

# **Dropped Calls in Global System for Mobile Communication (GSM) Network**

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**WAN NORSYAFIZAN Bt W.MUHAMAD  
FACULTY OF ELECTRICAL ENGINEERING  
UNIVERSITI TEKNOLOGI MARA MALAYSIA**

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In the name of ALLAH  
The Compassionate, the Merciful,  
Praise be to ALLAH, Lord of the Universe,  
And Peace and Prayers be open  
His Final Prophet and Messenger

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## **ABSTRACT**

The objective of this project is to study and analyze the dropped calls in GSM network. Dropped call is a major indicator of the quality of the mobile network. It is a critical feature in a cellular system and until now, still under extensive research. Dropped call will cause direct effect on user satisfaction. Furthermore, number of cell boundary crossing increases in order to meet the demands for increased capacity. This is particularly critical for 3G systems, where high data rate users will be prime candidates for being dropped. A dropped call encountered when a mobile station has successfully accessed a traffic channel, and subsequently experiences an abnormal call release. Drive test is a method used by network operators to gather information about the network performance. During the drive test, a testing tool call Test Mobile System (TEMS) is used. This tool is used to read and control the information sent over the air interface and useful to identify the reason for dropped calls. This tool is useful for mobile network operator to identify the reason or causes for dropped call in certain location. And it is easier for them to improve their network planning and optimization activities.

# TABLE OF CONTENTS

	<b>PAGE</b>
<b>ACKNOWLEDGEMENT</b>	i
<b>ABSTRACT</b>	ii
<b>TABLE OF CONTENTS</b>	iii
<b>LIST OF FIGURES</b>	VI
<b>LIST OF TABLES</b>	vii
<b>LIST OF ABBREVIATIONS</b>	viii
<b>CHAPTER 1</b>	
<b>INTRODUCTION</b>	<b>1</b>
1.1 Project Background	1
1.2 Objectives of Project	1
1.3 Scope of Project	2
1.4 Test Analysis Methodology	2
1.5 Organization of Project Report	3
<b>CHAPTER 2</b>	
<b>Global System for Mobile Communication (GSM)</b>	<b>5</b>
2.1 GSM	5
2.2 Network Element	6
2.3 GSM System Architecture	8
2.3.1 Mobile Serves Switching Centre	8
2.3.2 Operation and Maintenance Centre	9
2.3.3 Home Location Register	9
2.3.4 Visitor Location Register	9
2.3.5 Authentication Centre	9
2.3.6 Equipment Identity Register	10
2.3.7 Base Station Controller	10

2.3.8	Base Transceiver Station	10
2.4	Frequency Spectrum	10
2.5	Transmission Rate	12
2.6	Digital Transmission Method	12
2.7	The Channel Concept	13
2.8	Frequency Reuse	14
2.9	Frequency Hopping	14
2.10	Handover	15
2.11	Cellular Communication	19
2.12	Cellular Concept	19
2.13	Type of Cellular System	22
2.13.1	Micro Cell System	22
2.13.2	Macro Cell System	22
2.14	Type of Cell Pattern	23
<b>CHAPTER 3</b>	<b>Transmission Problem</b>	<b>25</b>
3.1	Introduction	25
3.2	Interference	25
3.2.1	Adjacent Channel Interference	25
3.2.2	Co-Channel Interference	26
3.3	Fading	26
3.3.1	Log Normal Fading	27
3.3.2	Rayleigh Fading	27
3.4	Noise	27
3.4.1	External Noise	28
3.4.2	Internal Noise	28
3.5	Non Line of Sight	28
3.5.1	Reflection	28
3.5.2	Diffraction	29
3.5.3	Scattering	29