ANNEX I

REGULATIONS FOR DETERMINING GROSS AND NET TONNAGES OF SHIPS

Regulation 1. GENERAL

(1) The tonnage of a ship shall consist of gross tonnage and net tonnage.

(2) The gross tonnage and the net tonnage shall be determined in accordance with the provisions of these regulations.

(3) The gross tonnage and the net tonnage of novel types of craft whose constructional features are such as to render the application of the provisions of these regulations unreasonable or impracticable shall be as determined by the Administration. Where the tonnage is so determined, the Administration shall communicate to the Organization details of the method used for that purpose, for circulation to the Contracting Governments for their information.

Regulation 2. DEFINITIONS OF TERMS USED IN THE ANNEXES

(1) *Upper deck*

The upper deck is the uppermost complete deck exposed to weather and sea, which has permanent means of weathertight closing of all openings in the weather part thereof, and below which all openings in the sides of the ship are fitted with permanent means of watertight closing. In a ship having a stepped upper deck, the lowest line of the exposed deck and the continuation of that line parallel to the upper part of the deck is taken as the upper deck.

(2) *Moulded depth*

(*a*) The moulded depth is the vertical distance measured from the top of the keel to the underside of the upper deck at side. In wood and composite ships the distance is measured from the lower edge of the keel rabbet. Where the form at the lower part of the midship section is of a hollow character, or where thick garboards are fitted, the distance is measured from the point where the line of the flat of the bottom continued inwards cuts the side of the keel.

(*b*) In ships having rounded gunwales, the moulded depth shall be measured to the point of intersection of the moulded lines of the deck and side shell plating, the lines extending as though the gunwales were of angular design.

(*c*) Where the upper deck is stepped and the raised part of the deck extends over the point at which the moulded depth is to be determined, the moulded depth shall be measured to a line of reference extending from the lower part of the deck along a line parallel with the raised part.

(3) *Breadth*

The breadth is the maximum breadth of the ship, measured amidships to the moulded line of the frame in a ship with a metal shell and to the outer surface of the hull in a ship with a shell of any other material.

(4) *Enclosed spaces*

Enclosed spaces are all those spaces which are bounded by the ship's hull, by fixed or portable partitions or bulkheads, by decks or coverings other than permanent or movable awnings. No break in a deck, nor any opening in the ship's hull, in a deck or in a covering of a space, or in the partitions or bulkheads of a space, nor the absence of a partition or bulkhead, shall preclude a space from being included in the enclosed space.

(5) *Excluded spaces*

Notwithstanding the provisions of paragraph (4) of this regulation, the spaces referred to in subparagraphs *(a)* to *(e)* inclusive of this paragraph shall be called excluded spaces and shall not be included in the volume of enclosed spaces, except that any such space which fulfils at least one of the following three conditions shall be treated as an enclosed space:

— The space is fitted with shelves or other means for securing cargo or stores;

— The openings are fitted with any means of closure;

— The construction provides any possibility of such openings being closed:

(*a*) (i) A space within an erection opposite an end opening extending from deck to deck except for a curtain plate of a depth not exceeding by more than 25 millimetres (one inch) the depth of the adjoining deck beams, such opening having a breadth equal to or greater than 90 per cent of the breadth of the deck at the line of the opening of the space. This provision shall be applied so as to exclude from the enclosed spaces only the space between the actual end opening and a line drawn parallel to the line or face of the opening at a distance from the opening equal to one half of the width of the deck at the line of the opening (figure 1 in appendix 1).

(*a*) (ii) Should the width of the space because of any arrangement except by convergence of the outside plating become less than 90 per cent of the breadth of the deck, only the space between the line of the opening and a parallel line drawn through the point where the athwartships width of the space becomes equal to, or less than, 90 per cent of the breadth of the deck shall be excluded from the volume of enclosed spaces (figures 2, 3 and 4 in appendix 1).

(*a*) (iii) Where an interval which is completely open except for bulwarks or open rails separates any two spaces, the exclusion of one or both of which is permitted under sub-paragraphs (*a*) (i) and/or (*a*) (ii), such exclusion shall not apply if the separation between the two spaces is less than the least half breadth of the deck in way of the separation (figures 5 and 6 in appendix 1).

(*b*) A space under an overhead deck covering open to the sea and weather, having no other connexion on the exposed sides with the body of the ship than the stanchions necessary for its support. In such a space, open rails or a bulwark and curtain plate may be fitted or stanchions fitted at the ship's side, provided that the distance between the top of the rails or the bulwark and the curtain plate is not less than 0.75 metres (2.5 feet) or one third of the height of the space, whichever is the greater (figure 7 in appendix 1).

(*c*) A space in a side-to-side erection directly in way of opposite side openings not less in height than 0.75 metres (2.5 feet) or one third of the height of the erection, whichever is the greater. If the opening in such an erection is provided on one side only, the space to be excluded from the volume of enclosed spaces shall be limited inboard from the opening to a maximum of one half of the breadth of the deck in way of the opening (figure 8 in appendix 1).

(*d*) A space in an erection immediately below an uncovered opening in the deck overhead, provided that such an opening is exposed to the weather and the space excluded from enclosed spaces is limited to the area of the opening (figure 9 in appendix 1).

(*e*) A recess in the boundary bulkhead of an erection which is exposed to the weather and the opening of which extends from deck to deck without means of closing, provided that the interior width is not greater than the width at the entrance and its extension into the erection is not greater than twice the width of its entrance (figure 10 in appendix 1).

(6) *Passenger*

A passenger is every person other than:

(*a*) The master and the members of the crew or other persons employed or engaged in any capacity on board a ship on the business of that ship; and

(*b*) A child under one year of age.

(7) *Cargo spaces*

Cargo spaces to be included in the computation of net tonnage are enclosed spaces appropriated for the transport of cargo which is to be discharged from the ship, provided that such spaces have been included in the computation of gross tonnage. Such cargo spaces shall be certified by permanent marking with the letters CC (cargo compartment) to be so positioned that they are readily visible and not to be less than 100 millimetres (4 inches) in height.

(8) *Weathertight*

Weathertight means that in any sea conditions water will not penetrate into the ship.

Regulation 3. GROSS TONNAGE

The gross tonnage (GT) of a ship shall be determined by the following formula:

$$GT = K_1 V$$

where: V = Total volume of all enclosed spaces of the ship in cubic metres,
$K_1 = 0.2 + 0.02 \log_{10} V$ (or as tabulated in appendix 2).

Regulation 4. NET TONNAGE

(1) The net tonnage (NT) of a ship shall be determined by the following formula:

$$NT = K_2 V_c \left(\frac{4d}{3D}\right)^2 + K_3 \left(N_1 + \frac{N_2}{10}\right),$$

in which formula:

(*a*) The factor $\left(\frac{4d}{3D}\right)^2$ shall not be taken as greater than unity;

(*b*) The term $K_2 V_c \left(\frac{4d}{3D}\right)^2$ shall not be taken as less than 0.25 GT; and

(*c*) NT shall not be taken as less than 0.30 GT,

and in which:

V_c = total volume of cargo spaces in cubic metres,

$K_2 = 0.2 + 0.02 \log_{10} V_c$ (or as tabulated in appendix 2),

$K_3 = 1.25 \frac{GT + 10{,}000}{10{,}000}$,

D = moulded depth amidships in metres as defined in regulation 2 (2),

d = moulded draught amidships in metres as defined in paragraph (2) of this regulation,

N_1 = number of passengers in cabins with not more than 8 berths,

N_2 = number of other passengers,

$N_1 + N_2$ = total number of passengers the ship is permitted to carry as indicated in the ship's passenger certificate; when $N_1 + N_2$ is less than 13, N_1 and N_2 shall be taken as zero,

GT = gross tonnage of the ship as determined in accordance with the provisions of regulation 3.

(2) The moulded draught (*d*) referred to in paragraph (1) of this regulation shall be one of the following draughts:

(*a*) For ships to which the International Convention on Load Lines [1] in force applies, the draught corresponding to the Summer Load Line (other than timber load lines) assigned in accordance with that Convention;

(*b*) For passenger ships, the draught corresponding to the deepest subdivision load line assigned in accordance with the International Convention for the Safety of Life at Sea [2] in force or other international agreement where applicable;

(*c*) For ships to which the International Convention on Load Lines does not apply but which have been assigned a load line in compliance with national requirements, the draught corresponding to the summer load line so assigned;

(*d*) For ships to which no load line has been assigned but the draught of which is restricted in compliance with national requirements, the maximum permitted draught;

(*e*) For other ships, 75 per cent of the moulded depth amidships as defined in regulation 2 (2).

Regulation 5. CHANGE OF NET TONNAGE

(1) When the characteristics of a ship, such as V, V_c, d, N_1 or N_2 as defined in regulations 3 and 4, are altered and where such an alteration results in an increase in its net tonnage as determined in accordance with the provisions of regulation 4, the net tonnage of the ship corresponding to the new characteristics shall be determined and shall be applied without delay.

(2) A ship to which load lines referred to in sub-paragraphs (2) (*a*) and (2) (*b*) of regulation 4 are concurrently assigned shall be given only one net tonnage as determined in accordance with the provisions of regulation 4 and that tonnage shall be the tonnage applicable to the appropriate assigned load line for the trade in which the ship is engaged.

(3) When the characteristics of a ship such as V, V_c, d, N_1 or N_2 as defined in regulations 3 and 4 are altered or when the appropriate assigned load line referred to in paragraph (2) of this regulation is altered due to the change of the trade in which the ship is engaged, and where such an alteration results in a decrease in its net tonnage as determined in accordance with the provisions of regulation 4, a new International Tonnage Certificate (1969) incorporating the net tonnage so determined shall not be issued until twelve months have elapsed from the date on which the current Certificate was issued; provided that this requirement shall not apply:

(*a*) If the ship is transferred to the flag of another State, or

(*b*) If the ship undergoes alterations or modifications which are deemed by the Administration to be of a major character, such as the removal of a superstructure which requires an alteration of the assigned load line, or

(*c*) To passenger ships which are employed in the carriage of large numbers of unberthed passengers in special trades, such, for example, as the pilgrim trade.

[1] United Nations, *Treaty Series*, vol. 640, p. 133.

[2] *Ibid.*, vol. 1184, p. 2.

Regulation 6. CALCULATION OF VOLUMES

(1) All volumes included in the calculation of gross and net tonnages shall be measured, irrespective of the fitting of insulation or the like, to the inner side of the shell or structural boundary plating in ships constructed of metal, and to the outer surface of the shell or to the inner side of structural boundary surfaces in ships constructed of any other material.

(2) Volumes of appendages shall be included in the total volume.

(3) Volumes of spaces open to the sea may be excluded from the total volume.

Regulation 7. MEASUREMENT AND CALCULATION

(1) All measurement used in the calculation of volumes shall be taken to the nearest centimetre or one twentieth of a foot.

(2) The volumes shall be calculated by generally accepted methods for the space concerned and with an accuracy acceptable to the Administration.

(3) The calculation shall be sufficiently detailed to permit easy checking.

Appendix 1

FIGURES REFERRED TO IN REGULATION 2(5)

In the following figures:

O = excluded space.
C = enclosed space.
I = space to be considered as an enclosed space. Hatched in parts to be included as enclosed spaces.
B = breadth of the deck in way of the opening. In ships with rounded gunwales the breadth is measured as indicated in figure 11.

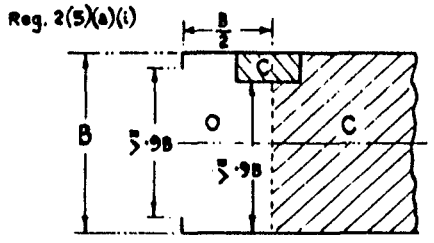

Fig. 1

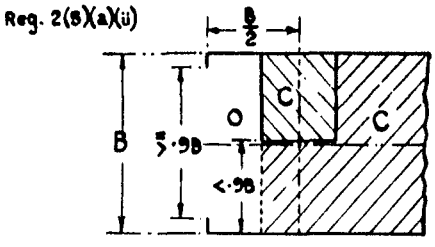

Fig. 2

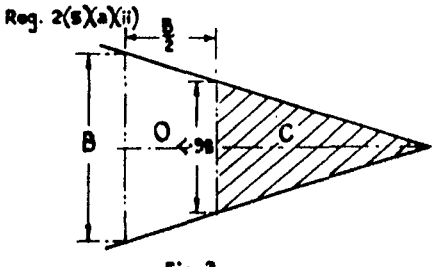

Fig. 3

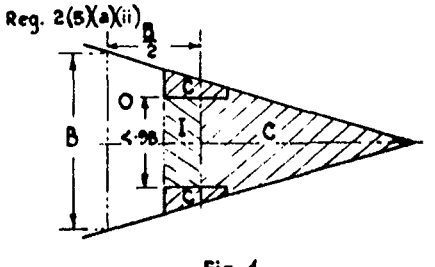

Fig. 4

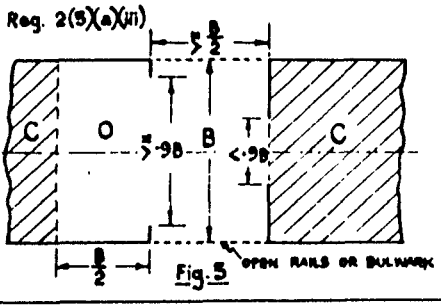

Fig. 5

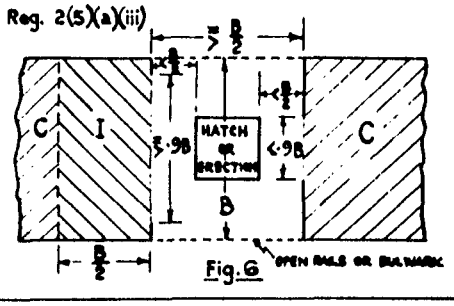

Fig. 6

Reg. 2(5)(b)

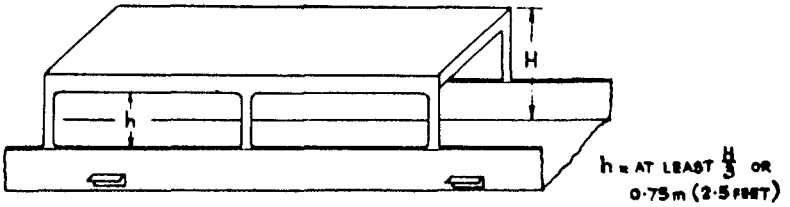

Fig. 7

Reg. 2(5)(c)

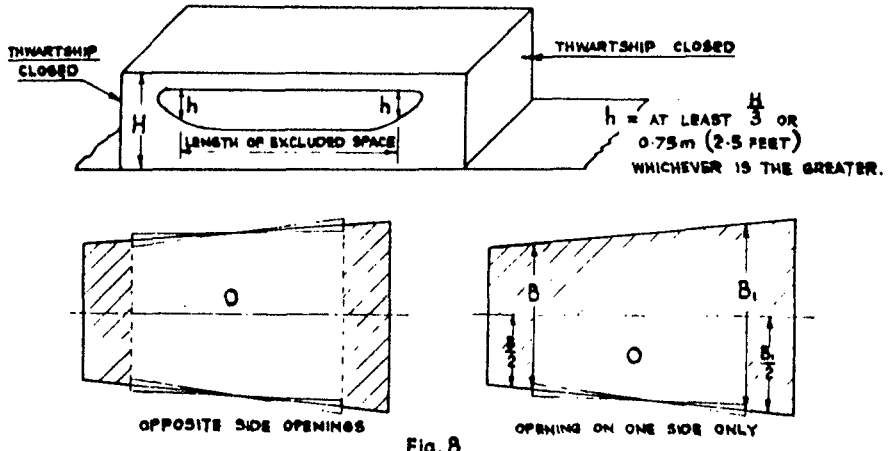

Fig. 8

Reg. 2(5)(d)

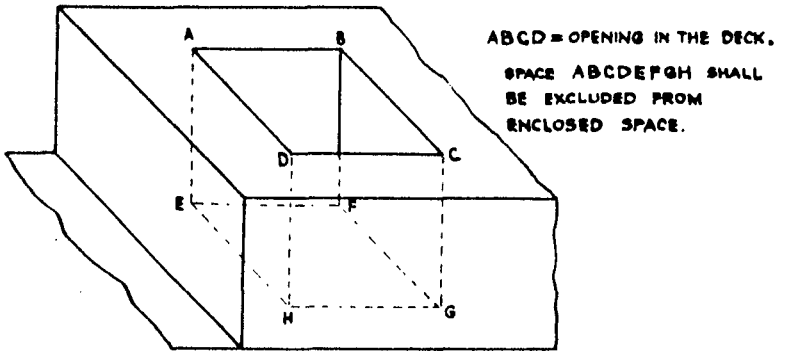

Fig. 9

Reg. 2(5)(e)

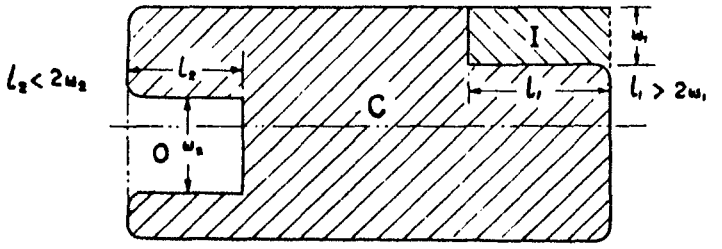

Fig. 10

SHIPS WITH ROUNDED GUNWALES

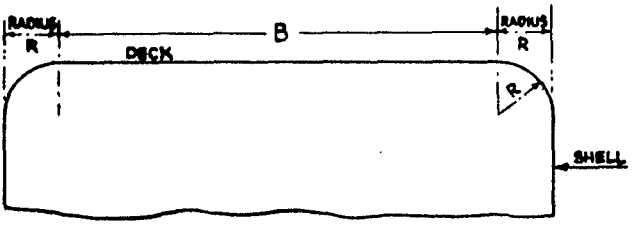

Fig. 11

Appendix 2

COEFFICIENTS K_1 AND K_2 REFERRED TO IN REGULATIONS 3 AND 4(1)

(V or V_c = volume in cubic metres)

V or V_c	K_1 or K_2	V or V_c	K_1 or K_2	V or V_c	K_1 or K_2	V or V_c	K_1 or K_2
10	0.2200	45,000	0.2931	330,000	0.3104	670,000	0.3165
20	0.2260	50,000	0.2940	340,000	0.3106	680,000	0.3166
30	0.2295	55,000	0.2948	350,000	0.3109	690,000	0.3168
40	0.2320	60,000	0.2956	360,000	0.3111	700,000	0.3169
50	0.2340	65,000	0.2963	370,000	0.3114	710,000	0.3170
60	0.2356	70,000	0.2969	380,000	0.3116	720,000	0.3171
70	0.2369	75,000	0.2975	390,000	0.3118	730,000	0.3173
80	0.2381	80,000	0.2981	400,000	0.3120	740,000	0.3174
90	0.2391	85,000	0.2986	410,000	0.3123	750,000	0.3175
100	0.2400	90,000	0.2991	420,000	0.3125	760,000	0.3176
200	0.2460	95,000	0.2996	430,000	0.3127	770,000	0.3177
300	0.2495	100,000	0.3000	440,000	0.3129	780,000	0.3178
400	0.2520	110,000	0.3008	450,000	0.3131	790,000	0.3180
500	0.2540	120,000	0.3016	460,000	0.3133	800,000	0.3181
600	0.2556	130,000	0.3023	470,000	0.3134	810,000	0.3182
700	0.2569	140,000	0.3029	480,000	0.3136	820,000	0.3183
800	0.2581	150,000	0.3035	490,000	0.3138	830,000	0.3184
900	0.2591	160,000	0.3041	500,000	0.3140	840,000	0.3185
1,000	0.2600	170,000	0.3046	510,000	0.3142	850,000	0.3186
2,000	0.2660	180,000	0.3051	520,000	0.3143	860,000	0.3187
3,000	0.2695	190,000	0.3056	530,000	0.3145	870,000	0.3188
4,000	0.2720	200,000	0.3060	540,000	0.3146	880,000	0.3189
5,000	0.2740	210,000	0.3064	550,000	0.3148	890,000	0.3190
6,000	0.2756	220,000	0.3068	560,000	0.3150	900,000	0.3191
7,000	0.2769	230,000	0.3072	570,000	0.3151	910,000	0.3192
8,000	0.2781	240,000	0.3076	580,000	0.3153	920,000	0.3193
9,000	0.2791	250,000	0.3080	590,000	0.3154	930,000	0.3194
10,000	0.2800	260,000	0.3083	600,000	0.3156	940,000	0.3195
15,000	0.2835	270,000	0.3086	610,000	0.3157	950,000	0.3196
20,000	0.2860	280,000	0.3089	620,000	0.3158	960,000	0.3196
25,000	0.2880	290,000	0.3092	630,000	0.3160	970,000	0.3197
30,000	0.2895	300,000	0.3095	640,000	0.3161	980,000	0.3198
35,000	0.2909	310,000	0.3098	650,000	0.3163	990,000	0.3199
40,000	0.2920	320,000	0.3101	660,000	0.3164	1,000,000	0.3200

Coefficients K_1 or K_2 at intermediate values of V or V_c shall be obtained by linear interpolation.

ANNEX II

INTERNATIONAL TONNAGE CERTIFICATE (1969)

(Official seal)

Issued under the provisions of the International Convention on Tonnage Measurement of Ships, 1969, under the authority of the Government of .....
(full official designation of country)
for which the Convention came into force on .....19..
by .....
(full official designation of the competent person or organization recognized under the provisions of the International Convention on Tonnage Measurement of Ships, 1969.)

Name of Ship	Distinctive Number or Letters	Port of Registry	*Date

*Date on which the keel was laid or the ship was at a similar stage of construction (Article 2(6)), or date on which the ship underwent alterations or modifications of a major character (Article 3(2)(b)), as appropriate.

MAIN DIMENSIONS

Length (Article 2(8))	Breadth (Regulation 2(3))	Moulded Depth amidships to Upper Deck (Regulation 2(2))

THE TONNAGES OF THE SHIP ARE:

GROSS TONNAGE .....

NET TONNAGE .....

This is to certify that the tonnages of this ship have been determined in accordance with the provisions of the International Convention on Tonnage Measurement of Ships, 1969.

Issued at ....19..
(place of issue of certificate) (date of issue)

.....
(signature of official issuing the certificate)
and/or
(seal of issuing authority)

If signed, the following paragraph is to be added:
The undersigned declares that he is duly authorized by the said Government to issue this certificate.

.....
(Signature)

SPACES INCLUDED IN TONNAGE					
GROSS TONNAGE			NET TONNAGE		
Name of Space	Location	Length	Name of Space	Location	Length
Underdeck	-	-			
			NUMBER OF PASSENGERS (Regulation 4(1)) Number of passengers in cabins with not more than 8 berths ..... Number of other passengers		
EXCLUDED SPACES (Regulation 2(5)) An asterisk (*) should be added to those spaces listed above which comprise both enclosed and excluded spaces.			MOULDED DRAUGHT (Regulation 4(2))		
Date and place of original measurement					
Date and place of last previous remeasurement					
REMARKS:					

FINAL ACT OF THE INTERNATIONAL CONFERENCE ON TONNAGE MEASUREMENT OF SHIPS, 1969

1. Recognizing that the establishment of a universal system of tonnage measurement for ships engaged on international voyages should constitute an important contribution to maritime transport, a Conference was held in London from 27 May to 23 June 1969, upon the invitation of the Inter-Governmental Maritime Consultative Organization, for the purpose of drawing up an International Convention on Tonnage Measurement of Ships.

2. The Governments of the following States were represented by delegations at the Conference:

Argentina
Australia
Belgium
Brazil
Bulgaria
Cameroon
Canada
China, Republic of
Czechoslovakia
Denmark
Federal Republic of Germany
Finland
France
Ghana
Greece
Guatemala
Iceland
India
Indonesia
Ireland
Israel
Italy
Japan
Korea, Republic of
Kuwait
Liberia
Malagasy Republic
Mexico
Netherlands
New Zealand
Nigeria
Norway
Pakistan
Peru
Philippines
Poland
Portugal
South Africa
Spain
Sweden
Switzerland
Union of Soviet Socialist Republics
United Arab Republic
United Kingdom
United States of America
Venezuela
Viet-Nam, Republic of
Yugoslavia

3. The Governments of the following States were represented at the Conference by observers:

Barbados
Cambodia
Holy See
Hong Kong
Iraq
Jordan
Thailand

4. The following non-governmental organizations were represented at the Conference by observers:

International Association of Ports and Harbors
International Chamber of Shipping
International Shipping Federation
Permanent International Association of Navigation Congresses

5. The Suez Canal Authority and the Panama Canal Company were also represented at the Conference by observers.

6. Admiral Edwin J. Roland (United States of America) was elected President of the Conference.

7. Mr. W. Milewski (Poland), Captain R. J. R. de Mattos (Brazil), Mr. Y. S. Kasbekar (India) and Mr. Y. K. Quartey (Ghana) were elected Vice-Presidents of the Conference.

8. The Secretary-General of the Conference was Mr. Colin Goad (Secretary-General of the Organization); the Deputy Secretary-General of the Conference was Mr. Jean Quéguiner (Deputy Secretary-General of the Organization); and the Executive Secretary of the Conference was Mr. V. Nadeinski (Secretary of the Maritime Safety Committee of the Organization).

9. The Conference established four Committees for the accomplishment of its work:

General Committee

Chairman:	Mr. R. Vancraeynest (Belgium)
Vice-Chairman:	Dr. P. Nikolić (Yugoslavia)

Technical Committee

Chairman:	Mr. L. Spinelli (Italy)
Vice-Chairman:	Mr. P. Eriksson (Sweden)

Drafting Committee

Chairman:	Mr. W. J. Madigan (United Kingdom)
Vice-Chairman:	Mr. N. I. Glukhov (Union of Soviet Socialist Republics)

Credentials Committee

Chairman:	Mr. A. von der Becke (Argentina)
Vice-Chairman:	Mr. I. C. Edet (Nigeria)

10. The documentation of the Conference, used as a basis for its discussions, included three proposals for a universal system of tonnage measurement, each consisting of a draft text of a Convention with annexed Regulations and Tonnage Certificate prepared by the Maritime Safety Committee of the Organization, together with comments thereon submitted by various Governments and additional proposals by Governments.

11. As a result of its deliberations, as recorded in the records and reports of the Committees and in the records of the Plenary sessions, the Conference prepared and opened for signature and accession the International Convention on Tonnage Measurement of Ships, 1969.

12. The Conference adopted three Recommendations arising from its deliberations. These Recommendations relate to:

(1) Acceptance of the International Convention on Tonnage Measurement of Ships, 1969.

(2) Uses of gross and net tonnages.

(3) Uniform interpretation of definitions of terms.

13. The text of this Final Act, being in a single original in the English, French, Russian and Spanish languages, together with the attached texts of the International Convention on Tonnage Measurement of Ships, 1969, and of the Recommendations of the Conference, which are in the English and French languages, shall be deposited with the Inter-Governmental Maritime Consultative Organization. Official translations of the attached Convention and Recommendations shall be prepared in the Russian and Spanish languages and shall be deposited together with this Final Act. The Secretary-General of the Organization shall send a certified copy of this Final Act and, when they have been prepared, certified copies of the official translations of the Convention and the Recommendations, to each of the Governments invited to be represented at this Conference.

IN WITNESS WHEREOF the undersigned have affixed their signatures to this Final Act.

DONE at London this twenty-third day of June one thousand nine hundred and sixty-nine.

President
Président
Председатель
Presidente

[*Signed — Signé*] [1]

Secretary-General of the Inter-Governmental Maritime Consultative Organization
Secrétaire général de l'Organisation intergouvernementale consultative de la navigation maritime
Генеральный Секретарь Межправительственной Морской Консультативной Организации
Secretario General de la Organización Consultiva Marítima Intergubernamental

[*Signed — Signé*] [2]

Deputy Secretary-General of the Inter-Governmental Maritime Consultative Organization
Secrétaire général adjoint de l'Organisation intergouvernementale consultative de la navigation maritime
Заместитель Генерального Секретаря Межправительственной Морской Консультативной Организации
Secretario General Adjunto de la Organización Consultiva Marítima Intergubernamental

[*Signed — Signé*] [3]

Executive Secretary of the Conference
Secrétaire exécutif de la Conférence
Исполнительный Секретарь Конференции
Secretario Ejecutivo de la Conferencia

[*Signed — Signé*] [4]

[1] Signed by Edwin J. Roland — Signé par Edwin J. Roland.
[2] Signed by Colin Goad — Signé par Colin Goad.
[3] Signed by Jean Quéguiner — Signé par Jean Quéguiner.
[4] Signed by V. Nadeinski — Signé par V. Nadeinski.

RECOMMENDATIONS

The following are the recommendations adopted by the Conference:

Recommendation 1. ACCEPTANCE OF THE INTERNATIONAL CONVENTION ON TONNAGE MEASUREMENT OF SHIPS, 1969

The Conference recommends that Governments should accept the International Convention on tonnage measurement of ships, 1969, at as early a date as possible.

Recommendation 2. USES OF GROSS AND NET TONNAGES

The Conference recommends that the gross tonnage and the net tonnage as determined in accordance with the provisions of the International Convention on tonnage measurement of ships, 1969, should be accepted as the parameters referred to where those terms are used in conventions, laws and regulations, and also as the basis for statistical data relating to the overall size or useful capacity of merchant ships. In addition, recognizing that the transition from existing tonnage measurement systems to the new system provided in the Convention should cause the least possible impact on the economics of merchant shipping and port operations, the Conference recommends that Contracting Governments, port authorities, and all other agencies which use tonnage as a basis for charges should carefully consider which parameter is most appropriate for their use in the light of their present practice.

Recommendation 3. UNIFORM INTERPRETATION OF DEFINITION OF TERMS

The Conference, recognizing that the definitions of certain terms used in the International Convention on tonnage measurement of ships, 1969, such as "length", "breadth", "passenger" and "weathertight", are identical to those contained in other conventions of which the Inter-Governmental Maritime Consultative Organization is depositary, recommends that Contracting Governments should take steps to ensure that identical definitions of terms used in such conventions are interpreted in a uniform and consistent manner.