Benefits & Strategies of Integrated Management Systems

Jennifer Koenig, CHMM,
EMS/HSMS/QMS Lead Auditor

Changes to the ISO Structure

• Standardizing the “framework” with other standards (easier to integrate)
• Philosophy of “top down” leadership involvement and direction of the system
• Establishing “expected outcomes” and planning to achieve them
• Leadership involvement in making course corrections and identifying areas needing correction
• Alignment of the Management System with overall business strategies
Why Integrate?

- Move to a holistic approach
- Unified messages
- More “eyes on the ball”
- Cost savings
- Shared people resources (i.e., internal auditors, document control clerks, etc)
- BETTER MANAGEMENT OF CHANGE
- BETTER LEADERSHIP DIRECTION & INVOLVEMENT

Strategies for Integration

- Consider all management systems as candidates
- Review the schemes to identify same or similar requirements (some are in slightly different spots of the standard)
- Identify any requirements specific or restrictive in the scheme
- Identification of opportunities to share resources
- Create shared tools to identify risks & controls and have a quality or environmental “flavor”?
- Create a cross-functional team to identify existing integrated components and candidates for additional integration
Management Systems for Integration

- Any ISO Scheme Management System
- ISO 9001:2015 Quality
- ISO 14001:2015 Environmental
- ISO 45001:2018 Health & Safety
- OSHAS 18001:2007 (old version H/S)
- IATF 16949 may be a good candidate but watch for restrictive scheme requirements

Clause 4 – Context of the Organization

- Business Strategy
- External & Internal Issues
- Needs/expectations of interested parties
- Consideration of statutory and regulatory requirements
- Scope of the Management System (note EMS requires definition of a physical boundary)
- Management System and Processes
### Clause 5.1 – Leadership & Commitment

- Top management takes accountability
- Makes sure policy & objectives established
- Integration into business processes
- Allocating resources
- Communicating importance of performing to the QMS and EMS
- Monitoring the performance to ensure plans are achieved
- Providing direction to those managing the day-to-day of the QMS and EMS
- Promoting improvement
- Supporting other relevant management roles to demonstrate their leadership (top down approach)

### 5.1.2 Customer Focus

- This is unique to QMS however meshes with several sections in the EMS (6.1). EPA could be our “customer”
- Ensure that customer requirements are determined, understood and met
- Identify any statutory and regulatory requirements that are required and identify the means to meet them
- Identify risks and opportunities Focus on enhancing customer satisfaction
5.2 Policy

- Many organizations integrate their EMS and QMS policies
- Or – have a high level statement that is more general (i.e., commitment to meeting customer and regulatory obligations and continual improvement) and then a more scheme specific statement for QMS and EMS

5.3 Organizational roles, responsibilities & authorities

- Top management assigns responsibility & authority for:
  – Ensuring the QMS and EMS conforms to the standard
  – Ensuring processes are meeting intended outputs
  – Reporting on the QMS and EMS and OFIs
    – QMS specific: ensuring customer focus
  – Ensuring the integrity of the QMS and EMS through Management of Change
6.1 Actions to address Risks & Opportunities

- EMS has been risk based – now QMS too
- Consideration of internal & external issues (both QMS & EMS) plus needs of interested parties
- Determination of suitable controls
- Plan for new actions to manage risks or opportunities and monitor effectiveness
- Document the processes where necessary to ensure they are carried out
- This is further developed for EMS in 6.1.2 aspects

6.2 Objectives

- Consider objectives that cross schemes
- Often QMS objectives have an environmental or health/safety component or benefit to them:

<table>
<thead>
<tr>
<th>QMS</th>
<th>EMS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reduction of Scrap</td>
<td>Conservation of Raw Materials; reduction of waste</td>
</tr>
<tr>
<td>Improve efficiency (parts/KWH)</td>
<td>Reduction of energy usage</td>
</tr>
<tr>
<td>Improve up-time through predictive &amp; preventive maintenance</td>
<td>Meet PM requirements for programs and permits</td>
</tr>
</tbody>
</table>
6.1 & 6.3 Management of Change

- QMS changes can directly impact EMS (and vice versa)
- What is the purpose and timeline of the change?
- Do we need permission to construct?
- What is the change linked to that could be a risk?
  - Controls could be disconnected
  - Documents could be inaccurate
  - Data may be erroneous
  - Training may be obsolete
- How could this change impact the QMS/EMS?
- Will we need resources to implement this change?
- Do new roles, responsibilities & authorities need to be established?

Management of Change

- Examples of “quality changes” which could negatively impact EMS
  - Purchasing a new baghouse for an air emission unit
  - Turning off an environmental control while troubleshooting a production issue or while trialing a new product
  - Reprogramming a PLC which also captures environmental metrics for permit reporting
Clause 7: Support

• Mostly the same requirements for:
  – Resources
  – Competence
  – Awareness
  – Internal/External Communication
  – Documented Information

• QMS Specific requirements:
  – People, Infrastructure, Environment for Operation of Processes
  – Measurement & Measuring processes (EMS – 9.1)
  – Organizational Knowledge

Clause 8 – the most differences

• This section may not make sense to integrate

• QMS: Operational planning & control, design, customer interactions, traceability and non-conforming outputs

• EMS: Operational planning & control, emergency preparedness & response
9.2 Internal Audit

• Integrate internal audits – QMS, EMS, HSMS
• Holistic view (look at the full picture)
• More efficient – can review 2-3 schemes
• Challenging for the auditor
• Provides more value for the organization

9.3 Management Review

Most of the required inputs are the same (or similar) — blue = QMS; green = EMS

• Status of actions from previous management reviews
• Changes in:
  — External or internal issues relevant to the QMS
  — Needs of interested parties including compliance obligations
  — Significant environmental aspects
  — Risks and opportunities
9.3 Management Review

• **Performance and effectiveness of the QMS including trends on:**
  – [Customer satisfaction](#) & feedback from relevant interested parties
  – Extent to which objectives have been met
  – Process performance and conformity of products/services
  – [Fulfillment of compliance obligations](#)
  – Non-conformities and corrective actions
  – Monitoring and measurement results (KPIs)
  – Audit results
  – Performance of external providers

9.3 Management Review

More inputs:

• Adequacy of resources

• Effectiveness of actions to address risks and opportunities

• Communication from interested parties including complaints

• Opportunities for improvement
9.3 Management Review

• Outputs must include:
  – Conclusions on how the QMS & EMS is performing
    • Is it suitable, adequate and effective?
    • What needs to be changed to become effective?
  – Decisions on continual improvement opportunities
  – Actions when objectives are not being achieved
  – Decisions related to resources needed
  – Opportunities for integration with other business processes
  – Implications for the strategic direction
• Management Review must be documented

10.1-.2 Nonconformity & Corrective Action

- Corrective action expectations are the same for QMS & EMS
- Requirement to take action, identify the issue, control & correct it, deal with consequences
- Ties back to reviewing of risks (significant aspects for EMS; risks & opportunities for QMS)
- Requires root cause, determining where the issue could also occur, resolving & verifying effectiveness
10.3 Continual Improvement

• Continual Improvement initiatives are a great way to introduce more integration
• Consider CI projects to strategically align the QMS and EMS

At least...

• Leadership: alignment of the management system to the business strategy
• Objectives & targets – consider double bang for the buck:
  – Reduction of scrap or off-quality
  – Resource conservation
  – Reduction of unscheduled downtime (i.e., upsets = more EHS risks and QMS risks)
• If you do nothing – integrate Management of Change!
• Let’s start rowing the boat together!
Q & A