White Paper

Understanding ISO 55001: The 7 Requirements of an Asset Management System

Operations

The asset management system is now ready to be put into operation. It is during this phase that the plans are implemented, and value realized from the system. During the operation of the asset management system, changes may occur to funding, risk profiles, objectives and resources, and these changes need to be documented, communicated, and addressed by Top Management. This is all part of the operation of the asset management system. These requirements can be found in ISO 55001:2014 Clause 8.

Performance Evaluation

Using the objectives set forth by the SAMP, performance of the assets included in the scope of the asset management system and the asset management system itself must be routinely evaluated. If the objectives are not being met, the reasons why need to be understood and action must be taken to improve performance. Without evaluating performance, the asset management system will not likely meet the documented organizational objectives and is not an effective system for asset management. The information gathered during the performance evaluation phase should be fed back to Top Management for use during formal management reviews. These requirements can be found in ISO 55001:2014 Clause 9.

Improvement

The information gathered in the performance evaluation phrase should be used to drive improvements. Your organization needs to ensure that the asset management system is being followed, therefore, it should be conducting regular assessments or audits. Any non-conformities shall be documented, and corrective, or preventive actions put in place to prevent reoccurrence. This includes failures that are impacting asset performance. If there is an incident (failures, emergencies, etc.), there is an opportunity to improve the asset management system. Take these incidents as a learning experience and improve the risk profiles and asset management plans. These requirements can be found in ISO 55001:2014 Clause 10.

Using these 7 requirements will ensure that the asset management system is developed and implemented as an effective an auditable standard for asset management.

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Abstract

When looking through the ISO 55001 standard, one may quickly become overwhelmed with the requirements. The ISO 55001 standard was written in a way that groups the requirements, making it easier to understand and implement the standard. Understanding the core requirements of ISO 55001 within the context of your existing Reliability and Maintainability processes and practices will ensure an effective and auditable asset management system.

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Context of the Organization

Since asset management is an organizational system, it is imperative that the organization considers the different factors that affect them. This includes the external context such as social, cultural, economic and political or regulatory environments. The internal context includes the organizational culture, physical environment, and stakeholder objectives. Understanding the organization's stakeholder risks is critical to achieve a balance between costs, performance risk, and decision-making. The requirements for the Context of the Organization can be found in ISO 55001:2014 Clause 4.

Leadership

An asset management system must be led from the top of your organization. Without leadership the asset management system will not be sustained, nor will it provide the benefits to the organization and its stakeholders. Top Management is required to develop the asset management objectives, as a subset of the organizational objectives, and cascade these down to both internal and external stakeholders. Leaders at all levels must continue to not only communicate the asset management system but live it each day. They accomplish this by resourcing the organization to achieve the objectives, define roles and responsibilities, and eliminate any barriers or conflicts that may arise. The requirements on Leadership can be found in ISO 55001:2014 Clause 5.

Planning

The direction and objectives of the organization are developed during the strategic planning activities and documented in the organization's business plans. These business plans are used to develop the Strategic Asset Management Plan (SAMP). The SAMP is used to guide the development of asset management objectives, along with how to achieve the objectives through the specific departmental Asset Management Plans. Lastly, all objectives in the Asset Management Plan should be fully aligned with the organization, as documented through roles, responsibilities and performance expectations. These requirements can be found in ISO 55001:2014 Clause 6.

Support

Implementing the Asset Management Plans requires the right level of support. Support generally refers to resources (people, information, systems, etc.). Each Asset Management Plan should explicitly spell out the resources required to execute the plan. This is where cross-functional work groups really come into the asset management system. HR and IT are critical in their support of asset management requirements. Whether it is ensuring the organization has the right capabilities and competencies, or the databases used to house asset information, maintenance histories, and records of non-conformances. These requirements can be found in ISO 55001:2014 Clause 7.

APPLIED SKILLS

- GRAPHICAL ANALYSIS.
- PROJECT CHARTERS.
- BUSINESS CASE DEVELOPMENT.
- ROOT CAUSE ANALYSIS.
- FAILURE MODE & EFFECTS ANALYSIS.
- PROCESS MAPPING.
- WORK PLANNING & SCHEDULING.
- BACKLOG MANAGEMENT.
- STANDARD WORK INSTRUCTIONS.
- PM EVALUATION & OPTIMIZATION.
- RELIABILITY MODELING.

DELIVERING RESULTS

Eliminate "Bad Actors", Optimize Labor Utilization, Increase Reliability, and Reduce Costs.

WEB SOLUTIONS

300 online, on-demand learning modules, mapped to your role and responsibilities. Delivering the training you need, when you need it.

CORPOPRATE SOLUTIONS

The iBL® program, and University of Tennessee Reliability & Maintainability Implementation Certification® is designed to develop subject matter experts in the fields of:
– Reliability Engineering,
– Maintenance Management,
– Maintenance Planning, and
– MRO Inventory Management.