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<td>First Issue</td>
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Operating Risk Management System Framework and Manual
Version 3.00

November 2013
Approved by: Patrick Allman-Ward, CEO Dana Gas
Owner: John Slater, Head of HSSE
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Operating Risk Management System Framework

Version 3.00
Purpose

ORMS provides a systematic, structured and demonstrable basis for managing Health, Safety, Security Environment (HSSE) asset integrity risks and for driving continual performance improvement in Dana Gas. ORMS comprises a series of managing processes that:

Cover the full suite of internationally recognised HSSE management system standards that provide the basis for delivering consistent world class performance at every site across the Group.

- Are risk based and value driven in accordance with the latest international standards for management systems and risk management.
- Contain minimum mandatory management system Requirements and supporting Group Standards Practices to be met by Business Units and Functions.
- Are presented in such a way as to be understood by all levels in the company.
- Shall be periodically monitored to ensure that risk management and performance improvement meet agreed objectives and targets.
- Shall be audited by internal and external parties at agreed intervals.
- Shall drive continuous improvement and risk reduction at all levels in the Group.
- Increasing levels of compliance with ORMS will lead to the driving down of risk to people, the environment, facilities and the reputation of the company.
The Board of Directors and Senior Management of Dana Gas believe that a clear set of behaviours and expectations of the entire workforce, including themselves will lead to reliable and profitable business.

This ORMS is developed to deliver value through:

- Every member of the workforce, be they contractor or employee, understand a clear set of behaviours and expectations of them and of what they can expect of the company they work for.
- Delivering confidence to all stakeholders, including Regional Authorities, Governments, Shareholders of the public listed partners, and potential future partners and investors that the activities of the company will be conducted in a manner that manages risk and is responsible, when measured by international, standards.
- Delivery of efficient and reliable activity sets, where we get HSSE right as early as possible in projects, and through a process of continuous improvement in our existing operations.
- The avoidance of incidents that destroy value and confidence of the workforce as well as stakeholders.

It is acknowledged worldwide in our industry that excellence in HSSE performance go hand in hand with excellence in business performance.
Activities that fall under the system include, but are not be limited to, acquisition of fields or assets, seismic evaluation, drilling, design and construction, commissioning, production, transmission, distribution, decommissioning, transportation and logistics.

ORMS shall apply to all employees, contractors, suppliers and stakeholders including communities.

It is recognized that HSSE performance improvement, as part of our Operating Culture, relies on all Exploration, Project, Operations and Functional processes working in harmony. The ORMS Manual addresses processes wider than HSSE where HSSE performance is dependent upon these wider processes.
Applicability

Where Dana Gas participates, or has an interest in a JV that it does not operate, Dana Gas shall consider whether the JV Company existing System provides a level of risk management and performance improvement equivalent to ORMS.

Sites/Facilities Operated by Dana Gas
ORMS shall apply to all projects, operations, sites and other asset/activities operated by or on behalf of Dana Gas.

Dana Gas Operated – Joint Ventures
Where Dana Gas operates a joint venture (JV), Dana Gas shall apply ORMS in agreement with the JV partner(s).

Non Operated – Joint Ventures
When Dana Gas has an interest in a JV that it does not operate, Dana Gas shall consider whether the JV Company existing System provides a level of risk management and performance improvement equivalent to ORMS.

If the JV company system does not provide an equivalent level of management of HSSE to the ORMS, then Dana Gas shall work with JV Company/Operator to adopt practices, standards and metrics that will maintain compliance with legal and regulatory requirements and to continuously drive HSSE risk management and performance to ALARP.
ORMS covers a number of Themes which define the hazards and risks that will be managed. Themes should not be considered in isolation but are closely linked to each other and frequently share the same risk management control measures.

Thematic risks shall be assessed and managed for all facilities, activities, products and services for which Dana Gas is partially or wholly responsible or accountable.

The term HSSE in this manual refers to all disciplines shown in the above diagram.
Roles, responsibilities and accountabilities are established to ensure that the Dana Gas ORMS is adopted at the local asset level and in all activities undertaken by the Company.

Local procedures developed at the asset level describing how risks are managed and how performance and compliance with the ORMS will be delivered.
Everybody who works for Dana Gas is responsible for continuous improvement of our HSSE performance. Together, we will continuously reduce our risks and impacts leading to improvement in health, safety and environmental performance with the goal of zero accidents and harm to people and minimizing our environmental impact.

In Dana Gas we are committed to:
• Operating our facilities in a safe, competent and efficient manner and caring for all those on our sites or impacted by our activities.
• The reduction of the negative environmental impacts of our operations through application of sound environmental practices and compliance with legislation, delivering reductions in waste, emissions and discharges in addition to the efficient use of energy.
• The inclusion of measurable HSSE targets in our business plans. We are all committed to meeting them as part our overall company performance which we report to the Board of Directors and shareholders.
• Compliance with all applicable national and international HSSE legal requirements and our company policies, standards and procedures.
• Treating our neighbours, customers, suppliers, employees, contractors and interest groups with respect and care.
• Improving the HSSE performance of our industry through the sharing of lessons and working with our partners, contractors, competitors and regulators.

Working safely, the protection of health and of the environment and complying with all applicable legal requirements is a condition of employment. Staff and contractors must not tolerate deviations from legal requirements, nor the existence of unsafe acts, behaviours or conditions. All who work for and with Dana Gas have the authority to stop work they consider to be of an immediate threat to life, health, property or the environment, or that violates legal requirements.

This Policy, along with the effectiveness of the ORMS, shall be reviewed annually, taking into account the views of our employees, neighbours, public interest groups and those who work with us.

Patrick Allman-Ward
Chief Executive Officer
Dana Gas
To transform the HSSE culture of Dana Gas to one in which every employee and contractor:

- Follows the lead of management who visibly demonstrate their commitment to the values set out in the Group HSSE Policy and are held to account for the HSSE performance and compliance of the business/department they manage.
- Understands that it is the goal of Dana Gas to eliminate injuries and harm to our workforce completely.
- Possesses a full understanding of what is expected of them and the Policies, Standards and Procedures that govern the job that they do.
- Is deemed competent to undertake the work for which they are employed through a clear competency framework and through assessment. Competencies required from contracting companies shall be clearly stated and audited as part of prequalification.
- Understands the implications, (personal, to their fellow workers and the business) of non-compliance with Policies, Standards and Procedures.
- Understands that it is a condition of their employment to work safely and to comply with the Group HSSE Policy with respect to unsafe conditions.
- Understands that is also an offence, that may result in termination, to retaliate against a person who has stood up for the values in the Group HSSE Policy.
- Understands how the contributions that they make in support of our Group Policies, Standards and procedures leads to the success of Dana Gas.

Risks are understood and managed by Leadership as well as the workforce. The Leadership of Dana Gas shall be clear on the risks associated with new ventures as well as in established Businesses.
Overview
ORMS consists of ten Elements that provide the managing processes that will be used to drive consistent risk-based, world-class HSSE performance at all levels and locations in the Group.

ORMS begins with the commitment of Leadership, and the empowerment of all members of the workforce to play a role as leaders in our drive towards no accidents and no harm to people and minimising our impact on the environment. It has risk management at its heart and is focused on assuring continual improvement in performance.

ORMS demonstrates to our stakeholders that HSSE risk management, as an integral part of our Operating Culture, is a core value and is fully embedded in the way we do business.
## Elements and Sub-Elements

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<td>Design, Construction &amp; Commissioning</td>
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<td>Facility Operation</td>
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<td>Inspection &amp; Maintenance</td>
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<td>Decommission</td>
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<td>Customer Focus</td>
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<td>Response &amp; Maintenance</td>
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<td>Management Review</td>
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Group Standards and Practices

Group Practices describe how we will operate and how we get things done. Compliance with Practices is essential for the continuous improvement of the company culture and efficiency of the company. Through common Practices we avoid multiple parties across the company executing the same activity in different ways, drive our ability to learn and share knowledge and for competence to be shared across assets.

Group Standards are numeric values or performance levels to be achieved in our activities throughout the life cycle of an asset or are engineering standards to which we will design and/or operate our facilities. Standards will often be drawn from International Authoritative bodies, however may also be developed in-house by Dana Gas.

Practices and Standards shall be approved according to the Delegation of Authority and rolled out across the Group on approval. All Standards and Practices shall be subject to a process of regular review and continuous improvement based on learning from without and out of Dana Gas.
Implementation

Existing Facilities
Following a comprehensive rollout of the ORMS Manual lead by members of the Senior Management of Dana Gas, Functions and Assets shall conduct gap assessments against Requirements using the ORMS gap assessment tool.

Functions and Assets shall agree their gap closure plans with the appropriate Executive Leader.

Gap closure plans shall demonstrate continuous improvement towards the Requirements of the ORMS over an agreed period of time.

Agreed gap closure plans shall be a key component of Annual Business Plans.

New activity sets and Projects
For New activity sets, including seismic, drilling, engineering design and build of new facilities, compliance with the ORMS shall be mandatory. Any dispensation from a Requirement for a new activity set shall be considered by the CEO who shall be presented with a clear description of the risk being accepted arrived at through a documented process of risk assessment by persons competent to take part in the assessment.

Risks shall be benchmarked against internationally accepted practices and risk criteria.

All gap closure plans shall be risk based meaning that they shall be prioritised to close gaps that are high functional and Asset Managers shall be held accountable for complying with agreed gap closure plans.
## Terms and Abbreviations

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<tr>
<td>ALARP</td>
<td>As Low As Reasonably Practicable. For a risk to be ALARP it must be possible to demonstrate that the cost involved in reducing the risk further would be grossly disproportionate to the benefit gained.</td>
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<tr>
<td>Aspect</td>
<td>Element of the organization’s activities, products or services that can interact with the environment (can be positive or negative).</td>
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<tr>
<td>Appraise</td>
<td>Define the business case for the project through acquisition of data to support progress of the project and to demonstrate that the project can be executed in-line with the Group Strategy and Policies. This may include the acquisition of data through seismic and/or appraisal drilling activities, as well as reservoir studies.</td>
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<tr>
<td>Asset</td>
<td>An organisational level below Business Unit.</td>
</tr>
<tr>
<td>Audit</td>
<td>A formal or official examination or verification that seeks to uncover systematic defects liable to impact HSSE performance and operating efficiency.</td>
</tr>
<tr>
<td>Bi-annual</td>
<td>Occurring twice a year.</td>
</tr>
<tr>
<td>BoD</td>
<td>Basis of Design. The Basis of Design is a narrative presentation of facts sufficiently complete to demonstrate that the project concept is fully understood and that subsequent design details and their ultimate presentation in the final drawings and specifications will be based on sound architectural and engineering decisions.</td>
</tr>
<tr>
<td>Business Unit</td>
<td>Logical element or segment of a firm representing a specific business function and a definite place on the organization chart under the domain of a GM/Country President.</td>
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<tr>
<td>Business Planning Cycle</td>
<td>Cycle that priorities ideas, assesses their relevance and potential, and documents the steps in the work you are going to do.</td>
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<tr>
<td>CAM</td>
<td>Contract Accountable Manager. Person responsible to ensure compliance with HSSE requirement during prequalification, tendering, award and execution of contracts.</td>
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<tr>
<td>CMMS</td>
<td>Computerized Maintenance Management System.</td>
</tr>
<tr>
<td>Competency</td>
<td>The skilful application of knowledge.</td>
</tr>
<tr>
<td>Competency Assurance System</td>
<td>A system designed to provide guidelines that will enable the management to set valid and reliable controls in place with a view to have reasonable assurance that their employees are well trained, assessed, verified and proved to be competent and can effectively perform all tasks assigned to them to the minimum competency level (standard) required at work location.</td>
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<tr>
<td>Contractor</td>
<td>An individual under a contractual relationship to supply Dana Gas or one of its subsidiary companies with goods and/or services.</td>
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<tr>
<td>Terms and Abbreviations</td>
<td>Definition</td>
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<tr>
<td>Critical Tasks</td>
<td>Critical tasks are important in preventing events with the potential to cause serious harm to people, the environment, asset and/or reputation and can reduce the impact of such an event. Critical tasks may be management or administrative based as well as functional.</td>
</tr>
<tr>
<td>Critical Assurance Tasks</td>
<td>A critical task that when completed satisfactorily provides assurance that SCE are suitable and have the desired integrity to perform their function.</td>
</tr>
<tr>
<td>Critical Role</td>
<td>Any job description with accountabilities for conducting HSSE critical activities.</td>
</tr>
<tr>
<td>Critical Information</td>
<td>Data, records or documents that are required as input or to support the management of SCE, HSSE critical controls and HSSE critical activities. Critical Information may be in paper or electronic format.</td>
</tr>
<tr>
<td>Decommission</td>
<td>Formal process to remove something from active status.</td>
</tr>
<tr>
<td>Define</td>
<td>The planning and basic design stage aimed at defining all project details in order to minimise the uncertainties during the Execute phase. Includes Front End Engineering Design (FEED).</td>
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<tr>
<td>Deviation</td>
<td>An approved non-compliance of the mandatory requirements of a procedure, standard or specification.</td>
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<tr>
<td>Element</td>
<td>A high level managing process that describes operating risk management.</td>
</tr>
<tr>
<td>Emergency Response</td>
<td>A series of appropriate actions and precautions in the event of a disaster.</td>
</tr>
<tr>
<td>Execute</td>
<td>To perform or carry out what is required. Includes detailed design, procurement, construction and commissioning activities.</td>
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<tr>
<td>FEED</td>
<td>Front End Engineering Design.</td>
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<tr>
<td>Fatal Accident Rate</td>
<td>The fatal accident rate is the number of fatal accidents per 1 million man hours.</td>
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<tr>
<td>Framework</td>
<td>A high level structure and representation of a system.</td>
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<tr>
<td>Gap</td>
<td>A Gap is a finding that an ORMS Requirement is not being fully met.</td>
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<tr>
<td>Gap Assessment</td>
<td>A process that identifies a Gap, i.e. those areas of ORMS that can or need to be improved. The initial formal evaluation of ORMS, part of the cycle of planning and implementation for continuous improvement.</td>
</tr>
<tr>
<td>Governance</td>
<td>Management framework within which project decisions are made.</td>
</tr>
<tr>
<td>Hazard</td>
<td>A condition or practice with the potential to cause harm to people, the environment, assets or Dana Gas’ reputation.</td>
</tr>
<tr>
<td>HSSE Case</td>
<td>A formal documented record that demonstrates that MAH and high HSSE risks across the asset integrity lifecycle have been systematically evaluated and are, or will be, managed to ALARP.</td>
</tr>
<tr>
<td>HSSE Critical</td>
<td>Important in preventing events with potential to cause serious harm to people, the environment, asset and/or reputation or which can reduce the impact of such an event. ORMS Elements, Sub-elements and Requirements are all HSSE Critical.</td>
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<tr>
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<td>Definition</td>
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</tr>
<tr>
<td>HSSE Critical Roles</td>
<td>Any job description with accountabilities for conducting HSSE critical activities.</td>
</tr>
<tr>
<td>HSSE MS</td>
<td>Health, Safety, Security and Environment Management System</td>
</tr>
<tr>
<td>HSSE Training Matrix</td>
<td>Training Matrix is a tool that can be used to track training and skill levels within an organization.</td>
</tr>
<tr>
<td>IDP</td>
<td>Individual Development Plan.</td>
</tr>
<tr>
<td>IGPA</td>
<td>Individual Goals and Performance Appraisal.</td>
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<tr>
<td>Incident</td>
<td>An unplanned event or sequence of events that results in undesirable consequences (e.g. Dana Gas loss of containment of material or energy).</td>
</tr>
<tr>
<td>Incident Investigation</td>
<td>The methodical examination of an incident; incident investigation activities are directed toward identifying the facts and circumstances related to the event, determining the causes, and developing remedial actions to control the risks.</td>
</tr>
<tr>
<td>Inherently Safe</td>
<td>A process is described as inherently safe if it reduces or eliminates hazards associated with materials used and operations, and this reduction or elimination is a permanent and inseparable part of the process technology.</td>
</tr>
<tr>
<td>Integrity</td>
<td>Integrity of an Asset is achieved when, under specified operating conditions, the risk of failure occurring which would endanger the safety of personnel, the environment, reputation or Asset value is tolerable and has been reduced to ALARP.</td>
</tr>
<tr>
<td>Integrity Assurance</td>
<td>All critical activities and tasks necessary to make sure that SCE are suitable, have the desired integrity and will continue to perform their function.</td>
</tr>
<tr>
<td>IPF</td>
<td>Instrumented Protective Function.</td>
</tr>
<tr>
<td>ISO</td>
<td>International Organization for Standardization.</td>
</tr>
<tr>
<td>Job Task Analysis</td>
<td>Process of determining which tasks each employee needs to perform and the standards at which he or she must perform them.</td>
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<tr>
<td>JV</td>
<td>Joint Venture. A partial ownership of an asset agreement between Dana Gas and one or more other companies.</td>
</tr>
<tr>
<td>Lost Time Incident</td>
<td>Incident resulting in personnel not being able to work as a result of their injury.</td>
</tr>
<tr>
<td>Major Accident</td>
<td>An ‘Uncontrolled Occurrence’ which leads to severe or catastrophic consequences to people, assets, the environment and/or Company reputation. The consequences may be immediate or delayed and may occur outside as well as inside the site. There will be a high potential for escalation.</td>
</tr>
<tr>
<td>MAH</td>
<td>Major Accident Hazard. A hazard that if uncontrolled has the potential to lead to a Major Accident.</td>
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<tr>
<td>Management of Change</td>
<td>A formal method to manage and control changes within an organization.</td>
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## Terms and Abbreviations

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<tr>
<td>Management System</td>
<td>A framework of processes, standards and procedures used to ensure that an organisation can fulfil all tasks required to achieve its performance objectives.</td>
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<tr>
<td>Occupational Health</td>
<td>The promotion and maintenance of the physical, mental and social well-being of the workforce.</td>
</tr>
<tr>
<td>OHSAS</td>
<td>Occupation Health and Safety Assessment Series.</td>
</tr>
<tr>
<td>Operate</td>
<td>Forms of business activities that are involved in managing Operations. Includes all operating facilities and activities.</td>
</tr>
<tr>
<td>Operating Culture</td>
<td>A shared, learnt system of values, beliefs and attitudes that shapes and influences behaviours and the manner in which we conduct our activities.</td>
</tr>
<tr>
<td>Operating Plan</td>
<td>Short term, highly detailed plan formulated to achieve tactical objectives.</td>
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<tr>
<td>ORMS</td>
<td>Operating Risk Management System.</td>
</tr>
<tr>
<td>Performance Standard</td>
<td>A statement, which can be expressed in qualitative or quantitative performance required of a system, item of equipment, person or procedure, and which is used as the basis for managing the MAH – e.g. planning, measuring, control or audit – through the life cycle of the installation. [UK PFFER Regs]</td>
</tr>
<tr>
<td>Performance Indicator</td>
<td>A standard which represents how well a process, activity, or function is achieving its intended purpose.</td>
</tr>
<tr>
<td>PHSSEA</td>
<td>Project HSSE Audit.</td>
</tr>
<tr>
<td>Policy</td>
<td>A set of principles set by the company (Dana Gas) with which personnel must comply.</td>
</tr>
<tr>
<td>Practice</td>
<td>A set of guidelines that establish how the company (Dana Gas) will operate.</td>
</tr>
<tr>
<td>PRM</td>
<td>Project Risk Management.</td>
</tr>
<tr>
<td>Procedure</td>
<td>A specified way to carry out an activity or a process (ISO 9001: 2008).</td>
</tr>
<tr>
<td>Process</td>
<td>Written description of how an activity is to be undertaken for functions other than HSSE.</td>
</tr>
<tr>
<td>Process Safety</td>
<td>Deals with the safety hazards of a facility, including P&amp;IDs, control information, equipment design data, process limits, materials of construction, safety system design, MSDS and relief design basis data.</td>
</tr>
<tr>
<td>PTW</td>
<td>Permit To Work. Written permission for specific work activities to be conducted within a specific area and for a designated time period.</td>
</tr>
<tr>
<td>QA</td>
<td>Quality Assurance. The plan, standards and methods that assure satisfactory work quality.</td>
</tr>
<tr>
<td>QC</td>
<td>Quality Control. The actions that assure acceptable quality.</td>
</tr>
<tr>
<td>QMS</td>
<td>Quality Management System. The policy, plan, procedures, standards and practices that assure satisfactory work quality in accordance with ISO 9001: 2008.</td>
</tr>
<tr>
<td>QRA</td>
<td>Quantitative Risk Assessment. A structured approach to assessing the potential for incidents and expressing this potential numerically.</td>
</tr>
<tr>
<td>Terms and Abbreviations</td>
<td>Definition</td>
</tr>
<tr>
<td>-------------------------</td>
<td>------------</td>
</tr>
<tr>
<td>RAM</td>
<td>Risk Assessment Matrix.</td>
</tr>
<tr>
<td>RBI</td>
<td>Risk Based Inspection. An RRMPT.</td>
</tr>
<tr>
<td>RCM</td>
<td>Reliability Centred Maintenance. An RRMPT.</td>
</tr>
<tr>
<td>Risk</td>
<td>The effect of uncertainty (both positive and negative) on people, the environment, stakeholders, those that Dana Gas interacts with and the assets we operate.</td>
</tr>
<tr>
<td>Requirement</td>
<td>A mandatory statement or task that is part of a Sub-element.</td>
</tr>
<tr>
<td>Risk Assessment</td>
<td>Formal and informal technique used to identify HSSE hazards and to develop controls to minimize, mitigate and/or eliminate them.</td>
</tr>
<tr>
<td>Risk Reduction</td>
<td>Actions taken to lessen the likelihood, negative consequence, or both, associated with a risk.</td>
</tr>
<tr>
<td>Risk Management</td>
<td>The process by which the results of a risk assessments are used to make decisions regarding risk reduction strategies.</td>
</tr>
<tr>
<td>RRMPT</td>
<td>Risk and Reliability Management Processes and Tools. A suite of tools and processes that optimize the approach to maintaining and inspecting SCE.</td>
</tr>
<tr>
<td>Select</td>
<td>Identification, evaluation and selection of preferred option for further evaluation and design. Includes concept design.</td>
</tr>
<tr>
<td>SCE</td>
<td>Safety Critical Element. Any structure, plant, equipment, or system the failure of which could cause or contribute substantially to a Major Accident, or whose purpose is to prevent or limit the effect of a Major Accident. SCE may also be referred to as HSE CE.</td>
</tr>
<tr>
<td>SIMOPS</td>
<td>Simultaneous Operations.</td>
</tr>
<tr>
<td>SMART</td>
<td>Specific, Measurable, Achievable, Realistic and Time-based.</td>
</tr>
<tr>
<td>Stakeholder</td>
<td>A person, group, organization, or system that affects or can be affected by an organization’s actions. Includes governments, shareholders, NGO’s, etc.</td>
</tr>
<tr>
<td>Standard</td>
<td>A basis for comparison; a reference point against which performance (and/or design integrity) can be evaluated.</td>
</tr>
<tr>
<td>Strategy</td>
<td>A plan of action designed to achieve a particular goal.</td>
</tr>
<tr>
<td>Sub-element</td>
<td>A managing activity that is part of an Element.</td>
</tr>
<tr>
<td>Target</td>
<td>Detailed performance requirement, quantified where practicable, applicable to the organization or parts thereof, that arises from the objectives and that needs to be set and met in order to achieve those objectives.</td>
</tr>
<tr>
<td>Workforce</td>
<td>Dana Gas and contractor employees working at a Dana Gas entity.</td>
</tr>
</tbody>
</table>
Element 1
Leadership

Governating Principle

Leaders provide clear direction, allocate resources and set the requirements to deliver the operating performance and culture for which they are accountable and then act in accordance with it.

1.1 Values and Culture
1.2 Commitment and Engagement
1.3 Budgeting and Resourcing
1.4 Accountability
1.5 Communication
1.1 Values and Culture

Principle

HSSE is a core business value as part of our operating culture.

Leaders take actions to develop and maintain an organisational culture in which the workforce understands what is expected of them and see the behaviours required demonstrated by management. The workforce understands and executes their right to openly communicate concerns to management.

Requirements

1.1.1 Management shall provide strong and visible leadership to promote a culture in which all employees share a commitment to HSSE management and shall set a personal example in day to day work by:

• Putting ORMS compliance matters high on the agenda of meetings.
• Highlighting the importance of operating risk management considerations in business decisions and in communication with stakeholders.
• Immediate and visible response and involvement in case of incidents or other abnormal events that have or may have resulted in HSSE impacts.
• Seeking internal and external views on HSSE hazards and issues and acting on these views.

1.1.2 Management shall jointly develop and discuss with their employees and contractors the performance improvement indicators, targets and standards. They shall:

• Verify that performance appraisals of staff and contractors include appropriate HSSE performance improvement targets.
• Participate in the review of all HSSE performance indicators.

1.1.3 Management shall define and communicate the desired operating culture and behaviours to the workforce; address behaviours that are inconsistent with the desired culture and encourage and recognise behaviours that support it.
1.1.4 Methods shall be in place to motivate staff to be aware of HSSE controls and to develop an HSSE culture within the overall operating culture of Dana Gas. This can include:

- The direct and personal interest shown by a supervisor in his subordinate’s work through immediate recognition or correction.
- Regularly updated HSSE performance data, available through intranet (process safety and personal safety metrics shall be reported separately.
- Training to improve HSSE behaviour.
- Incentive schemes should be based on proactive indicators rather than reactive indicators such as e.g. lost time incident (LTI) or fatal accident rate (FAR).

This Sub-element is supported by the following processes, Practices and Standards:

- Monthly Asset, Business Unit and Group HSSE Reports
- Dana Gas Group HSSE Policy and Strategy
- HR Processes for IGPA and IDPs
1.2 Commitment and Engagement

Principle

Leaders are visible and fully involved in implementation of ORMS. Their actions and behaviours create an environment in which the workforce are informed, involved and empowered to perform their roles in compliance with the requirements of ORMS.

Requirements

1.2.1 Management shall communicate HSSE Policy, Strategy, and ORMS Framework, Requirements and Standards to employees and contractors in addition to local requirements.

1.2.2 Management shall be able to demonstrate their commitment to and understanding of the values set out in the Group HSSE Policy and the requirements of ORMS through active personal participation in activities, such as training, site visits, risk assessments, industry/contractor workshops, conferences and inspection/audits.

1.2.3 Management shall evaluate the HSSE risks of all business decisions before final decisions are reached. The decisions shall be consistent with the HSSE policy and objectives and conflicts between HSSE and other business parameters shall be effectively balanced towards ALARP risk management.

1.2.4 Management shall set and regularly discuss and review with employees and contractors the progress made against specific HSSE targets.

This Sub-element is supported by the following processes, Practices and Standards:
- Monthly HSSE Performance Report to Management
- Monthly HSSE Performance Report to Employees
- Quarterly HSSE Performance Review with Executive Leadership Team
1.3 Budgeting and Resourcing

Principle

Leaders provide sufficient resources to manage HSSE and Operating risks and to deliver performance targets.

Requirements

1.3.1 Management shall demonstrate commitment to implementing ORMS by ensuring that the necessary manpower and financial resources are provided to implement prioritised gap closure plans and achieve agreed performance targets as part of the annual business planning cycle.

1.3.2 Management shall ensure that the results of periodic comprehensive HSSE reviews of Exploration, Project and Operational activities are incorporated in plans, objectives, targets, budgets and manpower resourcing for the business, assets, teams and individuals.

1.3.3 Sufficient resources (i.e. manpower and funds) shall be available to ensure the effective implementation / operation of ORMS and effective management of HSSE risks. This shall include resources available for:
   • Meeting objectives and plans to improve performance and compliance.
   • Prompt rectification of HSSE related deficiencies identified by Dana Gas, regulators and stakeholders.
   • Ongoing verification that Safety Critical Elements (SCE) and HSSE critical controls and systems function in accordance with the design operating intent and objectives.
   • Induction and ongoing training of employees to maintain and enhance competencies.

1.3.4 Staff levels / numbers shall be sufficient to meet the requirements of the annual ORMS compliance improvement plans and all HSSE critical roles and activities. The resource levels shall be periodically reviewed and agreed with line management and supervision who will ensure that account is taken of:
   • Actual and forecasted activity levels.
   • Actual staff competency / experience levels.
   • Existing manning philosophies and policies.
   • Unplanned and planned changes to HSSE critical positions and manpower levels.

This Sub-element is supported by the following processes, Practices and Standards:

- Group and Business Unit Finance and Planning Processes
- Annual ORMS Compliance Assessment Process
- HSSE Risk Management Practice
1.4 Accountability

Principle

Leaders create and support clear delegation and accountability consistent with the requirements of ORMS.

Requirements

1.4.1 Management shall provide employees with clearly defined and documented accountabilities as part of their job description. HSSE accountability and responsibility shall be documented as part of all job descriptions.

1.4.2 Management shall be fully aware of critical HSSE hazards associated with business activities under their control and ensure systems, processes, procedures, measures and standards are in place to manage these hazards.

1.4.3 Management shall be fully aware of the high priority areas for improvement as identified in ORMS assurance processes.

1.4.4 Management shall be personally involved in the improvement efforts arising from the formal senior management ‘Review’ of ORMS (see Element 10). They will promote the sharing of HSSE lessons learnt inside and outside their companies and locations.

1.4.5 Management shall set performance indicators, objectives, targets and standards which are aligned with performance contracts, balance scorecard and other reward mechanisms.

1.4.6 Business Unit Managers are accountable to the CEO for the implementation of the ORMS and approved and issued practices and standards in their business activities.

This Sub-element is supported by the following processes, Practices and Standards:

- HR Process for IGPA's and Job Descriptions.
- HSSE Risk Managerial Practices.
Leadership

1.5 Communication

Principle

Leaders create an environment in which the workforce is fully aware of what is expected of them and of the HSSE and Operating policies, Practices and Standards that govern the job that they do. The workforce is empowered to fulfil their roles and responsibilities and to freely communicate their concerns to management who demonstrably listen and respond appropriately.

Requirements

1.5.1 Through top down communication the workforce shall clearly understand the Business and HSSE Strategy and the role that they play in implementing the strategy.

1.5.2 Information on the HSSE Policy, Strategy, objectives, targets and performance standards shall be formally reported and available to shareholders and stakeholders, with a mechanism in place to collect feedback.

1.5.3 A documented HSSE communication and engagement plan shall be established to ensure that the workforce are aware of the ongoing progress towards meeting operating and HSSE objectives and targets, where intervention is required as well as developments and changes in key HSSE processes.

1.5.4 Management shall ensure that mechanisms (such as HSSE Committees) to focus attention on HSSE issues are in place, documented and clearly understood and supported by the workforce that:

• Stimulate effective two-way communication on HSSE issues between management and personnel.
• Engage all staff in the identification of hazards and implementation of HSSE management strategies and plans.
• Ensure workforce views are listened to and communicated to management.
• Provide HSSE advice to management and promotion of suggestions for improvement.
• Monitor measures taken for the prevention of accidents, their implementation and adherence.
• Organise inspections and audits focused on unsafe or environmentally unfriendly practices.
• Review reports of inspection and audits.
• Monitor follow-up to accidents and incidents that have occurred.
• Secure the co-operation of all persons in the promotion of HSSE.
• Advise on HSSE training, instructions and guidance of workers.
1.5  Communication Continued

1.5.5 Procedures for internal HSSE communication shall be in place and reviewed periodically; these shall describe mechanisms for encouraging two-way communication on HSSE issues within the organisation.

1.5.6 Procedures shall be in place for the management of external communications; these shall address HSSE issues raised by stakeholders and the registration and processing of public complaints.

1.5.7 A bottom up process shall be established and maintained to consult with the workforce to identify continuous risk reduction and performance improvement opportunities.

This Sub-element is supported by the following processes, Practices and Standards:

- Group Standard for HSSE Audit and Review
Element 2
Risk Management

Governing Principle

Continuous risk reduction through the identification and management of risk is a core value and skill set. Risk management shall be at the core of the way Dana Gas manages its business.

2.1 Hazard and Aspect Identification
2.2 Risk Evaluation and Assessment
2.3 Risk Reduction
2.4 Records and HSSE Case
2.1 Hazard and Aspect Identification

Principle

Hazards arising out of all mergers and acquisitions, facilities, activities, services, materials and products that may lead to harm to people, the environment and/or loss of property and reputation shall be identified and documented. Risks shall be assessed by persons competent to assess the activity to be undertaken.

Requirements

2.1.1 There shall be documented processes in place for the systematic identification of HSSE hazards that may either affect, or arise from business activities. The identification process shall:
- Provide for structured review using Group, industry and international standards.
- Include a process for updating the hazards and aspects registers as a result of changes to the operation, activity or products or findings from job hazard analyses, inspections, audits or incident analyses.
- Define clear roles and responsibilities for hazard and aspect identification at all levels of the organisation.

2.1.2 The identification of hazards shall be achieved through assessment by competent personnel who use established standards and procedures. The scope of the identification process shall:
- Include those business activities under the immediate control of Dana Gas or which it can be expected to influence.
- Cover the whole lifecycle of projects (e.g. from inception through to decommissioning and disposal) and consider routine, non-routine and emergency operating conditions.

2.1.3 There shall be a comprehensive and up to date register of hazards and risks for all Business Units, assets and projects which shall be subject to review and periodically updated at least every three months.

2.1.4 The methodology of assessment of risk will be dependent on the level of risk that may be posed, ranging from activities that are extremely unlikely to occur and/or result in negligible risk up to those that have the probability (however small) to result in catastrophic (Major accident hazard) incidents.

Note: Environmental impacts are referred to as ‘aspects’ in ISO 14001. An aspect may also be beneficial.

This Sub-element is supported by the following processes, Practices and Standards:
- Group Practice for HSSE Risk Management
- Group Practice for HSSE Management in Projects
- Group Practice for Security Risk Management
- Group Practice for Management of Change
2.2 Risk Evaluation and Assessment

Principle

An up to date register of assessed risks relating to all mergers and acquisitions, facilities, activities, services, materials and products is developed, maintained and available to the workforce. Risk assessment shall include estimating the probability and consequence of a harmful events and their combined impact.

Requirements

2.2.1 There shall be a documented process for the systematic assessment of HSSE risks for all mergers and acquisitions, facilities, activities, services, materials and products. The assessment procedures shall include a process for reviewing and updating the assessments i.e. at specified intervals and/or as part of the change control procedure.

2.2.2 All hazards identified shall be ranked in terms of risk and documented in a risk register.
   • The assessments shall be conducted by competent persons and solicit input from personnel directly involved with the risk.
   • A qualitative assessment of risk potential is adequate for most situations for which the concept of the Risk Assessment Matrix (RAM) shall be used.
   • In the comparison of more complex alternatives, or for the quantification of Major Accident Hazards (MAH) or high HSSE risks, it will be necessary to undertake a Quantitative Risk Assessment (QRA).
   • Quantitative risk acceptance criteria shall be determined at Group level.

2.2.3 In determining risk controls, in all cases consideration shall be given to risk reduction to achieve a level deemed ALARP, reflecting cost-benefit considerations and the concept of gross disproportion.

This Sub-element is supported by the following processes, Practices and Standards:
- Group Process for Business Risk Management
- Group HSSE Risk Management Standard
- Group Practice for HSSE Management in Projects
2.3 Risk Reduction

Principle

The principle of continuous risk reduction is at the core of managing HSSE risks within the business. Continuous risk reduction drives excellence in HSSE performance as well as an improvement in overall business performance.

Requirements

2.3.1 HSSE risks shall be reduced to ALARP during all stages of the asset integrity lifecycle (see Element 5). Emphasis shall be on the prevention of incidents through elimination of the hazards or failing this, reduction of hazards and lowering the probability and/or consequence of potential incidents. HSSE risks from New Projects shall be reduced to ALARP during all stages of the asset lifecycle (see Element 5). For existing facilities risks shall be continuously driven downwards towards the tolerable level of risk through risk reduction plans and drive the risk further down year on year.

2.3.2 Risk reduction measures shall:
   • Be commensurate with the risks and responsibilities for their implementation shall be clearly defined, understood and assigned to an individual or job position.
   • Be aligned with the risk control hierarchies for HSSE.
   • Be arrived at through involvement of persons technically competent to do so.
   • Set clear accountability for the risk reduction plan, responsibility for close out of measures as well as set clear completion dates.
   • Be reviewed and updated through inclusion in improvement program (e.g. HSSE Plans, HSSE gap closure action plans).

2.3.3 Performance standards shall be in place for all SCE, HSSE critical controls and critical activities. Performance standards shall be documented with parties responsible for delivering performance improvement clearly assigned.

2.3.4 Procedures for the recovery from scenarios with MAH or high HSSE risk or for tiered emergency response shall be in place and subject to regular testing, review and updating in light of actual incidents, analysis of emergency response drills and industry best practice (see Element 9).
2.3.5 Systems shall be in place to ensure that all recommendations and actions arising from hazard analyses and reviews are recorded and closed-out on time. Overdue actions shall be measured as a key indicator of the health of the system.

This Sub-element is supported by the following processes, Practices and Standards:

- Group Standard for HSSE Risk Management
- Group Standard for HSSE Management in Projects
2.4 Records and HSSE Cases

Principle

All Projects and Assets with MAH or high HSSE risk potential shall be supported by a documented case that demonstrates that these risks are managed to ALARP and that the Requirements of ORMS are embedded at the operating level. Operational HSSE cases are key tools for the management of risk and change on an operating facility.

Requirements

2.4.1 Business Units working with the Group Functional Teams shall identify and document those HSSE critical operations and installations which require a fully documented demonstration that MAH and high HSSE risks are being managed to ALARP.

2.4.2 HSSE Cases (see Element 5) shall be developed and available for drilling/workover, projects and operations defined as critical. The HSSE Case:
   • Development and implementation shall be led by the senior Manager of the asset (or Project Manager for the project) supported by the HSSE function lead in the line organisation.
   • Shall, through the Statement of Fitness, be signed off by the senior Manager of the asset (or Project Manager for the project) and verified by the Business Leader and Group HSSE Manager.
   • Shall accurately reflect current practice at the location or site and be reviewed per the HSSE Case review cycles (Element 2.4.4).
   • Shall demonstrate that SCE, HSSE critical controls and HSSE critical activities are in place and reduce risk to ALARP.
   • Shall specify performance standards for all SCE, HSSE critical controls and HSSE critical activities.
   • Shall be communicated to all levels in the line organisation with HSSE critical roles and responsibilities.
   • Shall detail, through the Manual of Permitted Operations (MOPO) incorporating Simultaneous Operations (SIMOPS), activities that must be stopped or restricted in given circumstance e.g. when SCE are not available, during adverse weather or when particular non-routine hazardous activities are being carried out.

2.4.3 Contractors managing HSSE critical activities shall have HSSE Cases or equivalent documentation of risk management demonstration in place. Bridging documents shall be in place linking contractor HSSE Cases and ORMS.

2.4.4 HSSE Cases shall be reviewed and updated every five years or following changes to people, plant, process, production, regulations or external developments that could increase MAH or high HSSE risks.

This Sub-element is supported by the following processes, Practices and Standards:

- Group Standard for HSSE Management in Projects
- Group Standard for HSSE Management in Operations
Element 3
Strategy and Planning

Governance Principle
The operating strategy and planning process is an integral part of the business planning process. Operating plans for the organisation address identified HSSE and operating reliability risks and deliver strategic and operational performance goals.

3.1 Policy and Strategy
3.2 Planning
3.1 Policy and Strategy

**Principle**

The HSSE Policies of the Dana Gas Group and of Business Units are supported by Operating Strategies which describe the long term goals of the Organisation and which support compliance with the Policy. The Strategy leads to risk reduction, continual performance improvement and compliance with ORMS.

**Requirements**

3.1.1 All Business Units shall have an HSSE Policy, which shall be consistent with the latest versions of Group HSSE Policy and shall:
- Be relevant and take account of the current and future nature and scale of the activities, products and services of the Business Unit.
- Take the interests of stakeholders into account.
- Be endorsed by the highest authority in the Business Unit, who is the custodian of HSSE policy, and is responsible for its periodic review.

3.1.2 The HSSE Policy shall be reviewed at least once a year as part of the formal ORMS review (Element 10). This review shall include the results of proactive consultation with stakeholders on Policy content and continued relevance of its intent, scope and adequacy.

3.1.3 Subordinate policies may be required for relevant HSSE subjects. These shall always be consistent with the Business Unit and Group HSSE Policy.

3.1.4 Contractor policies shall be audited for consistency with above policies and gaps addressed.

3.1.5 The HSSE Policy, subordinate policies and strategic objectives shall be communicated to all employees and contractors in a language and format that is easily understood. The policies shall be prominently displayed at facilities, work sites and offices.
3.1 Policy and Strategy Continued

3.1.6 Each Business Unit shall establish and maintain documented strategic HSSE objectives which shall be:
- Relevant to the activities, products and services.
- Consistent with the Dana Gas Group HSSE Policy and Strategy.
- Consistent with the Dana Gas Strategic HSSE objectives.
- SMART i.e. Specific, Measurable, Achievable, Realistic and Time-based.

This Sub-element is supported by the following processes, Practices and Standards:
- Group HSSE Policy and Strategy
- Business Unit HSSE Policy
3.2 Planning

**Principle**

Operating plans at all levels in the organisation are aligned to the strategic objectives of the Group and the Business Unit. These plans address identified risks as well as opportunities (and prioritised compliance gaps) and prioritised ORMS compliance gaps and are integral to the overall business planning process. Plans are designed to deliver continued HSSE risk reduction and performance improvement.

**Requirements**

3.2.1 Within the Business Planning Cycle, Business Units shall prepare an Annual Operating Plan. The Plan shall be integral to the Business Plan and shall demonstrate:

- Clear linkage to the Group and Business Unit HSSE Strategy.
- Clear linkage to the Business Unit or Group Function’s HSSE risk register with risk reduction controls taken from the register where appropriate.
- Clear linkage to the annual ORMS compliance assessment
- Clear linkage to the budgeting and funding process.
- Clear linkage to manning requirements and forecasts.
- Prioritised actions to access opportunities.

3.2.2 Plans shall have clearly identified actions, accountable parties for action completion and targeted completion dates. Where appropriate, plans shall be resource loaded to ensure that resources are made available to complete planned actions on time.

3.2.3 The process for the development of the Operating Plan shall include consideration of:

- Resources required and/or available, responsibilities and the realistic timetable to build and execute the Plan.
- Coverage of the Plan to include such activities as existing operations; modifications to existing facilities; acquisitions; new developments and projects; abandonment programmes; and exploration or development programmes.
- Present and anticipated future legislative and regulatory requirements, intolerable risks, technological options, and financial, operational and business requirements and views of stakeholders.
3.2 Planning Continued

3.2.4 Control mechanisms shall be established to address the risks to the delivery of the Plan and to assess performance against the Plan.

3.2.5 HSSE objectives and targets relating to the Plan shall be communicated to employees annually.

3.2.6 A process shall be established and maintained for the setting and review of HSSE and operating key performance indicators, objectives and targets at regular intervals to ensure continuous improvement.

This Sub-element is supported by the following processes, Practices and Standards:

- Group and Business Unit Business Planning Processes
- Group Practice for HSSE Risk Management
- ORMS Manual Compliance Assessment Tool
Element 4
People and Competency

Governing Principle

Clear organisation structures populated with competent people are essential in the management of our operating risks and to meet current and future business needs.

4.1 Organisation
4.2 Competency and Competency Assurance
4.3 Training
4.1 Organisation

Principle

The necessary organisation and resources to continuously increase levels of compliance with ORMS and the drive down risk shall be provided. Responsibilities at all levels are clearly described, communicated and understood. Organisational structures are designed to deliver business strategies through the deployment of competent people and adequate resources.

Requirements

4.1.1 Management shall appoint a management representative who shall have clearly defined roles, responsibilities, authority and resources for ensuring that ORMS Requirements are established, implemented, maintained and budgeted for in the Business.

4.1.2 All members of the workforce, including contractors, clearly understand to whom they report directly and the structure of the organisation in which they work.

4.1.3 Functional HSSE specialists shall have unhindered access to Business Leaders as well as their Functional Leadership.

4.1.4 The processes and associated accountabilities, roles and responsibilities for implementing ORMS Elements and Requirements shall be defined and documented at Group and Business Unit Level.

4.1.5 All employees shall have written roles and responsibilities that include their role in implementing the HSSE Policy and Strategy for the Business in which they work and the HSSE critical activities for which they are responsible and play a part.

4.1.6 HSSE critical roles and responsibilities within the organisation shall be defined and documented. Any contractor assigned an HSSE critical role either temporarily or on a long term basis shall be included in this list. The authority level for decision making of persons in these roles shall be defined.

4.1.7 HSSE critical roles and responsibilities shall be documented in HSSE Cases and in Company Job descriptions and indicated on organograms (Elements 2 and 5). These records shall include inputs and outputs necessary for control of the HSSE critical activities and performance standards and mechanisms for verification that the controls work.

1 HSSE Critical Role includes any job description with accountabilities for conducting HSSE critical activities.

HSSE Critical Activities are important in preventing events with potential to cause serious harm to people, the environment, asset and/or reputation or which can reduce the impact of such an event.
4.1 Organisation Continued

4.1.8 HSSE critical roles and responsibilities shall be periodically discussed and agreed with the employee as part of a formal appraisal process and the agreement documented.

4.1.9 Responsibilities for the technical integrity of HSSE critical facilities shall be clearly defined, including setting of performance standards, technical validation of standards and verification of compliance with standards.

4.1.10 The assigned roles and responsibilities for HSSE critical activities shall be discussed with, agreed with and understood by incumbent employees and contractors. They shall be communicated to relevant parties and be updated and revised in consultation with employees and contractors. This shall be managed as part of the IGPA process.

This Sub-element is supported by the following processes, Practices and Standards:

- HR Process for Job Descriptions
4.2 Competence and Competency Assurance

Principle

A competent workforce shall be developed with appropriate qualifications, skills and knowledge necessary to manage and reduce operational risks during all stages of the asset life cycle.

Requirements

4.2.1 A competency assurance system shall be established and maintained. The competency assurance system shall define the competence requirements for all HSSE critical tasks and associated performance standards. These shall include contractors where contractors fulfil one of these roles.

4.2.2 The competency assurance system shall clearly define:

- Accountability for the development, maintenance and execution of the competency assurance system (including the roles of management, employees and Business Functions).
- The process by which competence requirements are developed for existing and future HSSE critical roles. A competency profile shall define requirements for qualifications, relevant experience, knowledge and personal attributes and behavioural characteristics (including health and/or fitness requirements to perform HSSE critical tasks).
- The process by which persons are assessed before entry into an HSSE critical role and at regular intervals whilst in that role.
- The process by which competence gaps for HSSE critical roles are filled in a timely manner. This may consist of on the job training, supervision, formal training or other means.
- The approval process for the certification of competence assessors for HSSE critical roles.

4.2.3 Contracting companies employed for HSSE critical roles shall possess and be able to demonstrate application of a competency assurance system that meets the above requirements.

This Sub-element is supported by the following processes, Practices and Standards:


Group HSSE Competence Development Practice (to be developed)
4.3 Training

**Principle**

HSSE training shall be available for the development and maintenance of knowledge of all employees.

**Requirements**

4.3.1 All employees and contractors shall be made aware of their HSSE responsibilities during their induction, of which records shall be maintained. The induction shall include relevant information on HSSE hazards and risks associated with the job and the potential consequences of departure from procedures.

4.3.2 An HSSE training matrix shall be established and maintained for HSSE critical roles.

4.3.3 The HSSE training matrix shall document:
- All HSSE critical roles within the organisation.
- Mandatory HSSE training for new employees induction.
- Mandatory role specific training for all employees, including type, extent and frequency of training requirements.
- How progress against the annual training plan is monitored and reported to management.

4.3.4 HSSE critical training needs analysis shall be performed for all employees in HSSE critical roles and be part of the IDP Process. Training needs analysis shall be based on gap assessment of actual versus required competence requirements for all HSSE critical tasks.

4.3.5 HSSE training providers shall be competent to conduct training for HSSE critical activities. A process shall be in place to ensure that they are competent.

4.3.6 All employees shall have their HSSE critical training requirements documented on an annual basis as part of their Individual Development Plan (IDP).

4.3.7 All HSSE critical training conducted and certified shall be maintained in employee’s training records.
4.3 Training Continued

4.3.8 The effectiveness of the training plan for HSSE critical roles and responsibilities shall be periodically monitored and reviewed.

4.3.9 Completion of HSSE critical training (as a minimum) shall be monitored and reviewed as part of the year end performance appraisal of individuals.

This Sub-element is supported by the following processes, Practices and Standards:

- HR Process for development of IDPs.
- HR Process for Performance Appraisal.
Element 5
Asset Integrity Management

Governing Principle

Our assets have integrity and shall operate as designed for their assigned life (or greater) with all HSSE risks understood, controlled and driven down towards a level viewed by competent persons to be as low as reasonably practicable.

5.1 Project Management
5.2 Design, Construction and Commissioning
5.3 Facility Operation
5.4 Inspection and Maintenance
5.5 Decommissioning
5.1 Project Management

Principle

Projects for exploration and appraisal or design, procurement, construction, and commissioning of new or modified facilities shall be managed to prevent HSSE and reputational loss and to achieve competitive performance over the project lifecycle.

Requirements

5.1.1 A documented system shall be established and maintained for managing HSSE in projects over the six stages of the value realisation process including Appraise, Select, Define, Execute, Operate and Decommission with approval at each stage gate by an identified Gate Keeper.

5.1.2 A project risk register shall be established and maintained for all projects throughout the project life cycle. The project risk register shall define HSSE critical actions, provide a high level view that risks to Cost, Schedule, HSSE and Quality have been identified and that a Project Risk Management (PRM) Plan is in place.

5.1.3 A Project Execution Plan (PEP) shall be established and maintained which covers the entire scope of the project and details project specific HSSE critical actions as defined by the project risk register.

5.1.4 The PEP shall include the scheduling of Project HSSE Audits (PHSSEA) which will be conducted towards the end of each stage. The successful outcome of the PHSSEA will be a key factor in the approval decision by the Gate Keeper to allow the Project to move to the next stage. PHSSEA shall be conducted by parties independent of the project, the parties being agreed with the Group HSSE.Project Lead

5.1.5 HSSE governance shall be established for all projects to ensure accountability and lines of HSSE responsibility and reporting are in place.

5.1.6 HSSE Cases shall be developed at the outset of projects and shall be evolved to cover all stages and gates leading to testing/commissioning and handover to operations. HSSE Cases shall include technical HSSE risk studies that shall serve as the formal basis for demonstrating that MAH and high HSSE risks are managed to ALARP and meet all Group, Business Unit and regulatory requirements.
5.1 Project Management Continued

5.1.7 Projects resulting from temporary or permanent change of existing facilities shall in addition be subject to Management of Change requirements. Modification projects shall require a review of the Operations HSSE Case (see Element 5.3) and may be managed through a stage gate process. The decision to apply the stage gate process shall be taken between Functional and Business management.

5.1.8 A Quality Assurance and Quality Control (QA/QC) process shall be established and maintained for project design, procurement, construction, commissioning, start-up and handover.

5.1.9 Operations and maintenance expertise shall be integrated into projects from concept selection, definition of engineering scope, design, construction, commissioning through to handover of facilities.

5.1.10 Project interfacial and mutual risks with existing facilities shall be identified and Project Risk Management (PRM) shall be developed to manage these risks to ALARP.

5.1.11 Post project reviews shall be performed to identify lessons learnt for future projects.

This Sub-element is supported by the following processes, Practices and Standards:
- Group Practice for HSSE Management in Projects
- Group Practice for HSSE Management of Change
- Group Practice for Project Stage Gate Review
5.2 Design, Construction and Commissioning

Principle

The design and construction of new or modified assets shall be performed to prevent HSSE and reputational loss and to achieve competitive performance over the life cycle of the facility.

Requirements

5.2.1 The basis of design (BoD) shall be established following as a minimum Group HSSE Strategy, Policy, Practices, Standards and international best practice in the industry. The BoD shall consider new technology, business requirements, performance improvement, normal and abnormal operating conditions, start-up, shut down, ramp up, turn down and decommissioning.

5.2.2 HSSE and Design Philosophies related to HSSE engineering (including but not limited to Process Containment, Asset Integrity, Fire and Gas, Emergency Shut Down, Blowdown and Relief, Ignition Control, Active Fire Protection, Passive Fire Protection, Sour Gas Classification and Controls, Secondary Containment, Drainage and Emergency Response amongst others shall be developed during the Appraise Stage of the Project and shall be key documents to be complied with throughout design and operational readiness.

5.2.3 Assets shall be designed in accordance with inherently safe design principles.

5.2.4 Specialist contractors shall be responsible for design and shall ensure that all related HSSE case recommendations are incorporated where they are part of the demonstration of ALARP (e.g. recommendations made following challenges to the design).

5.2.5 A Design HSSE Case shall be developed and maintained during the Select (i.e. concept design), Define (i.e. FEED) and Execute (i.e. detailed design, procurement, construction and commissioning) stages of the value realisation process. The Design HSSE Case shall serve as the formal basis for demonstrating that MAH and high HSSE risks associated with Select, Define and Execute stages are managed to ALARP and meet all Group and regulatory requirements.

5.2.6 Only parties independent from the design process shall be responsible for developing Design HSSE Cases.

5.2.7 SCEs shall be identified as part of the design process. For each SCE; HSSE critical assurance tasks and performance standards
5.2 Design, Construction and Commissioning Continued

shall be established for design, procurement, construction and commissioning activities. Performance standards shall be developed to specify the functionality, reliability, availability, maintainability, survivability and interdependencies for all SCE.

5.2.8 All identified SCEs, HSSE critical assurance tasks and performance standards shall be added to the Asset Register and loaded into the Computerised Maintenance Management System (CMMS) during the Execute stage.

5.2.9 Assets and SCE shall be procured, constructed and commissioned in accordance with the BoD, HSSE critical assurance tasks and SCE performance standards.

5.2.10 Deviations from BoD, SCE performance standards, practices and procedures during procurement, construction and commissioning shall be managed through the Management of Change process.

5.2.11 Design operating envelopes shall be established which define the safe operating boundary of the asset and its SCE.

5.2.12 A commissioning, pre-start-up, handover and operating plan including a post start-up review shall be established and shall include full consideration of SCE.

5.2.13 For new facilities which are about to be handed over for and existing facilities which have been modified, the asset organisation shall:
   • Conduct documented pre-start-up reviews to confirm that construction is in accordance with design, all required verification testing is complete and acceptable, and all recommendations / deviations are closed and approved by the designated technical authority.
   • Establish and maintain procedures that ensure the documentation necessary to support operation, maintenance and inspection is complete prior to start-up (e.g. equipment manuals and all other drawings).
   • Develop and maintain procedures for start-up, operating, maintenance and shut-down with designated authorities defined.
   • Ensure that the facility is accepted, through a formal and documented process, as ready to operate by the agreed level of management.

This Sub-element is supported by the following processes, Practices and Standards:

- Group Practice for HSSE Management of Projects
5.3 Facility Operation

**Principle**

New or modified facilities shall be operated to prevent HSSE and reputational loss and to achieve competitive performance over the life cycle. Existing facilities shall be operated in a manner that drives down risk through continuous review, assessment and risk reduction actions.

**Requirements**

5.3.1 The asset organisation shall establish and maintain procedures that ensure:

- There is a clearly defined responsibility for asset ownership and there are designated technical authorities for the entire range of issues involved in managing technical integrity (e.g. mechanical, electrical, instrumentation / control, civil / structural, operation, marine, corrosion / erosion, fire protection, etc.).
- Those SCEs, activities and resources which are critical in the safeguarding of asset integrity shall be identified in the Operations HSSE Case.

5.3.2 An Operations HSSE Case shall be developed during the Execute stage prior to the commencement of operations for new facilities or during the Operate stage for existing facilities. The Operations HSSE Case shall be developed from the Design HSSE Case where available and shall serve as the formal basis for demonstrating that MAH and high HSSE risks during operations are managed to ALARP and meet all Group and regulatory requirements.

5.3.3 SCEs, HSSE critical assurance tasks and performance standards identified during the Operate stage shall be used for acceptance during commissioning and shall be maintained during the Asset’s Operate stage.

5.3.4 Assets shall be operated within the design operating envelope, in accordance with documented operating procedures and taking due account of manufacturers’ recommendation.
5.3 Facility Operation Continued

5.3.5 Any change (addition, removal and modification) to the Operations HSSE Case, SCEs (override, defeat and/or bypass), HSSE critical assurance tasks and/or performance standards shall be managed through the Management of Change process (Element 6.1).

5.3.6 Operations HSSE Case, SCEs, HSSE critical controls, HSSE critical assurance tasks and performance standards shall be reviewed and updated every five years or following changes to people, plant, process, production, regulations or external developments that could increase and or introduce MAH or high HSSE risks.

This Sub-element is supported by the following processes, Practices and Standards:

- Group Practice for HSSE Management of Projects
- The Practice for HSSE Management of Change
- Group Practice for Permit to Work (under development)
5.4 Inspection and Maintenance

Principle

Inspection and maintenance of operating facilities (including drilling and workover units) is critical to prevent HSSE and reputational loss and to achieve competitive performance over the life cycle.

Requirements

5.4.1 Procedures shall be established and maintained to ensure SCE shall be subject to integrity controls during the life cycle, which includes decommissioning, sale or disposal. The controls shall include:

- A transparent inspection philosophy and program that has been established and maintained to determine the condition of SCEs against performance standards. The inspection programme shall include verification (e.g. certification) of SCEs by independent third parties to ensure that they are fit for service.
- A system to ensure the reliability and availability of SCE and the testing and maintenance of these, including the management of temporary bypass, defeat or override.
- Regular maintenance in accordance with a maintenance management system which includes timely repairs of SCEs which have or are expected to fail inspection and function tests.

5.4.2 A CMMS shall be established and maintained to plan, schedule, resource and record the results of inspection and maintenance work.

5.4.3 The CMMS shall include elements applicable to predictive, preventative, breakdown/repair and fabric maintenance. The CMMS shall identify and be used to manage and report SCE deferments and backlogs.

5.4.4 A suite of Risk and Reliability Management Processes and Tools (RRMPT) shall be established to optimise the approach to maintaining and inspecting SCEs to meet business objectives. RRMPT shall include and combine Reliability Centred Maintenance (RCM), Risk Based Inspection (RBI) and Instrumented Protective Function (IPF) methodologies.
5.4  Inspection and Maintenance Continued

5.4.5 Each HSSE critical assurance task shall have an associated frequency derived from the RRMPT. All HSSE critical assurance tasks and their RRMPT derived frequencies shall be aligned with inspection and maintenance strategies, plans and programmes and shall be uploaded to the CMMS.

5.4.6 A risk assessment shall be carried out for all SCE deviations and further controls shall be established such that the risk is managed to ALARP.

5.4.7 All SCE backlog work shall be reported as a Non Conformance and shall be monitored by management as a key performance indicator.

5.4.8 SCE defects and failures shall be tracked and appropriate corrective actions put in place to eliminate or prevent future occurrence. SCE defects and failures shall be reported as incidents and shall be investigated and reported.

5.4.9 SCE, RRMPT, HSSE critical assurance tasks and performance standards shall be accessible from the CMMS and any changes shall be reflected in the CMMS.

5.4.10 A status report shall be available at any time to show the integrity status of the Asset. As a minimum, this report shall be updated daily.

This Sub-element is supported by the following processes, Practices and Standards:

- Group Practice for Permit to Work (under development)
- Group Generic list of HSSE Critical Tasks, Activities and Roles (under development)
5.5 Decommissioning

Principle

To plan for the decommissioning, sale or disposal of assets and the management (including remediation) of resultant HSSE risks.

Requirements

5.5.1 A Decommissioning HSSE Case shall be developed during the operational stage prior to the cessation of operations for decommissioning. The Decommissioning HSSE Case shall serve as the formal basis for demonstrating that HSSE risks during decommissioning (including any necessary remediation of soil and/or ground water contamination) will be managed to ALARP and will meet all Group and local regulatory requirements.

5.5.2 Used SCEs (whole or parts thereof) shall only be sold if it can be demonstrated from operation, inspection, maintenance and change records that the SCEs are fit for service.

5.5.3 SCE shall only be sold with original vendor manuals, full operation, inspection, maintenance and change records; certification/ recertification history; a current and valid third party certificate, a valid contract limiting or waiving liability and a warranty. Full legal and contract review is required as part of the sale process.

This Sub-element is supported by the following processes, Practices and Standards:

- Under development.
Element 6
Procedures

Governing Principle

To document, record and rigorously adhere to standards and procedures to achieve continuous improvement in our HSSE performance and compliance with the law.

6.1 People, Plant and Process Changes
6.2 Information Management and Control
6.3 Procedures
6.4 Safe Systems of Work
Procedures

6.1 People, Plant and Process Changes

Principle

A process shall be rigorously implemented to evaluate, approve, document and communicate temporary and permanent changes that could impact Dana Gas HSSE and/or reputational performance.

Requirements

6.1.1 Written procedures shall be maintained for the planning and control of all changes, in which the impact of the change shall be assessed to avoid adverse HSSE risks. The change control procedures will cover both permanent and temporary changes to:
  • People and organisation structure.
  • Infrastructure, equipment, processes and their controls.
  • Business processes.
  • Policies, standards and procedures.

6.1.2 Change control procedures shall document the evaluation and approval process, and the responsibilities and required competencies of those involved. The procedures shall provide for a comparative analysis and documentation of the HSSE risks of implementing the change and that of the implemented change. This shall include an evaluation of risks associated with the proposed change and measures to reduce the risks to ALARP.

6.1.3 An auditable Change Control Register shall be maintained in which all changes and change requests will be documented. The register shall be kept centrally or specific to operating locations/facilities as is deemed most suitable.

6.1.4 There shall be a regular management review of Change projects. Review schedules shall be agreed during Change preparation.

This Sub-element is supported by the following processes, Practices and Standards:

- Group Practice for HSSE Management of Change
- Group Practice for HSSE Risk Management
6.2 Information Management and Control

Principle

HSSE critical information, documents and records are developed, reviewed and maintained in a secure and readily available manner.

Requirements

6.2.1 A system shall be in place for the management and control of all HSSE information, documents and records, in paper and electronic format.

6.2.2 The controlled copy of HSSE documents and records shall be in electronic format, controlled and distributed through the intranet, extranet and internet. HSSE records which are private and personal shall not be distributed (e.g. health screening).

6.2.3 The system shall define control processes to manage the approval, publication, transmission, storage, change, retention and disposal of controlled HSSE information, documents and records. This shall include formal administration, custodianship for technical correctness and communication of correct use.

6.2.4 There shall be a local ORMS Manual that describes how the Business Unit complies with the Requirements contained in this document and other applicable standards. The Manual will assist employees and contractors in understanding how the Business Unit will meet the Group HSSE Policy and Strategy, by describing or referencing the processes, documents and standards used to manage HSSE.

6.2.5 The information contained in the local ORMS Manual shall be accessible to employees and contractors in the most effective format. The manual shall be updated and upgraded in line with requirements for continual improvement.

This Sub-element is supported by the following processes, Practices and Standards:

Group Practice for HSSE Management of Change
6.3 Procedures

Principle

All HSSE critical activities shall be executed by competent individuals according to set standards, procedures and work instructions.

Requirements

6.3.1 HSSE critical activities with their performance standards shall be documented in the HSSE Case (see Elements 2 and 5). Each HSSE critical activity shall be assigned to an accountable party who shall monitor and regularly report the performance of their activity(s) using the performance standards.

6.3.2 HSSE critical activities and tasks shall be conducted by competent individuals according to documented HSSE standards, procedures and work instructions. There shall be systems in place to provide verification of this.

6.3.3 HSSE standards and procedures shall be listed in ORMS. The appropriate standards and procedures shall be readily accessible to employees, suppliers and contractors, and shall be written in a way that users will understand. Business Units shall ensure that relevant HSSE procedures for their assets are communicated to suppliers and contractors.

6.3.4 A defined process for the development and review of HSSE standards, procedures, and work instructions shall be in place which includes employee involvement. This process must ensure that HSSE objectives are achieved, best practices are incorporated and legislative requirements are met.

6.3.5 Procedures shall be prepared in accordance with accepted standards and proven to be compliant with the job function and risks. Job task analysis, hazard analysis, risk assessments, job observations and accepted task performance standards shall be used as appropriate in developing the procedures.

6.3.6 Design and Engineering Practices, and accepted industry HSSE best practice and standards shall be consistently applied and variances shall be subject to a control procedure.
6.3 Procedures Continued

6.3.7 There shall be evidence, in addition to the formal review cycle, of standards, procedures and work instructions being reviewed in light of incidents, and that changes can and are initiated by operations personnel. Procedures shall be continually evaluated for accuracy, completeness and compliance.

6.3.8 Implementation of procedures shall include training of all parties with assigned roles and responsibilities, on the job performance evaluation and competency checks.

6.3.9 All operating procedures shall be developed from a competent understanding of the process equipment and should demonstrate involvement of the workforce in their development, maintenance and improvement.

This Sub-element is supported by the following processes, Practices and Standards:

- Group Standard for Development, Maintenance and Improvement of Operating Procedures
- Group Generic List of HSSE Critical Tasks, Activities and Roles (under development)
6.4 Safe System of Work

Principle

A safe system of work is a procedure that results from a systematic examination of a working process that identifies hazards and specifies work controls designed to reduce risks if incidents as a result of the work. A safe system of work includes the control of both routine and non routine tasks.

Requirements

6.4.1 A process shall be implemented and maintained to plan work, identify hazards, assess risk and put in place risk reduction measures to allow all work tasks to be completed safely and without leading to MAH events.

6.4.2 A Permit to Work (PTW) system shall be established and maintained to control certain types of non routine work that are potentially hazardous.

6.4.3 All work designated as routine and not managed under the PTW system shall be conducted according to a procedure that has been developed through risk assessment of the task(s) to be completed involving competent members of the workforce familiar with the task(s).

6.4.4 The PTW system shall provide clear identification of who may authorise certain jobs (and any limits to their authority) and who is responsible for specifying the necessary precautions.

6.4.5 The PTW system shall be used to manage concurrent activities (e.g. maintenance and operations) that may lead to hazardous situations unless adequately managed.

6.4.6 The PTW system shall be risk based and utilise tool box discussions to ensure that all workers understand the tasks to be performed, the associated hazards and the measures that shall be used to manage these risks (see Element 2).
6.4 Safe System of Work Continued

6.4.7 All employees and contractors shall receive appropriate training and instruction on the PTW system.

6.4.8 There shall be appropriate monitoring and auditing of the PTW system to ensure that the system works as intended.

This Sub-element is supported by the following processes, Practices and Standards:

- Group Practice for Permit to Work (under development)
Element 7
Contractor and Supplier Management

Governing Principle

Services, goods and equipment provided to Dana Gas meet documented HSSE requirements and do not adversely impact the risk profile of the Company.

7.1 Prequalification
7.2 Tendering and Selection
7.3 Mobilisation and Execution
7.4 Close Out and Demobilisation
7.1 Prequalification

**Principle**

Suppliers and contractors of HSSE critical services, goods or equipment are prequalified against a set of documented HSSE requirements which are compatible with ORMS.

**Requirements**

7.1.1 For HSSE critical contracts, HSSE risk shall be formally assessed prior to invitation to tender. HSSE pre-qualification, selection and retention criteria shall be established for all work performed by consultants, contractors and suppliers.

7.1.2 All tendering processes, from the initiation of prequalification shall have a clear documented Contract Accountable Manager (CAM) who shall ensure that HSSE requirements are given a high priority in the prequalification and tendering process.

7.1.3 Prequalification shall be based on a combination of a supplier's demonstrated capability to supply goods or equipment or provide services in line with Company requirements, technical capabilities, employee competence, financial viability, HSSE systems and performance.

7.1.4 A risk based approach shall be used in supplier/contractor prequalification. Suppliers and contractors undertaking high risk tasks or supplying HSSE critical equipment, goods or services and should have more mature systems that those conducting lower risk work.

7.1.5 Only suppliers and contractors meeting the required prequalification criteria shall be selected to bid for contracts.

7.1.6 In the unusual circumstance where no potential bidders can be sourced that meet the Company’s minimal technical requirements for an HSSE Critical contract or prequalification of suppliers is deemed not required by the CAM, a deviation from this Sub-Element must be requested in writing from the Group Technical Director demonstrating a full understanding of the risk inherent in the decision. The CAM must be able to demonstrate that controls can be put in place to meet all other relevant Requirements of this ORMS.

This Sub-element is supported by the following processes, Practices and Standards:

- Dana Gas Vendor Pre Qualification Form
- Dana Gas Group HSSE Policy
- Dana Gas Contracts and Procurement Manual
- Dana Gas Group Practice for Contractor Management (under development)
7.2 Tendering and Selection

**Principle**

HSSE critical services, goods or equipment contracts shall be awarded to competent suppliers and contractors that meet HSSE requirements. Suppliers shall be able to demonstrate their overall competency to carry out the work in compliance with ORMS Requirements.

**Requirements**

7.2.1 HSSE critical contracts shall have a clearly defined CAM who shall be deemed competent to conduct the technical evaluation of tenders and to verify technical information provided. The CAM shall be accountable for the impact that the supplier/contractor may have on HSSE performance.

7.2.2 A written contracting strategy shall be developed addressing issues such as:
- Dana Gas / contractor accountabilities,
- Roles and responsibilities of Dana Gas vs contractor,
- HSSE risks of the services to be supplied,
- Level of oversight of contractor/supplier,
- Dana Gas requirements of supplier / contractor making reference to policies, processes, procedures and standards,
- HSSE reporting required from contractor / supplier,
- Competency requirements of contractor personnel.

7.2.3 For every contract, prior to contract award, contractor HSSE competence shall be assessed against the HSSE risk. Tendering companies must show adequate understanding of the risks, have a plan to manage the risks and demonstrate ability and competence to manage the risks.

7.2.4 Contractors shall be able to demonstrate through documentation that their employees are competent to conduct the services for which they are to be contracted.

7.2.5 All sub contractors shall be declared by contractor and shall meet the same criteria as imposed on contractor.
7.2 Tendering and Selection Continued

7.2.6 Tender evaluation criteria shall be established prior to tendering and shall include HSSE critical performance requirements.

7.2.7 Any contractor / supplier working on a Dana Gas managed site shall work under ORMS including the Permit to Work System. Contractors/suppliers shall be made aware of their responsibilities under ORMS when working on site.

This Sub-element is supported by the following processes, procedures and standards:

- Group Practice – Contractor HSSE Management
- Group Standard – HSSE and Integrity Definitions
- Group Practice – HSSE Incident and Near Miss Reporting
- Dana Gas Contracts and Procurement Manual
- Dana Gas Delegation of Authority Manual
7.3 Mobilisation and Execution

Principle

Suppliers and contractors shall mobilise and execute the contract in a manner that does not adversely impact the HSSE or reputational risk profile of Dana Gas.

Requirements

7.3.1 Contracts shall clearly state HSSE requirements including, but not limited to:

- Contractor responsibility for complying with all applicable laws, regulations, and other legal requirements.
- HSSE policy, strategy, standards, procedures and local rules to which the contractor must comply.
- Contractor’s obligation to communicate HSSE requirements to their employees and those of sub contractors.
- Site boundaries and authorities for the purposes of Permit to Work.
- Requirement to report all work-related incidents and unsafe/unhealthy conditions and other matters (including injuries, illnesses, spills or other damage to the environment) to the designated Dana Gas representative.
- Requirement to inform Dana Gas of any breaches or potential breaches in compliance to HSSE Management System.
- The action to be taken in case of non-compliance with HSSE standards, terms and conditions including the provision to suspend or terminate the work.
- An HSSE inspection / audit requirement.
- The reward or penalties for HSSE performance.
- At least an annual formal HSSE (Management System) review for contracts running for two years or more.
- Contractor’s responsibility to discharge its contract obligations whether or not it subcontracts some or all of the work covered by the contract.

7.3.2 Prior to mobilisation the CAM shall ensure that the contractor/supplier is aware of all ORMS requirements, Dana gas Processes and Standards as well as the Dana Gas Rules for Staying Alive and that interfaces are understood.

7.3.3 The contractor / supplier and Dana Gas shall agree a risk register as a result of a risk assessment and ensure that controls are in place for credible risks. This assessment shall include risks associated with mobilisation, execution and demobilisation
7.3.4 Contractor mobilisation shall be conditional upon receipt of an acceptable HSSE Plan based on the level of HSSE risk and suitable interface arrangements to ensure compliance with ORMS. All high risk contracts shall have a documented demonstration as to how the risks are reduced to ALARP. For major contracts this demonstration can be in the form of an HSSE Case with bridging documents linking the contractors HSSE Management System with ORMS.

7.3.5 It is the explicit responsibility of the CAM to ensure the HSSE Plan is of an acceptable quality and that the senior most responsible contractor manager for the contract is committed to its execution. He should seek technical verification and input into and of controls where he is not competent to determine the adequacy.

7.3.6 As part of the kick off meeting Dana Gas shall review with the contractor the arrangements for supervision of work (be it by contractor or Dana Gas) ensuring that the span of control of any supervisor is practical and appropriate for the level of risk of work being supervised.

7.3.7 Prior to starting work all contractor and subcontractor employees shall receive a site specific HSSE induction/orientation which shall include the Dana Gas Rules for Staying Alive

7.3.8 During execution of services a documented process shall be followed for regular HSSE performance assessments of the contractor to ensure the implementation of risk unification measures (i.e. ALARP) as well as to verify through site visits that the contractor is conducting their services per the contract and the stipulated policies, Standards and Practices.

7.3.9 An HSSE inspection / audit programme shall be in place for all contracts to monitor effective implementation of the HSSE Management System and interfaces between contractor and Dana Gas.

7.3.10 All permanent and temporary changes to scope of work shall be risk assessed and adequate controls shall be put in place to manage the change.

7.3.11 Business Units shall be able to demonstrate that the HSSE Management System of contractors are subject to continuous improvement in the course of project execution.

This Sub-element is supported by the following processes, Practices and Standards:

- Group Practice – Contractor HSSE Management
- Dana Gas Contracts and Procurement Manual
7.4 Close Out and Demobilisation

Principle

Dana Gas HSSE requirements extend to the very end of a contract period and include demobilisation. Dana Gas shall work to continuously improve the performance of our contractors and industry through learning and sharing of the lessons.

Requirements

7.4.1 All affected personnel shall be aware of the risks and controls during demobilisation.

7.4.2 Demobilisation shall be effectively supervised by contractor and Dana Gas.

7.4.3 A Close Out report shall be prepared that is the formal method of providing HSSE feedback to Dana Gas management and for recording a concise history of the contract for future use. The report shall derive the majority of its content by extracts from factual documentation collected during the entire duration of the contract.

7.4.4 HSSE close out data shall be recorded and fed back into a Register of Approved Contractors or another easily accessible form for future reference. A formal record of HSSE performance shall be kept on each Contractor and be fully discussed with the Contractor’s management.

7.4.5 The CAM shall evaluate that practical lessons are learnt and communicated as part of a project close out process.

This Sub-element is supported by the following processes, Practices and Standards:

- Group Practice – Contractor HSSE Management
- Dana Gas Contracts and Procurement Manual
Element 8
Operating Responsibly

Governing Principle

Operations and Projects are managed such that legal compliance is always achieved and that the company takes into account stakeholder and community concerns and opinions in decision.

8.1 Legal Compliance
8.2 Social Responsibility
8.3 Customer Focus
Operating Responsibly

8.1 Legal Compliance

Principle

Full compliance shall be achieved with all applicable local and national legal requirements in addition to international and regional conventions and treaties.

Requirements

8.1.1 All applicable legal and regulatory requirements shall be identified covering all products, services, facilities and activities.

8.1.2 A register of HSSE regulatory and other legal requirements shall be established and maintained. A process shall be in place to ensure new HSSE regulatory and legal requirements are identified in a timely manner.

8.1.3 New HSSE regulatory and legal requirements shall be reviewed and incorporated into the development of ORMS through the management of change process.

8.1.4 Appropriate business controls shall be established to:
• Review all applications for HSSE licenses, certifications and approvals.
• Maintain contact with Regulatory Bodies for HSSE matters.
• Obtain all necessary HSSE licenses, certifications and approvals.
• Ensure timely renewal of HSSE licenses, certifications and approvals.

8.1.5 Current copies of all issued and obtained HSSE licenses, certifications and approvals shall be maintained in a secure manner and available for audit if required. Copies shall be provided to Group HSSE Manager.

8.1.6 Responsibilities for maintaining contact with appropriate local HSSE authorities shall be defined, established and maintained. This will include a clear description of all operations that are covered by HSSE legislation and the penalties for non-compliance.

This Sub-element is supported by the following processes, Practices and Standards:

📖 Group Practice for HSSE Management in Projects
8.2 Social Responsibility

Principle

Company activities shall be executed in such a manner as to deliver socially responsible operations and to provide a positive influence on the communities and societies in which we operate.

We shall enhance company reputation with key stakeholders as a good neighbour, partner, employer and investment of choice, and to engage key stakeholders on the issues that affect them.

Requirements

8.2.1 All HSSE and social responsibility risks associated with our products, facilities, services and activities shall be identified and managed by sustainable measures as far as practicable.

8.2.2 Public interest shall be proactively promoted by encouraging community development, and voluntarily eliminating practices that harm the public.

8.2.3 The public interest shall be included into Group decision making, and shall respect people, communities, and profits.

8.2.4 Key communities and stakeholders involved in or affected by our products, facilities, services and activities (including projects) shall be identified and relationships established and managed.

8.2.5 Relationships shall be built with key communities and stakeholders through early engagement, listening and responding to their expectations and concerns.

8.2.6 External commitments made through the engagement process shall be recorded and action shall be taken to meet them.

8.2.7 A process to receive communications from key communities and stakeholders shall be established and maintained. All responses shall be documented.
8.2 Social Responsibility Continued

8.2.8 Policies and processes that protect basic human rights and dignity shall be established that consider rights to life, liberty, security and freedom from slavery in line with relevant laws and constitutions.

8.2.9 Legal obligations that are designed to redress historical issues of inequality and employment imbalance shall be fully complied with.

8.2.10 All business shall be conducted in a manner that is protective of the environment and complies with all applicable environmental laws, regulations and standards, environmental permitting and reporting.

This Sub-element is supported by the following processes, Practices and Standards:


Under development
Operating Responsibly

8.3 Customer Focus

**Principle**

To establish and maintain transparent and sustainable relationships with our customers.

**Requirements**

8.3.1 Establish and maintain a process to make the workforce aware of the importance of maintaining customer relationships.

8.3.2 Establish and maintain a process to receive and respond to customer feedback on HSSE issues.

8.3.3 Establish and maintain a process for managing and assuring all supervised activities involved in the safe transport, storage and delivery of products to our customers.

This Sub-element is supported by the following processes, Practices and Standards:

- Under development
Element 9
Crisis and Emergency Response

Governing Principle

The reduction in the consequences of undesired events on the workforce, the public, the environment, company reputation and neighbouring facilities through the application of written plans and the actions of persons competent in crisis response.

9.1 Preparing for Emergencies
9.2 Response and Maintenance
9.1 Preparing for Emergencies

**Principle**

Through the application of risk assessment techniques, credible scenarios for tiered emergency response shall be identified and prepared for.

**Requirements**

9.1.1 Tiered emergency response organizations and plans shall enable responses to a range of undesired events from small events to catastrophic low probability events, country specific events to events that have a global/regional impact. Scenarios shall be based on the HSSE and business interruption risk assessments.

9.1.2 All persons expected to respond to crises, from field level up to and including Group resources shall be trained in the role(s) they are to perform in a crisis and deemed competent through drills ad/or accreditation as appropriate. Role descriptions shall be clearly written and communicated to those persons. A documented schedule of training and drills shall be in place at Group, business unit and asset levels.

9.1.3 Tiered Emergency Response Plans, and the controls held within these plans shall be readily available and communicated to all persons who require the information to be able to provide a response effect. All plans shall have a distribution list at the front of the document.

9.1.4 Facilities and equipment required for crisis management and response shall be identified, tested and available at all times. Crisis response rooms / facilities (including back-up facilities) shall be designated for the use of all teams above field response teams.

9.1.5 Business continuity and recovery systems shall be identified and incorporated in Facility, Business Unit and Group Plans.

This Sub-element is supported by the following processes, Practices and Standards:

- Dana Gas Group Emergency and Crisis Management Standard
- Group Practice for HSSE Risk Management
9.2 Response and Maintenance

Principle

A state of readiness to respond shall be maintained through review of plans, training and drills. Responses shall strictly adhere to the written plans and Group priorities.

Requirements

9.2.1 Response organizations shall adhere strictly to the Incident Command Structure laid out in the Group Crisis Management Framework.

9.2.2 All response efforts shall hold the following priorities:
   1. Human life
   2. Environment
   3. Buildings and facilities
   4. Reputation

9.2.3 Clear lines of communication between teams shall be documented and adhered to unless deemed appropriate by the designated team leader / commander.

9.2.4 A process shall be in place to regularly update plans and to learn lessons from every mobilisation, be it a real incident or drill. After every incident response the responsible leaders of the mobilized teams (On-Scene, Incident and Business as well as Group) shall conduct a lessons learnt review and record any actions to improve the response capability.

This Sub-element is supported by the following processes, Procedures and Standards:

Dana Gas Group Crisis Management Framework
Element 10
Performance and Assurance

Governning Principle

Verification of the effective functioning of ORMS is achieved through performance monitoring, audit and management review. Management constructively seeks out and receives bad as well as good news.

10.1 Performance Monitoring and Reporting
10.2 Non Conformance Reporting
10.3 Incident Management, Investigation and Reporting
10.4 Learning Lessons
10.5 Audit
10.6 Management Review
10.1 Performance Monitoring and Reporting

Principle

Performance indicators, objectives, targets and standards shall be established, monitored and communicated. Results shall be reported in a way that can be externally verified.

HSSE performance indicators, objectives, targets and standards are set to ensure progression towards the long-term goals of no harm to people, and assets and no damage to the environment.

Metrics are established to monitor and report delivery of HSSE targets and to promote continuous improvement.

Requirements

10.1.1 Documented performance standards shall be in place for all HSSE critical activities.

10.1.2 Performance against each target and metric shall be monitored and measured routinely and the results shall be trended and reviewed by management.

10.1.3 The staff appraisal system will be used to monitor the performance of personnel in:

- Compliance with standards, procedures and work instructions.
- Meeting planned HSSE targets.
- Undertaking their HSSE critical activities.
- Meeting SCE performance standards.

10.1.4 Appropriate records shall be retained to demonstrate conformance to the ORMS Requirements. As a minimum:

- The records shall be legible, identifiable and traceable to the activities involved with retention times defined.
- The records shall be stored and maintained to prevent loss and unintended use.
- The records which support the annual or other periodic HSSE performance data provided to Group HSSE function shall be kept in an auditable form.
- The records shall be used in HSSE improvement planning.

10.1.5 HSSE performance shall be regularly measured, recorded, tracked and reported against indicators, objectives and targets set in the HSSE Plan and in maintaining control of performance standards established for SCE, HSSE critical controls and HSSE critical activities. Process safety metrics shall be treated as distinct from personal safety metrics.
10.1 Performance Monitoring and Reporting Continued

10.1.6 Procedures shall be established and maintained for the identification and maintenance of HSSE performance records which shall include:

- Reports of audits and reviews.
- Audit tracking data.
- Situations of non-compliance and of improvement actions.
- Any incidents and follow-up actions.
- Any complaints and follow-up actions.
- Function tests, inspection, maintenance reports, etc. of SCE i.e. critical hardware providing a risk management function.
- Data obtained from monitoring as input to performance records.
- Results of emergency drills and exercises.
- HSSE training records.

10.1.7 Regularly updated performance indicators, objectives and targets shall be in place to measure the implementation of ORMS and to identify any shortcomings. These performance measures may be leading (e.g. unsafe act auditing, site inspections, self-assessments, progress on close out of audit action items), or may be lagging (e.g. statistics on incidents, deviations from permissible discharge levels etc).

10.1.8 Where equipment is required for performance measurement and monitoring, procedures for the QA/QC, calibration and maintenance of such equipment and for data handling and interpretation shall be established and maintained.

10.1.9 Management at Asset, Business Unit and Group levels shall be held accountable for the HSSE performance of their respective span of activity and shall ensure that the metrics and reports that they receive enable them to be aware of the hazards and conditions that could lead to performance degradation, including catastrophic loss.

This Sub-element is supported by the following processes, Practices and Standards:

- Group HSSE and Integrity Definitions
- Group Monthly HSSE Performance Report to Management
- Group Monthly HSSE Performance Report to Employees
10.2 Non Conformance Reporting

**Principle**

Deviations from ORMS shall be reported and corrective actions or preventative actions established to continuously reduce the level of non-compliance, which shall be achieved through regular assessment, audit, and the development and execution of compliance improvement plans.

**Requirements**

10.2.1 Procedures shall be established and maintained for defining responsibility and authority for:

- The handling and investigating of non compliance with HSSE legislation, regulations, policies, processes, procedures and standards.
- The identification of root causes and taking action to mitigate any consequences arising from such non-compliance.
- The initiation and completion of corrective and preventative actions in response to non-compliance.
- The confirmation of the effectiveness of corrective and preventative action taken.

10.2.2 Any corrective or preventative action taken to eliminate the causes of actual and potential non compliance shall be appropriate to the magnitude of the HSSE risks encountered.

10.2.3 To prevent non-compliance with standards and procedures a documented system for variance / change control shall be in place and:

- Employees shall be aware of the system.
- All occurrences of variance and non-compliance shall be documented, investigated and appropriately remedied.
- Any changes in the documented procedures resulting from corrective and preventative action shall be appropriately communicated and implemented.

This Sub-element is supported by the following processes, Practices and Standards:

- Under development
10.3 Incident Management, Investigation and Reporting

**Principle**

All HSSE and Operating incidents, near misses and deviations with significant actual or potential consequences shall be thoroughly investigated and reported and action shall be taken to avoid recurrence.

**Requirements**

10.3.1 Procedures for the reporting and investigation of near misses and incidents shall be established and maintained. A culture of openness in reporting all incidents and near misses shall be fostered.

10.3.2 Process failures and/or failures to operate SCEs in accordance with procedures and performance standards shall be treated as described in 10.3.1.

10.3.3 Incidents shall be investigated in a timely manner, with accountabilities assigned, and progress on recommended actions shall be monitored until close-out. To ensure that these investigations are carried effectively and thoroughly:

- Employees shall be aware of the incident reporting procedures and participate in incident investigations.
- Training shall be provided in incident investigation to appropriate staff.

10.3.4 Any corrective or preventative action taken to eliminate the causes of potential incidents shall be appropriate to the magnitude of problems and commensurate with the HSSE risks encountered.

10.3.5 Modification to documented procedures / standards resulting from corrective and preventative action shall be implemented and records kept of the change.

10.3.6 Lessons learnt from near misses and incidents shall be disseminated to all employees and stakeholders.

This Sub-element is supported by the following processes, Practices and Standards:

- Group Practice for HSSE Incident and Near Miss Reporting
- Group Practice for HSSE Incident Investigation
10.4 Learning Lessons

Principle

Continuous improvement in our operating practices, including HSSE practices shall be achieved through measures including the learning of lessons from incidents, deviations and non conformances from our own business and from the experience of others.

Requirements

10.4.1 Lessons learnt from incidents, audits and non conformance shall be disseminated to all employees and stakeholders.

10.4.2 All changes in documented procedures / regulations resulting from corrective and preventative actions shall be implemented and the change record kept.

10.4.3 A “Knowledge Base Process” shall be established and maintained to facilitate sharing of ORMS “Best Practices” and “Lessons Learnt”, e.g. systems, programs and procedures used to meet ORMS Requirements. Transfer of HSSE best practice and technology and lessons learnt is an essential component of the continuous improvement process and meeting HSSE strategic objectives.

This Sub-element is supported by the following processes, Practices and Standards:

Group Practice for HSSE Incident Investigation.
10.5 Audit

Principle

An audit plan shall be in place to review and verify effectiveness of ORMS and to identify failures and conditions that may lead to HSSE incidents. It shall include audits by competent auditors independent of the process or facility audited.

Business Units perform assessments and audits of HSSE performance and management processes to assure compliance and drive risk reduction and performance improvement.

Requirements

10.5.1 An audit plan and procedure shall be established and maintained for HSSE audits to be carried out in accordance with international standards and regulatory requirements. The audit programme shall include:
• Audits which cover the entire ORMS.
• External certification audits where appropriate e.g. ISO 14001, OHSAS 18001, etc.
• Independent audits by JV partners or other third parties.
• Specific activity or issue audits (e.g. facilities’/operations’ integrity, process safety, transport safety, drilling operations, occupational health, etc.).

10.5.2 A rolling (e.g. three year) audit plan shall be established which provides:
• HSSE audits of all facilities and operations on a fixed time scale appropriate to the facility and the risks associated with the activity or the operation.
• HSSE audits that cover operations and projects which have been contracted out.
• Specific detail for the first year of the plan regarding audit timing and duration, scope and team size and composition.

10.5.3 An effective control process shall be established to ensure that:
• Only personnel who have received adequate training and experience shall lead audits.
• Audit findings are recorded and prioritised and corrective actions are identified with assigned action parties and targeted completion dates.
• Audit findings and follow-up are tracked to final close-out.
• Best practices and lessons learnt are shared with all locations and/or assets as appropriate.
10.5 Audit continued

10.5.4 Audit procedures shall specify the requirements of audit teams in terms of competency, experience in subject area of the audit, and impartiality.

10.5.5 An audit focal point or department responsible for the audit process shall co-ordinate the appointment of competent HSSE auditors.

10.5.6 A competence assurance system shall be in operation to define auditor competence and ensure that relevant HSSE auditor training is provided. A suitable number of staff from different areas of the Business Unit shall be competent to carry out HSSE audits.

10.5.7 Contractors shall provide senior personnel to participate in Business Unit led integrated HSSE audits of the operations contracted to them.

10.5.8 Contractors shall have an HSSE Audit process and schedule for audits which includes audits carried out by independent auditors. Records of results of audits, findings and corrective actions shall be retained.

10.5.9 The results of audits and reviews, notably findings that indicate conditions that may lead to loss of life and/or serious environmental, health or security incidents shall be openly reported to senior management without reduction in clarity of the information and message.

This Sub-element is supported by the following processes, Practices and Standards:

□ To be developed
10.6 Management Review

Principle

Senior management at Group and Business Units shall regularly review the suitability and effectiveness of ORMS.

Requirements

10.6.1 A formal process shall be in place for top management to review the effectiveness and suitability of ORMS in managing HSSE risks and ensuring continual improvement in HSSE performance. The Management Review shall address but not be limited to:

- The need to change HSSE strategy and policies.
- The impact of significant organisational, location or activity changes.
- The HSSE concerns of employees, contractors and external stakeholders.
- The provision of adequate resources and competent personnel to achieve HSSE targets, objectives and strategies.
- Audit findings.
- Technical integrity.
- Verification of closure of corrective actions resulting from HSSE reviews, audits, self assessments, inspections and incident investigations.
- Review of legal compliance.

10.6.2 Management Reviews of ORMS shall take place on a bi-annual basis preferably within the Business Plan cycle. The Business Unit HSSE Department Manager shall assess the completeness and validity of the data used as the basis for submission of the Annual HSSE report to the Highest Authority (Chairman, CEO, etc.) in the Business Unit.

10.6.3 Performance against annual Group and Business Unit HSSE Plans shall be reviewed regularly e.g. quarterly, and the results of these reviews and identified remedial actions shall be documented and monitored until competition.

10.6.4 Improvement action items resulting from Management Reviews shall be tracked to completion, reporting overdue action items to Business Unit management at defined (e.g. quarterly) intervals.

This Sub-element is supported by the following processes, Practices and Standards:

- Group HSSE and Integrity and Definitions
- Group Monthly HSSE Performance Report to Management
- Group Monthly HSSE Performance Report to Employees