

## საქართველოს სტანდარტი

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ელექტრომაგნეტური თავსებადობა (EMC) - ნაწილი 3 - 6: ზღვრები - გაჟონვის  
ზღვრების შეფასება მწყობრიდან გამოსული დანადგარებთან  
დაკავშირებისათვის MV, HV და EHV ელექტრო სისტემებისათვის

საქართველოს სტანდარტებისა და მეტროლოგიის  
ეროვნული სააგენტო  
თბილისი

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აკრძალულია ამ სტანდარტის გადაცემა მესამე პირებისათვის ან/და მისი სხვა ფორმით გავრცელება

# TECHNICAL REPORT

BASIC EMC PUBLICATION

**Electromagnetic compatibility (EMC) –  
Part 3-6: Limits – Assessment of emission limits for the connection of distorting  
installations to MV, HV and EHV power systems**





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# TECHNICAL REPORT

BASIC EMC PUBLICATION

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**Electromagnetic compatibility (EMC) –  
Part 3-6: Limits – Assessment of emission limits for the connection of distorting  
installations to MV, HV and EHV power systems**

INTERNATIONAL  
ELECTROTECHNICAL  
COMMISSION

PRICE CODE  
CODE PRIX **XA**

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

**ELECTROMAGNETIC COMPATIBILITY (EMC) –****Part 3-6: Limits –  
Assessment of emission limits for the connection of distorting  
installations to MV, HV and EHV power systems**

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IEC/TR 61000-3-6, which is a technical report, has been prepared by subcommittee 77A: Low frequency phenomena, of IEC technical committee 77: Electromagnetic compatibility.

This Technical Report forms Part 3-6 of IEC 61000. It has the status of a basic EMC publication in accordance with IEC Guide 107 [29]<sup>1</sup>.

This second edition cancels and replaces the first edition published in 1996 and constitutes a technical revision.

<sup>1</sup> Figures in square brackets refer to the Bibliography.



This edition is significantly more streamlined than first edition, and it reflects the experiences gained in the application of the first edition. As part of this streamlining process, this second edition of IEC/TR 61000-3-6 does not address communications circuit interference. Clause 9 on this (section 10) was removed, as this did not suitably address emission limits for telephone interference. The scope has been adjusted to point out that IEC/TR 61000-3-6 does not address communications circuit interference. This edition has also been harmonised with IEC/TR 61000-3-7 [30] and IEC/TR 61000-3-13 [31].

The text of this technical report is based on the following documents:

Enquiry draft	Report on voting
77A/575/DTR	77A/637/RVC

Full information on the voting for the approval of this technical report can be found in the report on voting indicated in the above table.

A list of all parts of the IEC 61000 series, under the general title *Electromagnetic compatibility (EMC)*, can be found on the IEC website.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

The committee has decided that the contents of this publication will remain unchanged until the maintenance result date indicated on the IEC web site under "<http://webstore.iec.ch>" in the data related to the specific publication. At this date, the publication will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

A bilingual version of this publication may be issued at a later date.

## INTRODUCTION

IEC 61000 is published in separate parts according to the following structure:

### **Part 1: General**

General considerations (introduction, fundamental principles)  
Definitions, terminology

### **Part 2: Environment**

Description of the environment  
Classification of the environment  
Compatibility levels

### **Part 3: Limits**

Emission limits  
Immunity limits  
(in so far as they do not fall under the responsibility of product committees)

### **Part 4: Testing and measurement techniques**

Measurement techniques  
Testing techniques

### **Part 5: Installation and mitigation guidelines**

Installation guidelines  
Mitigation methods and devices

### **Part 6: Generic standards**

### **Part 9: Miscellaneous**

Each part is further subdivided into several parts published either as International Standards or as technical specifications or technical reports, some of which have already been published as sections. Others will be published with the part number followed by a dash and a second number identifying the subdivision (example: IEC 61000-6-1).

## ACKNOWLEDGMENT

In 2002, the IEC subcommittee 77A made a request to CIGRE Study Committee C4 and CIRED Study Committee S2, to organize an appropriate technical forum (joint working group) whose main scope was to prepare, among other tasks, the revision of the technical report IEC 61000-3-6 concerning emission limits for harmonics for the connection of distorting installations to public supply systems at MV, HV and EHV.

To this effect, joint working group CIGRE C4.103/ CIRED entitled "*Emission Limits for Disturbing Installations*" was appointed in 2003. Some previous work produced by CIGRE JWG C4.07-Cired has been used as an input to the revision, in particular the planning levels and associated indices. In addition, using experience since the technical report IEC 61000-3-6 was initially published in 1996, WG C4.103 reviewed the procedure used to determine emission limits and the assessment methods used to evaluate emission levels for installations.

Subsequent endorsement of the document by IEC was the responsibility of SC 77A.