

EXPLANATORY STATEMENT

STATUTORY RULES 1984 No. 195

Issued by the authority of the
Minister for Science and Technology

WEIGHTS AND MEASURES (NATIONAL STANDARDS) ACT 1960 REGULATIONS

Section 20 of the Weights and Measures (National Standards) Act 1960 (the Act) provides that the Governor-General may make regulations prescribing all matters required or permitted by the Act to be prescribed, or which are necessary or convenient to be prescribed for carrying out or giving effect to the Act.

Regulation 5 of the Weights and Measures (National Standards) Regulations currently provides that:

"The metre is the length equal to 1650 763-73 wave lengths in vacuum of the radiation corresponding to the transition between the levels 2 p 10 and 5 d 5 of the Krypton - 86 atom".

The Statutory Rule provides for the amendment of Regulation 5 by altering the definition of a metre to the following:

"The metre is the length of the path travelled by light in a vacuum during a time interval of 1/299 792 458 of a second".

This follows a recommendation by the National Standards Commission that the Commonwealth Weights and Measures (National Standards) Regulations be amended to incorporate a definition agreed to in Paris on 20 October 1983 by the 17th General Conference of Weights and Measures.

The length of the newly defined metre will not be detectably different from that of the previous metre. Consequently the new definition will not necessitate any change to existing practices in everyday measurement.

S.R. 133/84

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