1963 No. 1354

WEIGHTS AND MEASURES

ADMINISTRATION

The Weights and Measures (International Definitions) Order 1963

Made - - - - 1*st August* 1963
Coming into Operation 31*st January* 1964

The Board of Trade, in pursuance of the powers conferred upon them by paragraph 2 of Part I, paragraph 4 of Part IV, paragraph 5 of Part V and paragraph 1 of Part VI of Schedule 1 to the Weights and Measures Act 1963(a) and all other powers enabling them in that behalf, hereby order as follows:—

1. The metre, litre, kilogramme, ampere, watt, volt and ohm shall, for the purposes of measurements falling to be made in the United Kingdom, have the meanings respectively assigned to them in the Schedule hereto, being the meanings appearing to the Board to reproduce in English the international definitions of the said units in force at the date of the making of this Order.

2. This Order may be cited as the Weights and Measures (International Definitions) Order 1963 and shall come into operation on the 31st January 1964.

1st August 1963.

David Price,
Parliamentary Secretary to the Board of Trade.

SCHEDULE

Definitions of Units of Measurement

Measurement of length

METRE

The metre is the length equal to 1 650 763.73 wavelengths in vacuum of the radiation corresponding to the transition between the levels $2p_{10}$ and $5d_5$ of the krypton—86 atom.

[*General Conference of Weights and Measures held in Paris in* 1960]

Measurement of capacity

LITRE

The litre is the volume occupied by a mass of 1 kilogramme of pure water at its maximum density and under standard atmospheric pressure.

[*General Conference of Weights and Measures held in Paris in* 1901]

(a) 1963 c. 31.

Measurement of mass

KILOGRAMME

The kilogramme is the unit of mass represented by the mass of the international prototype kilogramme.

[*General Conference of Weights and Measures held in Paris in* 1901]

Measurement of electricity

AMPERE

The ampere is the constant current which, if maintained in two straight parallel conductors of infinite length and of negligible circular sections and placed 1 metre apart in vacuum, will produce between the conductors a force equal to 2×10^{-7} M.K.S. units of force per metre of length.

[*General Conference of Weights and Measures held in Paris in* 1948]

WATT

The watt is the power which gives rise to the production of energy at 1 joule per second.

[*General Conference of Weights and Measures held in Paris in* 1948]

VOLT

The volt is the difference of electrical potential between two points of a conducting wire carrying a constant current of 1 ampere when the power dissipated between these two points is equal to 1 watt.

[*General Conference of Weights and Measures held in Paris in* 1948]

OHM

The ohm is the electrical resistance between two points of a conductor when a constant difference of potential of 1 volt applied between the two points produces in the conductor a current of 1 ampere, the conductor not being the seat of any electromotive force.

[*General Conference of Weights and Measures held in Paris in* 1948]

NOTE. *The reference in relation to each definition to a General Conference of Weights and Measures is a reference to the General Conference of Weights and Measures (convened by the International Bureau of Weights and Measures) at which that definition was recognised.*

EXPLANATORY NOTE

(This Note is not part of the Order, but is intended to indicate its general purport.)

This Order comes into operation on the 31st January 1964. It defines, for the purposes of measurements in the United Kingdom, the meanings of the metre, litre, kilogramme, ampere, watt, volt and ohm in terms which reproduce in English the international definitions (in the French language) of these units.