

EXPRO National Manual of Assets and Facilities Management Volume 7, Chapter 1

Work Control Introduction Guideline

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1.0 PURPOSE

The purpose of Volume 7 of the National Manual of Assets and Facilities Management (NMA&FM) is to assist in the standardization of the Work Control function applied to Assets & Facilities management across all Government Entities.

The Volume provides guidance based upon best practice and latest standards applicable to the Work Control of Facilities Management operations.

The intention is to provide a comprehensive reference for all levels of the Entity to use when developing their own documents and internal processes, and when engaging with and managing external parties for the delivery of both hard and soft services.

2.0 SCOPE

Volume 7 defines the minimum requirements and operational practices to be met in the planning, delivery, and management of the topics covered.

The Entity Client should use Volume 7 Work Control as the basis for developing the Entity's own Work Control function or when specifying their requirement to a service provider. An Entity may choose to adapt these requirements further to take into account any technically or operationally unique environments, while maintaining the purpose and intent of the NMA&FM.

Volume 7 features two Chapters in order as follows:

Chapter 1: IntroductionChapter 2: Work Control

The Volume may be updated periodically to reflect changes that are likely to occur. Where possible references have been provided within the Volume, to direct users to the specific requirements of any decree, standard, or regulation, where only a summary is provided. While the Volume offers guidance in applying standards; all standards referenced herein should be consulted directly to ensure that guidance remains relevant, even if the standard has been updated.



3.0 DEFINITIONS

Term	Definition			
Facility	Building(s) situated within a single campus on which the Entity services, processes, and procedures are applied.			
Procedure	A series of steps in a logical order that advises on the sequence of activities to be carried out to achieve a declared conclusion.			
Acronyms				
AMS	Asset Management System			
CMMS	Computerized Maintenance Management System			
HSSE	Health, Safety, Security, and Environment			
KPI	Key Performance Indicator			
NMA&FM	National Manual of Assets & Facilities Management			
WMC	Work Management Center			

4.0 REFERENCES

The chapters within the Work Control Volume have been prepared using the latest standards, legislation and best practice at the time of production.

References are provided herein for further reading. As far as is reasonably practicable, standards and legislation referenced herein should be followed as a minimum. Referenced standards and legislation may become superseded as per the latest Royal Decree, regulatory changes, revised standards, innovative practices, new technologies, etc. Therefore, Expro should be consulted to ensure that the most up-to-date and accurate information is used.

Many of the references used in the compilation of the various documents in this Volume represent best practice applied to the Asset and Facilities Management industry within the built environment. This does not discount the relevance of other references not quoted here, that may offer equally applicable and high-quality advice.

5.0 RESPONSIBILITIES

Role	Description		
Entity Client	A Saudi Government organization that is responsible for the management of government-funded facilities management.		
Maintenance Contractor Contracts Manager	The maintenance contractor representative with overall or key responsibility for contract compliant maintenance service delivery under Work Control.		
Technician	Has key responsibility for the performance of maintenance work contained in work orders managed by the procedures in this volume of documents on work control.		
Work Management Center (WMC) Supervisor	Responsible for the management of the Work Management Center.		
WMC Team	Consists of Help Desk, Scheduling, and Planning staff. The WMC Supervisor, and possibly some staff, may have authorization permissions when escalated decision-making is required. WMC is also likely to be responsible for populating the Asset Management System (AMS) in a timely and accurate manner.		



6.0 PROCESS

The Volume contains two chapters. Chapter 1 (this Chapter) is the Introduction to the Volume, while Chapter 2 is summarized within this section.

The statements made in this Introduction are intended to reflect a summary of the documents within Volume 7, Work Control.

Work Control is an office-based activity that includes:

- Planning and scheduling of maintenance.
- Directing the technical workforce.
- Managing & Communicating the operational, technical, performance, compliance and financial aspects of immediate, short, medium and long-term priority requirements.

Work Control is therefore a fundamental precept for the management and continuous development of effective facilities services. This Chapter describes the processes and procedures associated with the delivery of the core and supporting Work Control activities.

6.1 Work Control Chapter 2

The guidance given throughout Volume 7, Work Control is applicable to all types of hard services maintenance, contracts, and operating models, including multisite contracts, outsourced delivery models, and specialist environments. These principles can also be applied to the soft services environment.

The key stages in Work Control are divided into several documents and are summarized in this Chapter as follows:

Index	Title	Document Type	Document No.
7.2.1	7.2.1 Requesting, Prioritizing, Scheduling and Planning Work		EOM-ZW0-PR-000001
7.2.5	Developing Maintenance Procedures	Procedure	EOM-ZW0-PR-000005
7.2.5.1	Maintenance Procedure Template	Template	EOM-ZW0-TP-000002
7.2.6	Maintenance Procedure Writers Guide	Guideline	EOM-ZW0-GL-000002
7.2.7	Estimating Work	Procedure	EOM-ZW0-PR-000006
7.2.8	Equipment Troubleshooting Guide	Guideline	EOM-ZW0-GL-000003
7.2.9	Performing Work	Procedure	EOM-ZW0-PR-000007
7.2.10	Documenting Performance of Work	Procedure	Within EOM-ZW0-PR- 000007
7.2.11	Work Closeout	Procedure	EOM-ZW0-PR-000009

6.1.1 Requesting, Prioritizing, Scheduling and Planning Work Procedure

The complexity of the core activities comprising Work Control can be briefly described by the route that a Work Request follows to become an unplanned Work Order. The Work Order is assigned a priority, planned, and then scheduled to be carried out in conjunction with scheduled planned work. It is subsequently delivered by the available resources against specified timescales.

The purpose of the Procedure is to guide the reader through the core activity of Work Control and allow them to draw connections to activities in other related procedures.

The document provides specific high-level flowcharts within the main text as well as more detailed flowcharts that are accompanied by step-by-step narratives in the Attachments section.

6.1.2 Developing Maintenance Procedures



Maintenance Procedures are critical to the success of the maintenance contract, but are subject to various influences that potentially impede and redirect the maintenance work, thereby compromising quality and effectiveness.

The purpose of the Developing Maintenance Procedures is to provide advice and methodology to determine the effectiveness of the Maintenance Procedure and identify areas that may require correction, adjustment, or improvement to ensure compliance and consistency.

The Procedure provides advice on when development is beneficial and necessary, what areas of the maintenance operation are likely exposed to weakness, how to approach and manage the development activity, and how to deliver the changes effectively.

6.1.3 <u>Maintenance Procedure Template</u>

Maintenance organizations will have a Maintenance Procedure template for managing the information to and from the stakeholders, primarily the Work Management Center, the caller, and the Technician.

The Maintenance Procedure Template is designed to manage information essential for the delivery of planned and unplanned maintenance, including details pertaining to location, task, schedule requirements, urgency, and fault.

A Maintenance Procedure Checklist is included in the Attachments section of the document. This checklist should be referred to when assessing the design of the Maintenance Procedure Template. It states the key minimum information that should be available, to whom, and in what situation. For electronic based templates, this minimum level of information should be used for setting the conditional fields in the CMMS.

6.1.4 Maintenance Procedure Writers Guide

A well-designed Maintenance Procedure is a key tool in moving a maintenance operation towards a predictable, reliable and resilient model, strengthening the connection with Operations and Asset Management and leading to greater profitability and contract compliance.

The Maintenance Procedure Writers Guide advises the Writer on how to create a documentary instruction and information management tool that is primarily used by maintenance Technicians and meets the needs of the entire maintenance operation, from Asset Management and Financial Management to continuous improvement and effective workflow. Following the Guide will help ensure that Maintenance Procedures:

- Are fit-for-purpose and designed in compliance with best practice.
- Are consistent across a maintenance organization and applicable to various engineering disciplines and asset types.
- Are effective at communicating information, data, and statuses.
- · Address deviations from expected work activity.

6.1.5 Estimating Work Procedure

The purpose of this Procedure is to provide guidance to the Entity Client and any appointed Contractors in the adoption of a best practice working process for 'Estimating Work'.

Estimating work is beneficial to the Client when the Maintenance Contractor is required to charge the Client for work performed outside of any 'fixed fee' contract. It is also beneficial to the Entity Client for related activities such as budgeting for small works, major repairs, or replacement work.



6.1.6 Equipment Troubleshooting Guide

Equipment Troubleshooting Guides are essential within facilities where high operational resilience is required, or in building and/or facilities where complex building service systems are installed.

The purpose of the Guide is to provide assist the Entity Client and their Maintenance Contractor in providing quicker resolutions to problems through more precise and effective fault-finding investigations. This guidance is provided from an engineered systems level.

The Guide provides advice and requirements for two main equipment troubleshooting situations:

- Resolving complex faults by means of effective fault locating.
- How to first respond to simple faults.

The Guide further identifies the types and sources of information required, and the intelligent follow-through needed to achieve comprehensive, yet concise 'reader-orientated' documents.

6.1.7 Performing Work Procedure

The purpose of the Procedure is to provide guidance to the Entity Client and their Contractor in the development of a best practice working process for 'Performing Work'.

It is intended to guide any Contractor and their staff on how to conduct their work in a professional and efficient manner, while also being able to manage their response to any changes in circumstances, in a consistent and resilient way.

This Performing Work Procedure defines the activities and decision-making steps required for work execution, from post-scheduling to Work Closeout, with activities involving technical and non-technical people at both the Work Management Center (WMC), as well as off and on-site.

6.1.8 Documenting Performance of Work Procedure

Documenting Performance of Work is a key activity if opportunities for continuous improvement are to be identified and quantified. This section of the Performing Work Procedure focuses on how an AMS/CMMS can assist the Entity Client and Maintenance Contractor in ascertaining where costs can be reduced while maintaining or increasing productivity, customer satisfaction, and contract compliance.

Documenting Performance of Work involves the understanding that time is possibly the most important resource for efficiency gains. This section also provides examples of working practices and record reporting that suggest inefficiencies or accuracies in tracking and documenting of performance of work.

6.1.9 Work Closeout Procedure

Effective adoption of a good Work Closeout Procedure ensures access to contractual and technical trends that can be used to develop budgets, form Key Performance Indicators (KPIs), and conduct reliability risk management and quality assurance.

The purpose of this procedure is to provide guidance to the Entity Client and any appointed Contractor in the development of a best practice 'Work Closeout' process. A Work Closeout Procedure that is designed to uphold best practice will help ensure the development of a high-quality and contract-compliant Maintenance History.

This document provides a best practice example of a Closeout Procedure and the key roles of the Work Management Center in ensuring that high quality is maintained.



6.2 Methodology

Each Volume of the National Manual of Assets & Facilities Management has been created by a team of World-Class experts in their field, using latest Standards and best practice knowledge based on decades of experience.

To ensure that the Entity is compliant with Royal Decrees, Local Standards, and Regulations and to support the Entity's decision-making process associated with the operation and maintenance of facilities, four tiers of linguistic classification have been used within the NMA&FM as follows:



Shall. This is a mandated instruction which must be followed or adhered to (e.g., a Royal Decree, in country standards such as the Saudi Building Code).



Should. This is an instruction or piece of information which is important and, while it may not be mandated to follow the advice, it is advisable to follow (e.g., international standards which are considered legislation in other countries).



Consider. This refers to advice or an instruction which is considered to be important, is worth following, and fits well for the purpose intended.



Advise. This generally refers to good practice and entails practical advice intended to raise standards and enhance quality.

