

See p. 24 of T.S. N^o 24 of 1927 } for ratifications + accessions.
and p. 12 of T.S. N^o 27 of 1930 }

International Convention of October 6, 1921,
modifying the International Convention of
May 20, 1875,

for assuring

The International Uniformity and Perfection of the Metric System,

Together with the International Convention
of 1875.

Presented to Parliament by Command of His Majesty.



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Convention internationale portant Modification (1^o) de la Convention signée à Paris le 20 Mai 1875 pour assurer l'Unification internationale et le Perfectionnement du Système métrique; (2^o) du Règlement annexé à cette Convention; conclue entre l'Allemagne, la République Argentine, l'Autriche, la Belgique, le Brésil, la Bulgarie, le Canada, le Chili, le Danemark, l'Espagne, les États-Unis d'Amérique, la Finlande, la France, la Grande-Bretagne, la Hongrie, l'Italie, le Japon, le Mexique, la Norvège, le Pérou, le Portugal, la Roumanie, l'État Serbe-Croate-Slovène, le Siam, la Suède, la Suisse et l'Uruguay.

Signée à Sèvres, le 6 Octobre 1921.

LES soussignés, plénipotentiaires des Gouvernements des Pays ci-dessus énumérés, s'étant réunis en conférence à Paris, sont convenus de ce qui suit :

ARTICLE 1^{er}.

Les articles 7 et 8 de la Convention du 20 mai 1875 sont remplacés par les dispositions suivantes :

Article 7. Après que le Comité aura procédé au travail de coordination des mesures relatives aux unités électriques, et lorsque a Conférence générale en aura décidé par un vote unanime, le Bureau sera chargé de l'établissement et de la conservation des étalons des unités électriques et de leurs témoins, ainsi que de la comparaison, avec ces étalons, des étalons nationaux ou d'autres étalons de précision.

Le Bureau est chargé, en outre, des déterminations relatives aux constantes physiques dont une connaissance plus exacte peut servir à accroître la précision et à assurer mieux l'uniformité dans les domaines auxquels appartiennent les unités ci-dessus mentionnées (article 6 et premier alinéa de l'article 7).

Il est chargé, enfin, du travail de coordination des déterminations analogues effectuées dans d'autres instituts.

Article 8. Les prototypes et étalons internationaux, ainsi que leurs témoins, demeureront déposés dans le Bureau; l'accès du dépôt sera uniquement réservé au Comité international.

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(Translation.)

International Convention Modifying the Convention signed at Paris on May 20, 1875,* for assuring the International Uniformity and Perfection of the Metric System, and the Regulations annexed to that Convention, concluded between Germany, the Argentine Republic, Austria, Belgium, Brazil, Bulgaria, Canada, Chile, Denmark, Spain, the United States of America, Finland, France, Great Britain, Hungary, Italy, Japan, Mexico, Norway, Peru, Portugal, Roumania, the Serb-Croat-Slovene State, Siam, Sweden, Switzerland and Uruguay.

Signed at Sèvres, October 6, 1921.

[British Ratification deposited February 21, 1923.]

THE undersigned, Plenipotentiaries of the Governments of the above-mentioned States, assembled in conference at Paris, have agreed as follows:—

ARTICLE 1.

Articles 7 and 8 of the Convention of the 20th May, 1875, are replaced by the following provisions:—

Article 7. After the Committee has proceeded to the work of co-ordination of measurements relating to the electrical units, and when the general Conference shall so have decided unanimously, the Bureau shall be charged with the establishment and preservation of standards of electrical units and of their reference copies ("témoins"), and also the comparison with those standards of national standards or of other standards of precision.

The Bureau is also charged with determinations concerning those physical constants, a more exact knowledge of which would serve to increase accuracy and better to assure uniformity in the spheres to which the above-mentioned units appertain (Article 6 and first paragraph of Article 7).

Finally it is charged with the duty of co-ordination of analogous determinations carried out in other institutions.

Article 8. The international prototypes and standards, as well as their principal copies ("témoins"), shall remain deposited in the Bureau; access to the place of deposit shall be reserved exclusively to the International Committee.

* See Annex.

ARTICLE 2.

Les articles 6, 8, 9, 10, 11, 12, 15, 17, 18 et 20 du Règlement annexé à la Convention du 20 mai 1875 sont remplacés par les dispositions suivantes :

Article 6. La dotation annuelle du Bureau international est composée de deux parties; l'une fixe, l'autre complémentaire.

La partie fixe est, en principe, de 250,000 fr., mais peut être portée à 300,000 fr. par décision unanime du Comité. Elle est à la charge de tous les États et des Colonies autonomes qui ont adhéré à la Convention du Mètre avant la Sixième Conférence générale.

La partie complémentaire est formée des contributions des États et des Colonies autonomes qui sont entrés dans la Convention après ladite Conférence générale.

Le Comité est chargé d'établir, sur la proposition du directeur, le budget annuel, mais sans dépasser la somme calculée conformément aux stipulations des deux alinéas ci-dessus. Ce budget est porté, chaque année, dans un Rapport spécial financier, à la connaissance des Gouvernements des Hautes Parties contractantes.

Dans le cas où le Comité jugerait nécessaire, soit d'accroître au delà de 300,000 fr. la partie fixe de la dotation annuelle, soit de modifier le calcul des contributions déterminé par l'article 20 du présent Règlement, il devrait en saisir les Gouvernements, de façon à leur permettre de donner, en temps utile, les instructions nécessaires à leurs délégués à la Conférence générale suivante, afin que celle-ci puisse délibérer valablement. La décision sera valable seulement dans le cas où aucun des États contractants n'aura exprimé, ou n'exprimera, dans la Conférence, un avis contraire.

Si un État est demeuré trois années sans effectuer le versement de sa contribution, celle-ci est répartie entre les autres États, au prorata de leurs propres contributions. Les sommes supplémentaires, versées ainsi par les États pour parfaire le montant de la dotation du Bureau, sont considérées comme une avance faite à l'État retardataire, et leur sont remboursées si celui-ci vient à acquitter ses contributions arriérées.

Les avantages et prérogatives conférés par l'adhésion à la Convention du Mètre sont suspendus à l'égard des États déficitaires de trois années.

Après trois nouvelles années, l'État déficitaire est exclu de la Convention, et le calcul des contributions est rétabli conformément aux dispositions de l'article 20 du présent Règlement.

Article 8. Le Comité international, mentionné à l'article 3 de la Convention, sera composé de dix-huit membres, appartenant tous à des États différents.

Lors du renouvellement par moitié du Comité international, les membres sortants seront d'abord ceux qui, en cas de vacances, auront été élus provisoirement dans l'intervalle entre deux sessions de la Conférence; les autres seront désignés par le sort.

Les membres sortants sont rééligibles.

ARTICLE 2.

Articles 6, 8, 9, 10, 11, 12, 15, 17, 18 and 20 of the Regulations annexed to the Convention of the 20th May, 1875, are replaced by the following provisions:—

Article 6. The annual endowment of the International Bureau consists of two parts, one fixed, the other supplementary.

In principle, the fixed part is 250,000 fr., but may be raised to 300,000 fr. by the unanimous decision of the Committee. All the States and self-governing Colonies which have acceded to the Metric Convention before the Sixth General Conference are responsible for this amount.

The supplementary part consists of the contributions of the States and self-governing Colonies which have joined the Convention after the said General Conference.

The Committee is authorised to draw up the annual budget on the proposals of the director, but without exceeding the amount calculated in accordance with the stipulations in the two preceding paragraphs. Every year this budget is brought to the notice of the Governments of the High Contracting Parties in a Special Financial Report.

Should the Committee consider it necessary either to raise beyond 300,000 fr. the fixed part of the annual endowment or to modify the calculation of the contributions determined by Article 20 of the present Regulations it must so inform the Governments in a manner permitting them to give, in good time, the necessary instructions to their delegates at the next General Conference, so that it may be able to deliberate authoritatively. The decision shall only be valid provided none of the contracting States shall have expressed or shall express at the Conference a contrary opinion.

If a State remains for three years in default with its contribution, this liability will be distributed among the other States, in proportion to their own contributions. The supplementary amounts thus paid by the States in order to make up the amount of the endowment of the Bureau will be reckoned as an advance on account of the State in arrears, and will be refunded to them if the latter pays the contributions in arrear.

The advantages and privileges attaching to accession to the Metric Convention are suspended in the case of States defaulting for three years.

After three more years the defaulting State is excluded from the Convention and the calculation of the contributions is established anew in conformity with the provisions of Article 20 of the present Regulations.

Article 8. The International Committee, referred to in Article 3 of the Convention, shall consist of eighteen members, all belonging to different countries.

At the re-election of one-half of the International Committee, the members retiring shall be, first, those who, in the event of vacancies, shall have been provisionally elected in the intervals between two sessions of the Conference; the others shall be selected by lot.

Retiring members are re-eligible.

Article 9. Le Comité international se constitue en choisissant lui-même, au scrutin secret, son président et son secrétaire. Ces nominations sont notifiées aux Gouvernements des Hautes Parties contractantes.

Le président et le secrétaire du Comité, et le directeur du Bureau, doivent appartenir à des pays différents.

Une fois constitué, le Comité ne peut procéder à de nouvelles élections ou nominations que trois mois après que tous les membres auront été informés de la vacance donnant lieu à un vote.

Article 10. Le Comité international dirige tous les travaux métrologiques que les Hautes Parties contractantes décideront de faire exécuter en commun.

Il est chargé, en outre, de surveiller la conservation des prototypes et étalons internationaux.

Il peut, enfin, instituer la coopération de spécialistes dans des questions de métrologie, et coordonner les résultats de leurs travaux.

Article 11. Le Comité se réunira au moins une fois tous les deux ans.

Article 12. Les votes au sein du Comité ont lieu à la majorité des voix ; en cas de partage, la voix du président est prépondérante. Les décisions ne sont valables que si le nombre des membres présents égale au moins la moitié des membres élus qui composent le Comité.

Sous réserve de cette condition, les membres absents ont le droit de déléguer leurs votes aux membres présents, qui devront justifier de cette délégation. Il en est de même pour les nominations au scrutin secret.

Le directeur du bureau a voix délibérative au sein du Comité.

Article 15. Le Comité international élaborera un règlement détaillé pour l'organisation et les travaux du Bureau, et il fixera les taxes à payer pour les travaux extraordinaires prévus aux articles 6 et 7 de la Convention.

Ces taxes seront affectées au perfectionnement du matériel scientifique du Bureau. Un prélèvement annuel pourra être effectué, en faveur de la Caisse de Retraites, sur le total des taxes perçues par le Bureau.

Article 17. Un règlement, établi par le Comité, fixera l'effectif maximum pour chaque catégorie du personnel du Bureau.

Le directeur et ses adjoints seront nommés au scrutin secret par le Comité international. Leur nomination sera notifiée aux Gouvernements des Hautes Parties contractantes.

Le directeur nommera les autres membres du personnel, dans les limites établies par le règlement mentionné au premier alinéa ci-dessus.

Article 18. Le directeur du Bureau n'aura accès au lieu de dépôt des prototypes internationaux qu'en vertu d'une résolution du Comité, et en présence d'au moins un de ses membres.

Le lieu de dépôt des prototypes ne pourra s'ouvrir qu'au moyen de trois clés, dont une sera en la possession du directeur des Archives de France, la seconde dans celle du président du Comité, et la troisième dans celle du directeur du Bureau.

Article 9. The International Committee shall form its own constitution by choosing its president and its secretary by ballot. These appointments shall be notified to the Governments of the High Contracting Parties.

The president and the secretary of the Committee and the director of the Bureau must belong to different countries.

Once constituted, the Committee cannot proceed to fresh elections or appointments until three months after all the members have been notified of the vacancy which has given rise to a vote.

Article 10. The International Committee directs all the metrological work which the High Contracting Parties decide to carry out in common.

It is, furthermore, entrusted with superintending the preservation of the prototypes and international standards.

Finally, it may institute the co-operation of specialists in metrological questions and co-ordinate the results of their labours.

Article 11. The Committee shall meet at least once in every two years.

Article 12. The votes of the Committee shall be by a majority; in case of equal division, the president has the casting vote. Decisions shall not be valid unless the number of members present is equal to at least half the elected members constituting the Committee. Subject to this condition, absent members are entitled to delegate their votes to members present, who must furnish proof of this delegation. The same applies in the case of appointments by ballot.

The director of the Bureau has a voice at the meetings of the Committee.

Article 15. The International Committee shall draw up detailed Regulations for the organisation and work of the Bureau and shall fix the fees to be paid for the extra-ordinary work mentioned in Articles 6 and 7 of the Convention.

These fees shall be devoted to the improvement of the scientific material of the Bureau. An annual deduction may be made on the amount of fees levied by the Bureau for the benefit of the superannuation fund.

Article 17. Regulations drawn up by the Committee shall fix the maximum strength of each class of the staff of the Bureau.

The director and his assistants shall be appointed by ballot of the International Committee. Their appointment shall be notified to the Governments of the High Contracting Parties.

The director will appoint the other members of the staff, within the limits prescribed by the Regulations referred to in the first paragraph above.

Article 18. The director of the Bureau shall have access to the place of deposit of the international prototypes only on a resolution of the Committee and in the presence of at least one of its members.

The place of deposit of the prototypes may only be opened by means of three keys, of which one shall be in the possession of the director of the Archives of France, the second in that of the president of the Committee, and the third in that of the director of the Bureau.

Les étalons de la catégorie des prototypes nationaux serviront seuls aux travaux ordinaires de comparaisons du Bureau.

Article 20. L'échelle des contributions, dont il est question à l'article 9 de la Convention, est établie, pour la partie fixe, sur la base de la dotation indiquée par l'article 6 du présent Règlement, et sur celle de la population; la contribution normale de chaque État ne peut être inférieure à 5 pour 1,000, ni supérieure à 15 pour 100 de la dotation totale, quel que soit le chiffre de la population.

Pour établir cette échelle, on détermine d'abord quels sont les États qui se trouvent dans les conditions voulues pour ce minimum et ce maximum, et l'on répartit le reste de la somme contributive entre les autres États, en raison directe du chiffre de leur population.

Les parts contributives ainsi calculées sont valables pour toute la période de temps comprise entre deux Conférences générales consécutives, et ne peuvent être modifiées, dans l'intervalle, que dans les cas suivants :

- (a.) Si l'un des États adhérents a laissé passer trois années successives sans faire ses versements ;
- (b.) Si, au contraire, un État, antérieurement retardataire de plus de trois ans, ayant versé ses contributions arriérées, il y a lieu de restituer aux autres Gouvernements les avances faites par eux.

La contribution complémentaire est calculée sur la même base de la population, et est égale à celle que les États anciennement entrés dans la Convention paient dans les mêmes conditions.

Si un État ayant adhéré à la Convention déclare en vouloir étendre le bénéfice à une ou plusieurs de ses Colonies non autonomes, le chiffre de la population desdites Colonies sera ajouté à celui de l'État pour le calcul de l'échelle des contributions.

Lorsqu'une Colonie reconnue autonome désirera adhérer à la Convention, elle sera considérée, en ce qui concerne son entrée dans cette Convention, suivant la décision de la Métropole, soit comme une dépendance de celle-ci, soit comme un État contractant.

ARTICLE 3.

Tout État pourra adhérer à la présente Convention en notifiant son adhésion au Gouvernement français, qui en donnera avis à tous les États participants et au président du Comité international des Poids et Mesures.

Toute accession nouvelle à la Convention du 20 mai, 1875 entraînera obligatoirement adhésion à la présente Convention.

ARTICLE 4.

La présente Convention sera ratifiée. Chaque Puissance adressera, dans le plus court délai possible, sa ratification au Gouvernement français, par les soins duquel il en sera donné avis aux autres Pays signataires. Les ratifications resteront déposées dans les archives du Gouvernement français. La présente Convention entrera en vigueur, pour chaque Pays signataire, le jour même du dépôt de son acte de ratification.

Standards of the same status as national prototypes shall alone serve for the ordinary work of comparisons at the Bureau.

Article 20. The scale of contributions referred to in Article 9 of the Convention is determined, as regards the fixed part, on the basis of the endowment mentioned in Article 6 of the present Regulations and on that of population; the normal contribution of each State must not be less than 5 per mille nor larger than 15 per cent. of the total endowment, whatever be the total of the population.

In order to draw up this scale, first the States which fulfil the required conditions for this minimum and this maximum are determined and the remainder of the sum to be contributed is divided among the other States in direct ratio to the total of their population.

The contributions thus calculated are valid for the whole of the time between two consecutive General Conferences and cannot be altered during the interval except in the following cases:—

- (a.) If one of the acceding States has allowed three years in succession to pass without making its payments;
- (b.) If, on the other hand, a State, previously in default for more than three years, having paid its arrears of contributions, the occasion arises to repay to the other Governments the advances made by them.

The supplementary contribution is calculated on the same basis of population, and is equivalent to that paid under like conditions by the States which previously acceded to the Convention.

If a State, party to the Convention, declares that it is desired to extend the privilege to one or more of her Colonies not enjoying self-government, the total of the population of the said Colonies shall be added to that of the State in order to establish the scale of the contributions.

When a self-governing Colony desires to accede to the Convention, it shall be considered, as regards its entry into the Convention, in accordance with the decision of the mother country, either as a dependency of the latter or as a contracting State.

ARTICLE 3.

Any State may accede to the present Convention on notifying its accession to the French Government, which will so inform all the participating States and also the President of the International Committee of Weights and Measures.

Every new accession to the Convention of the 20th May, 1875, involves the obligation of accession to the present Convention.

ARTICLE 4.

The present Convention shall be ratified. Each Power shall forward its ratification, with as little delay as possible, to the French Government, which shall notify this fact to the other signatory States. The ratifications shall remain deposited in the archives of the French Government. The present Convention shall come into force, as regards each signatory State, on the date of the deposit of its ratifications.

Fait à Sèvres, le 6 octobre 1921, en un seul exemplaire, qui restera déposé dans les archives du Gouvernement français, et dont les expéditions authentiques seront remises à chacun des Pays signataires.

Ledit exemplaire, daté comme il est dit ci-dessus, pourra être signé jusqu'au 31 mars 1922.

En foi de quoi, les Plénipotentiaires ci-après, dont les pouvoirs ont été reconnus en bonne et due forme, ont signé la présente Convention.

Pour l'Allemagne :

FORSTER.
KÖSTERS.

Pour la République Argentine :

M.-T. DE ALVEAR.
LUIS BEMBERG.

Pour l'Autriche :

MAYRHAUSER.

Pour la Belgique :

ERN. PASQUIER.

Pour le Brésil :

FRANC. RAMOS DE ANDRADE
NEVES.

Pour la Bulgarie :

SAVOFF.

Pour le Canada :

HARDINGE OF PENSHURST.
J. E. SEARS, JR.

Pour le Chili :

M. AMUNATEGUI.

Pour le Danemark :

K. PRYTZ.

Pour l'Espagne :

SEVERO GÓMEZ NUÑEZ.

Pour les États-Unis :

SHELDON WHITEHOUSE.
SAMUEL W. STRATTON.

Pour la Finlande :

G. MELANDER.

Done at Sèvres, the 6th October, 1921, in a single copy, which shall remain deposited in the archives of the French Government, and of which certified copies shall be forwarded to each of the signatory States.

The said copy, dated as above mentioned, may be signed up to the 31st March, 1922.

In faith whereof the following Plenipotentiaries, whose powers have been found in good and due form, have signed the present Convention.

✓ For Germany :

FORSTER.
KÖSTERS.

✓ For the Argentine Republic :

M.-T. DE ALVEAR.
LUIS BEMBERG.

✓ For Austria :

MAYRHAUSER.

✓ For Belgium :

ERN. PASQUIER.

✓ For Brazil :

FRANC. RAMOS DE ANDRADE
NEVES.

✓ For Bulgaria :

SAVOFF.

✓ For Canada :

HARDINGE OF PENSHURST.
J. E. SEARS, Jr.

✓ For Chile :

M. AMUNATEGUI.

✓ For Denmark :

K. PRYTZ.

✓ For Spain :

SEVERO GÓMEZ NUÑEZ.

✓ For the United States :

SHELDON WHITEHOUSE.
SAMUEL W. STRATTON.

✓ For Finland :

G. MELANDER.

Pour la France :

P. APPELL.
PAUL-JANET.
A. PEROT.
J. VIOLLE.

Pour la Grande-Bretagne :

HARDINGE OF PENSHURST.
J. E. SEARS, JR.
P. A. MACMAHON.

Pour la Hongrie :

BODOLA LAJOS.

Pour l'Italie :

VITO VOLTERRA.
NAPOLEONE REGGIANI.

Pour le Japon :

A. TANAKADATE.
SAISHIRO KOSHIDA.

Pour le Mexique :

JUAN E. URQUIDI.

Pour la Norvège :

D. ISAACHSEN.

Pour le Pérou :

G. TIRADO.

Pour le Portugal :

ARMANDO NAVARRO.

Pour la Roumanie :

ST. HEPITES.
C. STATESCU.

Pour la Serbie-Croatie-Slovénie :

M. BOCHKOVITCH.
CÉLESTIN KARGATCHIN.

Pour le Siam :

DAMRAS.

Pour la Suède :

K. A. WALLROTH.
IVAR FREDHOLM.

Pour la Suisse :

RAOUL GAUTIER.

Pour l'Uruguay :

J. C. BLANCO.

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For France :

P. APPELL.
 PAUL JANET.
 A. PEROT.
 J. VIOLE.

✓ For Great Britain :

HARDINGE OF PENSHURST.
 J. E. SEARS, JR.
 P. A. MACMAHON.

✓ For Hungary :

BODOLA LAJOS.

✓ For Italy :

VITO VOLTERRA.
 NAPOLEONE REGGIANI.

✓ For Japan :

A. TANAKADATE.
 SAISHIRO KOSHIDA.

✓ For Mexico :

JUAN F. URQUIDI.

✓ For Norway :

D. ISAACHSEN.

✓ For Peru :

G. TIRADO.

✓ For Portugal :

ARMANDO NAVARRO.

For Roumania :

ST. HEPITES.
 C. STATESCU.

✓ For the Serb-Croat-Slovene State :

M. BOCHKOVITCH.
 CELESTIN KARGATCHIN.

For Siam :

DAMRAS.

✓ For Sweden :

K. A. WALLROTH.
 IVAR FREDHOLM.

For Switzerland :

RAOUL GAUTIER.

✓ For Uruguay :

J. C. BLANCO.

ANNEX.

(Translation.)

METRIC CONVENTION.*Signed at Paris, May 20, 1875.*

[Accession of Great Britain, September 17, 1884.]

His Majesty the Emperor of Germany, His Majesty the Emperor of Austria-Hungary, His Majesty the King of the Belgians, His Majesty the Emperor of Brazil, His Excellency the President of the Argentine Confederation, His Majesty the King of Denmark, His Majesty the King of Spain, His Excellency the President of the United States of America, His Excellency the President of the French Republic, His Majesty the King of Italy, His Excellency the President of the Republic of Peru, His Majesty the King of Portugal and of the Algarves, His Majesty the Emperor of all the Russias, His Majesty the King of Sweden and Norway, His Excellency the President of the Swiss Confederation, His Majesty the Emperor of the Ottomans, and His Excellency the President of the Republic of Venezuela, being desirous of assuring the international uniformity and perfection of the metric system, have resolved to conclude a Convention for this object, and have named as their Plenipotentiaries, viz :—

(The names of the Plenipotentiaries, which are here given in the text of the Convention, with their full titles, &c., will be found as names of the signatories of the Convention.)

ARTICLE 1.

The High Contracting Parties engage to found and maintain at their common expense an *International Bureau of Weights and Measures*, scientific and permanent, its seat to be at Paris.

ARTICLE 2.

The French Government will undertake the necessary arrangements for facilitating the acquisition, or, if requisite, the construction of a building to be specially appropriated for this purpose, under the conditions specified in the Regulations annexed to the present Convention.

ARTICLE 3.

The International Bureau will execute its functions under the exclusive direction and superintendence of an *International Com-*

mittee of Weights and Measures, itself placed under the authority of a *General Conference of Weights and Measures*, formed of delegates of all the contracting Governments.

ARTICLE 4.

The President for the time being of the Academy of Sciences at Paris shall be the President of the General Conference of Weights and Measures.

ARTICLE 5.

The organisation of the International Bureau, as well as the composition and attributes of the International Committee and of the General Conference of Weights and Measures, are determined by the Regulations annexed to the present Convention.

ARTICLE 6.

The International Bureau of Weights and Measures is charged with :—

1. All comparisons and verifications of the new primary Standard Metres and Kilograms.
2. The preservation of the International Prototypes.
3. The periodical comparisons of the National Standards with the International Prototypes and their primary copies (*témoins*), and of the Standard thermometers.
4. The comparison of the new primary Standards with the fundamental standards of Weights and Measures, other than Metric, in the different countries and in scientific use.
5. The verification and comparison of geodesical instruments.
6. The comparison of Standards and scales of precision, the verification of which may be demanded either by the respective Governments, or by scientific societies, or even by artists and by men of science.

ARTICLE 7.

The *personnel* of the Bureau shall consist of a director, two assistants, and the requisite number of subordinate officers.

From and after the period of the comparisons of the new Standards, and their distribution amongst the several countries, the *personnel* of the Bureau shall be reduced in the proportion deemed proper.

The appointments of the *personnel* of the Bureau shall be notified by the International Committee to the Governments of the High Contracting Parties.

ARTICLE 8.

The international prototypes of the metre and kilogram, as well as their primary copies (*témoins*), shall remain deposited in the Bureau; access to this place of deposit shall be reserved exclusively to the International Committee.

ARTICLE 9.

All the expenses of the establishment and fitting up of the International Bureau of Weights and Measures, as well as the annual expenses of its maintenance and those of the Committee, shall be defrayed by contributions from the contracting countries, to be charged according to a scale based on their actual population.

ARTICLE 10.

The sums representing the proportion to be contributed by each contracting State shall be paid at the beginning of each year, through the office of the Minister for Foreign Affairs of France, to the *Caisse des Dépôts et Consignations* at Paris, from whence they shall be drawn as may be required by orders of the director of the Bureau.

ARTICLE 11.

The Governments which shall make use of the power reserved to every State to take part in the present Convention, shall be held chargeable with a contribution, the amount of which shall be fixed by the Committee upon the basis established by Article 9, and shall be appropriated to the amelioration of the scientific material of the Bureau.

ARTICLE 12.

The High Contracting Parties reserve to themselves the power of applying to the present Convention by common agreement all such modifications as may be found by experience useful.

ARTICLE 13.

At the expiration of a term of twelve years, any one of the High Contracting Parties may withdraw from the present Convention.

The Government that shall make use of this power of causing its provisions to cease, so far as it is concerned, shall be bound to give notice of its intention one year beforehand, and shall, by such act, renounce all its rights of common property in the International Metric Prototypes, and in the Bureau.

ARTICLE 14.

The present Convention shall be ratified according to the Constitutional laws peculiar to each State. The ratifications shall be exchanged within six months, or sooner if possible. It shall take effect from the 1st January, 1876.

In faith whereof, the respective Plenipotentiaries have signed the Convention and have affixed the seal of their arms thereto.

Done at Paris, the 20th May, 1875.

For Germany :

(L.S.) HOHENLOHE.

- For Austria-Hungary :
 (L.S.) APPONYI.
- For Belgium :
 (L.S.) BEYENS.
- For Brazil :
 (L.S.) VICOMTE D'ITAJUBA.
- For the Argentine Confederation :
 (L.S.) M. BALCARCE.
- For Denmark :
 (L.S.) L. MOLTKE-HIRTFELDT.
- For Spain :
 (L.S.) MARQUIS DE MOLINS.
 (L.S.) CARLOS IBANEZ.
- For United States :
 (L.S.) E. B. WASHBURNE.
- For France :
 (L.S.) DECAZES.
 (L.S.) C. DE MEAUX.
 (L.S.) DUMAS.
- For Italy :
 (L.S.) NIGRA.
- For Peru :
 (L.S.) S. GALVEZ.
 (L.S.) FRANCESCO DE RIVERO.
- For Portugal :
 (L.S.) JOSE DA SILVA MENDES LEAL.
- For Russia :
 (L.S.) OKOUNEFF.
- For Switzerland :
 (L.S.) KERN.
- For Turkey :
 (L.S.) HUSNY.
- For Venezuela :
 (L.S.) E. ACOSTA.

Regulations.

ARTICLE 1.

The International Bureau of Weights and Measures shall be established in a special building affording all the necessary guarantees of tranquillity and stability.

Besides the locality appropriated to the deposit of the Metric prototypes, it shall comprise rooms for fitting up the comparing instruments and balances, a laboratory, a library, a record room, working rooms for the executive officers, and lodgings for the principal and subordinate officers of the establishment.

ARTICLE 2.

The International Committee is charged with the acquisition and appropriation of this building, as well as with the fitting it up for the services for which it is destined.

In case the Committee shall not be able to obtain possession of a convenient building, they shall have one constructed under their direction, and according to their plans.

ARTICLE 3.

The French Government shall make, upon the requisition of the International Committee, all the necessary arrangements for recognising the Bureau as an institution of public utility.

ARTICLE 4.

The International Committee shall direct the construction of all the requisite instruments, such as comparing instruments for Standards of length, both line measures and end measures, apparatus for determining their absolute dilatation, balances for weighing in air and in a vacuum, comparing instruments for geodesical measures, &c.

ARTICLE 5.

The costs of acquiring or constructing a building, and the expenses of purchase and fitting up of instruments and apparatus, shall not exceed in the whole the sum of 400,000 fr.

ARTICLE 6.

The budget of annual expenditure is estimated as follows :—

(A.) For the first period during the completion and comparison of the new primary Metric Standards :—

	Frs.
(a.) Salary of Director	15,000
„ two assistants at 6,000 frs. ...	12,000
„ four sub-assistants at 3,000 frs....	12,000
Emoluments of a mechanic-porter	3,000
Wages of two messengers at 1,500	3,000
Total salaries	<u>45,000</u>

	Frs.
(b.) Remuneration to men of science and mechanical artists who may be employed by the Committee for special work, maintenance of the building, purchase, and repairs of apparatus, heating, lighting, and other office expenses	24,000
(c.) Remuneration to the Secretary of the International Committee of Weights and Measures	6,000
Total	75,000

This annual budget of the expenses of the Bureau may be modified, as may be found needful, by the International Committee, on the proposal of the Director, but shall not exceed the total amount of 100,000 frs.

Every modification within these limits that the Committee may think fit to apply to the annual budget, as fixed by the present Regulations, shall be brought under the cognisance of the contracting Governments.

The Committee may authorise the Director, on his request, to transfer the surpluses of one head of expenditure to another head of the budget thus appropriated.

(B.) For the period after the distribution of the new primary Metric Standards :—

	Frs.
(a.) Salary of the Director... ..	15,000
,, an assistant	6,000
Emoluments of a mechanic-porter	3,000
Wages of a messenger	1,500
	25,500
(b.) Office expenses	18,500
(c.) Remuneration to the Secretary of the International Committee	6,000
	50,000

ARTICLE 7.

The General Conference, mentioned in Article 3 of the Convention, shall meet at Paris, when convoked by the International Committee, at least once in every six years.

Its province will be to discuss and undertake the necessary measures for the propagation and perfecting of the Metric system, as well as to sanction the new fundamental metrological determinations which shall have been made in the intervals between its meetings. It will receive the report of the International Committee on the work done, and will proceed by ballot to re-elect one-half of the International Committee.

In the General Conference the votes will be taken according to the number of States; each State will have the right to one vote.

The members of the International Committee will take part officially in the meetings of the General Conference; they may at the same time be delegates of their Governments.

ARTICLE 8.

The International Committee, mentioned in Article 3 of the Convention, shall be composed of fourteen members, all belonging to different countries.

It shall be formed, for the first time, of the twelve members of the former permanent committee of the International Metric Commission of 1872, together with the two delegates who, at the election of this permanent committee, obtained the highest number of votes after the members elected.

At the re-election of one-half of the International Committee, the members retiring shall be, first, those who in the event of vacancies shall have been provisionally elected in the intervals between any two sessions of the Conference; the others shall be selected by lot.

The retiring members shall be re-eligible.

ARTICLE 9.

The International Committee is to direct all the operations relating to the verification of the new primary Metric Standards, and in general all the metrological operations that the High Contracting Parties shall direct to be executed in common.

It is charged, besides, with the superintendence of the preservation of the International Metric Prototypes.

ARTICLE 10.

The International Committee is to constitute itself by choosing its president and secretary by ballot. These appointments shall be notified to the High Contracting Parties.

The president and the secretary of the committee, and the director of the Bureau, must belong to different countries.

Once constituted, the Committee cannot proceed to any new election or appointment until three months shall have elapsed from the period of notice being given to all the members by the Bureau of the Committee.

ARTICLE 11.

Up to the period when all the new primary Metric Standards shall be completed and distributed, the Committee shall meet at least once a year; after this period, their meetings shall be at least biennial.

ARTICLE 12.

The votes of the Committee shall be taken by the majority of voices; in case the number is equal, the president shall have a casting vote. The decisions shall not be valid unless the number of members present is equal at least to one more than half the number of members composing the Committee.

Under this condition, the absent members shall have the right of delegating their votes to the members present, who must produce

proof of this delegation. The same rule is to apply to appointments by ballot.

ARTICLE 13.

During the interval between one session and another, the Committee is to have the right to deliberate by correspondence.

In such case, in order that the decision may be valid, it is requisite that all the members of the Committee shall have been appealed to for their opinion.

ARTICLE 14.

The *International Committee of Weights and Measures* is to fill up provisionally any vacancies which may arise in their number; these elections may be made by correspondence, each member being invited to take part in them.

ARTICLE 15.

The International Committee shall draw up detailed regulations for organising the work of the Bureau, and shall fix the fees to be paid for the extraordinary work already referred to in Article 6 of the Convention.

These fees shall be appropriated to perfecting the scientific material of the Bureau

ARTICLE 16.

All the communications of the International Committee with the *Governments of the High Contracting Parties* shall be made through the mediation of their diplomatic representatives at Paris.

In all matters requiring the intervention of a French administration, the Committee shall communicate with the French Ministry for Foreign Affairs.

ARTICLE 17.

The Director of the Bureau, as well as the assistants, shall be nominated by the International Committee by ballot.

The subordinate officers are to be nominated by the Director.

The Director is to have a voice at the meetings of the Committee.

ARTICLE 18.

The Director of the Bureau shall not have access to the place of deposit of the International Prototypes of the Metre and Kilogram, except by a special resolution of the Committee, and in presence of two of its members.

The place of deposit of the Prototypes shall be securely closed under three keys, of which one shall be kept in the possession of the Director of the Archives of France, the second in that of the President of the Committee, and the third in that of the Director of the Bureau.

The Standards which are of the same character as the national primary Metric Standards, shall alone serve for the ordinary work of comparisons at the Bureau.

ARTICLE 19.

The Director of the Bureau shall address to the Committee every year—

1. A financial report upon the accounts for the preceding period, for which, after examination and approval, he shall receive his discharge.
2. A report upon the state of the material of the Bureau.
3. A general report upon the work done during the course of the past year.

The International Committee, on their part, shall address to the Governments of all the High Contracting Parties an annual report on the whole of its scientific, technical, and administrative work, including that of the Bureau.

The President of the Committee shall render account to the General Conference of the work done since the period of its last session.

The reports and publications of the Committee and of the Bureau shall be drawn up in the French language. They shall be printed and communicated to the Governments of the High Contracting Parties.

ARTICLE 20.

The scale of contributions mentioned in Article 9 of the Convention shall be fixed as follows :—

The amount of population, expressed in millions, shall be multiplied by—

The co-efficient 3 for those countries in which the Metric System is compulsory.

The co-efficient 2 for those countries in which it is only permissive.

The co-efficient 1 for other countries.

The sum of the products thus obtained will furnish the number of units by which the whole expense must be divided. The quotient will give the amount of the unit of expense.

ARTICLE 21.

The costs of completing the International Metric Prototypes, as well as the auxiliary Standards intended to accompany them, shall be defrayed by the High Contracting Parties according to the scale fixed by the preceding Article.

The costs of comparison and of verification of the Standards demanded by the States who do not take part in the present Convention shall be regulated by the Committee in conformity with the tariff of fees to be fixed under Article 15 of the Regulations.

ARTICLE 22.

The present Regulations shall have the same force and value as the Convention to which it is annexed.

Transitory Provisions.

ARTICLE 1.

All the States represented at the International Metric Commission assembled at Paris in 1872, whether contracting parties to the present Convention or not, shall receive the primary Metric Standards they have ordered, which shall be delivered to them under all the guaranteed conditions determined by the said International Commission.

ARTICLE 2.

The first meeting of the General Conference of Weights and Measures, mentioned in Article 3 of the Convention, shall be held for the special object of sanctioning these new primary Metric Standards, and of distributing them amongst the States who have ordered them.

Consequently the delegates of all the Governments who were represented in 1872, as well as the members of the French section of the Commission, shall have the right to take part in this first meeting for concurring in the sanction of the new Standards.

ARTICLE 3.

The International Committee mentioned in Article 3 of the Convention and composed, as stated in Article 8 of the Regulations, is charged with receiving and comparing amongst themselves the new primary Metric Standards, in accordance with the scientific decisions of the International Commission of 1872, and of its Permanent Committee, reserving only such modifications as experience may in future suggest.

ARTICLE 4.

The French section of the International Commission of 1872 remains charged with the work entrusted to it of constructing the new primary Metric Standards, with the concurrence of the International Committee.

ARTICLE 5.

The costs of construction of the Metric Standards by the French section shall be reimbursed by the Governments interested, in accordance with the estimated price of each Standard, as shall be fixed by the said section.

ARTICLE 6.

The International Committee is authorised to constitute itself immediately, and to make all the preliminary arrangements requisite for carrying the Convention into effect, without incurring any expense until after the exchange of ratifications of the said Convention.
