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# ITU-T

TELECOMMUNICATION  
STANDARDIZATION SECTOR  
OF ITU

# K.37

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SERIES K: PROTECTION AGAINST INTERFERENCE

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## **Low and high frequency EMC mitigation techniques for telecommunication installations and systems – Basic EMC Recommendation**

ITU-T Recommendation K.37

(Previously CCITT Recommendation)

ITU-T K-SERIES RECOMMENDATIONS  
PROTECTION AGAINST INTERFERENCE



*For further details, please refer to ITU-T List of Recommendations.*

## ITU-T RECOMMENDATION K.37

**LOW AND HIGH FREQUENCY EMC MITIGATION TECHNIQUES FOR  
TELECOMMUNICATION INSTALLATIONS AND SYSTEMS –  
BASIC EMC RECOMMENDATION****Summary**

This Recommendation defines mitigation techniques which the telecommunication operators may use to avoid disturbances, interference and damages caused by power and electrified railway plants, radio transmitters, both intentional and unintentional, and electrostatic discharges.

This Recommendation contains guidance for the telecommunications system normal operation:

- use of telecommunications equipment fulfilling relevant EMC requirements;
- proper installation practices such as well-controlled earthing and bonding networks and a.c. power distribution networks in buildings, avoidance of disturbing equipment close to telecommunications equipment, environmental control and well-designed cabling;
- proper working practices such as avoiding use of hand-held radios close to telecommunications equipment and applying special precautions when handling electrostatic discharge sensitive devices;
- proper working practices in areas subject to high levels of low-frequency induction.

Special mitigation methods like shielding and filtering are discussed for cases where EMC problems arise.

This Recommendation does not include circuit or equipment design rules or guidelines for manufacturing – it is noted that this information is already widely available.

**Source**

ITU-T Recommendation K.37 was revised by ITU-T Study Group 5 (1997-2000) and was approved under the WTSC Resolution No. 1 procedure on the 26<sup>th</sup> of February 1999.

## FOREWORD

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The approval of Recommendations by the Members of the ITU-T is covered by the procedure laid down in WTSC Resolution No. 1.

In some areas of information technology which fall within ITU-T's purview, the necessary standards are prepared on a collaborative basis with ISO and IEC.

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As of the date of approval of this Recommendation, the ITU had not received notice of intellectual property, protected by patents, which may be required to implement this Recommendation. However, implementors are cautioned that this may not represent the latest information and are therefore strongly urged to consult the TSB patent database.

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