Doc No. : LITD 09 (24955) WC Draft IS 14700 (Part 4/Sec 6):2024 Identical with IEC 61000-4-6: 2023 February 2024

### **BUREAU OF INDIAN STANDARDS**

## **DRAFT FOR COMMENTS ONLY**

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मसौदा भारतीय मानक विद्युत चुंबकीय संगतता (ई एम सी) — भाग 4: परीक्षण एवं मापन तकनीकें — अनुभाग 6: रेडियो आवर्ती क्षेत्रों द्वारा प्रेरित चालित विक्षोभों से प्रतिरक्षा (पहला पुनरीक्षण)

Draft Indian Standard

# Electromagnetic Compatibility (EMC) – Part 4: Testing and Measurement Techniques – Section 6: Immunity to Conducted Disturbances, Induced by Radio-Frequency Fields

(First Revision)

ICS 33.100.01

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LITD 09 Electromagnetic Compatibility Last Date for Comments: 26 April 2024. Sectional Committee

### NATIONAL FOREWORD

(Formal clauses will be added later)

This Draft Indian Standard (Part 4/Section 6) (First Revision) which is identical with IEC 61000-4-6:2023 'Electromagnetic compatibility (EMC) - Part 4-6: Testing and measurement techniques -Immunity to conducted disturbances, induced by radio-frequency fields' issued by the International Electrotechnical Commission (IEC) *will be* adopted by the Bureau of Indian Standards on the recommendation of the Electromagnetic Compatibility Sectional Committee (LITD 09) and approval of the Electronics and Information Technology Division Council.

IS 14700 (Part 4/Sec 6) was originally published in 2016 and was identical to IEC 61000-4-6: 2013. This first revision has been undertaken to align it with the latest version of with IEC 61000-4-6: 2023 'Electromagnetic compatibility (EMC) - Part 4-6: Testing and measurement techniques -Immunity to conducted disturbances, induced by radio-frequency fields.

This Standard (Part 4) is one of the parts of a series of standards on 'Electromagnetic Compatibility (EMC)'. The other parts in this series are:

Part 1: General Part 3: Limits Part 6 Generic Standards

The text of IEC Standard *will be* approved as suitable for publication as an Indian Standard without deviations. Certain conventions are however not identical to those used in Indian Standards. Attention is particularly drawn to the following:

- a) Wherever the words 'International Standard' appears referring to this standard, they should be read as 'Indian Standard'.
- b) Comma (,) has been used as a decimal marker while in Indian Standards, the current practice is to use a point (.) as the decimal marker.

The technical committee has reviewed the provisions of the following International Standard referred in this adopted draft standard and has decided that it is acceptable for use in conjunction with this standard. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies:

International Standards	Title
CISPR 16-1-2	Specification for radio disturbance and immunity measuring apparatus and methods – Part 1-2: Radio disturbance and

immunity	measuring	apparatus	_	Coupling	devices	for	
conducted disturbance measurements							

For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated, expressing the result of a test or analysis, shall be rounded off in accordance with IS 2:2022 'Rules for rounding off numerical values (*Second Revision*)'. The number of significant places retained in the rounded off value should be same as that of the specified value in this standard.

### SCOPE OF IEC 61000-4-6:2023

"This part of IEC 61000 relates to the conducted immunity requirements of electrical and electronic equipment to electromagnetic disturbances coming from intended radio-frequency (RF) transmitters in the frequency range 150 kHz up to 80 MHz.

NOTE 1 Product committees might decide to use the methods described in this document also for frequencies up to 230 MHz (see Annex B) although the methods and test instrumentation are intended to be used in the frequency range up to 80 MHz.

Equipment not having at least one conducting wire or cable (such as mains supply, signal line or earth connection) which can couple the equipment to the disturbing RF fields is excluded from the scope of this document.

NOTE 2 Test methods are specified in this part of IEC 61000 to assess the effect that conducted disturbing signals, induced by electromagnetic radiation, have on the equipment concerned. The simulation and measurement of these conducted disturbances are not adequately exact for the quantitative determination of effects. The test methods specified are structured for the primary objective of establishing adequate repeatability of results at various facilities for quantitative analysis of effects.

The object of this document is to establish a common reference for evaluating the functional immunity of electrical and electronic equipment when subjected to conducted disturbances induced by RF fields. The test method in this document describes a consistent method to assess the immunity of an equipment or system against a specified phenomenon.

NOTE 3 As described in IEC Guide 107, this document is a basic EMC publication for use by product committees of the IEC. As also stated in Guide 107, the IEC product committees are responsible for determining whether this immunity test standard should be applied or not, and if applied, they are responsible for determining the appropriate test levels and performance criteria."

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**Note:** - The Technical content of this document has not been enclosed as these are identical with the corresponding IEC Standard. For details please refer to IEC 61000-4-6:2023 or kindly contact.

#### Head,

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