

International Telecommunication Union

ITU-T

TELECOMMUNICATION
STANDARDIZATION SECTOR
OF ITU

K.94

(05/2012)

SERIES K: PROTECTION AGAINST INTERFERENCE

Mutual disturbance test method for evaluating performance degradation of converged terminal devices

Recommendation ITU-T K.94



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Document ID: 123456789

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Mutual disturbance test method for evaluating performance degradation of converged terminal devices

Summary

With the rapid progress of the telecommunication terminal technology, more and more converged devices are appearing on the market. As the modules of the converged devices are so close together, if the printed circuit board (PCB) is not designed properly, without adequate earthing, shielding or filtering, an electromagnetic compatibility (EMC) disturbance can occur between the modules. Recommendation ITU-T K.94 analyses the EMC disturbance between different modules in converged terminal devices and defines a conducted test method. This mutual-disturbance test can be used as one of the immunity test items listed in Recommendation ITU-T K.34 and Recommendation ITU-T K.48 to determine the level of performance degradation.

History

Edition	Recommendation	Approval	Study Group
1.0	ITU-T K.94	2012-05-29	5

FOREWORD

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Table of Contents

	Page
1 Scope	1
2 References.....	1
3 Definitions	1
3.1 Terms defined elsewhere	1
3.2 Terms defined in this Recommendation.....	1
4 Abbreviations and acronyms	2
5 Basic test configuration	2
5.1 Test chamber	2
5.2 Generic test set-up	2
6 Generic test procedure	3
7 Test procedure for typical converged devices	3
7.1 GSM/Wireless LAN converged device	4
7.2 UMTS/Wireless LAN converged device.....	5
7.3 CDMA/Wireless LAN converged device.....	6
7.4 GSM/CDMA converged device	8
Annex A – Wireless LAN receiver sensitivity test methodology	10
A.1 General description.....	10
A.2 Unicast test packets	10
A.3 Frequency channels and data rates	10
A.4 Test procedure	10
Annex B – CDMA receiver sensitivity test methodology	11
B.1 General description.....	11
B.2 Network parameters and test channels	11
B.3 Test procedure	11
Bibliography.....	12

Introduction

With the rapid progress of the telecommunication terminal technology, more and more converged devices are appearing on the market. Converged devices usually contain two or more modules which can transmit at the same time, for example: GSM/Wireless LAN dual mode terminal, WCDMA/Wireless LAN dual mode terminal, CDMA/Wireless LAN dual mode terminal, GSM/CDMA dual mode terminal. As the two modules are physically close to each other, if the PCB is not designed properly, without adequate earthing, shielding or filtering, an EMC disturbance could occur between the modules.

In order to limit the EMC disturbance between these modules, this Recommendation defines a test method that can be used as one of the EMC immunity test items on a converged device.