



# 12.1 SUSTAINABLE FACILITY MANAGEMENT

12.1.1 SUSTAINABLE FACILITY MANAGEMENT

12.1.2 CONSULTANCY OF ASSET MANAGEMENT  
BASED ON ISO 41001

12.1.3 CONSULTANCY OF ASSET MANAGEMENT  
BASED ON ISO 55001



BUILDING ON FAMILY LEGACY OF  
EXCELLENCE | MUTUAL RESPECT | ETHICS | SAFETY | SUSTAINABILITY | FAIR RETURN



## 12.1.1 SUSTAINABLE FACILITY MANAGEMENT

### WHAT IS FACILITY MANAGEMENT ?

#### EN 15221-1 2006

The integration of processes within an organisation to maintain and develop the agreed services which support and improve the effectiveness of its primary activities.

#### INTERNATIONAL FACILITY MANAGEMENT ASSOCIATION (IFMA)

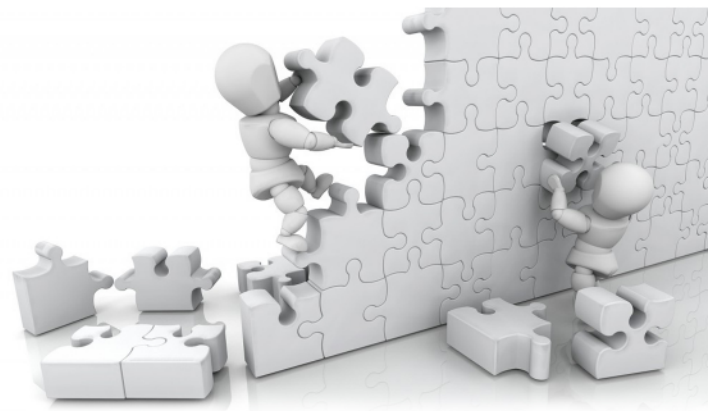
Facility management is a profession that encompasses multiple disciplines to ensure functionality of the built environment by integrating people, place, process and technology.

### FACILITY MANAGEMENT SCOPE

- 1) Maintenance Of Civil , M & E Works
- 2) Landscaping And Ground Maintenance
- 3) Rubbish Collection & Disposal
- 4) Cleaning & Cleansing Services
- 5) Pest Control
- 6) Safety & Security
- 7) Project Management  
(Renovation, Upgrading, Extension)
- 8) It (Information & Communication Technology)
- 9) Catering & Vending
- 10) Event Management
- 11) Logistics & Fleet Management
- 12) Parking
- 13) Design & Construction Services
- 14) Energy Management
- 15) Sustainability

### CORE COMPETENCIES OF FM PROFESSION

1. Communication
2. Emergency Preparedness and Business Continuity
3. Environmental Stewardship and Sustainability
4. Finance and Business
5. Human Factors
6. Leadership and Strategy
7. Operations and Maintenance
8. Project Management
9. Quality
10. Real Estate and Property Management
11. Technology







### WHAT IS MAINTENANCE MANAGEMENT ?

Maintenance management is an orderly and systematic approach to planning, organizing, monitoring and evaluating maintenance activities and their costs. A good maintenance management system coupled with knowledgeable and capable maintenance technical staff can prevent health and safety problems and environmental damage; yield longer asset life with fewer breakdowns; and result in lower operating costs and a higher quality of equipment reliability. Maintenance activity carried out on an asset in order to ensure that the asset continues to perform its intended functions, or to repair the equipment.

### MAINTENANCE STRATEGIES

A maintenance strategy or option means a scheme for maintenance, i.e. an elaborate and systematic plan of maintenance action. Following are the maintenance strategies that are commonly applied in JTR Operation and Maintenance :

- Plan Preventive Maintenance or Scheduled Maintenance
- Predictive or Condition Based Maintenance
- Breakdown Maintenance or Operate to Failure or Unplanned Maintenance

### TYPES OF MAINTENANCE

In general, maintenance can be classified into the following categories :

- a) **Routine** - ongoing maintenance activities such as servicing HVAC equipments, cleaning, waste collection, landscaping and ground works which are required because of continuing use of the facilities
- b) **Preventive** - periodic inspection, lubrication and adjustment of mechanical or other equipment to ensure continuing working condition
- c) **Condition Appraisal** - major/minor projects such as equipment upgrading or replacement, redesign, or complete reporting which are performed once every few years
- d) **Emergency** - unexpected breakdowns of assets or equipment. These are unpredictable or reactive type of maintenance and are more difficult to schedule than the above three categories

### ELEMENTS OF EFFECTIVE MAINTENANCE MANAGEMENT

- |                                    |                                           |
|------------------------------------|-------------------------------------------|
| 1. Maintenance Policy              | 6. Job planning/schedule                  |
| 2. Control of spareparts/materials | 7. Priority and backlog control           |
| 3. Preventive Maintenance          | 8. Data recording system (CMMS)           |
| 4. Condition Monitoring            | 9. Performance measurement measures (KPI) |
| 5. Work Order                      |                                           |



## 12.1.2 CONSULTANCY OF FACILITIES MANAGEMENT BASED ON ISO 41001

# CONSULTANCY

## FACILITIES MANAGEMENT SYSTEM CONSULTATION (ISO 41001)

- ★ Gap Analysis
- ★ Alignment Report
- ★ Mentoring Session
- ★ Training & Education
- ★ Brainstorming Session
- ★ Certification Body Audit Support

### ISO 41001:2018 Facility Management (FM)

### About ISO 41001 Facility Management (FM)

ISO 41001 establishes a benchmark for developing effective, strategic and operational facility management (FM) systems and practices. The standard applies to both FM within an organisation and external providers of FM services. Thus, the certification assists organisations seeking to outsource FM services. FM service providers that conform with ISO 41001 assures organisations that their approach and processes are verified and recognised



### Benefits of ISO 41001 Facility Management (FM)

Improve workforce productivity, safety and health.  
Improve communication of requirements and methodologies between public and private sector organisations. Improve efficiency and effectiveness.  
Reduce cost by optimising the system. Improve consistency of service.







## 12.1.2 CONSULTANCY OF FACILITIES MANAGEMENT BASED ON ISO 41001

# CONSULTANCY



The publication of the facilities management family of standard began in 2017. The series now comprises

- ISO 41001:2018 Facility Management. Management System. Requirements with Guidance for use
- ISO 41011:2017 Facility Management. Vocabulary
- ISO 41012:2017 Facility Management Guidance on Strategic Sourcing and the Development of Agreements
- ISO/TR 41013:2017 Facility Management, Scope, Key Concept and Benefits.
- ISO 41014:2020 Facility Management Development of a Facility Management Strategy
- ISO/CD 41015 Facility Management Influencing Organizational Behaviours for Improved Facility Outcomes (under development)
- ISO 41018:2022 Facility Management-Development of a Facility Management Policy

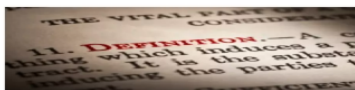
ISO 41001:2018 replaced the earlier European Standard (BS EN 15221).



### ...What actually is...“Facility management“...

#### Facility Management definitions

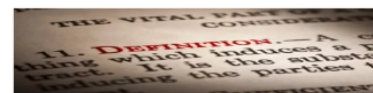
- „Facilities Management is an enabler of sustainable enterprise performance through the whole life management of productive workplaces and effective business support services.“  
(South African Facilities Management Association)
- „integration of processes within an organisation to maintain and develop the agreed services which support and improve the effectiveness of its primary activities.“  
(EN 15221-1)
- „Facilities Management is a process by which an organisation delivers and sustains agreed support levels within a quality environment to provide full values in use to meet strategic objectives.“  
(Strathclyde Centre for Facilities Management)
- „Facilities Management (FM) involves the total management of all services that support the core business of an organisation. It deals with those areas that the managers of the organisation consider to support their fundamental activities. FM focuses on the interaction between the core business, the support functions, and the facilities throughout all sections of industry, commerce, and services.“  
(RICS Royal Institution of Chartered Surveyors)



### ...What actually is...“Facility management“...

#### Facility Management definitions

- „Facility management is the practice of coordinating the physical workplace with the people and the work of the organization. It integrates the principles of business administration, architecture, and the behavioral and engineering sciences.“  
(IFMA 1983)
- „Facility management is a profession that encompasses multiple disciplines to ensure functionality of the built environment by integrating people, place, process and technology.“  
(IFMA 1983)
- „Facilities management involves the management, operation and maintenance of buildings, precincts and community infrastructure.“  
(IFMA Australia)
- „Facilities management involves the management, operation and maintenance of buildings, precincts and community infrastructure.“  
(BIFM British Institute of Facilities Management)





### 12.1.3 CONSULTANCY OF ASSET MANAGEMENT BASED ON ISO 55001

## CONSULTANCY

### ASSET MANAGEMENT SYSTEM CONSULTATION ( ISO 55001 )

- ★ Gap Analysis
- ★ Alignment Report
- ★ Mentoring Session
- ★ Training & Education
- ★ Brainstorming Session
- ★ Certification Body Audit Support



### About ISO 55001 Asset Management

The ISO 55001 Asset Management is an international standard for establishing, implementing, maintaining and improving an organisation's asset management system. This management system standard aims to help organisations where the management of physical assets is central to their business. Not only that, it is equally applicable to operations managing intangible assets.

Businesses should adopt the standard to improve performance, results and optimises asset control. Consistent asset management demonstrates the company's good judgement and satisfies the needs and expectations of internal and external parties. The standard applies to organisations of any size or sector.

### Benefits of ISO 55001 Asset Management

- Improve organisational efficiency and effectiveness in managing risks associated with ownership of assets.
- Save cost through optimisation of asset life.
- Improve health, safety, and environmental performance.
- Improve health and safety in the industrial sector.
- Demonstrates systematic supply chain security management.
- Develop business cooperation along the supply chain.
- Demonstrate a benchmark of good practice in asset management across industrial sectors.







## 12.1.3 CONSULTANCY OF ASSET MANAGEMENT BASED ON ISO 55001

### WHAT ARE WE OFFERING

- Organize, consult and operate your asset and facilities management more efficiently
- Developing an appropriate balance between the costs, the risks and the required performance of the physical assets.
- Provides an integrated approach to asset management development through education & training; requirements gap analysis, mentoring, experience and real knowledge transfer.

### OUR SCOPE

- Asset Management Consultation
- Gap Analysis & Brainstorming
- Mentoring & Training
- Reliability Centered Maintenance
- Full report on asset condition appraisal

### WHAT IS ASSET MANAGEMENT ?

#### AS/ISO 55000

An asset is an item, thing or entity that has potential or actual value to an organisation.

#### ASSET MANAGEMENT COUNCIL (AMC)

The life cycle management of physical assets to achieve the stated outputs of the enterprise

### ISO 55000 CONSISTS OF :

#### ISO 55000

An overview of the principles, concepts and terminology relating to asset management.

#### ISO 55001

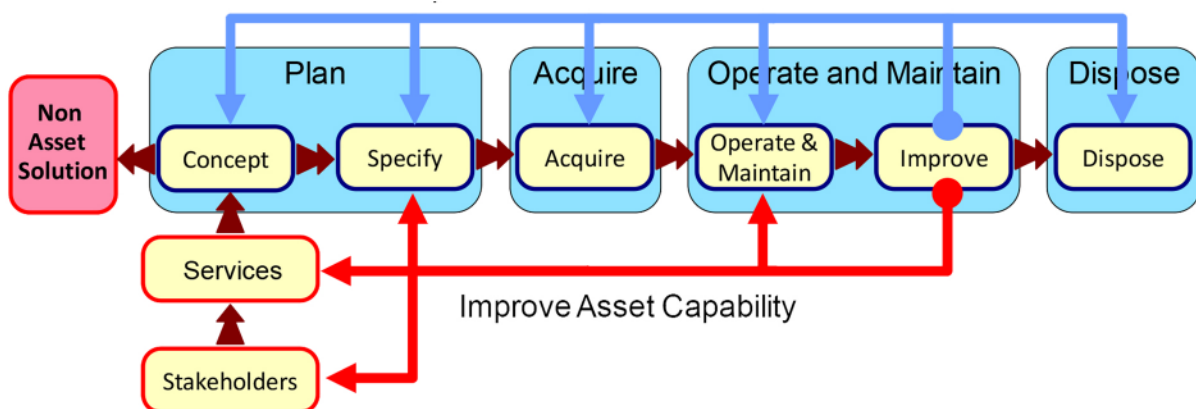
Specifies the requirements for establishing, implementing, maintaining and improving an asset management system.

#### ISO 55002

Provides guidance, explanatory on the application of ISO 55001.

### OUR REFERENCES

- ISO 55001: 2014 - Asset Management Systems- Requirements
- ISO 31000 : 2009 - Risk Management - Principles and Guidelines
- Asset Management Council (AMC)
- The Institute of Asset Management (IAM)
- International Facility Management Association (IFMA)
- British Institute of Facilities Management (BIFM)



### ASSET/FACILITY LIFE CYCLE PROCESS



## 12.1.3 CONSULTANCY OF ASSET MANAGEMENT BASED ON ISO 55001

### ASSET, FACILITY & MAINTENANCE MANAGEMENT LEVEL



### ASSET MANAGEMENT CONCEPT MODEL



The classification of the Total Asset Management approach and the choices that facilities owner has in implementing their Asset Management strategy in line with their organisation Vision and

Four principles - Plan, Do, Check, Act (PDCA) process.

### CAPABILITY DELIVERY MODEL

