
**Systems and software engineering —
Lifecycle profiles for Very Small
Entities (VSEs) —**

**Part 5-6-1:
Systems engineering — Management
and engineering guide: Generic profile
group: Entry profile**

*Ingénierie des systèmes et du logiciel - Ingénierie des systèmes - Profils
de cycle de vie pour très petits organismes (TPO) - Partie 5-6-1: —*

Partie 5-6-1: Guide d'ingénierie et de gestion - Profil d'entrée





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ISO copyright office
Ch. de Blandonnet 8 • CP 401
CH-1214 Vernier, Geneva, Switzerland
Tel. +41 22 749 01 11
Fax +41 22 749 09 47
copyright@iso.org
www.iso.org

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Foreword

ISO (the International Organization for Standardization) and IEC (the International Electrotechnical Commission) form the specialized system for worldwide standardization. National bodies that are members of ISO or IEC participate in the development of International Standards through technical committees established by the respective organization to deal with particular fields of technical activity. ISO and IEC technical committees collaborate in fields of mutual interest. Other international organizations, governmental and non-governmental, in liaison with ISO and IEC, also take part in the work. In the field of information technology, ISO and IEC have established a joint technical committee, ISO/IEC JTC 1.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of document should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO and IEC shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: [Foreword - Supplementary information](#)

The committee responsible for this document is ISO/IEC JTC 1, *Information technology*, Subcommittee SC 7, *Software and systems engineering*.

ISO/IEC 29110 consists of the following parts, under the general title *Systems and software engineering — Lifecycle profiles for Very Small Entities (VSEs)*:

The full list of parts of ISO/IEC 29110 is available [here](#).

Introduction

Very Small Entities (VSEs) around the world are creating valuable products and services. For the purpose of ISO/IEC 29110, a Very Small Entity (VSE) is an enterprise, an organization, a department or a project having up to 25 people. Since many VSEs develop and/or maintain system and software components used in systems, either as independent products or incorporated in larger systems, a recognition of VSEs as suppliers of high quality products is required.

According to the Organization for Economic Co-operation and Development (OECD) SME and Entrepreneurship Outlook report (2005) “Small and Medium Enterprises (SMEs) constitute the dominant form of business organization in all countries world-wide, accounting for over 95 % and up to 99 % of the business population depending on country”. The challenge facing governments and economies is to provide a business environment that supports the competitiveness of this large heterogeneous business population and that promotes a vibrant entrepreneurial culture.

From studies and surveys conducted, it is clear that the majority of International Standards do not address the needs of VSEs. Implementation of and conformance with these standards is difficult, if not impossible. Consequently VSEs have no, or very limited, ways to be recognized as entities that produce quality systems/system elements including software in their domain. Therefore, VSEs are excluded from some economic activities.

It has been found that VSEs find it difficult to relate International Standards to their business needs and to justify the effort required to apply standards to their business practices. Most VSEs can neither afford the resources, in terms of number of employees, expertise, budget and time, nor do they see a net benefit in establishing over-complex systems or software lifecycle processes. To address some of these difficulties, a set of guides has been developed based on a set of VSE characteristics. The guides are based on subsets of appropriate standards processes, activities, tasks, and outcomes, referred to as Profiles. The purpose of a profile is to define a subset of International Standards relevant to the VSEs' context; for example, processes, activities, tasks, and outcomes of ISO/IEC/IEEE 12207 for software; and processes, activities, tasks, and outcomes of ISO/IEC/IEEE 15288 for systems; and information products (documentation) of ISO/IEC/IEEE 15289 for software and systems.

VSEs can achieve recognition through implementing a profile and by being audited against ISO/IEC 29110 specifications.

The ISO/IEC 29110 series of International Standards and Technical Reports can be applied at any phase of system or software development within a lifecycle. This series of International Standards and Technical Reports is intended to be used by VSEs that do not have experience or expertise in adapting/tailoring ISO/IEC/IEEE 12207 or ISO/IEC/IEEE 15288 standards to the needs of a specific project. VSEs that have expertise in adapting/tailoring ISO/IEC/IEEE 12207 or ISO/IEC/IEEE 15288 are encouraged to use those standards instead of ISO/IEC 29110.

ISO/IEC 29110 is intended to be used with any lifecycle such as: waterfall, iterative, incremental, evolutionary or agile.

The ISO/IEC 29110 series, targeted by audience, has been developed to improve system or software and/or service quality, and process performance (see [Table 1](#)).

Table 1 — ISO/IEC 29110 target audience

ISO/IEC 29110	Title	Target audience
Part 1	Overview	VSEs and their customers, assessors, standards producers, tool vendors and methodology vendors
Part 2	Framework and taxonomy	Profile producers, tool vendors and methodology vendors Not intended for VSEs
Part 3	Assessment guide	VSEs and their customers, assessors, accreditation bodies
Part 4	Profile specifications	VSEs, customers, standards producers, tool vendors, and methodology vendors
Part 5	Management and engineering guide	VSEs and their customers

If a new profile is needed, ISO/IEC 29110-4 and ISO/IEC TR 29110-5 can be developed with minimal impact to existing documents.

ISO/IEC TR 29110-1 defines the terms common to the ISO/IEC 29110 series. It introduces processes, lifecycle and standardization concepts, the taxonomy (catalogue) of ISO/IEC 29110 profiles, and the ISO/IEC 29110 series. It also introduces the characteristics and needs of a VSE, and clarifies the rationale for specific profiles, documents, standards, and guides.

ISO/IEC 29110-2 introduces the concepts for systems and software engineering profiles for VSEs. It establishes the logic behind the definition and application of profiles. For standardized profiles, it specifies the elements common to all profiles (structure, requirements, conformance, assessment). For domain-specific profiles (profiles that are not standardized and developed outside of the ISO process), it provides general guidance adapted from the definition of standardized profiles.

ISO/IEC TR 29110-3 defines certification schemes, assessment guidelines and compliance requirements for process capability assessment (ISO/IEC 33xxx), conformity assessments (ISO/IEC 17xxx), and self-assessments for process improvements. ISO/IEC 29110-3 also contains information that can be useful to developers of certification and assessment methods and developers of certification and assessment tools. ISO/IEC 29110-3 is addressed to people who have direct involvement with the assessment process, e.g. the auditor, certification and accreditation bodies and the sponsor of the audit, who need guidance on ensuring that the requirements for performing an audit have been met.

ISO/IEC 29110-4-m provides the specification for all profiles in one profile group that are based on subsets of appropriate standards elements. Profile groups cover the following domains: systems engineering, software engineering and service delivery.

ISO/IEC TR 29110-5-m-n provides a management and engineering guide for each profile in one profile group.

The future ISO/IEC TR 29110-6-x provides management and engineering guides not tied to a specific profile.

This part of ISO/IEC 29110 provides an implementation management and engineering guide for the Entry Profile of the Generic Profile Group specified in ISO/IEC 29110-4-6. The Entry Profile is targeted at start-up VSEs (i.e. VSEs who started their operation less than three years) and/or at VSEs working on small project (e.g. project size of less than six person-months).

[Figure 1](#) describes the International Standards (IS) and Technical Reports (TR) of ISO/IEC 29110 and positions the parts within the framework of reference. Overview, assessment guide, management and engineering guide are available from ISO as freely available Technical Reports (TR). The Framework document, profile specifications and certification schemes are published as International Standards (IS).

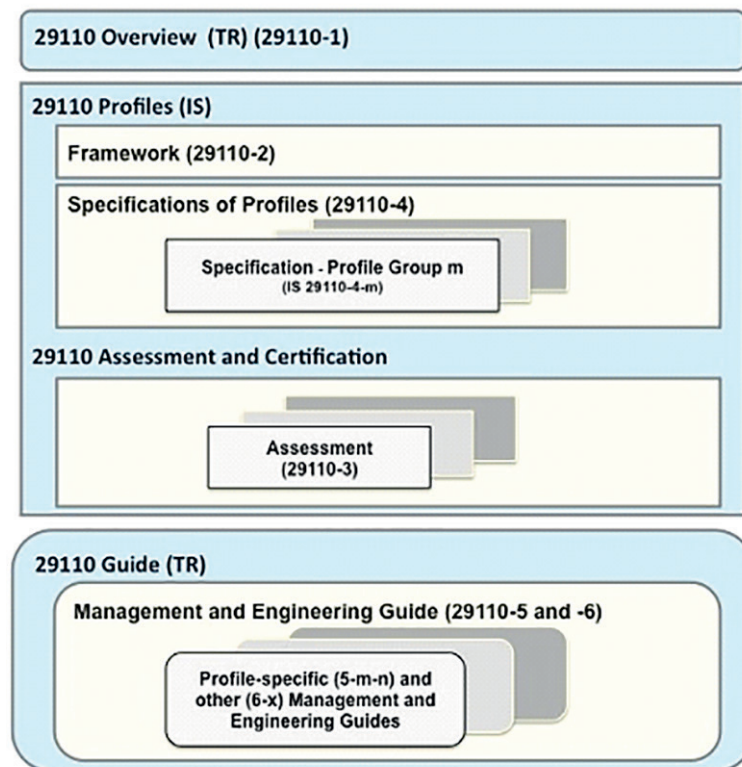


Figure 1 — ISO/IEC 29110 series

Systems and software engineering — Lifecycle profiles for Very Small Entities (VSEs) —

Part 5-6-1:

Systems engineering — Management and engineering guide: Generic profile group: Entry profile

1 Scope

1.1 Fields of application

This part of ISO/IEC 29110 is applicable to Very Small Entities (VSEs). VSEs are enterprises, organizations, departments or projects having up to 25 people. The lifecycle processes described in the set of International Standards (IS) and Technical Reports (TR) are not intended to preclude or discourage their use by organizations bigger than VSEs.

This part of ISO/IEC 29110 provides the management and engineering guide to the Entry Profile described in ISO/IEC 29110-4-6 through Project Management and System Definition and realization processes. This part of ISO/IEC 29110 is a standalone guide; it is not intended for a VSE to use the standardized profile to implement this part of ISO/IEC 29110.

This part of ISO/IEC 29110 applies for non-critical systems development projects. The system development should fulfil the project requirements and the system description.

Using this part of ISO/IEC 29110, a VSE can obtain benefits in the following aspects:

- an agreed set of project requirements (technical part of contract) and expected products are agreed by the Acquirer;
- a disciplined management process, that provides project visibility and corrective actions of project problems and deviations, is performed;
- a systematic System Definition and Realization process, that satisfies Acquirer needs and ensures quality products, is followed.

VSEs developing software that is part of a larger system and for standalone software products and services are encouraged to use the management and engineering guide of the Entry Profile (ISO/IEC TR 29110-5-1-1).

1.2 Target audience

This part of ISO/IEC 29110 is targeted at VSEs who do not develop critical systems and do not have experience with Systems Engineering (SE) process planning and implementation using ISO/IEC/IEEE 15288.

It is intended to be used with any processes, techniques and methods that enhance the VSE's Stakeholders satisfaction and productivity.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO/IEC 29110-2, *Systems and software engineering — Lifecycle profiles for Very Small Entities (VSEs) — Part 2: Framework*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO/IEC IS 29110-2 and the following apply.

3.1

acquirer

stakeholder that acquires or procures a product or service from a supplier

Note 1 to entry: Other terms commonly used for an acquirer are buyer, customer, owner, or purchaser.

[SOURCE: ISO/IEC/IEEE 15288:2015, 4.1.1]

3.2

agreement

mutual acknowledgment of terms and conditions under which a working relationship is conducted

[SOURCE: ISO/IEC/IEEE 15288:2015, 4.1.4]

3.3

critical system

items (e.g., functions, parts, software, characteristics, processes) having significant effect on the product realization and use of the product, including safety, performance, form, fit, function, producibility, service life, etc., that require specific actions to ensure they are adequately managed

EXAMPLE Critical items include safety critical items, fracture critical items, mission critical items, key characteristics, etc.

[SOURCE: AS/EN/JIS Q 9100:2009]

3.4

disposed system

system that has been transformed (i.e., state change) by applying the disposal process

Note 1 to entry: A systems approach considers the total system and the total lifecycle of the system. This includes all aspects of the system and the system throughout its life until the day users dispose of the system and the external enterprises complete the handling of the disposed system products.

[SOURCE: ISO/IEC/IEEE 15288:2015, modified]

3.5

operator

individual or organization that performs the operations of a system

Note 1 to entry: The role of operator and the role of user can be vested, simultaneously or sequentially, in the same individual or organization.

Note 2 to entry: An individual operator combined with knowledge, skills and procedures can be considered as an element of the system.

Note 3 to entry: An operator may perform operations on a system that is operated, or of a system that is operated, depending on whether or not operating instructions are placed within the system boundary.

[SOURCE: ISO/IEC/IEEE 15288:2015, 4.1.26]

3.6

Small and Medium Enterprise

SME

enterprise which employ fewer than 250 persons

[SOURCE: OECD 2005, modified]

3.7

system

combination of interacting elements organized to achieve one or more stated purposes

Note 1 to entry: A system may be considered as a product or as the services it provides.

Note 2 to entry: In practice, the interpretation of its meaning is frequently clarified by the use of an associative noun, e.g., aircraft system. Alternatively, the word “system” may be substituted simply by a context-dependent synonym, e.g., aircraft, though this may then obscure a system principles perspective.

[SOURCE: ISO/IEC/IEEE 15288:2015, 4.1.46]

3.8

trade-off

decision-making actions that select from various requirements and alternative solutions on the basis of net benefit to the stakeholders

[SOURCE: ISO/IEC/IEEE 15288:2015, 4.1.51]

3.9

user

individual or group that interacts with a system or benefits from a system during its utilization

Note 1 to entry: The role of user and the role of operator are sometimes vested, simultaneously or sequentially, in the same individual or organization.

[SOURCE: ISO/IEC/IEEE 15288:2015, 4.1.52]

3.10

system structure

decomposition of a system of interest into a set of interacting systems and system elements

Note 1 to entry: The system structure is described in a System Breakdown Structure (SBS).

[SOURCE: ISO/IEC/IEEE 15288:2015]

3.11

work breakdown structure

WBS

hierarchical decomposition of the total scope of work to be carried out by the project team to accomplish the project objectives and create the required deliverables

[SOURCE: ISO/IEC/IEEE 24765:2010, 3.3330, modified]

4 Symbols and abbreviated terms

4.1 Naming, diagramming, and definition conventions

The following process structure description and notation are used to describe the processes.

Name — process identifier, followed by its abbreviation in brackets “()”.

Purpose — general goals and results expected of the effective implementation of the process. The implementation of the process should provide tangible benefits to the stakeholders. The purpose is identified by the abbreviation of the process name.

Objectives — specific goals to ensure the accomplishment of the process purpose. The objectives are identified by the abbreviation of the process name, followed by the letter “O” and a consecutive number, for example PM.01,SR.02, etc.

Input Products — products required to perform the process and its corresponding source, which can be another process or an external entity to the project, such as the Acquirer. Identified by the abbreviation of the process name and showed as two column table of product names and sources.

Output Products — products generated by the process and its corresponding destination, which can be another process or an external entity to the project, such as Acquirer or Organizational Management. Identified by the abbreviation of the process name and showed as two column table of product names and destinations.

Internal Products — products generated and consumed by the process. Identified by the abbreviation of the process name and showed as one column table of the product names.

All products’ names are printed in cursive and initiate with capital letters. Some products have one or more statuses attached to the product name surrounded by square brackets “[]” and separated by “;”. The product status may change during the process execution. See [Clause 10](#) for the alphabetical list of the products, its descriptions, possible statuses and the source of the product. The source can be another process or an external entity to the project, such as the Acquirer.

Rectangle boxes — the rectangle boxes following the description of processes objectives make the correspondence with ISO/IEC/IEEE 15288 standard.

Roles involved — names and abbreviation of the functions to be performed by project team members. Several roles may be played by a single person and one role may be assumed by several persons. Roles are assigned to project participants based on the characteristics of the project. The role list is identified by the abbreviation of the process name and showed as two column table. See [Clause 9](#) for the alphabetical list of the roles, its abbreviations and required competencies description.

Diagram — graphical representation of the processes. The large round-edged rectangles indicate process or activities and the smaller square-edged rectangles indicate the products. The directional or bidirectional thick arrows indicate the major flow of information between processes or activities. The thin directional or bidirectional arrows indicate the input or output products. The notation used in the diagrams does not imply the use of any specific process lifecycle.

Activity — a set of cohesive tasks. Task is a requirement, recommendation, or permissible action, intended to contribute to the achievement of one or more objectives of a process. A process activity is the first level of process workflow decomposition and the second one is a task. Activities are identified by process name abbreviation followed by consecutive number and the activity name.

Activity Description — each activity description is identified by the activity name and the list of related objectives surrounded by brackets “()”. For example PM.1 Project Planning (PM.01, PM.05, PM.06, PM.07) means that the activity PM.1 Project Planning contributes to the achievement of the listed objectives: PM.01, PM.05, PM.06 and PM.07. The activity description begins with the task summary and is followed by the task descriptions table. The task description doesn’t impose any technique or method to perform it. The selection of the techniques or methods is left to the VSE or project team.

Tasks description table contain four columns corresponding to

- Role — the abbreviation of roles involved in the task execution.
- Task — description of the task to be performed. Each task is identified by activity ID and consecutive number, for example PM.1.1, PM.1.2, and so on.
- Input Products — products needed to execute the task.

— Output Products — products created or modified by the execution of the task.

Incorporation to Project Repository — list of products to be saved in *Project Repository*; the *Version Management Strategy* has to be applied to some of them (see [7.7.2](#) and [8.7.2](#)). It is useful as a checklist for project manager and technical leader.

NOTE Tables used in process description are for presentation purpose only.

4.2 Abbreviated terms

The following abbreviations are used in this document:

AGR	Agreement
DEV	Developer
HW	Hardware
IVV	Integration, Verification, Validation
PM	Project Management
PJM	Project Manager
SDD	System Design Document
SE	Systems Engineering
SEP	Systems Engineering Plan
SR	System Definition and Realization
SMART	Specific, Measurable, Achievable, Relevant and Traceable
SME	Small and Medium Enterprise
STK	Stakeholder
SUP	Supplier
SW	Software
VSE	Very Small Entity
WBS	Work Breakdown Structure
WP	Work Product

5 Systems Thinking

The traditional approach to solve a problem is called Cartesian. This approach focuses on dividing a problem into smaller parts and, once resolved each part, the whole problem is solved. This approach, however, has limitations because you can lose insight of the whole system. To overcome this limitation, there is the System Thinking, which analyses and observes the system as a whole and identifies the interrelationships among the parts that compose it and also with the system environment (e.g. enabling systems).

System Thinking allows for a better understanding of the systems as a whole: System Thinking is used to broaden the perspective to larger environments by considering the entire lifecycle of the system and the different possible applications of the system. Systems can be immersed in different environments and multiple relationships will emerge. Every project has a context in which the system is embedded.

Thus a system is not only composed of software and hardware, but is always part of a larger operation, often involving people and other systems. The designer must clearly understand these relationships before defining a solution.

The “system” perspective enables to design of an optimized system taking into account all needs and constraints. This perspective also helps to invent new solutions to meet existing needs or in some cases create new needs.

For the purpose of this part of ISO/IEC 29110, System Thinking should be considered particularly when understanding the system to be designed so that, when identifying the requirements, all the stakeholders must be considered as well as the context in which the system should operate. Following this approach, when deploying the requirements in smaller modules, it will help ensure effective integration the parts.

6 Overview

The Entry Profile Management and Engineering Guide is targeted at start-up VSEs (i.e. VSEs who started their operation less than three years) and/or at VSEs working on small project (e.g. project size of less than six person-months). The project may fulfill an external or internal contract. The internal contract between the project team and its Acquirer need not be explicit.

The Entry profile is the first systems engineering profile of the Generic profile group. The Entry profile is defined for the case when more flexible and more light-weight system engineering process is needed than the Basic profile scope, e.g. for the case when user-risk is very low, using period is very short. The main simplifications of Entry profile against the Basic profile concern the Systems Engineering Management Plan, the disposal Management approach and a lightweight program management approach.

The Guide provides Project Management and System Definition and Realization processes which integrate practices based on the selection of ISO/IEC/IEEE 15288 and ISO/IEC/IEEE 15289 standards elements. [Annex A](#) provides information about Deployment Packages which will facilitate the implementation of these processes.

This part of ISO/IEC 29110, is intended to be used by the VSE to establish processes to implement any development approach or methodology including, e.g., agile, evolutionary, incremental, test driven development, etc. based on the VSE organization or project needs.

Using the Guide, VSE can obtain benefits in the following aspects:

- a set of project requirements (technical part of the contract) and expected products are agreed with the Acquirer;
- a disciplined management process, that provides project visibility and corrective actions of project problems and deviations, is performed;
- a systematic System Definition and Realization process, that satisfies Acquirer needs and ensures quality products, is followed.

To use the Guide the VSE needs to fulfill the following entry conditions:

- project *Needs and Expectations* are documented;
- feasibility of the project was performed before its start;
- project team, including project manager and system engineer, is assigned and trained;
- goods, services, and infrastructure to start the project are available.

The purpose of the Project Management (PM) process is to establish and carry out in a systematic way the *Tasks* of the system development, which allows complying with the project's *Objectives* in the expected quality, time and cost.

The purpose of the System Definition and Realization process is the systematic performance of the analysis, design, construction, integration, verification, and validation activities for new or modified system according to the specified requirements.

Both processes are interrelated (see [Figure 2](#)).

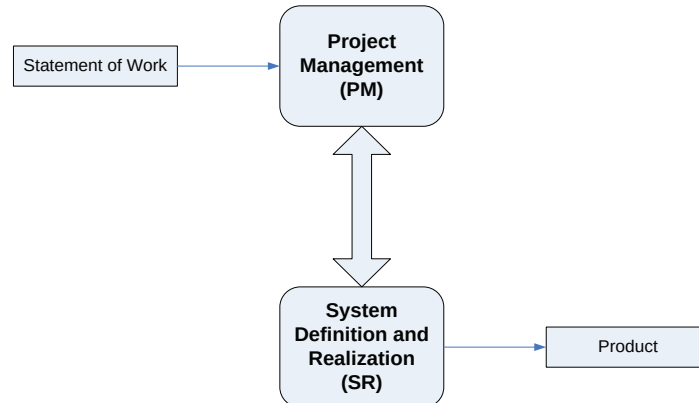


Figure 2 — Entry profile guide processes (diagram notation is explained in [4.1](#))

PM process uses the Acquirer's *Agreement* to elaborate the *Project Plan*. If there is no Agreement available from the Acquirer, the Project Manager (PJM), in collaboration with the Work Team, has to clarify the basis to develop the Agreement. The PM project assessment and control tasks compare the project progress against the *Project Plan* and actions are taken to eliminate deviations or incorporate changes to the *Project Plan*. The PM project closure activity ensures delivery of the *product (new or modified product)*, produced by SR (System Definition and Realization) process, and gets the Acquirer's acceptance to formalize the end of the project. A *Project Repository* is established to save the work products and to control its versions during the project.

The execution of the SR process is done according to the *Project Plan*.

The Acquirer provides an *Agreement* (AGR) as an input to Project Management process and receives *Products* as a result of System Definition and Realization process execution (see [Figure 2](#)).

7 Project Management (PM) process

7.1 PM purpose

The purpose of the Project Management process is to establish and carry out in a systematic way the *Tasks* of the system development project, which allows complying with the project's *Objectives* in the expected quality, time and costs.

This part of ISO/IEC 29110 is intended to be used by the VSE to establish processes to implement any development approach or methodology including, e.g., agile, evolutionary, incremental, test driven development, etc. based on the VSE organization or project needs.

7.2 PM objectives

PM.01. The *Project Plan*, the *Agreement* (AGR) and commitments are reviewed and accepted by both the Acquirer and the Project Manager. The *Tasks* and *Resources* necessary to complete the work are sized and estimated.

PM.02. Progress of the project is monitored against the *Project Plan* and recorded in the *Progress Status Record*. Corrections to remediate problems and deviations from the plan are taken when project targets are not achieved. Closure of the project is performed to get the Acquirer acceptance documented in the *Acceptance Record*.

PM.03. *Change Requests* are addressed through their reception and analysis. Changes to system requirements are evaluated by the project team for cost, schedule, risks and technical impact.

PM.04. Review meetings with the Work Team and the Acquirer, suppliers are held. Agreements are registered and tracked.

PM.05. A *Risk Management Approach* is developed. Risks are identified, analysed, prioritized, and monitored as they develop and during the conduct of the project. Resources to manage the risks are determined.

PM.06. A *Product Management Strategy* is developed. Items of *Product* are identified, defined and baselined. Modifications and releases of the items are controlled and made available to the Acquirer and Work Team. The storage, handling and delivery of the items are controlled.

PM.07. Quality Assurance is performed to provide assurance that work products and processes comply with the *Project Plan* and *System Requirements Specifications*.

NOTE The implementation of the Quality Assurance is through the performance of the verifications, validations and review *Tasks* performed in Project Management and System Definition and Realization processes.

PM.08. A *Disposal Management Approach* is developed to end the existence of a system entity.

7.3 PM input products

Table 2 — PM input products

Name	Source
<i>Agreement</i>	Acquirer
<i>All deliverables from SR</i>	Work Team
<i>Change Request</i>	Acquirer, Stakeholders Work Team Suppliers

7.4 PM output products

Table 3 — PM output products

Name	Destination
<i>Project Plan</i>	System Definition and Realization
<i>Product Acceptance Record</i>	Organizational Management
<i>Project Repository</i>	System Definition and Realization
<i>Meeting Record</i>	Acquirer, Stakeholders
<i>System Configuration</i>	Acquirer, Stakeholders System Definition and Realization Suppliers
<i>Disposed System</i>	Acquirer, Stakeholders Suppliers

7.5 PM internal products

Table 4 — PM internal products

Name
<i>Change Request</i>
<i>Correction Register</i>
<i>Justification Document</i>
<i>Meeting Record</i>
<i>Progress Status Record</i>
<i>Project Repository</i>
<i>Product Acceptance Record</i>

7.6 PM roles involved

Table 5 — PM roles involved

Role	Abbreviation
Acquirer, Stakeholders	STK
Project Manager	PJM
Work Team (System Engineer, Designer)	WT

7.7 PM diagram

The following diagram shows the flow of information between the Project Management Process activities including the most relevant work products and their relationship.

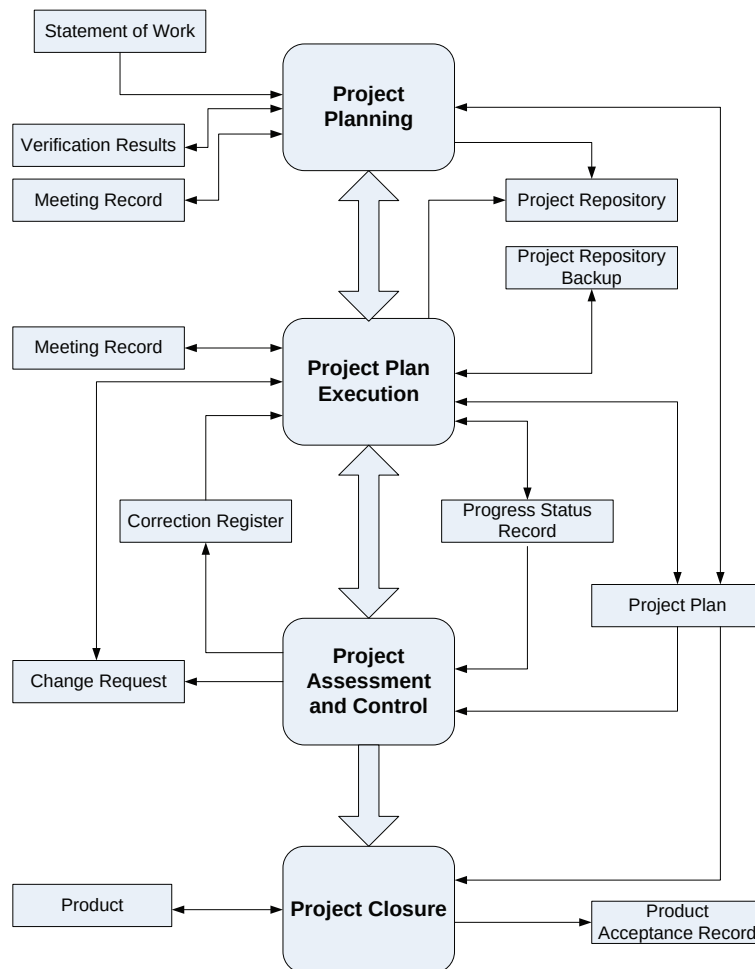


Figure 3 — Project Management process diagram

NOTE All the feedback lines are not all displayed to facilitate readability.

7.7.1 PM activities

The Project Management Process has the following activities:

- PM.1 Project Planning;
- PM.2 Project Plan Execution;
- PM.3 Project Assessment and Control;
- PM.4 Project Closure.

7.7.1.1 PM.1 project planning, (PM.01, PM.05, PM.06, PM.07)

The Project Planning activity documents the planning details needed to manage the project. The activity provides:

- Reviewed *Agreement* (AGR) and the *Tasks* needed to provide the contract *Deliverables*.
- System Breakdown Structure (SBS), to provide the list of system and system elements of the project.
- Project lifecycle, including task dependencies and duration.