Arabian Institute For Training

Infrastructure Asset Management

INTRODUCTION

- The management of physical public infrastructure (such as railways, roads, waterways, bridges and tunnels, distribution networks of gas, water and electricity, wastewater treatment plants, ports, airports, etc.) has become significantly critical in the last decade. Due to an increasing demand for infrastructure, deterioration of ageing assets, scarce resources, need for operational efficiency, budget and funding limitations, increasing restrictions on output and climate change, there is an urgent need to manage our physical assets better, pro-active and with a life cycle view.
- Asset Management has been increasingly recognized as a fundamental approach to improved investment decision making across the public infrastructure sector. Regulators require to develop and present a strategy with regard to Asset Management aligned with the corporate strategy. The implementation of 'good Asset Management practice' will contribute to realizing the corporate strategy and it becomes more and more important to prove this by showing results.

This training course will highlight:

- The basic principles of Asset Management
- ISO55000 series, the international standard on Asset Management
- An overview of 'good Asset Management practice', specifically focused on infrastructure assets
- How to realize higher performance at lower cost within compliance
- Implementing Asset Management by using a step-by-step approach to build the Asset Management System (the five core questions approach)
- The training course illustrates the state-of-art implementation of Asset Management reflecting ISO 55001 and international 'good Asset Management practice' from leading companies. It provides an opportunity for public infrastructure management professionals to gain in-depth Asset Management knowledge while keeping up optimal performance over the asset's life cycle.

OBJECTIVES

At the end of this training course, you will learn to:

- Explain what Asset Management is, why it is important and what deliverables the organization gets from it
- Understand the content and value of ISO 55000, the international standard on Asset Management, and how to use it
- Understand 'good Asset Management practice', starting with foundations and building up to best practices that will deliver maximum business benefits
- Apply the key steps to implement and improve Asset Management within a public infrastructure environment
- How to move their organization towards a sustainable future

TRAINING METHODOLOGY

- The training course will be conducted along workshop principles with formal lectures, case studies, group discussion and interactive practical exercises. There will be many opportunities for discussion and sharing experiences.

ORGANISATIONAL IMPACT

- Understand how Asset Management can contribute to realization of the corporate strategy
- Understand the background, application and benefits of ISO 55000 series
- Understand the most important key performance areas and related activities and methodologies of Asset Management, more specifically for the public infrastructure sector
- Be able to implement the basic Asset Management methodologies and technologies
- Understand how to assess the current status of the Asset Management processes

PERSONAL IMPACT

By attending the participants will:

- Gain understanding and practical insight of 'good Asset Management practice'
- Improve their level of personal knowledge
- Work more effectively by focusing on the processes and activities that really contribute to the corporate goals of the organization
- Add value for themselves
- Be able to plan and develop a future career

WHO SHOULD ATTEND?

This training course is suitable to a wide range of professionals:

- All professionals involved in managing or participating in Asset Management and Public Infrastructure Management processes, incl. all staff in the Asset Management & Maintenance department, Utilities Management, Building Maintenance, IT, Operations and Finance
- Anyone who wishes to update themselves on Asset Management and how to implement it for the benefit of the organization

Course Outline

Principles of Asset Management

- What is Asset Management?
- Why is it important for the public infrastructure management sector?
- Basic principles of Asset Management
- Reference models
- ISO 55000 series
- Asset Management roles : Asset Owner, Asset Manager, Service Provider
- Building the Asset Management System for public infrastructure assets (5 steps)

Alignment with the Organizational Strategy

- Stakeholder needs and demand analysis
- Required service levels: current and future
- The concept of the Line of Sight
- Asset Management Policy
- Strategic Asset Management Plan (SAMP) and underlying Asset Management Plans (AMP)

The Current State of our Asset Portfolio and Asset Management System

- Where are my assets? – Asset register
- Identify condition and useful life
- Valuation of our asset portfolio
- End-of-life framework & strategies for our asset portfolio
- Current state of our Asset Management System – Gap analysis
- Developing a roadmap and integration with the SAMP and AMP

Developing Risk Based Maintenance Strategies

- Failure behavior of assets
- Risk: Not every failure is important
- A Risk-based maintenance approach towards maintenance
- FMECA and maintenance reference plans
- Connecting the workflow
- Optimization of the maintenance strategy – The role of the Maintenance Engineer

Decision-Making and Building your Asset Management Team

- Decision-Making
- Preparing for informed decision-making in the Asset Management Triangle
- Developing scenarios and decision criteria, the business case
- Integration with Planning & Control Cycle: Long-term investment plan & long-term maintenance plan
- Funding
- Building Asset Management Teams
- What roles and functions do you need? Who does what?
- Organization & meeting structure
- Required competencies – the Asset Management Competencies Framework
- Asset Management Teams and implementation strategy

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