

AN ACT DEFINING THE METRIC SYSTEM AND ITS UNITS, PROVIDING FOR ITS IMPLEMENTATION AND FOR OTHER PURPOSES.

BATAS PAMBANSA BLG. 8, December 02, 1978

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Be it enacted by the Batasang Pambansa in session assembled:

SECTION 1. Adoption of the metric system.—Effective January one, Nineteen hundred and eighty-three, the metric system (SI) as denned herein, shall be the sole measurement system to be used in the Philippines for all products, commodities, materials, utilities, services, and commercial transactions, in all contracts, deeds and other official and legal instruments and documents, in accordance with the provisions of Presidential Decree Numbered One hundred eighty-seven as amended by Presidential Decree Numbered Seven hundred forty-eight and this Act and their implementing rules and regulations.

SEC. 2. Definition of the metric system.—For the purpose of this Act, the term "metric system" means the International System of Units, or SI in brief, as established by the General Conference of Weights and Measures and as interpreted or modified by the Metric System Board, established pursuant to Presidential Decree Numbered One hundred eighty-seven, as amended by Presidential Decree Numbered Seven hundred forty-eight, hereinafter referred to as the Board, to suit Philippine conditions.

SEC. 3. Definition of other terms.—For purposes of this Act:

- a. "Unit" means a value, quantity or magnitude, in terms of which other values, quantities or magnitudes are expressed.
- b. "Base Unit" means a well-defined unit which by convention is regarded as dimensionally independent.
- c. "Derived Unit" means a unit that is formed by combining base units and/or supplementary units according to the algebraic relations linking the other corresponding quantities.
- d. "Supplementary Unit" means a unit which is neither a base nor a derived unit.
- e. "Standard" means a physical embodiment of a unit.
- f. "National Standard" means the primary standard of the country.
- g. "Measurement" means quantitative expression of the state of phenomenon or matter such as length, mass, time, electric current, temperature, light intensity, surface area, volume, velocity, acceleration, force, pressure, work, power, beat, angle, and others.

SEC. 4. Definitions of base units of the metric system.— For purposes of this Act:

- a. The base unit of length shall be the metre, which is the length equal to 1 650 763.73 wavelengths in vacuum of the radiation corresponding to the transition between the levels 2p₁₀ and 5d₅ of the krypton-86 atom.
- b. The base unit of mass shall be the kilogram, which is equal to the mass of the international prototype of the kilogram, made of platinum-iridium, the standard of which is kept at the Bureau of International Weights and Measures at Sevres, France.

- c. The base unit of time shall be the second, which is the duration of 9 192 631 770 periods of the radiation corresponding to the transition between the two hyperfine levels of the ground state of the cesium-133 atom.
- d. The base unit of electric current shall be the ampere, which is that constant current which, if maintained in two parallel conductors of infinite length, of negligible circular cross-section, and placed one metre apart in vacuum, would produce between these conductors a force equal to 2×10^{-7} newton per metre of length.
- e. The base unit of thermodynamic temperature shall be the kelvin, which is the fraction $1/273.16$ of the thermodynamic temperature of the triple point of water.
- f. The base unit of luminous intensity shall be the candela, which is the luminous intensity, in the perpendicular direction, of a surface of $1/600\,000$ square metre of a blackbody at the temperature of freezing platinum under a pressure of 101 325 newtons per square metre.
- g. The base unit of amount of substance shall be the mole, which is the amount of substance of a system which contains as many elementary entities as there are atoms in 0.012 kilogram of carbon 12. When the mole is used, the elementary entities must be specified and may be atoms, molecules, ions, electrons, other particles, or specified groups of such particles.

SEC. 5. Definitions of supplementary units of the metric system.—For purposes of this Act:

- a. The supplementary unit of a plane angle shall be the radian, which is defined as the plane angle between two radii of a circle which cut off on the circumference an arc equal in length to the radius.
- b. The supplementary unit of solid angle shall be the steradian, which is defined as the solid angle which, having its vertex in the center of a sphere, cuts off an area of the surface of the sphere equal to that of a square with sides of length equal to the radius of the sphere.

SEC. 6. National standards for metric units.— a. For the purpose of deriving the value of the base units, the National Institute of Science and Technology shall establish and maintain national standards of these units with the concurrence of the Board for certification by the International Bureau of Weights and Measures, when necessary.

b. For the purpose of deriving the value of the second, the Philippine Atmospheric, Geophysical and Astronomical Services Administration shall establish and maintain the national standard for the second, with the concurrence of the Board.

SEC. 7. Implementation.— a. The Board shall take charge of the implementation of this Act, promulgate and enforce such rules and regulations as may be necessary for the effective use of the metric system including rules of usage, metric conversion tables and factors, metrication programs and weights and measures.

b. In order to enhance nationwide awareness of metric conversion by the people and all sectors of society and facilitate the necessary adjustments to the exclusive use of the metric system, National Metrication Month shall be observed in November of each year until Nineteen hundred and eighty-three. The Board shall manage appropriate activities, including the preparation, production and nationwide dissemination of informative materials about the metric system and conversion.

c. The Board shall continue in existence and exercise its powers and functions under Presidential Decree Numbered One hundred eighty-seven, as amended by Presidential Decree Numbered Seven hundred forty-eight, until the end of Nineteen hundred and eighty-four. Positions in the technical staff and secretariat of the Board shall be considered highly technical or confidential and the Board shall provide appropriate incentives for the recruitment, maintenance and high-level performance of highly qualified personnel, subject to the provisions of Presidential Decree No. 985.

SEC. 8. Penalties.—Any violation of the provisions hereof, or the rules and regulations promulgated pursuant hereto, shall, upon conviction, subject the offender to a fine of not more than One Thousand Pesos or imprisonment for a term of not more than one year, or both, upon the discretion of the Court. If the violation was committed by a juridical person, the manager, representative, director, agent and/or employee of said juridical person responsible for the act shall be liable to the penalties provided herein. If the offender is an alien, he shall be deported after serving the sentence, without the need for further proceedings for deportation.

SEC. 9. Funding.—The amount appropriated for the Metric System Board for the first semester of 1979 included in the General Appropriations Act for calendar year 1979 shall be used for the implementation of this Act. Savings in the programmed appropriations not exceeding Five Hundred Thousand Pesos of the Ministry of Trade and the National Science Development Board may be used to support the Board, subject to the provisions of Presidential Decree No. 1177, and to the approval of the President.

SEC. 10. Repealing Clause.—The provisions of any law, decree, order, rule and regulation which are inconsistent herewith are hereby repealed or modified accordingly.

SEC. 11. Effectivity.—This Act shall take effect upon its approval.

Approved, December 2, 1978.

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