



**DEPARTMENT OF BUILDING SURVEYING
FACULTY OF ARCHITECTURE, PLANNING AND SURVEYING
UNIVERSITI TEKNOLOGI MARA**

MAINTENANCE MANAGEMENT OF CONVENTION CENTRES

**This academic project is submitted in partial fulfillment of the requirement
for the Bachelor of Building Surveying (Hons.)**

**NORASHIKIN BINTI AKHIAR @ KHAIRUDDIN
(2008406276)**

APRIL 2010

ABSTRACT

Convention centre is one of the buildings and facility that should well function and need to be organized a proper maintenance management through their planning, organization, manual, budget, standard and strategy. Maintenance management is important to be taken into consideration in order to protect the asset which consists of building, equipment and support facilities from defects and damages. It has lot of advantages in maintaining the particular asset such as convention centre. The organization of convention centre should protect the value of the building, equipment and a facility with a good maintenance management as it is the key sources of investment beside the return on the profit that definitely will be obtained if the convention centre can function well without any serious defect occurred. To retain the function is another benefit besides the good appearance of the convention centre itself. Problem will occur if the maintenance aspect is neglected as the main reason of doing maintenance is the safety. If the building and equipment is defected, broken and damages, it will probably dangerous and being uncomfortable to occupants and visitors. After all, convention centre should be in a safe condition and comfortable place as well. In looking to the importance of the maintenance for the convention centre, a research will be conducted on the Maintenance Management of Convention Centres.

TABLE OF CONTENTS

<u>CONTENTS</u>		<u>PAGE</u>
CHAPTER 1: INTRODUCTION		
1.1	INTRODUCTION	1
1.2	ISSUE STATEMENT	3
1.3	AIM OF RESEARCH	4
1.4	OBJECTIVES	5
1.5	SCOPE	5
1.6	LIMITATION	6
1.7	SUMMARY OF THE CHAPTER	7
1.8	SUMMARY	9
CHAPTER 2 : LITERATURE REVIEW		
2.1	INTRODUCTION	10
2.2	MAINTENANCE MANAGEMENT	11
2.2.1	Definition of Maintenance Management	11
2.2.2	Maintenance Objectives	13
2.2.3	Factor of Good and Effective Maintenance Management	15
2.2.4	The Maintenance Organization Structure and General Responsibilities of Maintenance Management	15
2.2.5	Maintenance Policies and Standard	22
2.2.6	Maintenance Management Planning and Scheduling	26
2.2.7	Maintenance Management for Budgeting and Scheduling	29
2.2.8	Maintenance Principles	31
2.2.9	Types of Maintenance	34
2.2.10	Types of Maintenance Management System	43
2.2.11	Building Maintenance Manual	47

<u>CONTENTS</u>		<u>PAGE</u>
2.3	CONVENTION CENTRE	57
2.3.1	Definition of Convention Centre	57
2.3.2	Maintenance Management Categories in Convention Centre	59
2.3.3	Building Facilities	62
2.3.4	The Importance of Good Facility Program	66
2.4	SUMMARY	67
CHAPTER 3 : RESEARCH METHODOLOGY		
3.1	INTRODUCTION	68
3.2	DATA COLLECTION	70
3.3	DATA ANALYSIS	72
3.4	RESULT	73
3.5	TABLE OF RESEARCH METHODOLOGY	74
3.6	SUMMARY	79
CHAPTER 4 : CASE STUDY		
4.1	PUTRAJAYA INTERNATIONAL CONVENTION CENTRE (PICC)	80
4.1.1	Building Background	81
4.1.2	Location	83
4.1.3	Facilities	84
4.1.4	Maintenance Department Organization Chart	89
4.2	SIME DARBY CONVENTION CENTRE (SDCC)	90
4.2.1	Building Background	90
4.2.2	Location	92
4.2.3	Facilities	93
4.2.3	Maintenance Department Organization Chart	96
4.3	PUTRA WORLD TRADE CENTRE (PWTC)	97
4.3.1	Building Background	97

<u>CONTENTS</u>		<u>PAGE</u>
4.3.2	Location	99
4.3.3	Facilities	100
4.3.4	Maintenance Department Organization Chart	104
4.4	SUMMARY	105
CHAPTER 5 : ANALYSIS AND FINDING		
5.1	INTRODUCTION	106
5.2	METHOD OF INVESTIGATION	107
5.2.1	Preliminary Interview	107
5.2.2	Interview	107
5.2.3	Structural Interview	108
5.2.4	Observation	108
5.3	FINDINGS BASED ON INTERVIEW AND OBSERVATION	109
5.3.1	Analysis on Type of Maintenance Management System	109
5.3.2	Analysis on Maintenance Organization and Organization Structure	110
5.3.3	Analysis on Maintenance Policy	112
5.3.4	Analysis on Maintenance Strategy	113
5.3.5	Analysis on Type of Maintenance	115
5.3.6	Analysis on Maintenance Manual	117
5.3.7	Analysis on Maintenance Record	119
5.3.8	Analysis on Maintenance Budget	122
5.4	FINDINGS BASED ON STRUCTURAL INTERVIEW	126
5.4.1	Analysis on the Maintenance Head (Demographic Data)	126
5.4.2	Analysis on the Maintenance Management System, Maintenance Organization and Maintenance Policy	128
5.4.3	Analysis to Maintenance Staff	129
5.4.4	Analysis to the Maintenance Planning and Scheduling	132
5.4.5	Analysis to the Maintenance Budget	133