Quality management input comprises the standard requirements from ISO 9001:2015 which are deployed by our organization to achieve client satisfaction through process control.

# **Quality Manual**

ISO 9001:2015 Quality Management System PG/QMS/QAC/M001



ISO 9001:2015 Quality Management System

#### **APPROVAL**

The signatures below certify that this management system manual has been reviewed and accepted, and demonstrates that the signatories are aware of all the requirements contained herein and are committed to ensuring their provision.

	Name	Signature	Position	Date
Prepared by				
Reviewed by				
Approved by				

#### **AMENDMENT RECORD**

This quality manual is reviewed to ensure its continuing relevance to the systems and process that it describes. A record of contextual additions or omissions is given below:

Page No.	Context	Revision	Date

#### **COMPANY PROPRIETARY INFORMATION**

The electronic version of this document is the latest revision. It is the responsibility of the individual to ensure that any paper material is the current revision. The printed version of this manual is uncontrolled, except when provided with a document reference number and revision in the field below:

Document Ref.		Rev	2
Uncontrolled Copy	✓ Controlled Copy	Date	1 April 2019

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## 1 Introduction

PETROGAS has developed and implemented a quality management system (QMS), which uses ISO 9001:2015 as framework that allows PETROGAS to document and improve our practices in order to better satisfy the needs and expectations of our clients, stakeholders and interested parties.

This QMS manual is used to familiarise our clients, interested parties, or individuals with the controls that have been implemented and to assure them that the integrity of our QMS is maintained and is focused on meeting its intended outcomes.

This manual also describes the structure and interactions of our QMS, delineates authorities, inter relationships and responsibilities of personnel who operate within the boundaries of PETROGAS's Quality Management System. The manual also references procedures, process and activities that comprise internally.

The Figure below illustrates our methodology for the development of our QMS, using the plan, do, check and act process approach, to implement and deliver management system objectives, stakeholder requirements and client satisfaction.

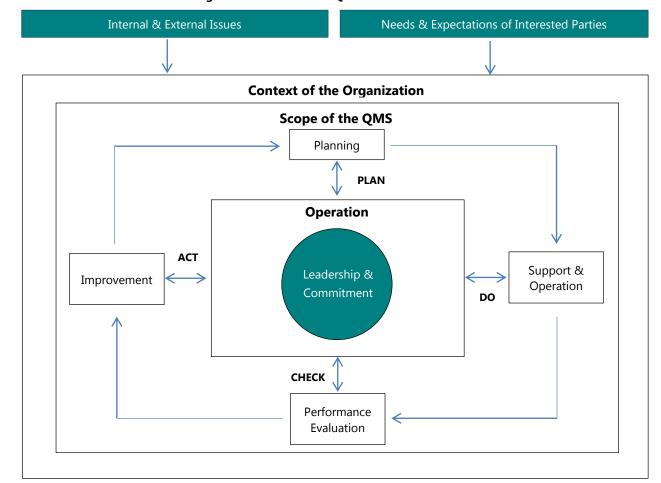


Figure 1: ISO 9001:2015 QMS & PDCA Interaction

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Certification to the international standard ISO 9001:2015 will help achieve these intended outcomes and demonstrates that the QMS is effective, provides value for PETROGAS and its interested parties. Our QMS addresses and supports our wider strategies for the scope of:

Project Management for offshore transportation, installation, inspection, repair and maintenance projects.

#### **PETROGAS**;

21-2, Jalan Sepah Puteri 5/1B, Sri Utama Kota Damansara, 47810 Petaling Jaya, Selangor Darul Ehsan.

The following table identifies any ISO 9001:2015 requirements, from Section 8.3, that are not applicable to PETROGAS as well as providing a brief narrative to justify their omission from the scope of our QMS:

Clause	Justification for Exclusion
8.3	We exclude design and development from our QMS, as we do not design or modify client's requirement.

# 2 References

In addition to ISO 9001:2015 we also make reference to other relevant Malaysia and/or international standards as well as client specifications appropriate to our services and market.

Standard	Title	Description
BS EN ISO 9000:2015	Quality management systems	Fundamentals and vocabulary
BS EN ISO 9004:2000	Quality management systems	Guidelines for performance improvements
BS EN ISO 19011:2011	Auditing management systems	Guidelines for auditing

# 3 Definitions

This document does not introduce any new definitions but rather relies on the following:

- 1. Definitions typically used by our clients, stakeholders or marketplace;
- 2. Terms typically used in standards and regulations as they relate to our QMS or products;
- 3. Standard business terminology;
- 4. Terms and vocabulary commonly used in quality and engineering practices.

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## 4 About PETROGAS

# **Organizational Context**

PETROGAS is committed to defining our position the marketplace understanding how relevant factors arising from legal, political, economic, social and technological issues influence our strategic direction and PETROGAS context.

PETROGAS identifies, analyzes, monitors and reviews factors that may affect our ability satisfy our clients stakeholders, as well as; factors that may adversely affect the stability of our process, or our management system's integrity.

To ensure that our QMS is aligned with our strategy, whilst taking account of relevant internal and external factors; we initially collate and analyze pertinent information in order to determine potential impact on our

or capable of affecting PETROGAS. Broadly, these issues are defined as:

Local Factors Macro Environment Interested Internal External Issues Issues **Parties SWOT Analysis PESTLE Analysis** Organizational Strategy & Operational Purpose **Business Planning** 

Opportinities

Context

Managment System

Figure 2: QMS Stategy Input Hierarchy

Objectives Scope Metrics

Risks

KPIs/

**Quality Policy** 

1. Internal issues – conditions related to PETROGAS activities, products, services, strategic direction, culture, people, knowledge, processes and systems. Using SWOT analysis provides PETROGAS with framework for reviewing and evaluating our strategies, and the position and direction of PETROGAS, business propositions and other ideas;

context and subsequent business strategy. Such issues include factors that are capable of being affected by,

**External issues** – conditions related to cultural, social, political, legal, regulatory, financial, technological, economic, competition at local, national or international levels. Using PESTLE analysis provides PETROGAS with framework for measuring our market and growth potential according to external political, economic, social, technological, legal and environmental factors.

#### **Supporting documentation:**

Ref.	Title & Description
F6011	Internal And External Issues

PETROGAS then monitors and reviews this information to ensure that a continual understanding of each group's requirements is derived and maintained. To facilitate the understanding of our context, we regularly consider issues that influence our context during management review meetings using the Context & Strategy Analysis template. The results of which are conveyed via MOM and business planning documents.

Although we acknowledge that ISO 9001:2015 does not require PETROGAS context to be maintained as documented information, we maintain and retain; in addition to this document, the following documented information to describe PETROGAS context:

1. Context & Strategy Analysis underpins our policies and provides a road map to achieve future goals;

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- 2. SWOT Analysis to help understand internal issues;
- 3. PESTLE Analysis to help understand external issues;
- 4. Analysis of business plans, strategies, and statutory and regulatory commitments;
- 5. Analysis of technology and competitors;
- 6. Economic reports from relevant business sectors;
- 7. Technical reports from technical experts and consultants;
- 8. Minutes of meetings (Management Review minutes), process maps and reports, etc.

The outputs from these activities are evident as an input to determining the scope of our QMS (Refer to Section 4.3) and its processes (Refer to Section 4.4), as well as, the consideration of risks and opportunities that may affect our QMS, and the resulting actions that we take to address them (Refer to Section 6.1).

SWOT analysis provides PETROGAS with framework for reviewing and evaluating our strategies, and the position and direction of PETROGAS, business propositions and other ideas. Similarly PESTLE analysis provides PETROGAS with framework for measuring our market and growth potential according to external political, economic, social, technological, legal and environmental factors.

#### **Supporting documentation:**

Ref.	Title & Description
P601	Determining Context of organization Procedure

#### 4.2 Relevant Interested Parties

PETROGAS recognizes that we have a unique set of interested parties whose needs and expectations change and develop over time, and furthermore; that only a limited set of their respective needs and expectations are applicable to our operational purpose. Such needs and expectations broadly include those shown in the table below.

Interested Parties	Needs & Expectations
Clients	Price, reliability & value
Distributors & retailers	Quality, price & logistics
Owners/shareholders	Profitability & growth
Employees	Shared values & security
Suppliers	Beneficial relationships
Regulatory & statutory	Compliance & reporting

To ensure that our products and processes continue to meet all relevant requirements, we identify and assess the potential impact of any relevant needs and expectations that may be elicited from interested parties.

The results of the assessment are captured using the *Interested Party Analysis* template.

Where appropriate, to ensure that our processes are aligned to deliver the requirements of our interested parties; we convert relevant needs and expectations into requirements which become inputs to our QMS and to our product and service designs.

#### **Supporting documentation:**

Ref.	Title & Description
P609	Legal & Other requirements
F6012	List Of interested Parties

# 4.3 Quality Management System Scope

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Based on the scope of our activities described in Section 1 - Introduction and the analysis of the issues and requirements identified in Sections 4.1 and 4.2, PETROGAS has established the scope of our quality management system in order the implement our objectives and our policies that are relevant to our context, products and any interested parties.

In order for our QMS to be robust, all the activities, products and services undertaken by PETROGAS are included with in the scope of the QMS. In this way, we are able to control and influence our activities, products and services.

This document describes our quality management system, delineates authorities, inter-relationships and responsibilities of process owners and personnel that operate within the system. Although we recognize that ISO 9001:2015 does not require a quality manual, we have decided to retain and update our quality manual, as our employees, clients, suppliers and other stakeholders perceive it to add value to our operations.

This document also demonstrates the relationship between our quality management system and the sequence and interaction of our key processes. Conformance to ISO 9001:2015 has been verified utilizing a formal assessment and review process by Certification International SOCOTEK.

#### **Supporting documentation:**

Ref.	Title & Description
F6013	Organizational Context Diagram

## 4.4 Quality Management System Processes

PETROGAS has implemented a quality management system that exists as part of a larger strategy that has established, documented and implemented our processes, quality policies and objectives, whilst satisfying the requirements of ISO 9001:2015.

To achieve this, PETROGAS has adopted the process approach advocated by ISO 9001:2015. Top management has determined the processes required for achieving the intended outputs. The *Process Clause Matrix* template is used to record and assign requirements to relevant functions, departments, teams, and personnel. By defining key process-groups and by managing their inputs, activities, controls, outputs and interfaces; we ensure that system effectiveness is established and maintained. These key process groups comprise:

- 1. Management and review processes;
- 2. Operation and production processes;
- 3. Support and assurance processes.

These process groups are described using tools such as documented procedures, process maps, flow diagrams, matrices, schedules, and charts, etc. Refer to <u>Appendix A.2</u> which shows the sequence and interaction of the process groups within our management system.

It is recognized that defining, implementing and documenting



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our quality management system is only the first step towards fully implementing its requirements. The effectiveness of each process and its subsequent output is measured and evaluated through regular internal audits, quality inspections and data analysis.

The monitoring of key performance indicators (KPIs), which are linked to our objectives, is used to measure and communicate process performance. This approach allows Top management to regularly review the QMS to ensure its ongoing integration with in the business.

As part of the decision making process, we use trends and statistical data related to non-conformities, quality related aspects, targets, objectives and corrective actions, as well as, monitoring and measurement results, audit results and compliance data, to ensure that objective, and responsible management decisions are made.

Where PETROGAS identifies the requirement to outsource any process, or part thereof, which affects conformity with the stated requirements; PETROGAS identifies control criteria such as; the competence of personnel, inspection regimes, the provision of product conformity certificates, adherence to specifications and specific job files, etc.

The controls identified do not absolve us of the responsibility to conform to client, statutory and regulatory requirements but instead they enhance our capacity to effectively manage our supply chain. The controls adopted are influenced by the potential impact of outsourcing on meeting client or stakeholder requirements, and the degree to which control of the process is shared. Outsourced processes are controlled via purchasing and contractual agreements. Refer to Section 8.4.

#### **Supporting documentation:**

Ref.	Title & Description
PIM001	Process Interaction Map
OPMP1	Organizational Process Management Plan

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# 5 Leadership & Governance

## 5.1 Leadership and Commitment

#### 5.1.1 General

PETROGAS's leadership is responsible for implementing our QMS, including the development and deployment of our quality policies, subsequent objectives and targets, and product or project-specific plans which are client focused. Top management provides accountability and governance to all activities related to the lifecycle processes including defining the strategic direction, responsibility, authority, and communication to assure the safe and effective performance.

Top management ensures that all necessary resources, responsibilities and accountabilities are allocated for the continual improvement of the QMS. Refer to <u>Appendix A.3</u> for a copy of PETROGAS Chart.

Top management have appointed and delegated the responsibility and authority for managing our quality processes to the Quality Manager to ensure that the necessary financial, technological and organizational resources are available to implement, monitor and maintain the QMS as required.

PETROGAS's governance structure provides necessary support for creating and establishing processes that are important for achieving our quality objectives, targets and policies by using the PDCA approach.

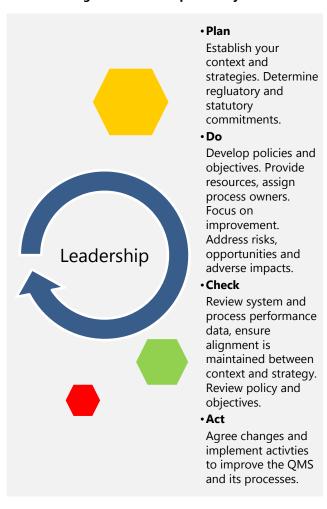
Governance activities include the systematic verification of QMS effectiveness by undertaking internal audits and analysing performance data, reviewing trends and KPIs.

Regular reviews and data reporting ensure that our QMS is effective and has the ability to react to emerging issues. Top management is committed to implementing and developing the QMS and this commitment is defined by our corporate policies and objectives. Evidence of Top management's involvement and commitment may be found in:

- 1. Business strategy plans and meetings;
- 2. Policies, objective and goals; and their communication and incentivisation;
- 3. Information provided on our website or social media channels;
- 4. Annual reports;
- 5. Management meeting minutes.

PETROGAS ensures that our policies are understood, implemented and maintained throughout at all levels of the organization through printed distribution of our policy statements and through periodic management review of the policy statements and corporate level improvement objectives. PETROGAS communicates

Figure 4: Leadership PDCA Cycle





our mission, vision, strategy, policies and processes to all employees in order to:

- 1. Create and sustain shared values of fairness and ethical behavior;
- 2. Establish a culture of trust and integrity;
- 3. Encourage commitment to quality;
- 4. Provide people with the required resources, training and authority to act with accountability;
- 5. Inspire, encourage and recognize people's contribution.

In addition, our policies, objectives and targets are communicated and deployed throughout the business via individual, team and department performance objectives which are established and discussed during employee performance reviews.

#### **Supporting documentation:**

Ref.	Title & Description
P602	Personnel Roles & Responsibility

#### 5.1.2 Client Focus

PETROGAS strives to identify current and future client needs, to meet their requirements and to exceed their expectations. Top management ensures that the focus on improving client satisfaction is maintained by setting objectives related to client satisfaction at management review meetings.

Top management also ensures that client requirements are understood and met. Client requirements are understood, converted into internal requirements and communicated to appropriate personnel within the organization. Client complaints and other client feedback are continually monitored and measured to identify opportunities for improvement. We continually look for ways to interact directly with our clients to ensure that we focus on their unique needs and expectations.

#### **Supporting documentation:**

Ref.	Title & Description
P610	Stakeholder Satisfaction & Feedback

## 5.2 Quality Policy

#### **5.2.1** Establishing the Quality Policy

PETROGAS's quality policies act as a compass by providing the direction and framework for establishing key corporate level performance measures, as well as related objectives and targets. Top management has overall responsibility for defining, documenting, implementing and reviewing our quality policies in consultation with the management teams and other personnel, or their representatives. The policies are reviewed at least annually, as part of the management review program or at a frequency determined by:

- 1. The changing needs and expectations of relevant interested parties, Section 4.2.
- 2. The risks and opportunities that are presented through the risk management process, Section 6.1.1.

PETROGAS's quality policy is communicated to all employees at all levels throughout PETROGAS via training, regular internal communications and reinforcement during annual employee performance reviews. Employee understanding of our policies and objectives is determined during internal audits and other methods deemed appropriate.

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PETROGAS is committed to an operating philosophy based on openness in communication, integrity in serving our clients, fairness and concern for our employees and responsibility to the communities within which we operate. Our vision is to exceed client expectations for quality, sustainability, cost, delivery and value.

Although the activities contained with our quality policy are centrally coordinated from our facilities, success of the policy relies on the participation of everyone, and as such, the policy's aims are embedded into our processes.

#### **Supporting documentation:**

Ref.	Title & Description
604	Communication, Consultation & Participation

#### 5.2.2 Communicating the Quality Policy

Top management ensures that our corporate policies are established and documented, and that the policies are available to all interested parties via our website. Our policies are communicated to all employees at all levels throughout PETROGAS via training, regular internal communications and reinforcement during annual employee performance reviews. Understanding of our policies and objectives is determined during internal audits and other methods deemed appropriate.

#### 5.2.3 Quality Policy Statement

#### QUALITY POLICY SHALL BE BASED ON THE RELEVANT ASPECT AS FOLLOW

PETROGAS is committed to an operating philosophy based on openness in communication, integrity in serving our clients, fairness and concern for our employees and responsibility to the communities within which we operate.

Our vision is to exceed client expectations for quality, safety, sustainability, cost, delivery and value. Additionally, we are dedicated to creating a profitable business culture that is based on the following principles:

#### **OUR PEOPLE**

PETROGAS is committed to equality in employment opportunity and rewards, embracing wholeheartedly the cultural diversity within the communities we call home.

Our employees' welfare and interests are foremost throughout all aspects of our business and how we conduct our affairs. PETROGAS is committed to:

- 1. Creating and nurturing an environment of success based on honesty and integrity;
- 2. Equitable sharing in the success of the company;
- 3. Empowerment through training and communication;
- 4. Individual growth and equal opportunity;
- 5. Designing and providing a safe and secure work environment.

#### **OUR CLIENTS**

Client needs are paramount and represent the highest priority within our business. Our obligation is to proactively seek out and define client needs while addressing all requests expeditiously without creating false expectations.

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#### **OUR COMMUNITY**

PETROGAS is committed to supporting the communities within which we operate. We believe in the practice of social responsibility and encourage similar behavior in our employees and suppliers.

We support the conservation of the physical environment and the prevention of pollution at our facilities and work area.

We proactively comply with all applicable safety, environmental, legal and regulatory requirements to which we subscribe.

#### **OUR QUALITY**

PETROGAS is committed to achieving competitive excellence and providing our clients with products and services designed, produced and maintained to meet or exceed their expectations by:

- 1. Complying with all client, statutory and regulatory requirements;
- 2. Enabling employees to achieve business and professional goals;
- 3. Continually improving our processes via our QMS;
- 4. Extending our QMS practices throughout our Supply Chain.

Beginning with a clear definition of clients' expectations, we strive to consistently meet or exceed them. We adhere to all applicable standards and client specific requirements and endeavor to provide processes that ensure we achieve this in order to build a robust and world class business.

## 5.3 Role, Responsibilities and Authorities

PETROGAS structure is defined in <u>Appendix A.3</u>. The organization chart shows the interrelation of personnel within <u>PETROGAS</u>, whilst job descriptions define the responsibilities and authorities of each role. Job descriptions and the organizational structure are reviewed and approved by <u>Top management</u> for adequacy as determined by the changing needs and expectations of the interested parties identified in Section 4.2, and any risk and opportunities presented through the risk management process, Section 6.1. All roles with QMS accountability and responsibilities are:

- 1. Documented in job descriptions
- 2. Documented in responsibility matrices;
- 3. Included in a QMS organization chart specific to the business;
- 4. Documented in organizational charts and available to all employees;
- 5. Where contractors are involved, areas of accountability and responsibility are clarified.
- 6. Supporting documentation:

Ref.	Title & Description
P602	Personnel Roles & Responsibility

#### **5.3.1** Top Management

Top management are responsible for business planning, development and the communication of our quality policies, quality management system planning, the establishment and deployment of objectives, the provision of resources needed to implement and improve the QMS (Refer to Section 7.1) and for undertaking management reviews (Refer to Section 9.3). Top management is also responsible for:

1. Effective implementation and ongoing operation of the QMS to maintain ISO 9001:2015 certification;

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- 2. Ensuring that the responsibilities and authorities for relevant roles are assigned;
- 3. Allocating resources to ensure that continual improvements can be achieved;
- 4. Chairing the Management Reviews to ensure the QMS remains effective, suitable and adequate.
- 5. Supporting documentation:

Ref.	Title & Description
GL6021	Top Management guideline

#### **5.3.2** Quality Manager

The Quality Manager is responsible, as delegated by Top management, for ensuring that any identified risks to quality are eliminated or reduced at source to As-Low-As-Reasonably-Practicable (ALARP) and that PETROGAS's strategic development does not compromise the intended outcomes of our QMS by;

- 1. Providing advice, information, instruction and training on quality management matters to employees and others as applicable;
- 2. Ensuring that the QMS is established, implemented and maintained in accordance with the requirements of and ISO 9001:2015;
- 3. Contributing to the annual (publicly available) reports;
- 4. Ensuring document control of QMS controlled documents;
- 5. Representation at QMS Improvement Groups;
- 6. Coordinating and completion of audits according to the internal audit program;
- 7. Reporting on the performance of the QMS, progress against objectives
- 8. Make recommendations for improvement to Top management via the agreed governance structure;
- 9. Increasing the competence and awareness of staff at all levels through the development of training and awareness initiatives and sharing of best practice;
- 10. Reporting on the operation of the QMS and identifying any opportunities;
- 11. Ensuring that improvement is taking place;
- 12. Ensuring that client focus is promoted throughout the organization;
- 13. Ensuring that whenever changes to the QMS are planned and implemented;
- 14. Ensuring the integrity of the system is maintained during changes;
- 15. Ensuring that responsibilities and authorities within the QMS are communicated and delegated.

#### **5.3.3** Department Managers

All department managers demonstrate their commitment to the development and improvement of the QMS through the provision of necessary resources, through their involvement in the internal audit process and through their proactive involvement in continual improvement activities. Emphasis is placed on improving both the effectiveness and efficiency of key system processes.

#### 5.3.4 Employees

All employees are responsible for the quality of their work and implementation of our policies and procedures applicable to the processes that they perform. Personnel responsible for product quality have the authority to stop production to correct problems. Employees are motivated and empowered to identify and report any known or potential problems, and to recommend solutions to aid subsequent risk management and corrective action activities.

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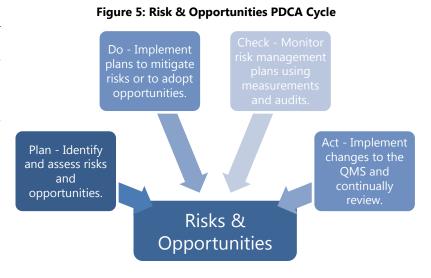
# 6 Management System Planning

# 6.1 Addressing Risks & Opportunities

In order for PETROGAS to have a successful QMS, we consider and manage the risks and opportunities relating to our stakeholders, and our external and internal context. This process uses the information collected during context and strategy evaluations (via SWOT & PESTLE analysis) and stakeholder and interested party analysis.

Using Risk & Opportunity Registers Top management and other responsible managers consider relevant risks and opportunities in order to help determine necessary action that ensures our QMS meets its intended outcomes; takes advantage of opportunities, mitigates risk, and achieves continual improvement.

Top management are responsible for incorporating risk based thinking in to PETROGAS's culture. This includes the



establishment of risk management policies and targets to ensure effective implementation of risk and opportunity management principles throughout the lifecycle of our products, activities or services by:

- 1. Providing sufficient resources to carry out risk and opportunity management activities;
- 2. Assigning responsibilities and authorities for risk and opportunity management activities;
- 3. Reviewing information and results from audits and risk and opportunity management activities.

The scope of PETROGAS's risk and opportunity management process is communicated by the <u>Control of Risks</u> <u>& Opportunities Procedure</u> which includes a methodology for the assessment of the internal and external issues identified in Section 4.1, and the assessment of the needs and expectations of any interested parties identified in Section 4.2. Risk and opportunity management is undertaken as part of PETROGAS's day-to-day operations and is captured at the following hierarchy:

Business Hierarchy	Risk/Opportunity
1. Strategic level	Budgets and profitability
2. Program level	Performance and efficiency
3. Department level	Resources and targets
4. Process level	Evaluation and assurance

Establishing such a hierarchy for capturing risks and opportunities ensures that each is managed at the most appropriate level within PETROGAS. Typically, the following categories shown in the table opposite are assigned to each level in the hierarchy.

PETROGAS has classified its 'risk appetite' as the amount of risk that we are willing to accept in pursuit of an opportunity or the avoidance of risk where each pertains to the conformity of our products and processes and which reflect the following considerations:

- 1. Risk management philosophy per product or process, and tolerance for failures;
- 2. Capacity to take on, or to mitigate risk;

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- 3. Our objectives, business plans and respective stakeholder demands;
- 4. Evolving industry and market conditions.

PETROGAS uses a <u>Risk & Opportunity Register</u> to help record, assess, respond, review, report, monitor and plan for the risks and opportunities that we perceive to be relevant. The register allows PETROGAS to methodically assess each risk and to study each opportunity associated with PETROGAS context, compliance obligations and the needs and expectations of our interested parties. The register also records the control and treatment of risk or opportunity to preserve this knowledge as documented information

#### Supporting documentation:

Ref.	Title & Description
P605	Addressing Risk And Opportunity

# 6.2 Quality Objectives

PETROGAS sets out its objectives and targets on a regular basis within the management review minutes where details of program dates and responsibilities are defined. Improvements in quality performance are incremental and are in keeping with the size and complexity of PETROGAS.

Top Management are responsible for developing the program of objectives and targets for the whole organization, details of which are recorded in the *Quality Objectives Management Program*. The Quality Manager is responsible for monitoring progress against our targets and objectives, and for reporting this data to Top management.

Progress is reviewed routinely by Top management as part of the management review and reporting activities, and incorporates any proposed developments for modified activities, products or services. Management programs are modified to account for any changes that affect the achievement of our objectives and targets. All proceedings and decisions are recorded in the management review meeting minutes.

When setting objectives and targets, Top Management ensures that they are consistent with the needs and expectations of our interested parties, as defined in Section 4.2, and with our corporate objectives, targets, programs and policies. In addition, technological options, financial, operational and business requirements are considered.

In order to determine whether or not our objectives and targets are being met, their related metrics are recorded and reported visually as a set of key performance indicators (KPIs) using the <u>Register of Quality Objectives & KPIs</u>. This allows progress over time to be monitored as the metrics are gathered and the data is analyzed. KPIs and objectives for PETROGAS include but not limited to the following aspects:

- 1. Turnover and profitability;
- 2. Sales targets and production efficiency targets:
- 3. Reject and rework and cost of quality targets;
- 4. Staffing breakdown.

On the basis of the set quality policies, and in connection with the application of the ISO 9001 quality management principles, PETROGAS sets quality objectives that are specified in the table below. All employees are aware of and, responsible, for the fulfillment of the quality policies and the subsequent

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objectives. Managers of all departments are obliged to develop high level objectives into objectives applicable to their departments and employees.

#### **Supporting documentation:**

Ref.	Title & Description
P612	Monitoring, Measurement & Analysis of Data
F6121	KPI Summary Plan

## 6.3 Planning for Change

Our QMS is planned and implemented in order to meet our corporate objectives as well as the requirements of ISO 9001:2015. The planning process involves establishing and communicating our corporate policies, objectives and associated operational procedures.

This document constitutes our overall plan for establishing, maintaining and improving our QMS. For each instance of management system planning, the output is documented and retained accordingly. Any changes are conducted in a controlled manner to ensure there that no unintended threats affect the QMS and are documented using the *Risk & Opportunity Register*.

Whenever management system changes are planned, Top management ensures that all personnel are made aware of any changes which affect their process, and that subsequent monitoring is undertaken to ensure that QMS changes are effectively implemented and that they do not adversely impact other processes.

All identified risks and opportunities that need to be addressed are used to prioritize action our action planning in order to manage and mitigate them. In order to manage the risks associated with any change, the Quality Manager identifies and assesses each change to any business processes that might impact the performance of the QMS. These types of change may be:

- 1. Planned or unplanned;
- 2. Sudden or gradual;
- 3. Temporary or permanent.

The Quality Manager analyses the risks associated with each change and presents the assessment to Top management for consideration. The change process applies to the following activities or items which may foreseeably undergo change:

- 1. Plant and equipment;
- 2. Materials used, their composition and properties;
- 3. Feedstock used and by-products/wastes generated;
- 4. Drawings and engineered processes;
- 5. Operating and maintenance procedures;
- 6. Emergency procedures or changes to business resilience;
- 7. Electronic system software;
- 8. Organizational structures and responsibilities;
- 9. Personnel changes, training or competency requirements;
- 10. Individual roles and responsibilities;
- 11. Regulatory and statutory requirements;

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#### 12. Activities, products and services.

The management review process, change control process, and the internal audit process ensure that the integrity of our QMS is maintained when significant changes affect key processes. The management review makes recommendations to ensure that risks and opportunities that could affect the intended outcomes of our QMS are taken into account and planned for via the most appropriate business processes.

#### **Supporting documentation:**

Ref.	Title & Description
P606	Management Of Change

# 7 Support

#### 7.1 Resources

#### 7.1.1 General

Resources at PETROGAS include human resources and specialized skills, infrastructure, technology, work environment and financial resources. The resource requirements for the implementation, management, control and continual improvement of the quality management system, and activities necessary to enhance client satisfaction, are defined in our operational procedures, work instructions and the following sections of this QMS manual:

- 1. Planning; Section 6.0
- 2. Management review; Section 9.3
- 3. Human resources; Section 7.1.2
- 4. Infrastructure; Section 7.1.3
- 5. Work environment; Section 7.1.4
- 6. Planning of product realization; Section 8.1
- 7. Determination of client requirements; Section 8.2

#### **Supporting documentation:**

Ref.	Title & Description
P201	Organizational Resource Planning

#### **7.1.2** People

To ensure competence of our personnel, job descriptions have been prepared which identify the qualifications, experience and responsibilities that are required for each position that affects product and QMS conformity. Qualifications include desired requirements for education, skills and experience. Appropriate qualifications, along with the provision of any required training, provide the competence required for each position.

Qualifications are reviewed upon hire, when an employee changes positions or the requirements for a position change. The Human Resources Department maintains records of employee qualifications. If any differences between the employee's qualifications and the requirements for the job are found, training or other action is taken to provide the employee with the necessary competence. The results of training are then evaluated to determine if it was effective.

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Staff training records are maintained to demonstrate competency and experience. The Human Resources Department maintains and reviews the training records to ensure completeness and to identify possible future training needs. Training records are maintained and include as a minimum; copies of certificates for any training undertaken to date, current job description and curriculum vitae. The requirements for training are communicated by the <u>Control of Competence & Awareness Procedure</u>.

#### **Supporting documentation:**

Ref.	Title & Description
P301	Recruitment of Personnel
P302	Competency & Awareness

#### 7.1.3 Infrastructure

PETROGAS is responsible for planning, providing and maintaining the resources needed to achieve product and process conformance, including buildings, workspace and associated utilities; process equipment (hardware and software); and supporting services (such as internal transportation and material handling systems and communications systems). The Facilities Manager in conjunction with the Quality Manager has overall responsibility for managing our facilities and equipment maintenance programs which include:

- 1. Transportation and material handling;
- 2. Equipment management, maintenance and repair;
- 3. Process and production equipment management, maintenance and repair;
- 4. Facilities management, maintenance and repair.

The Facilities Manager in conjunction with the Quality Manager has overall responsibility for managing and mitigating PETROGAS's facilities in accordance with the following:

- 1. Quality policies;
- 2. Quality management plans;
- 3. Statutory and other requirements:
  - a. The Climate Change Act 2008;
  - b. The Energy Performance of Buildings (England and Wales) Regulations 2012;
  - c. The Renewable Heat Incentive Scheme Regulations 2011;
  - d. Water Resources Act 1991;
  - e. Building Regulations 2000;
  - f. BREEAM;
  - g. CRC Energy Efficiency Commitment Scheme;
  - h. Climate Change Levy Regulations.

#### **Supporting documentation:**

Ref.	Title & Description
P101	Infrastructure & Equipment Maintenance

#### 7.1.4 Operational Environment

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#### ISO 9001:2015 Quality Management System

PETROGAS ensures that our factory, offices, warehouses and work area comply with relevant health and safety regulations. The Facilities Manager carries out regular compliance audits to ensure that appropriate standards are maintained. Top management is committed to providing:

- 1. A place of work that is safe, including all equipment and methods of work;
- 2. Training, instruction, information and supervision for employees;
- 3. A means of safe handling, storage, use and transportation of equipment, materials and chemicals;
- 4. Safe working environment with good lighting, ventilation, safe passageways, stairs and corridors.

Where the work environment or the impact of personnel on the product realization process are determined to result in risk to products, processes or environment, then risk control measures are defined, documented and implemented. The effectiveness of risk control measures is periodically assessed.

#### **Supporting documentation:**

Ref.	Title & Description	
P608	Work Environment Monitoring & Control	

#### 7.1.5 Monitoring & Measurement Tools

PETROGAS has determined the monitoring and measurement activities to be undertaken, and the devices needed to provide evidence of validation to specified tolerances and measurement ranges. The frequency of cleaning, maintenance and calibration is considered with reference to the risks associated with the process.

Methods for controlling monitoring and measurement tools are communicated by the <u>Calibrated Equipment</u> <u>Procedure</u>. Where necessary, to ensure the validity of results, measuring and monitoring equipment is:

- 1. Calibrated or verified at specified intervals, or prior to use;
- 2. Calibrated against measurement standards traceable to appropriate measurement standards;
- 3. Software used for monitoring and measurement is validated using defined parameters prior to use;
- 4. Protected from damage and deterioration during handling, maintenance and storage;
- 5. Safeguarded from adjustments that would invalidate the measurement result;
- 6. Identified to enable the unit's calibration status to be determined;
- 7. Safequarded from use when a unit is found to be out of calibration and the results revalidated;
- 8. Adjusted or re-adjusted as necessary.

In addition, the Quality Manager, as appropriate, assess and record the validity of previous measurement results when the equipment is found not to conform to requirements. The appropriate manager will take appropriate action on any equipment, product or process that may be affected.

Where equipment is found to be out of calibration, the significance of the error is reviewed and appropriate action taken. Records of the results of calibration and validation are maintained using the <u>Controlled</u> <u>Equipment Log</u>, the <u>Calibration Log</u>, and the <u>Software Validation Log</u> as documented information.

#### Supporting documentation:

Ref.	Title & Description
P104	Calibration Control of Measuring & Monitoring Equipment

#### 7.1.6 Organizational Knowledge

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#### ISO 9001:2015 Quality Management System

PETROGAS recognizes that organizational knowledge is a valuable resource that supports our quality management activities and ensures continual product and service conformity. There is a strong link between organizational knowledge and the competence of our people, the latter being peoples' ability to apply knowledge to their work.

To ensure that organizational knowledge is retained and transferred, organizational knowledge is recorded in documented information, and is embedded in our processes, products and services. Examples of organizational knowledge include:

- 1. Documented information regarding a process, product or service;
- 2. Previous specifications and work instructions;
- 3. The experience of skilled people and their processes and operations;
- 4. Knowledge of technologies and infrastructure relevant to PETROGAS, etc.

Sources of internal knowledge also include our intellectual property; knowledge gained from experience and coaching; lessons learnt from failures and successes; capturing and sharing undocumented knowledge and experience; the results of improvements in processes, products and services.

Sources of external knowledge often include other ISO standards; research papers; webinars from conferences; or knowledge gathered from clients, stakeholders or other external parties. PETROGAS determines and reviews internal and external sources of knowledge, such as:

- 1. Lessons learnt from non-conformities, corrective actions, and the results of improvement;
- 2. Gathering knowledge from clients, suppliers and partners, benchmarking against competitors;
- 3. Capturing knowledge existing within the organization, e.g. through mentoring/succession planning;
- 4. Sharing knowledge with relevant interested parties to ensure sustainability of the organization;
- 5. Knowledge from conferences, attending trade fairs, networking seminars, or other external events.

#### **Supporting documentation:**

Ref.	Title & Description	
P304	Organizational Knowledge	

## 7.2 Competence

Top management identifies emerging competency needs during management reviews. Emergent competency needs are converted into job descriptions for the type and number of positions that need to be filled through internal or external recruitment.

To ensure competence of our personnel, job descriptions have been prepared identifying the qualifications, experience and responsibilities that are required for each position that affects product and system conformity. Qualifications include desired requirements for education, skills and experience. Appropriate qualifications, along with the provision of any required training, provide the competence required for each position.

Qualifications are reviewed upon hire, when an employee changes positions or the requirements for a position change. The Human Resources Department maintains records of employee qualifications. If any differences between the employee's qualifications and the requirements for the job are found, training or

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ISO 9001:2015 Quality Management System

other action is taken to provide the employee with the necessary competence. The results of training are then evaluated to determine if it was effective.

All employees are made aware of the relevance and importance of their activities and how they contribute to the achievement of our policies and objectives. The company operates a formal system to ensure that all employees within the organization are adequately trained to enable them to perform their assigned duties.

Staff training records are maintained to demonstrate competency and experience. The Human Resources Department maintains and reviews the training records to ensure completeness and to identify possible future training needs. Training records are maintained and include as a minimum; copies of certificates for any training undertaken to date, current job description and curriculum vitae.

Where required; competency training and monitoring is conducted in-house, although for more specialist skills, external seminars or courses are utilized. The effectiveness of training is evaluated and recorded. The company induction includes an introduction to our policies and objectives. Future competency training needs are identified as part of the Management Review process by reviewing the <u>Competency Review Forms</u>.

#### Supporting documentation:

Ref.	Title & Description
P303	Training & Development

#### 7.3 Awareness

All employees are trained on the relevance and importance of their activities and how they contribute to the achievement of our policies and objectives. We aim to raise quality awareness and encourage involvement with relevant schemes.

PETROGAS operates a formal system to ensure that all employees within the organization are adequately trained to enable them to perform their assigned duties. Those staff whose work is directly related to achieving PETROGAS's objectives; understand their particular responsibilities and accountabilities within the context of the QMS.

Where required; awareness training is conducted in-house, although for more specialist skills, external seminars or courses are utilized. The effectiveness of awareness training is evaluated and recorded using the *Training Evaluation Form*. The company induction includes an introduction to PETROGAS's policy statements and objectives. Future training needs are identified as part of the management review process.

Employees are also encouraged to undertake personal and professional development with plans reviewed on an annual basis at individual annual performance appraisals undertaken by line management. It is a requirement for line managers to refer to the QMS training needs analysis during this appraisal to identify any gaps and/or any refresher training which may be due. These are added to the personal and professional development plans for the following year

#### Supporting documentation:

Ref.	Title & Description
P302	Competency & Awareness

#### 7.4 Communication

#### 7.4.1 General

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PETROGAS communicates information internally regarding our QMS and its effectiveness, through documented training, internal audit reports and continual improvement processes. All managers and supervisors are responsible for establishing regular formal and informal communications as needed to convey to their employees the relevance and importance of their activities; typically, this information is conveyed through team meetings and cross-functional improvement projects.

#### **Supporting documentation:**

Ref.	Title & Description
P604	Communication, Consultation & Participation

#### 7.4.2 Internal Communication

Communications regarding how employees contribute to the achievement of objectives are also conveyed and reinforced during employee performance reviews. Issues pertaining to our QMS that may be communicated internally include:

- 1. Day-to-day operations and general awareness;
- 2. Quality policy;
- 3. Information on achieving objectives and targets;
- 4. Risk and opportunities.

Top management and their direct reports are responsible for communicating the corporate policies as well as the importance of meeting client, statutory and regulatory requirements to employees within their respective departments. They ensure the quality policy is understood and applied to the daily work of the organization through the establishment of measurable goals and objectives. Internal communication occurs on an ongoing basis and is achieved through various mechanisms as appropriate:

- 1. Regular meetings and briefings;
- 2. Training sessions and training material;
- 3. Display boards, memorandums, letters;
- 4. Website, intranet, internal e-mails;
- 5. Product and process performance data analysis and audit results;
- 6. Targets, objectives, scorecards, KPIs, management system manual and procedures;
- 7. Corrective action and non-conformance reports.

#### 7.4.3 External Communication

PETROGAS determines the need to communicate information externally to our interested parties, as defined in Section 4.2, regarding the effectives of our QMS. In most instances, external interested parties (such as consumers, stockholders, neighboring communities, etc.) are the main driving force for PETROGAS to implement our QMS. The various processes or means of external communication may include as appropriate:

Interested Parties	Needs & Expectations	Possible modes of Communication
Clients	Price, reliability & value	Publications in the media and focus groups
Distributors & retailers	Price & logistics	Industry association publications and press releases
Owners/shareholders	Profitability & growth	Annual reports or newsletters of performance
Suppliers	Beneficial relationships	Publications on our website, meetings or questionnaires
Regulatory & statutory	Compliance & reporting	Regulatory compliance submissions or results of audits

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## ISO 9001:2015 Quality Management System

PETROGAS ensures that all external communications are authorized prior to release. Where required, advice appropriate to the context of the communication may be sought concerning the content and dissemination of certain external communications.

Internet - Information about our QMS is communicated externally to interested parties via our website.

**Enquiries** - PETROGAS is subject to the Freedom of Information Act which requires a response to external requests for information within specific timescales.

**Social Media** - PETROGAS manages a <u>Twitter</u> account <u>@PETROGAS</u> to share information, encourage behavioural change and promote events. Similarly, <u>PETROGAS</u> utilizes an official *Facebook* page. All social media is coordinated by our <u>Marketing Department</u>.

Responses to external communications are recorded if they are transmitted by email or letter. In each case the response is retained and controlled in accordance with the requirements for documented information.

#### 7.5 Documented Information

#### 7.5.1 Management System Documents

PETROGAS ensures that our QMS includes the documented information that is required to be maintained and retained by ISO 9001:2015, and additionally, any documented information identified by PETROGAS that demonstrates the effective operation. Refer to the <u>Master Document & Record Index</u>.

PETROGAS applies the following criteria to all types of documented information in order to assess whether the information is necessary for demonstrating the effectiveness of our QMS, and whether it should be formally controlled. Should any of the criteria apply, PETROGAS ensures that this information is retained and/or maintained as a form of 'documented information'.

- 1. Communicates a message internally or externally;
- 2. Provides evidence of process and product conformity;
- 3. Provides evidence that planned outputs were achieved;
- 4. Provides knowledge sharing.

Should any of the above criteria apply, PETROGAS ensures that this information is retained and/or maintained as a form of 'documented information'.

#### **Supporting documentation:**

Ref.	Title & Description
P607	Documented Information

#### 7.5.2 Creating & Updating

PETROGAS ensures that when we create documented information it is appropriately identified and described (e.g. title, date, author, reference number) and is available in an appropriate format (e.g. language, software version, graphics, etc.) and on appropriate media (e.g. paper, electronic).

All documented information is reviewed and approved for suitability and adequacy. Where permanent changes to a document are required, a <u>Document Change Request</u> form is completed and submitted for the document owner to consideration and implementation.

#### 7.5.3 Controlling Documented Information

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Documented information is retained to provide evidence of conformity to the requirements specified by ISO standards, client requirements and of the effective operation of our integrated management system. We use <u>Document Issue Sheets</u> to record the transmittal of documents to external parties.

PETROGAS uses standard forms and templates that are accessed via a local area network computer system. An electronic document management system, which is backed up and updated as required, is used to retain documented information ensuring only the current versions are available to users. All management system documents are controlled and communicated according to the <u>Control of Documented Information</u> procedure which defines the process for:

- 1. Approving documents for adequacy prior to issue;
- 2. Reviewing and revising as necessary and re-approving documents;
- 3. Ensuring that changes and current revision status of documents are identified;
- 4. Ensuring that relevant versions of applicable documents are available at points of use;
- 5. Ensuring that documents remain legible and readily identifiable;
- 6. Ensuring that documents of external origin are identified and their distribution controlled;
- 7. Preventing the unintended use of obsolete documents;
- 8. Ensuring that documents of external origin are identified and their distribution controlled.

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# 8 Operation

# 8.1 Operational Planning & Control

PETROGAS establishes and implements documented plans and procedures that describe the processes identified in Section 4.3.2 and the controls required for the provision of products and services in cognizance to our objectives, the potential for planned or unintended change, and the risks and opportunities identified in Section 6.1. During the planning phase, Top management, the Quality Manager and other responsible personnel identify the following parameters:

- 1. Objectives and requirements for the product or service;
- 2. Verification, validation, monitoring, inspection and test requirements;
- 3. Documented information to demonstrate conformity;
- 4. Related life risks and opportunities;
- 5. Documented information to demonstrate conformity;
- 6. Necessary resources; or outsourced processes and their controls;
- 7. Criteria for process performance and product/service acceptance;
- 8. Potential consequences and mitigation to change affecting input requirements;
- 9. Resources necessary to support the ongoing operation and maintenance of the product.

The output of this planning activity includes documented plans, resource schedules, processes, equipment requirements, procedures and design outputs. Design and development activities targeted at controlling risks are supported by documented information. This documentation relates the design activities to identified risks in a way that provides objective evidence that the nature and extent of the design control is reasonable and appropriate to the degree of risk.

#### **Supporting documentation:**

Ref.	Title & Description
P402	Project Planning
P403	Project Execution
P407	Project Claim & Invoicing

# 8.2 Client Requirements

#### 8.2.1 Client Communication

In accordance with our commitment to exceed our client's expectations, PETROGAS highlights effective client communication as an essential element of delivering client satisfaction. Appropriate handling of client communication helps to reduce client dissatisfaction and, in many cases, turn a dissatisfying scenario into a satisfying experience. Client communication occurs through the following formats, events and processes:

- 1. Brochures, specifications or technical data sheets relating to our products and services;
- 2. Enquiries, quotations and order forms, invoices and credit notes;
- 3. Confirmation of authorized orders and amended orders;
- 4. Delivery notes and certificates of conformity;
- 5. E-mails, letters and general correspondence;
- 6. When client property is handled or controlled;

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#### 7. Client feedback and complaints management process;

The Client Service Team and Business Development Department are responsible for establishing methods of communication with our clients to ensure enquiries, contracts or order handling; including amendments, client feedback and complaints are handled expeditiously and professionally.

#### **Supporting documentation:**

Ref.	Title & Description
P610	Stakeholder Satisfaction & Feedback

#### 8.2.2 Determining Requirements

PETROGAS develops appropriate requirements to ensure that we satisfy the needs and expectations across the socio-technical environment including those of our clients, stakeholders or relevant interested parties. PETROGAS ensures that client requirements are clearly articulated and that their requirements are captured and understood before the acceptance of an order. Client requirements include the following:

- 1. Previous client requirements which pertain to current parts being ordered;
- 2. Statutory and regulatory obligations related to the product's lifecycle;
- 3. Other non-client specified performance requirements;
- 4. Any additional requirements determined by PETROGAS;
- 5. Requirements not stated by the client but which are necessary for specified or intended use.

PETROGAS controls the stages of the product lifecycle by establishing requirements for each product during its design and development phase. This is client-driven process requires clear, and often repeated, client interaction to understand the client's needs.

#### **Supporting documentation:**

Ref.	Title & Description
P202	Tender, Bid & Proposal

#### 8.2.3 Review of Requirements

Prior to committing to the client, PETROGAS ensures and confirms our capacity to supply the required product or service. Pre-acceptance reviews are conducted to ensure that:

- 1. Service requirements are defined and are appropriate;
- 2. Requirements are defined for delivery and post-delivery activities such as product or service support;
- 3. Requirements not stated by the client but which are necessary for intended use are appropriate;
- 4. Any additional requirements determined by PETROGAS are appropriate;
- 5. Contract or order requirements differing from those previously expressed are resolved;
- 6. PETROGAS has the ability to meet the defined requirements;
- 7. Documented information is retained and maintained showing the results of the review.

Client requirements are confirmed before acceptance by the exchange of contracts, purchase orders via appropriate electronic or hard copy formats.

#### **Supporting documentation:**

Ref. Title & Description
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P203 Contract review & Deployment

#### 8.2.4 Changes in Requirements

PETROGAS ensures that all relevant documented information; relating to changes in product or service requirements, are authorized and amended where necessary, and that all relevant personnel are made aware of the documented changes in requirements via the <u>Change Request</u> form and the <u>Change Log</u>. The change process is communicated using the <u>Proposal Procedure</u>.

#### **Supporting documentation:**

Ref.	Title & Description
P406	Project Control of Change

## 8.3 Proposal Development

#### 8.3.1 General

The proposal development activity transforms the input requirements into conforming product or service outputs. PETROGAS has not yet implemented the <u>Proposal Development Procedure</u> to define the activities that are required to provide effective products and services. This process is omitted.

#### Supporting documentation:

Ref.	Title & Description
P202	Tender, Bid & Proposal

# 8.4 Control of Suppliers & External Processes

#### 8.4.1 General

The purchasing process is essential to PETROGAS's ability to provide our clients with products and services that meet their requirements. PETROGAS ensures that all purchased products or services that are incorporated in to our final products; conform to our specified requirements.

The type and extent of control applied to our suppliers and the purchased product is dependent upon the effect that the outsourced product or service may have on our final product or service. The following considerations are taken in to account by:

- 1. Ensuring that we understand the capabilities and competencies of potential outsourcing suppliers;
- 2. Ensuring that we clearly communicate the roles and responsibilities of the outsourcing supplier;
- 3. Defining the quality requirements for the outsourced process, activity, or product;
- 4. Establishing upfront the criteria for and review of deliverables, frequency of inspections and audits;
- 5. Selecting and qualifying appropriate outsourcing suppliers.

Potential suppliers are evaluated using the <u>Supplier Evaluation Form</u> and are added to the <u>Approved Supplier Index</u> after successful evaluation. It is the responsibility of the <u>Purchasing Manager</u> to evaluate and select suppliers based on their ability to supply products or services in accordance with specified quality requirements to ensure that our operations remain compliant with our:

- 1. Quality Policy;
- 2. Quality Management Plan(s);
- 3. Statutory, legal and other requirements;

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#### 4. Risk and opportunities.

Additionally, other internal resources may be called on to assist as required. The criteria for the selection, evaluation and re-evaluation are defined and communicated in the <u>Purchasing & Procurement Procedure</u>, while records of the results of evaluations and any necessary actions arising from the evaluation are maintained.

#### **Supporting documentation:**

Ref.	Title & Description
P501	Purchasing & Procurement
P502	Payment Certificate & Payment Request

#### **8.4.2** Purchasing Controls

PETROGAS ensures that externally provided processes, products and services do not adversely affect our ability to consistently deliver conforming products and services to our clients. Where appropriate, quality control measures are applied to outsourced processes and purchased products. These controls are documented within the purchasing information and clearly communicated to the supplier.

Supplier performance and capability are monitored and assessed through periodic, 2<sup>nd</sup> party audits, performance data analysis, and inspection and/or verification of the purchased product or outsourced process. Suppliers who demonstrate inadequate audit and delivery performance are required to implement corrective actions.

Poor performing suppliers are replaced, and the <u>Approved Supplier Index</u> is updated. The frequency of supplier contract reviews varies depending on their performance and the criticality of the products supplied but the interval between each review is no more than 12 months.

The type and extent of control required for purchased products depends on the effect of the purchased product on the subsequent realization of the end product. To ensure that all purchase order requirements are met prior to the material being released for use, purchased items and delivery notes are checked against the purchase order to confirm that the identity and quantity are correct. Activities to verify conformance to requirements may include:

- 1. Obtaining evidence of quality conformance from the supplier in the form of inspection documentation, certificates of conformity, test reports and/or record of statistical process control;
- 2. Inspection and audit at supplier's facilities;
- 3. Review and acceptance of required documentation;
- 4. Inspection of product upon receipt;
- 5. Verifying test report data against applicable specifications;
- 6. Periodic third party testing maybe performed on materials to verify accuracy of supplied test reports.

All purchased product inspections are recorded on the <u>Receiving Inspection Log</u> and retained along with copies of any applicable conformance information described above. Satisfactory purchased items are placed in stock. In the event that items are rejected on receipt, a non-conformance report is raised and the supplier contacted to arrange replacement or credit.

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Where purchased product is released for production, pending completion of all required verification activities, it is identified and recorded to allow recall and replacement if it is subsequently determined that the purchased product does not meet requirements.

#### **Supporting documentation:**

Ref.	Title & Description
P503	Managing Vendor & Subcontractor

#### **8.4.3** Purchasing Information

PETROGAS uses purchase orders to describe the product or service to be purchased. Designated individuals within the company create purchase orders using the company ERP system. They also ensure the adequacy of the requirements that are specified by the purchase order prior to release. Each purchase order includes where appropriate:

- 1. Identification of product or service to be delivered, quantity, delivery date, and cost;
- 2. Requirements for approval or qualification of product, procedures, processes or equipment;
- 3. Requirements of the quality management system and the qualification of personnel.

Where appropriate, the roles and responsibilities for risk management on the part of the manufacturer or supplier are defined as part of the purchasing requirements. In addition, prescribed risk control measures are included in the purchasing requirements as part of the purchasing information which is clearly communicated to the supplier or manufacturer.

#### **Supporting documentation:**

Ref.	Title & Description
P504	Vendor Performance Assessment

## 8.5 Production & Service Provision

#### 8.5.1 Control of Production & Service Provision

In order to control the planning, administrative support and implementation of work, PETROGAS's policy is to describe the work methods, the controls applied and the records required. The process control activities are quality related, with many aspects that also relate to quality control. The following controlled conditions are applied where applicable:

- 1. Quality control checks are performed using appropriate measuring equipment;
- 2. Handling, storage and transportation;
- 3. Evidence of completed inspections;
- 4. Detailed process work instructions and specifications for all products;
- 5. Criteria for workmanship, competence and plant maintenance.

In cases where special processes are employed where the results of which cannot be easily checked, including any processes where deficiencies become apparent only after the product is in use. Validation demonstrates the ability of these processes to achieve planned results by:

- 1. Defining qualification criteria and approval of special processes prior to use;
- 2. Defining criteria for review and approval of the processes;
- 3. Approval of equipment and qualification of personnel;

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- 4. Use of specific methods and procedures;
- 5. Requirements for records;
- 6. Revalidation.

Production information such as the rate of non-conformities, the rate of rework, scrap, yield, and other sources of quality data are evaluated and or compared against the current risk management output to confirm adequacy and completeness of risk controls.

#### **Supporting documentation:**

Ref.	Title & Description
P404	Project Control & Monitoring
P603	Event Notification
P102	Goods Equipment Receiving, Handling & Inspection

#### 8.5.2 Identification & Traceability

In order to preserve the conformance of products to client requirements during internal processing and delivery, PETROGAS identifies the product throughout the product realization process:

- 1. Stored equipment and materials are identified as to type, description and inspection status;
- 2. Unacceptable items are identified as such and are removed from the normal work flow;
- 3. All enquiries are identified with a unique estimate number, allocated on receipt;
- 4. Subsequent orders are identified by contract number.

Where appropriate, the Quality Manager has implemented an identification system allows for traceability from finished product back to incoming material records and client specifications. All parts, products and materials, either purchased or manufactured, are identified with part numbers and or job numbers and where applicable, serial numbers, which link the parts, products and materials to their respective documentation.

When required by the client, traceability is maintained from receipt of parts to delivery of the final products. The Quality Manager maintains records that trace part numbers to their corresponding drawings, specifications and any other relevant documentation such as product configuration records that trace serial numbers of products to their parts lists. Final product serial numbers are recorded on shipping documentation to provide traceability to the end user (client) and to the originating work order.

#### **Supporting documentation:**

Ref.	Title & Description
P401	Project Initiation

#### 8.5.3 3rd Party Property

We identify, verify, protect and maintain client property provided for use. The Quality Manager ensures that lost, damaged or unsuitable client property is recorded and immediately reported to the client and in cases where the client provides drawings, specifications, etc., they are managed as documented information. Client property can also include client-owned materials, tools (including packaging), tooling (including test/inspection tooling and equipment), and intellectual property.

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- 1. Unless otherwise defined by contract, upon receipt of client property, PETROGAS will examine items for completeness, proper identification and possible transit damage and identifies these items as the property of the relevant client;
- 2. Items found to be non-conforming are quarantined, tagged and recorded as defined in accordance with the *Non-conformity & Corrective Action Procedure* and brought to the immediate attention of the client;
- 3. No client property is released for further processing or storage until such time as all required verification and testing activities are completed and the results are found to be acceptable;
- 4. After receipt, care is exercised to ensure the protection of client property against loss or damage until such time as it is incorporated into the product or returned to the client;
- 5. The identification, segregation, handling, and protection of client property from time of receipt, subsequent storage, maintenance, during the entire realization cycle are performed in accordance with any applicable contract requirements;

In the event that client property is lost, damaged or otherwise identified as unsuitable for use while under our control, these conditions shall be recorded and reported to the client.

#### **Supporting documentation:**

Ref.	Title & Description
P408	Control Of Client Property

#### 8.5.4 Preservation

PETROGAS ensures that all products and materials are handled and stored appropriately at all stages of the development cycle to prevent damage or deterioration. Products and materials are stored in designated storage areas with appropriate control of inbound receipts and outbound releases. Products in storage are periodically assessed to detect deterioration. All packaging is sufficient to ensure product quality while in storage and during delivery to the client:

- 1. Components and products are handled and stored in a manner that prevents damage or deterioration, pending use or delivery;
- 2. Each department ensures controls are implemented to prevent mixing conforming and non-conforming materials;
- 3. Packing ensures specified or original manufacturing packaging is utilized;
- 4. All products are suitably packed to prevent deterioration or damage during storage and delivery.

#### **Supporting documentation:**

Ref.	Title & Description
P103	Equipment, Parts receiving, Handling & Inspection
P105	Logistic and Security

#### 8.5.5 Post-delivery Activities

PETROGAS determines client requirements before acceptance of an order. Client requirements include the following:

1. Previous client requirements which pertain to current part numbers being ordered;

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- 2. Requirements not stated by the client but necessary for specified use or intended use;
- 3. Statutory and regulatory requirements related to the product;
- 4. Requirements required for delivery and post-delivery activities such as product support.
- 5. Any additional requirements determined by PETROGAS.

#### **Supporting documentation:**

Ref.	Title & Description
P405	Project Delivery & Completion

#### 8.5.6 Control of Changes

Changes to the design and development requirements are identified and recorded. Any changes are reviewed, verified, validated and approved. The review of design development changes includes evaluating the effects of those changes upon constituent products already delivered. All results relating to the review of changes are retained as documented information.

#### **Supporting documentation:**

Ref.	Title & Description
P606	Management Of Change

#### 8.6 Release of Products & Services

The Quality Manager has overall responsibility for planning and implementing the inspection and test activities needed to verify that product requirements are met at appropriate stages of the product realization process. Products are not used until they are inspected or verified as conforming to requirements, except when the product is released under positive-recall procedures pending completion of all required measurement and monitoring activities.

When PETROGAS uses sampling inspection as a means of product acceptance, we ensure that the inspection plan is based on sample size and method of inspection that will yield statistically valid results. The plan precludes the acceptance of lots whose samples have known non-conformities. When required, the plan is submitted for client approval.

Measurement and acceptance criteria that are necessary for product acceptance are retained as documented information; subsequent acceptance records form the production documentation evidence which includes the following information:

- 1. Criteria for acceptance and rejection;
- 2. Locations in the process sequence where measurement and testing operations were performed;
- 3. Types of measurement instruments used, including any instructions associated with their use;
- 4. Test records showing actual test results where required by the specification or acceptance test plan.
- Documented information is retained to indicate the person authorizing the release of the product.
   Product release and service delivery does not proceed until all the planned arrangements have been satisfactorily completed, unless otherwise approved by a relevant authority, and where applicable by the client.

#### **Supporting documentation:**

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Ref.	Title & Description
P405	Project Delivery & Completion

## 8.7 Control of Non-Conforming Outputs

It is PETROGAS's policy to detect, control and rectify any aspect of an output that does not conform as quickly and efficiently as possible. Where necessary, any product or service output that does not conform to requirements is properly identified and controlled to prevent unintended use or delivery. The non-conformity is analyzed and the cause(s) are investigated.

Improvement actions are implemented to ensure the non-conformance does not reoccur. Once the non-conforming outputs are corrected, the outputs are then verified for conformity against requirements. Documented information concerning the nature of any non-conformances, the resolving authority, and the resulting corrective actions is retained. Where necessary, details concerning any authorized concessions are documented as evidence of acceptance.

#### **Supporting documentation:**

Ref.	Title & Description
P611	Quality Assurance & Control of Non-Conformance

## 9 Performance Evaluation

# 9.1 Monitoring, Measurement, Analysis & Evaluation

#### 9.1.1 General

PETROGAS applies suitable methods for determining which aspects of the quality management system and its processes are to be monitored, measured and evaluated. The frequency and methods by which our processes are monitored, measured and evaluated is determined and informed by:

- 1. Statutory and regulatory requirements;
- 2. Client feedback and specification requirements;
- 3. Process and QMS requirements;
- 4. Process performance and audit results;
- 5. Level of risk and types of control measure;
- 6. Trends in non-conformities or corrective actions;
- 7. Criticality for product conformity.

All monitoring, measuring and evaluation outputs are documented and analyzed to determine process effectiveness and to ensure their effectiveness in achieving in-tolerance results, and to identify opportunities for improvement.

- 1. In-process checks relate to both quality control and productivity checks;
- 2. Provision is made for the identification and resolution of non-conformances;
- 3. The emphasis is to prevent any problems which might affect client satisfaction;
- 4. In-process checks are performed and documented;
- 5. Where specific inspection points are required these are identified at the contract planning phase.

Where applicable, test and inspection records are retained as documented information for a minimum of three years. This documented information includes derails of the final inspection authority to confirm that all

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critical parameters were in accordance with established requirements and specifications. Additionally, product samples are stored for a minimum of five years.

Products are not normally released or delivered until all planned inspections and tests have been completed and that documented information exists to provide evidence of conformity with acceptance criteria and identifying the person(s) authorizing release. In rare cases (due to client requirements and/or production emergencies) unverified product may be released or delivered under controlled conditions of positive recall, as documented and authorized by the Quality Manager and, where applicable, approved by the client.

#### **Supporting documentation:**

Ref.	Title & Description
P612	Monitoring measurement & Analysis Of Data

#### 9.1.2 Client Satisfaction

The Quality Manager monitors information and trends relating to client perception as to whether the organization has fulfilled the clients' requirements in accordance with the <u>Client Satisfaction Procedure</u>.

Client complaints, whether received in writing, verbally or electronically through using the <u>Client Feedback Form</u> which is immediately forwarded to appropriate Client Service Team for action. If the problem cannot be resolved, the complaint is escalated to the <u>Business Development Manager</u> or to another manager for resolution.

Client survey data along with other client feedback, including written or verbal complaints and information collected via the <u>Client Satisfaction Form</u> and is reviewed by the <u>Quality Manager</u> who initiates appropriate corrective actions. The level of client satisfaction is monitored using various client data points:

- 1. Product returns and warranty claims;
- 2. Repeat clients and trends in market share;
- 3. Analysis of client complaints and client satisfaction surveys;
- 4. Recognition and consumer awards.

#### **Supporting documentation:**

Ref.	Title & Description
P610	Stakeholder Satisfaction & Feedback

#### 9.1.3 Analysis and Evaluation

In order to identify opportunities for improvement, Top management and senior managers, as appropriate, collect and analyze data using appropriate statistical and non-statistical techniques to determine the suitability and effectiveness of key quality management system processes using data points that are applicable to their area(s) of responsibility. At a minimum, data is analyzed to assess achievement of the corporate level objectives and client requirements.

A process is effective if the desired results are measurably achieved. Effectiveness is measured in terms of product quality, process performance, process accuracy, delivery schedule performance, cost and budgetary performance; employee performance against established objectives and levels of client satisfaction. In order

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to identify strengths, weaknesses, threats and opportunities within our integrated management system, PETROGAS monitors and analyzes trends using the following data points:

- 1. Characteristics of processes, products and their trends;
- 2. Conformity to product, client, and legal requirements;
- 3. Client satisfaction and perception data;
- 4. Supplier and external provider performance data;
- 5. Results of actions taken to address risks and opportunities;
- 6. Effective implementation of integrated management system planning;
- 7. Improvement opportunities identified during internal audits and management reviews.

Control limits for process and product performance are expressed as objectives and targets and are disseminated via documented information as appropriate. PETROGAS undertakes corrective action when the data shows a trend toward the pre-defined control limit. Employees, who utilize statistical tools to analyze; measure and verify outputs, are sufficiently competent to ensure proper deployment of these techniques.

#### **Supporting documentation:**

Ref.	Title & Description
P612	Monitoring measurement & Analysis Of Data

#### 9.2 Internal Audit

The QMS audit program is coordinated by the Quality Manager and details the frequency and general focus of each internal audit. This activity is defined by the <u>Internal Audit Procedure</u>. The internal audit program is recorded within the <u>QMS Action Tracker</u>. The schedule may be altered at any time as necessary to ensure all areas are audited at a frequency determined by the associated risk of non-compliance.

Internal audit results are critical inputs that help to assess the effectiveness of our QMS. PETROGAS's internal audits use risk-based thinking and the notion of continual improvement as the main drivers. Internal audits are conducted at planned intervals to determine whether the quality management system conforms PETROGAS's planned arrangements and to the requirements of ISO 9001:2015.

PETROGAS's internal audit program is based upon a strategy that considers the status and importance of each process that comprise the scope of our QMS. The audit frequency is based upon process performance trends, results from previous audits, levels of client satisfaction, rates of non-conformity and corrective action, etc. to ensure that PETROGAS focuses on the aspects that affect product and process conformity the most.

The criteria, scope, frequency and methods of each audit are defined in our audit plan. The selection of trained auditors and their subsequent impartial conduct ensures objectivity throughout the audit process. Each Auditor ensures that:

- 1. The results of each audit are recorded using the *Internal Audit Report*;
- 2. That timely appropriate corrective action undertaken where required;
- 3. They retain documented information such as audit checklists and audit reports as evidence of the effective implementation of the audit program in respect of each audit.

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All internal audits are conducted by individuals who have undertaken 'Lead Auditor' training or 'Internal Auditor' as a minimum, and who therefore are aware of the benefits of building their own scope for each audit by referring to:

- 1. Related previous internal and external audit actions;
- 2. Relevant parts of the Risk & Opportunities Register;
- 3. The relevant QMS management procedures;
- 4. The QMS Manual and relevant clause requirements of ISO 9001:2015;
- 5. Non-conformities and related corrective actions that are recorded within the QMS Action Tracker.
- 4. Auditors are not permitted to audit work they conduct themselves to ensure objectivity and impartiality.

#### Supporting documentation:

Ref.	Title & Description
P613	Management System Audit

# 9.3 Management Review

#### 9.3.1 General

To ensure the continuing suitability, adequacy and effectiveness of our QMS in meeting PETROGAS's strategies, Top management conducts formal management review meetings at planned internals. The requirements for conducting management review are defined and communicated using the <u>Management Reviews Procedure</u>.

In summary; a Senior Director chairs the QMS Review Meeting. The review group is coordinated and recorded by the Quality Manager. To ensure that the review group includes each of the requirements of ISO 9001:2015, a <u>Management Review Agenda & Minutes</u> is prepared issued and distributed by the Quality Manager as appropriate.

#### **9.3.2** Inputs

The primary inputs that are reviewed comprise data from conformance and performance measurements that are gathered at key quality data points from various processes. Subsequent recommendations for improvement are based on the evaluation of such measurements.

Conformance is primarily assured through internal audits and demonstrated through a review of audit results and our demonstrated ability to detect, correct and to prevent problems. Performance is primarily assured through the deployment of corporate and operational level objectives, and through the review of our demonstrated ability to achieve desired results.

#### 9.3.3 Outputs

The primary outputs of management review meetings are management actions that are taken to make changes or improvements to our quality management system. During management review meetings, top management will identify appropriate actions to be taken regarding the following issues:

- 1. Improvement of the effectiveness of the quality management system and its processes;
- 2. Improvement of product related to client requirements;
- 3. Opportunities and risks;

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#### 4. Resource needs.

The primary outputs of management review meetings are the actions necessary to make changes or improvements to our quality management system and the provision of resources needed to implement these actions. Responsibilities for required actions are assigned to members of the management review team. Any decisions made during the meeting, assigned actions and their due dates are recorded in the management review minutes.

#### **Supporting documentation:**

Ref.	Title & Description
P616	Management Review

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# 10 Improvement

#### 10.1 General

The Quality Manager uses a range of the performance evaluation tools highlighted in Section 9 to make recommendations for improvement and to achieve the intended outcomes of our QMS. For example, recommendations may emerge from the review groups and from findings raised in internal audits.

In order to determine and select opportunities for improvement or to implement any necessary actions to meet the requirements of clients and relevant interested parties, or to enhance client satisfaction, PETROGAS drives improvement via the analysis of relevant data. The data inputs for the improvement process include:

- 1. Risk and opportunity evaluations;
- 2. Assessment of the changing needs and expectations of interested parties;
- 3. The conformity of existing products and services;
- 4. The effectiveness of our QMS;
- 5. Supplier performance;
- 6. Reducing unintended consequences;
- 7. Increasing beneficial impact and opportunities;
- 8. Levels of client satisfaction, including complaints and feedback;
- 9. Internal and external audit results;
- 10. Corrective action and non-conformance rates;
- 11. Data from process and product characteristics and their trends.

PETROGAS also ensures that opportunities for improvement from daily feedback on operational performance are evaluated by the Quality Manager as appropriate. Changes are typically implemented through the corrective action system. Opportunities for improvement from analysis of longer-term data and trends are evaluated and implemented through the management review process and are prioritized with respect to their relevance for achieving our quality objectives.

The overall effectiveness of continual improvement program (including corrective actions taken as well as the overall progress towards achieving corporate level improvement objectives) is assessed through our management review process.

# 10.2 Non-Conformity & Corrective Action

Non-conformities with aspects of quality and the requirements of ISO 9001:2015 are reported to the Quality Manager in order that an investigation can be initiated, in which case, the *Non-conformity & Corrective Action Procedure* is referred to.

The appropriate manager documents the non-conformity using the <u>Non-conformance Report</u> and considers the root-cause of the non-conformity. If necessary, other responsible parties will be consulted to identify the root cause and plan appropriate action. The <u>Quality Manager</u> records the report together with any agreed corrective action within the <u>QMS Tracker</u>. The results of the corrective action are recorded within the <u>Corrective Action Report</u>.

The appropriateness of actions taken is reviewed during document reviews and the internal audit process and reported as necessary to the Management Review. Evidence of non-conformance, client dissatisfaction

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or process weakness is used to drive our continual improvement system. Since problems may already exist, they will require immediate correction and possible additional action aimed at eliminating or reducing the likelihood of its recurrence.

Follow-up audits are conducted in accordance with the internal audit process to ensure that effective corrective action is taken and that the action is appropriate to the impact and nature of the problem encountered. In addition, the Quality Manager summarizes and analyzes corrective action data to identify trends in order to assess the overall effectiveness of the corrective action system and to develop related recommendations for improvement.

The resulting corrective actions are reviewed for effectiveness and are reported to Top management in order to determine if changes to the QMS are required, or whether any new risks or opportunities need to be considered during planning.

The corrective actions are considered effective if the specific problem was corrected and data indicates that the same or similar problems have not recurred. Results of data analysis and subsequent recommendations are presented to Top management for review.

#### Supporting documentation:

Ref.	Title & Description
P611	Quality Assurance & Control Of Non-Conformance

# 10.3 Improvement

PETROGAS continually improves the effectiveness of its quality management system through the effective application of the corporate policies, objectives, auditing and data analysis, corrective and preventive actions and management reviews.

The continual improvement process begins with the establishment of our corporate policies and objectives for improvement, based on objectives contained in our business plan and client targets and goals. Client satisfaction, internal audit data, process and product performance data, and the cost of poor quality or risk control are then compared against objectives or KPIs to identify additional opportunities for improvement.

The overall effectiveness of continual improvement program, including corrective actions taken, as well as the overall progress towards achieving corporate level improvement objectives, are assessed through our management review process.

#### **Supporting documentation:**

Ref.	Title & Description
P615	Continual Improvement

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# **Appendices**

# A.1 Correlation Matrix

This section provides a matrix to correlate the requirements of ISO 9001:2015 against the relevant sections in this document and should be used to determine where the new and amended clauses are located.

ISO 9001:2015		This Document		
4.0	Context of the Organization	4.0	About PETROGAS	
4.1	Understanding the Organization and its Context	4.1	Organizational Context	
4.2	Needs and Expectations of Interested Parties	4.2	Relevant Interested Parties	
4.3	Scope of the Quality Management System	4.3	Quality Management System Scope	
4.4	Quality Management System and its Processes	4.4	Quality Management System & its Processes	
5.0	Leadership	5.0	Leadership & Governance	
5.1	Leadership and Commitment	5.1	Leadership and Commitment	
5.1.1	Quality Management System	5.1.1	General	
5.1.2	Client Focus	5.1.2	Client Focus	
5.2	Quality Policy	5.2	Quality Policy	
5.2.1	Establishing the Quality Policy	5.2.1	Establishing the Quality Policy	
F 2 2	Communication the Quality Balling	5.2.2	Communicating the Quality Policy	
5.2.2	Communicating the Quality Policy	5.2.3	Quality Policy Statement	
		5.3	Roles, Responsibilities and Authorities	
		5.3.1	Top Management	
5.3	Roles, Responsibilities and Authorities	5.3.2	Quality Manager	
		5.3.3	Department Managers	
		5.3.4	Employees	
6.0	Planning for the Quality Management System	6.0	Management System Planning	
6.1	Actions To Address Risks and Opportunities	6.1	Addressing Risk & Opportunities	
6.2	Quality Objectives & Planning To Achieve Them	6.2	Quality Objectives	
6.3	Planning of Changes	6.3	Planning for Change	
7.0	Support	7	Support	
7.1	Resources	7.1	Resources	
7.1.1	General	7.1.1	General	
7.1.2	People	7.1.2	People	
7.1.3	Infrastructure	7.1.3	Infrastructure	
7.1.4	Environment for the Operation Of Processes	7.1.4	Operational Environment	
7.1.5	Monitoring and Measuring Resources	7.1.5	Monitoring and Measuring Tools	
7.1.6	Organizational Knowledge	7.1.6	Organizational Knowledge	
7.2	Competence	7.2	Competence	
7.3	Awareness	7.3	Awareness	
		7.4	Communication	
7.4	Communication	7.4.1	General	
		7.4.2	Internal Communication	
		7.4.3	External Communication	
7.5	Documented Information	7.5	Documented Information	
7.5.1	General	7.5.1	Management System Documents	

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# ISO 9001:2015 Quality Management System

	ISO 9001:2015		This Document
7.5.2	Creating and Updating	7.5.2	Creating and Updating
7.5.3	Control of Documented Information	7.5.3	Controlling Documented Information
8.0	Operation	8.0	Operation
8.1	Operational Planning and Control	8.1	Operational Planning and Control
8.2	Requirements for Products and Services	8.2	Client Requirements
8.2.1	Client Communication	8.2.1	Client Communication
8.2.2	Determining Requirements Related to Products	8.2.2	Determining Requirements
8.2.3	Review of Requirements Related to the Products	8.2.3	Review of Requirements
8.2.4	Changes to Requirements for Products/Services	8.2.4	Changes in Requirements
8.3	Design and Development of Products	8.3	Design and Development of Products
8.3.1	General	8.3.1	General
8.3.2	Design and Development Planning	8.3.2	Planning
8.3.3	Design and Development Inputs	8.3.3	Inputs
8.3.4	Design and Development Controls	8.3.4	Controls
8.3.5	Design and Development Outputs	8.3.5	Outputs
8.3.6	Design and Development Changes	8.3.6	Changes
8.4	Externally Provided Products & Services	8.4	Control of Suppliers & External Processes
8.4.1	General	8.4.1	General
8.4.2	Type & Extent of Control of External Provision	8.4.2	Purchasing Controls
8.4.3	Information for External Providers	8.4.3	Purchasing Information
8.5	Production and Service Provision	8.5	Production & Service Provision
8.5.1	Control of Production and Service Provision	8.5.1	Control of Production & Service Provision
8.5.2	Identification and Traceability	8.5.2	Identification & Traceability
8.5.3	Client or External Provider's Property	8.5.3	3 <sup>rd</sup> Party Property
8.5.4	Preservation	8.5.4	Preservation
8.5.5	Post-Delivery Activities	8.5.5	Post-Delivery Activities
8.5.6	Control of Changes	8.5.6	Control of Changes
8.6	Release of Products and Services	8.6	Release of Products and Services
8.7	Non-conforming Process Outputs and Products	8.7	Control of Non-conforming Outputs
9.0	Performance Evaluation	9.0	Performance Evaluation
9.1	Monitoring, Measurement, Analysis & Evaluation	9.1	Monitoring, Measurement, Analysis & Evaluation
9.1.1	General	9.1.1	General
9.1.2	Client Satisfaction	9.1.2	Client Satisfaction
9.1.3	Analysis and Evaluation	9.1.3	Analysis and Evaluation
9.2	Internal Audit	9.2	Internal Audit
9.3	Management Review	9.3	Management Review
9.3.1	General	9.3.1	General
9.3.2	Management Review Inputs	9.3.2	Inputs
9.3.3	Management Review Outputs	9.3.3	Outputs
10.0	Improvement	10.0	Improvement
10.1	General	10.1	General
10.2	Non-Conformity and Corrective Action	10.2	Non-Conformity & Corrective Action
10.3	Continual Improvement	10.3	Continual Improvement

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A.2 Sequence & Interaction of QMS Processes

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# A.3 Organization Chart

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