BACK TO BASICS – ISO 14001

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RISK
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NQA: CLIENTS WE CERTIFY

YOUR PRESENTER

KEY INFO

- **45 minute webinar**

- **Questions in the chat box**

- **Q&A at the end**

- **Recording of webinar circulated shortly**

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CEnv MIEMA. ISO 9001, ISO 14001, ISO 50001, NHSS 18, Eco-Campus

NQA Principal Assessor
Environment & Energy

Richard is NQA's Principal Assessor for ISO 14001 and ISO 50001 management system standards. As a Principal Assessor his role is to lead and develop the technical knowledge and skill base of NQA staff and Assessors, whilst ensuring technical knowledge and changes within the industry are cascaded appropriately and accordingly to clients and external stakeholders.

LEARNING OBJECTIVES

- The key overarching concepts of ISO 14001

- Reminder of the structure

- A fresh look at the clauses - what is required and what we as assessors will look for.

- ISO14001 - destination or stepping stone

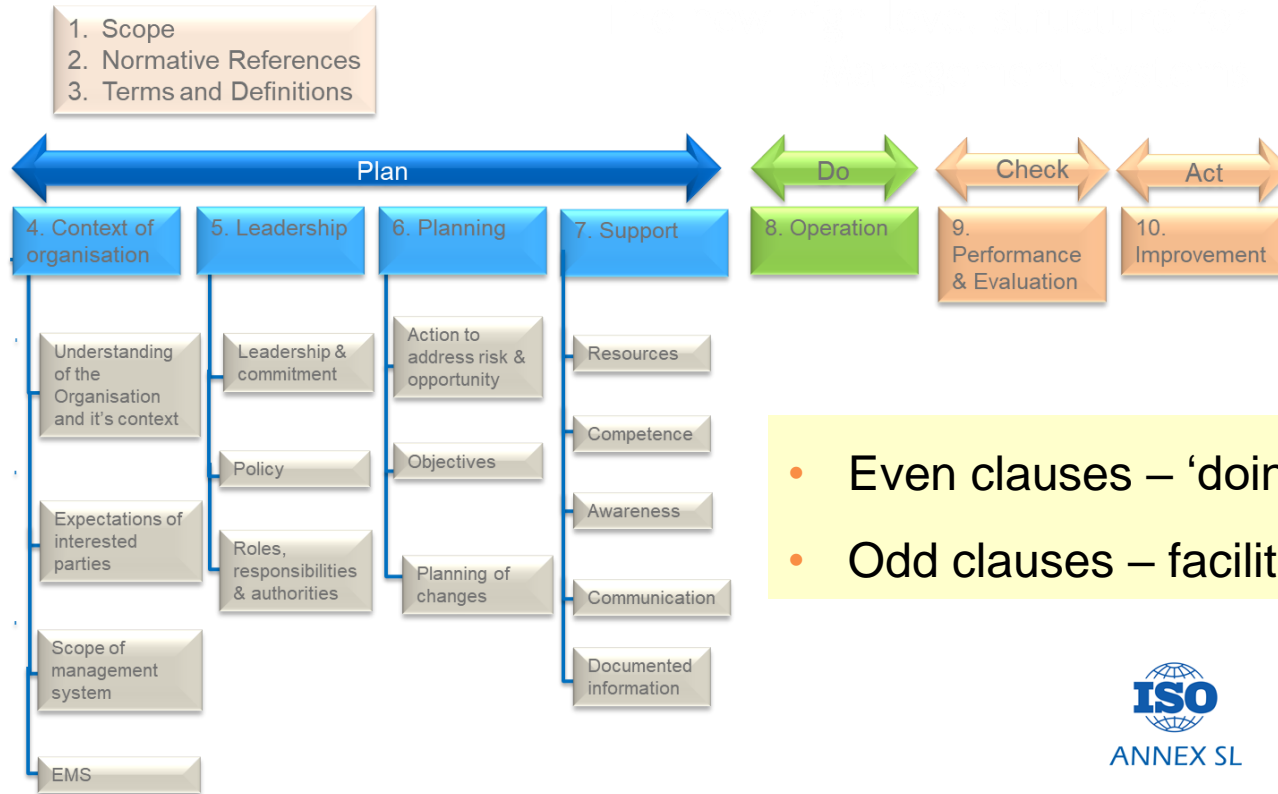- Questions

Aims of the standard

- Provide organisations with a framework to protect the environment and respond to changing environmental conditions.
- Systematic approach:
  - Protecting the environment by preventing or mitigating adverse environmental impacts
  - Mitigating the potential adverse effect of environmental conditions
  - Assisting the organisation in the fulfilment of compliance obligations
  - Enhancing environmental performance
  - Controlling or influencing the way the organisations products and services are designed manufactured distributed consumed and disposed of - life cycle.

Overarching Concepts

- Intended outcomes

  o Enhancement of environmental performance;

  o Fulfilment of compliance obligations;

  o Achievement of environmental objectives.

- Management of change

  o Focuses on planning process

  o Management of risk

  o Integration with other standards & business processes

Definitions

- **Consider**
  - Necessary to think about the topic – but **can** be excluded

- **Take into account**
  - Necessary to think about the topic – but **cannot** be excluded

- **Continual -** ✓
  - Duration occurs over a period of time

- **Continuous -** X
  - Duration without interruption.

Structure of standard.

- 1. Scope
- 2. Normative References
- 3. Terms and Definitions

Plan

Do

Check

Act

| 4. Context of organisation | 5. Leadership | 6. Planning | 7. Support | 8. Operation | 9. Performance & Evaluation | 10. Improvement |

Understanding of the Organisation and it's context

Leadership & commitment

Action to address risk & opportunity

Resources

Expectations of interested parties

Policy

Objectives

Competence

Scope of management system

Roles, responsibilities & authorities

Planning of changes

Awareness

Communication

EMS

Documented information

- • Even clauses – 'doing'
- • Odd clauses – facilitate.
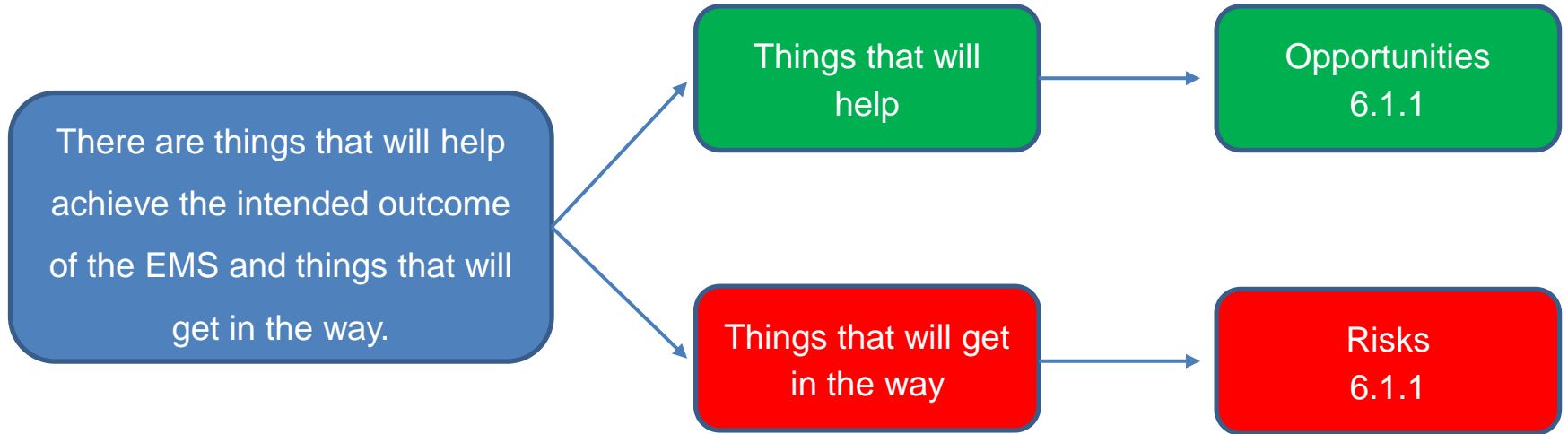
ISO
ANNEX SL

Clause 4 - Context of the organisation - summary

- Internal and external issues need to be determined

- The needs and expectations of interested parties need to be determined

- The scope **shall not** exclude activities, products and services that can have significant environmental aspects

- The scope shall be available as documented information and be available to interested parties.

Clause 4.1 - Context of the organisation

- Determine external and internal issues that are relevant to the organisation's purpose and that affect its ability to achieve the intended outcome of its EMS.

- Requirement is to consider the organisation's context and the needs of interested parties (stakeholder concerns) and their requirements

- The above should result in an organisation's EMS focussing on the issues that present the greatest risk, positive or negative, to achieving environmental improvement.

Clause 4.1 - Context of the organisation

There are things that will help achieve the intended outcome of the EMS and things that will get in the way.

Things that will help → Opportunities 6.1.1

Things that will get in the way → Risks 6.1.1

Potential Key Issues

Environment Conditions
Related to environmental aspects

- Climate (change)
- Air quality
- Water quality
- Land use
- Contamination
- Natural Resources
- Biodiversity

External

- Legal/Regulatory
- Economic
- Technology
- Social/Cultural
- Competition
- Drivers/Trends
- Interested parties

Internal

- Strategic direction
- Capabilities
- Compliance status
- Culture
- Standards
- Operations & systems
- Contractual relationships

Remember - Intent is to provide a **high level** conceptual understanding of the important issues that can positively or negatively affect the way in which environmental responsibilities are managed.

Concept – Understanding of need/expectation

- Determine relevant requirements of relevant interested parties

- Determine which ones the organisation has to or chooses to comply with - these become compliance obligations.

- As an absolute minimum, all relevant legal requirements must be included.

- Voluntary arrangements become obligations when agreed & adopted.

Clarifies Physical & Organisational Boundaries of EMS

- Whole or part of the organisation

- <mark>Cannot be used to exclude significant environmental aspects or evade compliance obligations</mark>

- Must not be misleading

- Documented scope to be made available to interested parties.

4.4 – Environmental Management System

Establish, implement, maintain & continually improve the EMS to achieve intended outcomes.

- Ensures processes are controlled, carried out as planned and achieve desired results

- Integrate the EMS into business processes

5.1 Leadership and Commitment. Ensure EMS……

* is not managed in isolation, or separately from the core strategy of the business;

* is considered when strategic business decisions are made;

* is aligned with business objectives;

* benefits from the appropriate level of resources (see 7.1), provided in a timely and efficient manner;

* receives the appropriate involvement from across the business;

* provides real value to the organization;

* continually improves and remains successful in the long term

Top management now defined as:

"person or group of people who directs and controls an organisation at the highest level"

- In an organisation with a company wide EMS Top Management is essentially board level.

- If an EMS has been adopted by a business unit within a organisation then top management would be the senior management of the business unit.

- New standard requires top management to take accountability for the effectiveness of the EMS.

5.2 – Environmental Policy

Appropriate to the organisation's purpose and context

- Nature scale & environmental impact of activities, products/services

- Framework for environmental objectives

- Documented and available to interested parties

- Communicated internally

- 4 basic commitments

  - Protect the environment

  - Fulfil the organisation's compliance obligations

  - Setting environmental objectives & targets

  - Continually improve the EMS to enhance environmental performance.

5.2 – Environmental Policy

Policy commitment -"protection of the environment"

- Protection of the environment includes prevention of pollution and others (specific to context).

- This can include:

  sustainable resource use, climate change mitigation & adaptation, protection of biodiversity and ecosystems along with restoration, water quality and air quality.

- **ISO14001:2015** vs **ISO50001:2018**

Responsibilities & authorities for key EMS roles

- Assigned and communicated within organisation

- Individual (management representative) or shared

  - No formal requirement for management representative

- Two key roles:

  - Ensuring EMS conforms to requirements of 14001

  - Reporting on performance of EMS & environmental performance to top management.

- Resources to establish, implement, maintain & continually improve EMS.

  - HR, infrastructure, technology, financial and time!

Clause 6 - Planning

Plan to address the issues (4.1/4.2) within the EMS that are needed to:

- Achieve intended outcomes

  - Enhance environmental performance

  - Fulfil compliance obligations

  - Achieve environmental objectives

- Prevent or reduce undesired effects

  - Significant environmental impacts

  - Environmental conditions affecting the organisation

- **ACHIEVE CONTINUAL IMPROVEMENT IN ENVIRONMENTAL PERFORMANCE**

Prioritise issues with potential adverse or beneficial effects

- Significant environmental aspects

- Compliance obligations

- Other issues with adverse/beneficial effect on organisation or environment – think back to 4.1 and 4.2

- Prioritisation based on:

    - Achievement of intended outcome

    - Prevention of adverse effects

    - Achievement of continual improvement

6.1.2 – Environmental Aspects

Environmental aspects of activities, products and services that it can control and/or influence and their associated environmental impacts.

- Take into account - change, new or modified activities, products and services. Planned or new developments.

- Abnormal and reasonably foreseeable emergency situations

- Covers adverse and beneficial impacts (opportunities).

- Communicate internally as appropriate/document method used

- Use a lifecycle perspective – (*control or influence!*)

  Note: Does NOT mean a full lifecycle assessment

6.1.3 – Compliance Obligations

Acceptable term can still be 'Legal and Other Requirements'.

- Determine and have access to relevant compliance obligations (4.2)

- Determine how they apply to organisation and <u>take into account</u> within the EMS.

- Compliance obligation can result in risk – 6.1.1.

However - risk management cannot be applied here

i.e. accepting risk of non-compliance.

6.1.4 – Planning Action

How the organisation will address significant environmental aspects, compliance obligations and other identified risks.

- How actions are integrated into the EMS **and** other business processes.

- How the effectiveness of these actions is to be evaluated

- Consideration of technological options, financial and business requirements.

This section details with how the organisation plans to take action and not the actions themselves.

6.2 – Objectives and Planning to achieve them

This is a policy commitment – improvement of EMS and environmental performance.

- The term 'target' has been removed from the standard.

Objectives must be:

- Consistent with policy commitments
- Measureable (if practicable)
- Monitored
- Communicated/documented
- Updated

Planned actions:

- Who, what, when
- Resources required
- Evaluate results using relevant indicators
- Integrated into business processes.

Competency and not just training!

- Determine necessary competence requirements

- Ensure persons are competent on basis of education, training or experience.

- Where necessary take action to allow staff to acquire competency and evaluate actions taken.

  - Training, Mentoring, Re-assignment of staff or use of additional staff .

- Competency records to be maintained.

7.3 - Awareness

- Persons doing work under the organisation's control – <u>includes contractors</u>, are aware of:

  - Environmental policy and commitments

  - Significant aspects and potential impacts of their work

  - How they can contribute to the effectiveness of the EMS and the benefits of improved environmental performance

  - Implications (risks) of not confirming to EMS requirements including compliance obligations.

Communication both internally and externally

- Establish a process on what, when, with whom and how to communicate.

- Internal Communication

  - Information relevant to EMS
  - Enable input/feedback on improvement process

- External Communication

  - Compliance obligation driven – needs of interested parties
  - Respond to enquiries from relevant interested parties
  - Communication as required by compliance obligations

7.4 - Communication

Internal	External
Importance of effective environmental management and conforming to EMS requirements	Environmental requirements to external providers and users
Responsibilities for EMS roles	Information as required by compliance obligations to interested parties
EMS performance to top management	Environmental policy and scope.
Environmental policy	Responses to relevant incoming communication regarding EMS
Significant environmental aspects & Environmental objectives	

7.5 – Documented Information

- Create and maintain sufficient documented information in a manner sufficient to demonstrate a suitable, adequate and effective EMS.

- Focus on implementation of EMS <u>not a complex document control system</u>

- Documentation required by the standard

- Does not have to be in the form of a manual

- Controlled, available, protected

7.5 – Documented Information

Documents	Records
Scope of the EMS	Competency (education, training, experience)
Environmental Policy	Internal & external communication
Risks & Opportunities	Results of evaluation of compliance
Processes required for 6.1.1 - 6.1.4	Monitoring, measurement & evaluation
Aspects and associated impacts	Audit programme & results
Significant Aspects	Management review
Compliance obligations	Nature of non-conformities & actions taken
Environmental objectives	Results of corrective action
Operational control	
Emergency preparedness & response	
Plus – any documented information deemed necessary including those of external origin	

8.1 – Operational planning & control

Process control to achieve desired results

- Processes to be established to:
    - Meet EMS requirements
    - Implement planned actions from 6.1 and 6.2.

- Includes:

    - Significant environmental aspects

    - Compliance obligations

    - Objectives

    - Other risks/opportunities

- Outsourced process control/influence.

8.1 – Operational planning & control

Ensure that a lifecycle perspective is taken into account

- Organisation shall:

  - Establish controls in design and development to ensure environmental requirements pertinent to lifecycle are addressed

  - Determine environmental requirements for procurement

  - Communicate relevant requirements to external providers *

  - Monitoring and measurement of results

  - Use of documentation as required to ensure effectiveness

  - Consider provision of potential impact information regarding transport, delivery, use, end of life treatment etc.

  * this is how organisation may get customer compliance obligations

8.2 – Emergency preparedness and response

Respond to potential situations identified in 6.1.1

- Prepare to respond with planned prevention/mitigation

- Respond to actual emergency situations

- Mitigation and response to be appropriate

- Post-emergency evaluation and revision as appropriate

- Periodic testing of planned response

- Training/competence of relevant personnel

- Provision of information as relevant

- Maintain documented information

9.1 – Monitoring, Measurement & Evaluation

Organisations must monitor, measure, analyse and evaluate its environmental performance (includes EMS itself)

- What needs to be monitored

- What methods are used to ensure valid results

  - Calibrated or verified equipment

- Criteria to be used along with appropriate indicators

- When monitoring will be performed

- When results analysed and evaluated.

- Communicate results internally & externally as required

- Retain documented information

9.1.2 – Evaluation of Compliance

Concept - Evaluate conformity with compliance obligations.

- Determine frequency

- Evaluate compliance & take actions if needed
  - Variety of methods can be used
  - Audit, documentation review, site tour, routine 'Day to Day' monitoring.
  - Who is suitable?

- Maintain knowledge of its compliance status

- Retain records

- A non-compliance is not necessarily elevated to an NC if identified and corrected within the scope of the EMS.

Applies equally to all mandatory & voluntary compliance obligations

9.2 – Internal Audit

Conduct internal audits to verify conformance to ISO 14001 and to its own EMS requirements

- Establish audit programme and consider
    - Frequency
    - Methods
    - Responsibilities
    - Planning requirements
    - Reporting

- Consider:
    - Environmental importance
    - Changes affecting organisation
    - Results of previous audits

9.3 – Management Review

Concept – Top Management review of EMS and environmental performance to ensure continuing suitability, adequacy & effectiveness.

INPUTS

- Status of actions from previous reviews
- Changing Circumstances/issues:
- Context of organization
    - Compliance obligations
    - Significant aspects
    - Risks & opportunities
- Extent objectives achieved
- Environmental performance information:
- Nonconformities/corrective actions
- Monitoring & measurement results
- Compliance status
- Audit results
- Adequacy of resources
- Communications from interested parties
- Improvement opportunities

OUTPUTS

- Conclusions on EMS suitability, adequacy & effectiveness
- Continual improvement decisions
- Changes to EMS, including resources, if needed
- Actions - if objectives not met
- Integration improvements
- Implications for strategic direction
- Documented results

10.1 & 10.3 Continual Improvement

Concept - Determine opportunities for improvement and implement actions to achieve intended outcomes

- Improve the suitability, adequacy and effectiveness of the environmental management system

- Focus - improving environmental performance
  - Achievement of intended outcomes
  - Reducing adverse environmental impacts
  - Increasing beneficial impacts.

10.2 Nonconformity and Corrective Action

Graded approach
- Appropriate to magnitude of effects or environmental impacts

Documented information
- Nature of nonconformities
- Actions taken
- Results of actions

Requirements
- React to nonconformity
- Take action to control & correct
- Deal with consequences; mitigate adverse impact
- Evaluate need for action to eliminate cause
- Review nonconformity
- Determine cause
- Determine like-fault
- Implement any corrective action
- Review effectiveness
- Make changes to EMS

Is ISO14001:2015 certification the end of the road?

- Or is it the first step in a longer journey?

  - ISO50001:2018 - Energy Management

  - PAS2060 – Demonstration of Carbon Neutrality

PAS 2060
Verification

ISO 14001
Certification

ISO 50001
Certification

WEBINAR:

How PAS 2060, ISO 14001 & ISO 50001 work together in unison.

- What are PAS 2060, ISO 14001 and ISO 50001?

- How can these standards together provide an ultimate carbon, energy and environmental solution and give support to industry and commerce?

- What are the benefits of the combined management systems?

- How can these standards help businesses meet COP26 and government requirements?

- What cost savings can these 3 standards when combined offer businesses?

Friday 22nd April 2022 – 2:30pm.

https://www.nqa.com/en-gb/resources/events/webinar-sustainable-standards-22-04-22

What should your next steps look like?

If you're starting to think about how to achieve your sustainability, net zero and carbon neutrality objectives, book your place on our two day '*Understanding and Achieving Carbon Neutrality*' training course here.

BOOK HERE

THANK YOU

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