**Quality Manual**

**JSC NC “KazMunayGas”**

**The quality management system is developed in accordance with ISO-9001:2015.**

**Chairman of the Management Board of JSC NC “KazMunayGas”**

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**I Scope of the QUALITY MANAGEMENT SYSTEM**

**1.1 General**

Joint-Stock Company “National Company “KazMunayGas” (hereinafter KMG) was established pursuant to Decree No. 811 of the President of the Republic of Kazakhstan dated 20 February 2002 On Activities to Further Pursue State Interests in the National Oil and Gas Sector, and RoK Government Resolution No. 248 dated 25 February 2002 On Activities to Enforce Decree No. 811 of the RoK President dated 20 February 2002.

The core activities of KMG are set out in KMG’s Charter.

KMG has developed and introduced: a quality management system in accordance with this Manual, a health, safety and environment management system in accordance with the HSE Management System Manual, a sustainable development and information security management system in accordance with the Information Security Management System Manual of JSC NC “KazMunayGas”. The management systems support and prove the ability to continuously improve the systems.

The existing quality management system enables KMG to manage and prevent nonconformities and predict the customer expectations. The quality management system manages a variety of interrelated activities, each of which is a transformation of inputs into outputs using resources and is therefore considered as a process. The process approach was applied to build a process-oriented model, which describes level 1 processes **(Appendix 4.4)**.

The quality management system (hereinafter the QMS) is based on the requirements of ISO 9001:2015 and recommendations of ISO 9004:2018 in terms of measuring the performance of management system processes, the achievement of set objectives, and analysing the results of customer satisfaction measurements and developing solutions for improving the system based on such results.

This Quality Manual has ten main sections, which include subsections that describe the essence of the quality management system. Each subsection gives references to the relevant rules and procedures of the system.

The purpose of this Quality Manual is to describe quality management system processes, roles and responsibilities of KMG’s employees involved in the management system processes.

With this document, KMG presents its quality management system to customers, interested parties and partners as a management tool that KMG has and uses to meet the needs of all interested parties, to encourage subsidiaries and affiliates to improve the quality of products and services related to KMG’s activities.

**1.2 Scope of the Quality Management System**

The quality management system applies to all KMG business units that manage:

assets;

petroleum operations, including exploration, production, transportation, storage, refining and marketing of oil, gas and their refined products;

service infrastructure of petroleum operations.

The management system excludes issues that do not affect KMG’s ability and responsibility to provide management services that meet customers’ requirements and relevant regulatory requirements, and are related to:

control of measuring equipment (Clause 7.1.5.2 of ISO 9001: 2015 — Monitoring and Measuring Resources), since no equipment is used to measure the services of corporate management of petroleum operations, assets and service infrastructure of petroleum operations;

design and development of new products and services (Clause 8.3 of ISO 9001:2015 — since KMG does not design and develop new products and services. KMG’s activities are governed by the laws of the Republic of Kazakhstan in the field of corporate governance (Law of the Republic of Kazakhstan on Joint-Stock Companies, Law of the Republic of Kazakhstan on Limited and Additional Liability Partnerships), and in the field of subsoil use (Code of the Republic of Kazakhstan on Subsoil and Subsoil Use, etc.). KMG, therefore, does not develop or provide any new types of services, which constitute grounds for violation of this clause;

validation and periodic re-validation of the ability to achieve the planned outcomes for all service provision processes, the final outcomes of which cannot be verified by subsequent monitoring or measurements (sub-clause f of clause 8.5.1 of ISO 9001:2015) — Control of Production and Service Provision, since the existing procedure for internal coordination and approval of management decisions before their adoption by the authorised body ensures that the decision meets the current procedures of KMG and does not contradict the laws of the Republic of Kazakhstan;

property of customers (Clause 8.5.3 of ISO 9001: 2015 — Property Belonging to Customers or External Providers). Since the company does not receive data that are the property of customers or external providers when providing services, accordingly, the clause is excluded from the scope of the Standard;

post-delivery activities (Clause 8.5.5 of ISO 9001:2015 — Post-Delivery Activities), since KMG does not give warranty or perform servicing of its products.

**II Regulatory References**

The text of ISO 9001:2015 approved by the Committee of the International Organisation for Standardisation (hereinafter ISO) as an international standard has been applied without any changes.

**III Terms, Definitions and Abbreviations**

The list of terms and definitions used in the quality management system is given in Appendix 3.1 IMS Glossary.

The terms and definitions used in the Quality Manual are applied in accordance with:

* ISO 9000: 2015 Quality Management Systems. Fundamentals and Vocabulary;
* Appendix 3.1 Glossary to the IMS Manual. Revision 11.

This Quality Manual uses the following abbreviations:

|  |  |
| --- | --- |
| Business Line | A set of technologically and organisationally linked core and support operations conducted by one or more subsidiaries or dependent entities, the development planning and corporate management of which are carried out by the relevant business line manager of KMG: Hydrocarbons Exploration; Hydrocarbons Production, Non-Operating Assets, Production Asset Service Infrastructure; Gas Transportation and Marketing; Oil Transportation. International Oil Refining and Marketing Projects; Oil Refining and Petrochemistry, Oil Marketing and Sale |
| Division | Strategic business units of KMG, which include several independent units of a similar profile from the point of view of the value chain according to one of the following criteria: product (oil, gas), type of activity (exploration, production, refining, transport, marketing, sales, and others).  Divisions are responsible for coordinating and ensuring corporate interaction between the managed BU/SDEs and CC of KMG |
| SDEs | Subsidiaries and dependent entities, including jointly controlled entities and joint ventures of KMG |
| Integrated Management System (IMS) | Part of the Company’s management system for achieving the set objectives in the field of quality, environmental protection, occupational health and safety through the organisation, control and allocation of resources (in accordance with the requirements of ISO 9001, ISO 14001 and ISO 45001) |
| Company | Joint name of KMG and its SDEs |
| Corporate Centre (CC) | A structural combination of KMG functions duly authorised to define the strategy, manage the portfolio of Divisions and Business Units, the portfolio of Company assets, ensuring their management, achievement and improvement of economic efficiency, value management and financing source management, shaping relations with the external environment, and achievement and monitoring of compliance with the corporate policies and internal documents. In the organisational structure — all KMG business units that report directly to the Chairman of the Management Board, the Deputy Chairman of the Management Board — Chief Financial Officer, Managing Directors: for strategy, human resources, legal support, occupational health and safety, environmental protection, transformation and digitalisation, information technology |
| KMG | Joint-Stock Company “National Company “KazMunayGas” |
| CRMS | Corporate Risk Management System |
| Ministry of Energy | The Ministry of Energy of the Republic of Kazakhstan |
| Responsible Department | The business unit responsible for QMS at KMG |
| SSC | KMG Shared Services Centre |
| HSE | Health, Safety and Environment |
| Head of Business Line / Division | Deputy Chairman of the Management Board, who heads the relevant Division: Hydrocarbons Exploration; Hydrocarbons Production, Non-Operating Assets, Production Asset Service Infrastructure; Gas Transportation and Marketing; Oil Transportation. International Oil Refining and Marketing Projects; Oil Refining and Petrochemistry, Oil Marketing and Sale (СЕО-1) |
| Head of Business Area | Deputy Chairman of the Management Board — Chief Financial Officer / Managing Directors / Head of Business Unit, who heads the relevant business area: Economics and Finance; Strategy; HR; Corporate Security; Health, Safety and Environment; Legal Support; Risk Management; Transformation (CEO-1) |
| Head of Functional Unit | A KMG management representative responsible for the effective management of a certain type of activity/process or several processes of the 1st level of KMG’s Corporate Centre (Managing Directors — CEO-1, CEO-2) |
| IAS | Internal Audit Service |
| MS | Management Systems |
| QMS | Quality Management System |
| ISMS | Information Security Management System |
| JV | Joint Venture |
| Business Unit | A separate unit within KMG’s organisational structure responsible for a specific business area |
| FS | Feasibility Study |
| HC | Hydrocarbons |
| Fund | Samruk-Kazyna JSC |
| Functional Unit | One or more business units that perform the function and report to the managing director |
| IMS EDB | IMS Electronic Document Database |
|  |  |

Other abbreviations used in internal documents are given in KMG’s Glossary.

**IV Quality Management System**

**4.1 Context of the Organisation** (Clause 4.1 of ISO 9001)

KMG is a vertically integrated oil and gas company with business areas ranging from exploration, production, transportation and refining of petroleum products to the retail of refined oil and gas products to the end consumer.

KMG is a national company representing the state in the oil and gas industry of Kazakhstan, ninety percent of its shares are owned by the Fund and ten percent by the National Bank of the Republic of Kazakhstan.

According to KMG’s Development Strategy until 2028, the main strategic goal of the Company is to maximise shareholder value by increasing the long-term value of assets and promoting the modernisation and diversification of the national economy.

KMG’s Development Strategy until 2028 identifies the main external and internal factors that may affect the Company’s business.

**KMG’s mission** is to maximise the benefit for the shareholders from their contribution to the development of the national oil and gas industry.

**KMG’s vision** is to become a highly efficient vertically integrated operational company by 2028 that meets the highest safety and corporate governance standards.

**Corporate values:**

1. ENBEKTI QORGAU (Occupational Health) or ZHUMYSSHLARDYN OMIRI & DENSAULYK (Employees’ Life and Health)

2. SAQTYQ (Safety)

3. BIRLIK (Unity)

4. SABYR (Reasonableness)

5. SAPA (Quality)

KMG’s mission and vision will be achieved through the implementation of three strategic goals:

1. Create value and strengthen financial sustainability.

2. Improve the manageability of SDEs/JVs.

3. Corporate governance and sustainable development.

KMG consists of about 190 production and non-production (sub-holding) subsidiaries in 5 business lines of KMG: Hydrocarbons Exploration; Hydrocarbons Production, Non-Operating Assets, Production Asset Service Infrastructure; Gas Transportation and Marketing; Oil Transportation. International Oil Refining and Marketing Projects; Oil Refining and Petrochemistry; Oil Marketing and Sale.

The total headcount of the KMG Group is about 90 thousand employees, including foreign assets.

A detailed analysis of the internal and external environment of KMG (context of the organisation) is described in KMG’s Development Strategy until 2028.

**4.2 Understanding the Needs and Expectations of Interested Parties** (Clause 4.2 of ISO 9001)

The requirements of interested parties are understood taking into account all aspects of the services for:

1) management of SDEs and operations that include a full cycle of exploration, production, transportation, storage, refining and marketing of oil, gas and their refined products, development of service infrastructure;

2) asset management.

The requirements of interested parties are defined by the laws of the Republic of Kazakhstan, decisions of the general shareholders meeting, the Board of Directors and the Management Board of KMG, are identified by analysing the Oil and Gas Industry Development Strategy, and during the approval of the Company’s Development Strategy and Development Plan by shareholders.

The Managing Director for Strategy, heads of business lines and functional units shall systematise and analyse information about the requirements of interested parties and their expectations by collecting comments, suggestions and additions to the Development Strategy and relevant development plans. Information about the requirements and expectations of interested parties shall be collected from the following sources:

shareholder’s expectation letters, which indicate the expected long-term and mid-term key performance indicators of KMG, strategic initiatives and development initiatives (projects) of the Fund;

laws of the Republic of Kazakhstan, decrees of the President of the Republic of Kazakhstan, resolutions of the Government of the Republic of Kazakhstan, orders and instructions of government authorities, the Fund, decisions of the general shareholders meeting, the Board of Directors and the Management Board of KMG;

meetings in the Government of the Republic of Kazakhstan, Ministry of Energy, Fund;

data on the satisfaction of interested parties, including their wishes and claims;

data on benchmarking with leading international oil and gas companies.

The QMS is developed and implemented to ensure that the requirements of interested parties will be met to the fullest extent possible through the implementation of interrelated processes of control, monitoring, measurement and implementation of corporate governance of SDEs and operations that include a full cycle of exploration, production, transportation, storage, refining and marketing of oil, gas and their refined products, development of service infrastructure.

Processes of control, monitoring, and measurement of corporate governance of SDEs and operations that include a full cycle of exploration, production, transportation, storage, refining and marketing of oil, gas and their refined products, development of service infrastructure are described in detail in Sections 8 and 9 hereof.

The satisfaction of KMG’s internal customers with the interaction system and the quality of services shall be determined by the Responsible Department in accordance with the Procedure for Assessing the Satisfaction of Internal Customers of JSC NC “KazMunayGas” with the Terms and Quality of Work Performed (KMG-RI-769.4-59).

The Procedure for Assessing the Satisfaction of Employees of JSC NC “KazMunayGas” with the Incentive System (KMG-RI-805.3-6) governs the process of analysing employee satisfaction at KMG with the current system.

The KMG Group’s Health, Safety and Environment Management System Manual describes the requirements of interested parties for occupational health and safety and environmental protection in the Company.

The current state of the HSE system in SDEs shall be monitored in accordance with the KMG Group’s Health, Safety and Environment Management System Manual and KMG’s Behaviour-Based Safety Monitoring Rules (KMG-PR-2312.1-13).

**4.3 Determining the Scope of the Quality Management System** (Clause 4.3 of ISO 9001)

The scope is determined in accordance with the business needs and to ensure an adequate level of organisation management for the Company’s management and requirements of international standards, and is defined in clause 1.2 hereof.

**4.4 KMG’s Quality Management System and Its Processes** (Clause 4.4 of ISO 9001)

All QMS processes are identified in this Quality Manual and in the relevant rules, procedures, regulations and instructions of KMG’s management system. These documents define KMG’s business processes, their sequence and interrelation, describe how to implement and apply them, define criteria and methods that ensure the effectiveness of the organisation management, take into account all potential risks and opportunities for improving processes in accordance with clause 6.1 hereof. The management system defines the roles and responsibilities of employees, the rules and procedure for allocating resources for processes, methods of monitoring and measuring the performance of processes, risks and inspection procedures to prevent them.

The Document Management Rules of JSC NC “KazMunayGas” (KMG-PR-1.13-59) specify the procedure and basic provisions for process documentation.

The processes of engineering and improving (reengineering) business process models in the Company are governed by the Business Process Model Engineering and Improvement Rules of JSC NC “KazMunayGas” (KMG-PR-2655.1-59).

The target operational management model of the KMG Group (process chart) is given in Appendix 4.4.

The Managing Director for Strategy is the authorised quality representative of KMG’s management.

The Managing Director for HSE is the authorised HSE representative.

The functions of quality and HSE representatives include identifying the resources and information necessary to support and monitor MS processes.

KMG’s management shall be responsible for providing the necessary resources and information. Section 7 hereof describes how these requirements are met and identified.

Process performance shall be systematically reviewed and measured. This guarantees their effectiveness and provides opportunities for improvement.

Process performance shall be reviewed by:

business units by conducting internal review according to the established criteria for the process performance evaluation in accordance with the IMS Process Performance Monitoring and Measurement Rules of JSC NC “KazMunayGas” (KMG-PR-1134.5-59);

independent auditors during internal and external audits of IMS in accordance with the Process and Management System Audit Rules of JSC NC “KazMunayGas” (KMG-PR-147.8-59);

KMG’s Internal Audit Service during scheduled financial and economic audits of the KMG Group (Internal Audit Guidelines of JSC NC “KazMunayGas”).

The overall performance evaluation of IMS shall be verified by measuring the satisfaction of interested parties in accordance with the Customer Satisfaction Measurement Rules of JSC NC “KazMunayGas” (KMG-PR-193.7-59).

Process monitoring and performance measurement are described in Sections 8 and 9 hereof and in the IMS Process Performance Monitoring and Measurement Rules of JSC NC “KazMunayGas” (KMG-PR-1134.5-59).

The processes are subject to regular KMG management review to eliminate any possible nonconformities to the laws of the Republic of Kazakhstan and internal regulatory documents, to identify the opportunity for IMS improvement by setting quality and HSE objectives and developing an improvement plan.

Actions necessary to resolve actual or potential issues shall be implemented as corrective and/or preventive actions, as well as through work plans of KMG’s business units, process inspection procedures, plans to resolve identified and potential issues, emergency response plans and special training, HSE programs and IMS improvement plans.

Clause 9.3 hereof describes how to conduct KMG management review to maintain the continued suitability, adequacy and effectiveness of IMS.

KMG shall conduct core processes on its own without the involvement of third parties.

**V Leadership**

**5.1 Leadership and Commitment**

**5.1.1 Responsibility of the Chairman of the Management Board** (Clause 5.1.1 of ISO 9001)

The Chairman of KMG’s Management Board shall be responsible for the operation and development of IMS, its continuous improvement by initiating IMS integration into business processes, supporting (developing, expanding) the use of a process-based approach and risk-based thinking, making KMG’s employees aware of the need and importance of meeting the requirements of customers, interested parties, laws of the Republic of Kazakhstan, developing HSE policies and objectives, conducting management review and ensuring the availability of resources.

**5.1.2 Customer Focus** (Clause 5.1.2 of ISO 9001)

The requirements of interested parties are understood taking into account all aspects for:

1) management of operations, including exploration, production, transportation, storage, refining and marketing of oil, gas and their refined products, development of the service infrastructure of petroleum operations;

2) asset management.

The requirements of shareholders are defined by the laws of the Republic of Kazakhstan, decisions of the Fund, general shareholders meeting, the Board of Directors and the Management Board of KMG, are identified by analysing the Oil and Gas Industry Development Strategy, and during the approval of the Company’s Development Plan by the Fund.

Deputy Chairman of the Management Board — Chief Financial Officer, Managing Director for Strategy, Heads of Business Lines / Divisions, as well as strategy and economics and finance units, shall systematise and analyse information about customer requirements and expectations by analysing shareholders’ expectation letters, collecting comments, suggestions and additions to KMG’s Development Strategy and relevant development plans.

KMG’s processes are developed and implemented to ensure that shareholders’ requirements are met to the fullest extent possible through the implementation of interrelated planning, implementation, control, monitoring and measurement processes in KMG.

Processes of control, monitoring, and measurement of corporate governance of SDEs and operations that include a full cycle of exploration, production, transportation, storage, refining and marketing of oil, gas and their refined products, development of service infrastructure are described in detail in Section 9.1 hereof.

**5.2 Policy**

**5.2.1** **Quality**

**5.2.1 Quality Policy (**Clause 5.2.1 of ISO 9001)

KMG’s Management Board shall define the quality policy (hereinafter the QMS Policy). The QMS Policy is documented and communicated to all KMG business units via the IMS EDB. The QMS Policy is also available on KMG’s corporate website.

The QMS Policy is approved by the resolution of KMG’s Management Board. Any amendments to the QMS Policy shall be duly approved in the same way.

The main purpose of the QMS Policy is to promulgate KMG’s commitments and quality objectives and to provide the basis for setting the goals of QMS.

The QMS Policy pre-determines KMG’s activities for QMS continuous improvement.

The use of the QMS Policy for goal setting is described in Section 6.2. hereof.

The QMS Policy is available in the IMS EDB. Information about the need to read the QMS Policy shall be communicated to all KMG employees. The fact of acknowledgement shall be indicated in the “I have read and understood” tab in the working space of the document.

Customers, suppliers of goods, works or services, and other interested parties can read the QMS Policy on KMG’s corporate website.

The package of necessary documents (QMS Policy and quality objectives) shall be provided to the potential supplier upon signing of the contract. Model contracts specify the requirement for the supplier of goods, works or services to comply with QMS regulations and anti-corruption standards.

The QMS Policy shall be periodically reviewed by KMG’s management during QMS review and can be revised and reissued depending on changes in the laws of the Republic of Kazakhstan, business environment, risks and operations of KMG.

The quality philosophy and objectives of KMG’s management shall be explained to new employees during onboarding.

**5.3 Organisational Roles, Responsibilities and Authorities**

**5.3 Responsibilities and Authorities** (Clause 5.3 of ISO 9001)

KMG’s management and business units and their relations are shown in the organisational structure of KMG’s headquarters, approved by the decision of KMG’s Board of Directors. The procedure for the development, coordination and approval of the organisational structure is set out in the Rules for the Development, Coordination and Approval of HQ Structure and Staffing Chart of JSC NC “KazMunayGas” (KMG-PR-1166.3-6).

Information on the approval of the organisational structure is available in the IMS electronic database in the Other Internal Documents section.

KMG’s internal regulations are established in internal documents. Work and rest hours are specified in the Internal Labour Regulations of JSC NC “KazMunayGas” (KMG-PR-1167.3-6).

The interaction of the heads of business lines / functional units and representatives of KMG (persons acting on the basis of a power of attorney) in the exercise of their corporate governance functions is presented in the Procedure for Managing Organisations with Shares (Participatory Interest) Directly or Indirectly Owned or Trust Managed by JSC NC “KazMunayGas”.

The executive body of KMG is its Management Board, which acts in accordance with the Regulations on the Management Board of JSC NC “KazMunayGas” (KMG-PL-914.11-12).

The KMG’s management shall be responsible for the implementation, maintenance and improvement of QMS in accordance with the following distribution of authority:

The Chairman of KMG’s Management Board shall be responsible for KMG performance, approve the QMS Policy and quality objectives, and shall also be responsible for providing the necessary resources for the quality management system and managing the Management Review process. The rights and obligations of the Chairman of the Management Board are defined by the laws of the Republic of Kazakhstan, KMG’s Charter, Regulations on the Management Board (KMG-PL-914.11-12) and other internal documents of KMG. The Chairman of the Management Board shall head the Transformation Council of JSC NC “KazMunayGas” (KMG-PL-2099.2-64) and MS Council (KMG-PL-1093.7-59), KMG’s Investment Committee (KMG-PL-1779.7-38) and other advisory bodies.

The Chairman of the Management Board shall identify the priorities and targets of the Deputy Chairmen of the Management Board, heads of functional units and business units directly subordinate and reporting to the Chairman of the Management Board.

Responsibility for the achievement of the targets by the processes is assigned to process owners — the heads of Divisions, the Deputy Chairman of the Management Board — Chief Financial Officer, heads of functional units and business units directly subordinate and reporting to the Chairman of the Management Board.

The division of responsibilities between the Chairman of the Management Board, Deputy Chairmen of the Management Board, heads of functional units and business units directly subordinate to the Chairman of the Management Board, as well as supervision of SDEs, shall be determined by the relevant orders of KMG.

The quality representative of the Management is the Managing Director for Strategy and shall be responsible for:

- ensuring that the quality management system conforms to the requirements of ISO-9001:2015;

- reporting on the performance of the quality management system and opportunities for improvement;

- ensuring that the integrity of the quality management system is maintained when changes to the quality management system are planned and implemented;

- ensuring the propagation and support of customer focus at KMG.

The Managing Director for Human Resource shall be responsible for ensuring the propagation and support of the Company’s key values, which were promulgated by KMG’s management.

Authorities and responsibilities for the identified processes of KMG are given in the level 3 process catalogue with a summary of the processes, the responsibility matrix for management processes (RACI), key performance indicators, integration of processes, functional distribution between the CC, Divisions, SDEs and SSC.

The procedure for the development, coordination and approval of regulations on business units, job descriptions of KMG’s employees is specified in the Procedure for the Development, Coordination and Approval of Regulations on Business Units and Job Descriptions of Employees of JSC NC “KazMunayGas” (KMG-RI-52.5-59).

**VI Planning**

**6.1 Actions to Address Risks** (Clause 6.1 of ISO 9001)

6.1.1 The system shall be planned in accordance with the set goals and objectives in the field of quality, and based on the organisation context analysis: its strategic goals, areas and key performance indicators, which were reviewed and approved by the management for the long-term (until 2028) and current (3-5 years) periods. System planning (strategic, investment and business planning) shall be based on the risks and opportunities of the Company’s development. KMG has developed and implemented a CRMS, which is the key element of the corporate management system and is aimed at timely identification, assessment, monitoring and mitigation of potential risk events that may have adverse impact on strategic and operational goals of the Company, which means KMG and its subsidiaries and affiliates.

Realising the importance of having a CRMS and risk management on a consolidated basis, as well as the expectations of KMG’s shareholders to apply high risk management standards:

- risk management in the Company is based on the principles and requirements of international risk management standards, which are described in the approved internal documents of KMG;

- KMG’s Board of Directors annually approves the Risk Register, Risk Map, Risk Appetite and Risk Management Plan of the Company. An owner is identified for each risk;

- continuous monitoring of the dynamics of key risks and the implementation of actions to mitigate them is conducted by sending quarterly risk reports to KMG’s Management Board and Board of Directors;

- risk culture in the Company is promoted by involving all KMG business units and KMG’s SDEs in the risk management process, as well as through the regular communication between KMG’s Board of Directors, Management Board, Risk Committee and the Company’s employees;

- an automated risk management system is in place.

Opportunities for improvement and further enhancement of the risk management system are provided by KMG’s transformation processes.

**6.1.2 Commitments** (Clause 6.1.2 of ISO 9001)

The Company is aware of the importance of developing CRMS as a key element of the corporate governance system. Individual elements of QMS and processes are planned in a way to guarantee the system integrity, the compliance of processes with their purpose, their effectiveness, in the event of potential risks, changes to the system or the context of the organisation.

The goals of planning are:

1) guarantee and capability to provide services and produce goods that meet the requirements of interested parties and supervisory authorities;

2) guarantee and capability to manage production processes, as well as SDEs, in a way to ensure the business continuity during the implementation or possible implementation of potential risks and threats, as well as in the event of emergencies;

3) preparation of prerequisites for continuous improvement in current operations and improvement of processes when opportunities arise.

QMS improvement shall be planned during KMG management review in accordance with Section 9.3 hereof. Planning outputs shall be documented in the form of Objectives, KMG Development Strategy Action Plan, IMS Improvement Plan to be approved by the decision of the MS Council. Such planning shall be based on suggestions of business units requested by the Responsible Department.

The objectives shall be achieved by implementing work plans of the business units in accordance with the Rules for the Current Planning of Business Units (KMG-PR-1182.6-59).

The Responsible Department shall be responsible for preparing an IMS improvement request to KMG’s business units and preparing draft objectives and IMS improvement plan for review by the MS Council.

The MS Council shall be responsible for making a decision on the KMG IMS improvement plan for the year.

**6.2 Quality Objectives and Planning to Achieve Them** (Clause 6.2 of ISO 9001)

Quality objectives (hereinafter QMS objectives) for each area shall be set as key performance indicators of KMG’s senior and managerial employees. Actions to achieve the objectives are outlined in the QMS Improvement Plan, KMG’s Development Strategy, KMG’s Development Plan and Budget for the current year, and in the action plans for certain business areas.

QMS objectives identify the areas and priorities for continuous improvement of the system and its performance.

QMS objectives relate to improving the quality of services for managing the operations of SDEs, assets, timely reporting, which are approved by internal documents, orders and instructions of the Chairman of KMG’s Management Board, decisions of the general shareholders meeting, the Board of Directors and the Management Board of KMG, public administration bodies.

These objectives directly relate to the specific units of KMG responsible for actions in the processes implemented by them. The achievement of these objectives shall be verified and documented during strategic sessions and meetings of the Management Board and the Board of Directors.

**6.3 Planning of Changes** (Clause 6.3 of ISO 9001)

In case of changes in the context of the organisation (internal or external environment), the Company shall make planned changes to the systems. Planned changes shall be approved by all interested parties. The range of interested parties shall be defined by the initiator of changes together with the Responsible Department in order to ensure the system integrity when it changes. Resources for changes shall be made available by the Company’s management through decision-making at the level of the executive body.

**VII Support**

**7.1 Resources** (Clause 7.1.1 of ISO 9001)

Resources required to implement and improve QMS, and to increase customer satisfaction, include employees, information, infrastructure, working environment and finances.

The main decisions on the establishment and specification of resource requirements shall be made as a result of QMS management review, and also at the stage of planning.

KMG’s management shall be responsible and authorised to provide the necessary resources.

The resource allocation procedure is documented in the Quality Manual, rules, procedures, work instructions, minutes of meetings, orders, or in another form.

The main decisions on the allocation of resources shall be made based on KMG QMS management review.

**7.1.2 People** (Clause 7.1.2 of ISO 9001)

When developing KMG’s Development Strategy, preparing a Development Plan, and based on the operational management model, the organisation shall identify the missing resources, assess the criticality of the missing resources and develop a goods, works and services procurement plan.

The HR unit, together with the process owners, shall specify the requirement for human resources based on the required number and skills of personnel for the high-quality execution of processes.

**7.1.3 Infrastructure** (Clause 7.1.3 of ISO 9001)

Planning of new and modification of existing infrastructure, as well as equipment upgrade, shall be made in connection with the following:

adoption of the infrastructure development concept;

change in processes or services;

increase in the scope of work;

change in the number of employees involved in management processes;

optimisation of existing resources.

The heads of business units shall be responsible for determining and identifying the need to improve the infrastructure and management tools in the processes or areas of work assigned to them.

Building maintenance and repair, including the entire infrastructure, and transport services shall be managed by a service organisation duly contracted for the maintenance of administrative buildings and transport services. The contract involves the responsibility of the service organisation for the timely implementation of planned measures to reduce health risks and identified environmental aspects. When signing the building maintenance contract, the service provider shall read the QMS Policy.

The Administrative Department shall procure transport services for KMG’s employees in accordance with the Rules for Providing Passenger Vehicles to Employees of JSC NC “KazMunayGas” (KMG-RR-201.4-7).

Maintenance of computer and office equipment, internal telephone and computer network shall be managed by the Information Technology Department in accordance with the Information Infrastructure User Manual (KMG-RI-89.2-30), Procedure for Providing Computer and Peripheral Equipment to Employees of JSC NC “KazMunayGas” (KMG-RI-953.2-30).

Organisation and procedure for managing the IMS electronic database (IMS EDB) are established in the IMS Electronic Document Database User Manual (KMG-RI-17.4-39) and the Document Management Rules of JSC NC “KazMunayGas” (KMG-PR-1.13-59).

* + 1. **Environment for the Operation of Processes** (Clause 7.1.4 of ISO 9001)

The Company’s management shall be responsible for ensuring social equality and partnership of KMG’s employees and the absence of discrimination on any basis. The Company has the following documents in place in order to prevent various types of conflicts or guarantee fair treatment in the event of conflicts: The Code of Conduct of JSC NC “KazMunayGas”, Corporate Conflict Rules of JSC NC “KazMunayGas” (KMG-PR-1700.1-31). The interests of ordinary employees in such conflicts are protected by the authority of the Ombudsman, as a representative of KMG’s employees and representatives of the trade union committee for members of KMG’s employee union (Regulations on the Ombudsman).

A Grievance Committee consisting of representatives of the employer and employees has been established to review individual labour disputes.

As part of social partnership with employees of SDEs, the Company’s management has adopted the Corporate Social Responsibility Code of JSC NC “KazMunayGas”.

The heads of business units are responsible for providing the necessary working environment for employees performing their official duties. The Administrative Department shall be responsible for ensuring an appropriate working environment for KMG’s employees.

The Administrative Department and the Information Technology Unit shall be responsible for identifying all the reasons for changes in the working environment that may affect the ability of employees to comply with the quality of services. Working environment factors (temperature, humidity, illumination, noise, and others) are set to monitor operations.

* + 1. **Monitoring and Measuring Resources (deleted)**
    2. **Organisational Knowledge** (Clause 7.1.6 of ISO 9001)

All documents regulating KMG’s activities (both internal and some of the external) are available in the electronic document database (IMS EDB). Any employee of the headquarters can read any document from the IMS EDB. For documents that are mandatory to read (job descriptions of employees, regulations, general policies), employees shall indicate the fact of acknowledgement in the IMS EDB. The information about acknowledgement is saved automatically.

The Responsible Department shall be responsible for maintaining the IMS EDB.

Documents adopted within KMG’s transformation program are available in the OpenText software (OT), which is shared by KMG’s Transformation Unit.

The Transformation Program Administration Department shall be responsible for updating documents in OT.

KMG’s internal website has an Internal Knowledge Library with publications both in the field of professional development and personal competency improvement of KMG’s employees. It also has all the information on support services (IT, technical workers, etc.) and an internal forum for KMG’s employees. The HR Methodology and Expertise Department shall be responsible for maintaining this database by replenishing the Knowledge Library, the Information Technology Department shall be responsible for maintaining it by providing IT support.

Organisational knowledge is transferred within the Internal Trainer Institution Program, which is regulated by the Internal Trainer Procedure of JSC NC “KazMunayGas” (KMG-PS-2238.1-6).

The HR Methodology and Expertise Department shall be responsible for the development of training programs, implementation of training plans within KMG in the following areas:

professional development;

corporate governance of KMG and its SDEs;

management of SDE operations that include a full cycle of exploration, production, transportation, storage, refining and marketing of oil, gas and their refined products, development of service infrastructure;

integrated quality management system.

The heads of business units shall be responsible for:

determining the competence and training requirements for employees of their units;

employees’ understanding of responsibility for their actions during production processes.

Training within the business units shall be focused primarily on improving the level of skills for the implementation of management processes.

KMG shall initiate and systematically implement training in accordance with the Personnel Training and Development Rules of JSC NC “KazMunayGas” (KMG-PR-434.8-6) in the following areas:

general information and training in QMS during onboarding for new employees of KMG and technical training conducted by the Responsible Department, at the request of business units;

professional development of KMG’s employees;

talent pool development;

development of the internal trainer institution;

professional development of IMS internal auditors;

regulatory framework of the Republic of Kazakhstan;

application of computer programs;

self-education.

The organisation and procedure for identifying the need for training and its implementation are described in the Personnel Training and Development Rules of JSC NC “KazMunayGas” (KMG-PR-434.8-6) and the Common Talent Pool Rules of JSC NC “KazMunayGas” (KMG-PR-866.2-6).

The effectiveness of training shall be determined by means of a questionnaire of employees who have been trained regarding the quality of the training provided, and an assessment by the direct supervisor of the practical application of the acquired knowledge and skills.

The effectiveness shall also be determined by an annual performance evaluation of employees in accordance with the Personnel Performance Evaluation Rules of JSC NC “KazMunayGas” (KMG-PR-2412.1-6).

The HR Methodology and Expertise Department shall maintain and save training reports in the form of:

a training schedule for the current year;

training programs;

documents proving the skills of employees;

quarterly reports on workshops/trainings and conferences held.

The achievement of targets set for each employee shall be evaluated on a quarterly basis in accordance with the Administrative Personnel Performance Evaluation Rules of JSC NC “KazMunayGas” (KMG-PR-1152.5-47).

**7.2 Competence** (Clause 7.2 of ISO 9001)

7.2.1 The required competence of personnel shall be determined by the process owner:

1. Chairman of the Management Board — for CEOs-1;
2. KMG CEO-1 — for supervised CEOs-2;
3. CEO-2 — for supervised CEOs-3;
4. CEO-3 — for other supervised employees.

7.2.2 Competence shall be defined by the job descriptions of employees to be developed by the direct supervisor and approved by KMG’s management in accordance with the requirements of the Document Management Rules of JSC NC “KazMunayGas” (KMG-PR-1.13-59) (Table 1) and the Procedure for the Development, Coordination and Approval of Regulations on Business Units and Job Descriptions of Employees of JSC NC “KazMunayGas” (KMG-RI-52.5-59).

7.2.3 The procedure for recruitment and competitive selection of candidates for administrative and managerial job openings, as well as the procedure for onboarding new employees of KMG, are in accordance with the Rules of Competitive Selection for Administrative Job Openings of JSC NC “KazMunayGas” (KMG-PR-838.7-47) and the Rules for Approving the Appointment (Election) of Executive Employees by the Board of Directors (KMG-PR-981.1-6).

The Personnel Employment, Transfer and Relocation Procedure of JSC National Company “KazMunayGas” (KMG-RI-898.6-6) establishes the internal HR procedure of KMG in terms of the employment, dismissal and relocation of employees. All information on personnel competence shall be stored in SSC in compliance with the labour and personal data laws.

**7.3 Awareness** (Clause 7.3 of ISO 9001)

The heads of business units shall duly make employees aware of the relevance and importance of their activities within their assigned authorities, their contribution to achieving quality objectives by reading the Quality Policy of JSC NC “KazMunayGas”, relevant QMS documents, and taking steps to identify the necessary personnel training.

**7.4 Communication** (Clause 7.4 of ISO 9001)

The internal communication at KMG shall be carried out through meetings, working group meetings, training and the internal electronic network. Information to be communicated covers the requirements of RoK laws, interested parties, quality policy and objectives, rules, procedures and business processes, opportunities for further improvement of the system.

Communication between various levels of KMG’s management and business units shall be made in accordance with the Workflow Regulations of JSC NC “KazMunayGas” (KMG-RG-6.13-8), Document Management Rules of JSC NC “KazMunayGas” (KMG-PR-1.13-59) and Personnel Training and Development Rules of JSC NC “KazMunayGas” (KMG-PR-434.8-6).

KMG’s management shall hold QMS meetings within the QMS Council, which play a special role in the necessary communication between KMG’s management and business units’ employees. System events shall be analysed at the meetings of the MS Council in order to develop areas and solutions for system improvement. The decisions of the MS Council shall be communicated to KMG’s employees.

The frequency and rules for MS Council meetings are set out in the Regulations on the Management System Council of JSC NC “KazMunayGas” (KMG-PL-1093.7-59).

New employees of KMG shall undergo an induction safety briefing upon employment in accordance with the Induction Health and Safety Briefing Procedure of JSC NC “KazMunayGas” (KMG-RI-195.2-13).

KMG’s management shall identify quality-related information to be communicated to external interested parties on as-needed basis.

External communications shall be made in accordance with KMG’s Corporate Communication Regulations, and according to the stakeholder map defined in the sustainable development and media plan approved annually. The media plan shall be developed by the Public Relations Department and shall specify: the subject, organisations or experts, time of communication and type of communication (meeting, interview, article, press conferences, etc.). This document shall identify the business unit responsible for providing the necessary information.

**7.5 Documented Information**

**7.5.1 General** (Clause 7.5.1 of ISO 9001)

QMS documentation is represented by the following types of documents:

KMG’s Development Strategy;

Codes;

QMS Policy;

QMS Objectives;

Quality Improvement Plan;

Quality Manual;

Rules;

Procedures;

Instructions;

Regulations on Business Units and Working Bodies of KMG;

Job Descriptions;

Standards;

Customer Documents.

All internal documents of KMG regulating KMG’s activities are available in the IMS EDB, which is accessible for all KMG employees, scanned in pdf format, with Word and Excel versions in Kazakh and Russian. The original hard copies of KMG’s internal documents shall be stored in the secretariat of the body that approved them, then transferred to KMG’s archive according to the approved file register in accordance with the Workflow Regulations of JSC NC “KazMunayGas” (KMG-PR-6.13-08) and Archive Regulations (KMG-PL-1109.6-8).

The current versions of external regulatory documents are used from the Paragraph information system, which is updated on a regular basis. The number of users is limited by the terms of the contract with the supplier.

**7.5.2 Creating and Updating Documented Information, Control of Documented Information** (Clauses 7.5.2-7.5.3 of ISO 9001)

KMG’s documented information is presented both on paper and on electronic media. Both forms of documented information are defined in the Document Management Rules of JSC NC “KazMunayGas” (KMG-PR-1.13-59).

Proposals for development and/or the development of new documents and/or updating of existing documents can be made by any employee of KMG, business unit, KMG’s management and the Fund. The procedure for the development, approval, identification and management of IMS documents is defined in the Document Management Rules of JSC NC “KazMunayGas” (KMG-PR-1.13-59).

The procedure for editing documents developed in the Kazakh language is in accordance with the Workflow Regulations of JSC NC “KazMunayGas” (KMG-PR-6.13-8).

The approved documents in scanned pdf format and Word and Excel versions in Kazakh and Russian shall be sent to the Responsible Department to be uploaded to the IMS EDB. At the end of a month, the WFMD shall notify all KMG employees about the documents uploaded to the IMS EDB during the month. Documents shall be sent to SDEs by SDE supervisors. The fact of acknowledgement of KMG’s documents by employees shall also be recorded in this database.

Project and regulatory documents of the transformation program are available in KMG’s Open Text Intranet (OT). This database shall be updated by the Transformation and Digitalisation Program Administration Department.

The documents used in work shall be stored on electronic and/or paper media in a place protected from external influence to enable their identification.

The expired documents of KMG in electronic form shall be stored in the IMS EDB and displayed in certain types and submittals with the Archive status.

The expired documents on paper shall be destroyed against a statement of document allocation for destruction in accordance with the Workflow Regulations of JSC NC “KazMunayGas” (KMG-RG-6.13-8).

KMG’s documents shall be developed, processed, stored and transferred to KMG’s archive in accordance with the Workflow Regulations of JSC NC “KazMunayGas” (KMG-RG-6.13-8), other internal regulatory documents of KMG and the Archive Regulations of JSC NC “KazMunayGas” (KMG-PL-1109.6-8).

Documents of external origin, except for correspondence with government authorities, SDEs and third parties, and some other documents that have become invalid but are necessary for work or information and are located in business units, shall be identified as Expired or Cancelled and stored separately from existing working documents.

Responsibility for the management of such documents is assigned to the heads of business units and employees of KMG who use these documents.

Documented information that is the result of KMG’s activities has the status of QMS records. It includes documents proving that:

business processes are implemented and meet the requirements;

goals and objectives for QMS improvement have been achieved;

QMS is functioning, maintained and is effective.

**VIII Operation**

**8.1 Operational Planning and Control** (Clause 8.1 of ISO 9001)

KMG’s management of SDEs and operations, including a full cycle of exploration, production, transportation, storage, refining and marketing of oil, gas and their refined products, development of service infrastructure and asset management, is based on the developed core processes of KMG presented in the operational management model of KMG and the process catalogue (Appendix 8.5) and the relevant IMS documents.

The supporting processes of KMG are also included in the operational management model (Appendix 8.5 hereto) and are described in the internal documents of IMS governing the support of the core processes. Some business processes are described in accordance with the Document Management Rules of JSC NC “KazMunayGas” (KMG-PR-1.13-59), some of the processes of corporate functions are described in ARIS software.

When new processes arise, new IMS documents describing these processes shall be developed (or amendments shall be made to the existing ones) in accordance with the Document Management Rules of JSC NC “KazMunayGas” (KMG-PR-1.13-59).

Strategic planning shall be based on macroeconomic indicators, expectations of shareholders and established corporate efficiency, analysis of the current state of KMG and the context of the organisation, collection of proposals from KMG’s SDEs, the vision and mission of KMG’s management. The decision on strategic planning shall be made in accordance with the Regulations on the Planning Committee (KMG-PL-793.10-24).

Planning at KMG and in SDEs shall be made in accordance with the requirements of the following documents:

The development, review and approval of business plans of KMG and SDEs are regulated by the Rules for the Development, Coordination, Approval, Revision and Monitoring of Business Plans of Subsidiaries, Dependent Entities and Joint Ventures of JSC NC “KazMunayGas” (KMG-PR-84.8-24), the Rules for the Development, Approval, Revision and Monitoring of the Development Plan (separate) of JSC NC “KazMunayGas” (KMG-PR-150.10-24), the Rules for the Development, Coordination, Approval and Monitoring of the Consolidated Development Plan of JSC NC “KazMunayGas” (KMG-PR-1054.3-24), the Procedure of Review, Approval and Monitoring of Major Oil and Gas Investment Projects of JSC NC “KazMunayGas” (KMG-PR-1793.4-38), the Rules for Review and Monitoring of Investment Projects Under Subsoil Use Contracts of JSC NC “KazMunayGas” and its Subsidiaries, Dependent Entities and Jointly Controlled Organisations (KMG-PR-2138.2-38), the Rules for Review of Investment Projects of JSC NC “KazMunayGas” and its Subsidiaries, Jointly Controlled Organisations and Controlled Organisations Engaged in the Construction, Upgrade and Renovation of Fixed Assets (KMG-PR-2139.2-38). To plan main indicators for producing assets (e.g. oil production calculation), KMG has developed Calculation Methods (KMG-MD-2423.1-10, KMG-MD-2425.1-10, KMG-MD-2494.1-44).

The above rules and methods clearly indicate the grounds for amending the approved documents (Development Plan, budget, production program): changes in market conditions, oil price and currency exchange rate volatility, M&A transactions, etc.

IT planning shall be based on the Rules for the Development and Monitoring of the Information Technology Development Program of JSC NC “KazMunayGas” (KMG-PR-1045.1-30), the Rules for Reviewing and Approving IT Projects at JSC NC “KazMunayGas” and its Subsidiaries (KMG-PR-1151.2-30).

**8.2 Requirements for Products and Services**

**8.2.1 Customer Communication** (Clause 8.2.1 of ISO 9001)

The primary customers for KMG are shareholders. In the target operational management model of the KMG Group, the primary customers will be trading organisations and the population in areas where KMG operates (consumers of petroleum products and gas).

Communication with the primary customers shall be carried out by the marketing and sales unit by developing customer engagement and brand management plans. Customer communications shall also be managed through call centres, websites, social media, etc. The Public Relations Department shall regularly issue press releases about the current activities, innovations and achievements of KMG, problematic issues arising in the areas of presence or business.

As part of the business planning process, the Budgeting and Analysis Department shall report to the main shareholders on the implementation of the Company’s budget and development plan on a quarterly basis (KMG-PS-1450.2-27; KMG-RI-1440.3-27; KMG-PR-1448.3-27).

The Document Support Department shall be responsible for receiving, sending out requests, proposals, customer complaints to KMG’s management or the relevant heads of functional units / business units, following up on their timely execution if special control is needed, and keeping records of negative data on customer satisfaction.

The Responsible Department shall be responsible for collecting, analysing and reporting on customer satisfaction (KMG-PR-193.7-59).

The satisfaction of KMG’s internal customers with the interaction system and the quality of services shall be determined by the Responsible Department in accordance with the Procedure for Assessing the Satisfaction of Internal Customers and Key Stakeholders of the Transformation Program of JSC NC “KazMunayGas” with the Timing and Quality of Work Performed (KMG-RI-769.4-59).

**8.2.2 Determination of Requirements for Products and Services** (Clause 8.2.2 of ISO 9001)

The requirements for asset management services, operations of SDEs, including exploration, production, transportation, refining, marketing and sales of oil and gas, as well as for monitoring of major oil and gas projects, shall be established by the Fund when preparing, reviewing and approving KMG’s Development Plan. Asset growth and the minimum amount of dividends specified in KMG’s Development Plan are the documented requirements of the Fund.

The Business Planning and Performance Management Department shall be responsible for the development and approval of KMG’s Development Plan.

The procedure for adjusting the SDE business plans is described in the Rules for Development, Coordination, Approval, Adjustment and Monitoring of Business Plans of Subsidiaries, Dependent Entities and Joint Ventures of JSC NC “KazMunayGas” (KMG-PR-84.8-24).

KMG’s consolidated Development Plan shall be developed and approved in accordance with the established procedure.

**8.2.3 Review of Requirements for Products and Services** (Clause 8.2.3 of ISO 9001)

Customer requirements shall be reviewed during the approval of the draft Development Plan.

The procedure for coordination and approval of the Company’s Development Plan is defined by the Rules for the Development, Coordination, Approval and Monitoring of the Consolidated Development Plan of JSC NC “KazMunayGas” (KMG-PR-1054.3-24).

**8.2.4 Changes to Requirements for Products and Services** (Clause 8.2.4 of ISO 9001)

The reasons for making changes to certain indicators are clearly identified in the relevant documents regulating KMG’s activities (corporate standards, rules, procedures, etc.). Changes shall be made in accordance with the requirements of the Document Management Rules of JSC NC “KazMunayGas” (KMG-PR-1.12-59), i.e. approval and review of the changes shall be similar to the stages of approval and determination of the list of interested parties during the document development.

**8.3 Design and Development of Products and Services** (Clause 8.3 of ISO 9001) (deleted)

Since KMG is not engaged in the design and development of products or services, KMG has created a subsidiary — KazMunayGas Research and Development Institute of Production and Drilling Technology LLP with functions including the development of new technology and methods of the core Upstream and Oilfield Service processes.

**8.4 Control of Externally Provided Processes, Products and Services** (Clause 8.4 of ISO 9001)

* + 1. **General** (Clause 8.4.1 of ISO 9001)

All suppliers and subcontractors (hereinafter suppliers) shall be evaluated for their capability to provide:

appropriate quality of goods, works and services;

compliance with RoK laws.

Potential suppliers shall be evaluated and selected in accordance with the Reference Procurement Management Model for Portfolio Companies of Samruk-Kazyna JSC, the Fund’s Standards, Procurement Strategies by type of goods and the Goods, Works and Services Procurement Planning and Management Rules of JSC NC “KazMunayGas” (KMG-PR-68.10-34).

**8.4.2 Type and Extent of Procurement Control** (Clause 8.4.2 of ISO 9001)

Business units that initiate procurement shall be responsible for the procurement of goods, works and services and shall set technical requirements for potential suppliers in order to select high-quality goods, works and services.

The quality of purchased goods, works and services shall be controlled by the business unit initiating procurement in accordance with the Contract Preparation, Conclusion and Execution Rules of JSC NC “KazMunayGas” (KMG-PR-92.7-12).

Based on the procurement, a certificate of acceptance of goods, works and services shall be issued indicating satisfaction with the quality and timing.

For procurement, the circulation of certain types of documents shall be established, starting from the annual demand for the types of purchased goods (works, services) and ending with the supplier’s documents confirming the quality of supplies.

The requirements for purchased goods, works or services shall be established in the technical specification when preparing tender and other documentation for the purchased goods, works or services in accordance with the Goods, Works and Services Procurement Planning and Management Rules of JSC NC “KazMunayGas” (KMG-PR-68.10-34).

The decision on the choice of monitoring methods shall be made by the business unit that initiates procurement.

Methods of inspection of purchased goods, works or services, as a rule, are established in procurement contracts.

The receipt of inventory to the warehouse, its accounting, acceptance, transfer and issuance, accounting of balances shall be carried out in accordance with the Procedure for Receiving, Storing and Issuing Inventory (KMG-RI-241.3-7).

**8.4.3 Information for External Providers** (Clause 8.4.3 of ISO 9001)

When awarding contracts, procurement initiators shall duly agree on the draft contract with all concerned business units of KMG.

Based on the supplier review, actions shall be taken such as supplier revaluation, supplier classification as unreliable, strengthening of acceptance inspection of purchases and rejection of the Supplier.

Handling of nonconforming purchased goods, works or services, and interaction with their supplier shall be carried out in accordance with the Goods, Works and Services Procurement Planning and Management Rules of JSC NC “KazMunayGas” (KMG-PR-68.10-34).

* 1. **Production and Service Provision**
     1. **Control of Petroleum Operations** (Clause 8.5.1 of ISO 9001)

The core activities of KMG in accordance with Decree No. 811 of the President of the Republic of Kazakhstan dated 20 February 2002 On Activities to Further Pursue State Interests in the National Oil and Gas Sector include:

participation in the implementation of the single state oil and gas policy;

participation in tenders for oil and gas operations in the Republic of Kazakhstan;

corporate governance and monitoring of exploration, development, production, refining, sales, transportation of hydrocarbons, design, construction, operation of oil and gas pipelines and oil and gas infrastructure;

participation in the domestic and international oil and gas projects of the Republic of Kazakhstan as prescribed by law;

efficient and rational development of the republic’s oil and gas resources;

participation in the development of a strategy for the use, reproduction and further increase of oil and gas resources;

representation of the state in contracts with contractors engaged in oil and gas operations as prescribed by law through mandatory share participation in contracts.

In accordance with the specified nature of KMG’s activities, the Fund and the Government of the Republic of Kazakhstan determine the requirements for KMG’s services, which are established by the current regulatory legal acts, decisions, orders and other documents regulating KMG’s activities, as well as instructions and requests of the Government of the Republic of Kazakhstan / the Fund.

An operational management model has been developed for the core processes (Appendix 8.5 to this IMS Manual) and a catalogue of level 1-2 and 3 processes of KMG’s HQ.

The processes are described in accordance with the Document Management Rules of JSC NC “KazMunayGas” (KMG-PR-1.13-59) on paper or according to the Business Process Modelling Rules of Samruk-Kazyna JSC volume III.A of the Transformation Manual in ARIS.

KMG’s management processes shall be implemented in accordance with the value chain chart (Appendix 8.5.1 hereto) and begin with determining the context of the organisation (internal and external environment), strengths and weaknesses of its business, threats and opportunities for growth and development.

The Strategy Department shall be responsible for the development, coordination and organisation of the review, development and approval of KMG’s Development Strategy, which is revised from time to time as necessary to reflect the changed conditions.

The process of developing strategic goals and objectives for Business Areas shall be implemented in accordance with the KMG Development Strategy Design and Monitoring Rules (KMG-PR-1950.1-9).

The procedure for developing, coordinating and approving the business plans of SDEs is described in the Rules for Development, Coordination, Approval, Adjustment and Monitoring of Business Plans of Subsidiaries, Dependent Entities and Joint Ventures of JSC NC “KazMunayGas” (KMG-PR-84.8-24).

The determination of KMG’s development program by the heads of business lines, Corporate Centre and functional units is governed by the Rules for the Development, Approval, Adjustment and Monitoring of the Development Plan (separate) of JSC NC “KazMunayGas” (KMG-PR-150.10-24).

The business and financial activities of SDEs shall be evaluated and monitored by the Budgeting and Analysis Department, SDE supervisors and concerned business units within their competence in accordance with the Rules for the Development, Coordination, Approval and Monitoring of the Consolidated Development Plan of JSC NC “KazMunayGas” (KMG-PR-1054.3-24).

Monitoring of business and financial activities of Tengizchevroil is described in the Business and Financial Monitoring Procedure of Tengizchevroil LLP (KMG-PS-103.6-15).

Upon detection of deviations (nonconformities) in the activities of SDEs from technological, geological, geophysical and other parameters, and from the approved business plan, supervising business units shall analyse them and send the appropriate recommendations for elimination to the SDEs.

Preliminary risk assessment of investment projects shall be performed in accordance with the Investment Project Risk Identification and Assessment Procedure of JSC NC “KazMunayGas”.

The analysis of preliminary studies and preplanning of oil transportation projects shall be based on the long-term forecast of oil production and distribution balance prepared by the Oil Transportation business line. If the preliminary studies are successful, oil transportation projects shall be submitted to KMG’s Investment Committee (KMG-PL-1779.7-38) to be included in the list of investment intentions.

The procedure for developing, approving and submitting investment projects to KMG’s Investment Committee, and monitoring the implementation of investment projects, shall be carried out in accordance with the Rules for Reviewing, Approving and Monitoring Major Oil and Gas Investment Projects of JSC NC “KazMunayGas” (KMG-PR-1793.4-38), the Rules for Reviewing and Monitoring Investment Projects under Subsoil Use Contracts of JSC NC “KazMunayGas” and its Subsidiaries, Dependent Entities and Jointly Controlled Organisations (KMG-PR-2138.2-38), the Rules for Reviewing Investment Projects of JSC NC “KazMunayGas” and its Subsidiaries, Jointly Controlled Organisations and Controlled Organisations engaged in the Construction, Upgrade and Renovation of Fixed Assets (KMG-PR-2139.2-38).

The Legal Support Unit shall provide legal support for projects (transactions) aimed at creating the value of KMG and implemented and/or planned to be implemented jointly with foreign partners, including foreign jurisdictions, according to the Procedure for Legal Support of International Contracts (KMG-PS-136.6-14).

* + 1. **Identification and Traceability** (Clause 8.5.2 of ISO 9001)

All types of management decisions shall be identified at various levels of KMG’s management system. Management decisions shall be identified by:

1) name;

2) date;

3) index of the KMG business unit that developed it;

4) registration number;

5) authorised person who approved it;

6) deadline;

7) priority.

To facilitate the search, management decisions shall be indexed, systematised, and their copies shall be stored in business units in accordance with the Workflow Regulations of JSC NC “KazMunayGas” (KMG-RG-6.13-8).

There are no customer requirements established for special conditions of traceability.

However, KMG ensures the traceability of management decisions at all stages of their preparation, coordination and approval, which is achieved through timely and accurate identification of documents in accordance with this section.

The results of management decisions shall be recorded in the minutes of operations meetings with the Chairman of the Management Board and/or meetings of the Management Board of KMG.

All types of purchased inventory placed in the warehouse of the administrative department after the incoming inspection shall be identified.

Traceability applies to inventory purchased, stored and issued from KMG’s warehouse.

* + 1. **Property Belonging to Customers or External Providers** (Clause 8.5.3 of ISO 9001) (deleted).

KMG does not store any property of customers or external providers.

* + 1. **Preservation** (Clause 8.5.4 of ISO 9001)

After each stage of development, review and approval of management decisions, the signatures of the relevant responsible persons shall identify their review in order to avoid the use of inappropriate management decision.

The procedure for storing management decisions in the form of organisational and administrative documents (orders, instructions, etc.), decisions of KMG’s bodies or advisory bodies (minutes) is defined in the Workflow Regulations of JSC NC “KazMunayGas” (KMG-RG-6.13-8).

* + 1. **Post-Delivery Activities** (Clause 8.5.5 of ISO 9001) **(deleted)**
    2. **Control of Changes** (Clause 8.5.6 of ISO 9001)

The Company’s management has adopted a transformation program aimed at increasing KMG’s added value, optimising processes and improving the corporate culture. The scope of this program includes the main production SDEs.

The transformation program includes a 2-level management system, which enabled KMG to transform from a managing holding company to an operating company that directly controls its SDEs.

The new target operational management model of the KMG Group is implemented in accordance with the Reference Models of the Fund.

In order to build an effective management system to improve KMG’s business processes and business architecture in general aimed at continuous improvement in order to achieve the Company’s strategic goals, KMG periodically analyses the need to introduce changes to existing business process models.

**8.6 Release of Products and Services** (Clause 8.6 of ISO 9001)

The results of the analysis and monitoring of the business and financial activities of SDEs shall be reviewed by the heads of concerned business units of KMG, agreed with the supervising heads of business lines / heads of functional units and duly sent to the relevant SDEs. Draft decisions submitted for review to the Management Board and/or the Chairman of the Management Board of KMG shall be approved by the concerned business units and the Deputy Chairmen of the Management Board / managing directors of KMG in the relevant business area of KMG in accordance with the Regulations on KMG’s Management Board and KMG’s internal documents.

If any errors are detected in the results of analysis and monitoring, the errors shall be managed in accordance with the Process Audit Rules of JSC NC “KazMunayGas” (KMG-PR-147.8-59).

The Corporate Secretary and the Secretary of the Management Board shall not transmit draft management decisions to KMG’s management without the appropriate approvals of the heads of the concerned functional units in accordance with the Workflow Regulations of JSC NC “KazMunayGas” (KMG-RG-6.13-8), the Regulations on the Management Board of JSC NC “KazMunayGas” (KMG-PL-914.11-12) and the Regulations on the Board of Directors of JSC NC “KazMunayGas”.

**8.7 Control of Nonconforming Outputs** (Clause 8.7 of ISO 9001)

KMG shall document all cases of nonconformity, regardless of the significance and complexity of correcting it.

Data on nonconformities are of great importance for monitoring performance and identifying areas requiring corrective and preventive actions.

The nonconformity shall be recorded with an indication and description of the deviation, a decision on nonconformity handling shall be made and documented, further actions shall be defined, as described in the Process Audit Rules of JSC NC “KazMunayGas” (KMG-PR-147.8-59).

A nonconformity shall be identified to prevent its unintentional use and release. Business units shall be responsible for handling a nonconformity identified in the relevant business unit.

The rules and procedure for making and documenting decisions on nonconformity handling are described in the Process Audit Rules of JSC NC “KazMunayGas” (KMG-PR-147.8-59). The corrected management decision shall be submitted for re-review.

The management decision shall be re-reviewed in the same order as the development, coordination and approval of the management decision.

The Responsible Department shall monitor the timely correction of nonconformities.

**IX Performance Evaluation**

**9.1 Monitoring, Measurement, Analysis and Evaluation** (Clause 9.1 of ISO 9001)

**9.1.1 General**

Measurements and monitoring aimed at ensuring that services comply with the laws of the Republic of Kazakhstan and requirements of interested parties shall be planned and implemented in accordance with the requirements established in KMG’s documents.

Measurement and monitoring actions shall be systematised and described in the Rules and Procedures for Management Decision Monitoring and Process Management in accordance with Section 8.5.

QMS performance monitoring and measurement are planned and described by the Process and Management System Audit Rules of JSC NC “KazMunayGas” (KMG-PR-147.8-59) and the Customer Satisfaction Measurement Rules of JSC NC “KazMunayGas” (KMG-PR-193.7-59).

MS internal audits and customer satisfaction measurement actions are described in Section 9.2 hereof.

The results of QMS performance monitoring and measurement shall be reported to KMG’s management and used by them to identify opportunities for further improvement of KMG’s management system.

**9.1.2 Customer Satisfaction** (Clause 9.1.2 of ISO 9001)

Customer satisfaction shall be measured by the quality of fulfilment of the requirements determined in accordance with Clause 8.2.3 hereof. Such measurement shall be based on the comments and suggestions of customers submitted in writing to the documents reflected in the Customer Satisfaction Measurement Rules of JSC NC “KazMunayGas” (KMG-PR-193.7-59). KMG is committed to the maximum customer satisfaction through the full and timely fulfilment of these requirements.

High-quality fulfilment is characterised by effective results of the work performed, achievement of set goals, implementation of tasks and assignments in accordance with the current regulatory legal acts, decisions, orders and other documents regulating KMG’s activities, customer orders and requests, and is supported by timely submission of relevant reports and materials to customers.

Responsibility for customer satisfaction is assigned to the business unit of KMG within the tasks and assignments performed by it in accordance with KMG’s requirements and internal documents related to its functions defined in the Regulations on this business unit.

When resolutions are received on reports and deliverables submitted by KMG indicating customer dissatisfaction, the responsible business unit of KMG shall ensure proper fulfilment of the submitted claims in accordance with the established requirements. The fulfilment shall be accompanied by an appropriate analysis to determine the validity of these resolutions and implementation of measures to ensure customer satisfaction. If the analysis finds certain resolutions in the form of claims to be invalid, the responsible business unit of KMG will coordinate the positions of KMG and the relevant customer bodies.

The Document Support Department shall be responsible for sending negative data on customer satisfaction (letters, requests, etc. containing customer claims and complaints) to the business unit responsible for the MS via EDMS.

The Responsible Department shall perform a customer satisfaction assessment in accordance with the Customer Satisfaction Measurement Rules of JSC NC “KazMunayGas” (KMG-PR-193.7-59) with mandatory data mapping to the main business areas of KMG.

The processed data shall be submitted by the employee of the Responsible Department to the MS, HSE and ISMS management representative to develop proposals for improvement of KMG’s performance.

Based on the quality, HSE and ISMS management review, the MS Council shall make decisions on improving KMG’s performance to achieve greater customer satisfaction.

**9.1.3 Analysis and Evaluation** (Clause 9.1.3 of ISO 9001)

Data and information registered in IMS records shall be accumulated and analysed from time to time to identify trends in the quality of services, evaluate the performance of QMS and identify opportunities for improvement.

The WFMD shall be responsible for coordinating these actions and reporting to KMG’s management on existing trends.

The analysis shall be performed within the actions set out in Section 9.3 hereof and in the Process Audit Rules of JSC NC “KazMunayGas” (KMG-PR-147.8-59).

The analysis shall be based on the following data:

number of nonconformities identified during the audit;

number of complaints and claims from customers;

effectiveness of training.

The data analysis shall provide information about:

customer satisfaction;

compliance with the service requirements;

characteristics and trends of processes and results of services, including opportunities for preventive actions;

suppliers.

The analysis of the achieved financial and economic performance of KMG and its SDEs shall be performed at regular intervals by the heads of business lines / functional units / business units in accordance with the requirements of the Fund and KMG’s internal documents (Rules for the Development, Coordination, Approval, Adjustment and Monitoring of Business Plans of Subsidiaries, Dependent Entities and Joint Ventures of JSC NC “KazMunayGas” (KMG-PR-84.8-24)).

The performance analysis of KMG’s assets shall be performed by the Asset Management Department in accordance with the Asset Analysis Procedure of JSC NC “KazMunayGas” (KMG-PS-3362.1-31).

The procedure for analysing data on KMG’s IT infrastructure process is described in the Procedure for Processing Requests of JSC NC “KazMunayGas” Employee by the Technical Support Department (KMG-RI-1003.2-30).

**9.2 Internal Audit** (Clause 9.2 of ISO 9001)

The Responsible Department shall prepare an annual IMS internal audit plan in accordance with the Process and Management System Audit Rules of JSC NC “KazMunayGas” (KMG-PR-147.8-59). Certain types of activities can be audited more than once a year, depending on the importance of their impact on quality.

For internal audits, the quality management representative shall appoint a lead internal auditor, as well as MS auditors, who are independent of the activities being audited.

In preparation for the audit, auditors shall review the processes being carried out, the rules and procedures applied, standards, QMS protocols, prepare an Audit Program, a checklist in accordance with the Process Audit Rules of JSC NC “KazMunayGas” (KMG-PR-147.8-59).

During audits, auditors shall find objective evidence that the activities being audited are carried out in accordance with the requirements of international standards and evaluate the performance of processes.

Nonconformities shall be recorded in the forms established in the Process Audit Rules of JSC NC “KazMunayGas” (KMG-PR-147.8-59).

Audits shall be conducted in a way to minimise the impact on the work being audited and the distraction of employees from it.

When nonconformities are identified and accurately formulated, the head of the business unit being audited shall identify and take actions to correct the nonconformity and prevent it in the future.

The heads of business units shall be responsible for taking corrective and preventive actions in accordance with the Process Audit Rules of JSC NC “KazMunayGas” (KMG-PR-147.8-59).

The results of corrective and/or preventive actions shall be followed up and documented by auditors.

The procedure for corrective and preventive actions is set out in the Process Audit Rules of JSC NC “KazMunayGas” (KMG-PR-147.8-59).

After the audit is completed, all audit reports shall be systematised, analysed and submitted to the Responsible Department in the form of a summary report, and at least once a year to the MS Council.

Internal audit reports shall be used in the KMG management review process.

**9.3 KMG Management Review**

**9.3.1 General** (Clause 9.3.1 of ISO 9001)

The Chairman of the Management Board shall periodically, in accordance with the requirements of international standards, but at least once a year, review MS performance to ensure its continued suitability, adequacy and effectiveness, as well as compliance with the requirements of international standards and KMG’s internal requirements.

The Chairman of the Management Board, jointly with the quality, HSE and ISMS management representatives, shall determine the date of a meeting of the MS Review Council.

If necessary, unscheduled meetings may be held as advised by one of the Council members.

The review shall evaluate the current status and compliance of MS, on the basis of which the Chairman of the Management Board shall make decisions on further improvement of the system.

All members of the MS Council, as well as other concerned employees, shall take part in the MS review meeting. The agenda shall be prepared by the Secretary of the MS Council in agreement with the quality, HSE and ISMS management representatives, reviewed by the Chairman of the Management Board and communicated to all participants of the meeting no later than two business days before it is held.

**9.3.2 Management Review Inputs** (Clause 9.3.2 of ISO 9001)

KMG management review inputs consist of information and data based on assessments of the achievement of the set goals and performance of processes.

The following shall be used as inputs for the Quality Management System performance review:

1. status (degree of implementation) of actions taken based on the results of previous management reviews;
2. results of internal audits;
3. results of the analysis of suggestions and wishes of customers;
4. process performance information;
5. status of corrective and preventive actions;
6. changes in internal and external factors that could affect the system;
7. effectiveness of actions taken in response to risks and opportunities;
8. opportunities for improvement;
9. performance and effectiveness of the quality management system, including trends in:

- feedback from relevant interested parties;

- performance of external providers;

10) suggestions for improving the processes and MS as a whole.

**9.3.3 Management Review Outputs** (Clause 9.3.3 of ISO 9001)

KMG management review output is the decisions related to the improvement of the system and processes necessary to fully meet the requirements of customers and improve the performance of MS. The review shall identify the need to change the policy and objectives of MS, and the need for resources necessary for further improvement of MS.

Decisions taken based on KMG management review, meetings of the MS Council shall be documented in the minutes, indicating action owners and deadlines.

The minutes of the meeting of the MS Council shall be drawn up by the secretary in accordance with the form of the minutes of meetings of KMG-F-15.13-8/RI-6.13-8.

**Х. Improvement**

**10.1 General** (Clause 10.1 of ISO 9001)

Data and information registered in IMS records shall be accumulated and analysed from time to time to identify trends in the quality of services, evaluate the performance of IMS and identify opportunities for improvement.

The Responsible Department shall be responsible for coordinating these actions and reporting to KMG’s management on existing trends.

The analysis shall be performed within the actions set out in Section 9.3 hereof and in the Process Audit Rules of JSC NC “KazMunayGas” (KMG-PR-147.8-59).

The analysis shall be based on the following data:

1. number of nonconformities identified during the audit;
2. number of complaints and claims from customers;
3. identified risks by processes and controls;
4. effectiveness of training;
5. results of internal and external audits;
6. characteristics and trends of business processes and service deliverables, including opportunities for preventive actions.

The analysis of the achieved financial and economic performance of KMG and its SDEs shall be performed at regular intervals by the heads of business lines / functional units / business units in accordance with the Fund’s requirements and KMG’s internal documents.

The performance analysis of KMG’s assets shall be performed by the Asset Management Department in accordance with the Asset Analysis Procedure of JSC NC “KazMunayGas” (KMG-PS-3362.1-31).

The process monitoring procedure is described in the IMS Performance Monitoring and Measurement Rules of JSC NC “KazMunayGas” (KMG-PR-1134.5-59).

According to these rules, processes identified in the business units shall be monitored at least once every six months according to the criteria set out in the form (KMG-F-1137.5-59/PR-1134.5-59) and in Section 6 of the documents regulating the relevant process.

KMG shall apply appropriate methods of monitoring and, where appropriate, measuring business processes.

**10.2 Nonconformity and Corrective Action** (Clause 10.2 of ISO 9001)

If the targets are not achieved, corrective actions shall be taken in accordance with the requirements of the Process and Management System Audit Rules of JSC NC “KazMunayGas” (KMG-PR-147.8-59) to ensure compliance of services and works, or changes shall be made to existing processes.

To confirm the capability of processes to achieve the target quality of these services, KMG shall monitor (study and analyse) and measure these processes to evaluate:

1) availability of the necessary process steps, compliance with the requirements of regulatory documents and KMG’s internal documents;

2) duration of the processes (compared with the regulatory documents and KMG’s internal documents); deadlines for the individual process steps;

3) resource utilisation (equipment, human resources, machinery, etc.);

4) requirements for the skill level of process owners.

The heads of business units shall be responsible for monitoring and measuring processes.

In order to improve the risk management and corporate governance systems of KMG, the IAS shall conduct an internal audit of the financial and economic activities of KMG and its SDEs in accordance with the internal documents of the IAS (IAS Regulations, Internal Audit Manual, IAS Procedure).

The performance shall be measured by comparing the actual performance with the targets. At the same time, quarterly measurements can be made.

KMG follows the principle of prevention, rather than correction, of already detected nonconformities.

Preventive actions shall be planned and implemented when the analysis identifies risks and threats of not achieving the target or downward trends in the quality and QMS performance, which create a risk of potential nonconformity.

The need for preventive actions shall be determined on the basis of information and data on changes in the parameters and performance of processes, the proportion of nonconformities, wishes and suggestions of customers, QMS audit findings, results of the internal audit conducted by KMG’s IAS. Such information and data shall be collected and analysed, as described in Section 9.3 of this IMS Manual, in order to identify adverse trends that increase the risk of nonconformities.

Corrective actions shall be identified and implemented when an actual nonconformity is detected. The purpose of corrective actions is to eliminate the cause of nonconformity.

The need for corrective actions shall be determined on the basis of identified actual nonconformities, which is usually due to negative results obtained during the review, detection of nonconforming delivery or as a result of IMS audit.

The procedure for corrective and preventive actions is set out in the Process Audit Rules of JSC NC “KazMunayGas” (KMG-PR-147.8-59).

Preventive actions can also be developed on the basis of a risk analysis conducted in accordance with the Risk Identification and Assessment and Risk Management Method Selection Procedure of JSC NC “KazMunayGas” (KMG-RI-986.3-37) and the Standard Rules for Managing Production and Non-Production Risks at JSC NC “KazMunayGas” and in its Subsidiaries and Dependent Entities (KMG-PR-251.3-37). The Risk Management Department shall advise on the application of these guidance documents.

* 1. **Continual Improvement** (Clause 10.3 of ISO 9001)

Opportunities for improvement shall be identified by comparing the achieved quality indicator with the targets defined in the quality policy and objectives.

Quality indicators shall be determined by analysing information about customer satisfaction, deviations in business processes from established requirements, the results of internal audits and other data and information relevant to the quality indicator in accordance with Section 10 hereof.

Quality indicators shall be evaluated during KMG management review of MS.

If the quality indicator does not reach the set target, then KMG management review shall identify certain improvement measures to achieve the target.

If the quality indicator reaches the set target, then a new, higher target shall be set and new measures shall be identified to achieve it.

In addition to KMG management review, the business units responsible for the process implementation shall conduct an analysis for the opportunity for improvement.

Improvement measures are usually planned based on KMG management review and through the implementation of corrective and preventive actions.

Continual improvement measures are, as a rule, presented as corrective and preventive actions, and in the form of an IMS improvement plan for the current year.