

International Telecommunication Union

**ITU-R**  
Radiocommunication Sector of ITU

**Recommendation ITU-R V.430-4**  
(08/2015)

**Use of the international  
system of units (SI)**

**V Series**  
**Vocabulary and related subjects**

**150**   
1865-2015

 **ITU**  
International  
Telecommunication  
Union

## Foreword

The role of the Radiocommunication Sector is to ensure the rational, equitable, efficient and economical use of the radio-frequency spectrum by all radiocommunication services, including satellite services, and carry out studies without limit of frequency range on the basis of which Recommendations are adopted.

The regulatory and policy functions of the Radiocommunication Sector are performed by World and Regional Radiocommunication Conferences and Radiocommunication Assemblies supported by Study Groups.

## Policy on Intellectual Property Right (IPR)

ITU-R policy on IPR is described in the Common Patent Policy for ITU-T/ITU-R/ISO/IEC referenced in Annex 1 of Resolution ITU-R 1. Forms to be used for the submission of patent statements and licensing declarations by patent holders are available from <http://www.itu.int/ITU-R/go/patents/en> where the Guidelines for Implementation of the Common Patent Policy for ITU-T/ITU-R/ISO/IEC and the ITU-R patent information database can also be found.

### Series of ITU-R Recommendations

(Also available online at <http://www.itu.int/publ/R-REC/en>)

Series	Title
<b>BO</b>	Satellite delivery
<b>BR</b>	Recording for production, archival and play-out; film for television
<b>BS</b>	Broadcasting service (sound)
<b>BT</b>	Broadcasting service (television)
<b>F</b>	Fixed service
<b>M</b>	Mobile, radiodetermination, amateur and related satellite services
<b>P</b>	Radiowave propagation
<b>RA</b>	Radio astronomy
<b>RS</b>	Remote sensing systems
<b>S</b>	Fixed-satellite service
<b>SA</b>	Space applications and meteorology
<b>SF</b>	Frequency sharing and coordination between fixed-satellite and fixed service systems
<b>SM</b>	Spectrum management
<b>SNG</b>	Satellite news gathering
<b>TF</b>	Time signals and frequency standards emissions
<b>V</b>	<b>Vocabulary and related subjects</b>

*Note: This ITU-R Recommendation was approved in English under the procedure detailed in Resolution ITU-R 1.*

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## RECOMMENDATION ITU-R V.430-4

**Use of the international system of units (SI)**

(1953-1963-1978-1982-1990-2015)

**Scope**

This text recommends the use of the international system of units (SI), together with the symbols for their representation. It also recommends that other units and symbols in the field of telecommunication should follow similar rules.

**Keywords**

International system of units

**Related ITU Recommendations**

Recommendation ITU-R V.431-8	Nomenclature of the frequency and wavelength bands used in telecommunications
Recommendation ITU-R V.573-6	Radiocommunication vocabulary
Recommendation ITU-R V.574-5	Use of the decibel and the neper in telecommunications
Recommendation ITU-R V.665-3	Traffic intensity unit

The ITU Radiocommunication Assembly,

*considering*

- a) the international system of units (SI) adopted by the General Conference of Weights and Measures (CGPM);
- b) that the SI system is supported by the International Organization for Standardization (ISO) and is based on the rationalized form of electromagnetic and electrotechnical relations,

*recommends*

**1** that the various ITU organs, as well as administrations and recognized private operating agencies should use in their mutual relations:

- the units of the SI system;
- the symbols adopted in the SI system to represent units;
- rules similar to those of the SI system when it is necessary to form names of other units and their symbols in the field of telecommunications;

**2** that, with the exception of unit symbols frequently used in telecommunications, the first time a symbol is used in a particular text, its full meaning should be given either in the body of the text or in a footnote.

NOTE 1 – References of relevant publications (updated in 2015).

*International Bureau of Weights and Measures (BIPM) publication: “Le système international d'unités (SI)/The International System of Units (SI)” (8<sup>th</sup> edition, 2006; updated in 2014)*

*International Standard ISO 80000: “Quantities and units”*

Parts of International Standard ISO 80000 of greatest interest for telecommunications:

80000-1 (General)

80000-2 (Mathematical signs and symbols to be used in the natural sciences and technology)

80000-3 (Space and time)

80000-6 (Electromagnetism)

80000-7 (Light and radiation)

80000-8 (Acoustics)

*International Standard IEC 60027: "Letter symbols to be used in electrical technology"*

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