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# INTERNATIONAL STANDARD

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**Wind energy generation systems -  
Part 40: Electromagnetic compatibility (EMC) - Requirements and test methods**

Sample Document

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## CONTENTS

FOREWORD .....	3
1 Scope .....	5
2 Normative references .....	5
3 Terms, definitions, abbreviated terms and units .....	6
3.1 Terms and definitions .....	6
3.2 Abbreviated terms and units .....	6
4 Operating conditions during testing .....	6
5 Emission requirements .....	7
5.1 General .....	7
5.2 Conducted emissions .....	7
5.3 Radiated emissions .....	7
5.3.1 General .....	7
5.3.2 Measurement system .....	9
5.3.3 Data recording .....	9
5.3.4 Requirements for the wind turbine .....	10
5.3.5 Requirements for the measurement site .....	10
5.3.6 Weather conditions .....	10
5.3.7 Measurement setup .....	10
5.3.8 Description of the operating modes .....	14
5.3.9 Limit values .....	15
5.3.10 Measurement uncertainty .....	15
5.4 Flicker .....	16
6 Immunity requirements .....	16
6.1 General .....	16
6.2 Electrostatic discharge .....	16
6.3 Immunity to radiated electromagnetic fields .....	16
6.4 Immunity to burst EFT .....	16
6.5 Surge tests .....	16
6.6 Conducted immunity .....	16
6.7 Immunity to power frequency magnetic field .....	16
6.8 Voltage dips, short interruptions and voltage variations .....	17
7 Test reports .....	17
7.1 Test report requirements for emission tests of the wind turbine .....	17
7.1.1 General .....	17
7.1.2 Wind turbine .....	17
7.1.3 Antenna orientation for each measurement point .....	17
7.1.4 Site description .....	18
7.1.5 Description of the test setup .....	18
7.1.6 Test report annex .....	18
7.2 Test report requirements for immunity tests .....	18
Annex A (informative) Variations with effect on EMC behaviour of a wind turbine .....	19
Annex B (normative) Main converter of wind turbines .....	20
Annex C (normative) Limit values CISPR 11:2024, Table 20 .....	21
Annex D (informative) Deviation from CISPR standards .....	22

Annex E (informative) Recommendation of a possible procedure to detect buried cables .....	23
Bibliography.....	24
Figure 1 – Recommended flow chart of EMI measurement.....	8
Figure 2 – Example of a test configuration for an EMC measurement on a wind turbine – Reference points relative to the wind turbine hub .....	12
Figure 3 – Example of a test configuration with a transformer .....	13
Figure 4 – Example of a test setup of a magnetic field strength measurement.....	13
Figure 5 – Example of a test setup of an electric field strength measurement.....	14
Figure 6 – Overview of operating modes of a wind turbine .....	15
Table 1 – Summary of measurements for each reference point of the antenna.....	9
Table C.1 – CISPR 11:2024 limits for 30 m measurement distance.....	21

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**Wind energy generation systems -  
Part 40: Electromagnetic compatibility (EMC) -  
Requirements and test methods**

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Draft	Report on voting
88/1131/FDIS	88/1144/RVD

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

The language used for the development of this International Standard is English.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at [www.iec.ch/members\\_experts/refdocs](http://www.iec.ch/members_experts/refdocs). The main document types developed by IEC are described in greater detail at [www.iec.ch/publications](http://www.iec.ch/publications).

A list of all parts of the IEC 61400 series, under the general title: *Wind energy generation systems*, can be found on the IEC website.

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## 1 Scope

This part of IEC 61400 provides the EMC requirements and test methods that apply to the individual wind turbine and all the sub systems which are part of the wind turbine.

The current document applies to measurements on individual wind turbines and not multiple wind turbines.

This document defines the requirements and test methods for the verification of the wind turbine performance against radiated emissions and the immunity of their components against conducted and radiated phenomena.

This document is applicable to onshore and offshore wind turbines.

Safety considerations are not covered by this standard.

## 2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC TR 61000-2-5, *Electromagnetic compatibility (EMC) - Part 2-5: Environment - Description and classification of electromagnetic environments*

IEC 61000-4-2, *Electromagnetic compatibility (EMC) - Part 4-2: Testing and measurement techniques - Electrostatic discharge immunity test*

IEC 61000-4-3, *Electromagnetic compatibility (EMC) - Part 4-3: Testing and measurement techniques - Radiated, radio-frequency, electromagnetic field immunity test*

IEC 61000-4-4, *Electromagnetic compatibility (EMC) - Part 4-4: Testing and measurement techniques - Electrical fast transient/burst immunity test*

IEC 61000-4-5, *Electromagnetic compatibility (EMC) - Part 4-5: Testing and measurement techniques - Surge immunity test*

IEC 61000-4-6, *Electromagnetic compatibility (EMC) - Part 4-6: Testing and measurement techniques - Immunity to conducted disturbances, induced by radio-frequency fields*

IEC 61000-4-8, *Electromagnetic compatibility (EMC) - Part 4-8: Testing and measurement techniques - Power frequency magnetic field immunity test*

IEC 61000-4-11, *Electromagnetic compatibility (EMC) - Part 4-11: Testing and measurement techniques - Voltage dips, short interruptions and voltage variations immunity tests for equipment with input current up to 16 A per phase*

IEC 61000-4-34, *Electromagnetic compatibility (EMC) - Part 4-34: Testing and measurement techniques - Voltage dips, short interruptions and voltage variations immunity tests for equipment with input current more than 16 A per phase*

IEC 61000-6-2, *Electromagnetic compatibility (EMC) - Part 6-2: Generic standards - Immunity standard for industrial environments*