



Abu Dhabi Environment, Health and Safety Management System Regulatory Framework

(AD EHSMS RF)

Manual

Version 2.0

February 2012

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1. Leadership, Commitment and Strategic Objectives

An Environment, Health and Safety Management System (EHSMS) is a management tool that integrates all Environment, Health and Safety (EHS) management components of a business into one coherent system. The integration of these components allows the business to achieve its objectives efficiently by managing its impacts to the environment and minimizing occupational health and safety risks.

This integrated approach requires combining all EHS internal business management practices into one system; and the different management components of the Abu Dhabi EHSMS Regulatory Framework (*AD EHSMS RF*) require effective links between them to ensure a complete system that operates as a whole (Figure 1).

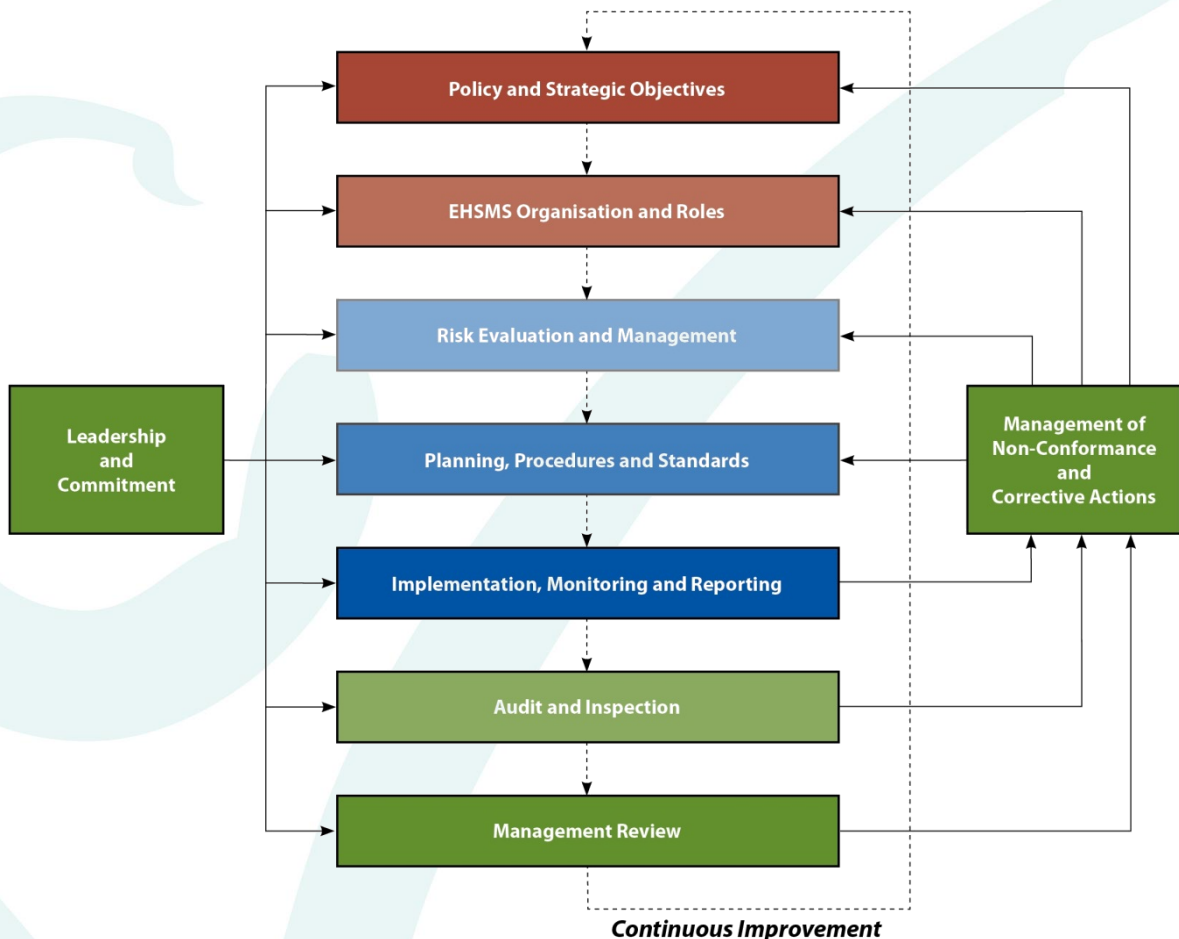


Figure 1 – EHSMS – Main Management Components

The *AD EHSMS RF* incorporates the key requirements from the following International Standards: Environmental Management System (ISO 14001); Occupational Health and Safety System (OHSAS 18001); Environmental Management System Auditing (ISO 19011) and Risk Management Principles (ISO 31000), into one integrated system that also recognizes the commitments and aspirations of Abu Dhabi Government and the unique features of Abu Dhabi’s “regulatory” EHSMS compared to conventional “voluntary” standards.

1.1 Commitment of the Abu Dhabi Government

The Government of Abu Dhabi Emirate is committed to protect and conserve the environment, and to protect and promote human health and safety for all inhabitants of the Emirate. (Refer to the *EHS Policy Statement: Section 3.3 of this Manual*).

This commitment can be achieved through partnerships between the government and private sectors, coordinated by the *AD EHSMS RF*, with the aim of ensuring that economic activities within Abu Dhabi Emirate are undertaken in a responsible, safe and sustainable manner.

The *AD EHSMS RF* is a risk and performance based management system that defines the roles and responsibilities of all concerned parties and sets the minimum requirements required at Emirate level for development and implementation of individual entity EHSMS. It is an approach that recognizes the inter-relationships between entities, employees, contractors, the community, and the occupational environment in contributing to diverse risks.

1.2 Aims

The aims of the *AD EHSMS RF* include:

- integrate existing EHS laws and regulations;
- serve as a management tool to achieve compliance with Abu Dhabi Emirate EHS laws and regulations;
- ensure that the Emirate's Environment, Health and Safety Policy (2006) objectives are promoted and achieved;
- drive continuous improvement in the management of EHS issues to achieve the best outcomes while having regard to the social and economic development of the Emirate of Abu Dhabi; and
- develop appropriate management system and technical requirements to ensure EHS issues are addressed in a systematic matter.

1.3 Intent

The Abu Dhabi Government acknowledges the increasing and positive role being played by private and government entities in promoting improved environment, health and safety practices.

By developing a well-defined and structured Regulatory Framework that is to be embedded into daily activities of entities, the Government of Abu Dhabi has provided a tool that ensures long-term success in identifying, meeting and exceeding environment, health and safety objectives and goals of the Emirate of Abu Dhabi.

The *AD EHSMS RF* has been developed to define the minimum requirements to be met by entities seeking to establish a compliant EHSMS.

Therefore, private and government entities shall meet, and strive to exceed, the requirements of relevant Emirate and UAE legislation, by developing, implementing and maintaining a compliant EHSMS when officially notified by the concerned SRA.

1.4 Benefits

The development of an EHSMS has the following benefits:

- improved occupational health and safety regulations and standards;
- minimize injuries, illnesses and incidents in workplaces;
- development of Emirate EHS performance database and baseline data;
- improved natural resource conservation and utilization;
- improved efficiency in waste management;
- reduced corporate risks and liabilities;
- improved business efficiently; and
- centralized registration of EHS Practitioners, Consultancy Offices, Service Providers and Training Providers.

1.5 Distinctive Features

Although the *AD EHSMS RF* incorporates the key features of the relevant international EHS standards, importantly it includes a number of distinctive features (Figure 2). These include:

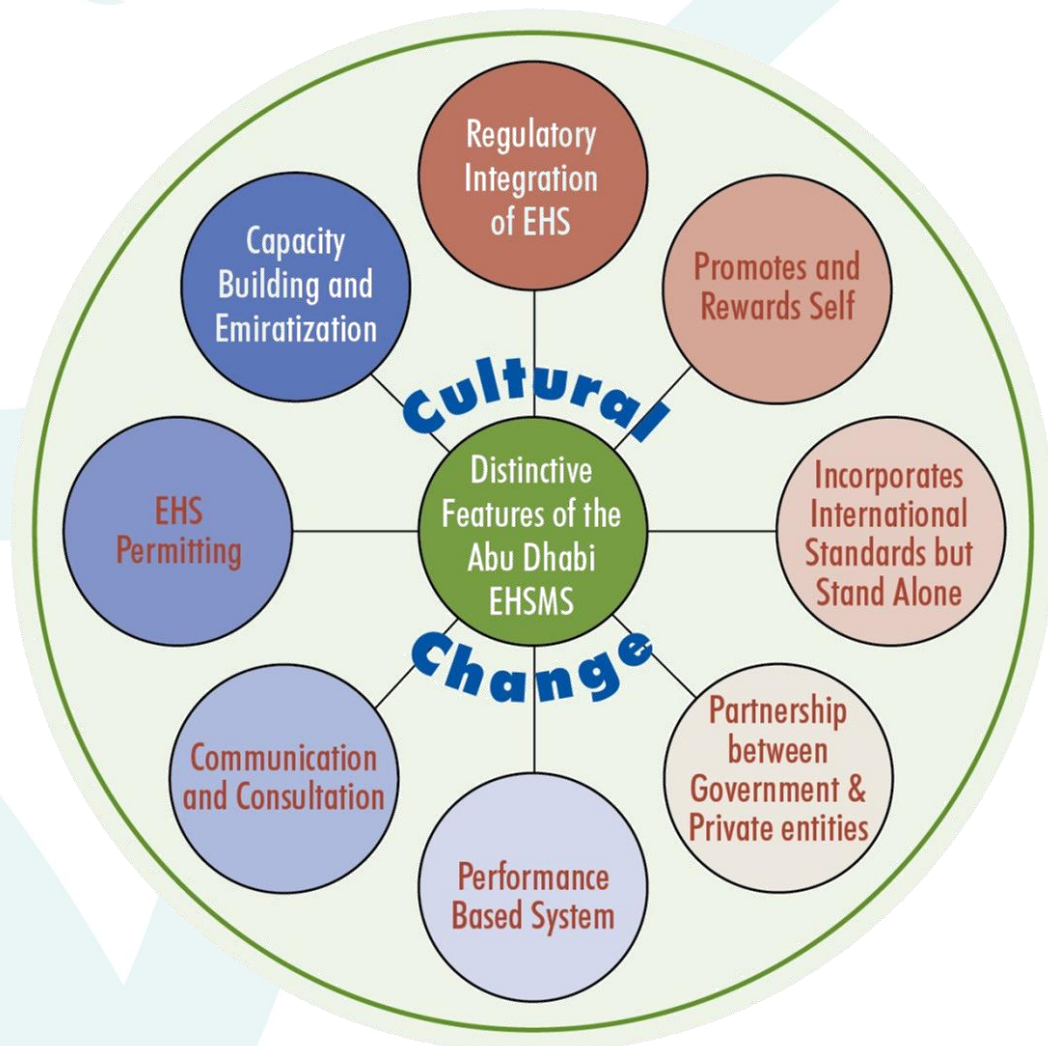


Figure 2 – The AD EHSMS RF – Distinctive Features

- **Regulatory Integration of EHS** – the main focus of Version 2.0 of the *AD EHSMS RF* is to reduce EHS regulatory duplication and overlap through a systematic process of integration of the Federal and Emirates relevant authorities EHS requirements into the system. Refer to *AD EHS RI – Mechanism 1.0 – Integration of EHS Requirements in the Emirate of Abu Dhabi* for more details.
- **Promotes and Rewards Self-Regulation** – entities are encouraged to voluntarily discover, disclose, correct, and prevent violations of relevant laws. By applying this concept they may be protected from EHS prosecution.
- **Incorporates International Standards – but Stand Alone in Implementation** – the system incorporates the key components of the relevant international standards but does not require entities to gain certification to these international systems by a third party if they do not wish to do so.
- **Based on Partnerships between Government and the Private Sector Entities** – the system is designed to encourage interaction and cooperation between the government and private sectors, in particular the interaction between entities and the concerned SRA's.
- **Performance Based System** – it is a system requirement for SRA's and entities to establish EHS performance targets and goals and implement a monitoring program. For entities to obtain and maintain approval for their EHSMS they must comply with the monitoring and reporting requirements of the *AD EHSMS RF*.
- **Communication and Consultation** – a key component of the system is the inclusion of communication and consultation requirements. Employers have the duty to consult with employees and work together to eliminate or reduce work-related injuries and illness and to promote health and well-being. This is not only a legal responsibility - there are very real benefits for an employer to implement and maintain a consultative approach. It ensures that a safe and healthy work environment, and work practices, programs and procedures are actually created and maintained by the people who must work within these systems and be guided by them.
- **Integration of EHS Permitting Requirements** – the system incorporates the current EHS permitting requirements of the relevant authorities and every effort has been made to ensure that the impacts of any additional permitting requirements introduced by the *AD EHSMS RF* add value to the Emirate by protecting the EHS interests of all residents of the Emirate.
- **Capacity Building and “Emiratization”**- one of the key features of the system is the focus on capacity building within the field of expertise in Occupational Health and Safety within the Emirate. An important component of the capacity building initiative is to proactively encourage citizens of the Emirate to engage in the EHSMS initiative.
- **Cultural Change** – one of the long term goals of the EHSMS initiative is to effect cultural change within the inhabitants of the Emirate. It is intended that the *AD EHSMS RF* will be a key tool in the process of achieving a positive EHS cultural change to achieve a safer, healthier and sustainable future for the Emirate.

1.6 Accountability

The Government of Abu Dhabi Emirate, the AD EHS Center (Competent Authority), Sector Regulatory Authorities (SRA's) and government and private entities are responsible for improving the management of EHS activities in the Emirate.

The Government of Abu Dhabi Emirate will work with the Federal Government of the United Arab Emirates (UAE) to develop national consistency in the measures, policies and strategies developed and adopted for the protection of health, safety and the environment.

The AD EHS Center shall encourage and maintain open communications and constructive dialogue with other government departments, concerned SRA's, relevant international EHS bodies, and the community, on EHS matters and make decisions and actions as open and as transparent as practicable.

Refer to AD EHSMS RF – Element 01 – Roles, Responsibilities and Self-Regulation for detailed description of Roles and Responsibilities.

1.7 Scope

The *AD EHSMS RF* specifies mandatory EHS management requirements for developing, implementing and maintaining an environment, health and safety management system to enable an entity to control its EHS impacts and aspects and continually improve its EHS performance.

The extent of the application by any entity of the mandatory requirements of the *AD EHSMS RF* will depend on factors such as the nature of the entity's activities, the risks and complexity of its operations.

The purpose of this Regulatory Framework is to lead all entities in the Emirate of Abu Dhabi, both government and private, towards providing safe and healthy workplaces for their workforce and minimizing environmental impacts of their workplaces.

The key areas of concern for the *AD EHSMS RF* include:

- Occupational Health and Safety; and
- Environmental impacts resulting from the Workplace.

Occupational Health and Safety

The *AD EHSMS RF* is designed to ensure workers' safety and the promotion and maintenance of the highest degree of physical, mental and social well-being of workers by preventing ill health, controlling risks and the adaptation of work to people, and people to their jobs.

The goal of all occupational health and safety programs is to foster a safe work environment. Through the protection of workers the system will also protect visitors, customers, suppliers, nearby communities, and other members of the public who are impacted by the workplace environment.

Environmental Impacts Resulting from the Workplace

The *AD EHSMS RF* is designed to ensure that these impacts are reduced and managed, at the individual entity level, to ensure the workplace is healthy and safe and to protect and conserve the environment as a whole for the benefit of the Emirate of Abu Dhabi and its inhabitants.

Compliance

The *AD EHSMS RF* is the key EHS regulation in the Emirate of Abu Dhabi. Compliance of any entity to its different components is subject to the entity's classification under the system. There are three levels of classification, which include:

Nomination: An entity officially nominated by a concerned SRA shall comply with all requirements of the *AD EHSMS RF*, including developing a fully compliant EHSMS and gaining approval from the concerned SRA.

Notification as a Low Risk Entity: An entity that officially notified to do so, shall comply with the requirements of *AD EHS RI – Mechanism 5.0 – EHS Requirements for Low Risk Entities* and the technical requirements of relevant Regulatory Instruments (Codes of Practice, Mechanisms and Standards).

All other Entities: All other entities operating within the Emirate of Abu Dhabi who are not yet nominated or notified by a concerned SRA shall strive to comply with the requirements *AD EHSMS RF*.

1.8 Applicability

The *AD EHSMS RF* is applicable to all places of employment within the Emirate of Abu Dhabi. Employers, contractors and self-employed persons shall adhere to applicable requirements. Phased implementation of the system will take place through official nomination of entities within concerned EHSMS sectors (Figure 3).

In case of any conflict with any existing Federal or Emirate Laws and/or Regulations, the existing more stringent requirements will apply.

Through the signing of mutually beneficial agreements with these organizations the AD EHS Center intends to develop, implement and enforce international best practice EHS regulations.

Organizations that the AD EHS Center is currently working with include, but not limited to:

- Safe Work Australia;
- Occupational Safety and Health Administration (OSHA – USA);
- Health and Safety Executive (UK);
- Ministry of Manpower (Singapore);
- Institution of Occupational Safety and Health (IOSH – UK); and
- American Society of Safety Engineers (ASSE).

2. AD EHSMS Administration and Roles

2.1 Administration Hierarchy

The *AD EHSMS RF* relies on constructive relationships between the AD EHS Center, the concerned SRA's and other relevant authorities, not only in the integration and development of EHS requirements, but also for the implementation, monitoring and enforcement of the *AD EHSMS RF* requirements.

The AD EHS Center nominates the relevant government authority for each concerned sector and delegate's responsibility to implement the requirements of the *AD EHSMS RF* in the concerned sector.

One of the major advantages of this structure is that the SRA's have expert technical knowledge of their concerned sector entities, activities and EHS risks and through their specific establishment laws have the power license and enforce requirements onto these entities.

The hierarchy for administration of the EHSMS system is as follows:

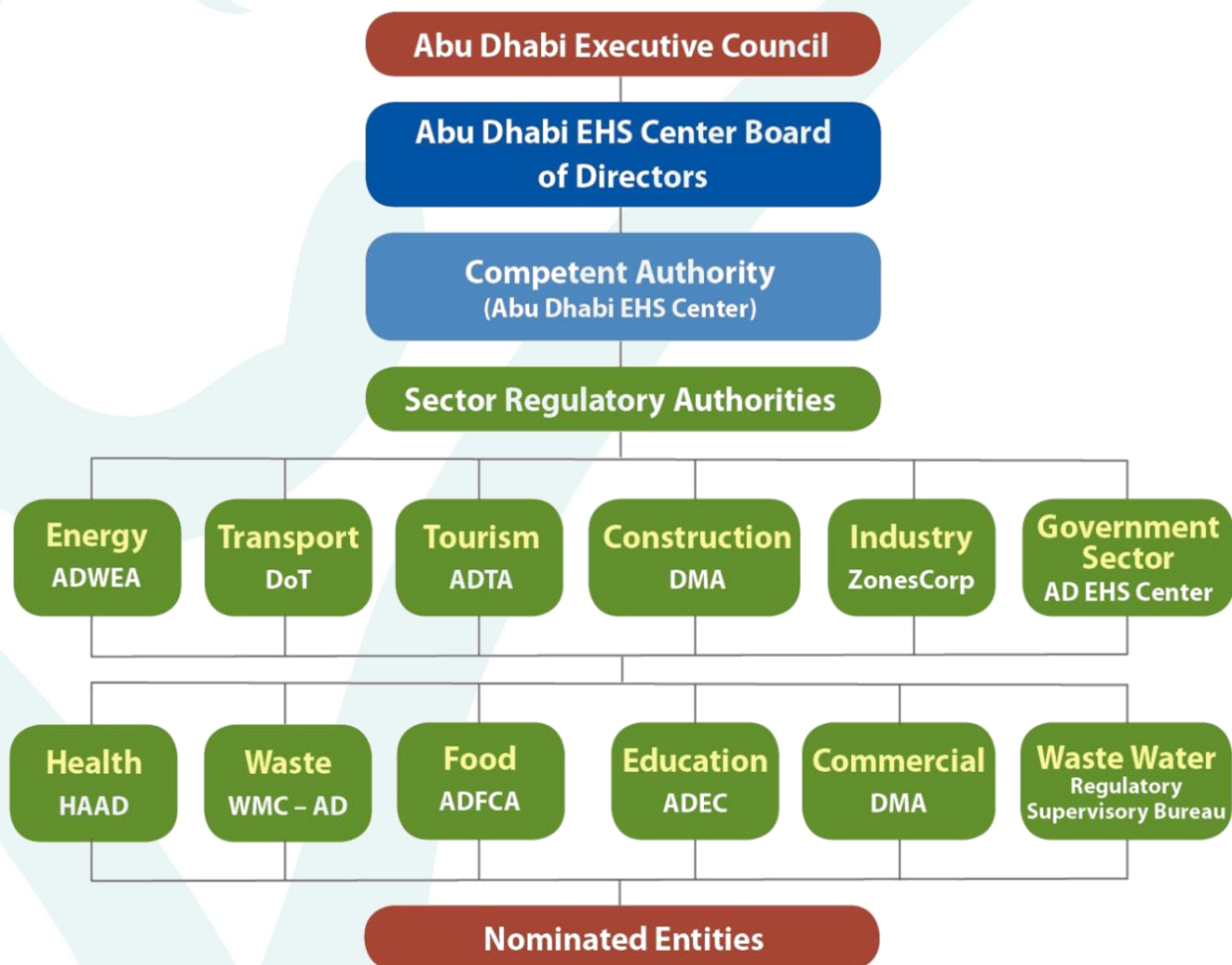


Figure 4 – The Abu Dhabi Emirate EHSMS – Administration Hierarchy

The system includes detailed roles and responsibilities as defined in *AD EHSMS RF – Element 01 – Roles, Responsibilities and Self-Regulation*.

Board of Directors (AD EHS Center)	Competent Authority (AD EHS Center)
<p>Role: Supervision of AD EHSMS at Emirate Level</p> <ol style="list-style-type: none"> 1. Setting Policy of the AD EHS Center. 2. Approval and issuance of AD EHSMS Regulatory Framework. 3. Issuing mechanisms to support AD EHSMS RF implementation. 4. Nominating Sector Regulatory Authorities. 5. Reporting AD EHSMS RF progress to the Executive Council. 	<p>Role: Development and Implementation of AD EHSMS RF at Emirate Level</p> <ol style="list-style-type: none"> 1. Setting plans to update the AD EHSMS Regulatory Framework. 2. Ensure integration of EHS requirements across the Emirate. 3. Coordination with concerned authorities on EHSMS issues. 4. Approval of Sectors EHSMS Requirements. 5. Monitoring AD EHSMS RF implementation. 6. Raising awareness of EHS issues. 7. Reporting EHS performance to Executive Council.
Sector Regulatory Authorities (Relevant Authority in each Sector)	Entities (Government and Private)
<p>Role: Implementation of AD EHSMS RF at Sector Level</p> <ol style="list-style-type: none"> 1. Develop Sector EHSMS Requirements. 2. Identify Entities required to implement EHSMS. 3. Approval of Nominated Entities EHSMS. 4. Monitoring, Auditing and Inspection of Nominated Entities. 5. Participation in EHS Integration process. 6. Reporting EHS performance to the Competent Authority. 	<p>Role: Management of EHS Impacts and Aspects</p> <ol style="list-style-type: none"> 1. Develop and implement an EHSMS in compliance with AD EHSMS RF and SRA's requirements. 2. Actively audit system internally to ensure compliance. 3. Undergo annual third party compliance audit. 4. Report EHS Incidents to SRAs/ Relevant Authorities. 5. Reporting EHS Performance to SRAs.

Figure 5 – The Abu Dhabi Emirate EHSMS – Administration Roles

2.2 AD EHSMS RF Authorization and Approval

The Executive Council of the Emirate of Abu Dhabi has authorized the AD EHS Center to develop, implement and maintain the *AD EHSMS RF* in consultation and coordination with relevant stakeholders.

The AD EHS Center Board of Directors has the authority to approve the *AD EHSMS RF*.

2.3 Distribution and Version Control

The AD EHS Center shall be responsible for the distribution and version control of the *AD EHSMS RF*.

The master copy of the *AD EHSMS RF* will be held and maintained by the AD EHS Center. This master copy will define the current revision.

Updates to the *AD EHSMS RF* will be developed by the AD EHS Center and approved by the AD EHS Center Board of Directors. For each modification/amendment, the revision number will be incremented.

The AD EHS Center website shall contain the current versions of all *AD EHSMS RF* documents.

2.4 Registration of EHS Professional Entities

The EHS Professional Entity Registration Mechanism provides a centralized process to objectively verify the qualifications and / or competence of any professional entity that wishes to perform EHS activities and operations within the Emirate of Abu Dhabi and to ensure only those who are qualified and/ or competent to perform the works are permitted to do so.

The mechanism shall be implemented in a phased approach starting in 2012.

Please refer to AD EHS RI – Mechanism 07 – AD EHS Professional Entity Registration for more details.

2.5 Registration of EHS Practitioners

The EHS Practitioner Registration Mechanism provides a centralized process to objectively verify the qualifications and / or competence of any EHS Practitioner (or Individual) that wishes to perform EHS operations within the Emirate of Abu Dhabi.

The mechanism shall be implemented in a phased approach starting in 2012.

Please refer to AD EHS RI – Mechanism 08 – AD EHS Practitioner Registration for more details.

3. AD EHSMS RF Document Hierarchy and Structure

3.1 Structure of the Abu Dhabi EHSMS Version 2

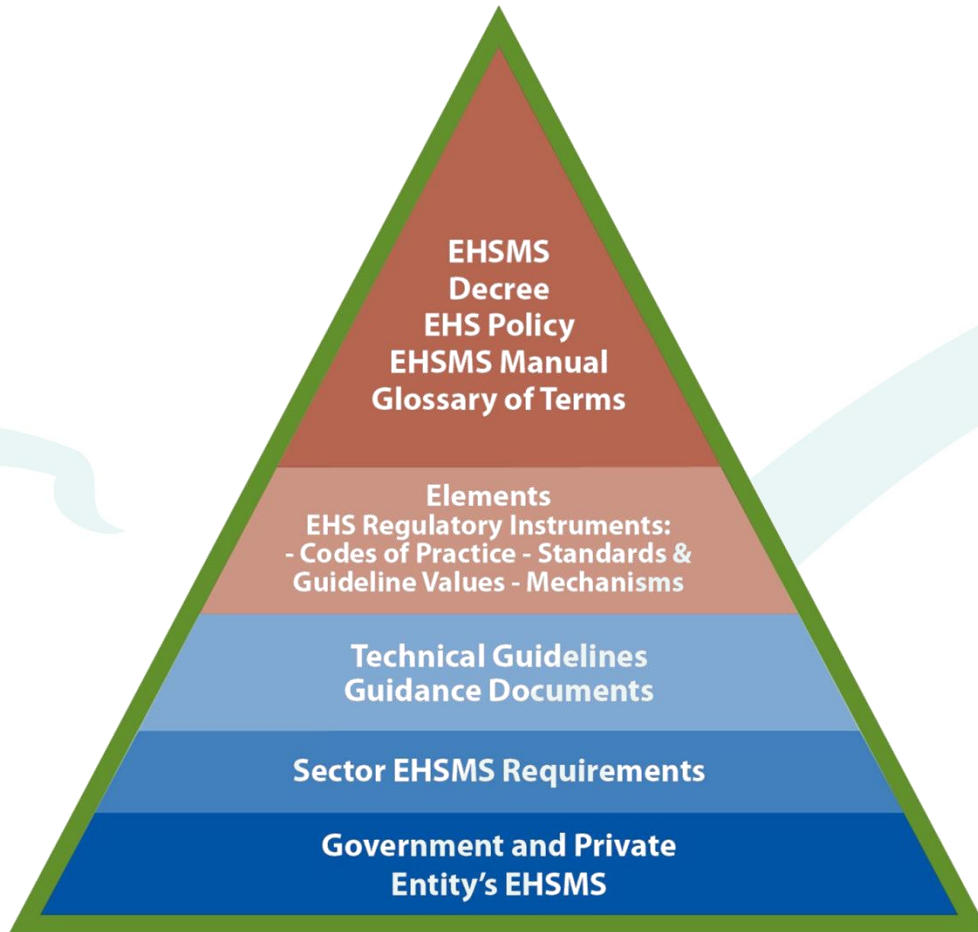


Figure 6 – The Abu Dhabi Emirate EHSMS – Structure

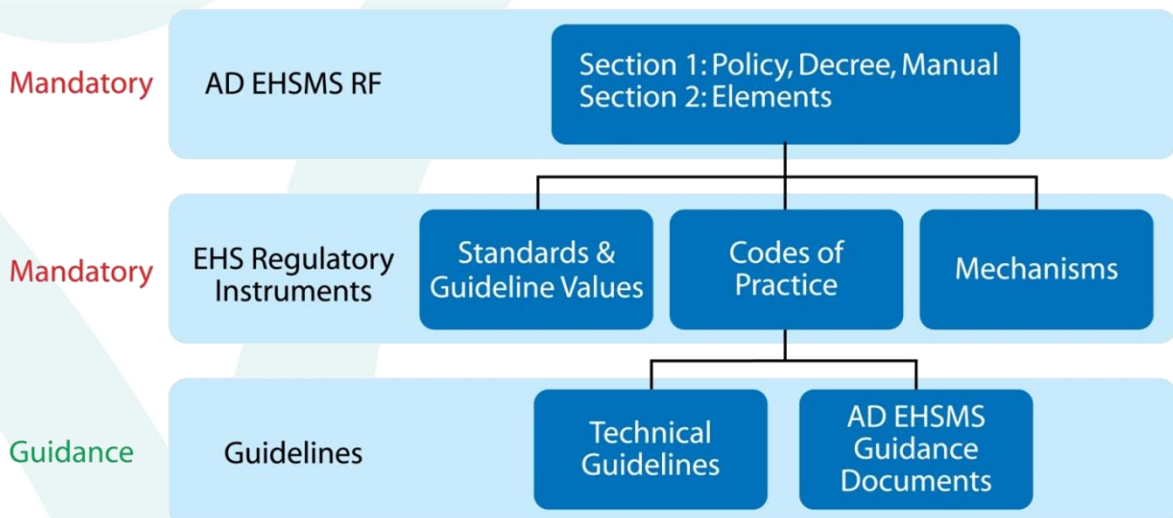


Figure 7 – The Abu Dhabi Emirate EHSMS – Documents

3.2 AD EHSMS RF - Decree

On 16th June 2009, Decree No. (42) of 2009 concerning the Environment, Health and Safety Management System in Abu Dhabi Emirate was issued by the Crown Prince, Chairman of the Executive Council.

This decree aims to implement the Environment, Health and Safety Management System in the Emirate through provision of a unified tool at Emirate level to facilitate implementation of regulations relevant to environment, health and safety and for protection of human health and safety and the environment and conservation of natural resources.

3.3 AD EHS Policy

On 6th December 2006, the Executive Council issued a Decree (Committee Decree 2-Session 31/2006) approving "Abu Dhabi Emirate EHS Policy".

Refer to "Abu Dhabi Emirate Environment, Health and Safety Policy"

The EHS Policy has the following main goals:

1. Implementation of EHSMS Regulatory Framework by all sectors.
2. Compliance with EHSMS requirements.
3. Minimization of hazards and risks to the environment and to the health and safety of workers and the community.
4. Continual progress towards sustainable development.

The Policy focuses on the importance of partnering with government and private sector and on engaging all members of society in protecting the environment and being responsible for health and safety issues.

This Policy sets out goals of the Abu Dhabi Government in relation to protecting and conserving the environment and promoting human health and safety for all inhabitants of the Emirate.

Also outlined in the Policy are a set of "Guiding Principles" for all sectors and entities to commit to and align their plans and activities. The guiding principles identify the key philosophies that relevant stakeholders must consider to ensure successful integration of EHS requirements, sustainable development and the aspirations of people of the Emirate.

Please refer to *AD EHSMS RF – Guideline Document – Self-Regulation and the AD EHS Guiding Principles* for further explanation.

This Policy is a key component of the *AD EHSMS RF* and is applicable to the SRA's and the entities in the private and government sectors.

3.4 AD EHSMS RF - Glossary of Terms

The purpose of the glossary is to harmonize the definitions and understanding of commonly used EHS technical terms within the Emirate of Abu Dhabi. This is vital due to the diverse range of cultural backgrounds and languages spoken within the Emirate.

All efforts have been made to integrate existing definitions from relevant Competent Authorities.

3.5 AD EHSMS RF - Manual

This Manual is designed to serve as a comprehensive guide to the *AD EHSMS RF* and of its related requirements. It provides an overview of the Management System's structure and approach, and a brief description of the key components of the Management System.

The *AD EHSMS RF* Manual is an excellent source for obtaining a high-level understanding of the Emirates EHS requirements and the tools available to meet those requirements.

3.6 AD EHSMS RF - Elements

The *AD EHSMS RF* Elements define the mandatory management system components to be incorporated into an entity's EHSMS. These key components specify the minimum requirements of an entity's EHSMS.

Technical EHS issues and topics are not integrated in the Elements; they are addressed in AD EHS Regulatory Instruments (eg. Codes of Practice).

3.7 AD EHS Regulatory Instruments

AD EHS Regulatory Instruments define mandatory requirements for technical EHS issues and topics.

These Regulatory Instruments are developed by the AD EHS Center in coordination and consultation with the subject matter Competent Authority and the SRA's – as per *AD EHS RI – Mechanism 01 – Integration of EHS Requirements in the Emirate of Abu Dhabi*.

These regulatory instruments are enacted by the *AD EHSMS RF* and are enforceable requirements. Relevant stakeholders are encouraged to request the development and/or modification to these technical documents as per *AD EHS RI – Mechanism 10.0 – Request to Update AD EHSMS RF and Associated Documents*.

AD EHS Regulatory Instruments include the following documents:

Standards and Guideline Values

Include EHS threshold and exposure levels for occupational environments - the level of pollutants prescribed by regulations that are not to be exceeded during a given time in a defined occupational environment.

AD EHSMS RF Standards and Guideline Values include:

- Occupational Air Quality; and
- Occupational Noise.

Note: Standards and Guideline Values developed under the AD EHSMS RF are to be followed and will be mandatory after decreed by the Executive Council.

Codes of Practice

An approved code of practice (CoP) provides mandatory minimum EHS technical requirements on a specific subject (eg. Personal Protective Equipment).

Mechanisms

Describe mandatory *AD EHSMS RF* implementation processes and procedures (eg. EHS Incident Reporting). These mechanisms include relevant process maps and standard *AD EHSMS RF* Forms.

3.8 EHS Guidelines

Guidelines include non-mandatory information and guidance on implementation and/or interpretation of an *AD EHSMS RF* requirement.

Technical Guidelines

Provide guidance on how to achieve a requirement as defined in the *AD EHSMS RF*. Guidance is not mandatory, but it should be adopted unless an entity chooses an alternative control measure or course of action that achieves an equivalent or better standard.

Technical guidelines are developed jointly by AD EHS Center and relevant subject Competent Authority – usually as a subordinate document to an approved Code of Practice.

AD EHSMS RF Guidance Documents

Provide guidance and interpretation of an *AD EHSMS RF* concept and/or principle.

These guidelines also provide detailed interpretations of important principles, concepts and processes to be followed when developing and implementing an EHSMS.

3.9 Sector EHSMS Requirements

Each of the concerned SRA are required to develop sector specific requirements to facilitate integration of the *AD EHSMS RF* requirements with specific sector requirements for entities within each concerned sector and assist multi-disciplinary comply with all relevant requirements.

AD EHS RI – Mechanism 2.0 – Concerned Sector EHSMS Requirements provides detailed information and requirements.

3.10 Individual Entity EHSMS

Entities that are officially notified (nominated) by a concerned SRA are required to develop, implement and maintain an appropriate EHSMS that addresses the specific EHS hazards and risks associated with its activities.

An entity EHSMS must comply with the requirements of the *AD EHSMS RF* and the concerned Sector EHSMS Requirements.

4. AD EHSMS RF Key Components

4.1 Risk Management

One of the most important components in managing EHS hazards and risks is to ensure entities have a comprehensive risk management program implemented.

Risk management provides structured approach to identifying EHS risks. Having an understanding of all EHS impacts and aspects allows an entity to measure and prioritize risks and take the appropriate actions to reduce losses. Risk management has other benefits for an entity, including:

- protecting employees and other persons from harm;
- reducing an entities impacts on the environment;
- protecting the reputation and public image of the entity;
- increasing the stability of operations; and
- preventing or reducing legal liability.

An effective risk management program does not eliminate all EHS risks. However, having an appropriate and operational risk management program in place is a key component to ensure that an entity is committed to loss reduction or prevention.

Another key factor of risk management is the management of change within an entity, (changes to processes, machinery, equipment, location, materials, chemicals, etc). This process ensures that you have control over every stage of the change being made, and that the change is properly evaluated prior to being introduced to your workplace. This avoids any problems that may arise if effects of the change are assessed carefully in advance, such as the introduction of unforeseen EHS risks caused by the change.

AD EHSMS RF – Element 02 - Risk Management provides detailed information and requirements.

4.2 Legal Compliance

In order to comply with laws and regulations that apply, entities must first know what the requirements are and how they affect what they do. Compliance with legal requirements is one of the key components upon which each EHSMS shall be based. The potential costs of non-compliance (possible harm to employees, the community, damage to the environment, revenue loss and impact on public image, for example) can be very high.

Thus, an effective EHSMS should include processes to:

- identify and communicate applicable legal and other requirements, and;
- ensure that these requirements are factored into the entities management efforts.

An EHSMS shall include a procedure for identifying, having access to and analyzing applicable legal and other requirements to determine their impacts on its operations. “Other requirements” might include international standards, industry codes of practice, international conventions or similar requirements to which the entity might subscribe.

AD EHSMS RF – Element 09 – Compliance and Management Review provides detailed requirements.

4.3 EHS Performance Monitoring and Reporting

The *AD EHSMS RF* includes rigorous requirements monitoring, measurement and reporting of EHS performance. These monitoring activities enable an entity to:

- evaluate EHS performance (eg. KPI's, health surveillance, well-being programs);
- analyze root causes of problems;
- assess compliance with legal requirements;
- identify areas requiring corrective action, and
- improve performance and increase efficiency.

The *AD EHSMS RF* includes detailed EHS incident investigation and reporting requirements. These include a standard reporting form (Form G) and specified timelines for reporting. The system also includes specific lists of types of EHS incidents and performance information that are mandatory to report, including:

- List of Reportable Dangerous Occurrences;
- List of Reportable Serious Injuries;
- List of Reportable Occupational Illness / Diseases;
- Annual External Compliance Audit Results;
- SRA Minimum Key Performance Indicators; and
- Private and Government Entity Minimum Key Performance Indicators.

AD EHSMS RF – Element 07 – Monitoring, Investigation and Reporting provides detailed information and requirements.

4.4 Emergency Response and Management

One of the key components of the *AD EHSMS RF* is ensuring that all concerned Sectors and Nominated Entities develop an appropriate Emergency Management Program.

Despite an entity's best efforts, the possibility of incidents and other emergency situations still exists. Effective preparation and response can reduce injuries, prevent or minimize environmental impacts, protect employees and neighbors, reduce asset losses and minimize downtime.

Emergency preparedness and response programs shall include provisions for:

- assessing the potential for accidents and emergencies;
- preventing incidents and their associated environmental impacts;
- plans / procedures for responding to incidents;
- periodic testing of emergency plans / procedures; and
- mitigating impacts associated with these incidents.

AD EHSMS RF – Element 06 - Emergency Management provides detailed information and requirements.

4.5 Management of Contractors

The *AD EHSMS RF* ensures a systematic approach to the management of contractors so that the EHS risks from the engagement of contractors are assessed and minimized.

Entities have the obligation to ensure that contractors are performing work activities in a manner that is safe for employees and the community, as well as in a manner that protects the environment.

To do this the *AD EHSMS RF* includes a number of features that include:

- introduction of “principal contractor” requirements for construction work;
- contractor’s management process, for the selection, engagement and monitoring of contractors;
- risk management requirements;
- training requirements; and
- communication and consultation requirements.

AD EHSMS RF – Element 03 – Management of Contractors provides detailed information and requirements.

4.6 Audit and Inspection

Once an entity has established its EHSMS, verifying the implementation of the system is critical. To identify and resolve EHSMS deficiencies the entity must actively seek them out.

Results of EHSMS audits shall be linked with developed corrective and preventive action processes.

The *AD EHSMS RF* includes requirements for EHS audits and inspections. Such monitoring activities are critical to EHSMS effectiveness. Systematic identification and reporting of EHSMS deficiencies to management provides a great opportunity to:

- maintain management focus on the impacts on the environment;
- improve the EHSMS and EHS performance; and
- ensure the system’s cost-effectiveness.

Refer to AD EHSMS RF - Element 08 – Audit and Inspection for a complete list of the AD EHSMS RF.

4.7 Training and Competence

Under the *AD EHSMS RF* entities have a responsibility to identify, plan, monitor and record training needs for all employees and other relevant stakeholders.

Entities are required to develop a procedure to ensure the training of employees to ensure they understand the necessary EHS technical and procedural requirements to perform their duties in a safe manner.

To do this the *AD EHSMS RF* includes a number of features that include:

- appropriate induction training to all new and transferred employees;
- identify and deliver specific EHS training that enables employees to work safely;
- ensure employees have the appropriate competence for the duties they are required to perform; and
- maintain records of employee EHS training and competencies.

The *AD EHSMS RF* ensures all employees shall receive appropriate EHS training. Such training shall be tailored to the different needs of various levels or functions in the entity. Training shall also be developed and conducted in an appropriate manner considering language and literacy requirements of participants. However, training is just one factor to establish and maintain competence of employees, which is typically based on a combination of education, training, and experience.

The *AD EHSMS RF* establishes criteria to measure and maintain the competence of individuals performing tasks.

AD EHSMS RF – Element 05 – Training and Competency provides detailed information and requirements.

4.8 Consultation and Communication

Consultation and communication with relevant stakeholders, particularly with employees is required under the *AD EHSMS RF* when developing, implementing and maintaining an EHSMS.

Through consultation, employers can become more aware of hazards and EHS issues experienced by employees. Employees can provide suggestions on how to solve EHS problems. Participation enables the employee to contribute to determining how the work can be undertaken safely and while providing increased protection for the environment.

Effective communication requires mechanisms for information to flow top-down, bottom-up and across functional lines. Since employees are on the “front lines,” they are an excellent source of information, issues, concerns and ideas.

Effective consultation and communication can result in:

- demonstrating management commitment;
- ensure understanding of roles and expectations;
- improved management decisions through gathering a wider source of ideas about EHS;
- greater employee commitment to EHS through a better understanding of EHS decisions and employee ownership of the outcome of the consultation;
- greater openness, respect and trust between management and employees through developing an understanding of each other’s points of view;
- higher employee morale and job satisfaction through the employer demonstrating that employee views are valued and taken into account;
- healthier working environments and increased productivity;
- opportunities for learning through sharing of information, concepts and ideas; and

- reduced injury and disease with consequent savings to the employer, employees and the general community.

Meaningful and effective consultation involves drawing on the knowledge, experience and ideas of employees and encouraging their participation and input to improve the systems the employer has in place for managing EHS.

Thus, an effective EHSMS shall include procedures for:

- communicating and consulting internally (between levels and functions within the entity), and
- soliciting, receiving, documenting and responding to external communications.

AD EHSMS RF – Element 04 – Consultation and Communication provides detailed information and requirements.

4.9 Operational Procedures

Where operations or activities are complex and/or the potential EHS impacts are significant, control measures shall include documented operational procedures. Procedures can help entities to manage its EHS risks, ensure regulatory compliance and achieve objectives. Procedures can also play a prominent role in employee training.

Risk management programs are critical in determining which operations shall be covered by documented procedures and how those operations shall be controlled. In determining which operations and activities need to be controlled, entities need to look beyond routine production or service. Activities such as equipment maintenance, management of on-site contractors, and services provided by suppliers or vendors will affect an entity's EHS performance significantly.

AD EHSMS RF – Element 09 – Compliance and Management Review provides detailed information and requirements.

4.10 Document Control and Record Retention

To ensure that everyone is working with the correct EHSMS documents, entities shall have a procedure that describes how such documents are controlled. Implementation of this procedure should ensure that:

- development, approval and distribution of EHS documents;
- EHSMS documents are accessible to all employees and relevant stakeholders;
- they are periodically reviewed; and
- current versions are available and obsolete documents are removed.

Records management ensures entities are able to demonstrate that they are actually implementing the EHSMS as designed. While records have value internally, over time entities are required to provide evidence of EHSMS implementation to external parties (such as clients, AD EHSMS auditors, SRA's, and the AD EHS Center).

The *AD EHSMS RF* provides minimum requirements for the retention of EHS documentation and records.

AD EHSMS RF – Element 09 – Compliance and Management Review provides detailed information and requirements.

4.11 Management Review

Management reviews are vital to continual improvement and for ensuring that the EHSMS will continue to meet your entities needs over time. Management reviews also offer a great opportunity to keep the entities EHSMS effective and efficient.

The key question that a management review process seeks to answer: “Is the system working?” (eg. is it suitable, adequate and effective, given our activities and needs?)

AD EHSMS RF – Element 09 – Compliance and Management Review provides detailed information and requirements.

4.12 Low Risk Entities

The *AD EHSMS RF* recognizes that not all entities perform tasks and activities that contain a significant level of risk. Each SRA shall conduct a risk assessment to determine the underlying hazards and risks on all relevant sector entities. Entities that are found to have low EHS impacts and aspects can be officially informed to comply with *AD EHSMS RF – Mechanism 05 – EHS Requirements for Low Risk Entities*.

AD EHS RI – Mechanism 05 – EHS Requirements for Low Risk Entities provides detailed information and requirements.

5. EHSMS Development and Implementation

5.1 Starting Points of Development

It is acknowledged by the Government that many entities within the Emirate have existing EHS management systems of varying levels of complexity.

For this reason the timeline set for implementation allows entities with limited systems in place additional time and guidance from the concerned SRA to develop their EHSMS.

The options for developing and implementing an EHSMS that meets the requirements of the *AD EHSMS RF* are shown below:

- Entities without any environmental management system or occupational health and safety management system in place, can develop an EHSMS based on *AD EHSMS RF*; or
- Entities with environmental management system and / or occupational health safety management system in place will have to incorporate the additional specific requirements of the *AD EHSMS RF*. Key additional requirements include: developing an integrated EHS policy, the consideration of self-regulation, and the external reporting requirements of EHS incidents and performance.

The *AD EHSMS RF* Guidelines includes a number of guidance documents to assist entities develop and implement EHS Management Systems.

5.2 Steps for Development and Implementation of EHSMS

Figure 8 illustrates steps for development and implementation of AD EHSMS RF compared to RADAR (Results, Approach, Deployment, Assessment, Review) and PDCA (Plan, Do, Check, Assess) systems development methodologies (outer and inner green circles, respectively).

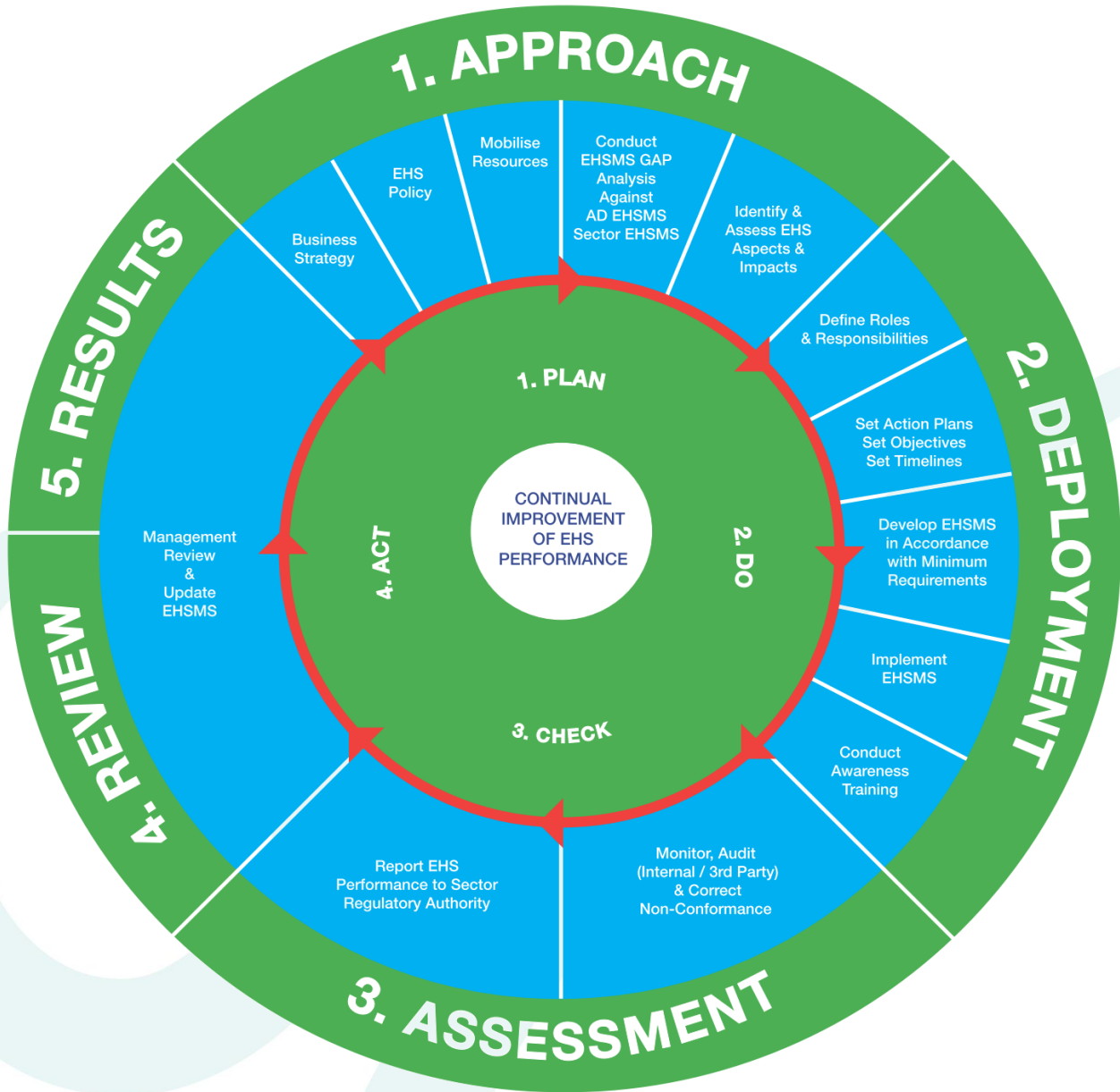


Figure 8 - The AD EHSMS RF Development & Implementation Cycle compared to RADAR and PDCA System Development Methodologies

Results: Continual Improvement: of EHS Performance.

Approach (Plan): During the planning stage you should:

- Mobilize resources;
- Develop EHS policy (commitment of top management);
- Perform Gap analysis of existing EHS managements systems against the requirements of the AD EHSMS RF and the Sector EHSMS Requirements; and
- Risk Management - Identify and Assess EHS Aspects and Impacts.

Deployment (Do): At this point you should:

- Establish EHS roles and responsibilities;
- Set Actions Plans, including Timelines for development and implementation;
- Set EHS Objectives and Targets;
- Develop EHSMS in accordance with the minimum requirements;
- Implement EHSMS; and
- Conduct EHS awareness training.

Assessment (Check): Continually improve your management system by:

- Introduce performance, measuring and monitoring practices;
- Monitor EHS performance;
- Auditing and assessing the performance of the management system; and
- Identifying and correcting non-conformances.

Review (Act): Continual Improvement:

- Management Review on the effectiveness of the system;
- Revise EHS Objectives and Targets; and
- Update EHSMS as necessary.

5.3 Continual Improvement

Continual improvement is an essential component of the EHSMS, which aims to improve organizational EHS performance over time. The continuous improvement cycle is commonly based on RADAR or PDCA cycles (Figure 8).

Embedded into the requirements of the *AD EHSMS RF* is the need for regular reviews of the entities performance and adequacy of their EHSMS.

Another key component of the system is the focus on self-regulation. Entities are also rewarded for the self-identification and correction of non-conformances, contributing to the continual improvement of EHS performance, e.g., through streamlined permitting procedures.

5.4 EHSMS Guidance Materials

The *AD EHSMS RF* Guidance Documents includes a series of documents to assist entities to comply with the minimum requirements.

These documents include:

- *AD EHSMS RF* Guideline Document – EHS Roles and Responsibilities;
- *AD EHSMS RF* Guideline Document – Understanding the Key Performance Indicators; and
- *AD EHSMS RF* Guideline Document – Self-Regulation and the AD EHS Guiding Principles.

Other relevant International Standards referenced during the development of the Abu Dhabi Emirate EHSMS includes:

- ISO 14001 - Environmental Management Systems - Requirements with Guidance for Use;
- OHSAS 18001 - Occupational Health and Safety Management Systems Requirements Standard;
- ISO 9001 - Quality Management Systems – Requirements;
- ISO 19011 - Guidelines for Quality and/or Environmental Management Systems Auditing; and
- ISO 31000 - Risk Management -- Principles and Guidelines.

6. Summary of Modifications to *AD EHSMS RF* Version 2.0

There have been significant modifications and improvements incorporated into Version 2.0 of the *AD EHSMS RF* with the main focus being to integrate all Federal and Emirate EHS requirements into the Framework and reduce duplication of EHS regulation.

Version 1.2	Version 2.0	Benefits
Initiated the integration process.	Further integration of Federal, Emirate and Sector EHS requirements.	Further reduction of duplication in EHS regulation through increased consultation and co-operation with SRA's / Relevant Subject Competent Authorities – creating a leaner more unified EHS regulatory environment within the Emirate.
All mandatory and non-mandatory technical requirements and processes included in the Codes of Practice.	<i>AD EHSMS RF</i> updated structure.	A clearly defined document structure that separates requirements into distinctive categories: <ol style="list-style-type: none"> 1. <i>Elements – mandatory management system requirements;</i> 2. <i>Codes of Practice – mandatory EHS technical requirements;</i> 3. <i>Mechanisms – mandatory implementation processes and procedures;</i> 4. <i>Occupational Standards and Guideline Values; and</i> 5. <i>Guidelines – non-mandatory compliance advice.</i>
Broad minimum requirements allowing varied interpretation.	Updated management system minimum requirements.	More prescriptive minimum requirements and closer alignment to the latest versions of the relevant international standards.
Included Building and Construction, Energy, Industrial, Transport, Waste Tourism and Health.	Introduction of 5 more concerned Sectors (Government, Education, Food, Commercial and Waste Water.)	Broader range of entities and activities directly covered by the <i>AD EHSMS RF</i> and increased integration of EHS requirements and regulation.
Each SRA had a fully compliant EHSMS which resulted in duplication of EHS Requirements.	Standardized "Sector EHSMS Requirements" document.	Replacement of the Sector EHSMS with a standard template and table of contents including only the key EHS objectives and requirements of the individual sectors – no technical requirements included. This will benefit entities to comply that perform multi-disciplinary activities across sectors by reducing duplication.
Broad processes and requirements allowing varied interpretation and implementation by SRA's.	Clearly defined implementation processes for the SRA's.	Increased transparency, consistency and accountability in implementation of the <i>AD EHSMS RF</i> through the Emirate.
Small and medium entities addressed but transferred responsibility to the individual SRA's to set requirements.	Standardized EHS requirements for low risk entities.	New integrated document listing EHS requirements for entities with low risks that are not required to develop and implement a fully compliant EHSMS. Includes standard templates for ease of compliance.

Version 1.2	Version 2.0	Benefits
Included a detailed list of reporting requirements.	Updated and improved EHS performance and incident reporting requirements.	More prescriptive set of EHS incident and performance requirements. More flexible compliance requirements and includes an updated list of Reportable Incidents / Illnesses and updated Reporting Forms.
Included general "Management of Contractors" requirements only.	Introduction of "Principal Contractor" for Construction Work.	Greater EHS control on construction sites of contractors and activities - aligned to international practices. Officially identifies a main or "principal" contractor on construction sites to control and have increased responsibility for activities and EHS compliance.
Short list of EHS topics covered.	Mandatory requirements for a broader range of EHS technical issues (Codes of Practice).	Comprehensive set of EHS topics developed with co-operation and co-ordination of the relevant Competent Authorities. Also includes a mechanism for including further EHS topics.
Utilized the Environment Agency Abu Dhabi registration.	Independent registration of Professional EHS Service Entities.	Introduction of an independent EHS Professional Services registration process with an increased focus on OHS and Auditing activities managed by the AD EHS Center. This will allow the AD EHS Center increased ability to regulate the competency of EHS service providers with the Emirate.
None.	Registration of EHS Practitioners.	Introduction of a new requirement for all EHS Practitioners to register with the AD EHS Center. This will provide the AD EHS Center increased ability to regulate the competency of EHS practitioners with the Emirate.
Focused on lagging OHS KPI's.	Updated and improved Key Performance Indicators (KPI's).	Introduction of new leading and lagging EHS KPI's. Will produce beneficial baseline EHS information for the Emirate of Abu Dhabi.
Existing Federal and Emirate requirements only.	Updated asbestos requirements and control measures.	Introduction of integrated control measures and requirements - aligned to the international practices. Increased management of asbestos maintenance, removal and disposal, increased worker protection regulations and health surveillance.
Minimum Federal and Emirate requirements only.	Significant increase on the focus on Occupational Health / Industrial Hygiene issues.	Specific mandatory requirements covering a broader range of occupational health topics.

7. Transitional Provisions & System Review

7.1 Transitional Provisions

- (a) All relevant EHS Laws, Regulations and Quality Standards that are currently legislated under Federal or Abu Dhabi law are prescriptive requirements and compliance with them is mandatory. Where new EHS Standards and Quality Indicators have been developed, compliance will be required after publication in the Government Gazette.
- (b) Where non-compliance with the requirements of the *AD EHSMS RF* exists, provided there is no immediate threat to the life and health of people and/or there is no threat of serious or irreversible damage to the environment, a program must be put in place to achieve compliance no later than three (3) years of its approval and release.
- (c) If new EHS objectives and requirements cannot be achieved within three (3) years of the *AD EHSMS RF* coming into force then a submission must be made to the SRA / relevant Competent Authority outlining the entities corrective actions of how and when the requirements and objectives will be met, or why this is not possible.
- (d) Where there is immediate threat to the life and health of people or irreversible damage to the environment related to meeting new requirements, the period for setting a program in compliance with the *AD EHSMS RF* shall be decided by the AD EHS Center / SRA.
- (e) The AD EHS Center may consult with Board of Directors in making decisions on exemptions from system requirements and on periods for achieving compliance with them.

7.2 EHSMS Regulatory Framework Review

- (a) The Board of Directors will review and approve all additions and modifications to the *AD EHSMS RF* as necessary (e.g., in view of new information and/or emerging circumstances).
- (b) The Board of Directors shall ensure that the AD EHS Center conducts a review of the *AD EHSMS RF* annually.
- (c) The entire *AD EHSMS RF* shall undergo a thorough review at a minimum every five (5) years from the date of issue, in consultation with all relevant stakeholders.

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