

Pursuant to Article 11 of the Metrology Law (Official Gazette of the Republic of Macedonia No. 55/2002 and 84/20), the Minister for Economy hereby adopts a

RULEBOOK ON DEFINITIONS, NAMES AND SYMBOLS AND THE FIELD AND MANNER OF IMPLEMENTATION, OBLIGATION OF USAGE AND MANNER OF WRITING THE LEGAL UNITS OF MEASUREMENT

I. General provisions

Article 1

This Rulebook shall prescribe the definition, names and symbols and the field and manners of implementation, obligation of usage and manner of writing the legal units of measurement.

II. Definition, names and symbols of legal unit of measurement

Article 2

The international System of Units (SI) is consisted of:

- base unites;
- derived unit

Article 3

The International System of Units (SI), there are decimals multiples and sup-multiples, also there are names and definitional are listed in Appendix 1 which is integral part of this Rulebook.

The names and symbols of the base units and quantities to which they are related are listed in the Table 1.1 of the Appendix 1.

Specialize name and symbol for unite of the temperature is listed in the Table 1.2 of the Appendix 1.

Article 4

Additional units of the SI with specialized name and symbol are listed in the Table 2.1 of the Appendix 1.

The derived units of the SI are then formed as products of powers of the base units, according to the algebraic relations that define the corresponding derived quantities in terms of the base quantities.

Some of the derived units of the SI have specialized name and symbol.

In the Table 2.2 of the Appendix 1 are listed names and symbols for the coherent derived units of the SI. In the Table 2.3 of the Appendix 1 are listed coherent derived units in the SI

expressed in terms of base units. In the Table 2.4 of the Appendix 1 are listed coherent derived units whose names and symbols include SI coherent derived units with special names and symbols.

Article 5

The decimal multiples and submultiples of units of the SI are formed by attaching the appropriate prefix, in front of the name and symbol, which is adopted on the International level (in the text SI-prefix).

The decimal multiples and submultiples of the unit of mass are formed by attaching prefixes to the word 'gram' and their symbols to the symbol 'g'. 'Gram' is specialize name and 'g' is specialize symbol for unite which is a thousand times smaller than kg ($1\text{g} = 10^{-3}\text{kg}$).

The names of the SI-prefixes, their symbols and values represented by number and there usage are listed in the Table 3.1 of the Appendix 1.

Specialized names and symbols for some decimal multiples and submultiples of the units of the SI are listed in the Table 4.1 of the Appendix 1.

Article 6

In the Appendix 2 are listed unit which are defined on the basis of the SI units but are not decimal multiples and submultiples thereof.

These units of SI are used in the daily life as traditional units of angle and time.

Article 7

In the Appendix 3 are listed unites with the SI, whose value are obtained experimentally.

The vales of unites of SI obtained experimentally are given with their combine standard uncertainty with coverage factor $k=2$, which is applied to the last two places shown in parentheses. These units are used in the specialized fields.

Article 8

In the Appendix 4 are listed units and names of units which are used in specialized fields only.

These units should be defined in terms of SI units in each document they will be used.

III. The field, manners of implementation and obligation of usage

Article 9

The legal units of measurement are used in:

- 1) Etalons, measuring instruments and referent materials
- 2) Reporting of the results obtained from the measurements;
- 3) Reporting of the measured quantity that are expressed in units of measurement in the areas of: protection of human's health, animals and plants; protection of environment and nature; general technical product safety; production and marketing of goods and services; education, standardization, and in judicial and administrative proceedings.

Article 10

During exports of goods and foreign relations regarding the export of goods can be used units of measurement that are not provided by these Rulebook, but which are in use in an appropriate foreign country.

In certain areas (air travel , lake transport , railways , etc.) can be used units of measurement that are not provided by these Rulebook, if the use of such units is regulated by international agreements ratified by the Republic of Macedonia .

Unit of measurement in area of biology which are based on standardized effects of individual substances on living organisms, meteorological unit BOFOR (beaufort) which is based on standardized effects of the action of wind and units to express the strength of earthquakes, are not in terms of this Rulebook. The use of these units in the Republic of Macedonia is allowed without limiting.

Article 11

In the Appendix 5 are listed units that do not belong in the International System of Units (SI).

The units of measurements from paragraph 1 from this article re accepted for use to satisfy certain special scientific interest. These units should be defined in terms of SI units in each document they will be used. Their use is not recommended.

Article 12

In the Table 2 of Appendix 5 which is an integral part of this regulation are listed units that do not belong in the International System of Units, but are accepted for use to satisfy certain commercial, legal and special scientific interest. These Units must be defined in terms of SI-units in each document that will be used.

Article 13

In the Table 3 of Appendix 5 shows the relationship between units of measurement system CGS (Centimeter-Gram-Second) with specific names and SI-units.

Article 14

In the Table 4 of Appendix 5 are listed units of measurement that are not included in the International System of Units, but are often found in older documents. In each new documents will be used it should be emphasized that these units are replaced with SI-units.

Article 15

The use of the units of measurement that do not conform to the provisions of this Rulebook may be used for:

- products and equipment that are still on the market and/or in use until the day this Rulebook comes into force,
- components or parts needed for installation or replacement in the products and equipment referred to in subparagraph 1 of this paragraph.

The use of legal units of measurement may be required for devices for dispelling in the measuring instrument.

IV. Manner of writing the names and symbols of the unit of SI

Article 16

The symbols of the units in roman alphabet with letters Ω and μ of the Greek alphabet.

The symbols of the units are written without a point.

The names of decimal multiples and submultiples of the units of measure, or the name of the SI- prefix and the name of the measuring unit are written together as one word.

Symbols of the decimal multiples and submultiples of the units of measure, i.e. the symbol SI- prefix designation of the measuring unit, are write together.

The product of two units of measurement is marked with the midpoint as the multiplication sign. The point can be omitted when the symbols of the units are such that no confusion can arise.

If the measuring unit is formed by mutual sharing of two units of measurement, then the sign of sharing, you can use a slash (/) or rumor insidious like grains dash (-) or degree with negative sign.

In systems for processing data that have limited characters can be used specifically tailored symbols and units of measurement marks multiplication, division and exponentiation.

Article 17

This Rulebook shall enter into the force on the eight day from its publishing in the Official Gazette of the Republic of Macedonia.

No. 25-1545/4

26 July 2007

Skopje