

Gap analysis: One MAESTRO vs. MAESTRO RC

CR-GR-HSE-001 One-MAESTRO HSE Expectations 01/03/2018 Rev 00	CR-RC-HSE-100 Rules for Implementation of the Health, Safety, Security, Societal Commitment and Environment Policy of the DGRC: RC MAESTRO Dec 2015 Rev 02	Comments / Gaps
PURPOSE This rule sets out expectations in line with the One-MAESTRO HSE Principles (DIR-GR-HSE-001). The directive, these expectations and the requirements defined in Group HSE rules and guides constitute One-MAESTRO, the HSE management system framework within the Group. One-MAESTRO addresses: - Industrial Hygiene; - Safety; - Environment.	This directive defines the Health, Safety, Security, Social Commitment and Environment (HSE) policy of the Refining & Chemicals division (DGRC). This directive consists of 14 basic principles which are applicable to all the entities of DGRC and activities under its control. The directive is consistent with the Safety Health Environment Quality Charter of the Total Group, the Code of Conduct, the guideline DIR-GR-SEC-011 "HSE management systems", and includes specific commitments of DGRC.	<ul style="list-style-type: none"> From 14 to 10 principles "Health" replaced by "Industrial Hygiene", but health is highlighted in Principle 3 and Expectations 01.04 and 04.05, and is included in the SHEQ Charter CH-GR-HSE-001 "Security" and "Social Commitment" not mentioned in One-Maestro but are also part of the CH-GR-HSE-001
SCOPE OF APPLICATION These expectations are applied to Group entities and affiliates, in accordance with their respective decision-making rules and without prejudice to the locally applicable legal and regulatory provisions, for the assets, activities, and sites in the Group-operated domain. For entities and affiliates without operations and without a HSE management system, these expectations apply as far as they are concerned by the risk. With regard to assets, activities and sites outside the Group-operated domain, that is to say operated by structures (joint ventures) in which the Group does not exercise control, the Group representatives in these structures will seek to promote the One-MAESTRO HSE expectations and endeavour to have similar expectations adopted.	Scope of application This Company Rule applies to all operated industrial sites, research centers and depots of the entities (1) of the Refining & Chemicals division in accordance with their respective rules, without prejudice of any legal or regulatory local obligations and to all entities for requirements related to product management. With regard to structures formed in association with third parties (joint ventures), the representative of Total or any of its subsidiaries within these structures, will seek to promote the principles laid down by this company rule. (1) As defined in GM-GR-DJ-001	
Principle 1 - Management Leadership and Commitment (from DIR-GR-HSE-001) "In accordance with the Group Charter, each entity adopts the HSE policy, sets its objectives, communicates them at all levels of the organization and allocates the resources necessary for their implementation. Management at all levels demonstrates exemplary conduct, rigor, vigilance and professionalism regarding HSE in all their activities. The visible commitment to HSE performance is part of the overall assessment of all managers. HSE performance is evaluated for everyone."	2 - Management leadership and commitment Each entity's management implements the HSE policy defined by DGRC. To this end he defines and maintains a HSE management system, sets objectives, communicates them at all levels of the organization and assigns the resources necessary for their implementation. Management at all levels demonstrates exemplary conduct, vigilance, and professionalism regarding HSE in all their activities and products. The visible commitment to HSE performance is part of the overall assessment of all managers.	
Expectation 01.01: The HSE Policy A local HSE policy and the organizational means and resources required to respect the Group SHEQ Charter and apply One-MAESTRO in the local HSE management system (HSE-MS) are in place.	Replaces Expectation: 02:01 Site Senior Management defines the site HSE policy in line with that of the Branch and considering the context of the site operation. Site Senior Management communicates the policy to all personnel, makes it available to stakeholders, and ensures its application and understanding at all levels of the organization. Site Senior Management assigns the organizational means and resources required to apply the HSE policy. Replaces Expectation: 05:04 Site Senior Management ensures an organization, tools and resources aimed at preventing risks of pollution, as well as limiting its extent and impact on the environment, is in place on the site installations. Replaces Principle 14 The DGRC conforms to the Voluntary Principles on Security & Human Rights (VPSHR). Its activities are guided with the first priority being the protection of people. Security risks and threats are subject to ongoing assessment. Security plans are tested and updated regularly.	<ul style="list-style-type: none"> No issues. Affiliates will be directed to the Group policies rather than the Branch, but not a major change NB: Detailed Security requirements were not part of the RC HSE Referential; specific rules related to security were intended to be published outside RC MAESTRO.
Expectation 01.02: HSE Vision, Strategy and Objectives The Group HSE vision and strategy are communicated to personnel and made available to relevant stakeholders. In support of the Group HSE vision and strategy, specific objectives and targets designed to eliminate or minimize HSE risks and impacts are set and associated action plans are established. The HSE objectives are the basis for defining the individual annual HSE objectives for each employee.	Replaces Expectation: 02:02 As part of its continual improvement approach, Site Senior Management sets HSE objectives and targets for the site designed to eliminate or minimize health, safety, security, societal and environmental risks and optimize safe product management. Line Management ensures associated action plans are established. Site Senior Management ensures the applicable HSE Policy and site HSE objectives are the basis for defining the individual annual HSE objectives for each employee.	<ul style="list-style-type: none"> The objective to "optimize safe product management" is not in this expectation of One Maestro, however risks related to product are mentioned (see definition of "Continual Improvement", "Critical", "Hazard", "Non conformity"; and expectation 01:07 Stakeholder Engagement) "Vision and strategy" are new and the expectation is aimed at the Group rather than the branch or sites
Expectation 01.03: HSE Management System, Documents and Records An HSE-MS in accordance with One-MAESTRO and applicable management system standards is implemented. A procedure is in place to ensure that associated documents and records are identified, effectively managed, regularly reviewed and updated as necessary.	Replaces Expectation: 02:03 Site Senior Management ensures the implementation of a documented HSE Management System (HSE-MS) in accordance with the HSE Policy of the DGRC. Site Senior Management ensures the HSE-MS and associated documents are effectively managed and regularly reviewed and updated to ensure their adequacy. Site Senior Management implements a process to determine and control any records as required to provide evidence that the HSE-MS is functioning as intended. The documentation procedure includes the identification, collection, indexing, filing, modifications and archiving of relevant documents. Any changes to the HSE MS and associated documentation are managed through an established management of change process, and modifications are communicated to all applicable personnel.	<ul style="list-style-type: none"> No issues. Focus moves from complying with Branch requirements to those of the Group. RC Maestro underlined requirement of MOC for any change in the HSE MS whereas CR-GR-HSE-001 doesn't, but MOC is detailed in expectation 03.02
Expectation 01.04: Roles and Accountabilities The authority, accountabilities and interfaces for managing, performing and monitoring activities that have an impact on HSE at all levels of the organization are clearly defined. All personnel are aware of their roles and personal accountabilities in the practice of their duties. Personnel demonstrate the strictest discipline in preventing accidents, in protecting health and the environment, whilst addressing other relevant stakeholder expectations.	Replaces Expectation: 02:04 Line Management ensures a job description is issued for each position in its organization. Job descriptions include the definition of HSE roles and accountabilities inherent to that position. Replaces Expectation: 02:10 The commitment, authority and relationships between those managing, performing and monitoring activities having a HSE impact at all levels of the organization are clearly documented. This includes responsibilities shared with one or more third parties (contractors and sub contractors). Replaces Expectation: 03:05 All site personnel demonstrate exemplary behavior in all aspects of HSE activities. Replaces Expectation: 03:08 Site Senior Management appoints a competent HSE function manager who is accountable for managing the HSE activities of the site. Replaces Expectation: 13:03 Site Senior Management appoints appropriate representatives who are accountable for oversight regarding communication with external stakeholders.	<ul style="list-style-type: none"> No issues CR-GR-HSE-001 doesn't require HSE function manager, since new rule not focused on the means.

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<p>Expectation 01.05: HSE Committees One or more HSE committees are established that function collectively to improve performance, ensure the implementation of the HSE-MS, monitor corrective and preventive action plans, and ensure communication of the resulting information to all relevant stakeholders.</p>	<p>Replaces Expectation: 02:06 Site Senior Management establishes an HSE Executive Committee that ensures the effective implementation of the HSE-MS. The site sets up a network of specific HSE Committees suited to its organization. These HSE committees ensure the proper monitoring of corrective and preventive actions, and ensure effective communication of the resulting information to internal and external stakeholders.</p> <p>Replaces Expectation: 02:13 Site Senior Management establishes an HSE Committee that ensures the effective implementation of the HSE-MS (e.g. for France, CHSCT; for Belgium, CPBW; for the US, Joint Health and Safety/Loss Control Committee). These HSE committees are a network of people coming from all levels of the organization and ensure proper monitoring of corrective and preventive actions.</p>	<ul style="list-style-type: none"> • No issues • CR-GR-HSE-001 doesn't require "HSE Executive Committee" and "HSE Committee": it's the entity accountability to determine the appropriate number of HSE committee
<p>Expectation 01.06: Leadership Management HSE leadership and engagement are actively demonstrated. HSE programs are implemented: - Safety tours: to reinforce HSE messages and to seek feedback from employees and contractors; - STOP CARD: to stop any situation that has the potential to harm people, the environment and/or assets; - Recognition and sanction: to recognize and improve HSE performance.</p>	<p>Replaces Expectation: 02:07 Senior Management demonstrates a visible commitment to the health and safety of the people, safe product management, and respect for the environment and to the safeguarding of assets. Line Management actively promotes the HSE policy, objectives and performance commitment.</p> <p>Replaces Expectation: 02:08 Site Senior Management implements a site visit program for managers that cover HSE aspects in order to give greater impact to the messages concerning the site HSE policy, the objectives and its performance and establish a dialog with the personnel.</p> <p>Replaces Expectation: 02:09 Senior Management demonstrates its visible commitment through exemplary behavior. Senior Management ensures an HSE Culture is established to promote HSE awareness at all levels in the organization.</p> <p>11:04 ... Site Senior Management implements a system to recognize safe behaviors and practices, and to sanction inappropriate behavior.</p> <p>3.3 - Principle 3: Operational Accountability All employees demonstrate the highest operational discipline to avoid incidents and minimize any health, safety and environmental impact and report without delay any dangerous situation and any divergence from current safety rules.</p>	<ul style="list-style-type: none"> • STOP card promotion is new • RC Maestro required to report whereas CR-GR-HSE-001 requires to intervene • CR-GR-HSE-001 doesn't mention "HSE culture", but a new CR-GR-HSE-106 "Developing HSE Culture" is scheduled for 2019.
<p>Expectation 01.07: Stakeholder Engagement Relevant stakeholders are identified and mapped. Open, transparent and structured dialogue is established and maintained in order to provide these stakeholders with information regarding the relevant HSE risks.</p>	<p>Replaces Expectation: 13:01 Based on the context of its operation, Site Senior Management identifies all applicable external stakeholders.</p> <p>Replaces Expectation: 13:04 Site Senior Management establishes and maintains a structured dialogue with external stakeholders in order to provide them with information regarding the site's activities and products, to listen to their concerns and to provide an appropriate response.</p>	<ul style="list-style-type: none"> • No issues • CR-GR-HSE-001 doesn't insist on "to listen to their concerns and to provide an appropriate response" but it will be detailed in the future CR-GR-HSE-412 "Societal Management"
<p>Expectation 01.08: HSE Communication Whilst respecting language and cultural aspects, an HSE communication system is established that keeps relevant stakeholders regularly informed regarding HSE issues. This includes alerts related to relevant HSE events, and notification as required following near-misses and incidents. The effectiveness of HSE communication is regularly assessed.</p>	<p>Replaces Expectation: 02:11 Site Senior Management establishes an effective HSE communication system to keep internal and external stakeholders regularly informed regarding HSE and societal issues. Senior Management regularly assesses the clarity of HSE communication. Language barriers are considered to ensure effective communication occurs. [FR reference version indicates « Les difficultés de langage et de culture doivent être pris en compte pour garantir une communication efficace. »]</p> <p>Replaces Expectation: 12:04 Site Senior Management ensures the results of the Management Review are communicated to applicable internal and external stakeholders and the branch when appropriate.</p>	<ul style="list-style-type: none"> • RC Maestro: Cultural barriers not specified in EN version but specified in FR one, that is the reference.
<p>Principle 2 - Compliance with Laws, Regulations and Group Requirements (from DIR-GR-HSE-001) "In all activities, the entities act in compliance with applicable laws, regulations, relevant industry standards, Group's voluntary commitments, and other specific principles and requirements at the Group and branch level."</p>	<p>Replaces Principle 1: Compliance with Laws and Regulations In all activities, DGRC acts in compliance with applicable laws and regulations as well as with the relevant industry standards and the principles and requirements specific to the Group and the Branch.</p>	<ul style="list-style-type: none"> • Added: Group's voluntary commitments [from which Responsible Care® commitment for RC]
<p>Expectation 02.01: Compliance Within the HSE domain, a process is established to identify, monitor and comply with the applicable: - Legal, regulatory requirements; - Voluntary commitments; - Contracts; - Industry standards; - One-MAESTRO. Identified requirements are communicated to relevant personnel.</p>	<p>Replaces Expectation: 01:01 Site Senior Management establishes a system to monitor, to communicate to all personnel and stakeholders and to enforce the applicable legal and regulatory requirements, the principles and requirements specific to the Group and the Branch, the applicable industry standards and to anticipate future laws and regulations.</p>	<ul style="list-style-type: none"> • No issues • RC Maestro underlined the importance to anticipate future laws and regulations whereas CR-GR-HSE-001 doesn't
<p>Expectation 02.02: Authorizations for Activities No activity is undertaken without first obtaining the necessary official authorizations. All Group activities are performed in compliance with the conditions specific to these authorizations.</p>	<p>Replaces Expectation: 01:02 Site Senior Management ensures no activity is undertaken without obtaining the necessary authorizations, and that all of the site activities are performed in full compliance with the conditions specific to these authorizations.</p>	<ul style="list-style-type: none"> • No issues
<p>Expectation 02.03: Contacts with Authorities Regular contacts are established and maintained with national and/or local authorities that have responsibilities for HSE. Participation in consultations, public hearings or other similar initiatives regarding future regulations is organized when appropriate.</p>	<p>Replaces Expectation: 01:03 Senior Management establishes and maintains close contact with national and local authorities that have responsibilities for HSE. When applicable, the site assists the authorities in drafting laws and regulations participation in consultations, public hearings or other similar initiatives.</p>	<ul style="list-style-type: none"> • No issues
<p>Expectation 02.04: Derogation to Group Requirements Any deviation from a Group HSE expectation or requirement is the subject of a prior written and reasoned authorization from the designated internal authority, following consultation with the competent HSE authority.</p>	<p>Replaces Expectation: 01:04 In cases of non-compliance with Company Rules and Industrial standards, a formal derogation process is applied.</p>	<ul style="list-style-type: none"> • It means that in the future HSE will only deliver an opinion, the entity being accountable of the decision (process under revision with RC/SG/GOUV).
<p>Principle 3 - Risk Management (from DIR-GR-HSE-001) "For any activity the hazards to which people, the environment and assets are exposed are systematically identified, the associated risks assessed and the measures for reducing them defined and implemented. The risk level and risk reduction measures are periodically reassessed, at a minimum with each change of an activity or a process. In particular, the potential risks to human health, the technological risks and the potential significant environmental impacts are managed as per this principle."</p>	<p>Replaces Principle HSE 04 – Risk management For all activities, for all processes or products, the hazards to people, environment and assets are systematically identified. Their associated risks, especially those pertaining to loss of integrity of installations, are evaluated and measures to reduce these risks identified and implemented. The risk levels and risk reduction measures are periodically reassessed, at least upon every modification of activities or processes. Any development of a project or launch of a product is undertaken upon full life cycle risk assessment.</p>	<ul style="list-style-type: none"> • CR-GR-HSE-001 underlines "the potential risks to human health", "the technological risks" and "the potential significant environmental impacts" • CR-GR-HSE-001 mentions "Full life cycle risk assessment" in expectation 03.01 • RC Maestro reference FR version more complete for risk reassessment « Le niveau de ces risques, ainsi que les mesures pour les réduire sont régulièrement réévalués, en particulier à chaque modification d'activité, de procédé, de produit ou de processus.

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<p>Expectation 03.01: Hazard Identification and Risk Assessment Hazards are identified, and risks are systematically assessed using an appropriate method. Decisions to implement risk controls and for the acceptance of residual risk are appropriate to the nature and the magnitude of the risk. Action plans are documented and monitored. A HSE reference study is conducted prior to acquisition of assets or the commencement of any activity, and at regular intervals throughout the asset's lifetime. Any development of a project or new technology is undertaken upon completion of a full lifecycle risk assessment. A global view of the risks and their impacts on operability is maintained, taking into account the evolving HSE context.</p>	<p>Replaces Expectation: 04:01 Site Senior Management ensures all HSE risks are systematically identified, evaluated and controlled to an acceptable level. This includes the cumulative effect and the impacts on the operability of the site. Personnel involved in this process are adequately trained and competent. All operations undergo a risk assessment aimed at identifying opportunities for application of adequate risk reduction measures. Site Senior Management ensures preventive measures are implemented to reduce to an acceptable level those HSE risks not directly related to the site's activities. Replaces Expectation: 05:01 Senior Management ensures an Environmental Baseline Study (EBS) is systematically performed on every new site prior to acquisition or the commencement of any work. A similar study is performed at the final abandonment stage. Replaces Expectation: 05:02 Senior Management ensures an Environmental Impact Assessment (EIA) is performed at the early stages of any project to identify any significant impacts. Replaces Expectation: 06:01 Site Senior Management establishes a system to ensure the risks to which personnel are exposed are quantified and regularly measured. Site Senior Management works to reduce risks through elimination, substitution, engineering or administrative controls. Replaces Expectation: 13:02 Site Senior Management ensures a self assessment of the site socio-economical stakes is conducted. Replaces Expectation: 03:12 Each site develops a system for the identification and marking of all piping and process equipment. This system includes subsurface piping, cables, and abandoned or obsolete equipment.</p>	<ul style="list-style-type: none"> • Global risk view and impacts on operability required in CR-GR-HSE-001 but not included in RC Maestro • RC Maestro was more detailing the various types of risk assessments and activities, but CR-GR-HSE-001 applies to all HSE aspects. • Identification and marking not specifically required in CR-GR-HSE-001, but their need should come out of the risk assessments.
<p>Expectation 03.02: Management of Change HSE aspects are factored in at all levels of the decision-making process, including decisions taken regarding technological or organizational changes, whether temporary or permanent. Necessary measures are defined and implemented in order to manage associated risks.</p>	<p>Replaces Expectation: 02:05 All changes to the established organization are documented and communicated to applicable personnel. All affected documentation is updated. Replaces Expectation: 04:05 Site Senior Management ensures risks associated with new installations, and modifications to existing installations (including temporary modifications) are identified, evaluated and effectively managed to minimize their HSE and societal impacts. Site Senior Management ensures risks are periodically reassessed at specified intervals and as change occurs. Replaces Expectation: 04:06 Site Senior Management ensures risks associated with changes to equipment, materials, procedures, technology, chemicals, organization and safe operating limits are documented and managed using a formal management of change system.</p>	<ul style="list-style-type: none"> • No issues • RC Maestro scope of MOC is more detailed (e.g. includes chemicals and safe operating limits), but it will be detailed in the future CR-GR-HSE-302 "Management of Change"
<p>Expectation 03.03: Operational Readiness Review Based on assessed risks, operational readiness reviews are conducted: - Prior to start up for new or modified activities; - The restart of existing or modified installations; - The restart resulting from emergency situations. These reviews confirm that risks associated with the start/restart are effectively managed.</p>	<p>Replaces Expectation: 03:07 After operations are disrupted by emergency situations, personnel with appropriate knowledge and expertise assess the condition of equipment, processes and materials to determine operational readiness.</p>	<ul style="list-style-type: none"> • CR-GR-HSE-001 requires an Operational Readiness Review 1) Prior to start up for new or modified activities and 2) Prior the restart of existing or modified installations • RC Maestro required only 3) following an emergency situation.
<p>Expectation 03.04: Risk Controls Adequate risk controls are implemented and reassessed at specified intervals, throughout the asset lifecycle, and as changes occur.</p>	<p>3.4 - Principle 4: Risk Management For all activities, for all processes or products, the hazards to people, environment and assets are systematically identified. Their associated risks, especially those pertaining to loss of integrity of installations, are evaluated and measures to reduce these risks identified and implemented. The risk levels and risk reduction measures are periodically reassessed, at least upon every modification of activities or processes. Any development of a project or launch of a product is undertaken upon full life cycle risk assessment. Replaces Expectation: 06:01 Site Senior Management establishes a system to ensure the risks to which personnel are exposed are quantified and regularly measured. Site Senior Management works to reduce risks through elimination, substitution, engineering or administrative controls.</p>	<ul style="list-style-type: none"> • No issues • CR-GR-HSE-001 doesn't detail but it concerns all the risks as mentioned in the header of Principle 3 - Risk Management • RC Maestro requires Reassessment at specified intervals only in the header of Principle 4: Risk Management
<p>Expectation 03.05: Critical task analysis Tasks are evaluated to determine their HSE criticality. Tasks that are deemed critical are identified and analyzed, and measures are taken to reduce the task's criticality, including when necessary the development of specific procedures.</p>	<p>Replaces Expectation: 04:03 All tasks are evaluated to determine their criticality. Site Senior Management ensures all activities are risk assessed and all critical tasks are analyzed and supported by specific procedures, to ensure they are being performed consistently and effectively. These procedures are communicated to all relevant personnel, and updated as frequently as necessary to ensure their adequacy. Replaces Expectation: 03:10 Site Senior Management establishes a critical task observation program including the required frequency for conducting the observations, which must perform the observations, and how the observations are documented.</p>	<ul style="list-style-type: none"> • No issues
<p>Principle 4 - Operational Accountability (from DIR-GR-HSE-001) "It is the duty of each and every one, at their own particular level, to manage the risks and limit the impacts inherent to their specific activity and to the activity of their own team. This duty is an integral part of operational accountability."</p>	<p>Replaces Principle 3: Operational Accountability Each employee, at his level, ensures control of risks linked with his activities, the smooth and proper operational condition of the installations, equipments and work tools and safe product management. In particular, everyone is accountable for ensuring safety systems are in place and effective. This mission is inseparable from the operational accountability. All employees demonstrate the highest operational discipline to avoid incidents and minimize any health, safety and environmental impact and report without delay any dangerous situation and any divergence from current safety rules.</p>	<ul style="list-style-type: none"> • CR-GR-HSE-001 less detailed but applies to all the risks • Duty of all employees to report without delay transferred in the Principle 8 - Learning from Events
<p>Expectation 04.01: Rules and Procedures Following a risk based approach, rules and procedures necessary to control specific HSE risks are identified, formalized and implemented. These rules and procedures are regularly reviewed and updated with the involvement of relevant personnel. Procedures specifically for housekeeping are implemented. The Golden Rules are strictly enforced.</p>	<p>Replaces Expectation: 03:01 For all activities with potential HSE risks, Line Management ensures rules and specific procedures are effectively developed, communicated to all relevant personnel and made available where they are applicable. These rules and procedures are effectively controlled. Replaces Expectation: 03:06 Line Management ensures housekeeping expectations are well defined in standards and relevant procedures. Line Management closely monitors all site areas to ensure ongoing compliance and promotion. Replaces Expectation: 03:13 All lifting or handling devices and associated equipment are clearly identified by color-coding and labeling. All lifting or handling devices and associated equipment are periodically checked and/or certified.</p>	<ul style="list-style-type: none"> • Enforcement of golden rules is new • CR-GR HSE-001 doesn't formally require all lifting or handling devices to be clearly identified by color-coding and labeling; it will be addressed in the future CR-GR-HSE-420 "Lifting, rigging and handling operations" and also may be required by local regulation.
<p>Expectation 04.02: Permit to Work A risk-based work permitting process is implemented and used to control the activities and to manage the interfaces between the different parties involved.</p>	<p>Replaces Expectation: 03:02 Based on an assessment of need, Line Management develops the general loss control rules, specific loss controls rules and a work permitting process used to control the activities at the site. This includes housekeeping expectations. These rules, procedures and work permitting process are reviewed with the applicable personnel as often as is necessary, and at least annually, in order to ensure adequacy.</p>	<ul style="list-style-type: none"> • There is stronger focus on WPP in CR-GR-HSE-001 and in the future CR-GR-HSE-402 "Work Permit Process" (to which CR-RC-EXP-034 "Work Permit Process" shall comply); • RC Maestro, as well as CR-RC-HSE-134 "MAESTRO - Management of Rules and Work Permits" included WPP in the pool of general and specific loss controls rules.

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<p>Expectation 04.03: Asset Integrity Asset integrity risks are identified, assessed, monitored and controlled. Corrective and preventive action plans are defined and implemented. A system with the adequate resources is implemented for managing the integrity of installations. This includes the identification of critical safety and environmental risk controls, their monitoring, testing, inspection and maintenance in order to ensure their performance.</p>	<p>Replaces Expectation: 04:08 Site Senior Management implements a system for controlling the integrity of its installations assuring the testing, inspection and maintenance of equipment. Replaces Expectation: 04:02 Site Senior Management develops and implements a system for identifying, managing, maintaining and where appropriate calibrating the Process Safety and Environmental Critical Measures (PSECMs). Appropriate corrective actions are taken for any measure found to be defective, including forbidding its use. All applicable employees are aware of the normal operation and failure mode modes of all existing Process Safety and Environmental Critical Measures.</p>	<ul style="list-style-type: none"> • "with the adequate resources" is a new requirement for managing the integrity of installations (RC Maestro required generally in 02.01 that Management assigns the organizational means and resources required to apply the HSE policy). • CR-GR-HSE-001 doesn't formally express the expectation that all applicable employees are aware of the normal operation and failure mode modes of all existing PSECMs; it will be addressed in the future CR-GR-HSE-403 "Asset integrity"
<p>Expectation 04.04: Management of Hazardous Chemicals, Materials and Substances Chemicals, substances or materials considered as hazardous by regulations, international standards or Group requirements are clearly identified and their HSE risks evaluated. Risk controls including storage, handling, utilization, transportation and disposal are clearly defined and implemented, and all relevant personnel have access to specific safety data sheets.</p>	<p>Replaces Expectation: 04:07 Site Senior Management establishes a system ensuring any product, substance or material is clearly identified and quantified, including those considered as hazardous by local regulations or international standards. Storage, handling, utilization and disposal requirements are clearly defined and all personnel concerned have access to chemical Safety Data Sheets (SDS). Replaces Expectation: 04:09 HSE risks associated with our finished products are identified, evaluated and controlled. Through partnerships with our customers and suppliers, product risks are documented and managed to an acceptable level for their lifecycle. Senior Management insures that this documentation linked to his activity is available.</p>	<ul style="list-style-type: none"> • CR-GR-HSE-001 doesn't make explicit the expectation for risks associated with our finished products but Group's voluntary commitments shall be respected, from which Responsible Care® commitment for RC • No major issues
<p>Expectation 04.05: Industrial Hygiene As to preserve human health, risks to health and sanitary conditions are assessed and appropriate risk controls are implemented: - An appropriate level of first aid is maintained and the level of professional medical assistance needed is available. The results of occupational health risk assessments are used in order to determine the medical surveillance requirements; - Preliminary risk assessments are done and physical fitness criteria and medical monitoring requirements are clearly defined.</p>	<p>Replaces Expectation: 06:01 Site Senior Management establishes a system to ensure the risks to which personnel are exposed are quantified and regularly measured. Site Senior Management works to reduce risks through elimination, substitution, engineering or administrative controls. Replaces Expectation: 06:03 Site Senior Management determines the level of professional medical assistance that is required both on site, and available through external medical services. Site Senior Management provides the results of risk assessments to the medical staff in order to determine the required level of medical surveillance. Replaces Expectation: 06:04 Site Senior Management ensures medical fitness criteria, specific to the position held and the work environment, are clearly defined and include the prior assessment of health risks. Those positions assessed as having risk exposure, are subject to a reinforced medical check-up. Replaces Expectation: 06:05 Site Senior Management promotes assistance programs and behaviors for good health.</p>	<ul style="list-style-type: none"> • Using the results of occupational health risk assessments more clearly expressed in CR-GR-HSE-001 than in RC Maestro
<p>Expectation 04.06: Personal Protective Equipment Based on a needs assessment, exposed personnel are provided with the required personal protective equipment (PPE) along with associated rules and instructions for control, supply, training, use and maintenance.</p>	<p>Replaces Expectation: 06:02 In situations where risk cannot be reduced to an acceptable level, Site Senior Management ensures a needs assessment is conducted to determine the appropriate level of Personal Protective Equipment (PPE) that is required. Line Management ensures the rules and instructions for using and maintaining PPE are clearly defined communicated, and takes appropriate actions when noncompliance occurs. Line Management ensures all personnel are properly trained in the use and maintenance of personal protective equipment.</p>	<ul style="list-style-type: none"> • In CR-GR-HSE-001, all personnel exposed is concerned
<p>Expectation 04.07: Chain of Command and Handover Continuity of an effective chain of command remains in place at all times. Handovers between shift and rotational personnel are effectively managed so that HSE risks are controlled without discontinuity and without loss of key information.</p>	<p>Replaces Expectation: 03:09 The handover process among operations personnel (shift to shift) and maintenance personnel is formalized, documented, strictly controlled to ensure HSE aspects are fully addressed.</p>	<ul style="list-style-type: none"> • Continuity of an effective chain of command is a new requirement • CR-GR-HSE-001 doesn't formally specify the handover process for maintenance personnel but it applies to all shift personnel
<p>Expectation 04.08: Simultaneous Operations When two or more independent operations are to be performed simultaneously and are likely to increase the level of risk, rules are established to ensure effective control of risks associated with the simultaneous operations.</p>	<p>Replaces Expectation: 03:03 On sites where major activities with HSE risks are performed simultaneously and are likely to increase the level of risk, Site Senior Management establishes the rules for Simultaneous Operation (SIMOPS) to ensure effective management of the risks.</p>	<ul style="list-style-type: none"> • No issues
<p>Expectation 04.09: Downgraded Situations Downgraded situations are declared and risk controls are implemented to prevent escalation and minimize consequences. Actions to facilitate recovery are taken.</p>	<p>Replaces Expectation: 03:11 Site Senior Management ensures downgraded situations are declared, control measures are applied and actions are taken to return to the normal operating status as soon as possible.</p>	<ul style="list-style-type: none"> • No issues
<p>Expectation 04.10: Critical Operations All critical operations are systematically identified and assessed to determine necessary risk controls including extra levels of supervision when needed. Risk controls for critical operations are implemented and communicated to all relevant personnel.</p>	<p>Replaces Expectation: 04:04 All safety critical operations are systematically identified, and undergo a specific risk assessment to determine necessary risk reducing control measures. Safety critical operations are closely monitored to ensure these control measures, including extra levels of supervision when needed, are communicated to all relevant personnel.</p>	<ul style="list-style-type: none"> • No issues
<p>Expectation 04.11: Environmental Protection An environmental reference status is systematically performed prior to acquisition of assets or the commencement of any activity, at regular intervals throughout the site's lifetime, and prior to divestment of the asset or at the end of activities. Energy consumption and environmental risks including emissions in natural environments (water, air and soils), production of waste, use of natural resources and impact on biodiversity through the entire project or activity lifecycle are managed. When developing new projects or processes, options to enhance energy efficiency and reduce environmental footprint are considered. Based on risk and impact assessments, and applicable regulation, the environmental remediation of sites is conducted after final end of operations life is ensured.</p>	<p>Replaces Expectation: 05:01 Senior Management ensures an Environmental Baseline Study (EBS) is systematically performed on every new site prior to acquisition or the commencement of any work. A similar study is performed at the final abandonment stage. Replaces Expectation: 05:02 Senior Management ensures an Environmental Impact Assessment (EIA) is performed at the early stages of any project to identify any significant impacts. Replaces Expectation: 05:03 During the entire lifecycle of any installation, Site Senior Management ensures any existing, new or modified installation of the site is managed to control and limit its energy consumption, its atmospheric emissions, its effluents, its production of ultimate waste, its use of natural resources and its impacts on biodiversity. Based on risk and impact assessment and applicable regulation, Site Senior Management ensures the environmental remediation of the site is conducted after final shutdown.</p>	<ul style="list-style-type: none"> • CR-GR-HSE-001 doesn't formally requires EBS and EIA but it should be required in the future CR-GR-HSE-306 "HSE risks management in construction, acquisition and divestiture projects "
<p>Expectation 04.12: Local Impact Local impacts caused by activities, new or modified installations are managed. Appropriate measures are adopted to avoid, minimize and manage residual negative impacts on communities and to develop a strong relationship with relevant stakeholders, tailored to the local needs, risks and opportunities.</p>	<p>Replaces Expectation: 13:05 Based on the self-assessment of site socio-economical stakes and the structured dialogue with external stakeholders, Site Senior Management establishes action plans in line with their concerns and Group priorities.</p>	<ul style="list-style-type: none"> • Societal issues are generally much stronger in One-Maestro than in RC Maestro. • Further details should be provided in CR-GR-HSE-412

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<p>Principle 5 - Contractors and Suppliers (from DIR-GR-HSE-001) “Contractors and suppliers are assessed and selected by considering their HSE performance, their ability to implement an HSE policy conforming to the entity policy, and to control the risks inherent to the activities under contract. Obligations and responsibilities in terms of HSE are clearly defined in the contracts and the entity ensures that these stipulations are respected throughout the duration of the contract.”</p>	<p>Replaces Principle 7: Contractors and Suppliers Contractors and suppliers of purchases and goods are assessed and selected by considering their HSE performance, their ability to conform to the HSE policy of DGRC and their capacity to manage the risks inherent to the activities and products under contract. Obligations and responsibilities are clearly defined in the contracts and the entity ensures that these stipulations are strictly respected throughout the duration of the contract.</p>	<ul style="list-style-type: none"> • No issues
<p>Expectation 05.01: HSE Requirements for Contracted Activities and Purchased Goods As early as the planning phase and throughout the execution of activities, HSE risks are considered when developing the contracting or purchasing strategy.</p>	<p>Replaces Expectation: 07:01 As early as the planning phase, Site Senior Management includes operational risks in the contract strategy. Site Senior Management establishes a system to ensure that for any works contracted by the site to a contractor, HSE requirements are included at each stage of the contractual process for all contracts including services and projects.</p>	<ul style="list-style-type: none"> • No issues
<p>Expectation 05.02: Relationships with Contractors Relationships with contractors are managed in order to facilitate a shared continual improvement in HSE performance.</p>	<p>Replaces Expectation: 07:06 The site develops relationships with contracted stakeholders to promote the continual improvement of HSE performance.</p>	<ul style="list-style-type: none"> • No issues • CR-GR-HSE-001 underlines the required reciprocity by indicated a continuous shared improvement
<p>Expectation 05.03: Contractors Qualification Contractors that are considered during the bidding process are qualified against the HSE criteria adapted to the level of risk of the contracted activity. In situations where local context requires the use of a contractor not meeting the qualification requirements, risk controls are put in place until the contractor improves its capabilities.</p>	<p>Replaces Expectation: 07:03 Site Senior Management ensures the contractors are pre-qualified and selected based on their ability to manage the risks associated with the activity to be contracted, their previous HSE performance, the type of work to be contracted and their ability to comply with the Total Code of conduct. Only commercial offers from bidding contractors having met the site HSE and technical requirements are considered. This information is considered at the same level as the technical and financial factors. Replaces Expectation: 07:02 Any contract with a service company includes specific HSE clauses that highlight the requirements of the contractor’s HSE management system within the framework of the contract. A written document must clarify any incompatibility or differences between the two HSE management systems. Site Senior Management determines if these differences are significant enough to prohibit the work.</p>	<ul style="list-style-type: none"> • Requirements addressing local context and pushing contractors that are not fully qualified to improve is an upgrade in CR-GR-HSE-001
<p>Expectation 05.04: HSE Clauses All call for tender documents contain detailed information that enables bidding contractors to assess the risks related to contracted activities and appropriate risk controls. Based on the risks, contracts shall include specific HSE clauses.</p>	<p>Replaces Expectation: 07:02 Any contract with a service company includes specific HSE clauses that highlight the requirements of the contractor’s HSE management system within the framework of the contract. A written document must clarify any incompatibility or differences between the two HSE management systems. Site Senior Management determines if these differences are significant enough to prohibit the work.</p>	<ul style="list-style-type: none"> • Call for tender were not addressed in RC Maestro but specified in CR-RC-HSE-149 “HSE requirements for selecting Contractors and Subcontractors” in § 7 - Contractual Requirements
<p>Expectation 05.05: Contractors Selection Contractors are selected based on their ability to manage the risks associated with the activity being contracted, their HSE performance, and their ability to comply with the defined HSE requirements. Contractor capabilities to manage the defined HSE requirements are evaluated independently from commercial bids. Based on the level of risk, a process is in place to clarify and bridge incompatibilities or differences between the contractor’s HSE procedures and the defined HSE requirements. Only offers deemed to meet the defined HSE requirements can be selected.</p>	<p>Replaces Expectation: 07:02 Any contract with a service company includes specific HSE clauses that highlight the requirements of the contractor’s HSE management system within the framework of the contract. A written document must clarify any incompatibility or differences between the two HSE management systems. Site Senior Management determines if these differences are significant enough to prohibit the work. Replaces Expectation: 07:03 Site Senior Management ensures the contractors are pre-qualified and selected based on their ability to manage the risks associated with the activity to be contracted, their previous HSE performance, the type of work to be contracted and their ability to comply with the Total Code of conduct. Only commercial offers from bidding contractors having met the site HSE and technical requirements are considered. This information is considered at the same level as the technical and financial factors.</p>	<ul style="list-style-type: none"> • Requirement to evaluate HSE capabilities independently from commercial bids is new in CR-GR-HSE-001. (Not required in RC Maestro nor in CR-RC-HSE-149 “HSE requirements for selecting Contractors and Subcontractors”)
<p>Expectation 05.06: Contract Execution During execution of the contract the HSE contract clauses are implemented and verified. This includes implementation of a formal HSE plan when necessary. Performance of the contractor is evaluated throughout the duration of the contract, and appropriate corrective actions are taken when non-compliances are detected.</p>	<p>Replaces Expectation: 07:04 Site Senior Management ensures when the contractor is mobilized, the conditions specified in the contract clauses, including those cases where a formal HSE plan is required, are effectively implemented. Performance of the contractor is evaluated jointly by the site and the contractor from the point of mobilization through the closure of the contract. Heightened awareness occurs during the mobilization and demobilization phases of the work. Appropriate corrective actions are taken immediately when noncompliance is detected.</p>	<ul style="list-style-type: none"> • CR-GR-HSE-001 doesn’t highlight the mobilization and demobilization phases of the work but it will be developed in the future CR-GR-HSE-501 "HSE Management of Contractors"
<p>Expectation 05.07: Subcontractors Measures are taken to limit subcontracting. Subcontractors follow equivalent HSE requirements to those applied to the contractor. The entity or affiliate is informed by the contractor of the plan to use a subcontractor. The entity or affiliate maintains the right to refuse any subcontractor.</p>	<p>Replaces Expectation: 07:05 Site Senior Management ensures a contractor takes all the necessary measures to limit subcontracting and in any case, ensures its subcontractors apply the terms defined in the contract’s HSE clauses. All subcontracted work is formally approved by the site. Any contract with a service company includes specific HSE clauses that highlight the requirements of the Contractor’s HSE management system within the framework of the contract. A written document clarifies any incompatibility or differences between the two HSE management systems. Site Senior Management determines if these differences are significant enough to prohibit the work.</p>	<ul style="list-style-type: none"> • No issues
<p>Expectation 05.08: Management of Suppliers of Goods, Equipment or Materials A process is defined for procuring or renting of goods, equipment or materials that meets the defined HSE specifications. For goods, equipment or materials with specific HSE risks, an acceptance and control procedure is applied.</p>	<p>Replaces Expectation: 07:07 Site Senior Management establishes implements and maintains a process for procuring and hiring goods, products or equipment compliant with the site HSE criteria. Site Senior Management ensures supplies of goods, products or equipment undergo an acceptance and control procedure by a technically competent person that includes a check for conformity with all the criteria specified when the order was placed.</p>	<ul style="list-style-type: none"> • CR-GR-HSE-001 doesn’t detail the need of a "check for conformity with all the criteria specified when the order was placed".
<p>Principle 6 - Competencies and Training (from DIR-GR-HSE-001) “For all activities, the competencies required are defined, taking into account HSE aspects. Competencies of personnel are regularly assessed, and training and development plans are implemented to ensure that competencies are appropriate for the tasks to be performed.”</p>	<p>Replaces HSE 08 - Competence and training For all activities, each entity defines the competencies required, taking into account HSE aspects. Competencies of personnel are regularly assessed, and training and development plans implemented to ensure that competencies are appropriate for the tasks to be performed.</p>	<ul style="list-style-type: none"> • No issues
<p>Expectation 06.01: HSE Competency Needs Based on the assessed risks to which personnel are exposed, a system for identifying and defining the role specific HSE competencies is implemented. A protocol to regularly assess personnel competencies and to close identified gaps is defined and implemented.</p>	<p>Replaces Expectation: 08:02 Site Senior Management implements a system for defining the required level of competencies compared to the risk the individual positions must effectively manage. Replaces Expectation: 08:03 Site Senior Management ensures an appropriate training process is established enabling the personnel involved in the site activities to develop their competencies. Line Management ensures people accountable for activities in the HSE-MS are properly trained. Site Senior Management ensures a mandatory and specific HSE training plan is implemented addressing the required training by position. Site Senior Management monitors performance against the training plan.</p>	<ul style="list-style-type: none"> • Concept of a HSE competency process is stronger in CR-GR-HSE-001 , but no major issues. • RC Maestro underlined the role of line Management while CR-GR-HSE-001 doesn’t detail
<p>Expectation 06.02: HSE Training Based on assessed risks and defined needs, an HSE training process is established. An HSE training plan is implemented and monitored in order to ensure effectiveness.</p>	<p>Replaces Expectation: 08:03 Site Senior Management ensures an appropriate training process is established enabling the personnel involved in the site activities to develop their competencies. Line Management ensures people accountable for activities in the HSE-MS are properly trained. Site Senior Management ensures a mandatory and specific HSE training plan is implemented addressing the required training by position. Site Senior Management monitors performance against the training plan.</p>	<ul style="list-style-type: none"> • No issues

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<p>Expectation 06.03: HSE Induction & Orientation Personnel and visitors are informed about any HSE risk they may be exposed to. Site-specific rules and emergency response measures are included in HSE inductions. All newly hired or transferred personnel (including management) are provided with an HSE orientation including training on any specific HSE obligations related to their role.</p>	<p>Replaces Expectation: 08:01 Site Senior Management ensures all personnel working on the site are thoroughly informed of the risks, rules and emergency response measures specific to their site and their function. Site Senior Management ensures a documented orientation is provided to all newly hired or transferred employees, visitors or contractors at the site.</p> <p>Replaces Expectation: 03:04 Site Senior Management ensures all personnel working on the site are thoroughly informed of the risks, rules and emergency response measures specific to their site and their function. Site Senior Management ensures a documented orientation is provided to all newly hired or transferred employees, visitors or contractors to all industrial sites.</p> <p>Replaces Expectation: 08:04 Line management ensures everyone is fully aware of their role and accountability regarding their own health and safety, the health and safety of others, and the impact of their activities on the environment and assets. This includes an HSE induction of newly hired and newly assigned employees.</p> <p>Replaces Expectation: 08:05 All personnel in leadership positions receive a formal orientation and induction regarding their HSE roles and accountability.</p>	<ul style="list-style-type: none"> • No issues
<p>Expectation 06.04: Requirements for Instructors Internal and external instructors are selected based on defined subject matter competency and their ability to instruct others</p>	<p>Replaces Expectation: 08:06 Site Senior Management selects internal and external instructors based on established competency requirements. These competency requirements ensure instructors are selected based on their subject matter expertise, as well as their capabilities to instruct others.</p>	<ul style="list-style-type: none"> • No issues
<p>Principle 7 - Emergency Preparedness (from DIR-GR-HSE-001) "The emergency situations potentially critical for people, the environment and assets are identified based on a risk assessment. An organization is set up to ensure that emergency plans, appropriately-trained personnel and suitable equipment necessary for dealing with such situations are constantly on hand. Emergency and associated external assistance plans are drawn up, tested during periodic exercises and updated on a regular basis. Where appropriate, these emergency plans take into account local communities, mutual aid organizations and authorities. All employees, contractors, suppliers and visitors are informed about what to do in the event of an emergency."</p>	<p>Replaces Principle HSE 09 - Emergency preparedness The emergency situations potentially critical for people, the environment and assets are identified based on a risk assessment. An organization is set up to ensure that emergency plans, appropriately-trained personnel and suitable equipment necessary for dealing with such situations, are constantly on hand. Emergency and associated external assistance plans are drawn up, tested during periodic exercises and updated on a regular basis. Where appropriate, these emergency plans include the local communities, mutual aid organizations and the authorities. All employees, suppliers and visitors know what to do in case of emergencies.</p>	<ul style="list-style-type: none"> • No issues • CR-GR-HSE-001 makes explicit information of contractors
<p>Expectation 07.01: Scenarios Identification With the inclusion of major risks, scenarios that can lead to emergency/crisis situations are identified. Scenarios for activities managed by contractors are taken into account.</p>	<p>Replaces Expectation: 09:01 Based on an assessment of risks, Site Senior Management ensures all scenarios that may result in emergency situations are identified, including those identified in the major risks register from internal and external sources. Site Senior Management implements specific emergency response procedures based on the identified scenarios.</p>	<ul style="list-style-type: none"> • Requirement to take in account Scenarios for activities managed by contractors is new
<p>Expectation 07.02: Emergency Response/Crisis Plan An emergency response/crisis plan is in place that describes: - The specific procedures related to the defined emergency/crisis scenarios; - The emergency/crisis organization including related role definitions and responsibilities; - The resources required to manage the defined emergency/crisis scenarios; - The process and accountabilities for emergency/crisis notification and communication; - The actions necessary for large scale responses; - The mutual aid agreements including related roles and responsibilities; - Post-event recovery plans.</p>	<p>Replaces Expectation: 05:04 Site Senior Management ensures an organization, tools and resources aimed at preventing risks of pollution, as well as limiting its extent and impact on the environment, is in place on the site installations.</p> <p>Replaces Expectation: 09:01 Based on an assessment of risks, Site Senior Management ensures all scenarios that may result in emergency situations are identified, including those identified in the major risks register from internal and external sources. Site Senior Management implements specific emergency response procedures based on the identified scenarios.</p> <p>Replaces Expectation: 09:02 The emergency response plans describe the organization, notification, communication network and resources necessary to manage the emergency situations. The plans describe the response actions necessary for minor events, as well as catastrophic events where large scale responses are needed. These plans are updated and communicated to all applicable internal and external stakeholders.</p> <p>Site Senior Management establishes business continuity plans related to potential pandemic diseases.</p> <p>Replaces Expectation: 09:05 Effective, reliable and efficient communication networks are established to ensure a proper response when an emergency situation requires external assistance, this includes mutual aid responses. Every individual and organization knows their roles and responsibilities during a crisis response.</p> <p>Replaces Expectation: 09:06 Site Senior Management defines the process for effectively communicating with Headquarters when a major accident, high potential incident, or any event that may adversely affect the Company's image or reputation occurs.</p> <p>Replaces Expectation: 03:07 After operations are disrupted by emergency situations, personnel with appropriate knowledge and expertise assess the condition of equipment, processes and materials to determine operational readiness.</p>	<ul style="list-style-type: none"> • No issues. • CR-GR-HSE-001 doesn't make explicit the business continuity plans related to potential pandemic diseases whereas RC Maestro did it in 09.02. • CR-GR-HSE-001 doesn't make explicit the requirement to define the process for effectively communicating with Headquarters (whereas RC Maestro did it in 09.06) but it will be specified in the future CR-GR-HSE-701 "Crisis Management".
<p>Expectation 07.03: Emergency/Crisis Training Personnel that may be involved in the response or management of an emergency/crisis situation are aware of their roles and accountabilities and have taken the required theoretical and practical training.</p>	<p>Replaces Expectation: 09:03 Site Senior Management ensures personnel who may be involved in managing an emergency situation are fully aware of their roles and have taken the theoretical and practical training required.</p>	<ul style="list-style-type: none"> • No issues
<p>Expectation 07.04: Drills Emergency / crisis plans including communication means are systematically tested and improved through periodic drills. Lessons learned are identified and addressed. Large scale exercises are conducted for sites exposed to significant technological or environmental risks, at minimum annually, including at least one site and the entity or affiliate's headquarters.</p>	<p>Replaces Expectation: 09:04 Site Senior Management ensures the emergency response plans are systematically tested and improved through periodic drills. A large scale drill is conducted at least annually between the site and headquarters.</p> <p>Replaces Expectation: 09:05 Effective, reliable and efficient communication networks are established to ensure a proper response when an emergency situation requires external assistance, this includes mutual aid responses. Every individual and organization knows their roles and responsibilities during a crisis response.</p>	<ul style="list-style-type: none"> • Lessons learnt were not fully addressed in this principle in RC Maestro, but addressed in Principle 10 "Learning from Events" and also in CR-RC-HSE-125 "MAESTRO - Emergency planning and response" § 3.4.7 Drills and return of experience (REX)
<p>Principle 8 - Learning from Events (from DIR-GR-HSE-001) "All incidents are reported and analyzed in depth to determine their root causes. All corrective actions and preventive measures are defined and appropriately prioritized. The results of the analyses are reported to all interested parties that may benefit from the lessons learned. All employees have a duty to report without delay, any dangerous situation or any deviation from HSE rules."</p>	<p>Replaces Principle HSE 10 – Learning from events All incidents are reported and analyzed. Those with significant actual or potential severity are analyzed in depth to determine their root causes. All corrective actions and preventive measures are taken with priority. The results of those analyses are reported to all interested parties that may benefit from the experience learned. Identification and reporting of anomalies are promoted.</p>	<ul style="list-style-type: none"> • No issues • "Duty of all employees to report without delay" was in Principle 3 - Operational accountability of RC Maestro
<p>Expectation 08.01: Incident and Anomaly Reporting Reporting of all incidents, near-misses and anomalies is promoted. A process to return feedback to the reporter is implemented. Employees have a duty to report.</p>	<p>Replaces Expectation: 10:01 Site Senior Management establishes a system to ensure that all incidents/accidents and anomalies related to the site activities are effectively reported and analyzed to determine their loss potential. The system includes a process for notification to the Branch and the applicable stakeholders, based on the potential severity of the incident. Resulting remedial and preventive actions are defined and implemented.</p> <p>Replaces Expectation: 10:04 To ensure each incident is properly managed and documented, the details of the incidents and accidents, the results of the investigations, and resulting action plans are entered into a company-wide database.</p>	<ul style="list-style-type: none"> • No issues • RC Maestro required entering all relevant informations into a company-wide database whereas CR-GR- HSE-001 doesn't, but it will be required in the future CR-GR-HSE-100 "HSE indicators and reporting"
<p>Expectation 08.02: Investigation and Analysis Process Based on the level of risk and in the effort to prevent recurrence, incidents and near-misses are investigated. Fatal accidents, incidents with high severity potential, and significant loss of containment events are analyzed as to determine cause. The analysis and related corrective and preventive action plans are validated at the appropriate level and monitored through to closure.</p>	<p>Replaces Expectation: 10:02 Site Senior Management implements an investigation process and ensures an investigation is conducted for every accident and for every incident with high loss potential. The depth of the investigation depends on the potential severity of the event. The investigation analysis and related action plans are validated at the appropriate level.</p>	<ul style="list-style-type: none"> • No issues.

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<p>Expectation 08.03 : Communication of Incidents While considering aspects of confidentiality, a communication process is established ensuring that relevant information regarding incidents:</p> <ul style="list-style-type: none"> - Are shared with employees and contractors ; - Are communicated to authorities. 	<p>Replaces Expectation: 10:03 Site Senior Management establishes an effective communication process to ensure relevant information regarding incidents and accidents, including causal analysis and pertinent investigation information, is adequately communicated to applicable internal and external stakeholders.</p>	<ul style="list-style-type: none"> • No issues. • CR-GR-HSE-001 is more explicit ("shared with employees and contractors" ; "communicated to authorities").
<p>Expectation 08.04 : Return on Experience A companywide network is established to identify and share lessons learned from the analysis results of relevant events (return on experience, or "REX"). All REX received are analyzed and communicated to the relevant personnel, and pertinent recommendations are implemented.</p>	<p>Replaces Expectation: 10:05 All Return of Experience (REX) received by the site is analyzed and communicated to the applicable internal and external stakeholders, and the identified recommendations are implemented.</p>	<ul style="list-style-type: none"> • No issues.
<p>Principle 9 - Monitoring, Audit and Inspection (from DIR-GR-HSE-001) "Management is responsible for the implementation of the HSE policy, and regularly assesses its performance through monitoring, audits and inspections. Any shortfalls in regard to the set objectives are analysed and corrective actions and/or an improvement plans are subsequently defined, implemented and monitored through to closure. "</p>	<p>Replaces Principle HSE 11 – Monitoring, audit and inspection In every field of activity, the entity checks the implementation of HSE policy, and regularly improves its performance through monitoring, audit and inspection missions. Any shortfalls in regard to objectives are analyzed and an improvement plan is subsequently defined, for which management is responsible to implement.</p>	<ul style="list-style-type: none"> • CR-GR-HSE-001 requires to monitor through to closure
<p>Expectation 09.01: Monitoring A process is implemented to monitor compliance with applicable requirements (legal, internal, contractual, and the voluntary commitments). The results of the monitoring are documented. Deficiencies are identified and improvement plans are implemented and monitored through to closure.</p>		<ul style="list-style-type: none"> • Global planning, scheduling and follow-up of all required monitoring activities is not so explicitly required in RC Maestro, even it's included in RC rules.
<p>Expectation 09.02: HSE Self-assessment, Audit & Inspection program HSE self-assessments, audits & inspections are systematically planned, and related roles and accountabilities are defined. All installations are subject to technical audits and inspections to evaluate integrity and operability. The resulting action plans are defined and validated at the appropriate level and the actions are monitored through to closure.</p>	<p>Replaces Expectation: 11:01 Through regular HSE audits, Site Senior Management ensures the adequacy and effectiveness of the site HSE-MS and the compliance to the HSE policy of the Branch. Site Senior Management ensures a documented, comprehensive HSE audit plan is developed that covers all sectors of the site operations. This plan defines the audit scope, frequency and associated roles and accountabilities. Replaces Expectation: 11:02 Site Senior Management ensures Planned General Inspections and Loss Control Tours are carried out in all sectors of activity. A follow-up of identified corrective actions is systematically implemented. Replaces Expectation: 11:03 Site Senior Management ensures regular testing of Process Safety and Environment Critical Measures (PSECMs) is conducted regularly, and the results are documented.</p>	<ul style="list-style-type: none"> • CR-GR-HSE-001 makes explicit the aim to evaluate integrity and operability for all installations • CR-GR-HSE-001 requires HSE self-assessment, which is more exhaustive and stronger than an internal audit. [see also Memo PSR/HSE relative to HSE audits processus (including self assessment) sent to all LBU Managers 05/01/2017].
<p>Expectation 09.03: Observations and Recognition Observations of operational tasks are regularly conducted in order to ensure compliance with the Golden Rules and other HSE requirements. The results of these observations are used to promote appropriate behavior and to recognize HSE performance.</p>	<p>Replaces Expectation: 11:04 Field assessments are conducted regularly at the site to ensure compliance with the Total Golden Rules and to assess HSE behaviors and achievements. The results of the field assessments are communicated to applicable internal and external stakeholders, and used to promote performance improvement. Site Senior Management implements a system to recognize safe behaviors and practices, and to sanction inappropriate behavior.</p>	<ul style="list-style-type: none"> • No major issues. New wording allows for a wider interpretation and likely to be accepted better than field assessments.
<p>Principle 10 - Performance Improvement (from DIR-GR-HSE-001) "In order to improve performance, HSE action plans are regularly reviewed within each activity. HSE management system effectiveness is analysed during management reviews and monitored through key performance indicators, both quantitative and qualitative. Actions are prioritized according to the risk level or associated impact and are incorporated within the entity's action plan. "</p>	<p>Replaces Principle HSE 12 – Performance improvement In order to improve performance, HSE action plans are regularly reviewed within each activity. HSE management system's effectiveness is analyzed during management reviews and monitored through key performance indicators, both quantitative and qualitative. Actions are prioritized according to the risk level or associated impact and are incorporated within the entity action plan.</p>	
<p>Expectation 10.01: Key Performance Indicators (KPIs) Both leading and lagging key performance indicators are established to track HSE performance and implementation of the HSE-MS.</p>	<p>Replaces Expectation: 12:02 Management shall establish key performance indicators chosen to control the efficiency of the HSE-MS implemented by the entity, particularly in the risk management domain.</p>	<ul style="list-style-type: none"> • No major issues.
<p>Expectation 10.02: Impacts Reduction HSE impacts are regularly monitored and the results are recorded and reported. Corrective and preventive action plans are implemented in order to eliminate or reduce HSE impacts.</p>	<p>Replaces Expectation: 12:01 Based on the conclusions of audits, incident analyses, investigations, Return of Experience, inspections and other activities of the HSE-MS including societal consideration, Site Senior Management implements prioritized action plans to correct the identified deficiencies. The action plans define the work to be done, the timeline for completion, and those accountable for the implementation of each action. Action plan progress is monitored, and appropriate measures are taken when the action plans are not achieving the desired improvements. Replaces Expectation: 12:05 Site Senior Management uses the results of the Management Review to set action plans aimed to improve the HSE-MS and the performance, including modifications of the site Policy, objectives and KPIs. Replaces Expectation: 12:06 Site Senior Management ensures significant HSE and societal impact factors are regularly monitored, and the results are recorded and reported. Corrective and preventive actions are implemented to minimize or eliminate any HSE and societal impact.</p>	<ul style="list-style-type: none"> • No issues
<p>Expectation 10.03: Management Review The HSE-MS is systematically reviewed at minimum annually, to ensure its continued adequacy and effectiveness. The review includes at minimum:</p> <ul style="list-style-type: none"> - The evolution of HSE risks and associated significant impacts; - Changes in regulatory requirements; - Any emerging issues; - An assessment of performance against the established HSE objectives; - Findings from HSE audits and investigations; - Progress in completing action plans; - The adequacy of resources. <p>Based on this review and prioritized according to the level of risk, the policy, strategy, objectives and the HSE-MS are adapted to ensure continual improvement in HSE performance.</p>	<p>Replaces Expectation: 12:03 Site Senior Management systematically reviews the HSE Policy, strategy and management system to ensure its continued suitability, adequacy and effectiveness. A Management Review is conducted at least annually, including an analysis of performance against set HSE, results of audits, the current status of the major risk register, outcomes from set action plans, including societal, and findings from incident investigations in making the review. Replaces Expectation: 12:06 Site Senior Management ensures significant HSE and societal impact factors are regularly monitored, and the results are recorded and reported. Corrective and preventive actions are implemented to minimize or eliminate any HSE and societal impact. Replaces Expectation: 12:04: Results Communication Site Senior Management ensures the results of the Management Review are communicated to applicable internal and external stakeholders and the branch when appropriate.</p>	<ul style="list-style-type: none"> • No issues. • Adaptation of the management system based on the management review was not explicitly addressed in RC Maestro but was captured in the RC rules.

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<p align="center">CR-GR-HSE-001 One-MAESTRO HSE Expectations 01/03/2018 Rev 00</p>	<p align="center">CR-EP-HSE-001 Implementing the E&P branch HSE policy: MAESTRO 01/05/2015 Rev 05</p>	<p align="center">Comments / Gaps</p>
<p>PURPOSE This rule sets out expectations in line with the One-MAESTRO HSE Principles (DIR-GR-HSE-001). The directive, these expectations and the requirements defined in Group HSE rules and guides constitute One-MAESTRO, the HSE management system framework within the Group. One-MAESTRO addresses: - Industrial Hygiene; - Safety; - Environment.</p>	<p>This Company Rule defines the expectations to be respected for implementing the E&P branch's Hygiene-Health, Safety, Security, Societal and Environment policy (HSE) (DIR EP 01). These expectations are, whenever relevant, further detailed in other Company Rules, and all practical arrangements and recommendations are provided in the relevant Guides & Manuals.</p>	
<p>SCOPE OF APPLICATION These expectations are applied to Group entities and affiliates, in accordance with their respective decision-making rules and without prejudice to the locally applicable legal and regulatory provisions, for the assets, activities, and sites in the Group-operated domain. For entities and affiliates without operations and without a HSE management system, these expectations apply as far as they are concerned by the risk. With regard to assets, activities and sites outside the Group-operated domain, that is to say operated by structures (joint ventures) in which the Group does not exercise control, the Group representatives in these structures will seek to promote the One-MAESTRO HSE expectations and endeavour to have similar expectations adopted.</p>	<p>Field of application This Company Rule applies to every entity within the E&P branch.</p>	
<p>Principle 1 - Management Leadership and Commitment (from DIR-GR-HSE-001) "In accordance with the Group Charter, each entity adopts the HSE policy, sets its objectives, communicates them at all levels of the organization and allocates the resources necessary for their implementation. Management at all levels demonstrates exemplary conduct, rigor, vigilance and professionalism regarding HSE in all their activities. The visible commitment to HSE performance is part of the overall assessment of all managers. HSE performance is evaluated for everyone."</p>	<p>Replaces Principle 2: Management leadership and commitment Each entity establishes its own HSE policy, sets objectives, communicates them at all levels of the organization and assigns the resources necessary for their implementation. Management at all levels demonstrates exemplary conduct, vigilance, and professionalism regarding HSE in all their activities. The visible commitment to HSE performance is part of the overall assessment of all managers.</p>	<ul style="list-style-type: none"> • No issues
<p>Expectation 01.01: The HSE Policy A local HSE policy and the organizational means and resources required to respect the Group SHEQ Charter and apply One-MAESTRO in the local HSE management system (HSE-MS) are in place.</p>	<p>Replaces Expectation: 02:01 Management shall define the entity's HSE policy in line with that of the branch. Management shall communicate the policy to all personnel, make it available to interested parties, and ensure its application at all levels in the organization. Management shall assign the organizational means and resources required to apply the HSE policy. Replaces Expectation: 05:04 Management shall ensure that an organization, including tools and resources aimed at preventing risks of pollution and limiting its extent and impact on the environment, is in place.</p>	<ul style="list-style-type: none"> • No issues • Affiliates will be directed to the Group policies rather than the Branch, but not a major change
<p>Expectation 01.02: HSE Vision, Strategy and Objectives The Group HSE vision and strategy are communicated to personnel and made available to relevant stakeholders. In support of the Group HSE vision and strategy, specific objectives and targets designed to eliminate or minimize HSE risks and impacts are set and associated action plans are established. The HSE objectives are the basis for defining the individual annual HSE objectives for each employee.</p>	<p>Replaces Expectation: 02:02 As part of its continual improvement approach, Management shall set HSE objectives and targets for the entity and ensure that associated action plans are put in place. Replaces Expectation: 12:03 Management shall set action plans aimed to improve the HSE Policy, strategy and HSE-MS appropriate to the nature of the risks faced by the entity and in line with the current HSE performance. Management shall ensure that the entity's technical standards are updated if any shortcomings are identified during the systematic review. Actions shall be prioritized and assigned to persons with the appropriate level of competence and authority, and followed by Management through to closure.</p>	<ul style="list-style-type: none"> • "Vision and strategy" are new, but aimed at the Group • Requirement for objectives to be linked to individual annual
<p>Expectation 01.03: HSE Management System, Documents and Records An HSE-MS in accordance with One-MAESTRO and applicable management system standards is implemented. A procedure is in place to ensure that associated documents and records are identified, effectively managed, regularly reviewed and updated as necessary.</p>	<p>Replaces Expectation: 02:03 Management shall ensure the implementation of a documented HSE Management System (HSE-MS) in accordance with DIR EP 01, and the requirements of international standard ISO 14001. Management shall ensure that the HSE-MS and associated documents are effectively managed, and shall implement a process to determine and control any records as required to provide evidence that the HSE-MS is functioning as intended.</p>	<ul style="list-style-type: none"> • No issues
<p>Expectation 01.04: Roles and Accountabilities The authority, accountabilities and interfaces for managing, performing and monitoring activities that have an impact on HSE at all levels of the organization are clearly defined. All personnel are aware of their roles and personal accountabilities in the practice of their duties. Personnel demonstrate the strictest discipline in preventing accidents, in protecting health and the environment, whilst addressing other relevant stakeholder expectations.</p>	<p>Replaces Expectation: 02:04 The commitment, authority and the relationships between those managing, performing and monitoring activities having an impact on HSE at all levels of the organization shall be clearly documented. This includes responsibilities shared with one or more third parties (e.g. other operators). Each department's functional charters shall define HSE roles and responsibilities, taking into account the requirements for managing risks inherent to its activities. Replaces Expectation: 08:02 The entity shall ensure that a job description is issued for each position in its organization. It shall include the definition of HSE roles and responsibilities inherent to that position.</p>	<ul style="list-style-type: none"> • Personal accountabilities section is new and replaces responsibilities
<p>Expectation 01.05: HSE Committees One or more HSE committees are established that function collectively to improve performance, ensure the implementation of the HSE-MS, monitor corrective and preventive action plans, and ensure communication of the resulting information to all relevant stakeholders.</p>	<p>Replaces Expectation: 02:05 Management shall put in place an HSE Management Committee that ensures the effective implementation of the HSE-MS. The entity shall set up a network of specific HSE Committees suited to its organization. These HSE Committees shall ensure a proper monitoring of corrective and preventive actions, and ensure effective communication of the resulting information to all interested parties.</p>	<ul style="list-style-type: none"> • No issues
<p>Expectation 01.06: Leadership Management HSE leadership and engagement are actively demonstrated. HSE programs are implemented: - Safety tours: to reinforce HSE messages and to seek feedback from employees and contractors; - STOP CARD: to stop any situation that has the potential to harm people, the environment and/or assets; - Recognition and sanction: to recognize and improve HSE performance.</p>	<p>Replaces Expectation: 02:06 The entity shall implement a site visit program for Management that covers HSE aspects in order to give greater impact to the messages concerning the entity's HSE policy, the objectives and its performance. Replaces Expectation: 02:08 Management shall develop an HSE culture by displaying exemplary behavior, and by regularly assessing the behavior and performance of all personnel including management itself. Management shall implement a system to recognize good behavior and to justly sanction inappropriate behavior.</p>	<ul style="list-style-type: none"> • "Feedback" is emphasized more directly in the new One-Maestro • STOP card promotion is new in one-MAESTRO but already promoted within EP
<p>Expectation 01.07: Stakeholder Engagement Relevant stakeholders are identified and mapped. Open, transparent and structured dialogue is established and maintained in order to provide these stakeholders with information regarding the relevant HSE risks.</p>	<p>Replaces Expectation: 13:01 Management shall ensure that before any E&P activity begins necessary studies are conducted to obtain in-depth understanding of the societal context within the perimeter of its activities. Management shall ensure that throughout its activities a structured dialogue with its stakeholders is maintained. The dialogue shall be designed in order to provide stakeholders with information regarding the entity's activities, to listen to stakeholder concerns and to guide consultation.</p>	<ul style="list-style-type: none"> • Although the listening to concerns is not specified, it is in essence addressed by the "structured dialogue". No major issues.
<p>Expectation 01.08: HSE Communication Whilst respecting language and cultural aspects, an HSE communication system is established that keeps relevant stakeholders regularly informed regarding HSE issues. This includes alerts related to relevant HSE events, and notification as required following near-misses and incidents. The effectiveness of HSE communication is regularly assessed.</p>	<p>Replaces Expectation: 02:09 Management shall establish an effective HSE communication system to keep personnel and other interested parties regularly informed regarding HSE issues. Management shall regularly assess the clarity of HSE communication. Language and cultural aspects shall be considered to ensure effective communication.</p>	<ul style="list-style-type: none"> • "Effective" system implies regularly assessed. No major issues

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<p>Principle 2 - Compliance with Laws, Regulations and Group Requirements (from DIR-GR-HSE-001) "In all activities, the entities act in compliance with applicable laws, regulations, relevant industry standards, Group's voluntary commitments, and other specific principles and requirements at the Group and branch level. "</p>	<p>Replaces Principle HSE 01 – Compliance with laws and regulations "In all activities, the branch acts in compliance with applicable laws and regulations as well as with the relevant industry standards and the principles and requirements specific to the Group and the branch."</p>	<ul style="list-style-type: none"> • "Voluntary commitments" are a new detail. No significant issue
<p>Expectation 02.01: Compliance Within the HSE domain, a process is established to identify, monitor and comply with the applicable: - Legal, regulatory requirements; - Voluntary commitments; - Contracts; - Industry standards; - One-MAESTRO. Identified requirements are communicated to relevant personnel.</p>	<p>Replaces Expectation: 01:01 Management shall set up a system to monitor, communicate to all personnel and interested parties and enforce the applicable legal and regulatory requirements, applicable industry standards, and the principles and requirements specific to the Group and the branch</p>	<ul style="list-style-type: none"> • No issues
<p>Expectation 02.02: Authorizations for Activities No activity is undertaken without first obtaining the necessary official authorizations. All Group activities are performed in compliance with the conditions specific to these authorizations.</p>	<p>Replaces Expectation: 01:02 Management shall ensure that no activity is undertaken without obtaining beforehand the necessary official authorizations, and that all of the entity's activities are performed in full compliance with the conditions specific to these authorizations.</p>	<ul style="list-style-type: none"> • No issues
<p>Expectation 02.03: Contacts with Authorities Regular contacts are established and maintained with national and/or local authorities that have responsibilities for HSE. Participation in consultations, public hearings or other similar initiatives regarding future regulations is organized when appropriate.</p>	<p>Replaces Expectation: 01:03 Management shall establish and maintain close contact with national and local authorities that have responsibilities for HSE. When applicable, the entity assists the authorities in drafting laws and regulations through participation in consultations, public hearings or other similar initiatives.</p>	<ul style="list-style-type: none"> • No issues
<p>Expectation 02.04: Derogation to Group Requirements Any deviation from a Group HSE expectation or requirement is the subject of a prior written and reasoned authorization from the designated internal authority, following consultation with the competent HSE authority.</p>	<p>Replaces Expectation: 01:04 In cases of non-conformance to Company Rules and General Specifications, the entity shall seek derogation pursuant to DIR EP 00.</p>	<ul style="list-style-type: none"> • No issues
<p>Principle 3 - Risk Management (from DIR-GR-HSE-001) "For any activity the hazards to which people, the environment and assets are exposed are systematically identified, the associated risks assessed and the measures for reducing them defined and implemented. The risk level and risk reduction measures are periodically reassessed, at a minimum with each change of an activity or a process. In particular, the potential risks to human health, the technological risks and the potential significant environmental impacts are managed as per this principle. "</p>	<p>Replaces Principle HSE 04 – Risk management "For any activity the hazards to which people, the environment and assets are exposed are identified, the associated risks assessed and the measures for reducing them defined and implemented. The risk level and risk reduction measures are regularly reassessed, at least whenever changes of activities or processes occur. All technological risks in particular are managed as per this principle".</p>	
<p>Expectation 03.01: Hazard Identification and Risk Assessment Hazards are identified, and risks are systematically assessed using an appropriate method. Decisions to implement risk controls and for the acceptance of residual risk are appropriate to the nature and the magnitude of the risk. Action plans are documented and monitored. A HSE reference study is conducted prior to acquisition of assets or the commencement of any activity, and at regular intervals throughout the asset's lifetime. Any development of a project or new technology is undertaken upon completion of a full lifecycle risk assessment. A global view of the risks and their impacts on operability is maintained, taking into account the evolving HSE context.</p>	<p>Replaces Expectation: 04:01 Management shall implement a process to systematically identify and assess the technological risks related to its installations and operations. Management shall be involved in the review and decisions to address risks. Controls shall be implemented to lessen exposure to the identified hazards. Management shall ensure that risks are periodically reassessed at specified intervals and as change occurs. Replaces Expectation: 04:02 Management shall ensure that risk management aspects are taken into account in all asset acquisition or sale, evaluation, concept, engineering and construction studies concerning new projects, or the decommissioning of existing installations. Replaces Expectation: 02:07 Management shall ensure that HSE aspects are factored in at all levels of the decision-making processes, including decisions taken regarding technological and organizational change, and that the necessary measures for managing associated risks are defined and implemented. Replaces Expectation: 03:01 All operations shall undergo a risk assessment aimed at identifying opportunities for application of adequate risk-reduction measures. All operations that are assessed as being critical shall be identified and closely monitored, specific procedures shall be implemented and updated as frequently as necessary to ensure their adequacy. The risk-reduction measures, including extra levels of supervision when needed, shall be communicated to all relevant personnel and interested parties. Replaces Expectation: 05:01 Management shall ensure that an Environmental Baseline Study (EBS) is systematically performed on every new site prior to acquisition or the commencement of any work. A similar study is performed at the final abandonment stage. An Environmental Impact Assessment (EIA) study shall be carried out at the early stages of a project to identify any significant impacts (see rule HSE 13.02 for references to Societal Impact Assessment). Replaces Expectation: 06:01 Management shall ensure that health risks are regularly assessed – and quantified by measurement where appropriate – and that risk reduction measures are taken to bring them down to an acceptable level. Health risks include those related directly to the entity's activities, and those related to the climate, the environment and local sanitary conditions as well as those related to dining and housing. Replaces Expectation: 03:02 Management shall set a process to maintain a global view of the entity's risks considering cumulative effects and their impacts on operability. Replaces Expectation: 04:03 Management shall ensure that the technological risks of its installations are managed as part of a continual appraisal process based on approved methods. A risk reduction plan shall be prepared and approved when the risks evaluated are not in line with the branch's acceptability criteria. The entity shall maintain a register of major risks.</p>	<ul style="list-style-type: none"> • The previous branch Maestro was more specific on the various types of risk assessments and activities. Care will need to be taken to insure that all of these risks are adequately addressed in rules. • Concept of "lifecycle" risk assessment is a new detail
<p>Expectation 03.02: Management of Change HSE aspects are factored in at all levels of the decision-making process, including decisions taken regarding technological or organizational changes, whether temporary or permanent. Necessary measures are defined and implemented in order to manage associated risks.</p>	<p>Replaces Expectation: 02:07 Management shall ensure that HSE aspects are factored in at all levels of the decision-making processes, including decisions taken regarding technological and organizational change, and that the necessary measures for managing associated risks are defined and implemented. Replaces Expectation: 03:10 Management shall implement a process for managing temporary installations that systematically factors in risk management aspects. When they have fulfilled their purpose, the temporary installations shall be dismantled or disabled in order to prevent further use. Replaces Expectation: 04:05 Management shall implement a procedure for managing changes to current installations that systematically factors in all risk management aspects.</p>	<ul style="list-style-type: none"> • No major gaps. New One-Maestro is less specific, but the spirit is the same

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<p>Expectation 03.03: Operational Readiness Review Based on assessed risks, operational readiness reviews are conducted:</p> <ul style="list-style-type: none"> - Prior to start up for new or modified activities; - The restart of existing or modified installations; - The restart resulting from emergency situations. <p>These reviews confirm that risks associated with the start/restart are effectively managed.</p>		NEW
<p>Expectation 03.04: Risk Controls Adequate risk controls are implemented and reassessed at specified intervals, throughout the asset lifecycle, and as changes occur.</p>	<p>Replaces Expectation: 04:01 Management shall implement a process to systematically identify and assess the technological risks related to its installations and operations. Management shall be involved in the review and decisions to address risks. Controls shall be implemented to lessen exposure to the identified hazards. Management shall ensure that risks are periodically reassessed at specified intervals and as change occurs.</p> <p>Replaces Expectation: 04:03 Management shall ensure that the technological risks of its installations are managed as part of a continual appraisal process based on approved methods. A risk-reduction plan shall be prepared and approved when the risks evaluated are not in line with the branch's acceptability criteria. The entity shall maintain a register of major risks.</p> <p>Replaces Expectation: 06:02 Management shall work to reduce health risks through elimination, substitution, engineered and/or administrative controls. In situations where risk cannot be reduced, Management shall provide Personal Protective Equipment selected by a needs assessment and shall ensure that the rules and instructions for using and maintenance are clearly defined and applied.</p>	<ul style="list-style-type: none"> • No issues
<p>Expectation 03.05: Critical task analysis Tasks are evaluated to determine their HSE criticality. Tasks that are deemed critical are identified and analyzed, and measures are taken to reduce the task's criticality, including when necessary the development of specific procedures.</p>	<p>Replaces Expectation: 03:03 All tasks shall be evaluated to determine their criticality. Management shall establish a critical task observation program including the required frequency for conducting the observations, who is to perform the observations, and how the observations are documented.</p>	<ul style="list-style-type: none"> • Task analysis is more specific on One-Maestro
<p>Principle 4 - Operational Accountability (from DIR-GR-HSE-001) "It is the duty of each and every one, at their own particular level, to manage the risks and limit the impacts inherent to their specific activity and to the activity of their own team. This duty is an integral part of operational accountability."</p>	<p>Replaces Principle HSE 03 – Operational accountability "It is the duty of each and every one, at their own particular level, to manage the risks and limit the impacts inherent to their specific activity and to the activity of their own teams. This duty is an integral part of operational accountability."</p>	<ul style="list-style-type: none"> • No issues
<p>Expectation 04.01: Rules and Procedures Following a risk based approach, rules and procedures necessary to control specific HSE risks are identified, formalized and implemented. These rules and procedures are regularly reviewed and updated with the involvement of relevant personnel. Procedures specifically for housekeeping are implemented. The Golden Rules are strictly enforced.</p>	<p>Replaces Expectation: 03:05 Based on an assessment of need, Management shall implement the rules, procedures and work permitting process to be used to control the activities. These activities include, but are not limited to land/sea/air transportation, lifting, and confined space entry. These rules, procedures and work permitting process shall be reviewed with the applicable personnel as often as is necessary in order to ensure adequacy with the risks as assessed.</p> <p>Replaces Expectation: 03:09 The entity shall ensure that specific measures are taken to manage safety equipment inhibits and to manage process, mechanical and electrical isolations.</p> <p>Replaces Expectation: 03:12 Each entity shall develop a system for the identification and marking of all piping and process equipment. This system shall include subsurface piping, cables, and abandoned or obsolete equipment</p>	<ul style="list-style-type: none"> • Specifics on housekeeping are a new detail, but was part of the set of rules to be prepared and in the inspection expectations • Enforcement of golden rules is new
<p>Expectation 04.02: Permit to Work A risk-based work permitting process is implemented and used to control the activities and to manage the interfaces between the different parties involved.</p>	<p>Replaces Expectation: 03:05 Based on an assessment of need, Management shall implement the rules, procedures and work permitting process to be used to control the activities. These activities include, but are not limited to land/sea/air transportation, lifting, and confined space entry. These rules, procedures and work permitting process shall be reviewed with the applicable personnel as often as is necessary in order to ensure adequacy with the risks as assessed.</p> <p>Replaces Expectation: 03:09 The entity shall ensure that specific measures are taken to manage safety equipment inhibits and to manage process, mechanical and electrical isolations.</p>	<ul style="list-style-type: none"> • No issues
<p>Expectation 04.03: Asset Integrity Asset integrity risks are identified, assessed, monitored and controlled. Corrective and preventive action plans are defined and implemented. A system with the adequate resources is implemented for managing the integrity of installations. This includes the identification of critical safety and environmental risk controls, their monitoring, testing, inspection and maintenance in order to ensure their performance.</p>	<p>Replaces Expectation: 04:04 Management shall implement a system, with the adequate resources for managing the integrity of its installations. The system shall include the identification of Safety and Environmental Critical Elements, their inspection, maintenance and testing in order to ensure performance. The system shall ensure that asset integrity threats are identified, assessed, monitored, corrected and are reported to Management.</p>	<ul style="list-style-type: none"> • No issues
<p>Expectation 04.04: Management of Hazardous Chemicals, Materials and Substances Chemicals, substances or materials considered as hazardous by regulations, international standards or Group requirements are clearly identified and their HSE risks evaluated. Risk controls including storage, handling, utilization, transportation and disposal are clearly defined and implemented, and all relevant personnel have access to specific safety data sheets.</p>	<p>Replaces Expectation: 06:03 Management shall set up a system ensuring that any product, substance or material considered as hazardous by local regulations or international standards is clearly identified and quantified. Storage, handling, utilization and disposal requirements shall be clearly defined and all personnel and interested parties have access to specific material safety data sheets.</p>	<ul style="list-style-type: none"> • Wording has been updated, but the spirit remains the same. No major issues
<p>Expectation 04.05: Industrial Hygiene As to preserve human health, risks to health and sanitary conditions are assessed and appropriate risk controls are implemented:</p> <ul style="list-style-type: none"> - An appropriate level of first aid is maintained and the level of professional medical assistance needed is available. The results of occupational health risk assessments are used in order to determine the medical surveillance requirements; - Preliminary risk assessments are done and physical fitness criteria and medical monitoring requirements are clearly defined. 	<p>Replaces Expectation: 06:02 Management shall work to reduce health risks through elimination, substitution, engineered and/or administrative controls. In situations where risk cannot be reduced, Management shall provide Personal Protective Equipment selected by a needs assessment and shall ensure that the rules and instructions for using and maintenance are clearly defined and applied.</p> <p>Replaces Expectation: 06:04 Management shall ensure, by means of an appropriate and recurrent medical audit, that adequate medical resources are available locally appropriate to the level of identified hazards.</p> <p>Replaces Expectation: 06:05 Management shall ensure that medical fitness criteria specific to the position held and the work environment, are clearly defined and include the prior assessment of health risks. For those positions assessed as having a hygiene and/or health risk exposure, will be subject to a reinforced medical check-up</p>	<ul style="list-style-type: none"> • No issues
<p>Expectation 04.06: Personal Protective Equipment Based on a needs assessment, exposed personnel are provided with the required personal protective equipment (PPE) along with associated rules and instructions for control, supply, training, use and maintenance.</p>	<p>Replaces Expectation: 06:02 Management shall work to reduce health risks through elimination, substitution, engineered and/or administrative controls. In situations where risk cannot be reduced, Management shall provide Personal Protective Equipment selected by a needs assessment and shall ensure that the rules and instructions for using and maintenance are clearly defined and applied.</p>	<ul style="list-style-type: none"> • No issues
<p>Expectation 04.07: Chain of Command and Handover Continuity of an effective chain of command remains in place at all times. Handovers between shift and rotational personnel are effectively managed so that HSE risks are controlled without discontinuity and without loss of key information.</p>	<p>Replaces Expectation: 03:07 Measures shall be taken to ensure that handovers between shift and rotational personnel and for new assignments or during vacation periods are effectively managed, documented and that HSE aspects are fully addressed.</p>	<ul style="list-style-type: none"> • Chain of command is a new requirement
<p>Expectation 04.08: Simultaneous Operations When two or more independent operations are to be performed simultaneously and are likely to increase the level of risk, rules are established to ensure effective control of risks associated with the simultaneous operations.</p>	<p>Replaces Expectation: 03:08 On sites where major activities of different nature (Construction, Drilling, Production, etc.) are to be performed simultaneously and are likely to increase the level of risk, Management shall set the rules for Simultaneous Operation (SIMOPS) ensuring that adequate resources are in place.</p>	<ul style="list-style-type: none"> • No issues

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<p>Expectation 04.09: Downgraded Situations Downgraded situations are declared and risk controls are implemented to prevent escalation and minimize consequences. Actions to facilitate recovery are taken.</p>	<p>Replaces Expectation: 03:11 Downgraded situations shall be declared and risk reduction measures put in place to prevent escalation, lessen consequences and to facilitate recovery.</p>	<ul style="list-style-type: none"> • No issues
<p>Expectation 04.10: Critical Operations All critical operations are systematically identified and assessed to determine necessary risk controls including extra levels of supervision when needed. Risk controls for critical operations are implemented and communicated to all relevant personnel.</p>	<p>Replaces Expectation: 03:01 All operations shall undergo a risk assessment aimed at identifying opportunities for application of adequate risk-reduction measures. All operations that are assessed as being critical shall be identified and closely monitored, specific procedures shall be implemented and updated as frequently as necessary to ensure their adequacy. The risk reduction measures, including extra levels of supervision when needed, shall be communicated to all relevant personnel and interested parties.</p>	<ul style="list-style-type: none"> • No issues
<p>Expectation 04.11: Environmental Protection An environmental reference status is systematically performed prior to acquisition of assets or the commencement of any activity, at regular intervals throughout the site's lifetime, and prior to divestment of the asset or at the end of activities. Energy consumption and environmental risks including emissions in natural environments (water, air and soils), production of waste, use of natural resources and impact on biodiversity through the entire project or activity lifecycle are managed. When developing new projects or processes, options to enhance energy efficiency and reduce environmental footprint are considered. Based on risk and impact assessments, and applicable regulation, the environmental remediation of sites is conducted after final end of operations life is ensured.</p>	<p>Replaces Expectation: 05:01 Management shall ensure that an Environmental Baseline Study (EBS) is systematically performed on every new site prior to acquisition or the commencement of any work. A similar study is performed at the final abandonment stage. An Environmental Impact Assessment (EIA) study shall be carried out at the early stages of a project to identify any significant impacts (see rule HSE 13.02 for references to Societal Impact Assessment). Replaces Expectation: 05:02 Management shall ensure that any new installation or significant modification to an installation is designed such as to control and limit its energy consumption, its atmospheric emissions, its effluents, its production of ultimate waste, its use of natural resources and its impacts on biodiversity. Management shall ensure that the environmental rehabilitation of sites, after final shutdown and decommissioning of the installations, is integrated into any project as early as the conceptual stage. Replaces Expectation: 05:03 Management shall ensure that appropriate measures for limiting and controlling any significant impact on the environment caused by activities in progress are implemented and monitored during the lifecycle of the installation.</p>	<ul style="list-style-type: none"> • Enhancing energy efficiency is a new detail
<p>Expectation 04.12: Local Impact Local impacts caused by activities, new or modified installations are managed. Appropriate measures are adopted to avoid, minimize and manage residual negative impacts on communities and to develop a strong relationship with relevant stakeholders, tailored to the local needs, risks and opportunities.</p>	<p>Replaces Expectation: 13:01 Management shall ensure that before any E&P activity begins necessary studies are conducted to obtain in-depth understanding of the societal context within the perimeter of its activities. Management shall ensure that throughout its activities a structured dialogue with its stakeholders is maintained. The dialogue shall be designed in order to provide stakeholders with information regarding the entity's activities, to listen to stakeholder concerns and to guide consultation. Replaces Expectation: 13:04 Management shall develop a societal strategy and a societal management plan tailored to the local context, risks and opportunities. To sustain the deployment of the strategy and the plan, management shall ensure that a structured governance is implemented together with appropriate organizational, human and financial resources Replaces Expectation: 13:03 Management shall ensure that the local development support plan is in line with the societal strategy and that societal projects are properly selected and monitored with appropriate and structured governance.</p>	<ul style="list-style-type: none"> • "societal" is not clearly mentioned but the notion of impacts on communities remains as well as relations with relevant stakeholders
<p>Principle 5 - Contractors and Suppliers (from DIR-GR-HSE-001) "Contractors and suppliers are assessed and selected by considering their HSE performance, their ability to implement an HSE policy conforming to the entity policy, and to control the risks inherent to the activities under contract. Obligations and responsibilities in terms of HSE are clearly defined in the contracts and the entity ensures that these stipulations are respected throughout the duration of the contract."</p>	<p>Replaces Principle HSE 07 - Contractors and Suppliers "Contractors and suppliers are assessed and selected by considering their HSE performance, their ability to conform to the entity's HSE policy and their capacity to manage the risks inherent to the activities under contract. Obligations and responsibilities are clearly defined in the contracts and the entity ensures that these stipulations are strictly respected throughout the duration of the contract."</p>	<ul style="list-style-type: none"> • Changes in wording only. No issues
<p>Expectation 05.01: HSE Requirements for Contracted Activities and Purchased Goods As early as the planning phase and throughout the execution of activities, HSE risks are considered when developing the contracting or purchasing strategy.</p>	<p>Replaces Expectation: 07:01 As early as the planning phase, Management shall factor operational risks into the contract strategy. Management shall set up a system to ensure that for any works contracted by the entity to a contractor, HSE requirements are factored in at each stage of the contractual process for all contracts including services and projects.</p>	<ul style="list-style-type: none"> • No issues
<p>Expectation 05.02: Relationships with Contractors Relationships with contractors are managed in order to facilitate a shared continual improvement in HSE performance.</p>	<p>Replaces Expectation: 07:02 The entity shall manage relationships with contractors in order to facilitate continuous HSE improvement for both the contractor and the Company.</p>	<ul style="list-style-type: none"> • No issues
<p>Expectation 05.03: Contractors Qualification Contractors that are considered during the bidding process are qualified against the HSE criteria adapted to the level of risk of the contracted activity. In situations where local context requires the use of a contractor not meeting the qualification requirements, risk controls are put in place until the contractor improves its capabilities.</p>	<p>Replaces Expectation: 07:04 Management shall ensure that the bidders are pre-qualified and selected based on their ability to manage the risks associated with the activity to be contracted. Only commercial offers from bidders that have met the entity's HSE and technical requirements shall be considered. Replaces Expectation: 07:05 Any contract with a service company shall include specific HSE clauses that highlight the requirements of the contractor's HSE-MS within the framework of the contract. A written document, approved by Management, shall clarify and bridge any incompatibility or differences between the two HSE-MS.</p>	<ul style="list-style-type: none"> • Requirements addressing local context and pushing contractors that are not fully qualified to improve is an upgrade in One-Maestro.
<p>Expectation 05.04: HSE Clauses All call for tender documents contain detailed information that enables bidding contractors to assess the risks related to contracted activities and appropriate risk controls. Based on the risks, contracts shall include specific HSE clauses.</p>	<p>Replaces Expectation: 07:03 Management shall ensure that the call for tender documents contain sufficiently detailed information to enable bidder companies to assess the works-related risks and the risk reduction measures that shall be implemented to deal with them. These documents shall also present the HSE evaluation criteria for answering the call for tenders. Replaces Expectation: 07:05 Any contract with a service company shall include specific HSE clauses that highlight the requirements of the contractor's HSE-MS within the framework of the contract. A written document, approved by Management, shall clarify and bridge any incompatibility or differences between the two HSE-MS.</p>	<ul style="list-style-type: none"> • No issues
<p>Expectation 05.05: Contractors Selection Contractors are selected based on their ability to manage the risks associated with the activity being contracted, their HSE performance, and their ability to comply with the defined HSE requirements. Contractor capabilities to manage the defined HSE requirements are evaluated independently from commercial bids. Based on the level of risk, a process is in place to clarify and bridge incompatibilities or differences between the contractor's HSE procedures and the defined HSE requirements. Only offers deemed to meet the defined HSE requirements can be selected.</p>	<p>Replaces Expectation: 07:04 Management shall ensure that the bidders are pre-qualified and selected based on their ability to manage the risks associated with the activity to be contracted. Only commercial offers from bidders that have met the entity's HSE and technical requirements shall be considered. Replaces Expectation: 07:05 Any contract with a service company shall include specific HSE clauses that highlight the requirements of the contractor's HSE-MS within the framework of the contract. A written document, approved by Management, shall clarify and bridge any incompatibility or differences between the two HSE-MS.</p>	<ul style="list-style-type: none"> • Requirement that HSE capabilities are evaluated independently is new One-Maestro but addressed in EP company rules. No gaps.
<p>Expectation 05.06: Contract Execution During execution of the contract the HSE contract clauses are implemented and verified. This includes implementation of a formal HSE plan when necessary. Performance of the contractor is evaluated throughout the duration of the contract, and appropriate corrective actions are taken when non-compliances are detected.</p>	<p>Replaces Expectation: 07:06 Management shall ensure that when the contractor is mobilized, the conditions specified in the contract clauses, including those cases where a formal HSE plan is required, shall be effectively implemented. Performance of the contractor shall be evaluated jointly by the entity and the contractor from the point of mobilization through to closure of the contract. Appropriate corrective actions shall be taken immediately when noncompliance is detected</p>	<ul style="list-style-type: none"> • No issues
<p>Expectation 05.07: Subcontractors Measures are taken to limit subcontracting. Subcontractors follow equivalent HSE requirements to those applied to the contractor. The entity or affiliate is informed by the contractor of the plan to use a subcontractor. The entity or affiliate maintains the right to refuse any subcontractor.</p>	<p>Replaces Expectation: 07:07 Management shall ensure that a contractor takes all the necessary measures to limit subcontracting and in any case, makes sure that its subcontractors apply the terms laid down in the contract's HSE clauses.</p>	<ul style="list-style-type: none"> • Right to refuse any Subcontractor is new for EP, but already in practice

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<p>Expectation 05.08: Management of Suppliers of Goods, Equipment or Materials A process is defined for procuring or renting of goods, equipment or materials that meets the defined HSE specifications. For goods, equipment or materials with specific HSE risks, an acceptance and control procedure is applied.</p>	<p>Replaces Expectation: 07:08 Management shall define a process for procuring products or equipment in line with the entity's HSE and technical criteria. Management shall ensure that supplies of products or equipment, including those items hired or rented, undergo an acceptance and control procedure by a technically competent person.</p>	<ul style="list-style-type: none"> • No issues
<p>Principle 6 - Competencies and Training (from DIR-GR-HSE-001) "For all activities, the competencies required are defined, taking into account HSE aspects. Competencies of personnel are regularly assessed, and training and development plans are implemented to ensure that competencies are appropriate for the tasks to be performed."</p>	<p>Replaces HSE 08 - Competence and training "For all activities, each entity defines the competencies required, taking into account HSE aspects. Competencies of personnel are regularly assessed, and training and development plans implemented to ensure that competencies are appropriate for the tasks to be performed."</p>	<ul style="list-style-type: none"> • No issues
<p>Expectation 06.01: HSE Competency Needs Based on the assessed risks to which personnel are exposed, a system for identifying and defining the role specific HSE competencies is implemented. A protocol to regularly assess personnel competencies and to close identified gaps is defined and implemented.</p>	<p>Replaces Expectation: 08:01 Management shall implement a system to identify and define the role, specific competency and training requirements, based on the specific tasks, duties and risks faced by each role. The entity shall define and implement a protocol for regularly assessing personnel competencies, and implement a process to address any failures to meet the defined competency requirements.</p>	<ul style="list-style-type: none"> • One-Maestro treats training separately from competency. No gaps
<p>Expectation 06.02: HSE Training Based on assessed risks and defined needs, an HSE training process is established. An HSE training plan is implemented and monitored in order to ensure effectiveness.</p>	<p>Replaces Expectation: 08:03 Management shall ensure that an appropriate training process is put in place that enables all personnel involved in the entity's activities to develop their competencies. Management shall ensure that a mandatory and specific HSE training plan is implemented addressing the required training by position. Management shall monitor realization of the HSE training plan.</p>	<ul style="list-style-type: none"> • No issues
<p>Expectation 06.03: HSE Induction & Orientation Personnel and visitors are informed about any HSE risk they may be exposed to. Site-specific rules and emergency response measures are included in HSE inductions. All newly hired or transferred personnel (including management) are provided with an HSE orientation including training on any specific HSE obligations related to their role.</p>	<p>Replaces Expectation: 03:04 Management shall ensure that all personnel working on the entity's sites are thoroughly informed of the risks, rules and emergency response measures specific to their site and their function. Management shall ensure that a documented induction is provided to all newly hired or transferred employees, visitors or contractors to all industrial sites, including specific training for personnel in leadership positions regarding their HSE roles and responsibilities.</p>	<ul style="list-style-type: none"> • No issues
<p>Expectation 06.04: Requirements for Instructors Internal and external instructors are selected based on defined subject matter competency and their ability to instruct others</p>	<p>Replaces Expectation: 08:04 Management shall select internal and external instructors based on established competency requirements. These competency requirements shall ensure instructors are selected based on their subject matter expertise, as well as their capabilities to instruct others.</p>	<ul style="list-style-type: none"> • No issues
<p>Principle 7 - Emergency Preparedness (from DIR-GR-HSE-001) "The emergency situations potentially critical for people, the environment and assets are identified based on a risk assessment. An organization is set up to ensure that emergency plans, appropriately-trained personnel and suitable equipment necessary for dealing with such situations are constantly on hand. Emergency and associated external assistance plans are drawn up, tested during periodic exercises and updated on a regular basis. Where appropriate, these emergency plans take into account local communities, mutual aid organizations and authorities. All employees, contractors, suppliers and visitors are informed about what to do in the event of an emergency."</p>	<p>Replaces Principle HSE 09 - Emergency preparedness "The emergency situations potentially critical for people, the environment and assets are identified based on a risk assessment. An organization is set up to ensure that emergency plans, appropriately-trained personnel and suitable equipment necessary for dealing with such situations are constantly on hand. Emergency and associated external assistance plans are drawn up, tested during periodic exercises and updated on a regular basis."</p>	<ul style="list-style-type: none"> • More specific on local communities, mutual aid organizations and authorities to be considered in the emergency plans. • Visitors, suppliers and personnel informed of what to do in case of an emergency is not included in the EP principle.
<p>Expectation 07.01: Scenarios Identification With the inclusion of major risks, scenarios that can lead to emergency/crisis situations are identified. Scenarios for activities managed by contractors are taken into account.</p>	<p>Replaces Expectation: 09:02 Management shall ensure that on each of the entity's sites, all scenarios that may result in emergency situations have been identified by means of a risk assessment, including those identified in the major risks register. Management shall ensure that for certain very critical scenarios, additional specific emergency response procedures are implemented.</p>	<ul style="list-style-type: none"> • Requirements for contractors not included in EP Maestro
<p>Expectation 07.02: Emergency Response/Crisis Plan An emergency response/crisis plan is in place that describes: - The specific procedures related to the defined emergency/crisis scenarios; - The emergency/crisis organization including related role definitions and responsibilities; - The resources required to manage the defined emergency/crisis scenarios; - The process and accountabilities for emergency/crisis notification and communication; - The actions necessary for large scale responses; - The mutual aid agreements including related roles and responsibilities; - Post-event recovery plans.</p>	<p>Replaces Expectation: 09:01 Management shall implement an emergency-management system that fits the entity's operational context, and describes the organization, notification and communication circuits and resources needed to deal with the situations identified. These plans shall be updated as and when required, and changes are communicated to personnel and interested parties. Replaces Expectation: 05:04 Management shall ensure that an organization, including tools and resources aimed at preventing risks of pollution and limiting its extent and impact on the environment, is in place. Replaces Expectation: 09:05 Management shall ensure that whenever an emergency response plan calls for external assistance provided to or accepted from an industry partner or local authority, there is a written agreement defining the communication networks and each organization's role and responsibilities.</p>	<ul style="list-style-type: none"> • Details related to post-event recovery and plans for large scale events are not specified in EP Maestro, but are addressed in the EP rules. No major issues.
<p>Expectation 07.03: Emergency/Crisis Training Personnel that may be involved in the response or management of an emergency/crisis situation are aware of their roles and accountabilities and have taken the required theoretical and practical training.</p>	<p>Replaces Expectation: 09:03 Management shall ensure that personnel who may be involved in managing an emergency situation are fully aware of their roles and have taken the theoretical and practical training required.</p>	<ul style="list-style-type: none"> • No issues
<p>Expectation 07.04: Drills Emergency / crisis plans including communication means are systematically tested and improved through periodic drills. Lessons learned are identified and addressed. Large scale exercises are conducted for sites exposed to significant technological or environmental risks, at minimum annually, including at least one site and the entity or affiliate's headquarters.</p>	<p>Replaces Expectation: 09:04 Following the principle of continual improvement, Management shall ensure that the emergency response system is systematically tested through periodic exercises, and updated. The entity shall conduct a large scale exercise at least once a year between at least one site and the entity's headquarters.</p>	<ul style="list-style-type: none"> • Lessons learnt are not addressed in this principle in EP Maestro, but addressed in "Learning from Events." • New: Large scale exercises are conducted for sites exposed to significant technological or environmental risks > already the case for EP
<p>Principle 8 - Learning from Events (from DIR-GR-HSE-001) "All incidents are reported and analyzed in depth to determine their root causes. All corrective actions and preventive measures are defined and appropriately prioritized. The results of the analyses are reported to all interested parties that may benefit from the lessons learned. All employees have a duty to report without delay, any dangerous situation or any deviation from HSE rules."</p>	<p>Replaces Principle HSE 10 – Learning from events "All incidents are reported and analyzed. Those with significant actual or potential severity are analyzed in depth to determine their root causes. All corrective actions and preventive measures are taken with priority. The results of those analyses are reported to all interested parties that may benefit from the experience learned. Identification and reporting of anomalies are promoted."</p>	<ul style="list-style-type: none"> • Reporting anomalies is more than promoted, it is now a duty.

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<p>Expectation 08.01: Incident and Anomaly Reporting Reporting of all incidents, near-misses and anomalies is promoted. A process to return feedback to the reporter is implemented. Employees have a duty to report.</p>	<p>Replaces Expectation: 10:01 Management shall implement a system to ensure that any incident arising from the entity's activities is immediately reported using a company-wide database and analyzed to determine its cause(s) and potential severity. Corrective actions shall be defined and implemented and preventive measures are taken to avoid recurrence. The system shall include a process for notification when appropriate to the branch, Group and interested parties. Replaces Expectation: 10:02 Management shall promote the identification and reporting of anomalies. Appropriate corrective actions shall be defined and implemented. Replaces Expectation: 10:04 Based on the actual or potential severity, Management shall appoint an entity Board of Enquiry in order to identify the circumstances, analyze the root causes and issue a report containing, among other things, the entity's conclusions and recommendations. Conclusions shall be presented to branch senior Management and final actions plans shall be validated by the senior management of the branch.</p>	<p>• No issues</p>
<p>Expectation 08.02: Investigation and Analysis Process Based on the level of risk and in the effort to prevent recurrence, incidents and near-misses are investigated. Fatal accidents, incidents with high severity potential, and significant loss of containment events are analyzed as to determine cause. The analysis and related corrective and preventive action plans are validated at the appropriate level and monitored through to closure.</p>	<p>Replaces Expectation: 10:01 Management shall implement a system to ensure that any incident arising from the entity's activities is immediately reported using a company-wide database and analyzed to determine its cause(s) and potential severity. Corrective actions shall be defined and implemented and preventive measures are taken to avoid recurrence. The system shall include a process for notification when appropriate to the branch, Group and interested parties. Replaces Expectation: 10:03 Management shall implement an investigation process. The depth of the investigation and management review shall depend upon the actual or potential severity of the incident. The investigation analysis and related action plans shall be validated at the appropriate level. Replaces Expectation: 10:04 Based on the actual or potential severity, Management shall appoint an entity Board of Enquiry in order to identify the circumstances, analyze the root causes and issue a report containing, among other things, the entity's conclusions and recommendations. Conclusions shall be presented to branch senior Management and final actions plans shall be validated by the senior management of the branch.</p>	<p>• There is more detail on following corrective actions through to closure in One-Maestro, but the spirit is captured within EP Maestro effectively (not as explicitly). No major issues</p>
<p>Expectation 08.03 : Communication of Incidents While considering aspects of confidentiality, a communication process is established ensuring that relevant information regarding incidents: - Are shared with employees and contractors ; - Are communicated to authorities.</p>	<p>Replaces Expectation: 10:01 Management shall implement a system to ensure that any incident arising from the entity's activities is immediately reported using a company-wide database and analyzed to determine its cause(s) and potential severity. Corrective actions shall be defined and implemented and preventive measures are taken to avoid recurrence. The system shall include a process for notification when appropriate to the branch, Group and interested parties. Replaces Expectation: 10:03 Management shall implement an investigation process. The depth of the investigation and management review shall depend upon the actual or potential severity of the incident. The investigation analysis and related action plans shall be validated at the appropriate level.</p>	<p>• EP Maestro captures the spirit, if not in the same level of detail. No issues</p>
<p>Expectation 08.04 : Return on Experience A companywide network is established to identify and share lessons learned from the analysis results of relevant events (return on experience, or "REX"). All REX received are analyzed and communicated to the relevant personnel, and pertinent recommendations are implemented.</p>	<p>Replaces Expectation: 10:04 Based on the actual or potential severity, Management shall appoint an entity Board of Enquiry in order to identify the circumstances, analyze the root causes and issue a report containing, among other things, the entity's conclusions and recommendations. Conclusions shall be presented to branch senior Management and final actions plans shall be validated by the senior management of the branch. Replaces Expectation: 12:04 Management shall ensure that all feedback received by the entity, in particular those issued by the branch, is analyzed and communicated to the personnel and interested parties, and that the identified recommendations are implemented. Management shall actively encourage the issuance of experience feedback from the entity to the branch and local authorities.</p>	<p>• No issues</p>
<p>Principle 9 - Monitoring, Audit and Inspection (from DIR-GR-HSE-001) "Management is responsible for the implementation of the HSE policy, and regularly assesses its performance through monitoring, audits and inspections. Any shortfalls in regard to the set objectives are analysed and corrective actions and/or an improvement plans are subsequently defined, implemented and monitored through to closure. "</p>	<p>Replaces Principle HSE 11 – Monitoring, audit and inspection "In every field of activity, the entity checks that its HSE policy is being applied and its performances are regularly assessed through monitoring, audit and inspection. Any shortfalls in regard to objectives are analyzed and an improvement plan is subsequently defined."</p>	<p>• No issues</p>
<p>Expectation 09.01: Monitoring A process is implemented to monitor compliance with applicable requirements (legal, internal, contractual, and the voluntary commitments). The results of the monitoring are documented. Deficiencies are identified and improvement plans are implemented and monitored through to closure.</p>	<p>Replaces Expectation: 11:04 Management shall ensure that findings from audits, reviews and inspections are analyzed. Prioritized action plans shall be set according to the level of assessed risk. Persons with the appropriate combination of competence and authority shall be assigned to each action.</p>	<p>• Monitoring is not directly included in this part of EP Maestro, but is included in EP rules. No major issues related to implementing this expectation.</p>
<p>Expectation 09.02: HSE Self-assessment, Audit & Inspection program HSE self-assessments, audits & inspections are systematically planned, and related roles and accountabilities are defined. All installations are subject to technical audits and inspections to evaluate integrity and operability. The resulting action plans are defined and validated at the appropriate level and the actions are monitored through to closure.</p>	<p>Replaces Expectation: 11:01 Management shall check through regular HSE audits and/or reviews that the entity's HSE-MS is effectively implemented and in line with its HSE policy and objectives. Management shall implement the necessary means, resources and competencies to validate adherence to HSE terms within Joint Operator Agreements, and work to influence partners to strive for continuous improvement. Management shall implement HSE audit programs setting the frequency, roles and responsibilities. These audits shall be systematically prepared, performed and followed up. Replaces Expectation: 11:02 Management shall ensure that all installations are subject to housekeeping, planned general and technical inspections aimed to ensure ongoing integrity and operability. Management shall devise inspection plans setting the frequency, roles and responsibilities. These inspections shall be systematically prepared, performed and followed up. Replaces Expectation: 11:03 Management shall ensure that all the entity offices and accommodations are regularly inspected, actions shall be prioritized and assigned to persons with the appropriate level of competence and authority and followed by Management through to closure. Replaces Expectation: 11:04 Management shall ensure that findings from audits, reviews and inspections are analyzed. Prioritized action plans shall be set according to the level of assessed risk. Persons with the appropriate combination of competence and authority shall be assigned to each action.</p>	<p>• No issues</p>
<p>Expectation 09.03: Observations and Recognition Observations of operational tasks are regularly conducted in order to ensure compliance with the Golden Rules and other HSE requirements. The results of these observations are used to promote appropriate behavior and to recognize HSE performance.</p>	<p>Replaces Expectation: 11:05 Behavioral Safety Audits (BSAs) shall be conducted regularly at each site to ensure compliance with the branch's Golden Rules. The results of the BSAs shall be communicated to personnel and interested parties, and used to promote performance improvement.</p>	<p>• Observations of operational tasks is new</p>
<p>Principle 10 - Performance Improvement (from DIR-GR-HSE-001) "In order to improve performance, HSE action plans are regularly reviewed within each activity. HSE management system effectiveness is analysed during management reviews and monitored through key performance indicators, both quantitative and qualitative. Actions are prioritized according to the risk level or associated impact and are incorporated within the entity's action plan. "</p>	<p>Replaces Principle HSE 12 – Performance improvement "In every field of activity, in order to improve performance, HSE action plans are regularly reviewed. HSE-MS's effectiveness is analyzed during management reviews and monitored through key performance indicators. Actions are prioritized according to the risk level or associated impact and are incorporated within the entity action plan."</p>	<p>• No issues.</p>

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<p>Expectation 10.01: Key Performance Indicators (KPIs) Both leading and lagging key performance indicators are established to track HSE performance and implementation of the HSE-MS.</p>	<p>Replaces Expectation: 12:02 Management shall establish key performance indicators chosen to control the efficiency of the HSE-MS implemented by the entity, particularly in the risk management domain.</p>	<ul style="list-style-type: none"> • No major issues.
<p>Expectation 10.02: Impacts Reduction HSE impacts are regularly monitored and the results are recorded and reported. Corrective and preventive action plans are implemented in order to eliminate or reduce HSE impacts.</p>	<p>Replaces Expectation: 12:01 Management shall systematically review the evolution of the HSE Policy, strategy and HSE-MS to ensure its continued suitability, adequacy and effectiveness. Management shall analyze performance against set HSE objectives and targets, results of audits, present status of the major risk register, outcomes from set action plans and findings from incident investigations in making the review. Results of the systematic reviews shall be communicated within the entity, to concerned parties and the branch when appropriate.</p>	<ul style="list-style-type: none"> • Corrective and preventive actions are not addressed within this expectation, but treated throughout other parts of EP Maestro and within company rules. No major issue. • Impacts reduction is stronger in One-Maestro than in EP Maestro, but company rules (ENV) address the issue effectively.
<p>Expectation 10.03: Management Review The HSE-MS is systematically reviewed at minimum annually, to ensure its continued adequacy and effectiveness. The review includes at minimum: - The evolution of HSE risks and associated significant impacts; - Changes in regulatory requirements; - Any emerging issues; - An assessment of performance against the established HSE objectives; - Findings from HSE audits and investigations; - Progress in completing action plans; - The adequacy of resources. Based on this review and prioritized according to the level of risk, the policy, strategy, objectives and the HSE-MS are adapted to ensure continual improvement in HSE performance.</p>	<p>Replaces Expectation: 12:01 Management shall systematically review the evolution of the HSE Policy, strategy and HSE-MS to ensure its continued suitability, adequacy and effectiveness. Management shall analyze performance against set HSE objectives and targets, results of audits, present status of the major risk register, outcomes from set action plans and findings from incident investigations in making the review. Results of the systematic reviews shall be communicated within the entity, to concerned parties and the branch when appropriate.</p>	<ul style="list-style-type: none"> • Clearer wording and more specific details on what must be addressed within a management review in One-Maestro, but the spirit of the expectation is respected in EP Maestro.
	<p>Expectation 03:06 Management shall assign authority to top Management at each site (RSES) as responsible for HSE management and performance. Management shall put in place an organization suitable to the criticality of operations faced.</p>	<p>RSES is a specific requirement within EP and will be treated as a Branch Rule.</p>
	<p>Expectation 03:12 Each entity shall develop a system for the identification and marking of all piping and process equipment. This system shall include subsurface piping, cables, and abandoned or obsolete equipment.</p>	<p>Will be treated as Branch specifics.</p>
	<p>Expectation 03:13 Operational sites shall keep up to date an HSE dossier that shall be reviewed by the entity management.</p>	<p>EP specific. May become a Branch Rule, but should be discussed as to whether this is still of value considering more modern data and information storage systems.</p>
	<p>Expectation 05:01 Management shall ensure that an Environmental Baseline Study (EBS) is systematically performed on every new site prior to acquisition or the commencement of any work. A similar study is performed at the final abandonment stage. An Environmental Impact Assessment (EIA) shall be carried out at the early stages of a project to identify any significant impacts (see rule HSE 13:02 for references to Societal Impact Assessment).</p>	<p>Included as part of risk assessment, and partially addressed in Laws & Regulations (authorizations).</p>
	<p>Expectation 06:01 Management shall ensure that health risks are regularly assessed – and quantified by measurement where appropriate – and that risk reduction measures are taken to bring them down to an appropriate level. Health risks include those related directly to the entity’s activities, and those related to the climate, the environment and local sanitary conditions as well as those related to dining and housing.</p>	<p>Included in principle 3 Risk, and in expectations for the risk assessment method and the application of controls.</p>
	<p>Expectation 06:04 Management shall ensure, by means of an appropriate recurrent medical audit, that adequate medical resources are available locally appropriate to the level of hazard.</p>	<p>Integrated into principle 3 - Risk assessment and the expectation on application of controls. Addressed in part by principle 1 - HSE policy with the assignment of means and resources. Addressed in principle 4 – organizational means.</p>
	<p>Expectation 13:02 Management shall ensure that before any major operating activity begins, the entity assesses its societal impacts and its degree of societal exposure. Management shall ensure that negative impacts of its activities are properly management by the entity and its contractors (see rule 5:01 for references to Environmental Impact Assessment).</p>	<p>Addressed in expectation 4.12</p>
	<p>Expectation 13:03 Management shall ensure that the local development support plan is in line with the societal strategy and that the societal projects are properly selected and monitored with appropriate and structured governance.</p>	<p>Not in One-Maestro</p>
	<p>Expectation 13:04 Management shall develop a societal strategy and a societal management plan tailored to the local context, risks and opportunities. To sustain the deployment of the strategy and the plan, management shall ensure that a structured governance is implemented together with appropriate organizational, human and financial resources.</p>	<p>Partially addressed in expectation 4.12</p>
	<p>Expectation 14:01 Management shall ensure that a security policy compliant with the VPSHR and the Corporate security referential has been implemented, and an organization officially appointed to implement and maintain the Security aspects (organizational, human and technical) related to the HSE-MS.</p>	<p>Security not in the scope of application of One Maestro</p>
	<p>Expectation 14:03 According to the threat level, Management shall ensure that a security plan and supporting procedures are prepared and implemented. The Security Plan shall be tested through periodic exercises and updated on a regular basis.</p>	<p>Security not in the scope of application of One Maestro</p>
	<p>Expectation 14:04 Management shall ensure a security alert and reporting procedure is implemented for the entity.</p>	<p>Security not in the scope of application of One Maestro</p>

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	<p>Expectation 14:06 For any new project or activity, Management shall ensure that security issues are assessed. According to this evaluation, security requirements and responsibilities shall be stated in the entity's contracts and the entity shall ensure these stipulations are respected throughout the duration of the contract.</p>	<p>Security not in the scope of application of One Maestro</p>
	<p>Appendix 2: 6x6 risk matrix</p>	<p>The 6x6 risk matrix is now included in CR EP HSE 032 and is not be included in One-Maestro</p>

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<p align="center">CR-GR-HSE-001 One-MAESTRO HSE Expectations 01/03/2018 Rev 00</p>	<p align="center">CR MS HSEQ 110 MS HSEQ management general requirements 01/09/2014 Rev 00</p>	<p align="center">Comments / Gaps</p>
<p>PURPOSE This rule sets out expectations in line with the One-MAESTRO HSE Principles (DIR-GR-HSE-001). The directive, these expectations and the requirements defined in Group HSE rules and guides constitute One-MAESTRO, the HSE management system framework within the Group. One-MAESTRO addresses: - Industrial Hygiene; - Safety; - Environment.</p>		<ul style="list-style-type: none"> • One Maestro does not cover quality and Security
<p>SCOPE OF APPLICATION These expectations are applied to Group entities and affiliates, in accordance with their respective decision-making rules and without prejudice to the locally applicable legal and regulatory provisions, for the assets, activities, and sites in the Group-operated domain. For entities and affiliates without operations and without a HSE management system, these expectations apply as far as they are concerned by the risk. With regard to assets, activities and sites outside the Group-operated domain, that is to say operated by structures (joint ventures) in which the Group does not exercise control, the Group representatives in these structures will seek to promote the One-MAESTRO HSE expectations and endeavour to have similar expectations adopted.</p>		
<p>Principle 1 - Management Leadership and Commitment (from DIR-GR-HSE-001) "In accordance with the Group Charter, each entity adopts the HSE policy, sets its objectives, communicates them at all levels of the organization and allocates the resources necessary for their implementation. Management at all levels demonstrates exemplary conduct, rigor, vigilance and professionalism regarding HSE in all their activities. The visible commitment to HSE performance is part of the overall assessment of all managers. HSE performance is evaluated for everyone."</p>	<p>Replaces Principle 2 - Management, Leadership and Commitment Each entity establishes its own HSEQ policy, sets objectives, communicates them at all levels of the organization and assigns the resources necessary for its implementation. Management at all levels demonstrates exemplary conduct, vigilance, and professionalism regarding HSEQ in all their activities. The visible commitment to HSEQ performance is part of the overall assessment of all managers.</p>	<ul style="list-style-type: none"> • No issues
<p>Expectation 01.01: The HSE Policy A local HSE policy and the organizational means and resources required to respect the Group SHEQ Charter and apply One-MAESTRO in the local HSE management system (HSE-MS) are in place.</p>	<p>Replaces Expectation: 02:01 Management shall define, at appropriate organizational level, the entity's HSEQ policy in line with the one of the branch. Management shall communicate the HSEQ policy to all personnel, make it available to interested parties, and ensure its application at all levels in the organization. Management shall assign the organizational means and resources required to apply the HSE policy. In particular, Management shall appoint one or more management system coordinators. Replaces Expectation: 05:04 Management shall ensure that an organization, including tools and resources aimed at preventing risks of pollution and limiting its extent and impact on the environment, is in place. Replaces Expectation: 14:01 Management shall ensure that a security policy compliant with the VPSHR and the Corporate security referential has been implemented, and an organization officially appointed to implement and maintain the Security aspects (organizational, human and technical) related to the HSEQ management system</p>	<ul style="list-style-type: none"> • No issue. Affiliates will be directed to the Group policies rather than the Branch, but not a major change
<p>Expectation 01.02: HSE Vision, Strategy and Objectives The Group HSE vision and strategy are communicated to personnel and made available to relevant stakeholders. In support of the Group HSE vision and strategy, specific objectives and targets designed to eliminate or minimize HSE risks and impacts are set and associated action plans are established. The HSE objectives are the basis for defining the individual annual HSE objectives for each employee.</p>	<p>Replaces Expectation: 02:02 As part of its continual improvement approach, Management shall set HSE objectives and targets for the entity and ensure that associated action plans are put in place.</p>	<ul style="list-style-type: none"> • Vision and strategy are new, but aimed at the Group • Requirement for objectives to be linked to individual annual objectives is new but no so critical as it was already in the audit protocol (SMI)
<p>Expectation 01.03: HSE Management System, Documents and Records An HSE-MS in accordance with One-MAESTRO and applicable management system standards is implemented. A procedure is in place to ensure that associated documents and records are identified, effectively managed, regularly reviewed and updated as necessary.</p>	<p>Replaces Expectation: 02:03 Management shall ensure the implementation of a documented HSE Management System in accordance with branch HSEQ general requirements, and if necessary in conformance with the requirements of international management system norms such as ISO norms. Management shall ensure that the HSEQ management system and associated documents are effectively managed, and shall implement a process to determine and control any data as required to provide evidence that the HSEQ management system is functioning as intended. Replaces Expectation: 03:13 The entity shall develop a system to manage, review and update technical and HSEQ documentation. Replaces Expectation: 03:14 An HSEQ management system manual shall define the scope of application of the system and shall describe the main processes or components of the system, and their interactions. Replaces Expectation: 15:02 The Entity shall organize its activity in the form of processes and assess their performance using relevant indicators. Replaces Expectation: 15:03 The Entity shall ensure control of product quality across its entire manufacturing and distribution chain and the associated services.</p>	<ul style="list-style-type: none"> • No issues
<p>Expectation 01.04: Roles and Accountabilities The authority, accountabilities and interfaces for managing, performing and monitoring activities that have an impact on HSE at all levels of the organization are clearly defined. All personnel are aware of their roles and personal accountabilities in the practice of their duties. Personnel demonstrate the strictest discipline in preventing accidents, in protecting health and the environment, whilst addressing other relevant stakeholder expectations.</p>	<p>Replaces Expectation: 02:04 The organization, responsibilities, authority and the relationships between those managing, performing and monitoring activities having an impact on health, safety, environment, security, quality and commercial product safety at all levels of the organization shall be clearly documented. This includes responsibilities shared with one or more third parties. Each entity's organizational memo shall define clearly HSEQ roles and responsibilities. Replaces Expectation: 08:02 The entity shall ensure that a job description is issued for each position in its organization. It shall include the definition of HSE roles and responsibilities inherent to that position. Management shall ensure that each individual is aware of his/her role and its attributions with regard to his/her own occupational health and safety and that of others, and is aware of the potential impact of his/her activity on the environment and on the installations. Replaces Expectation: 02:05 Management shall ensure that all concerned personnel are correctly informed of the existence of the HSEQ management system and of their role within this system.</p>	<ul style="list-style-type: none"> • Personal accountabilities section is new, used to be "responsibilities"

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<p>Expectation 01.05: HSE Committees One or more HSE committees are established that function collectively to improve performance, ensure the implementation of the HSE-MS, monitor corrective and preventive action plans, and ensure communication of the resulting information to all relevant stakeholders.</p>	<p>Replaces Expectation: 02:12 Management shall put in place an organization suitable to the criticality of operations faced. Management shall assign responsibility of HSEQ performance to top Management and give him all the necessary authority.</p>	<ul style="list-style-type: none"> • Committees are not really addressed in MS Maestro. Affiliates to determine the appropriate size and number of HSE committees. (note that HSE committees were a requirement of CR MS HSEQ 112)
<p>Expectation 01.06: Leadership Management HSE leadership and engagement are actively demonstrated. HSE programs are implemented: - Safety tours: to reinforce HSE messages and to seek feedback from employees and contractors; - STOP CARD: to stop any situation that has the potential to harm people, the environment and/or assets; - Recognition and sanction: to recognize and improve HSE performance.</p>	<p>Replaces Expectation: 02:06 The entity shall implement a site visit program for Management (safety tours) that covers HSEQ aspects in order to give greater impact to the messages concerning the entity's HSEQ policy, the objectives and its performance. Replaces Expectation: 02:08 Management shall develop an HSEQ culture by formalizing its personal commitment, and displaying exemplary behaviour. Management shall regularly assess the HSEQ behaviour and performance of all personnel including management itself. Management shall implement a system to recognize good behaviour and to justly sanction inappropriate behaviour.</p>	<ul style="list-style-type: none"> • Feedback is emphasized more directly in the new One-Maestro • STOP card promotion is new, but already in place in the Branch
<p>Expectation 01.07: Stakeholder Engagement Relevant stakeholders are identified and mapped. Open, transparent and structured dialogue is established and maintained in order to provide these stakeholders with information regarding the relevant HSE risks.</p>	<p>Replaces Expectation: 13:01 The entity shall be familiar with its societal context and shall measure its level of exposure to societal risk. The entity shall regularly conduct an internal assessment of its societal exposure. The entity shall stay abreast of local authority priorities regarding economic and social development. For any project, change or disinvestment, the impacts on the involved parties are taken into account. Replaces Expectation: 13:02 Each entity shall possess a list of its principal involved parties and shall consult them at regular intervals. The involved parties are listed in 4 categories: internal, local and national authorities, economic players and civilian society. Each involved party is classified according to its importance for the entity. The entity regularly consults its principal involved parties in order to identify their concerns and expectations as well as their vision of the socio-economic priorities for the community. The entity measures the satisfaction level of its principal involved parties. Replaces Expectation: 15:04 The Entity shall identify and put in place the appropriate tools to measure the satisfaction level of all involved parties, particularly its customers, and shall communicate the results and put in place actions for improvement in conformity with the observed results and the proposed objectives.</p>	<ul style="list-style-type: none"> • Although the listening to concerns is not specified, it is covered in the spirit of MS Maestro.
<p>Expectation 01.08: HSE Communication Whilst respecting language and cultural aspects, an HSE communication system is established that keeps relevant stakeholders regularly informed regarding HSE issues. This includes alerts related to relevant HSE events, and notification as required following near-misses and incidents. The effectiveness of HSE communication is regularly assessed.</p>	<p>Replaces Expectation: 02:09 Management shall establish an effective HSEQ communication system to keep personnel and other interested parties regularly informed regarding HSEQ issues. Management shall regularly assess the clarity of HSEQ communication. Language and cultural aspects shall be considered to ensure effective communication. Measures are formalized for the organization, performance and follow-up of team meetings chaired by the local management and dealing with HSEQ matters. Replaces Expectation: 14:04 Management shall ensure a security alert and event reporting procedure is implemented for the entity. Replaces Expectation: 15:04 The Entity shall identify and put in place the appropriate tools to measure the satisfaction level of all involved parties, particularly its customers, and shall communicate the results and put in place actions for improvement in conformity with the observed results and the proposed objectives.</p>	<ul style="list-style-type: none"> • "Effective" system implies regularly assessed. No major issues.
<p>Principle 2 - Compliance with Laws, Regulations and Group Requirements (from DIR-GR-HSE-001) "In all activities, the entities act in compliance with applicable laws, regulations, relevant industry standards, Group's voluntary commitments, and other specific principles and requirements at the Group and branch level."</p>	<p>Replaces Principle HSE 01 – Compliance with laws and regulations In all activities, the branch acts in compliance with applicable laws and regulations as well as with the relevant industry standards and the principles and requirements specific to the Group and the branch.</p>	<ul style="list-style-type: none"> • Voluntary commitments are a new detail.
<p>Expectation 02.01: Compliance Within the HSE domain, a process is established to identify, monitor and comply with the applicable: - Legal, regulatory requirements; - Voluntary commitments; - Contracts; - Industry standards; - One-MAESTRO. Identified requirements are communicated to relevant personnel.</p>	<p>Replaces Expectation: 01:01 Management shall set up a system to monitor, update, communicate to all personnel and interested parties and enforce the applicable legal and regulatory requirements, appropriate industry norms and standards, and the rules and requirements specific to the Group and the branch.</p>	<ul style="list-style-type: none"> • No issues
<p>Expectation 02.02: Authorizations for Activities No activity is undertaken without first obtaining the necessary official authorizations. All Group activities are performed in compliance with the conditions specific to these authorizations.</p>	<p>Replaces Expectation: 02:02 Management shall ensure that no activity is undertaken without obtaining beforehand the necessary official authorizations, and that all of the entity's activities are performed in compliance with the conditions specific to these authorizations.</p>	<ul style="list-style-type: none"> • No issues
<p>Expectation 02.03: Contacts with Authorities Regular contacts are established and maintained with national and/or local authorities that have responsibilities for HSE. Participation in consultations, public hearings or other similar initiatives regarding future regulations is organized when appropriate.</p>	<p>Replaces Expectation: 02:03 Management, at appropriate level, shall establish and maintain close contact with national and local authorities that have responsibilities for HSEQ matters. When applicable, the entity shall assist the authorities in drafting laws, regulations or norms through direct or indirect participation in consultations, or other similar initiatives.</p>	<ul style="list-style-type: none"> • No issues
<p>Expectation 02.04: Derogation to Group Requirements Any deviation from a Group HSE expectation or requirement is the subject of a prior written and reasoned authorization from the designated internal authority, following consultation with the competent HSE authority.</p>	<p>Replaces Expectation: 02:10 In cases of non-conformance to Company Rules and General Specifications, the entity shall seek derogation pursuant to the process set in the branch.</p>	<ul style="list-style-type: none"> • No issue, but derogation process to be formalized
<p>Principle 3 - Risk Management (from DIR-GR-HSE-001) "For any activity the hazards to which people, the environment and assets are exposed are systematically identified, the associated risks assessed and the measures for reducing them defined and implemented. The risk level and risk reduction measures are periodically reassessed, at a minimum with each change of an activity or a process. In particular, the potential risks to human health, the technological risks and the potential significant environmental impacts are managed as per this principle."</p>	<p>Replaces Principle HSE 04 – Risk management For any activity the hazards to which people, the environment and assets are exposed are identified, the associated risks assessed and the measures for reducing them defined and implemented. The risk level and risk reduction measures are regularly reassessed, at least whenever changes of activities or processes occur. All technological risks in particular are managed as per this principle.</p>	<ul style="list-style-type: none"> • The new Maestro broadly focuses on all risks and not just industrial risk

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<p>Expectation 03.01: Hazard Identification and Risk Assessment Hazards are identified, and risks are systematically assessed using an appropriate method. Decisions to implement risk controls and for the acceptance of residual risk are appropriate to the nature and the magnitude of the risk. Action plans are documented and monitored. A HSE reference study is conducted prior to acquisition of assets or the commencement of any activity, and at regular intervals throughout the asset's lifetime. Any development of a project or new technology is undertaken upon completion of a full lifecycle risk assessment. A global view of the risks and their impacts on operability is maintained, taking into account the evolving HSE context.</p>	<p>Replaces Expectation: 03:01 All operations shall undergo a risk assessment aimed at identifying opportunities for application of adequate risk-reduction measures. All operations that are assessed as being critical shall be systematically identified and closely monitored, The risk-reduction measures, including extra levels of supervision when needed, shall be communicated to all relevant personnel and interested parties. If necessary, specific procedures shall be implemented and updated as frequently as necessary to ensure their adequacy. Replaces Expectation: 03:02 Management shall set a process to maintain a global view of the entity's risks. Replaces Expectation: 03:12 Each entity shall develop a system for the identification and marking of piping and equipment if needed and undergrounded lines. Abandoned or obsolete equipment shall be identified and eventually dismantled. Replaces Expectation: 04:01 Management shall implement a process to systematically identify hazards and assess the risk associated to its products, installations and operations, in particular technological risks. Management shall be involved in the review and decisions to address risks. Controls shall be implemented to lessen exposure to the identified hazards. Management shall ensure that risks are periodically reassessed at specified intervals and as change occurs. Replaces Expectation: 04:02 Management shall ensure that risk management aspects are taken into account, through a formalized process, in all asset acquisition or sale, and in engineering and construction studies concerning new projects, or the decommissioning of existing installation. Replaces Expectation: 05:01 Management shall ensure that an Environmental Baseline Study, adapted to the stakes, is systematically performed on every new site prior to acquisition or the commencement of any activity. A similar study is performed at the final abandonment stage. Management shall ensure that main environmental aspects are identified at the early stages of a project. Replaces Expectation: 06:01 Management shall ensure that health risks are regularly assessed – and quantified by measurement where appropriate – and that risk reduction measures are taken to bring them down to an acceptable level. Health risks include those related directly to the entity's activities, and those related to the climate, the environment and local climatic and sanitary conditions. Replaces Expectation: 06:06 Management shall put in place a procedure to ensure that health, safety and environmental protection is integrated into all phases of the life cycle of any product, from design through to its elimination. Replaces Expectation: 13:01 The entity shall be familiar with its societal context and shall measure its level of exposure to societal risk. The entity shall regularly conduct an internal assessment of its societal exposure. The entity shall stay abreast of local authority priorities regarding economic and social development. For any project, change or disinvestment, the impacts on the involved parties are taken into account. Replaces Expectation: 14:02 Management shall conduct and regularly update a security risk and threat assessment to identify potential vulnerabilities in order to protect entity personnel, assets, information and reputation. Regular internal reviews, surveys and external audits shall be conducted to assess security performance. Replaces Expectation: 14:06 For any new project or activity, Management shall ensure that security issues are assessed. According to this evaluation, security requirements and responsibilities shall be stated in any entity's contracts and the entity shall ensure these stipulations are strictly respected throughout the duration of the contract.</p>	<ul style="list-style-type: none"> • The previous branch Maestro was much more specific on the various types of risk assessments and activities. Care will need to be taken to insure that all of these risks are adequately addressed in rules. • More emphasis in One-Maestro on risk reduction measure than in MS Maestro. • Concept of "lifecycle" risk assessment is a new detail, but it is adequately addressed.
<p>Expectation 03.02: Management of Change HSE aspects are factored in at all levels of the decision-making process, including decisions taken regarding technological or organizational changes, whether temporary or permanent. Necessary measures are defined and implemented in order to manage associated risks.</p>	<p>Replaces Expectation: 02:07 Management shall ensure that HSE aspects are factored in at all levels of the decision-making processes, including decisions taken regarding technological and organizational change, and that the necessary measures for managing associated risks are defined and implemented. Replaces Expectation: 03:10 Management shall implement a process for managing temporary installations that systematically factors in risk management aspects. When they have fulfilled their purpose, the temporary installations shall be dismantled or disabled in order to prevent unintentional further use. Replaces Expectation: 04:05 Management shall implement a structured process for managing new projects including changes to current installations that systematically factors in all HSEQ risk management aspects.</p>	<ul style="list-style-type: none"> • No major gaps. New One-Maestro is less specific, but the spirit is the same
<p>Expectation 03.03: Operational Readiness Review Based on assessed risks, operational readiness reviews are conducted: - Prior to start up for new or modified activities; - The restart of existing or modified installations; - The restart resulting from emergency situations. These reviews confirm that risks associated with the start/restart are effectively managed.</p>	<p>NEW</p>	<ul style="list-style-type: none"> • New for MS
<p>Expectation 03.04: Risk Controls Adequate risk controls are implemented and reassessed at specified intervals, throughout the asset lifecycle, and as changes occur.</p>	<p>Replaces Expectation: 04:03 Management shall ensure that HSEQ risks of its facilities and in particular technological risks are managed as part of a continual appraisal process based on approved methods. A risk-reduction plan shall be prepared and approved when the risks evaluated are not in line with the branch's acceptability criteria. Replaces Expectation: 06:01 Management shall ensure that health risks are regularly assessed – and quantified by measurement where appropriate – and that risk reduction measures are taken to bring them down to an acceptable level. Health risks include those related directly to the entity's activities, and those related to the climate, the environment and local climatic and sanitary conditions. Replaces Expectation: 14:03 According to the threat level, Management shall ensure that a security plan and supporting procedures are prepared and implemented. The Security Plan shall be tested through periodic exercises and updated on a regular basis. Replaces Expectation: 14:05 Management shall establish, implement, and maintain a physical protection system to deter, detect, and delay with the goal to deny and provide an appropriate response to malevolent acts and undesirable events.. The physical protection system shall consist of a balanced multilayer protection based on organizational, human and technical security risk reduction measures Procedures shall be prepared to facilitate recovery following security events.</p>	<ul style="list-style-type: none"> • No issues • Reassessment of controls is stronger in One-Maestro
<p>Expectation 03.05: Critical task analysis Tasks are evaluated to determine their HSE criticality. Tasks that are deemed critical are identified and analyzed, and measures are taken to reduce the task's criticality, including when necessary the development of specific procedures.</p>	<p>Replaces Expectation: 03:03 All tasks shall be evaluated to determine their criticality. Tasks that are deemed critical shall be identified and analyzed. Where necessary, they shall be the object of specific procedures that are updated as often as necessary in order to maintain their relevance.</p>	<ul style="list-style-type: none"> • No issues
<p>Principle 4 - Operational Accountability (from DIR-GR-HSE-001) "It is the duty of each and every one, at their own particular level, to manage the risks and limit the impacts inherent to their specific activity and to the activity of their own team. This duty is an integral part of operational accountability."</p>	<p>Replaces Principle 3: Operational Accountability It is the duty of each and every one, at their own particular level, to manage the risks and limit the impacts inherent to their specific activity and to the activity of their own teams. This duty is an integral part of operational accountability of each and everyone.</p>	<ul style="list-style-type: none"> • No issues

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<p>Expectation 04.01: Rules and Procedures Following a risk based approach, rules and procedures necessary to control specific HSE risks are identified, formalized and implemented. These rules and procedures are regularly reviewed and updated with the involvement of relevant personnel. Procedures specifically for housekeeping are implemented. The Golden Rules are strictly enforced.</p>	<p>Replaces Expectation: 03:05 Based on an assessment of need, Management shall implement the operational documentation, (rules, procedures, instructions, and work permits and records) used to control operations. These activities include, but are not limited to hazardous works and operations, personal protective equipments requirements, critical tasks, transportation operations, etc. These documents shall be accessible to interested personnel, properly managed and reviewed as often as necessary. Replaces Expectation: 03:09 The entity shall ensure that specific measures are taken to manage safety equipment inhibits or other equipments important for HSEQ inhibits and to manage process, mechanical and electrical isolations. Inhibition and re-start processes shall be clearly identified and documented. Replaces Expectation: 03:15 Management shall set an objective of keeping the installations clean and orderly, and ensuring the promotion of this aim.</p>	<ul style="list-style-type: none"> • Enforcement of golden rules is new but not an issue
<p>Expectation 04.02: Permit to Work A risk-based work permitting process is implemented and used to control the activities and to manage the interfaces between the different parties involved.</p>	<p>Replaces Expectation: 03:05 Based on an assessment of need, Management shall implement the operational documentation, (rules, procedures, instructions, and work permits and records) used to control operations. These activities include, but are not limited to hazardous works and operations, personal protective equipments requirements, critical tasks, transportation operations, etc. These documents shall be accessible to interested personnel, properly managed and reviewed as often as necessary.</p>	<ul style="list-style-type: none"> • No issues
<p>Expectation 04.03: Asset Integrity Asset integrity risks are identified, assessed, monitored and controlled. Corrective and preventive action plans are defined and implemented. A system with the adequate resources is implemented for managing the integrity of installations. This includes the identification of critical safety and environmental risk controls, their monitoring, testing, inspection and maintenance in order to ensure their performance.</p>	<p>Replaces Expectation: 04:04 Management shall implement a system, with the adequate resources for managing the integrity of its installations. The system shall include the identification of HSEQ Critical Elements, their inspection, maintenance and testing in order to ensure performance. The system shall ensure that asset integrity threats are identified, assessed, monitored, corrected and are reported to Management. Replaces Expectation: 14:05 Management shall establish, implement, and maintain a physical protection system to deter, detect, and delay with the goal to deny and provide an appropriate response to malevolent acts and undesirable events.. The physical protection system shall consist of a balanced multilayer protection based on organizational, human and technical security risk reduction measures Procedures shall be prepared to facilitate recovery following security events.</p>	<ul style="list-style-type: none"> • no issues
<p>Expectation 04.04: Management of Hazardous Chemicals, Materials and Substances Chemicals, substances or materials considered as hazardous by regulations, international standards or Group requirements are clearly identified and their HSE risks evaluated. Risk controls including storage, handling, utilization, transportation and disposal are clearly defined and implemented, and all relevant personnel have access to specific safety data sheets.</p>	<p>Replaces Expectation: 06:03 Management shall set up a system ensuring that any product, substance or material considered as hazardous by local regulations or international standards is clearly identified and its risks are evaluated. Risk, storage, handling, utilization and disposal requirements shall be clearly defined, and specified. All personnel and interested parties shall have access to the corresponding material safety data sheets for both raw materials and finished goods. Replaces Expectation: 15:01 The Entity's Management shall engage in a quality process that includes the control and improvement of its performance with respect to its customers. It shall ensure that the products provided to the customers conform to regulations and prevailing specifications, are wholesome and merchantable and comply with the announced performance commitments.</p>	<ul style="list-style-type: none"> • Wording has been updated, but the spirit remains the same. No major issues
<p>Expectation 04.05: Industrial Hygiene As to preserve human health, risks to health and sanitary conditions are assessed and appropriate risk controls are implemented: - An appropriate level of first aid is maintained and the level of professional medical assistance needed is available. The results of occupational health risk assessments are used in order to determine the medical surveillance requirements; - Preliminary risk assessments are done and physical fitness criteria and medical monitoring requirements are clearly defined.</p>	<p>Replaces Expectation: 06:04 Management shall ensure, that a first aid organization and adequate medical resources are available locally appropriate to the level of identified hazards. Replaces Expectation: 06:05 Management shall ensure that medical fitness criteria specific to the position held and the work environment are clearly defined and include the prior assessment of health risks. Persons doing jobs involving exposure to particular hygiene and/or health risks shall undergo a specific medical check-up. Replaces principle 06 All activities are undertaken so as to preserve the health of people. Risks to health and sanitary conditions are assessed so that the appropriate measures are taken. Fitness for duty of personnel takes into account this risk assessment.</p>	<ul style="list-style-type: none"> • no issues
<p>Expectation 04.06: Personal Protective Equipment Based on a needs assessment, exposed personnel are provided with the required personal protective equipment (PPE) along with associated rules and instructions for control, supply, training, use and maintenance.</p>	<p>Replaces Expectation: 06:02 Management shall work to reduce health risks through elimination, substitution, engineered and/or administrative controls. In situations where risk cannot be reduced, Management shall provide Personal Protective Equipment selected by a needs assessment and shall ensure that the rules and instructions for using and maintenance are clearly defined and applied.</p>	<ul style="list-style-type: none"> • No issues
<p>Expectation 04.07: Chain of Command and Handover Continuity of an effective chain of command remains in place at all times. Handovers between shift and rotational personnel are effectively managed so that HSE risks are controlled without discontinuity and without loss of key information.</p>	<p>Replaces Expectation: 03:07 Measures shall be taken to ensure that handovers between shift, new assignments, and absence during vacation periods are effectively managed, documented and that HSEQ aspects are fully addressed.</p>	<ul style="list-style-type: none"> • Chain of command is a new requirement, but not an issue. No rotational management
<p>Expectation 04.08: Simultaneous Operations When two or more independent operations are to be performed simultaneously and are likely to increase the level of risk, rules are established to ensure effective control of risks associated with the simultaneous operations.</p>	<p>Replaces Expectation: 03:08 Management shall establish operating and supervision rules to handle joint activity situations and shall ensure that adequate resources are in place on sites where significant activities of a different nature (construction, maintenance, production, etc.) are performed simultaneously and are likely to increase the risk level.</p>	<ul style="list-style-type: none"> • For MS "SIMOPS" is unknown. MS requirement is more precise
<p>Expectation 04.09: Downgraded Situations Downgraded situations are declared and risk controls are implemented to prevent escalation and minimize consequences. Actions to facilitate recovery are taken.</p>	<p>Replaces Expectation: 03:11 Downgraded situations shall be declared and risk reduction measures put in place to prevent escalation, lessen consequences and to facilitate recovery.</p>	<ul style="list-style-type: none"> • No issues
<p>Expectation 04.10: Critical Operations All critical operations are systematically identified and assessed to determine necessary risk controls including extra levels of supervision when needed. Risk controls for critical operations are implemented and communicated to all relevant personnel.</p>	<p>Replaces Expectation: 03:01 All operations shall undergo a risk assessment aimed at identifying opportunities for application of adequate risk-reduction measures. All operations that are assessed as being critical shall be systematically identified and closely monitored. The risk-reduction measures, including extra levels of supervision when needed, shall be communicated to all relevant personnel and interested parties. If necessary, specific procedures shall be implemented and updated as frequently as necessary to ensure their adequacy. Replaces Expectation: 03:06 Management shall put in place an organization suitable to the criticality of operations faced. Management shall assign responsibility of HSEQ performance to top Management and give him all the necessary authority.</p>	<ul style="list-style-type: none"> • No issues

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<p>Expectation 04.11: Environmental Protection An environmental reference status is systematically performed prior to acquisition of assets or the commencement of any activity, at regular intervals throughout the site's lifetime, and prior to divestment of the asset or at the end of activities. Energy consumption and environmental risks including emissions in natural environments (water, air and soils), production of waste, use of natural resources and impact on biodiversity through the entire project or activity lifecycle are managed. When developing new projects or processes, options to enhance energy efficiency and reduce environmental footprint are considered. Based on risk and impact assessments, and applicable regulation, the environmental remediation of sites is conducted after final end of operations life is ensured.</p>	<p>Replaces Expectation: 05:02 Management shall ensure that any new installation or significant modification to an installation is designed such as to control and limit its energy consumption, its atmospheric emissions, its effluents, its production of ultimate waste, its use of natural resources and its impacts on soil, groundwater biodiversity. Replaces Expectation: 05:03 Management shall ensure that main environmental aspect are evaluated and appropriate measures for limiting and controlling any significant impact on the environment caused by activities in progress are implemented and monitored during the lifecycle of the installation.</p>	<ul style="list-style-type: none"> • Enhancing energy efficiency is defined more clearly • Remediation requirements are more clearly defined in One-Maestro, but broadly acceptable
<p>Expectation 04.12: Local Impact Local impacts caused by activities, new or modified installations are managed. Appropriate measures are adopted to avoid, minimize and manage residual negative impacts on communities and to develop a strong relationship with relevant stakeholders, tailored to the local needs, risks and opportunities.</p>	<p>Replaces Expectation: 13:03 Each asset shall have a societal strategy and an action plan in line with the assessment of its societal situation and with the fruits of its dialogue with the involved parties. The entity has defined its priority fields of intervention. The entity has formally set forth a societal action plan for the year in progress. Replaces Expectation: 13:05 Each entity shall for its management organize an annual Societal Action and Management System (SAMS) review and shall adapt its governance with view to its application. Senior Management formally examines the Societal Action and Management system in at least one review each year. The entity allocates a dedicated budget to societal activities (included in both its annual budget items and in its long term plan). The persons involved from the different branches of the group in a given country meet annually to discuss the coordination of their respective societal actions.</p>	<ul style="list-style-type: none"> • Societal impacts more clearly addressed in One-Maestro, but not an issue
<p>Principle 5 - Contractors and Suppliers (from DIR-GR-HSE-001) "Contractors and suppliers are assessed and selected by considering their HSE performance, their ability to implement an HSE policy conforming to the entity policy, and to control the risks inherent to the activities under contract. Obligations and responsibilities in terms of HSE are clearly defined in the contracts and the entity ensures that these stipulations are respected throughout the duration of the contract."</p>	<p>Replaces Principle HSE 07 - Contractors and Suppliers Contractors and suppliers are assessed and selected by considering, if pertinent, their HSE performance, their ability to conform to the entity's HSEQ policy and their capacity to manage the risks inherent to the activities under contract. Obligations and responsibilities are clearly defined in the contracts and the entity ensures that these stipulations are strictly respected throughout the duration of the contract.</p>	<ul style="list-style-type: none"> • Notion of favoring contractors with similar approaches is taken from the Group SHEQ charter. No significant gaps.
<p>Expectation 05.01: HSE Requirements for Contracted Activities and Purchased Goods As early as the planning phase and throughout the execution of activities, HSE risks are considered when developing the contracting or purchasing strategy.</p>	<p>Replaces Expectation: 07:01 As early as the planning phase, Management shall factor HSEQ risks into the contract strategy. Management shall set up a system to ensure that for any works contracted by the entity to a contractor, HSEQ requirements are factored in at each stage of the contractual process for all contracts including services and projects.</p>	<ul style="list-style-type: none"> • No issues
<p>Expectation 05.02: Relationships with Contractors Relationships with contractors are managed in order to facilitate a shared continual improvement in HSE performance.</p>	<p>Replaces Expectation: 07:02 The entity shall manage relationships with contractors in order to facilitate continuous HSEQ improvement for both the contractor and the Company.</p>	<ul style="list-style-type: none"> • No issues
<p>Expectation 05.03: Contractors Qualification Contractors that are considered during the bidding process are qualified against the HSE criteria adapted to the level of risk of the contracted activity. In situations where local context requires the use of a contractor not meeting the qualification requirements, risk controls are put in place until the contractor improves its capabilities.</p>	<p>Replaces Expectation: 07:04 Management shall ensure that the bidders are pre-qualified and selected based on their ability to manage the risks associated with the activity to be contracted. Only commercial offers from bidders that have met the entity's HSE and technical requirements shall be considered. Replaces Expectation: 07:05 Management shall ensure that any contract with a service company includes specific HSEQ clauses that highlight the entity expectations towards behaviour, HSEQ performance and competencies of contractors employees; If necessary, a written document, approved by Management, shall clarify any incompatibility or differences between HSEQ rules of entity and those of contractor.</p>	<ul style="list-style-type: none"> • Requirements addressing local context and pushing out contractors that are not fully qualified to improve is an upgrade in One-Maestro.
<p>Expectation 05.04: HSE Clauses All call for tender documents contain detailed information that enables bidding contractors to assess the risks related to contracted activities and appropriate risk controls. Based on the risks, contracts shall include specific HSE clauses.</p>	<p>Replaces Expectation: 07:03 Management shall ensure that the call for tender documents contain sufficiently detailed information to enable bidder companies to assess the works-related risks and the risk reduction measures that shall be implemented to deal with them. These documents shall also present the HSEQ evaluation criteria for answering the call for tenders. Replaces Expectation: 07:05 Management shall ensure that any contract with a service company includes specific HSEQ clauses that highlight the entity expectations towards behaviour, HSEQ performance and competencies of contractors employees; If necessary, a written document, approved by Management, shall clarify any incompatibility or differences between HSEQ rules of entity and those of contractor.</p>	<ul style="list-style-type: none"> • No issues
<p>Expectation 05.05: Contractors Selection Contractors are selected based on their ability to manage the risks associated with the activity being contracted, their HSE performance, and their ability to comply with the defined HSE requirements. Contractor capabilities to manage the defined HSE requirements are evaluated independently from commercial bids. Based on the level of risk, a process is in place to clarify and bridge incompatibilities or differences between the contractor's HSE procedures and the defined HSE requirements. Only offers deemed to meet the defined HSE requirements can be selected.</p>	<p>Replaces Expectation: 07:04 Management shall ensure that the bidders are pre-qualified and selected based on their ability to manage the risks associated with the activity to be contracted. Only commercial offers from bidders that have met the entity's HSE and technical requirements shall be considered.</p>	<ul style="list-style-type: none"> • Requirement to evaluate HSE requirements independently from commercial bids is new in CR-GR-HSE-001. • Bridging document is new for MS (however situations with contractors where bridging document is required are very rare in MS)
<p>Expectation 05.06: Contract Execution During execution of the contract the HSE contract clauses are implemented and verified. This includes implementation of a formal HSE plan when necessary. Performance of the contractor is evaluated throughout the duration of the contract, and appropriate corrective actions are taken when non-compliances are detected.</p>	<p>Replaces Expectation: 07:06 Management shall ensure that when the contractor is mobilized, the conditions specified in the contract clauses, shall be effectively implemented. Performance of the contractor shall be evaluated by the entity possibly through audits to check conformity of this implementation during realization of the contract. Appropriate corrective actions shall be taken immediately when noncompliance is detected.</p>	<ul style="list-style-type: none"> • Formal HSE plan not addressed in MS Maestro but similarities with typical prevention plan written together with the contractor in MS (MS HSEQ 202)
<p>Expectation 05.07: Subcontractors Measures are taken to limit subcontracting. Subcontractors follow equivalent HSE requirements to those applied to the contractor. The entity or affiliate is informed by the contractor of the plan to use a subcontractor. The entity or affiliate maintains the right to refuse any subcontractor.</p>	<p>Replaces Expectation: 07:07 Management shall ensure that a contractor takes all the necessary measures to limit subcontracting and in any case, makes sure that its subcontractors apply the terms laid down in the contract's HSEQ clauses.</p>	<ul style="list-style-type: none"> • No issues

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<p>Expectation 05.08: Management of Suppliers of Goods, Equipment or Materials A process is defined for procuring or renting of goods, equipment or materials that meets the defined HSE specifications. For goods, equipment or materials with specific HSE risks, an acceptance and control procedure is applied.</p>	<p>Replaces Expectation: 07:08 Management shall define a process for procuring products or equipment in line with the entity's HSEQ and technical criteria. Management shall ensure that supplies of products or equipment, including those items hired or rented, if evaluated critical, undergo an acceptance and control procedure by a technically competent person.</p>	<ul style="list-style-type: none"> • No issues
<p>Principle 6 - Competencies and Training (from DIR-GR-HSE-001) "For all activities, the competencies required are defined, taking into account HSE aspects. Competencies of personnel are regularly assessed, and training and development plans are implemented to ensure that competencies are appropriate for the tasks to be performed."</p>	<p>Replaces HSE 08 - Competence and training For all activities, each entity defines the competencies required, taking into account HSEQ aspects. Competencies of personnel are regularly assessed, and training and development plans implemented to ensure that competencies are appropriate for the tasks to be performed.</p>	<ul style="list-style-type: none"> • No issues
<p>Expectation 06.01: HSE Competency Needs Based on the assessed risks to which personnel are exposed, a system for identifying and defining the role specific HSE competencies is implemented. A protocol to regularly assess personnel competencies and to close identified gaps is defined and implemented.</p>	<p>Replaces Expectation: 08:01 Management shall implement a system to identify and define the role, specific competency and training requirements, based on laws and regulation, specific tasks, duties and risks faced by each role. The entity shall assess personnel HSEQ competencies, and implement a process to address any failures to meet the defined competency requirements.</p>	<ul style="list-style-type: none"> • One-Maestro treats training separately from competency. No gaps
<p>Expectation 06.02: HSE Training Based on assessed risks and defined needs, an HSE training process is established. An HSE training plan is implemented and monitored in order to ensure effectiveness.</p>	<p>Replaces Expectation: 08:03 Management shall ensure that an appropriate training process is put in place that enables all of its employees involved in the entity's activities to develop their competencies. Management shall ensure that specific HSE training plan, possibly mandatory, is implemented addressing the required training by position, in particular for Management. Management shall monitor realization of the HSEQ training plan and efficiency of training.</p>	<ul style="list-style-type: none"> • No issues
<p>Expectation 06.03: HSE Induction & Orientation Personnel and visitors are informed about any HSE risk they may be exposed to. Site-specific rules and emergency response measures are included in HSE inductions. All newly hired or transferred personnel (including management) are provided with an HSE orientation including training on any specific HSE obligations related to their role.</p>	<p>Replaces Expectation: 03:04 Management shall ensure that all personnel working on the entity's sites are thoroughly informed of the risks, rules and emergency response measures specific to their site and their function. Management shall ensure that a documented induction is provided to all newly hired or transferred employees, visitors or contractors to all industrial sites. A specific training regarding their HSEQ roles and responsibilities shall be given to personnel in leadership positions.</p>	<ul style="list-style-type: none"> • No issues
<p>Expectation 06.04: Requirements for Instructors Internal and external instructors are selected based on defined subject matter competency and their ability to instruct others</p>	<p>Replaces Expectation: 08:04 Management shall select internal and external instructors based on established competency requirements. These competency requirements shall ensure instructors are selected based on their subject matter expertise, as well as their capabilities to instruct others.</p>	<ul style="list-style-type: none"> • No issues
<p>Principle 7 - Emergency Preparedness (from DIR-GR-HSE-001) "The emergency situations potentially critical for people, the environment and assets are identified based on a risk assessment. An organization is set up to ensure that emergency plans, appropriately-trained personnel and suitable equipment necessary for dealing with such situations are constantly on hand. Emergency and associated external assistance plans are drawn up, tested during periodic exercises and updated on a regular basis. Where appropriate, these emergency plans take into account local communities, mutual aid organizations and authorities. All employees, contractors, suppliers and visitors are informed about what to do in the event of an emergency."</p>	<p>Replaces Principle HSE 09 - Emergency preparedness The emergency situations potentially critical for people, the environment and assets are identified based on a risk assessment. An organization is set up to ensure that emergency plans, appropriately-trained personnel and suitable equipment necessary for dealing with such situations are constantly on hand. Emergency and associated external assistance plans are drawn up, tested during periodic exercises and updated on a regular basis.</p>	<ul style="list-style-type: none"> • Visitors and personnel informed of what to do in case of an emergency > not in MS Maestro but covered by CR MS HSEQ 201 – General safety rules
<p>Expectation 07.01: Scenarios Identification With the inclusion of major risks, scenarios that can lead to emergency/crisis situations are identified. Scenarios for activities managed by contractors are taken into account.</p>	<p>Replaces Expectation: 09:02 Management shall ensure that on each of the entity's sites, all scenarios that may result in emergency situations have been identified by means of a risk assessment Management shall ensure that intervention procedures and/or outside assistance adapted to the scenarios under consideration are prepared and put in place</p>	<ul style="list-style-type: none"> • Requirements for contractors not included in MS Maestro
<p>Expectation 07.02: Emergency Response/Crisis Plan An emergency response/crisis plan is in place that describes: - The specific procedures related to the defined emergency/crisis scenarios; - The emergency/crisis organization including related role definitions and responsibilities; - The resources required to manage the defined emergency/crisis scenarios; - The process and accountabilities for emergency/crisis notification and communication; - The actions necessary for large scale responses; - The mutual aid agreements including related roles and responsibilities; - Post-event recovery plans.</p>	<p>Replaces Expectation: 05:04 Management shall ensure that an organization, including tools and resources aimed at preventing risks of pollution and limiting its extent and impact on the environment, is in place. Replaces Expectation: 09:01 Management shall implement an emergency-management system that fits the entity's operational context, and describes the organization, notification and communication circuits and resources needed to deal with the situations identified. These plans shall be updated as and when required, and changes are communicated to personnel and interested parties. Activity continuity plans shall be established for emergency scenarios impacting strategic activities.</p>	<ul style="list-style-type: none"> • Details related to post-event recovery and plans for large scale events are not specified in MS Maestro recovery plan (09 14)
<p>Expectation 07.03: Emergency/Crisis Training Personnel that may be involved in the response or management of an emergency/crisis situation are aware of their roles and accountabilities and have taken the required theoretical and practical training.</p>	<p>Replaces Expectation: 09:03 Management shall ensure that personnel who may be involved in managing an emergency situation are fully aware of their roles and have taken the theoretical and practical training required.</p>	<ul style="list-style-type: none"> • No issues
<p>Expectation 07.04: Drills Emergency / crisis plans including communication means are systematically tested and improved through periodic drills. Lessons learned are identified and addressed. Large scale exercises are conducted for sites exposed to significant technological or environmental risks, at minimum annually, including at least one site and the entity or affiliate's headquarters.</p>	<p>Replaces Expectation: 09:04 Management shall ensure that the emergency response system is tested through periodic exercises. For site subjected to technological or environmental risk, the entity shall conduct a large scale exercise at least once a year between at least one site and the entity's headquarters. Replaces Expectation: 09:05 Should an emergency intervention plan call for outside assistance from an industry partner, or a specialist service provider, Management shall ensure that there is a written agreement defining the communication circuits between the entity and those structures and the role and attributions of each. If the entity reciprocally offers outside assistance in the implementation of the emergency intervention plan of other industries, an agreement of the same nature must be agreed with each party.</p>	<ul style="list-style-type: none"> • System improvement is an addition (a detail). No major issues.

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<p>Principle 8 - Learning from Events (from DIR-GR-HSE-001) "All incidents are reported and analyzed in depth to determine their root causes. All corrective actions and preventive measures are defined and appropriately prioritized. The results of the analyses are reported to all interested parties that may benefit from the lessons learned. All employees have a duty to report without delay, any dangerous situation or any deviation from HSE rules. "</p>	<p>Replaces Principle HSE 10 – Learning from events All incidents are reported and analyzed, when they are relevant. Those with significant actual or potential severity are analyzed in depth to determine their root causes. All corrective actions and preventive measures are taken with priority. The results of those analyses are reported to all interested parties that may benefit from the experience learned. Identification and reporting of anomalies are promoted.</p>	<p>• No issues</p>
<p>Expectation 08.01: Incident and Anomaly Reporting Reporting of all incidents, near-misses and anomalies is promoted. A process to return feedback to the reporter is implemented. Employees have a duty to report.</p>	<p>Replaces Expectation: 10:01 Management shall implement a system to ensure that any accident or near miss arising from the entity's activities is identified, evaluated in term of severity and reported to appropriate level. The system shall include a process for notification when appropriate to the branch, Group, partners and interested parties including authorities, when the event justifies this, particularly depending on the defined reporting criteria. The reporting and recording of the events within the branch must be done using the defined computer tools. Replaces Expectation: 10:02 Management shall promote the identification and reporting of near misses and anomalies. Appropriate corrective actions shall be defined and implemented. Replaces Expectation: 15:03 The Entity shall ensure control of product quality across its entire manufacturing and distribution chain and the associated services. All customer complaints and all anomalies detected within the company shall be analyzed and the necessary corrective and preventive measures shall be put in place. If necessary, and if relevant, a formalized waiver system shall be put in place and all decisions recorded.</p>	<p>• No issues</p>
<p>Expectation 08.02: Investigation and Analysis Process Based on the level of risk and in the effort to prevent recurrence, incidents and near-misses are investigated. Fatal accidents, incidents with high severity potential, and significant loss of containment events are analyzed as to determine cause. The analysis and related corrective and preventive action plans are validated at the appropriate level and monitored through to closure.</p>	<p>Replaces Expectation: 10:03 Management shall implement an investigation process. The depth of the investigation and management review shall depend upon the actual or potential severity of the incident. The investigation analysis and related action plans shall be validated at the appropriate level. Corrective measures shall be defined and applied, and preventive measures taken to avoid a recurrence. Replaces Expectation: 10:04 Based on the actual or potential severity, Entity, operational division or even branch Management shall appoint an entity Board of Enquiry in order to identify the circumstances, analyze the root causes and issue a report containing, among other things, the entity's conclusions and recommendations. Conclusions shall be presented to the corresponding management board, who shall validate final actions plans and monitor its implementation.</p>	<p>• No issues</p>
<p>Expectation 08.03 : Communication of Incidents While considering aspects of confidentiality, a communication process is established ensuring that relevant information regarding incidents: - Are shared with employees and contractors ; - Are communicated to authorities.</p>	<p>Replaces Expectation: 10:05 Management shall ensure that all feedback received by the entity, in particular those issued by the branch, is analyzed and communicated to the involved personnel, and that the pertinent recommendations are implemented. Management shall actively encourage the issuance of experience feedback from the entity to the branch. Replaces Expectation: 14:04 Management shall ensure a security alert and event reporting procedure is implemented for the entity.</p>	<p>• No issues</p>
<p>Expectation 08.04 : Return on Experience A companywide network is established to identify and share lessons learned from the analysis results of relevant events (return on experience, or "REX"). All REX received are analyzed and communicated to the relevant personnel, and pertinent recommendations are implemented.</p>	<p>Replaces Expectation: 10:05 Management shall ensure that all feedback received by the entity, in particular those issued by the branch, is analyzed and communicated to the involved personnel, and that the pertinent recommendations are implemented. Management shall actively encourage the issuance of experience feedback from the entity to the branch.</p>	<p>• No issues</p>
<p>Principle 9 - Monitoring, Audit and Inspection (from DIR-GR-HSE-001) "Management is responsible for the implementation of the HSE policy, and regularly assesses its performance through monitoring, audits and inspections. Any shortfalls in regard to the set objectives are analysed and corrective actions and/or an improvement plans are subsequently defined, implemented and monitored through to closure. "</p>	<p>Replaces Principle HSE 11 – Monitoring, audit and inspection In every field of activity, the entity checks that its HSEQ policy is being applied and its performances are regularly assessed through monitoring, audit and inspection. Any shortfalls in regard to objectives are analyzed and corrective actions or improvement plan are subsequently defined. Replaces Principle HSE 11 04 - Management shall ensure that findings from system audits, HSEQ reviews, technical audits, monitoring activities and inspections are examined and analyzed. Prioritized action plans shall be set according to the level of assessed risk. Persons with the appropriate combination of competence and authority shall be assigned to each actions Management shall follow the completion of action plans through checks or pertinent indicators.</p>	<p>• No issues</p>
<p>Expectation 09.01: Monitoring A process is implemented to monitor compliance with applicable requirements (legal, internal, contractual, and the voluntary commitments). The results of the monitoring are documented. Deficiencies are identified and improvement plans are implemented and monitored through to closure.</p>	<p>Replaces Expectation: 11:06 Management shall put in place identification, communication, management, verification, maintenance and if necessary a calibration system for all items of equipment important for hygiene, safety, the environment or quality. Appropriate corrective measures shall be taken for any installation in which a significant equipment item is deemed to be faulty, including prohibiting its use if necessary. Replaces Expectation: 13:04 Each entity shall measure and produce a report on its societal performance. The entity produces an annual internal report of its societal activities and of their impact, including using indicators if and when this should prove necessary. Replaces Expectation: 15:02 The Entity shall organize its activity in the form of processes and assess their performance using relevant indicators. The design of new products or services (if applicable) shall be based on a structured approach and shall result from the analysis of market expectations, changing regulations, technological developments and internal innovation. Replaces Expectation: 15:04 The Entity shall identify and put in place the appropriate tools to measure the satisfaction level of all involved parties, particularly its customers, and shall communicate the results and put in place actions for improvement in conformity with the observed results and the proposed objectives.</p>	<p>• No major issues.</p>

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<p>Expectation 09.02: HSE Self-assessment, Audit & Inspection program HSE self-assessments, audits & inspections are systematically planned, and related roles and accountabilities are defined. All installations are subject to technical audits and inspections to evaluate integrity and operability. The resulting action plans are defined and validated at the appropriate level and the actions are monitored through to closure.</p>	<p>Replaces Expectation: 11:01 Management shall check through regular HSEQ audits, evaluations and/or others monitoring activities the adequacy and efficiency of activities of the entity's HSEQ management system. Management shall implement HSEQ audit programs setting the frequency, roles, responsibilities and distribution of the report. These audits shall be systematically prepared, performed and followed up. Replaces Expectation: 11:02 Management shall verify by means of business audits and technical inspections that the installations are well maintained and conform to the required technical standards in order to ensure their integrity and operability. Management shall prepare the required inspection program by setting the frequency and the documentation required for its performance, as well as the associated roles and attributions. These business audits and inspections shall systematically be prepared, performed and their conclusions followed by actions. Replaces Expectation: 11:03 Each site shall ensure by means of scheduled inspections that its installations and premises are kept clean and orderly, maintained in smooth operating condition and operated in application of the established HSEQ rules. These scheduled inspections must systematically be prepared, performed and their conclusions followed by actions. Replaces Expectation: 11:04 Management shall ensure that findings from system audits, HSEQ reviews, technical audits, monitoring activities and inspections are examined and analyzed. Prioritized action plans shall be set according to the level of assessed risk. Persons with the appropriate combination of competence and authority shall be assigned to each actions Management shall follow the completion of action plans through checks or pertinent indicators.</p>	<ul style="list-style-type: none"> • No issues
<p>Expectation 09.03: Observations and Recognition Observations of operational tasks are regularly conducted in order to ensure compliance with the Golden Rules and other HSE requirements. The results of these observations are used to promote appropriate behavior and to recognize HSE performance.</p>	<p>Replaces Expectation: 11:05 Behavioural observation programs shall be conducted regularly at each site to ensure compliance with the Group's Golden Rules, others HSEQ rules and proper execution of critical tasks. The results of those evaluations shall be communicated to involved personnel and used to promote performance improvement.</p>	<ul style="list-style-type: none"> • No major issues.
<p>Principle 10 - Performance Improvement (from DIR-GR-HSE-001) "In order to improve performance, HSE action plans are regularly reviewed within each activity. HSE management system effectiveness is analysed during management reviews and monitored through key performance indicators, both quantitative and qualitative. Actions are prioritized according to the risk level or associated impact and are incorporated within the entity's action plan. "</p>	<p>Replaces Principle HSE 12 – Performance improvement In every field of activity, in order to improve performance, HSEQ action plans are regularly reviewed. HSEQ management system's effectiveness is analyzed during management reviews and monitored through key performance indicators. Actions are prioritized according to the risk level or associated impact and are incorporated within the entity action plan.</p>	<ul style="list-style-type: none"> • No major issues.
<p>Expectation 10.01: Key Performance Indicators (KPIs) Both leading and lagging key performance indicators are established to track HSE performance and implementation of the HSE-MS.</p>	<p>Replaces Expectation: 12:02 Management shall establish key performance indicators chosen to control the efficiency of the HSEQ management system implemented by the entity, particularly in the risk management domain and customer satisfaction. Replaces Expectation: 15:02 The Entity shall organize its activity in the form of processes and assess their performance using relevant indicators. The design of new products or services (if applicable) shall be based on a structured approach and shall result from the analysis of market expectations, changing regulations, technological developments and internal innovation.</p>	<ul style="list-style-type: none"> • No major issues.
<p>Expectation 10.02: Impacts Reduction HSE impacts are regularly monitored and the results are recorded and reported. Corrective and preventive action plans are implemented in order to eliminate or reduce HSE impacts.</p>	<p>Replaces Expectation: 12:01 Management shall systematically review its strategy, its politics and the HSEQ management system to ensure its continued suitability, adequacy and efficiency to reach the goals and find improvement opportunities... For this review, the input data shall be the level of execution compared to the HSEQ objectives and targets, the monitoring of performance indicators, the results of the audits, the progress of the action plans established, the regulatory changes, the result of investigations into accidents and near-misses, the performance of the processes, the measurement of customer satisfaction and any useful information coming from interested parties. The result of the reviews shall be communicated, within the entity, to the parties concerned. Replaces Expectation: 15:02 The Entity shall organize its activity in the form of processes and assess their performance using relevant indicators. The design of new products or services (if applicable) shall be based on a structured approach and shall result from the analysis of market expectations, changing regulations, technological developments and internal innovation.</p>	<ul style="list-style-type: none"> • Corrective and preventive actions are not addressed within this expectation, but treated throughout other parts of MS Maestro and within company rules. No major issue.
<p>Expectation 10.03: Management Review The HSE-MS is systematically reviewed at minimum annually, to ensure its continued adequacy and effectiveness. The review includes at minimum: - The evolution of HSE risks and associated significant impacts; - Changes in regulatory requirements; - Any emerging issues; - An assessment of performance against the established HSE objectives; - Findings from HSE audits and investigations; - Progress in completing action plans; - The adequacy of resources. Based on this review and prioritized according to the level of risk, the policy, strategy, objectives and the HSE-MS are adapted to ensure continual improvement in HSE performance.</p>	<p>Replaces Expectation: 12:03 Management shall set action plans aimed to improve the strategy, the HSEQ Policy and the HSEQ management system appropriate to the nature of the risks faced by the entity and in line with the current HSEQ performance. Management shall ensure that the entity's technical standards are updated if any shortcomings are identified during the systematic review. Actions shall be prioritized and assigned to persons with the appropriate level of competence and authority, and followed by Management through to closure.</p>	<ul style="list-style-type: none"> • Clearer wording and more specific details on what must be addressed within a management review in One-Maestro, but the spirit of the expectation is respected in MS Maestro (CR MS HSQ 112 – Implementation of an HSE management system) so not an issue