

## **Suggestions for improving the new proposal for base SI units revision**

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### **Abstract**

**> We live on Earth - ball sphere, but most of the SI units are, as we live on flat Earth <**

**It's well known that throw dimensional equitation can not discover hidden physical nature laws and gave as something new, because they are only as result of our human arbitrary conventions.**

**But if the units are chosen with wrong basic postulates than they can become main reason for stagnation or for developing of human knowledge.**

**The present International System of units (SI) is not finished job. It must be improved and developed in accordance with new theoretical research projects and also with new experimental equipments and techniques.**

**So, according Resolution 12 from 23 rd General conference on Weight and Measures (2007) for refine and improving International System of Units (SI) especially for the kilogram, the Ampere and adders units, for next 24 rd General Conference (17-21 October 2011), it will be useful to improve the new proposal for base SI unit revision the SI Draft Resolution A , and some modifications and new definitions for proposed base SI unit definitions in Draft Chapter 2 for SI Brochure.**

## Introduction

There are seven principal SI base units in each of seven different categories.

quantity	symbol quantity	name (unit)	symbol (unit)
length	$l, (L)$	metre	m
mass	$m$	kilogram	kg
time	$t$	second	s
electric current	$I$	ampere	A
Temperature	$T$	kelvin	K
amount of substance	$n$	mole	mol
luminous intensity	$I_v$	candela	cd

There was two special supplementary SI (derived units) units with special names.

quantity	symbol quantity	name (unit)	symbol (unit)	definition
plane angle	$\theta$	radian	rad	$m/m = 1$
solid angle	$\Omega$	steradian	srad	$m^2/m^2 = 1$

Because of their importance at first they are named as supplementary units , but later they are named as derived units. Also there were preposition to make them base units. But now with new proposed special base units this dilemma shall be solved and they are only derived units and used only for angle calculations not for velocity and similar equations, connected with them.

# **Redefinition and improving the base SI units**

**Base for this SI units redefinition proposal are:**

## **1. The BIPM and the Metre Convention**

**Bureau International des Poids et Mesures  
The International System of Units (SI) 8 th edition 2006**

**Organisation Intergouvernementale de la Convention du Metre**

## **2 The Convocation of the General Conference on Weights and Measures - 24th meeting (17-21 October 2011)**

**On the possible future revision of the International System of Units, the SI Draft Resolution A and**

## **3. Draft Chapter 2 for SI Brochure, following redefinitions of the base units.**

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**Before any proposal for any unit redefinition, it be useful to make some suggestions for some postulates, as starting point.**

**Suggestion for basic postulates, for base or derived SI unit definition or redefinition**

- The SI units are based on experiments, measurement and numbers values of defined number of constants.**
- Every unit definition must have possibility with formulae or equitation to be expressed.**
- The introduction of base or derived units must follow common order. First or any next unit must be independent from still not defined units or constants.**
- When one unit is defined as base or derived unit, than it can be used in next base or derived unit definition.**
- Any natural constant can be introduced or present only with base or derived units, defined before.**
- Natural constant can be used for unit definition only with the natural constant number value.**

- **The condition of all experiment, in which the exact constant values will be determined, will be made after all base unit definition.**
- **Starting point for SI units definition are special base units. They are based on well known natural concepts or facts and some of them connect spherical and flat space. They will also eliminate need for rationalization of the units.**

## **Special base SI units**

**Starting from well known concepts or facts for the basic phenomena and processes in nature as well as objects and objects that appear or contains in them, the following special units will be introduced and defined, which units will be starting point for basic or derived units definition, which are used in science and in society at all.**

- 1. Distance - as space between two points**
- 2. Radius - as element of the circle**
- 3. Revolution - circle or any closed loop**
- 4. Sphere - as ball surface**
- 5. Globe - as ball at all**
- 6. Cycle or Period - natural phenomena which repeat cyclic or periodical, with magnitude and time duration**
- 7. Particle or object - any particle or object which can be count, with same characteristic**

## Table with new Special base SI units

Physical quantity		Special base SI units		
Quantity	Symbol	Name	Symbol	in SI units
distance	$L_d$	distance	d	-
radius	$L_r$	radius	r	-
revolution	$L_o$	revolution	rev	-
cycle (period)	$L_c$	cycle	cyc	-
sphere	$Sp$	ball sphere	sp	-
globe	$Gl$	globe	gl	-
particle, object	$N$	particle, object	par or ob	-

All special base units are very useful. They are all variables and also tools, literally, for extending or shorting the metre. They are universal and independent units. These units connect spherical and flat space, macro and micro cosmos and also curved and fractal space.

Dimension distance is any space as : yard, kilometer, inch, light year and so on, and when this unit is used in dimensional analysis than the unit name "distance" can be replaced with real name of the space. Using them in dimensional analysis will show that many problems with formulas and equations can be solved. And the most important benefits from using this new set of special base SI units is that the problem of the rationalizations of the units also will be solved.

Also the proposal for new unit with name object or particle(par or ob), for any objects as planets and stars or any known particles as photon, electron, proton, molecule and so on, is very useful. When this unit is used in dimensional analysis than the unit name "object or particle" can be replaced with real name of the object or the particle.

Basic units redefinition using also special base units and some of above basic postulates

**1. second, unit of time - similar to proposal in draft resolution 2, but without Kelvin, express with special base unit cycle - [cyc]**

**Present proposed definition**

The second, s, is the unit of time; its magnitude is set by fixing the numerical value of the ground state hyperfine splitting frequency of the caesium 133 atom, at rest and at a temperature of 0 K, to be equal to exactly 9 192 631 770 when it is expressed in the unit s<sup>-1</sup>, which is equal to Hz.

The next formula follow the definition for second, as base unit:

$$\Delta \nu (^{133}\text{Cs})_{\text{hfs}} = 9\,192\,631\,770 \text{ Hz}$$

The effect of this definition is that the second 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 caesium 133 atom.

The problem with this proposal is that there is no formula connected with this definition?

**New definition**

The second, s, is the unit of time; its magnitude is set by relation between the numerical value of the ground state hyperfine splitting frequency of the caesium 133 atom, by definition equal to time duration for exactly 9 192 631 770 periods to pass throw or to be count as [cyc/s], and fixing the number of periods or cycles of photon waves to be equal to exactly 9 192 631 770 as [cyc].

1 second (:=) 9 192 631 770 [cyc]

(:=) - by definition equal to

$T = L_c [\text{cyc}] / f_c [\text{cyc/s}] = 9\,192\,631\,770 / 9\,192\,631\,770 = 1 \text{ second } [\text{s}]$   
 $[\text{cyc}/\text{cyc/s}] = [\text{s}]$  by definition, **base unit of time second [s]**

$L_c = 9\,192\,631\,770 [\text{cyc}]$  - special base unit **number of periods or cycles [cyc]**

$f_c = 9\,192\,631\,770 [\text{cyc/s}]$  - cycle per second, derived unit, by definition as **cycle velocity [cyc/s]**

$[\text{cyc/s}] = [\text{Hz}]$

There are also next units by definition, using special base units, with base unit second

$f_o = L_o / T [\text{rev/s}]$  - revolution per second, derived unit by definition as **circular velocity [rev/s]**

$\omega = L_r / T [\text{r/s}]$  - radius per second, derived unit by definition as **angular velocity [r/s]**

$f_d = L_d / T [\text{d/s}]$  - distant per second, derived unit by definition as **distant velocity [d/s]**

$\omega / f_o = 2\pi [\text{r/rev}]$        $[\text{r/s} // \text{rev/s}] = [\text{r/rev}]$ , by definition equal to product of number two and  $\pi$  - **Ludolph's number**

## 2. metre, unit of length - new definition, express also with special base unit cycle - [cyc]

### Present proposed definition

The metre, m, is the unit of length; its magnitude is set by fixing the numerical value of the speed of light in vacuum to be equal to exactly 299 792 458 when it is expressed in the unit  $\text{m s}^{-1}$ .

Thus we have the exact relation  $c = 299\,792\,458 \text{ m/s}$ . The effect of this definition is that the metre is the length of the path traveled by light in vacuum during a time interval of  $1/299\,792\,458$  of a second.

### This proposal express with formulae

$L = c \text{ [m/s]} * t \text{ [s]} = 299\,792\,458 * 1/299\,792\,458 = 1 \text{ metre [m]}$  by definition, base unit metre [m]

The problem with this definition is that the base unit for time, second, is determined by definition, equal to number of periods, not with formulae. With this definition for second is hard to connect base unit metre with periods.

Because of that it be usefully to take the definition for base unit second, as base, for definition of base unit metre.

### New definition

The metre, m, is unit of length; its magnitude is set by fixing the numerical value of the ground state hyperfine splitting frequency of the caesium 133 atom, to be equal to product of number  $3.26122557175 * 10^{-2}$ , by definition equal to length of period of photon waves, and number  $1/3.26122557175^{-2} * 10$ , by definition equal to number of periods.



$$L = \lambda * n_c = 3.26122557175 * 10^{-2} * 1/3.26122557175 * 10^{-2} = 1 \text{ [m]}$$

[m/cyc \* cyc] = [m] - by definition, **base unit metre [m]**

$$\lambda = 3.26122557175 * 10^{-2} \text{ [m/cyc]} \quad \text{- cycle value, by definition, derived unit metre per cycle [m/cyc]}$$

$$n_c = 1 / 3.26122557175 * 10^{-2} \text{ [cyc]} \quad \text{- by definition, special base unit cycle [cyc]}$$

The product  $[f * \lambda] \text{ [cyc/s * m/cyc]} = [\text{m/s}]$  metre per second, by definition, derived unit **velocity [m/s]**

$$v = f_c * \lambda = 9\,192\,631\,770 \text{ [cyc/s]} * 3.26122557175 * 10^{-2} \text{ [m/cyc]} = 299792458 \text{ [m/s]} = C \quad \text{[cyc/s * m/cyc] = [m/s]}$$

$$C = 299792458 \text{ [m/s]} \quad \text{speed of light constant}$$

There are also next derived units, by definition, using special units, with base units metre.

$$D = L / L_e \text{ [m / d]} \quad \text{- metre per distance, by definition, distance value [m/d]}$$

$$R = L / L_r \text{ [m / r]} \quad \text{- metre per radius, by definition, radius value [m/r]}$$

$$O = L / L_o \text{ [m / rev]} \quad \text{- metre per revolution, by definition, revolution value [m/rev]}$$

$$O/R = 2\pi \text{ [r/rev]} \quad \text{[m/rev // m/r] = [r/rev], by definition equal to product of number two and } \square \pi \text{ - Ludolph's number}$$

There are also next derived unit products with same derived unit value for velocity as [m/s]

$$v = D * f_d = O * f_o = R * \omega = \lambda * f_c \quad \text{[m/d * d/s] = [m/rev * rev/s] = [m/r * r/s] = [m/cyc * cyc/s] = [m/s]}$$

### 3. kilogram, unit of mass - new definition, express also with special base unit particle, object - [par]

Present proposed definition

The kilogram, kg, is the unit of mass; its magnitude is set by fixing the numerical value of the Planck constant to be equal to exactly  $6.626\ 068\ 96 \times 10^{-34}$  when it is expressed in the unit  $\text{s}^{-1} \text{m}^2 \text{kg}$ , which is equal to  $\text{J s}$ .

Thus we have the exact relation  $h = 6.626\ 068\ 96 \times 10^{-34} \text{ J s} = 6.626\ 068\ 96 \times 10^{-34} \text{ s}^{-1} \text{m}^2 \text{kg}$ . The value of the Planck constant is a constant of nature, which may be expressed as the product of a number and the unit joule second, where  $\text{J s} = \text{s}^{-1} \text{m}^2 \text{kg}$ . The effect of this definition, together with those for the second and the metre which are based on fixed numerical values for the caesium frequency  $\Delta \nu(^{133}\text{Cs})_{\text{hfs}}$  and the speed of light  $c$ , is to open the way to a definition of the unit of mass through two of the most fundamental equations of physics, namely  $E = mc^2$  and  $E = h\nu$ , which relate energy  $E$  to mass and to frequency, and which together lead to  $m = h\nu/c^2$ .

One of two proposed, the most fundamental equations of physics, namely  $E = h\nu$  or  $E = h_0 f_c$  is not correct because is product of different special base units and is not unique.

If the equation for energy is express with special base units then next relations are valid.

$$h_0 = m_e \cdot v_e \cdot O \quad [\text{kg m/s m/rev}] = [\text{kg m}^2/\text{s}^2 \text{ s/rev}] = [\text{J s/rev}]$$

- Planck constant

$$h_r = m_e \cdot v_e \cdot R_e \quad [\text{kg m/s m/r}] = [\text{kg m}^2/\text{s}^2 \text{ s/r}] = [\text{J s/r}]$$

- Dirack constant

$$h_c = m_e \cdot v_e \cdot \lambda \quad [\text{kg m/s m/cyc}] = [\text{kg m}^2/\text{s}^2 \text{ s/cyc}] = [\text{J s/cyc}]$$

- De Broglie constant ?

$$E = h_0 \cdot f_o = h_r \cdot f_r = h_c \cdot f_c \quad [\text{kg m}^2/\text{s}^2] = [\text{J}] \quad \text{or}$$

$$E = h_o * f_o = m_e * v_e * O_e * f_o \quad [\text{kg m/s m/rev rev/s}] = [\text{kg m}^2/\text{s}^2] = [\text{J}]$$

$$E = h_r * \omega = m_e * v_e * R_e * \omega \quad [\text{kg m/s m/r r/s}] = [\text{kg m}^2/\text{s}^2] = [\text{J}]$$

$$E = h_c * f_c = m_e * v_e * \lambda * f_c \quad [\text{kg m/s m/cyc cyc/s}] = [\text{kg m}^2/\text{s}^2] = [\text{J}]$$

but so told fundamental equation  $E = h\nu$  or  $E = h_o f_c$  has different derived unit

$h = h_o$  - Planck constant, while

$$\nu = c [\text{m/s}] / \lambda [\text{m/cyc}] = [\text{cyc/s}] = f_c \quad \text{cycle frequency}$$

$$E = h_o * f_c = m_e [\text{kg}] * v_e [\text{m/s}] * O_e [\text{m/rev}] * f_c [\text{cyc/s}] = [\text{kg m}^2/\text{s}^2 \text{ cyc/rev}] = [\text{J cyc/rev}] \text{ De Broglie proposal}$$

This equation can't be base for base unit definition for mass, kilogram [kg]

Because the number of the electrons is taken as base to define the unit Coulomb, and with that the base unit Ampere, it be usefully to take also the number of the electrons as base, to define the basic unit kilogram.

## New definition

The kilogram, m, unit of mass; its magnitude is set by fixing the numerical value of the number to be equal to product of number of  $1.09776929 \times 10^{30}$  electrons, by definition equal to one kilogram, and number of  $1/1.09776929 \times 10^{30}$  kilograms per electron.

$$M = n_e * m_e = 1.09776929 \times 10^{30} * 1/1.09776929 \times 10^{30} [\text{el} * \text{kg/el}] = 1 \text{ kilogram [kg]} \quad \text{by definition, base unit for mass - kilogram [kg]}$$

$n_e = 1.09776929 \times 10^{30}$  [el] number of particles or electrons, by definition, special base unit **particles [par] or [el]**

$m_e = 1/1.09776929 \times 10^{30} = 9.10938215 \times 10^{-31}$  [kg/el] electron mass constant in kilogram per electron [kg/el]

The product of kilogram [kg] and squared velocity  $v^2$  by definition derived unit of energy - Joule [J].

$$E = m * v^2 = [\text{kg m}^2/\text{s}^2] = [\text{J}]$$

The product of electron mass in [kg], revolution value in [m/rev] and velocity in [m/s] of the electron, on first Hydrogen orbit, is known as constant of revolution action or Planck constant with exact value as;

$h = h_o = m_e * v_e * O_e = 6.626 06 \times 10^{-34} * 10^{-34}$  [kg m/s m/rev] by definition, constant of revolution action or Planck constant [J s/rev]

$v_e = c * \alpha = 299792458 * 7.297352537 \times 10^{-3} = 218769125.4154631$  [m/s] first electron orbit velocity in Hydrogen atom

$c = 299792458$  [m/s] speed of light constant

$\alpha = 7.297352537 \times 10^{-3}$  fine - structure constant

$O_e = 2\pi * R_e = 2\pi * 5.2917720859 \times 10^{-11} = 3.32491846192 \times 10^{-10}$  [m/rev] [r/rev \* m/r] = [m/rev]

$R_e = 5.2917720859 \times 10^{-11}$  [m/r] Bohr radius

The product of electron mass in [kg], radius value in [m/rev] and velocity in [m/s] of the electron, on first Hydrogen orbit, is known as constant of radius action with exact value as;

$h_r = m_e * v_e * R_e = 1.05457 \times 10^{-34}$  [kg m/s m/r] by definition, constant of radius action or Dirack constant [J s/r]

$h_r / h_o = 2\pi$  [r/rev] [kg m/s r/s // kg m/s rev/s] = [r/rev], by definition equal to product of number two and  $\pi$  - Ludolph's number

The product of electron mass and number 1836.15267247X as number of electrons, is known as **proton mass constant**.

$$n_p = 1836.15267247X \text{ [e]}$$

$$m_p = n_p * m_e = 1836.15267247X * 9.10938215X * 10^{-31} \text{ [e * kg/e]} = 1.672621637X * 10^{-27} \text{ [kg]}$$

The product of electron mass and number 1838.6836605X as number of electrons, is known as **neutron mass constant**.

$$n_n = 1838.6836605X \text{ [e]}$$

$$m_n = n_n * m_e = 1838.6836605X * 9.10938215X * 10^{-31} \text{ [e * kg/e]} = 1.674927211X * 10^{-27} \text{ [kg]}$$

#### 4. Coulomb, unit of electricity - new definition ( instead Ampere ), express also with special base unit particle - [par]

Present proposed definition

The ampere, A, is the unit of electric current; its magnitude is set by fixing the numerical value of the elementary charge to be equal to exactly  $1.602\ 17X * 10^{-19}$  when it is expressed in the unit s A, which is equal to C.

Thus we have the exact relation  $e = 1.602\ 17X * 10^{-19}$  C. The effect of this definition is that the ampere is the electric current corresponding to the flow of  $1/(1.602\ 17X * 10^{-19})$  elementary charges per second.

The present basic unit of electric current Ampere can't be basic unit because is defined with Coulomb. Ampere is not unique unit, because depend of special units for velocity, and because of that also can't be basic unit?

## New definition

The Coulomb, C, unit of elementary electric charge; its magnitude is set by fixing the numerical value of the number to be equal to product of number of  $6.24153 \times 10^{18}$  electrons, by definition equal to one Coulomb, and number of  $1/6.24153 \times 10^{18} = 1.60217 \times 10^{-19}$  Coulombs per electron.

$$q = n_q \cdot e = 6.24153 \times 10^{18} \cdot 1/6.24153 \times 10^{18} = 1 \text{ Coulomb [C]}$$

[el \*C/el] = [C] - by definition, base unit for **electric charge - Coulomb**

$$n_q = 6.24153 \times 10^{18} \text{ [el]}$$

$$e = q / n_q = 1 / 6.24153 \times 10^{18} = 1.60217 \times 10^{-19} \text{ [C/el]}$$

The flow or flux of one Coulomb of electrons throw circle or closed loop, with circular velocity  $f_o$  is named , by definition, derived unit for revolution electric current - **Ampere revolution (Ampere thread)**

$$I_o = Q \cdot f_o \quad [\text{C rev/s}] = [\text{A}_o]$$

The flow or flux of one Coulomb of electrons throw radius as part of the circle or closed loop, with angular velocity  $\omega$  is named , by definition, derived unit for radius electric current - **Ampere radius**

$$I_r = Q \cdot \omega \quad [\text{C r/s}] = [\text{A}_r]$$

## electron specific charge

$$k_e = e/m_e = 1.60217 \times 10^{-19} / 9.10938215 \times 10^{-31} = 1.758813 \times 10^{11} \text{ [C/kg]}$$

## proton specific charge

$$k_p = e/m_p = 1.60217 \times 10^{-19} / 1.672621637 \times 10^{-27} = 9.578795 \times 10^7 \text{ [C/kg]}$$

## 5. mol, unit of amount of substance - same as draft resolution 2, express also with special base unit particle - [par]

### Present proposed definition

The mole, mol, is the unit of amount of substance of a specified elementary entity, which may be an atom, molecule, ion, electron, any other particle or a specified group of such particles; its magnitude is set by fixing the numerical value of the Avogadro constant to be equal to exactly  $6.022\ 14 \times 10^{23}$  when it is expressed in the unit  $\text{mol}^{-1}$ .

### New definition

The mole, mol, is the unit of amount of substance of a specified elementary entity, which may be an atom, molecule, ion, electron, any other particle or a specified group of such particles; its magnitude is set by fixing the numerical value of the Avogadro constant to be equal to number to be exactly  $6.022\ 14 \times 10^{23}$  as number of particles, by definition equal to one mole, and number of  $1/6.022\ 14 \times 10^{23}$  when it is expressed in the mol per particles.

$$M = n \cdot n_m = 6.022\ 14 \times 10^{23} \cdot 1 / 6.022\ 14 \times 10^{23} = 1 \text{ [mol] [par} \cdot \text{mol/par]} = \text{[mol]} - \text{by definition, amount of substance mole [mol],}$$

$$n = 6.022\ 14 \times 10^{23} \text{ [par]}$$

$$n_m = M / n = 1 / 6.022\ 14 \times 10^{23} = 1.665393 \times 10^{-24} \text{ [mol /par]}$$

### Faraday constant

$$F = q_e / n_m = 1.60217 \times 10^{-19} // 1/6.022\ 14 \times 10^{23} = 96484.92 \text{ [C/el // el/mol]} = \text{[C/mol]}$$

### Loschmidt constant

$$V_m = 0.0224141 \text{ [m}^3\text{/mol]}$$

$$n_o = n_m / V_m = 6.022\ 14 \times 10^{23} / 0.0224141 = 2.68676 \times 10^{25} \text{ [par/m}^3\text{]} \quad \text{[ par/mol / m}^3\text{/mol]} = \text{[par/m}^3\text{]}$$

## 6. Kelvin, unit of temperature - same as draft resolution 2, with special unit particle [par] and without [J]

### Present proposed definition

The kelvin, K, is the unit of thermodynamic temperature; its magnitude is set by fixing the numerical value of the Boltzmann constant to be equal to exactly  $1.380\ 6X \cdot 10^{-23}$  when it is expressed in the unit  $\text{s}^{-2} \text{m}^2 \text{kg K}^{-1}$ , which is equal to  $\text{J K}^{-1}$ .

### New definition

The kelvin, K, is the unit of thermodynamic temperature; its magnitude is set by fixing the numerical value of the Boltzmann constant to be equal to exactly  $1.380\ 6X \text{ exp-23}$  when it is expressed in the unit  $[\text{kg m}^2 / \text{s}^2\text{K}]$  per particle.

$$k = 1.380\ 6X \cdot 10^{-23} [\text{kg m}^2 / \text{s}^2\text{K par}] = [\text{J/K par}]$$

### Molar gas constant

$$n_m = 6.022\ 14X \cdot 10^{22} [\text{par/mol}]$$

$$R = n_m \cdot k = 6.022\ 14X \cdot 10^{22} \cdot 1.380\ 6X \cdot 10^{-23} = 8.3141665X [\text{par/mol} \cdot \text{kg m}^2 / \text{s}^2\text{K par}] = [\text{kg m}^2 / \text{s}^2\text{K mol}] = [\text{J/K mol}]$$



## 7. Candela, unit of luminous intensity - same as draft resolution 2, with cycle frequency [cyc/s] and without [W]

### Present proposed definition

The candela, cd, is the unit of luminous intensity in a given direction; its magnitude is set by fixing the numerical value of the luminous efficacy of monochromatic radiation of frequency  $540 \cdot 10^{12}$  Hz to be equal to exactly 683 when it is expressed in the unit  $\text{s}^3 \text{m}^{-2} \text{kg}^{-1} \text{cd sr}$ , or  $\text{cd sr W}^{-1}$ , which is equal to  $\text{lm W}^{-1}$ .

### New definition

The candela, cd, is the unit of luminous intensity in a given direction; its magnitude is set by fixing the numerical value of the luminous efficacy of monochromatic radiation of frequency  $540 \cdot 10^{12}$  [cyc/s] to be equal to exactly 683 when it is expressed in the unit  $[\text{lm s}^3 / \text{m}^2 \text{kg}]$ .

$K_{\text{cd}} = 683 [\text{lm s}^3 / \text{m}^2 \text{kg}]$  - for monochromatic radiation of frequency  $f = 540 \cdot 10^{12}$  [cyc/s] or [Hz].

### Conclusion

Implementation of this redefined SI units, in present International System of Units (SI), will improve the system, clear the most of the existing problems in science and also gave new approach and solution for many physical laws. These new proposed base SI units definitions will enable determination of all known rest derived units and constants.

This set of derived units and constants must be part of this proposal for base SI units revision.

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