BILL No. 15 OF 1981 *Saturday, 12th December, 1981*

GUYANA

BILL o. 15 of 1981

WEIGHTS AND MEASURES BILL 1981

ARRANGEMENT OF S CTIONS

PART I

Preliminary

PART II

Standards of Weight and Measure

PART III

Chief Inspector and Inspectors of Weights and Measures

PART IV

General

PART V

Offences, Proceedings and Repeal

A BILL

Intituled

AN ACT to provide for the implementation of the International System of Units (SI); and for purposes connected therewith.

A.D. 1981 Enacted by the Parliament of Guyana —

PART I

Preliminary

Short title and commencement.

1. This Act may be cited as the Weights and Measures Act 1981 and shall come into operation on such date as the Minister may, by order, appoint.

Interpretation.

2. (1) In this Act —

"appointed day" in relation to any area, undertaking or class of undertaking means the day appointed by the Minister for the purposes of this Act by order made under section 3 (3) in relation to that area, undertaking or class of undertaking.

"carat" has the meaning assigned to it in Part V of the Sixth Schedule;

"Chief Inspector" means the Chief Inspector of Weights and Measures appointed under section 10;

"container" means any form of packaging of goods for sale as a single item,

whether by way of wholly or partly enclosing the goods or by attaching the goods to, or winding the goods around, some other article, and includes a wrapper or confining band;

"General Conference" means the General Conference of Weights and Measures from time to time convened by the International Bureau;

"Inspector" means an Inspector of Weights and Measures appointed under section 10;

"International Bureau" means the International Bureau of Weights and Measures;

"International System of Units" means the system of units referred to in section 3 and adopted by the General Conference;

"measuring instrument" includes an instrument for the measurement of length, superficial area, capacity or volume or for measurement by counting and such instruments as are also constructed to calculate and indicate the price in money;

"metric system" means the base, supplementary, derived and special (or permitted) units, of the International System of Units;

"National Standards" or "National Standards of Weight and Measure" means the standard for use in weight and measure authorised by the Minister under section 5;

"net weight" means the weight of an article excluding the weight of its container;

"purchaser" includes any person acting on behalf of the purchaser;

"secondary standards" means the copies of the National Standard prepared, verified and authenticated in accordance with section 7;

"stamping" includes casting, engraving, etching, branding, or otherwise marking, in such a manner as to be, as far as practicable, indelible;

"trade" means dealing in goods, wares or merchandise sold by weight or measure, or unit or performing the service of weighing or measuring, or performing a service for which payment is determined by weight or measurment;

"weighing instrument" includes scales with weights belonging thereto, scale beams, balances, steelyards, weighing machines and other instruments for weighing including such instruments as are also constructed to calculate and indicate the price in money;

"working standards" means standards which, standardise by comparison with secondary standards, are kept for the purpose of verifying ordinary measuring instruments, weighing instruments, weights or measures.

(2) The abbreviation SI shall be recognised a a legal reference to the International System of Units.

PART II

Standards of Weight and Measure

Standards. Cap. 90:14

3 (1) The standards of weight and measure as established by section 3 of the Weights and Measures Act and all multiples and parts thereof in force in Guyana immediately before the commencement of this Act shall, subject to subsection (4), continue to be used in Guyana.

(2) From and after the date of the commencement of this Act, the International System of Units shall have legal Force and validity in Guyana.

(3) The Minister may, by order appoint a day from and after which the standards of weight and measure mentioned in subsection. (1) shall cease to have legal force and validity in Guyana and the Minister may appoint different dates for different areas, undertakings or class of undertakings specified in the order.

(4) From and after the appointed day, the standards of weight and measure in subsection (1) shall cease to have legal force and validity and the International System of Units and certain units outside the International System of Units specified in subsection (6) only shall continue to have legal force and validity in Guyana in relation to the area, undertaking or class of undertaking specified in the order made under subsection (3).

(5) The International System of Units shall consist of —

First Schedule.

(a) base units; the physical quantities they represent, their names, symbols and definitions are set out in the First Schedule;

Second Schedule.

(b) supplementary units; the physical quantities they represent, their names, symbols and definitions are set out in the Second Schedule;

Third Schedule.

(c) derived units; being units derived only from the base of supplementary units or both by the process of multiplication or division or both without the introduction of any coefficients, unity excepted. The physical quantities they represent, the names and symbols of the more commonly used of such units are set out in the Third Schedule.

Fourth Schedule.

(6) The certain units outside the International System of Units referred to in subsection (4), are special (or permitted) units and units used with the International System of Units in physical quantities they represent, their names, symbols and definitions are set out in the Fourth Schedule. These units may be used in conjunction with the base, supplementary and derived units and their multiples and sub-multiples.

Fifth Schedule.

(7) The SI prefixes for multiples and sub-multiples which may be used with the units of measurements set out in the First, Second, Third and Fourth Schedules and the symbols therefor are as set out and defined in the Fifth Schedule.

(8) The Sixth Schedule shall have effect for the purpose of defining the units of measurements set out in that Schedule; and for the purposes of any measurement of weight, that weight may be expressed, by reference to the units of measurement set out in Part V of that Schedule in the same terms as its mass. Sixth Schedule.

(9) The Seventh Schedule shall have effect for the purpose of specifying the weights and measures that shall be used for purpo es of trade in Guyana. Seventh Schedule.

(10) The Eighth Schedule shall have effect for the purpose of showing the relationship between the International System of Units and the standards of weight and measure referred to in subsection (1). Eighth Schedule.

(11) The Minister may, by order, amend any Schedule referred to in this section.

(12) Every reference in any other law, instrument or document enacted, or executed before the appointed day to a weight or measure expressed in terms of a standard or weight or measure in force in Guyana immediately before the commencement of this Act shall, after the appointed day be read and construed as a reference to the equivalent weight or measure expressed in term of the corresponding standard of weight or measure having legal force in Guyana after the appointed day.

4. Where the quantity of anything weighed or measured or to be weighed or measured is expressed in any manner not authorised by this Act, in reference to any such thing, the quantity so expressed shall be deemed to be uncertain. Use of Weight.

5. (1) The Minister shall authorise the use of uch standards of weight and measure as he considers necessary. National Standards of Weight and Measure.

(2) Every standard referred to in subsection (1), every secondary standard referred to in section 7 or every working standard referred to in section 8 —

(a) shall be of a denomination equivalent to —

(i) a weight or mea ure authorised by this Act; or

(ii) a multiple, aliquot part or sub-multiple of such a weight or measure;

(b) shall be verified bv such competent institution as the Minister directs; and

(c) shall be made of such material, in such manner and placed and kept in such a receptacle as affords it, as far as practicable, protection against mechanical and atmospheric agencies and any likely source of error.

(3) A standard of linear or capacity measurement may, as the Minister considers fit, —

(a) be provided either as a separate standard or by means of divisions marked on a standard of larger measure; and

(b) be either marked in whole or in part with sub-divisions representing any smaller unit of measurement, or multiples or sub-multiples of such a unit, or have no such marking.

(4) Where a standard of weight or measure is about to be brought into use in Guyana the Minister shall, by notice published in the **Gazette,** declare that such standard of weight or measure is about to be brought into use in Guyana and specify therein the date on which that standard of weight or measure shall become operative; and upon publication of the notice, such standard shall become a National Standard of Weight or Measure and shall, for all purposes, be conclusively deemed to be true and accurate.

Custody of National Sandards

6. The National Standard of Weight and Measure shall be kept at such place, under such custody and under such conditions as the Minister may direct.

Secondary Standards.

7. (1) The Minister shall —

(a) cause to be prepared such copies of the National Standards as he considers fit;

(b) provide for the verification of any copies so prepared;

(c) cause the verified copies to be authenticated as secondary standards in the prescribed manner; and

(d) cause such secondary standards to be kept at such place and under such custody as he may direct.

(2) Every secondary standard shall until the contrary is proved, be deemed to be true and accurate.

(3) Every secondary standard shall from time to time be compared by the custodian thereof with the corresponding National Standard, and shall if necessary, be corrected and adjusted.

(4) The custodian of the National Standards may at any time cancel any secondary standard and direct that it be no longer used

8. Working standard shall be used for the verification or re-verification of weight , measures, measuring instruments or weighing instruments. Working Standards.

9. (1) The Minister shall at least once in every five years cause every National Standard to be verified as provided in section 5 (2) (b) and, if necessary, to be replaced. Periodic Verification of Chief of National Standards.

(2) Where a National Standard is to be sent out of Guyana for verification, the Minister shall cause a corresponding secondary standard to be deposited with the custodian of the National Standard and to be verified by comparison with the National Standard and authenticated in such manner as he considers proper, and that secondary standard shall be deemed to be the National Standard during such time as the National Standard is out of Guyana.

PART III

Chief Inspector and Inspectors of Weights and Measures

10. (1) There shall be a Chief Inspector of Weights and Measures and such other Inspectors of Weights and Measures as may be necessary for the purposes of this Act and such Inspectors may be assigned to a particular area or particular areas of Guyana. Appointment of Chief Inspector and Inspectors.

(2) The Minister shall furnish the Chief Inspector and every Inspector with a certificate of his appointment as set out in the Ninth Schedule. Ninth Schedule.

(3) The Minister, may by order, amend the Ninth Schedule.

(4) No maker, repairer or adjuster of weights, measures, measuring instruments or weighing instruments shall be appointed to any office mentioned in subsection (1).

(5) The Chief Inspector shall exercise general supervision and control over every Inspector, and every Inspector shall —

(a) make such returns and furnish such information to the Chief Inspector as the Chief Inspector shall require; and

(b) give effect to the directions of the Chief Inspector.

(6) The Chief Inspector may exercise any power or perform any duty conferred or imposed on an Inspector by or under this Act.

11. (1) The Chief Inspector shall deliver to each Inspector such working standards as he considers necessary. Verification of weights and measures by Inspector

(2) The Chief Inspector shall by notice published in the **Gazette**, specify such date, time and place where an Inspector shall attend for the purpose of examining weights, measures, weighing instruments or measuring instruments used or proposed to be used for purposes of trade.

(3) Notwithstanding subsection (2), an Inspector may at any time examine any weight, measure, weighing instrument or measuring instrument that a person uses or proposes to use for purposes of trade within the area assigned to him and for that purpose may at all reasonable times enter any premises where any such weight, measure, weighing instrument or measuring instrument is reasonably believed to be kept or found.

(4) The Chief Inspector shall provide for the use of every Inspector good and sufficient stamps for stamping or sealing weights, measures, measuring instruments or weighing instruments and the stamps so provided shall be taken to be the stamps of the area for which the Inspector is assigned.

(5) Where, under this section, an Inspector examines any weight, measure, weighing instrument or measuring instrument, he shall verify such weight, measure, weighing instrument or measuring instrument by comparision with the working standard in his possession, and subject to subsection (6), if he find it to be in order, stamp or seal it in the prescribed manner.

(6) An Inspector shall stamp or seal only —

(a) those denominations of weights or measures that he determines to be suitable for use in trade;

(b) those denominations of weights or measures of which he has working standards; and

(c) those weighing instruments or measuring instruments that he determines to be fit for use for purposes of trade.

Tenth Schedule.

(7) The fees for the examination, comparison, stamping or sealing of any weight, measure, weighing instrument or measuring instrument shall be according to the scale set out in the Tenth Schedule.

Tenth Schedule.

(8) The Minister may, by order, amend the Tenth Schedule.

Certification of weight etc.

12. Where an Inspector stamps or seals any weight, measure, weighing instrument or measuring instrument under this Act, he shall deliver to the person having custody of that weight, measure, weighing instrument or measuring instrument a certificate in such form as may be prescribed to the effect that it is fit for use and such certificate shall be valid for one year commencing from the date on which it is delivered.

Power to enter Premises and to seize Weight and Measure.

13. (1) Subject to subsection (2), an Inspector may at any reasonable time, enter any shop, store, warehouse, stall, yard or other place within the area assigned to him wherein any goods are —

(a) bought, sold, kept or exposed for sale; or

(b) weighed or measured for conveyance or carriage, and

require the production of and examine any weight, measure, measuring instrument or weighing instrument therein.

(2) An Inspector shall, before entering any of the premises mentioned in subsection (1), produce to the occupier or the person in charge of such premises his certificate of appointment furnished to him under section 10 (2).

(3) An Inspector may seize and detain any weight, measure, weighing instrument or measuring instrument examined by him under subsection (1) or section 11 that he has reason to believe to be false or unjust or is liable to forfeiture under section 27.

(4) An Inspector shall at the time of the seizure and detention of the article under subsection (3) give written notice to the person from whom the article was taken of the grounds upon which the article was seized or detained.

(5) An Inspector shall, within three days of seizing and detaining an article under subsection (3), either make a complaint before the magistrate for the area in which such seizure or detention takes place or return the article so seized and detained, to the person from whom it was taken.

Prohibition against adjustment.

14. No Inspector shall repair, alter or adjust any weight, measure, weighing instrument or measuring instrument examined by him.

PART IV

General

Duty to have weight and measure marked with their proper determination.

15. Any person who has in his possession for use for purposes of trade any weight or measure shall —

(a) in respect of every such weight, have the denomination of such weight marked on the top or side thereof in legible figures or letters in English language except where the small size of the weight renders such marking impracticable; and

(b) in respect of every such measure, whether of length or capacity, have the denomination thereof marked on the outside of such measure in legible figures and letters in English language.

Sale of goods by weight or measurement.

16. (1) A person shall not sell any goods by weight or measurement except by net weight or measurement.

(2) Any person who, before the appointed day, sells any goods by weight or measurement expressed in metric units shall inform the purchaser, in such manner as may be prescribed, of the correct equivalent of the weight or measurement in the units used before the commencement of this Act.

Weight made of lead or pewter not to be stamped or used.

17. To prevent frauds by the use of a weight made of soft materials, no weight made of lead or pewter, or of any mixture thereof, shall be stamped or used:

Provided that nothing herein contained shall prevent the use of lead or pewter, or of any mixture thereof, in the manufacture of weights, if they are wholly and substantially cased with brass, copper, or iron, and legibly stamped or marked "cased", or shall prevent the insertion of any plug of lead or pewter into weights **bona fide** necessary for the purpose of adjusting them and affixing thereon the stamp mentioned in this Act.

Sale of prepackaged goods by weight or measurement.

18. (1) Subject to the regulations, a person shall not sell any prepackaged goods by weight or measurement unless the net weight or the capacity measurement of those goods is marked on the container in the prescribed manner.

(2) Subject to the provisions of this Act, no person shall, before the appointed day, supply by way of trade any goods in a container marked with any unit of weight or measurement differing in name or size from the appropriate units specified in the Sixth Schedule unless its correct equivalent in units of weight or measurement so specified is also marked on that container in the prescribed manner and with equal prominence.

Sixth Schedule.

(3) For the purposes of this Part and Part V, goods shall be deemed to be prepackaged if they are made up in advance ready for sale in or on a container; and articles of any description that are so made up for sale and kept stored on premises shall be deemed to be prepackaged for sale unless the contrary is proved.

(4) For the purposes of subsection (3), it shall not be sufficient proof to the contrary to show that the container has not been marked in accordance with the requirements of this Act or the regulations.

19. (1) person hall not use for purposes of trade after the appointed date any unit of measurement that is not contained in the Sixth Schedule. Use of carat. (metric) Sixth Schedule.

(2) ubject to ub ection (3), a person hall not, after the appointed day, use the carat unit for purposes of trade except in transactions relating to precious stones or pearls.

(3) The re trictions et out in this ection do not apply to any transaction affecting the export of goods to a country where a system of units of mea urement other than tho e authori ed by this ct is used for purposes of trade.

20. The Minister may make regulations re pecting — Regulations.

(a) the exemption in whole or in part from the provisions of this Act any area, undertaking or class of undertaking specified in the regulations;

(b) the v rification and stamping of weights, measures, weighing instruments or measuring instruments, including the prohibition of stamping in cases where the nature, denomination, material or principle of construction of the weight, measure, weighing instrument or measuring in trument appears likely to facilitate the perpetration of fraud;

(c) the tests to be applied for the purpo e of ascertaining the accuracy and efficiency of weight, measure, weighing instrument or measuring instrument;

(d) the limits of error to be allowed on verification and tolerated either generally or with respect to any trade;

(e) th custody of the set of standards of weight and measure that are to be maintained by Government and the periodical verification and adjustment thereof;

(f) the manner in which the value expressed in terms of any weight or measure other than in terms of tandard weight and mea ure may be converted;

(g) the enabling of Inspectors to carry out their duties under this Act;

(h) the enforcement of the requirements that relate to weighing instruments and measuring instruments;

(i) the materials and principles of construction of weighing instrumen or mea uring instruments for u e for purpose of trade;

(j) the purpose for which particular type of weighing instruments or measuring in trument may be used for pur- es of trade;

(k) the manner of erecting, siting or using, weighing instruments or measuring instruments used for purposes of trade;

(l) the circumstances in which, conditions under which, and manner in which stamps or marks placed on weights, measures, weighing in truments or measuring instrumen may be obliterated or defaced;

(m) the abbreviations of or symbols for units of measurement which may be used for trade;

(n) the system of licensing for the control of the importation, repairing, adjusting and recalibrating of weights, mea ures, weighing instrument and measuring instruments;

(o) the quantities in which prescribed prepackaged goods may be sold;

(p) the prescribing of anything that is by this Act authorised or required to be prescribed; and

(q) generally, the carrying out of the provisions of this Act.

PART V

Offences, Proceedings and Repeal

Failure to weigh or measure when selling goods if so required.

21. (1) A person who sells by weight or measure goods other than prepackaged goods, whether on his own behalf or on behalf of another per on, shall, upon being required by the person to whom the good are to be delivered and in the presence of that person, weigh or measure uch goods, as the ca e may be.

(2) per on who i required under this section to weigh or measure any goods, other than prepackaged goods, and fails to do so is guilty of an offence.

ales by authorised denomina- tions.

22. A per on who sells or exposes for sale by any denomination of weight or measure other than the denominations of weight or measure authorised by this Act i guilty of an offence.

Use of non- certified weight, etc.

23. A person who uses for purposes of trade or has in his possession for use for purpos of trade any weight, measure, weighing instrument or measuring in trument, in respect of which —

(a) a certificate ha not been issued in pur uance of section 12; or

(b) such a certificate has been i sued but ha expired,

i guilty of an offence.

Use of false or unjust weight, etc.

24. A per on who uses for purposes of trade or has in his possession for use for purposes of trade any weight, measure, weighing instrument or measuring instrument that is false or unjust, is guilty of an offence.

Fraud in use of weight etc.

25. Where fraud is knowingly committed in the use of a weight, measure, weighing instrument or measuring instrument, the person committing the fraud and every person who is a party to the fraud is guilty of an offence and in addition to any penalty the court imposes, the weight, measure, weighing instrument or measuring in trument may be forfeited.

Forgery, etc.

26. A person who —

(a) forges or counterfeits or causes or procures to be forged or counterfeited a stamp issued pursuant to section 11 or a certificate issued pursuant to section 12;

(b) utters or assists in uttering any such forged or counterfeited stamp or certificate;

(c) removes, or causes or procures the removal of, any tamp or mark from any weight, measure, weighing instrument or measuring instrument, and places, causes or procures the placing of such stamp or mark on another weight, measure, weighing instrument or measuring in trument; or

(d) uses as a certificate issued to him in respect of any weight, measure, weighing instrument or measuring instrument a certificate delivered to him in respect of a different weight, measure, weighing instrument or measuring instrument,

is guilty of an offence.

Selling, etc., weight, etc. with forged or counterfeited tamps of verification or certificates of justness.

27. A person who knowingly sells, utters, disposes of, or exposes for sale any weight, measure, weighing instrument or measuring instrument with any forged or counterfeited stamp or certificate resembling or purporting to resemble any stamp or certificate used for the purposes of this Act is guilty of an offence, and in addition to any punishment the court imposes, the weight, measure, weighing instrument or measuring instrument may be forfeited.

Making or selling unjust weight, etc.

28. A person who knowingly makes or sells, or knowingly causes to be made or sold, any unjust weight, measure, weighing instrument or measuring instrument is guilty of an offence.

Obstructing Inspectors, etc. in the performance of their duties.

29. A person who —

(a) assaults, resists, hinder or ob tructs an Inspector entering any place or premises mentioned in section 11 or 13;

(b) hinders or obstructs an Inspector in the performance of his duties under this Act;

(c) fails to comply with any request made by an Inspector in the performance of his duties under this Act;

(d) bribes or attempts to bribe an Inspector, in connection with any matter arising in the exercise or performance of his duties under this Act.

(e) being an In pector, accepts or attempts to solicit any bribe in connection with any matter arising in the performance of his duties under this Act;

(f) uses indecent, abusive or insulting language to an Inspector in the exercise of his duties under this Act; or

(g) contraven or fails to comply with any provision of thi Act or the regulations,

is guilty of an offence.

Costs.

30. Costs shall not be imposed on any Inspector prosecuting a complaint under this Act, unless, the complaint is dismissed and deemed by the court to be frivolou or vexatious.

Forfeitures.

31. All weight , measures, weighing instruments or measuring instruments forfeited under this ct shall be broken up and the materials thereof may be sold or otherwise disposed of as the Minister may direct and the proceeds of any sale hall be paid into the Consolidated Fund.

Evidence as to possession.

32. Where any weight, measure, weighing instrument or measuring instrument is found —

(a) in the possession of a person carrying on trade; or

(b) on the premises used for trade, of any person —

(i) whether or not such premises are a building or in the open air, or

(ii) whether or not such premises are open or enclosed,

that person shall be deemed for the purposes of this Act, until the contrary is proved, to have such weight, measure, weighing instrument or measuring instrument in his possession for use for purposes of trade.

Inspector stamping without verification.

33. n inspector who stamps any weight or measure without duly verifying it by comparison with the proper working standard in his po session, or tamps any weighing instrument or measuring instrument without having determined its suitability for use in trade, is guilty of an offence.

34. A person who, in selling any article by weight, measure or number, delivers or causes to be delivered to the purchaser a less weight, measure, or number, as the case may be, than is purported to be sold is guilty of an offence. Prohibition of giving short weight, measure or number.

35. In any proceedings for an offence under this Act or the regulations, it is a defence for the person charged to prove — Defence of mistake, accident, etc.

(a) that the commission of the offence was due to a mistake or to an accident or some other cause beyond his control; and

(b) that he took all reasonable precautions and exercised all due diligence to avoid the commission of such an offence by himself or any person under his control.

36. (1) A person who is guilty of an offence under this Act is liable on summary conviction to a fine of one thousand dollars or to imprisonment for six months. Penalty.

(2) Save as otherwise provided in section 13 (5), proceedings for an offence under this Act shall not be commenced except by the Chief Inspector or any person authorised in writing by the Chief Inspector.

37. The Weights and Measures Act is hereby repealed. Repeal of Ca . 90:14.

FIRST SCHEDULE

s. 3 (5) **BASE UNITS**

Physical Quantity	Name of Unit	Unit Symbol	Definition
length	metre	m	the unit for the measurement of 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.
mass	kilogram	kg	the unit for the measurement of mass, being a mass of the international prototype of the kilogram established in the year 1889 by the First General Conference of Weights and Measures and deposited at the International Bureau of Weights and Measures.
time	second	s	the unit for the measurement of time, being the duration of 9 192 631 770 periods of the rediation corresponding to the transition between the two hyperfine levels of the ground tate of the caesium-133 atom.
electric current	ampere	A	the unit for the measurement of electric current, being that constant electric current which, if maintained in two straight 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.

Physical Quantity	Name of Unit	Unit Symbol	Definition
thermodynamic temperature	kelvin	K	the unit for the measurement of thermodynamic temperature, being the fraction 1/273, 16 of the thermodynamic temperature of the triple point of water.
amount of substance	mole	mol	the unit for the measurement of the amount of substance of a system which contains as many elementary entities as there are atoms in 0,012 kilogram of carbon 12.
luminous intensity	candela	cd	the unit for the measurement of luminous intensity, being the luminous intensity in a given direction, of a source which emits monochromatic radiation of frequency 540 x 10^{12} hertz having a power flux in that direction of 1/683 watt per steradian.

Note : 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.

SECOND SCHEDULE

s. 3(5) **SUPPLEMENTARY UNITS**

Physical Quantity	Name of Unit	Unit Symbol	Definition
Plane angle	radian	rad	the unit for the measurement of plane angle, being the plane angle between two radii of a circle which cut off on the circumference and are equal in length to the radius.
solid angle	steradian		the unit for the measurement of solid angle being the solid angle which having its vertex in the centre of a sphere, cuts off an area on the surface of the sphere equal to that of a square with sides of length equal to the radius of the sphere.

THIRD SCHEDULE

s. 3(5)

DERIVED UNITS

SI DERIVED UNITS EXPRESSED IN TERMS OF BASE UNITS

Physical Quantity	Name of Unit	Unit Symbol
Area	square metre	m^2
Volume	cubic metre	m^3
Speed, Velocity	metre per second	m/s ; $m.s^{-1}$
Accerleration	metre per second squared	m/s^2 ; $m.s.^{-2}$
Wave Number	1 per metre; reciprocal metre	m^{-1}
Density, Mass Density	kilogram per cubic metre	kg/m^3 ; $kg.m^{-3}$
Current density	ampere per square metre	A/m^2 ; $A.m^{-2}$
Magnetic field strength	ampere per metre	A/m ; $A.m.^{-1}$
Concentration (of amount of Substance)	mole per cubic metre	mol/m^3 ; $mol.m^{-3}$
Specific volume	cubic metre per kilogram	m^3/kg ; $m^3.kg^{-1}$
Luminance	candela per square metre	cd/m^2 ; $cd.m^{-2}$
Moment of inertia	kilogram square metre	$kg.m^2$
Kinematic Viscosity	metre squared per second	$m^2.s^{-1}$
Magnetic moment		$A.m^2$

SI DERIVED UNITS WITH SPECIAL NAMES

Physical Quantity	Name of Unit	Unit Symbol	Expression in terms of other Units	Expression in terms of SI base Supplementary Units
Frequency	hertz	Hz		s^{-1} or 1/s
Force	newton	N		$kg.m/s^2$; $kg.m.s^{-2}$
Pressure, stress	pascal	Pa	N/m^2	$kg.m^{-1}.s^{-2}$
Energy, work quantity of heat	joule	J	N.m	$kg.m^2.s^{-2}$
Power	watt	W	J/s	$kg.m^2.s^{-2}$
Quantity of electric charge	coulomb	C		A.s
Electric potential volt potential difference electro-motive force	volt	V	W/A or J/C	$kg^{-3}.m^2.A^{-1}$
Capacitance	farad	F	C/V	$kg^{-1}.m^{-2}.s^4.A^2$
Electric resistance	ohm	Ω	V/A	$kg.m^2.s^{-1}.A^{-2}$
Conductance	siemens	S	A/V	$kg^{-1}.m^{-2}.s^3.A^2$
Magnetic flux	weber	Wb	V.s	$kg.m^2.s^{-2}.A^{-1}$
Magnetic flux density	tesla	T	Wb/m^2	$kg.m^{-2}.A^{-1}$
Inductance	henry	H	Wb/A	$kg.m^2.s^{-2}.A^{-2}$
Luminous flux	lumin	lm		cd.sr
Illuminance	lux	lx	lm/m^2	cd.sr m^{-2}
Absorbed dose specific energy, imparted ker-ma absorbed dose index	gray	Gy	J/kg	
Activity (radio active)	becqueral	Bq		$1\ s^{-1}$
Celsius temperature	degree Celsius	°C		1 K
Volume	litre	L		1 dm^3

SI DERIVED UNITS EXPRESSED BY MEANS OF SPECIAL NAMES AND BASE UNITS AND SUPPLEMENTARY UNITS

Physical Quantity	Name of Unit	Unit Symbol	Expression in terms of Base and special names and Supplementary Units
Angular acceleration	radian per square second	$rad.s^{-2}$	
Angular speed	radian per second	$rad.s^{-1}$	
Dynamic viscosity	pascal second	Pa. s	$kg.m^{-1}.s^{-1}$
Moment of force	metre newton	N.m	$kg.s^{-2}.m^{2}$
Surface tension	newton per metre	N/m	$kg.s^{-2}$
Power density, heat flux density, irradiance	watt per square metre	W/m^2	$kg.s^{-3}$
Heat capacity, entrophy	joule per kelvin	J/K	$m^2.kg.s$
Specific heat, capacity, specific entrophy	joule per kilogram kelvin	J/(kg.k)	$m^2.s^{-2}.K^{-1}$
Specific energy	joule per kilogram	J/kg	$m^2.s^{-2}$
Thermal conductivity	watt per metre kelvin	W/(m.k)	$m.kg.s^{-3}.K^{-1}$
Energy density	joule per cubic metre	J/m^3	$m^{-1}.kg.s^{-2}$
Electric field strength	Volt per metre	V/m	$m^{-3}.s.A$
Electric charge density	coulomb per cubic metre	C/m^3	$m^{-3}.s.A$
Electric flux density	coulomb per square metre	C/m^2	$m^{-2}.s.A$
Permittivity	farad per metre	F/m	$kg^{-1}.m^{-3}.s^{4}.A^{2}$
Permeability	henry per metre	H/m	$kg.m.s^{-2}.A^{-2}$
Molar energy	joule per mole	J/mol	$kg.m^2.s^{-2}.mol^{-1}$

Physical Quantity	Name of Unit	Unit Symbol	Expression in terms of Base and special names and Supplementary Units
Molar entrophy, molar heat capacity	joule per mole. kelvin	J/(mol.K)	$kg.m^2.s^{-2}.k^{-1}.mol^{-1}$
Exposure (X and Y rays)	coulomb per kilogram	C/kg	$kg^{-1}.S.A.$
Absorbed dose rate	gray per second	Gy/s	$m^2.s-1$
Conductivity (electrical)	siemens per metre	S/m	$m^{-1}.A.s$
Radiant intensity	watt per steradian	W/sr	$J.sr^{-1}.s^{-1}$
Radiance	watt per steradian square metre	$W/(sr.m^2)$	$J.s-1.sr^{-1}.m^{-2}$

s. 3(6)

FOURTH SCHEDULE

PART I

SPECIAL (OR PERMITTED) UNITS

Physical Quantity	Name of Unit	Unit Symbol	Definition
time	minute	min	1 min = 60 s
	hour	h	1 h = 60 m
	day	d	1 d = 24 h
	week	wk	1 wk = 7 d
	calendar year	yr	1 yr = 365 d or 366 d (leap year)
plane angular measure	degree	°	$1° = \frac{\pi}{180}$ rad
	minute	′	$1′ = \frac{1°}{60}$
	second	″	$1″ = \frac{1′}{60}$
	revolution	r	1 r = 2 π rad
mass	tonne	t	1 t = 1 000 kg = 1 Mg
pressure	bar	bar	1 bar = 100 000 Pa
	standard atmosphere	atm	1 atm = 101 325 Pa
area	are	a	1 are = 100 m^2
	hectare	ha	1 hectare = 10 000 m^2
temperature	degree Celsius	°C	1°C = 1 K (temperature intervals)
marine and aerial navigation	nautical mile	nautical mile	1 nautical mile = 1 852 m
	knot	knot	1 knot = 1 nautical mile per hour
linear density	tex	tex	1 tex = 1 g/km

NOTE : Special (or permitted) units are internationally agreed unit which are deviations from strict SI. They are permitted either because of their practical importance or because of their use in specialised scie c f ds.

PART II

UNITS USED WITH SI IN SPECIALISED SCIENTIFIC FIELDS

Name of Unit	Unit Symbol	Definition
Electronvolt	eV	1 eV = 1,602 1892 x 10^{-19} J
Unified atomic mass	u	1 u = 1,660 5655 x 10^{-27} kg
astronomical unit	AU	1 AU = 149,597 870 x 10^{9} m
parsec	pc	1 pc = 3 086 x 10^{13} m
angstron	$\mathring{A}$	1 $\mathring{A}$ = 10^{-10} m
barn	b	1 b = 10^{-13} m^2
curie	Ci	1 Ci = 37 x 1^{09} Bq
gal	Gal	1 Gal = 10^{-2} m/s^2
metric carat	metric carat	1 metric carat = 2 x 10^{-4} kg
rad	rad	1 rad = 10^{-3} Gy
rontgen	R	1 R = 2,58 x 10^{-4} $C.kg^{-1}$

s. 3(7)

FIFTH SCHEDULE

PREFIXES FOR MULTIPLES AND SUB-MULTIPLES OF SI

Prefix	Symbol	Definition
exa	E	10^{18}
peta	P	10^{15}
tera	T	10^{12}
giga	G	10^{9}
mega ...	M	10^{6}
kilo ...	K	10^{3}
hecto ...	h	10^{2}
deca	da	10^{1}
deci	d	10^{-1}
centi ...	c	10^{-2}
milli ...	m	10^{-3}
micro	u	10^{-6}
nano ...	n	10^{-9}
pico ...	p	10^{-12}
femto	f	10^{-15}
atto ...	a	10^{-18}

NOTE : SI prefixes are not applicable to the base unit "kilogram" bu applicable to the one-thousandth part thereof, namely the "gram". SI prefixes may be used in conjunction with some of the units rovided in the Fourth Schedule.

s. 3(8)

SIXTH SCHEDULE

DEFINITIONS OF UNITS OF MEASUREMENT

PART I

Measurement of Length

kilometre	(km)	=	1 000 m
metre	(m)	=	as defined in First Schedule
decimetre	(dm)	=	0,1 m
centimetre	(cm)	=	0,01 m
Millimetre	(mm)	=	0,001 m

PART II

Measurement of Area

hectare	(ha)	=	100 a
decare	(daa)	=	10 a
are	(a)	=	100 m^2
square metre	(m^2)	=	a superficial area equal to that of square each side of which measures one metre
square decimetre	(dm^2)	=	0,01 m^2
square centimetre	(cm^2)	=	0,01 dm^2
square millimetre	(mm^2)	=	0,01 cm^2

PART III

Measurement of Volume

cubic metre	(m^3)	=	A volume equal to that of a cube each edge of which measures one metre
cubic decimetre	(dm^3)	=	0,001 cubic metre
cubic centimetre	(cm^3)	=	0,001 cubic decimetre

PART IV

Measurement of Capacity

hectolitre (hL)	=	100 L
litre (L)	=	The capacity equal to that of cube each edge of which measures 1 decimetre
decilitre (dL)	=	0,1 L
centilitre (cL)	=	0,01 L
millilitre (mL)	=	0,001 L

PART V

Measurement of Mass or Weight

metric ton or tonne (t)	=	1 000 kg
kilogram (kg)	=	Unit of Mass
hectogram (hg)	=	0,1 kg
gram (g)	=	0,001 kg
carat (metric)	=	200 mg
milligram (mg)	=	0,001 g

PART VI

Measurement of Electricity

The following units of measurement, that is to say —

(a) The AMPERE (A) (as the unit of measurement of electrical current)

(b) The OHM (Ω) (as the unit of measurement of electrical resistance)

(c) The VOLT (V) (as the unit of measurement of difference of electrical potential), and,

(d) The WATT (W) (as the unit of measurement of electrical power)

shall have the meanings from time to time respectively assigned by order by the Minister, being the meanings appearing to the Minister to reproduce in English the International definition of the ampere, ohm, volt or watt as the case may be, in force at the date of the making of the order.

Kilowatt KW	=	1 000 W
megawatt MW	=	1 000 000 W

PART VII

Measurement of Time

hour	=	60 min
minute	=	60 s
second	=	As defined in First Schedule

s. 3(9)

SEVENTH SCHEDULE

WEIGHTS AND MEASURES LAWFUL FOR USE IN TRADE

1. CAPACITY MEASURES

Measures of —	
Any multiple of ten litres	100 mL
10 L	50 mL
5 L	25 mL
2,5 L	20 mL
2 L	10 mL
1 L	5 mL
500 mL	2 mL
250 mL	1 mL

2. METRIC SYSTEM

WEIGHTS OR MASS

Weights of or mass of	
20 kg	20 g
10 kg	15 g
5 kg	10 g
2 kg	5 g
1 kg	4 g
500 g	3 g
200 g	2 g
100 g	1 g
50 g	500 mg

Cont'd

400 mg	50 carats (metric)
300 mg	20 carats (metric)
200 mg	10 carats (metric)
150 mg	5 carats (metric)
100 mg	2 carats (metric)
50 mg	1 carat (metric)
20 mg	0,5 carat (metric)
10 mg	0,25 carat (metric)
5 mg	0,2 carat (metric)
2 mg	0,1 carat (metric)
1 mg	0,05 carat (metric)
500 carats (metric)	0,02 carat (metric)
200 carats (metric)	0,01 carat (metric)
100 carats (metric)	0,5 carat (metric)

METRIC SYSTEM

LINEAR MEASURES

Measure of —

50 m	2 m
30 m	1,5 m
20 m	1 m
10 m	0,5 m
5 m	1 dm
3 m	1 cm

METRIC SYSTEM

SQUARE MEASURES

Measure of, or of any multiple of, 1 cm^2 (square centimetre)

METRIC SYSTEM

CUBIC MEASURES

Measures of, or of any multiple of, 1 m^3 (cubic metre)

EIGHTH SCHEDULE

s. 3 (10) **RELATIONSHIP BETWEEN SI AND THE STANDARD OF WEIGHT AND MEASURE REPEALED**

PART I

Units of weights or mass

1 g (gram)	=	0,035 273 962 oz
1 kg (kilogram)	=	2,204 622 622 lb
1 t (tonne) also referred to as a metric ton	=	1 000 kg
1 mg (milligram)	=	0,015 432 358 gr (grains)
1 metric carat	=	3,086 47 gr (grains) = 0,2 g
1 lb (av)	=	0,453 592 37 kg
1 ton (long ton)	=	1 016,046 908 kg
1 oz	=	28,349 523 125 g

PART II

Volume and Capacity

1 m^3 (cubic metre)	=	1,307 950 6 cu yd. (cubic yards)
1 dm^3 (cubic decimetre)	=	0,035 314 667 cu ft. (cubic foot)
cm^3 (cubic centimetre)	=	0,061 023 744 cu in. (cubic inch)
1 L (litre or 1 dm^3)	=	0,219 969 25 gal (UK)
1 gal (imp)	=	4,546 09 L (litres)
pt (UK)	=	0,568 262 L (litres)
fl. oz. (UK)	=	28,413 08 mL (millilitres)
1 fl. oz. (US)	=	29,573 53 mL (millilitres)

PART III

Length		Conversion Table
1 m (metre)	=	1,093 613 yd (yard)
1 km (kilometre)		0,621 371 19 ml (miles)
1 cm (centimetre)		0,393 700 79 in (inches)
1 mm (millimetre)	=	0,039 370 079 in (inches)
1 in (inch)	=	2,54 cm or 25,4 mm
1 yd (yard)	=	0,914 4 m
1 ml (mile)	=	1,609 344 km

Area (Surface)

1 km² (quare kilometre)	=	247,105 38 ac. (acres) 0,386 102 17 sq ml (quare mile)
1 ha (hectare) = 10 000 m²	=	2,471 053 8 ac. (acres)
1 are = 100 m²	=	199,599 sq yd. (square yards)
1 m² (quare metre)	=	1,195 99 q yd. (square yards)
1 mm² (square millimetre)		0,001 55 q in. (square inches)
1 ac (acre)	=	4 046,856 4 m² or 0,404 685 6 ha
1 sq ml (square mile)	=	2,589 988 336 km² or 258,998 881 ha
1 q in. (square inch)	=	645,16 mm²
1 sq yd. (quare yard)	=	0,836 127 4 m²

NINTH SCHEDULE

. 10(2) CERTIFICATE OF APPOINTMENT OF *CHIEF INSPECTOR/* INSPECTOR

In exerci e of the power conferred upon me b section 10(2) of the Metri ation Act 1981 I hereby certify that Cdc. ..... has been appointed a *Chief Inspector/*an In pector for the purpose of thi Act.

Signature of *Chief Inspector/*Inspector.

Date

Minister

.....

Date

*Delete where inapplicable

TENTH SCHEDULE

TABLE OF FEE TO BE TAKEN BY INSPECTORS OF WEIGHTS AND MEASURES

		$ c
1.	For examining, comparing and stamping all weight within their respective jurisdiction —	
	a) Each weight from half a hundredweight to a stone, both included, or 25 kg to 5 kg	5 00
	b) Each weight under a tone to a pound, or 10 kg to 500 g	5 00
	c) Each set of weight of a pound and under, or 1 kg or under	5 00
	d) Each weighing machine and steelyard	15 00
2.	For examining, comparing and stamping all wooden mea ures within their respective jurisdictions —	$ c
	a) Each bushel or 4 L (litres)	5 00
	b) Each half bushel or 2 L (litres)	5 00
	c) Each peck, and all under 1 L (litre) or under	5 00
	d) Each yard or metre	5 00
3.	For examining, comparing and stamping all measures of capacity of liquids made of copper or other metal, within their respective jurisdictions —	$ c
	a) Each five-gallon or 25 L (litres)	5 00
	b) Each four-gallon or 20 L (litres)	5 00
	c) Each three-gallon or 15 L (litres)	5 00
	d) Each two-gallon or 10 L (litres)	5 00
	e) Each gallon or 5 L (litres)	5 00
	f) Each half-gallon or 2 L (litres)	5 00
	g) Each quart or one litre and under	5 00
4.	For examining, comparing and sealing all petrol pumps without their respective jurisdictions —	$ c
	Each petrol pump	80 00

EXPLANATORY MEMORANDUM

This Bill seeks to replace the existing imperial standards of weight and measure by the International System of Units, commonly known as metric weight and measure.

PART I of the Bill seeks to provide for the title, commencement and interpretation.

PART II seeks to set out the standards of weight and measure. During a transitional period the imperial standards of weight and measure and the International System of Units shall both be valid in Guyana. But from an appointed date the imperial standards of weight and measure shall cease to have legal force and validity in relation to any area, undertaking or class of undertaking specified in an order made under clause 3(3), and only the International System of Units shall continue to have legal force and validity in relation to that area, undertaking or class of undertaking. Where the quantity of anything weighed or measured is expressed in a manner not authorised by the provisions of this Bill the said quantity so expressed shall be deemed to be uncertain. The Minister shall provide for the use of such standards of weight and measure as he considers necessary, for their denominational equivalents, their verification, the material that they should be made of and the manner in which they should be brought into use as National Standards of Weight and Measure. The National Standards shall be kept in proper custody. Copies of such Standards shall be prepared, verified and authenticated as secondary standards. Working standards, that is, standards which have been standardised by comparison with secondary standards shall be used for the verification of weights, measures, measuring instruments or weighing instruments.

PART III seeks to provide for the appointment of a Chief Inspector of Weights and Measures and Inspectors of Weights and Measures and sets out their functions. An Inspector may at any time examine any weight, measure, weighing instrument or measuring instrument that a person uses for the purposes of trade, shall verify any of them by comparison with the working standard in his possession, stamp them as fit for use and charge prescribed fees therefor. An Inspector may, on production of his certificate of appointment to the person in charge of any place at any reasonable time, enter such place within the area assigned to him where there are goods for the purpose of trade. He may seize and detain any weight, measure, weighing instrument or measuring instrument examined by him which he believes to be false or unjust and within three days either make a complaint to the magistrate for the area in which the seizure or detention takes place or return the seized article to the person from whom it was taken.

PART IV seeks to make certain general provisions. Every weight or measure shall have its denomination marked in legible figures on its top or side. Goods shall be sold by net weight or measurement. In an effort to prevent fraud no weight, except one so made that is cased with brass, copper or iron, shall be made of soft materials such as lead or pewter. Prepackaged goods shall be sold in a container

only if the net weight or capacity measurement of those goods is marked on the container. After the appointed date, when the imperial standards of weight and measure cease to have legal force and validity, a person shall use only the metric weight or measure and shall not use its imperial standard equivalent. The Minister is empowered to make regulations for the purpose of carrying out the objects of this Bill.

PART V seeks to provide for offences and penalties and for the repeal of the Weights and Measures Act, Cap. 90: 14. The offences, for which the penalty is a fine of one thousand dollars or six months imprisonment, include failure to weigh or measure goods when required by law to do so, selling by an unauthorised denomination of weight or measure, use or a non-certified or false or unjust weight or measure or weighing instrument or measuring instrument, forging or counterfeiting a stamp or certificate issued by an Inspector or uttering such forged stamp or certificate, removing from any weight, measure, weighing instrument or measuring instrument any stamp affixed by an Inspector, hindering or obstructing or bribing an Inspector and being an Inspector, accepting a bribe. Proceedings for an offence under this Bill shall be commenced only by the Chief Inspector or any person authorised by him in writing.

Sallahuddin,
Minister, Finance, in the Ministry of Economic Planning and Finance.

(Bill No. 15/1981)
(St: 34/2/4)