risk materialises into an issue, implement the relevant contingency plans.
- **Communicate portfolio risks**: Trigger the Stakeholder Engagement & Communication process to inform portfolio stakeholders of the status of important risks as well as the overall portfolio risk.

Portfolio Realisation	PfDG	PfM	PfAC	PfSO	CRs	LSO
Manage Portfolio Risk	A	R	C/S	S	C	I

7.5 Manage Portfolio Issues

Issues are events which, if unresolved, will have an impact on the achievement of the portfolio objectives. Managing portfolio issues means identifying, assessing, and resolving them in ways that are aligned with the organisational and portfolio procedures and culture. Portfolio issues can be the result of risks that have materialised, of mistakes or omissions in the management of the portfolio (e.g. inadequately assessing constraints on the implementation of portfolio components), and even of unforeseeable events (e.g. the results of a change in legislation).

Issues can also be escalated from the components layer; these usually relate to important scope, cost, scheduling, or performance issues which can impact on the portfolio objectives. The Portfolio Manager (PfM) should pay special attention to the combined effect of seemingly unrelated component issues, as they can result in significant portfolio risks.

The Issue Log is used to manage portfolio issues, while a Decision Log can be used to document all relevant decisions. Decisions may be taken by the Portfolio Manager (PfM) or escalated, depending on their importance. Note that issues and decisions are often linked to the resolution of other log items, such as risks or changes).

The portfolio issues management approach (e.g. steps, techniques, etc.,) is defined and updated through the Portfolio Framework Definition and documented in the Portfolio Handbook.

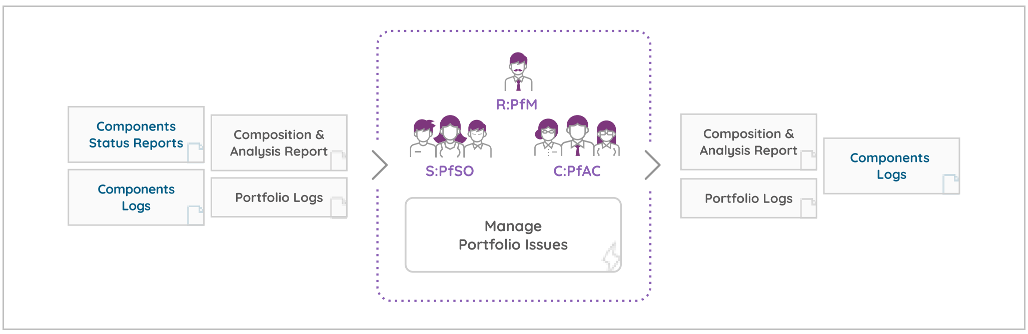


Fig 7.6: Manage Portfolio Issues activity—Input, output and main roles.

Guidelines:

- **Identify portfolio issues**: Identify portfolio issues and document them in the Portfolio Issue Log.
- **Assess portfolio issues:** Assess each identified portfolio issue, considering their impact on the portfolio objectives but also the complexity, cost, and urgency of their resolution.
- **Develop issue response:** Define optimal issue response actions and document them in the Issue Log; detail the activities, milestones, and target implementation dates as well as the cost and resource estimate of the action. Also connect to any other issues, risks, changes, and decisions relating to the issue response.
- **Monitor the response implementation**: Monitor the implementation of issue responses and update the Issue Log as needed. Review its effectiveness and take corrective actions, if necessary.
- **Communicate portfolio issues**: Inform relevant stakeholders of the status of important issues and the actions that have been taken to resolve them.

Portfolio Realisation	PfDG	PfM	PfAC	PfSO	CRs	LSO
Manage Portfolio Issues	A	R	C/S	S	C	I

This page is intentionally left blank

8 Portfolio Monitoring & Controlling

Monitoring & Controlling activities run throughout the portfolio's lifecycle and in parallel with all other portfolio processes. They include the periodic collection and analysis of information that helps establish the portfolio's performance based on defined targets or indicators. They also include identifying and implementing corrective actions to address deviations from target performances.

Portfolio Monitoring & Controlling runs at predetermined intervals (triggered periodically) or as required (triggered by circumstances). However, for **agile portfolios**, the Monitoring & Controlling activities will be leaner and executed more frequently to allow for smaller and more frequent adjustments (if necessary).

The Portfolio Monitoring & Controlling process comprises 5 activities:

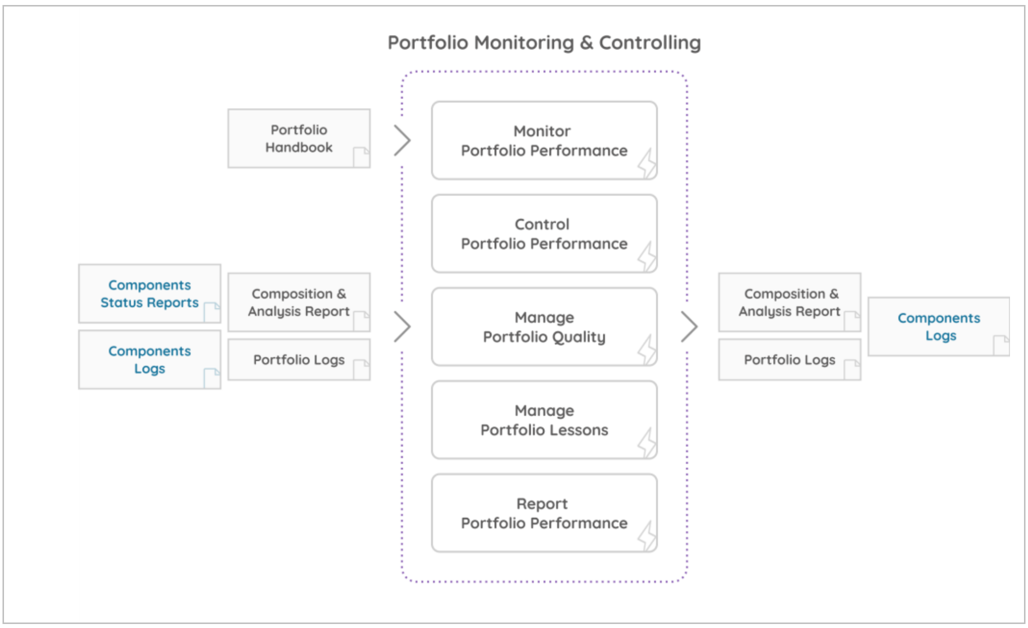


Fig 8.1: Portfolio Monitoring & Controlling activities and key input/output artefacts

The outputs of the Monitoring & Controlling activities are documented in the Portfolio Logs and the Portfolio Composition & Analysis Report, while controlling decisions can trigger other portfolio activities which can result in changes to the portfolio's objectives, to its composition and its components, or to its management framework (i.e. management approach).

Portfolio Monitoring & Controlling Objectives

Running the indicated management activities and producing the recommended Artefacts are best practices that should be followed. However, Monitoring & Controlling achieves its purpose when it:

- is done consistently and regularly through predetermined management activities at a predetermined frequency.
- adapts to the emerging needs of the portfolio and its components.
- monitors the performance of the portfolio and triggers effective corrective actions which have broad stakeholder buy-in and are planned and executed in a timely manner.
- triggers the appropriate portfolio process and portfolio management activities to implement the identified corrective actions.
- enables the production of reports which accurately reflect the overall performance of the portfolio.
- achieves effective and transparent communication across the portfolio governance layers.
- collects stakeholder feedback and maintains close contact with stakeholders with varied perspectives in order to obtain valuable feedback.
- anticipates and satisfies stakeholder expectations.
- ensures that the PfM² good practices are being followed and assures portfolio management process quality.

The consolidated responsibilities of the Roles involved in Portfolio Monitoring & Controlling are shown in the table below.

Portfolio Monitoring & Controlling	PfDG	PfM	PfAC	PfSO	CRs	LSO
Monitor Portfolio Performance	A	R	C	S	C	S
Control Portfolio Performance	A	R	C	S	C	C
Manage Portfolio Quality	A	R	C	S	C	C
Manage Portfolio Lessons	A	R	C	S	C	S
Report Portfolio Performance	A	R	C	S	C	I

The following sections provide a description of the Portfolio Monitoring & Controlling activities along with useful guidelines for their execution.

8.1 Monitor Portfolio Performance

Monitoring is an essential activity which includes the periodic collection of pertinent information on the basis of which the performance of the portfolio can be assessed, and corrective actions taken (when needed). The performance of the portfolio is determined on the basis of predetermined performance indicators that measure both the performance of its components and the overall performance of the portfolio compared to the objectives set out and documented in the Portfolio Handbook.

The Portfolio Manager (PfM), with the support of the Portfolio Support Team (PfSO) is responsible for portfolio monitoring. However, the Component Managers (CMs) responsible for the component-level monitoring activities are also responsible for rolling-up the components performance information to the portfolio level.

The various sources of portfolio information should be clearly identified and documented in the Portfolio Handbook along with the performance indicators that will be monitored. Monitored portfolio information should be collected at regular (predetermined) intervals, or as needed. Typical areas to monitor include budget, changes to the portfolio environment, component changes, risks, issues, quality etc., the effectiveness of the business implementation goals of the components, portfolio management quality, as well as stakeholder feedback.

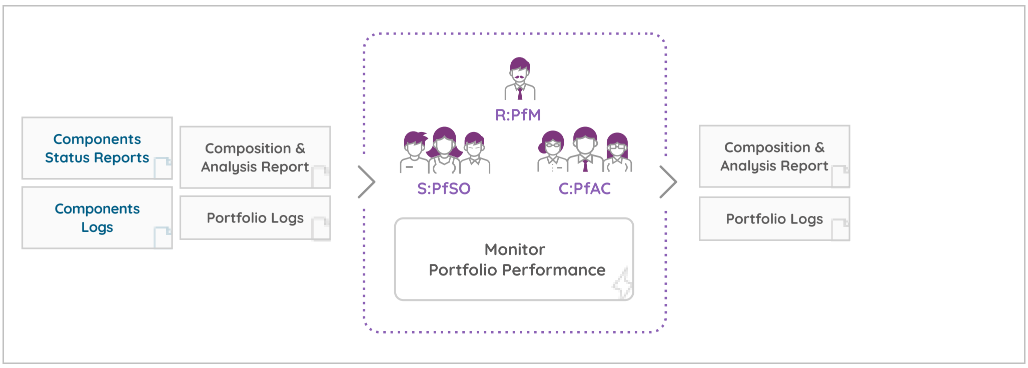


Fig 8.2: Monitor Portfolio Performance activity—Inputs/outputs and main roles

Guidelines

- **Optimise the monitoring frequency:** Determine the monitoring frequency required based on the needs of the portfolio. However, remember that monitoring (and controlling) activities require significant effort and involve contributions from multiple stakeholders. They therefore impose an additional overhead on the portfolio and their components. Optimise these, ensuring that the benefits outweigh the costs.

- **Inform involved stakeholders about their responsibilities:** Stakeholders should be informed regarding the monitoring activities, so that their involvement and effort is not perceived as additional work but is accounted for as part of the overall management cost.

- **Put in place the appropriate infrastructure:** Ensure that the necessary methods and tools are in place for the efficient collection of monitoring information. This infrastructure includes clear data collection processes and information systems that also ensure the quality of the information collected.

- **Collect information:** Ensure that the components' Status Reports are collected on a regular basis. This activity is supported by the Portfolio Support Office (PfSO).
- **Analyse portfolio performance:** Analyse component performance data, as well as changes, risks, issues, and the status of planned management activities. This information can then be consolidated and visualised via a portfolio dashboard to help the Portfolio Manager (PfM) determine the overall portfolio performance.
- **Update the artefacts:** Update the relevant Portfolio Artefacts (e.g. Composition and Analysis Report, Portfolio Logs, etc.).

Portfolio Monitoring & Controlling	PfDG	PfM	PfAC	PfSO	CRs	LSO
Monitor Portfolio Performance	A	R	C	S	C	S

8.2 Control Portfolio Performance

The Control Portfolio Performance activity includes analysing the information collected by the Monitor Portfolio Performance activity in order to resolve issues that impact on the portfolio's performance, and to suggest courses of action when significant deviations from the performance targets are observed or anticipated.

It is through this control activity that corrective actions are devised and the appropriate portfolio management activities are triggered to ensure that the best possible actions (or reactions) are implemented. Control activities can result in the fine-tuning of the Portfolio Framework and the portfolio's composition and may even result in changes to the portfolio components themselves.

The control activity is executed throughout the whole portfolio lifecycle at a predetermined frequency or as necessitated by circumstances. The predetermined control frequency (e.g. quarterly) is defined and documented in the Portfolio Handbook. The main input into the control activity is the output of the Monitor Portfolio Performance activity.

Controlling actions are usually devised and proposed by the Portfolio Manager (PfM) after consultation with the Portfolio Advisory Committee (PfAC) and with the support of the Portfolio Support Office (PfSO). These proposed actions are then approved by the Portfolio Directing Group (PfDG) and the appropriate portfolio management activities are triggered. The Decision Log should be used to document all relevant decisions.

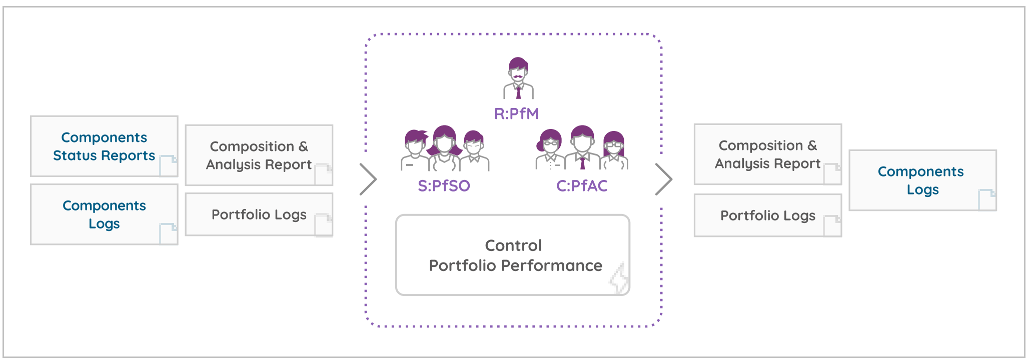


Fig 8.3: Control Portfolio Performance activity—Inputs/outputs and main roles

Guidelines

- **Set the controlling frequency and rigour:** This should be in line with the needs of the portfolio and adjusted in line with emerging needs, keeping in mind that frequent controlling reduces portfolio risk but increases portfolio management costs.
- **Identify deviations:** Identify any significant deviations from portfolio component baselines, as well as deviations from the portfolio objectives, budgets, etc. Assess the impact of these deviations on the portfolio and make forecasts.
- **Define corrective actions:** Define actions to control the realisation of the portfolio at both the portfolio and component levels (i.e., if necessary, request or propose corrective actions for the components). In the case of under-performing components, early termination or suspension are also options, but only after the Manage Portfolio Change and Risk activities have been triggered, and this in turn has triggered the Portfolio Composition process. This ensures that the impact of any controlling decision on the portfolio and other components is accurately assessed.

- **Communicate decisions:** Document the recommended actions and communicate them to the components representatives and portfolio stakeholders.
- **Update the artefacts:** Update the relevant Portfolio Artefacts (e.g. Composition and Analysis Report, Portfolio and Component Logs, etc.).
- **Monitor the implementation of control actions**: Monitor the implementation of control actions, including those that are to be implemented at the components level.

Portfolio Monitoring & Controlling	PfDG	PfM	PfAC	PfSO	CRs	LSO
Control Portfolio Performance	A	R	C	S	C	C

8.3 Manage Portfolio Quality

The Manage Portfolio Quality activity is concerned with monitoring the quality of the portfolio management activities and their outputs and taking actions to ensure the desired quality is achieved. It is through this activity that steps are taken towards achieving the quality standards set. Effective portfolio quality management lowers the risk of failing to achieve the portfolio objectives and stakeholder expectations.

Defining and implementing quality management activities is the responsibility of the Portfolio Manager (PfM), supported by the Portfolio Support Office (PfSO), and in consultation with the Portfolio Advisory Committee (PfAC). The quality management approach and its results are then approved by the Portfolio Directing Group (PfDG) and documented in the Portfolio Handbook.

The Manage Portfolio Quality activity is executed throughout the whole portfolio lifecycle at a predetermined frequency or as needed.

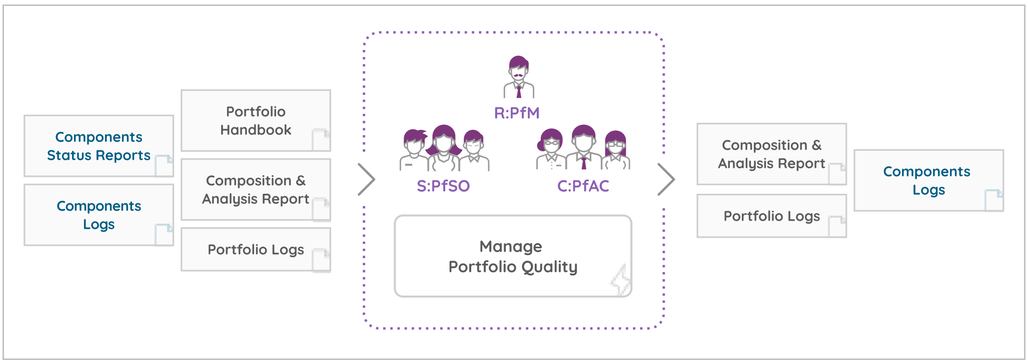


Fig 8.4: Manage Portfolio Quality - key inputs/outputs and main roles.

Guidelines:

- **Define the quality management standards:** Define the quality standards for portfolio management and document them in the Portfolio Handbook.
- **Specify quality assurance activities:** These facilitate and enable conformity to the management processes. Determine whether a Quality Assurance (QA) role (internal or external) is required to plan and carry out the defined quality assurance activities.
- **Specify quality control activities:** Check whether the defined quality standards are achieved, to identify causes of unsatisfactory management performance and propose remediation actions.
- **Balance rigour and benefits:** Balance the benefits of the defined quality standards and the rigour of the quality management activities with the effort and cost of achieving these. Ensure that these are aligned with the maturity and expectations of the organisation and the portfolio stakeholders.
- **Use quality management tools and techniques:** Use appropriate tools and techniques to assess and predict portfolio management quality. These techniques facilitate better use of available data, assist in decision making and contribute to continual improvement.

- **Identify opportunities to improve management quality:** Establishment of a continual improvement mindset and approach to improve the management processes and their relevant outputs (e.g. portfolio artefacts, portfolio decisions, etc.).
- **Recommend and implement improvements** based on the continual capturing of lessons learned These are an important input to the Manage Portfolio Quality activity.

Portfolio Monitoring & Controlling	PfDG	PfM	PfAC	PfSO	CRs	LSO
Manage Portfolio Quality	A	R	C	S	C	C

8.4 Manage Portfolio Lessons

The Manage Portfolio Lessons activity is concerned with identifying and assessing the lessons gained throughout the life of the portfolio, as well as with turning them into lessons learned so that they can be exploited for the benefit of the portfolio and the organisation. The purpose of this activity is to create opportunities for capturing lessons from the various experiences gained, and to develop and implement proposals for achieving improvements proactively and systematically. These relate both to improving the way the portfolio is managed, but also to optimising the portfolio objectives.

The Manage Portfolio Lessons activity is a recurrent activity executed throughout the portfolio at predetermined intervals or as needed when learning opportunities emerge. The Portfolio Support Office (PfSO) plays a very important role in collecting the lessons gained from the stakeholders and uses regular or ad-hoc meetings and their relevant artefacts as opportunities to capture lessons. The main tool for documenting and tracking the status of portfolio lessons is the Portfolio Lessons Log.

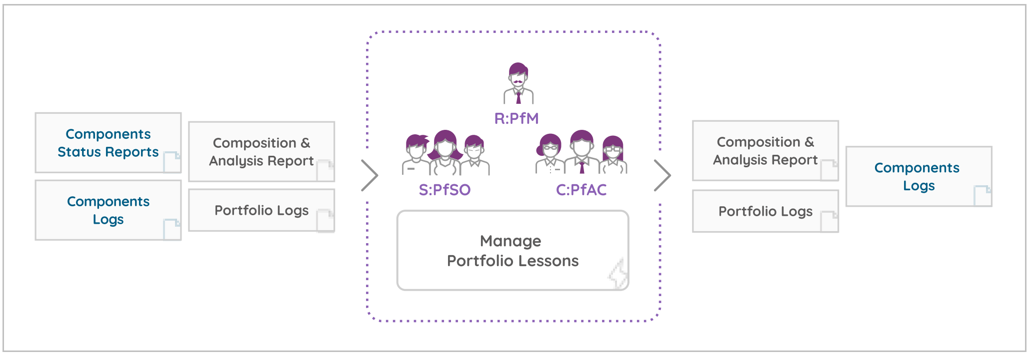


Fig 8.5: Manage Portfolio Lessons activity—Inputs/outputs and main roles

Guidelines:

- **Identify lessons**: Identify lessons and document them in the Lessons Log. Consider all portfolio activities and interactions with stakeholders as opportunities to capture lessons.
- **Discuss the lessons identified:** Create opportunities to meet and discuss the lessons identified and assess them in terms of their value to the portfolio and the organisation. Organise dedicated meetings or add relevant agenda items to recurrent portfolio and component meetings.
- **Establish the Lessons Log as an input to decision making**: Make the Lessons Log entries a standard input (like risks and issues) to other portfolio management activities and decisions. Also highlight key lessons in both the portfolio and component level reports.
- **Recommend improvements**: Improvements are not to be acted upon directly without further analysis, but rather the appropriate portfolio management processes should be triggered. For instance, lessons related to the performance of the management activities and overall management framework are to be processed as an input to the Manage Quality and the Review Portfolio Framework activities.

Portfolio Monitoring & Controlling	PfDG	PfM	PfAC	PfSO	CRs	LSO
Manage Portfolio Lessons	A	R	C	S	C	S

8.5 Report Portfolio Performance

The Report Portfolio Performance activity is concerned with ensuring that adequate, relevant, and structured information relating to the state and performance of the portfolio reaches the portfolio stakeholders.

Note that the information and reporting needs of each stakeholder have already been established, and the media, format and frequency of reporting have also been determined. This activity is therefore concerned with creating and disseminating the reports.

Portfolio reporting usually involves the visual display (e.g. via dashboards) of a variety of portfolio-level and component-level information and KPIs.

No matter what level of sophistication has been reached in portfolio reporting, reports need to serve their purpose: namely, to provide stakeholders with an up-to-date and data-driven view of the portfolio and its performance. This provides a basis on which they can make better management or implementation decisions.

The Portfolio Manager (PfM) is responsible for ensuring that the reporting activities are executed as planned, and that they provide only correct and pertinent information. However, most of the preparation, collation and presentation activities are performed by the Portfolio Support Office (PfSO). The Portfolio Support Office (PfSO) consolidates the portfolio component information provided by the local portfolio offices or reported directly by each of the portfolios, and as defined in the Portfolio Handbook and the Communications Plan.

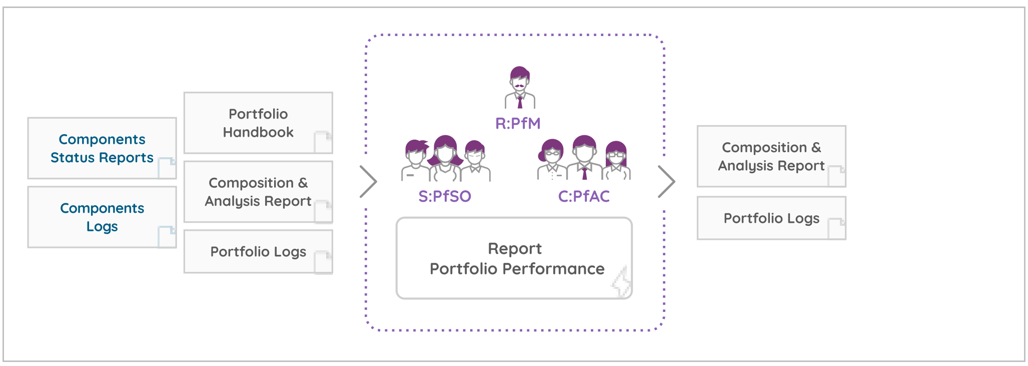


Fig 8.6: Report Portfolio Performance activity—Input, output, and main roles.

Guidelines:

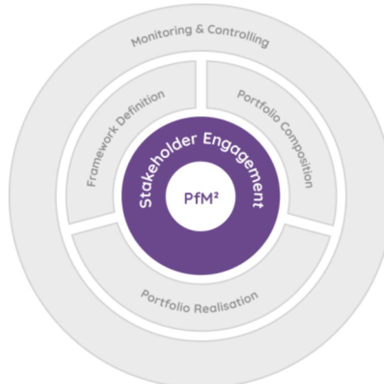
- **Identify the information needs:** Customise reports to address the established or emerging reporting needs of various stakeholders. Define the content, format, granularity, and frequency of the reports.
- **Provide access to portfolio reports**: Notify portfolio stakeholders regarding the availability of updated dashboards and allow access to historical information that will allow trends to be visualised. Depending on their needs and access privileges, different stakeholders may have access to different parts of the portfolio reports.
- **Tailor report views:** Specify the purpose of the communication per stakeholder group, and if needed, provide additional portfolio views which enable better visualisation of the pertinent information.

- **Report on portfolio composition and evolution**: Provide information on the evolution of the portfolio, not just its current state. Portfolio reports can include:
    - Information regarding new component candidates and the status of existing components.
    - Portfolio risks, issues, changes, decisions, recommendations, and actions.
    - Portfolio status and overall performance.
    - Analysis of the current portfolio and progress.
    - Resource capacity forecast.
    - Other component and portfolio-level Key Performance Indicators (KPIs).
- **Disseminate information:** Disseminate the Portfolio Composition & Analysis Report and key Portfolio Log entries.
- **Assess the effectiveness of the portfolio reports:** collect feedback from various stakeholders and capture specific feedback to improve portfolio data and reporting.

Portfolio Monitoring & Controlling	**PfDG**	**PfM**	**PfAC**	**PfSO**	**CRs**	**LSO**
Report Portfolio Performance	A	R	C	S	C	I

This page is intentionally left blank

9 Stakeholder Engagement & Communication



The Portfolio Stakeholder Engagement & Communication process is concerned with planning and implementing the activities needed to achieve the required level of engagement with portfolio stakeholders.

Portfolio management decisions and activities can have a significant impact on all levels of the organisation, from the strategic management level all the way to components management level and the day-to-day operations. The active engagement of stakeholders in portfolio management is a critical success factor without which portfolio management may end up being just another unproductive layer of bureaucracy and reporting.

Keeping the objectives of portfolio management aligned with the needs and interests of the various stakeholder groups is therefore a portfolio management priority, which needs to be planned and executed throughout the life of the portfolio.

The main activities involved in Stakeholder Engagement & Communication are shown in the figure below and described in the upcoming sections.

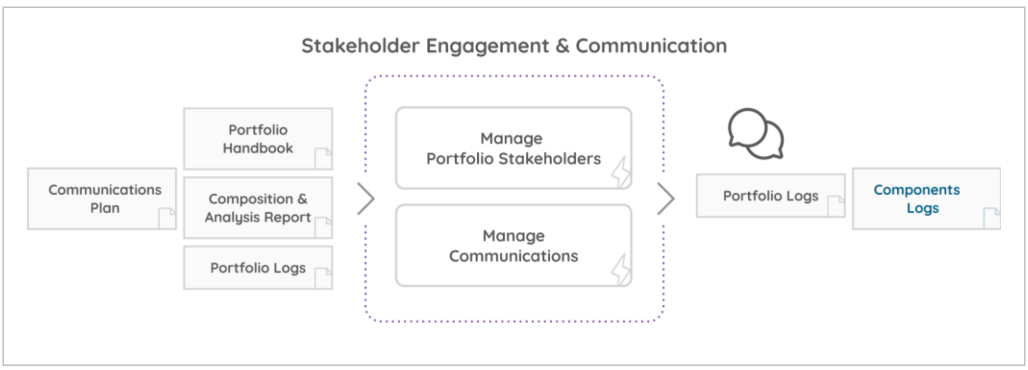


Fig 9.1: Stakeholder Engagement & Communication activities, inputs and outputs

Stakeholder Engagement & Communication Objectives

Running the indicated management activities and producing the recommended Artefacts are best practices that should be followed. However, Stakeholder Engagement & Communication achieves its purpose when it:

- results in the necessary level of engagement and commitment from the stakeholders.
- enables the exchange of ideas between stakeholders with varied perspectives.
- promotes the alignment of mindset between all stakeholders.
- helps to provide clarity regarding the purpose and performance of the portfolio.
- makes it clear who is supposed to do what in relation to portfolio management.

- prevents the whole process from being hijacked by organisational politics or bureaucracy.
- keeps stakeholders informed about the portfolio and reinforces their confidence about the value of the management approach followed and the organisational investments pursued.

The consolidated responsibilities of the Roles involved in the Stakeholder Engagement & Communication activities are shown in the RAM/ARSCI table below.

Stakeholder Engagement & Communication	PfDG	PfM	PfAC	PfSO	CRs	LSO
Manage Portfolio Stakeholders	A	R	C	S	I	I
Manage Portfolio Communications	A	R	C	S	I	I

The following sections provide a description of the Stakeholder Engagement & Communication activities along with useful guidelines for their execution.

9.1 Manage Portfolio Stakeholders

Portfolios and their effective management depend on the contribution of a wide range of stakeholders within the organisation, including senior managers, service management staff, project, and operational staff, but also client organisations, users, and contractors.

The Manage Portfolio Stakeholders activity involves interacting with the different stakeholders to assess how the portfolio goals and its management decisions and activities can affect them, or how stakeholders can influence and contribute to these activities and decisions. It is also concerned with disseminating the information resulting from the composition, realisation, monitoring and controlling of the programme to the appropriate stakeholders at the right time, at an optimal frequency, and with a suitable media and format.

The Portfolio Manager (PfM) is responsible for portfolio stakeholder management and is supported by the Portfolio Support Office (PfSO). However, members of the Portfolio Directing Group (PfDG) and Portfolio Advisory Committee (PfAC) are also expected to be actively involved in managing those stakeholders who are closer to their respective strategic or operational domains.

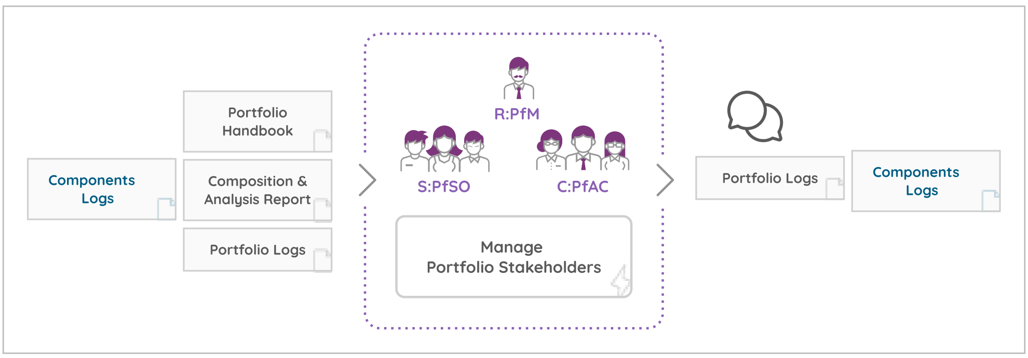


Fig 9.2: Manage Portfolio Stakeholders—Input, output, and main roles.

Guidelines:

- **Identify stakeholders:** Identify portfolio-level stakeholders and understand their needs, expectations, involvement, and interest in both the portfolio objectives and the components objectives.
- **Analyse stakeholders:** Analyse the attitudes, level of interest and influence of the portfolio stakeholders.
- **Plan stakeholders management activities:** Develop management strategies and plans. Customise communication activities to the needs of each stakeholder (or stakeholder group), but also to the level of their involvement as required by the portfolio.
- **Capture the results of these communications** and decisions in the various portfolio Artefacts, such as Minutes of Meeting, Portfolio Logs, etc.
- **Trigger the Manage Risk and Issues process:** Stakeholders and their behaviours are an important source of portfolio risks and issues. Identify these and manage them using the relevant portfolio process to ensure that the engagement of the various stakeholders has a net positive contribution to the portfolio.

- **Monitor the effectiveness of stakeholder management**: Monitor the implementation and results of the planned stakeholder management activities and adjust the strategies and plans accordingly.
- **Update portfolio artefacts:** Keep the relevant portfolio artefacts up-to-date (i.e. Portfolio Handbook, Portfolio Composition & Analysis Report, Stakeholder Log, and other Portfolio Logs).

Stakeholder Engagement & Communication	PfDG	PfM	PfAC	PfSO	CRs	LSO
Manage Portfolio Stakeholders	A	R	C	S	I	I

9.2 Manage Portfolio Communications

The Manage Portfolio Communication activity is concerned with keeping portfolio stakeholders informed throughout the life of the portfolio by providing multi-directional communication opportunities and channels. Portfolio communications should ensure that the objectives and performance of the portfolio are known to and understood by the stakeholders, but also provide opportunities and appropriate fora and channels for feedback and ideas about potential improvements to be shared.

Communication needs and activities differ from one portfolio to another and depend on many factors, such as the specific portfolio objectives, the stakeholder composition, the position of the portfolio within the organisation (e.g. strategic level vs operational level), the culture of the organisation and its maturity in terms of portfolio management.

The Portfolio Manager (PfM) is responsible for planning and executing the appropriate communication activities, which should be documented in the Portfolio Handbook or, if required, in a more elaborate Portfolio Communications Plan.

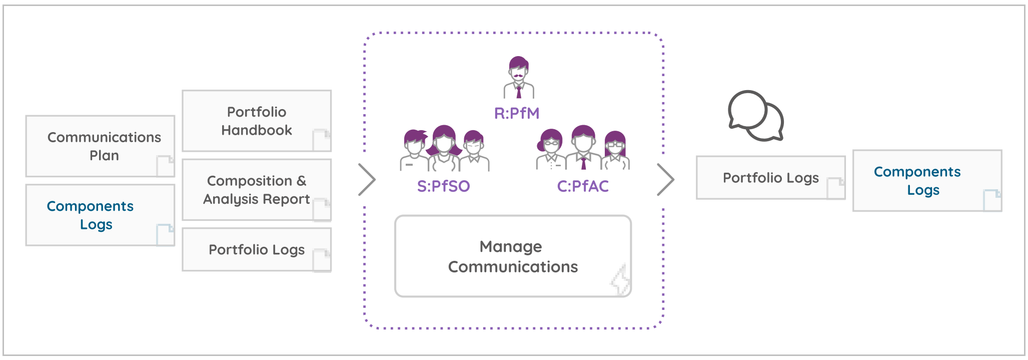


Fig 9.3: Manage Portfolio Communications activities—Input, output, and main roles.

Guidelines:

- **Determine communication needs**: Determine the information and communication needs of the portfolio stakeholders or stakeholder groups.
- **Plan communications:** Define the objectives of the communications and plan specific communication activities. Define the recipients, media and frequency of each communication designed to address stakeholders' needs.
- **Establish communication channels**: Define and establish the communication channels and methods that best serve the specific objectives of each communication. Define all the relevant portfolio artefacts that will be used both to disseminate and to collect portfolio information (e.g. Portfolio Composition & Analysis Report, Component Status Reports, etc.).
- **Conduct portfolio meetings:** Define and organise the various portfolio meetings (e.g. Portfolio Directing Group (PfDG) meetings, Portfolio Advisory Committee (PfAC) meetings, etc.). Define the meeting goals, the Meeting Agenda, identify the participants of each meeting, and disseminate their results (i.e. Decision Log, Minutes of Meetings, etc.).
- **Collect stakeholder feedback:** Provide appropriate channels of communication and create opportunities to capture honest feedback from stakeholders that can be used for improving communications and other portfolio management activities.

- **Update portfolio artefacts:** Keep the relevant portfolio artefacts up-to-date (e.g. Minutes of Meeting, Decision Log, Stakeholder Log, etc.).

Stakeholder Engagement & Communication	PfDG	PfM	PfAC	PfSO	CRs	LSO
Manage Portfolio Communications	A	R	C	S	I	I

10 Portfolio Artefacts

Portfolio documentation is an important activity for planning, reporting and communication and is caried out throughout the management of the portfolio.

The purpose of portfolio documentation is to:

- capture the portfolio's objectives.
- describe the management processes and governance responsibilities.
- facilitate communication with stakeholders.
- provide a baseline for controlling the realisation of the portfolio.
- capture important portfolio management decisions.
- capture snapshots of the portfolio performance in reports.
- provide a baseline for the assessment of the portfolio management effectiveness and efficiency.
- support organisational memory and act as an historical reference which can be used to increase the portfolio management maturity of the organisation.

Note that portfolio documentation should adhere to the quality standards of the organisation and the portfolio with regard to quality of information, format, style, etc. Above all, it must be lean and reader-friendly if it is to fulfil its purpose.

Determining what documentation is required is therefore an important decision that should be made during the Portfolio Framework Definition. The decision to add, remove or modify PfM² artefact templates as per the needs of the portfolio should be determined by its complexity and size, the formality required, and the input of the Portfolio Advisory Committee (PfAC).

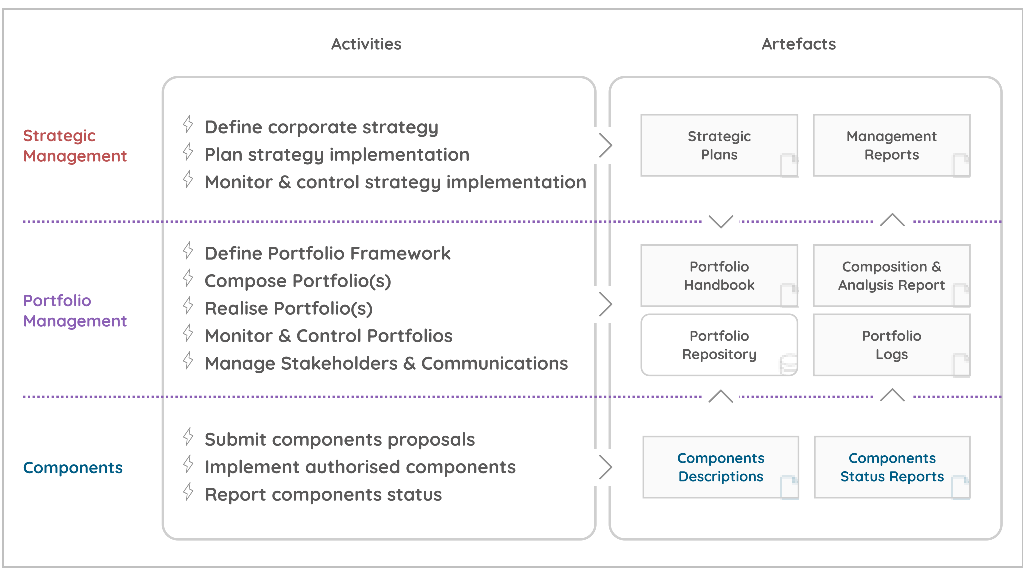


Fig 10.1: Key Portfolio Management Artefacts

The consolidated responsibilities of the Roles involved in the Stakeholder Engagement & Communication activities are shown in the RAM/ARSCI table below.

Portfolio Artefacts	**PfDG**	**PfM**	**PfAC**	**PfSO**	**CRs**	**LSO**
Portfolio (Management) Handbook	A	R	C	S	I	I
Portfolio Communications Plan	A	R	C	S	I	I
Portfolio Composition & Analysis Report	A	R	C	S	I	I
Benefits Matrix	A	R	S	S	C	C
Portfolio Logs	A	R	C	S	C	C

10.1 Portfolio Handbook

The Portfolio Handbook is a key portfolio management artefact that describes the portfolio objectives and characteristics, as well as the portfolio management approach. It is an important point of reference for everyone involved in portfolio management activities.

- The **portfolio objectives** capture and define the reasons that a particular portfolio exists. These are explicitly and directly related to one or more of the strategic and operational objectives of the organisation. They guide the composition and realisation of the portfolio, but also play a role in the selection of the appropriate management approach.
- The **portfolio characteristics** define the component types that are qualified to be part of the portfolio along with their attributes. These attributes can relate to category, size, duration (i.e. time to maturity), cost, urgency, risk, etc. and are captured through the component description forms provided by the portfolio which can be different for each component type.
- The **management approach** describes the portfolio management processes and activities, its governance, artefacts, and any specific tools and techniques to be used.

The Portfolio Handbook is defined during the Portfolio Framework Definition process by the Portfolio Manager (PfM), with support from the Portfolio Support Office (PfSO). The Portfolio Handbook is approved by the Portfolio Directing Group (PfDG). It is also updated based on the results of the Review Portfolio Framework process, and it is therefore kept up to date throughout the life of the portfolio to reflect any changes in, or improvements to, the portfolio's objectives and management approach.

Guidelines

- Document the portfolio's objectives in a way that will make sense to the Handbook's users.
- Document (tailored) management activities in a way that will help all those involved in portfolio management.
- Align the Handbook updates to the annual management planning and budgeting cycles or establish a more **agile** approach with more frequent and lean review/update cycles.
- Keep the Portfolio Handbook up-to-date throughout the life of the portfolio.

10.2 Portfolio Communications Plan

The Portfolio Communications Plan defines and documents the content, format, frequency, audience and expected results of the portfolio communications. It defines the communication needs of the various stakeholders based on their interests, influence, and expectations. It can be made part of the Portfolio Handbook or developed as a standalone plan.

Guidelines

- Determine what information needs to be communicated to each stakeholder.
- Define the artefacts which will be used to collect, analyse, and distribute portfolio information.
- Determine the granularity of information and the frequency of communication.
- Based on the purpose of each communication and its audience, define the optimal format and media (e.g. written reports, presentations, face-to-face meetings, emails, calls, etc.).
- Determine the expected result for each communication action and the person responsible.

10.3 Portfolio Composition & Analysis Report

The Portfolio Composition & Analysis Report provides information on the portfolio's composition and current state, along with a view of the key portfolio objectives and their performance. Portfolio risks, issues and changes are also presented along with any recommendations for improving the portfolio's performance.

The structure of the Portfolio Composition & Analysis Report is defined during the Portfolio Framework Definition process but should be adjusted to address the evolving or emerging portfolio reporting needs. The organisation can further tailor this Report so that it includes priorities such as cost reduction, progress against specific organisational objectives, or any other pertinent organisational priority.

The Portfolio Composition & Analysis Report is a key working document that informs all stakeholders of the composition and state of the portfolio and helps the Portfolio Manager (PfM) and Portfolio Directing Group (PfDG) to make informed decisions regarding the optimisation of the portfolio.

Guidelines

- Present the composition of the portfolio highlighting any new portfolio candidates as well as those components which are close to exit or to be removed from the portfolio.
- Report on the portfolio performance connected to the realisation of the portfolio objectives and benefits. This information should be based on a consolidation of the components' status reports.
- Provide an analysis of the overall portfolio performance, presenting the causes and impact of any observed deviations from the plan. Capture the recommendations for corrective or preventative actions to optimise the portfolio, or to get it back on track.

10.4 Benefits Matrix

A Benefits (Traceability) Matrix provides a central location and a standardised structure for documenting and tracing the achievement of the portfolio's benefits. It is a tool which allows the Portfolio Manager (PfM) to assess the components' performance and their contribution to the achievement of the organisation's strategic objectives. Typically, the entries in the Benefits Matrix are interconnected, since benefits often belong to groups and are interdependent. It is also an important input for the Portfolio Composition & Analysis Report.

The Portfolio Manager (PfM) is responsible for creating and managing the Benefits Matrix, with the support of the Portfolio Support Office (PfSO).

Guidelines

- Define the structure of the Benefits Matrix in the Portfolio Handbook. The structure of the Benefits Matrix should generally be standardised within an organisation, particularly for portfolios within the same domain and of similar size.
- The Benefits Matrix to include: the benefit description and category (tangible/intangible, benefit/disbenefit, short term/long term etc.), the KPIs and supporting metrics per benefit, along with their definitions (current value, future value, measurement units and methods etc.), plus any other necessary traceability information.
- Set up the Benefits Matrix during the Portfolio Composition process, as the component benefits have already been identified during their evaluation.
- Iteratively elaborated the content of the Benefits Matrix throughout the Portfolio Realisation Process, as the components report on their updated Business Implementation Plans.
- Update the Benefit Matrix through the Manage Portfolio Value activity, during which the degree of the realisation of benefits is assessed, and the component level Business Implementation actions are re-assessed to ensure that the intended benefits are realised at the highest degree possible.

10.5 Portfolio Logs

A set of portfolio logs should be used to capture and manage stakeholders and relevant risks, issues, decisions, change, and lessons learned. The logs can also reference items escalated from the components layer. However, their main purpose is to capture and help manage portfolio-related items. These logs also provide valuable information relating to the status and performance of the portfolio and are used as inputs for the portfolio dashboards and reports. The Portfolio Handbook defines the Logs to be used in the portfolio, along with the configuration management rules which document who can view or edit the Portfolio Logs. PfM² provides templates for the Portfolio Logs.

Guidelines

- Tailor the portfolio logs and ensure that they have the appropriate level of detail.
- Ensure that logs from all portfolios and sub-portfolios are consistent and can be easily consolidated at the next hierarchical layer to avoid additional reporting overheads.
- Capture major portfolio changes, risks, issues, or decisions which are likely to have a significant impact on a portfolio component or the portfolio as a whole.

- Ensure that the reporting or escalation procedures are well understood, so that critical log entries are communicated effectively and regularly to maintain transparency and trust.
- Ensure that each portfolio component also keeps their component logs up to date.

Stakeholders Log

The Stakeholders Log is used to capture the names, roles and contact information of all the Portfolio Stakeholders. Specific communication needs should also be captured and addressed in the Portfolio Handbook. The Stakeholders Log can also be used to capture the outcomes of a specific communication with a stakeholder from which specific issues or decisions are derived (the various log entries are connected through their unique IDs).

Change Log

The Change Log is used to capture any changes in the organisation, system/service, people, environment, etc., that could potentially impact on the risk assessment and treatment. Identified changes need to be analysed and a decision taken on whether action is required, what that action will be, when it needs to be taken, and by whom.

Risk Log

The Risk Log us used to capture all the risks that may have an impact on the portfolio and its objectives. The Risk Log is aligned with the PM² Risk Management process and helps the Portfolio Manager (PfM) to document the results of the risk analysis and monitor the implementation of the selected strategies developed to deal with risks.

Issues Log

The Issues Log is used to capture issues that relate to the entire portfolio. The Issue Log is also used as a to-do list for capturing, assigning, and scheduling any management activities that have not been foreseen, or other activities that need to be appropriately assigned and tracked.

Decisions Log

The Decisions Log is used to capture all the important decisions relating to the management and execution of the portfolio. It is used to log a variety of types of decision, such as decisions taken during meetings, decisions relating to the acceptance of risks, approvals, etc.

Lessons Log

The Lessons Log is used to capture important lessons learned from managing the portfolio. Capturing and sharing such lessons is an important aspect of continual learning and improvement for those involved in portfolio management. However, it also contributes to an overall improvement in Portfolio Management across the entire organisation.

Appendix A—Acknowledgements & Contributions

The PM² Foundation and the author of this publication are grateful to everyone who has contributed to the development of the PfM² Guidelines for Portfolio Management and wish to acknowledge their contribution and support.

Author of the PfM² Guidelines: Nicos KOUROUNAKIS

In addition, the following people contributed to this publication (or previous versions) through the provision of expert knowledge and content reviews:

[redacted]

Note: The PfM² Guidelines are a product of refinement and elaboration of the PM²-PPM Model, as included in the Appendix of the Open PM² Guide, v3, October 2018, European Commission, DIGIT. The following people are acknowledged as having served as leaders for the creation of the PM²-PPM Model:

[redacted]

- The full list of contributors will be released with version 1.0 -

Creation of the PfM²

The PfM² Guidelines are the result of the evolution of the basic PM²-PPM model based on several years of applied consulting experience. A brief history of the creation of PfM² is presented in the table below:

Year	Description
11/2014	PM² PPM Tools & Techniques Publication v.1 *(internal EC publication)*
6/2017	PM² PPM Portfolio Management Guidelines v.0.9 *(internal EC publication)*
7/2019	DPfM² Portfolio Management Methodology Guide v.1 *(internal EC publication)*
12/2021	PfM² Portfolio Management Overview
1/2022	PfM² Portfolio Management Guide v0.9 (draft – for open review)
5/2022	PfM² Portfolio Management Guide

This page is intentionally left blank

Appendix B—Ethics and Conduct

B.1 Code of Conduct

Professionalism refers to the ability to pursue professional goals by meeting the highest professional and moral standards. While the professional standards are narrowly applied and defined in the form of various work-specific methodologies within the organisation, the moral standards are widely applied to any kind of conduct (namely any attitude, behaviour, and action) in the professional environment, and they are defined in the Code of Conduct. Also, unlike professional standards, the moral standards, set by organisations and/or wider society, are not enforced. Rather, they are offered as a set of aspirational principles which people may choose to adopt. They aim to promote professional excellence through moral criteria that transcend formal professional and legal obligations. This section provides a useful reminder of the key principles that portfolio practitioners (and those involved in portfolio management) should both be aware of and respect.

- **INDEPENDENCE:** any kind of staff conduct, and decision-making should serve the common good and public interest, and never serve any other private interest or the interest of a third party at the expense of common good and public interest.
- **IMPARTIALITY:** staff members should be unbiased in any decisions they are called upon to make.
- **OBJECTIVITY:** any conclusions drawn by staff should be balanced and based on a thorough analysis of the facts and legal background.
- **TRANSPARENCY AND TRUTHFULNESS:** stuff members should cultivate openness and disclose information appropriately to facilitate professional efficiency and promote trusting, mutually beneficial, sustainable relationships with stakeholders.
- **LOYALTY**: loyalty towards the organization is essential for the sustainability and positive growth of the organization itself, as well as, for all stakeholders. It is necessary for the effective and efficient functioning of the organization, and the achievement of its objectives.

Putting these principles into practice requires:

- **CIRCUMSPECTION**: it refers to stopping and reflecting on the possible consequences and implications of potential actions, showing a degree of moderation and a sense of proportion and propriety.
- **RESPONSIBILITY**: it refers to carrying out tasks as dutifully as possible and looking for solutions when difficulties are encountered. Responsibility also refers to being familiar with and respecting the legal obligations and administrative rules and procedures in force.

The consistent application of above key principles comprise the higher-level principle of **INTEGRITY**, which refers to a person's reliability in applying, serving, and promoting all the ethical principles without compromising some in favour of others.

The aforementioned Code of Ethics reflects but is not limited to the following values which every portfolio practitioner should adhere to:

- **LAWFULNESS** and **ACCOUNTABILITY**: acting in accordance with the law, and holding oneself accountable for one's own decisions and acts.
- **FAIRNESS**: delivering damages and benefits fairly, based on impartial and objective judgments which are free from self-interest, prejudice, and favouritism.
- **NON-DISCRIMINATION** and **EQUAL TREATMENT**: respecting cultural, political, and economic diversity, and guaranteeing equal treatment for members of the public

irrespective of nationality, gender, racial or ethnic origin, religion or beliefs, disability, age or sexual orientation.

- **PROPORTIONALITY** and **CONSISTENCY**: ensuring that any conduct (behaviour, action, decision, measure etc.) is proportional to the aim pursued, and consistent with the principles and values laid out in the Code of Conduct.
- **RESPECT** and **LEADERSHIP**: exercising position with responsibility, leading by example to promote professional and moral standards.
- **HONESTY** and **OPENESS**: declaring any private interests, and openly providing reasons for any decision.
- **TEAMWORK** and **CONFLICT RESOLUTON**: appreciating, inviting, and supporting others' contributions to the achievement of common goals, and managing disagreements and conflicts by promoting the mutual understanding to facilitate their best resolution.

POLITENESS and **CLEAR COMMUNICATION**: maintaining a polite and friendly attitude when communicating with others, speaking the truth, and promoting clarity of instructions.

B.2 Personal and Professional Virtues

B.2 Personal and Professional Virtues

Virtues are strengths of the person who possesses them, and refer to the ideal management of the attitudes, behaviours and actions that drive personal and professional performance. Specifically, each virtue refers to our disposition with regard to a decisive determinant of overall human performance. Such determinants include both intellectual factors of performance, such as logical analysis, and moral factors of performance such as fairness, anger, fear etc. Although the ideal state of the intellectual determinants of behaviour is commonly defined and understood across different contexts, the ideal state of the moral determinants of our performance differs across situations. For example, the standard of good judgment is commonly defined across contexts and situations, but the standard of fairness, calmness and courage differs across contexts. Nevertheless, the Aristotelian definitions of the moral virtues (as the healthy mean between the extremes of *excess* and *deficiency*) provide the measure for defining the ideal state of moral determinants in every different situation.

Virtues can only be developed through practice. The application of the *healthy mean* in every situation helps us clarify what we ought to do in each situation to apply the right principles of conduct. Acting in a virtuous way enables us to raise the effectiveness and efficiency of our performance to serve our personal and professional, as well as our higher and more inclusive, goals.

The virtue of **prudence (practical wisdom)** refers to our ability to effectively choose and achieve the right goals; the goals that reflect and serve the principles of conduct. Prudence is characterised as an executive virtue because its outcome is something to be executed. It can be examined on two levels: the level of *purpose* (our ability to set worthy goals) and the level of *deliberation* (our ability to carefully consider the course and the means of our actions to achieve the desired goals).

The virtue of **judgment** refers to our ability to discern what is true from what is not. Judgement is not an executive disposition, because its outcome (e.g. an assessment or a conclusion) is not something to be executed. However, since it shapes our perception about things around us, it strongly affects the executive virtue of prudence, which in turn determines our actions. Furthermore, it also affects all moral virtues, and our overall ability to apply the principles of conduct. Since we rely on our judgment to define the 'health mean' in moral virtues, a deficiency in judgment (due to emotional factors, cognitive biases, or false reasoning) can seriously impair our moral virtues, too. For example, despite our willingness to be fair, due to wrong judgment, we might consider an act to be fair when it is actually unfair. Consequently, despite our willingness to be fair, due to wrong judgment, we might behave and act unfairly.

The virtue of **insightfulness** refers to our ability to understand things, to examine circumstances cleverly, to understand the relationships between things, to analyse and synthesise. It determines our capability to learn, as well as our ability to discern the right thing to do when we lack experience or knowledge. Insightfulness is very important for the application of principles of conduct because it is through intuitive insight that the mind grasps the principles of conduct and how to apply them in practice within any [new] context.

The virtue of **courage** refers to the management of fear and risk taking, and it is described as the productive mean between *cowardice* (a deficiency) and *audacity* or *fearlessness* (an excess). A courageous person undertakes all the acts required to serve the principles of conduct (not necessarily without fear), enduring whatever is logically required for them and any worthy goal aligned to them. Courage, always involving a risk, is a necessary means of sustaining and further developing one's capacities. Deviations from the mean of courage, as deviations from any of the following moral virtues, impair our ability to consistently apply the principles of conduct.

The virtue of **honour** refers to our disposition to seek honours and rewards from others. This virtue is defined as the mean between *lack of ambition* (seeking fewer honours and rewards than are deserved or having no desire for honours) and *over-ambition* (an excessive desire for honours or seeking more honours and rewards than are deserved).

The virtue of **honesty** refers to our ability to tell the truth about ourselves, and present ourselves to others as we really are, without denying or exaggerating our qualities. It is defined as the mean between *self-deprecation* (deficiency) and *boastfulness* (excess).

The virtue of **fairness** (or Justice) is attained and expressed through the development and application of all other virtues. However, there is a **particular** type of **fairness** that refers to our disposition to fairly distribute benefits and damages between others and ourselves, or among others. Fairness is the mother of all virtues, and for one to be truly fair all virtues must be fully developed ("Fairness is superior to all virtues"—Aristotle).

The virtue of **generosity** refers to the management of things that have value (e.g. time, money, knowledge, information, and other assets). It is defined as the productive mean between *stinginess* (deficiency) and *wastefulness* (excess). Generosity ensures that the valuable assets we possess, such as our knowledge, are shared with the right person, at the right time, in the right quantity and in the right way in order to be used productively. Generosity is determined by our willingness and ability to give (e.g. to share our knowledge), but also by whether our giving is in harmony with the long-term interests of the people involved, and in accordance with the other moral virtues.

The virtue of **friendliness** refers to the management of our amicability in our interactions with others. It is defined as the mean between *rudeness* (deficiency) and *obsequiousness* (excess). A rude person enjoys conflict, without taking into consideration whether they unnecessarily displease or embarrass others, whereas an obsequious person demonstrates servitude and is mostly interested in being likeable to others, avoiding conflict at the expense of the common good or even their own personal interest.

The virtue of **humour** is described as the mean between *boorishness* (deficiency) and *buffoonery* (excess). The boorish person does not enjoy humour: in fact, they might even be unduly upset or annoyed by it. On the other hand, the buffoon is someone who enjoys humour in excess, expresses it in an unproductive way, with inappropriate timing or frequency, and possibly causes annoyance to others.

The virtue of **calmness** refers to the management of anger. It is the mean between *spiritlessness* (deficiency) and *irritability* (excess). Spiritlessness refers to a lack of anger, while irritability refers to anger that is excessive in its duration, intensity, and frequency. The calm person desires to remain calm and not get carried away by passion or rage but is also capable of expressing anger appropriately to defend professional and personal integrity and promote common good according to the principles of conduct.

The virtue of **temperance** refers to the management of our desires, and it is the mean between *insensibility* (deficiency) and *intemperance* (excess). A temperate person is one who desires moderately and reasonably all those pleasures that promote health and wellness and sustain or improve functional efficiency.

The virtue of **magnificence** is similar to generosity, but it refers to the management of large assets. It is defined as the mean between *paltriness* (deficiency) and *vulgarity* (excess). Paltriness is exhibited when someone contributes to an important cause with a miserly disposition. In contrast, vulgarity is displayed when someone contributes excessively with more than what is required or expected

The virtue of **magnanimity** is similar to honour, but it refers to the management of high honours and rewards. It is defined as the mean between *meekness* (deficiency) and *vanity* (excess). A meek person believes that they do not deserve great honours when they actually do deserve them, whereas a vain person believes that they deserve great honours when they actually do not deserve them. The magnanimous person (magnum=great) seeks and enjoys the greatest goods (wealth, influence, prestige, distinctions, etc.) when they do indeed deserve them.

All virtues are required for the application of professional competences; however, due to their direct relevance to certain competencies, certain virtues are more important for particular competencies than others. Considering that the intellectual virtues of judgement, prudence and insightfulness are imperative for all virtues, the following table shows the strongest correlations between moral virtues and key professional competencies.

Competence	**Key Virtues**
Leadership	Calmness, Courage, Friendliness, Generosity, Honesty, Magnanimity, Magnificence, Temperance
Relationships and engagement	Courage, Fairness, Friendliness, Generosity, Honesty, Humour, Temperance
Self-reflection and-self management	Courage, Friendliness, Honesty, Honour, Magnanimity, Temperance
Change and transformation	Calmness, Courage, Friendliness, Generosity, Magnificence
Personal communication	Calmness, Friendliness, Generosity, Humour, Magnanimity
Resourcefulness	Fairness, Friendliness, Generosity, Honesty, Honour
Results orientation	Honesty, Honour, Fairness, Generosity, Magnanimity, Magnificence, Temperance
Teamwork	Fairness, Friendliness, Generosity, Honour, Magnanimity
Negotiation	Calmness, Courage, Fairness, Friendliness, Generosity, Honesty Temperance
Conflict and crisis management	Calmness, Courage, Fairness, Friendliness, Generosity
Personal integrity and reliability	All virtues
Culture and values management	All virtues

This page is intentionally left blank

Appendix C—Portfolio Artefact Templates

- The Portfolio Artefact Templates will be released with version 1.0 -

This page is intentionally left blank

Appendix D—References & Additional Resources

[redacted]

- The full list of references will be released with version 1.0 -

This page is intentionally left blank

Appendix E—Abbreviations & Glossary

Abbreviation/Acronym	Definition
CCB	Change Control Board
CRs	(Portfolio) Components Representatives
PdO	Product Owner (PdO)
Pf	Portfolio
PfAC	Portfolio Advisory Committee
PfDG	Portfolio Directing Group (PfDG)
PfM²	Portfolio Management Method
PfM	Portfolio Manager (PfM)
PfO	Portfolio Office
LPfOs	Local Portfolio Offices
LSOs	Local Portfolio/Project Support Offices
PgM	Programme Manager (PgM)
PgO	Programme Owner (PgO)
PM²	Project Management Methodology
PfMIS	Portfolio Management Information System
PM	Project Manager (PM)
PO	Project Owner (PO)
PSC	Project Steering Committee
SM	Service Manager
SP	Solution or Service Provider (SP)
SS	Service Supplier (SS)

- The full Glossary will be released with version 1.0 -

PfM²
PORTFOLIO
MANAGEMENT GUIDELINES

https://www.pfm2.website

PM²
FOUNDATION

9 789998 791404