## No. 1345

# BELGIUM, DENMARK, FRANCE, GREECE, IRELAND, etc.

European Regional Convention for the Maritime Mobile Radio Service (with Copenhagen Plan, statements, resolutions and recommendations). Signed at Copenhagen, on 17 September 1948

Official texts: English, French and Russian.

Registered by the United Kingdom of Great Britain and Northern Ireland on 31 July 1951.

# BELGIQUE, DANEMARK, FRANCE, GRÈCE, IRLANDE, etc.

Convention régionale européenne du service mobile radiomaritime (avec Plan de Copenhague, déclarations, résolution et recommandations). Signée à Copenhague, le 17 septembre 1948

Textes officiels anglais, français et russe.

Enregistrée par le Royaume-Uni de Grande-Bretagne et d'Irlande du Nord le 31 juillet 1951.

# No. 1345. EUROPEAN REGIONAL CONVENTION<sup>1</sup> FOR THE MARITIME MOBILE RADIO SERVICE. SIGNED AT COPENHAGEN, ON 17 SEPTEMBER 1948

# EUROPEAN REGIONAL CONVENTION FOR THE MARITIME MOBILE RADIO SERVICE

# concluded between the Governments of the following countries:

Belgium, Denmark France, Greece, Ireland, Iceland, Italy, Monaco, Norway, Netherlands, Portugal, French Protectorates of Morocco and Tunisia, United Kingdom of Great Britain and Northern Ireland, Sweden, Turkey.

#### PREAMBLE

The undersigned, plenipotentiaries of the Governments of the abovenamed countries, being assembled at Copenhagen, have, by mutual consent and subject to ratification, adopted the provisions concerning the radiocommunications of the maritime mobile service of the European Maritime Area contained in the following Convention and the Plan annexed thereto.

#### Article 1

#### Execution of the Convention and of the Plan

- 1. The contracting Governments declare that they adopt, and will implement, the provisions of this Convention and of the Plan annexed thereto.
  - The Governments undertake

—not to use for their maritime mobile service stations situated in the European Area, in the bands provided for in the Plan, any frequencies other than those mentioned in the Plan,

<sup>1</sup> Came into force on 15 March 1950, in accor The Convention has been ratified by the follow been deposited with the Government of Denmar	ving States, the instruments of ratification having
Denmark 2 February 1949	Iceland 4 February 1950
Netherlands 6 October 1949	Norway 14 February 1950
Belgium 6 December 1949	France (including French
United Kingdom (including	Morocco and Tunisia) 19 March 1950
Cyprus, Gibraltar and	Monaco 29 June 1950
Malta) 15 December 1949	Ireland 17 July 1950
Sweden 2 January 1950	- ·

—nor to instal nor to put into operation, in the bands provided for in the Plan, any maritime mobile service stations other than those mentioned in the Plan,

except under the conditions provided for in Article 10.

#### Article 2

Prohibition of the use of Ship Station frequencies by Coast Stations

The contracting Governments undertake, pursuant to the provisions of Article 33, § 8 (1) and (2) of the Radio Regulations, not to assign to their Coast Stations frequencies in the bands:

421—429 kc/s 450—458 kc/s 464—472 kc/s 476—484 kc/s 510—516 kc/s

except, as regards the last band, the frequency of 512 kc/s as provided for in the said Article 33,  $\S$  8 (3).

#### Article 3

#### DEFINITIONS

In this Convention:

- (1) the words "International Telecommunication Convention" denote the International Telecommunication Convention signed at Atlantic City in 1947,1 or any revision thereof which may be substituted therefor after the entry into force of such revision;
- (2) the words "Radio Regulations" denote the Radio Regulations annexed to the International Telecommunication Convention signed at Atlantic City in 1947, or any revision thereof which may be substituted therefor after the entry into force of such revision;
- (3) the word "Plan" denotes the Copenhagen Plan annexed to this Convention or any revision thereof which may be substituted therefor;
- (4) the word "Administration" denotes a governmental administration of a contracting Government;

<sup>&</sup>lt;sup>1</sup> United Kingdom: Cmd. 7466.

- (5) the words "General Secretary of the Union" denote the General Secretary of the International Telecommunication Union;
  - (6) the expression "European Maritime Area" denotes the area bounded:

on the North by a line extending along parallel 72° North from its intersection with meridian 55° East to its intersection with meridian 5° West, then along meridian 5° West to its intersection with parallel 67° North, thence along parallel 67° North to its intersection with meridian 30° West;

on the West by a line extending along meridian 30° West to its intersection with parallel 30° North;

on the South by a line extending along parallel 30° North to its intersection with meridian 43° East;

on the East by a line extending along meridian 43° East to its intersection with parallel 60° North, thence along parallel 60° North to its intersection with meridian 55° East and thence along meridian 55° East to its intersection with parallel 72° North.

#### Article 4

#### RATIFICATION OF THE CONVENTION

- 1. This Convention shall be ratified.
- 2. The instruments of ratification shall be deposited, in as short a time as possible, in the archives of the Government of Denmark, which shall notify the other signatory Governments and acceding Governments, and the Secretary General of the Union, of each ratification.
  - 3. Ratification shall include approval of the Plan.

#### Article 5

#### Accession to the Convention

- 1. The Government of a country of the European Maritime Area which is a Member of the International Telecommunication Union, and not a signatory of this Convention, may accede to it at any time. Such accession shall be notified to the Government of Denmark, shall extend to the Plan and shall be without reservations.
- 2. The instruments of accession shall be deposited in the archives of the Government of Denmark. The latter shall inform all signatory and all acceding Governments as well as the Secretary General of the Union.

3. The accession shall take effect on the day of deposit of the instruments of accession unless they contain any stipulation to the contrary.

#### Article 6

#### DENUNCIATION OF THE CONVENTION

- 1. Any Government which has ratified or acceded to this Convention and the Plan annexed thereto shall have the right at any time to denounce them by a communication sent to the Government of Denmark, which shall inform the other contracting Governments and the Secretary General of the Union.
- 2. Such a denunciation shall take effect after the expiry of one year from the date of receipt of the communication thereof by the Government of Denmark.

#### Article 7

#### ABROGATION OF THE CONVENTION AND OF THE PLAN

- 1. This Convention and Plan shall be abrogated between all the contracting Governments as from the entry into force of a new Convention. The Plan shall be abrogated as from the entry into force of a new Plan.
- 2. In the event of a contracting Government not approving a new Plan, the Convention shall be abrogated in relation to such Government as from the entry into force of the new Plan.

#### Article 8

#### REVISION OF THE CONVENTION AND OF THE PLAN

- 1. The revision of the Convention and of the Plan shall be undertaken by a Conference of Plenipotentiaries of the Governments of the European Maritime Area. The Conference shall be convened as soon as possible, and within eighteen months at the latest after the close of the next Radio Administrative Conference. However, the meeting of the Delegates of the countries of the European Maritime Area, which shall be held during the Radio Administrative Conference, to establish all directives for the European Maritime Conference, may take a contrary decision concerning the convening of the Conference and/or the interval within which it is to be convened.
- 2. In addition, the revision of the Convention and of the Plan may be undertaken by a Conference of Plenipotentiaries when a request, accompanied by reasoned proposals, is made by ten contracting Governments, after prior mutual agreement, to the Secretary General of the Union.

#### Article 9

# INITIAL ADJUSTMENTS

For a period of six months from the date of the entry into force of this Convention, Administrations may, by mutual agreement with the Administrations concerned, make modifications, having a maximum variation of plus or minus one kilocycle, to the frequencies contained in the Plan for their coast stations, so as to avoid harmful interference.

#### Article 10

#### MODIFICATION OF THE PLAN

- 1. Except in the case of initial maximum adjustments of 1 kc/s in frequencies (Article 9), any Administration wishing to alter the characteristics (such as frequency, power, geographical position, etc.) of one of the coast stations included in the Plan, or to set up a new coast station shall inform the other Administrations which it considers to be directly concerned.
- 2. If agreement is reached between these Administrations the Secretary General of the Union shall be informed and shall inform all other Administrations. The Secretary General shall take all the necessary measures to ensure that communications are received by the said Administrations.
- 3. Any Administration which considers that such agreement may affect its own services unfavourably shall notify its observations, through the Secretary General of the Union, within a period of six weeks from the date of receipt of the communication from the Secretary General of the Union. Until the expiry of this period the modification shall not be adopted. Any Administration which does not reply before the expiry of this period shall be considered to have given its assent. After the expiry of the same period, the proposals may be adopted if no objection has been raised, or if all Administrations concerned have agreed.
- 4. Where agreement is not reached under the provisions of paragraph 3 above, the Administrations in disagreement may refer the dispute to an expert or experts acceptable to all parties to the disagreement, or may adopt any other method of settlement mutually agreed upon. If none of these methods of settlement is adopted, any Administration party to a dispute may submit the dispute to arbitration in accordance with the procedure defined in Annex 3 to the International Telecommunication Convention.

#### Article 11

# NOTIFICATION OF FREQUENCIES

1. Frequencies allocated by the Plan to stations of the Maritime Mobile Service shall bear, as the date of notification in the International Frequency List, the date of signature of this Convention.

- 2. Any change in the frequencies allocated by the Plan, made in conformity with the provisions of Articles 9 and 10, shall be notified as soon as possible in accordance with the provisions of Article 11, Section II of the Radio Regulations.
- 3. Any change in a frequency allocated by the Plan, made in conformity with the provisions of Article 9, shall retain the date of notification of the initial frequency.

#### Article 12

#### GENERAL TECHNICAL PROVISIONS

- 1. Administrations shall take the necessary steps:
- (a) to ensure, with due regard to the latest technical progress, that their coast stations keep to the nominal frequency allocated to them, according to the standards permitted for the category of frequency used;
- (b) to avoid, in transmissions from coast stations, any spurious frequencies liable to cause harmful interference to other stations;
- (c) to remedy as rapidly as possible breaches which may be brought to their notice.
- 2. When the use of a frequency by a coast station causes harmful interference which had not been foreseen at the time of signing this Plan, the Administrations concerned shall endeavour to reach agreements with a view to eliminating such harmful interference, having regard to the provisions of the Plan.

#### Article 13

#### CONFERENCE EXPENSES

- 1. The expenses of European Maritime Regional Radio Conferences shall be a charge on participating Governments and international organisations admitted to the Conferences.
- 2. The final apportionment and payment of the expenses of these Conferences shall be made in accordance with the provisions of Article 14 of the International Telecommunication Convention.

#### Article 14

ENTRY INTO FORCE OF THE CONVENTION AND OF THE PLAN

This Convention and the Plan annexed thereto shall enter into force on 15th March 1950 at 0200 hours (Greenwich Mean Time).

This Convention and the Plan annexed thereto shall abrogate and replace: The Regional Arrangement for the Baltic Sea;

The Regional Arrangement for the English Channel and the North Sea; The Regional Arrangement for the Atlantic and the Coast of North Africa; The Regional Arrangement for the Mediterranean;

concluded at Montreux on 12th April, 1939, as between the Administrations concerned.

In WITNESS WHEREOF, the Plenipotentiaries of the above-named Governments have signed this Convention in each of the English, French, and Russian languages, in a single copy, in which in case of dispute, the French text shall be authentic, and which shall remain deposited in the archives of the Government of Denmark and one copy of which shall be forwarded to each signatory Government and to the Secretary General of the Union.

Done at Copenhagen, 17th September 1948.

For Belgium:

R. CORTEIL

For Denmark:

N. E. HOLMBLAD GUNNAR PEDERSEN

T. C. CHRISTENSEN

K. Svenningsen

For France:

J. M. Biansan

For Greece:

S. Eleftheriou

For Ireland:

T. J. Monaghan

For Iceland:

GUNNLAUGUR BRIEM

For Italy:

Antonio Pennetta

G. GNEME

For Monaco:

A. Crovetto

For Norway:

OLAF MOE

PAUL FALNES

For the Netherlands:

J. D. H. van der Toorn

J. Kuyper

For Portugal:

JORGE MAIA RAMOS PEREIRA

For the French Protectorates of Morocco and Tunisia:

PIERRE SCHAEFFER

For the United Kingdom of Great Britain and Northern Ireland:

H. FAULKNER

R, M. BILLINGTON

(We declare that our signatures in respect of the United Kingdom of Great Britain and Northern Ireland also cover Gibraltar, Malta and Cyprus.)

For Sweden:

ERIK ESPING

THOMAS ÖVERGAARD

KARL EKSTRÖM

For Turkey:

TASHIN ARMAY

#### COPENHAGEN PLAN

for the distribution of frequencies between the coast stations of the European Maritime Area

annexed to the European Regional Convention for the Maritime Mobile Radio Service

#### PREAMBLE

#### Section I.—General Provisions

#### Article 1

#### **Definitions**

1. In this preamble and in the Frequency Allocation Plan which follows it, technical terms are used in accordance with the definitions contained in Article 1 of the Radio Regulations of Atlantic City (1947). Any necessary additional definitions are given in paragraph 2 of this Article.

#### 2. In this Plan:

- (1) The word "Convention" denotes the European Regional Convention for the Maritime Mobile Radio Service of Copenhagen (1948);
- (2) The words "Radio Regulations" denote the Radio Regulations as defined in Article 3 (2) of the Convention;
- (3) The word "Plan" denotes the Copenhagen Plan annexed to the Convention as defined in Article 3 (3) of the Convention;
- (4) The words "European Maritime Area" denote the area defined in Article 3 (6) of the Convention;
- (5) The word "power" denotes the peak power of a radio transmitter as defined in Article 1 (Number 61) of the Radio Regulations.

#### Article 2

#### Power

- 1. The powers indicated for the coast stations in the Plan are the maximum powers that may be used.
- 2. The powers indicated for the coast stations in the Plan are those which are capable of giving good working conditions during the hours of daylight

as regards mutual interference between stations, but it is recommended that during the hours of darkness less power be used, especially as regards those stations which have a power of more than 0.5 kW, except in case of necessity.

#### Article 3

# Use of Frequencies

- 1. In the Plan, frequencies in the bands 415—490 kc/s and 510—525 kc/s, allocated for the Maritime Mobile Service in accordance with the provisions of the Radio Regulations, are assigned to coast stations.
  - 2. No frequency assignment has been made to coast stations
- —in the band 405—415 kc/s allocated essentially to the Radio Direction-Finding Service,
- -in the band 490-510 kc/s reserved for distress, calling and reply,
- -among the frequencies

425 kc/s 454 kc/s 468 kc/s 480 kc/s 512 kc/s

reserved for ship stations, account being taken of the provisions of Article 33, § 8, (3), (Number 732) of the Radio Regulations in the case of the frequency 512 kc/s.

- 3. (1) In the Plan the separation between adjacent channels used by coast stations is, in most cases, 3 kc/s. However, it has proved necessary, in a few exceptional cases, to reduce this separation in order to allow of a fuller use of the frequency bands.
- (2) The separation between adjacent channels, used by coast stations on the one hand and by ship stations on the other, is 4 kc/s.
  - (3) The following frequencies are assigned to coast stations:

416 kc/s	438 kc/s	461 kc/s	489 kc/s
418 kc/s	441 kc/s	464 kc/s	516 kc/s
421 kc/s	444 kc/s	472 kc/s	519 kc/s
429 kc/s	447 kc/s	476 kc/s	522 kc/s
432 kc/s	450 kc/s	484 kc/s	524 kc/s
435 kc/s	458 kc/s	487 kc/s	

Exceptionally, the frequencies 419.5 and 474 kc/s are assigned to the following stations:

419.5 kc/s to Rouen-Port Radio

474 kc/s to Elbe-Weser Radio

474 kc/s to Kemi Radio

474 kc/s to Kiel Radio

474 kc/s to Tobruch Radio

474 kc/s to Trieste Radio.

(4) In preparing the Plan a frequency tolerance of 0.1 per cent. for coast station transmitters and 0.3 per cent. for ship station transmitters has been adopted.

#### Article 4

# Type of Emission

With a view to eliminating or minimising interference between adjacent channels it is recommended that type A1 emissions be used as far as possible by coast and ship stations, when operating on their working frequencies.

#### Article 5

# Interference caused by stations operating in derogation

- 1. In accordance with the decisions taken by the European Broadcasting Conference of Copenhagen (1948), no broadcasting stations other than those mentioned in the Plan shall be permitted in derogation in the band 415—485 kc/s and 515—525 kc/s allocated to the maritime mobile service and they shall not cause harmful interference to stations of that service.
- 2. If unforeseen interference occurs, the Administrations concerned will do their utmost to obtain agreements capable of eliminating this interference and, in such cases, the maritime mobile service will take precedence over the broadcasting service.

#### SECTION II

# Tables showing Distribution of Frequencies

1. (1) Table I below shows the distribution of frequencies among the coast stations of the European Maritime Area classified in numerical order of frequencies.

- (2) Stations using the same frequency are shown in the Table in the alphabetical order of the countries to which they belong, and stations of the same country are shown in the alphabetical order of their official designations.
- 2. (1) Table II below shows the distribution of frequencies among the coast stations of the European Maritime Area classified in alphabetical order of the countries to which they belong.
- (2) Stations of the same country in the Table are shown in the alphabetical order of their official designations.
- 3. Tables I and II provide for the assignment of frequencies both to the contracting countries of the European Maritime Area and to the countries non-signatories of the Convention.

#### **PLAN**

## for the Distribution of Frequencies between the Coast Stations of the European Maritime Area

- (1) The frequencies 416 and 487 kc/s used by Gouesnou Radio may be used by Le Couquet Radio when it replaces this station.
- (2) The frequency of 447 kc/s allocated to Swinoujscia Radio may be used by Gdynia Radio (421 kc/s) when necessary.
- (3) The frequencies provided for Ostende Radio (435 kc/s) and for Anvers Radio (489 kc/s) may be used reciprocally by Anvers Radio and Ostende Radio.
- (4) The frequencies provided for Rijeka Radio (438 kc/s) and for Split Radio (484 kc/s) may be used reciprocally by Split Radio and Rijeka Radio.
- (b) In the case of the Spanish Coast Stations, the power indicated is that given in the Berne List of Coast and Ship Stations for 1939.
- (6) In the absence of any request for frequencies for a coast stations in Palestine, provision has been made in the plan for one frequency of 489 kc/s with a maximum permitted power of 1 kW, to be used by that country.
- (7) The Italian stations listed on 524 kc/s will only use this frequency for meteorological bulletins and will use emissions of type A 2 with a peak power of 2 kW.

Freq. kc/s	Barents and White Seas	Baltic Sea	English Channel and North Sea	Atlantic	Mediterranean	Black Sea
416	Arkhangelsk Radio (1.0) RSFSR	Karlskrona Radio (1.0) Sweden Stavsnäs Radio (1.0) Sweden		Gouesnou Radio¹) (1.0) France Bergen, Norge Radio (2.0) Norway	Alger Radio (1.0) France	Kertch Radio (CO/0.5) RSFSi Istanbul Radio (0.8) Turke Samsun Radio (2.0) Turke
418		Tingstäde Radio (1.0) Sweden	North Foreland Radio (0.5) G. Britain	Siglufjördur Radio (0.1) Iceland Vestmannaeyjar Radio (0.1) Iceland Apulia Radio (CO/1.0) Portugal Boa Nova Radio (CO/0.35) Portugal Cascais Radio (CO/0.35) Portugal Faro Radio (CO/0.75) Portugal Monsanto Radio (CO/2.5) Portugal Montijo Radio (CO/1.0) Portugal Sagres Radio (CO/0.35) Portugal	Athinai Radio (1.5) Greece	Nikolaev Radio (CO/1.0) Ukraine (SSK Osipenko Radio (0.5) Ukraine (SSK

Freq. kc/s	Barents and White Seas	Boltic Sea	English Channel and North Sea	Atlantic	Mediterranean	Black Sea
418				Flores Radio (CO/0.45) Portugal (Axores) Horts Radio (CO/2.0) Portugal (Axores) Ponta Delgada Radio (CO/0.45) Portugal (Axores) Santa Maria Radio (CO/0.45) Portugal (Azores) Funchal Radio (CO/0.35) Portugal (Madeira)		
419.5			Rouen-Port Radio (0.2) France			
420		Östersund Broadcasting Station*) (10.0) Sweden				
421		Gdynia Radio <sup>2</sup> ) (1.0) Rep. of Poland	Scheveningen Radio (2.0) Netherlands	Malin Head Radio (0.5) Ireland Ponta Delgada Radio (0.5) Portugal (Azores)	Ismailia Radio (0.5) Egypt Agde Radio (5.0) France Corinth Radio (0.2) Greece	Burgas Radio (0.5)  Bulgaria (PR)  Evpatoria Radio (0.25)  Poti Radio (0.25)  USSR

Directional serial, protection South-West.

· Directional aerial, protection South-West,

Black Sea	Ships	Novorossiisk Radio (0.5) RSFSR Otchakov Radio (CO/0.5) Ukraine (SSR)	Genitchesk Radio (0.05) Ukraine (SSR) Ismail Radio (1.0) Ukraine (SSR)		Feodosia Radio (0.5) RSFSR Tuapse Radio (0.07) RSFSR
Mediterransan	Ships	Augusta Radio (1.0) Italy Venezia Radio (1.0) Italy	Marseille Radio (1.0) France Rhodos Radio (0.5) Greece Brindisi Radio (1.0) Italy		Napoli Radio (1.0) Italy Bengasi Radio (1.0) Libya
Adantic	Ships	Valentia Radio (1.0) Ireland	StNazaire Radio (1.0) France Wick Radio (1.2) G. Britain		Lisboa Radio (3.0) Portugal
English Chamel and North Sea	Ships	Blaavand Radio (0.9) Dennark Calais Radio (0.1) France (0.1) France (0.1) France (0.1) France (0.1) France Harbour Radio (0.25) G. Britain Newhaven, Sussex Radio (0.25) G. Britain Newhaven, Sussex Radio (0.25) G. Britain Newhaven, Sussex Radio (0.25) G. Britain Radio (0.5)			Ostende Radio <sup>3</sup> ) (Anvers Radio, (2.0) Belgium
Baltic Sea	Ships	Vindava Radio (0.5) Latvia (SSR)	Ruegen Radio (1.0) Germany (USSR Zone)	Oulu Broadcasting Station*) (10.0) Finland	Gdansk Radio (1.0) Rep. of Poland Kolobrzeg Radio (0.5) (0.5) Swirousjscia Radio (2.0) Rep. of Poland
Barents and White Sear	Ships				
Freq. kc/s	425	429	432	433	435

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Freq. kc/s	Barents and White Seas	Baltic Sea	English Channel and North Sea	Atlantic	Meditorranean	Black Sea
438		Helsinki Radio (1.0) <i>Finland</i> Mariehamn Radio (1.0) <i>Finland</i>	Tjöme Radio (1.0) <i>Norway</i>	Land's End Radio (5.0) G. Britain Hammerfest Radio (1.0) Norway	Oran-Aïn el- Turk Radio (0.5) France Rijeka Radio <sup>4</sup> ) (0.5) Yugoslavia (FPR) Split Radio (1.0) Yugoslavia (FPR)	Temruk Radio (0.25) RSFSK Nikolaev Radio (0.3) Ukraine (SSR
441	Onega Radio (0.25) RSFSR	Libava Radio (0.5) Latvia (SSR)	Humber Radio (0.5) G. Britain	Casablanca Maroc Radio (2.0) Morocco Rörvik Radio (1.0) Norway Cabo Mayor Radio <sup>5</sup> ) (0.5) Spain	Bizerte Radio (0.5) Tunisia	Taganrog Radio (0.1) RSFSI Istanbul Radio (3.0) Turkey
444	Khodovaríkha Radio (CO/0.1) RSFSR	Tolkmicko Radio (0.25) Rep. of Poland Viborg Radio (0.5) USSR	Norddeich Radio (1.0) Germany (Brit. Zone)	Lorient Radio (1.0) France Tromsö Radio (1.0) Norway Madeira Radio (0.5) Portugal (Madeira)	Alexandria Radio (2.0) Egypt Maddalena Radio (La) (0.5) Italy	Khorly Radio (CO/0.5) Ukraim (SSR Mariupol Radio (0.5) Ukraim (SSR
447	Kandalakcha Radio (0.12) RSFSR	Darlowo Radio (0.5) Rep. of Poland Swinoujscia Radio <sup>3</sup> ) (1.0) Rep. of Poland		Thorshavn Radio (1.0) Denmark (Faroe Islands) Bayonne Radio (1.0) France) Seaforth Radio (0.5) G. Britain Tanger Radio (2.0) Morocco	Dubrovnik Radio (0.12) Yugoslavia (FPR)	Adler Radio (CO/0.07) RSFSF Odessa Radio (0.75) Ukrain (SSR

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Freq. Ac/s	Barents and White Seas	Baltic Sea	English Channel and North Sea	Atlantic	Mediterranean	Black Sea
450	Kem Radio (0.1) RSFSR	Tallinn Radio (0.5) Estonia (SSR)	Boulogne-sur-Mer Radio France (1.0) France Göteborg Radio (1.0) Sweden	Boa Nova Radio (CO/0.35) Portugal Sagres Radio (CO/0.35) Portugal Funchal Radio (CO/0.35) Portugal (Madena)	Larnaca Radio (1.0) Cyprus Frapani Radio (1.0) Italy Soller Radio (Palma de Mallorca Radio) <sup>§</sup> ) (0.5) Spain	Eisk Radio (0.5) RSFSR Sukhumi Radio (0.5) USSR
454	Ships	Ships	Ships	Ships	Ships	Ships
458	Murmansk Radio (1.0) RSFSR	Gdynia Radio (2.0) Rep. of Poland Szczecin Radio (1.0) Rep. of Poland	Cherbourg- Rouges-Terres Radio (0.5) France Stonehaven Radio (0.5) G. Britain	Montijo Radio (CO/1.0) Portugal Horta Radio (CO/2.0) Portugal (Azores)	Toulon La Crau Radio (2.0) France Izmir Radio (2.0) Turkey	Bokovo Radil (0.005) RSFSR Kertch Radio (1.0) RSFSR
461	Belomorsk Radio (1.25) RSFSR	Köbenhavn- Lyngby Radio (CO/L.0)  Tallinn Radio (1.0) Estonia (SSR)	Scheveningen Radio (2.0) Netherlands	Bordeaux-Port Radio (1.0) France Agadir Radio (0.2) Morocco	Tripoli Liban Radio (0.5) <i>Lebanon</i> Malta Radio (3.0) <i>Malta</i>	Constanta Radio (2.0) Roumanian (PR) Akhtari Radio (CO/0.5) RSFSR Gagry Radio (0.07) USSR
464		Klaipeda Radio (0.25) Lithuania (SSR) Boden Radio (1.0) Sweden Härnösand Radio (1.0) Sweden	Skagen Radio (0.35) Denmark Niton Radio (0.5) G. Britain	Mallaig Radio (0.35) G. Britain	Gibraltar Radio (5.0) Gibraltar Athmai Radio (0.2) Greece Spezia Radio (La) (1.0) Italy	Ialta Radio (0.3) RSFSR Rostov, Don Radio (0.25) RSFSR

Freq.	Barents and White Seas	Baltic Sea	English Channel and North Sea	Atlantic	Mediterranean	Black Sea
468	Ships	Ships	Ships	Ships	Ships	Ships
472	Murmansk Radio (0.3) RSFSR	Kaliningrad Radio (1.0) RSFSR	Havre-Port Radio (Le) (0.2) France Dunkerque-Port Radio (0.15) France	Portpatrick Radio (0.5) G. Britain Isafjördur Radio (0.1) Iceland Coruña Radio <sup>8</sup> ) (0.35) Spain	Cagliari Radio (0.5) Italy Maddalena Radio (La) (1.0) Italy Taranto Radio (1.0) Italy	Tuapse Radio (0.3) RSFSR Batumi Radio (0.07) USSR
474		Kemi Radio (0.5) Finland Kiel Radio (0.3) Germany (British Zone)	Elbe-Weser Radio (0.3) Germany (British Zone)		Tobruch Radio (1.0) Libya Trieste Radio (0.4) Trieste (Anglo-American Zone)	
476	Arkhangelsk Radio (5.0) RSFSR	Libava Radio (0.5) Latvia (SSR)	Farsund Radio (1.0) Norway	Burnham-on-Sea Radio (1.0) G. Britain Cascais Radio (CO/0.35) Portugal	Vlora Radio (0.2) Albania (PR) Tripoli Radio (1.0) Libya Cabo de Palos Radio <sup>5</sup> ) (0.5) Spain	Kertch Radio (0.005) RSFSR Odessa Radio (0.5) Ukraine (SSR)
480	Ships	Ships	Ships	Ships	Ships	Ships
484		Kaliningrad Radio (0.5) RSFSR Leningrad Radio (0.3) RSFSR	Cullercoats Radio (0.5) G. Britain	Reykjavik Radio (3.0) Iceland Cadiz Radio*) (0.35) Spain Cabo Finistere Radio (Vigo Radio)*) (0.5) Spain	Rijeka Radio (0.5) Yugoslavia (FPR) Split Radio <sup>4</sup> ) (1.0) Yugoslavia FPR)	Sulina Radio (0.5) Roumanian (PR) Taganrog Radio (0.1) RSFSR Batumi Radio (1.5) USSR

Freq. kc/s	Barents and White Seas	Baltic Sea	English Channel and North Sea	Atlantic	Mediterranean	Black Sea
487	Mezen Radio (0.5) RSFSR	Kobenhavn- Lyngby Radio (0.1) Denmark Skamleback- Lyngby Radio (0.75) Denmark		Gouesnou Radio <sup>1</sup> ) (5.0) France Aslesund Radio (1.0) Norway Apulia Radio (CO/1.0) Portugal Ponta Delgada Radio (CO/0.45) Portugal (Azores)	Genova Radio (2.0) Italy Derna Radio (1.0) Libya	Taman Radio (0.1) RSFSF Kherson Radio (0.5) Ukrain (SSR)
489		Riga Radio (1.0) Latvia (SSR)	Anvers Radio³) (Ostende Radio) (2.0) Belgium	Seydisfjördur Radio (0.5) <i>Iceland</i>	Ancona Radio (1.0) Italy Cagliari Radio (1.0) ItalyRadio*) (1.0) Palestine	Varna Radio (2.0) Bulgaria (PR) Novorossiisk Radio (0.5) RSFSR
500	Distress Calling and Answering	Distress Calling and Answering	Distress Calling and Answering	Distress Calling and Answering	Distress Calling and Answering	Distress Calling and Answering
512	Ships	Ships	Ships	Ships	Ships	Ships
516		Leningrad Radio (5.0) RSFSR	Jersey Harbour Radio (0.05) G. Britain Guernsey Harbour Radio (0.05) G. Britain Stavanger Radio (1.0) Norway	Cork Radio (0.1) Ireland Harstad Radio (1.0) Norway Monsanto Radio (CO/2.5) Portugal Santa Maria Radio (CO/0.45) Portugal (Azores)	Kerkyra Radio (0.5) Greece Genova Radio (2.0) Italy Adana Radio (1.0) Turkey	Sotchi Radio (1.0) RSFSR Skadovsk Radio (0.5) Ukraine (SSR)
519		Skamlebaek- Lyngby Radio (1.0) Denmark Kotka Radio (0.8) Finland			Roma Radio (5.0) Italy	Odessa Radio (5.0) Ukraine (SSR) Otchemtchiri Radio (CO/0.1) USSR

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Treaty

1951

Barents and White Seas	Balbic Sea	English Chamel and North Sea	Atlantic	Mediterranean	Black Sea
		Hamar Broad- casting Station*) (1.0) Norwey			
Vardó Radio (1.0) Norway	Sassnitz Radio (0.1) Germany (USSR Zone) Warnernuende Radio (0.2) Germany (USSR Zone) Riga Radio (1.0) Latvia (1.0) Latvia		Land's End Radio (0. (5.0) G. Britain (0. Faro Radio (CO)0.75) Portugal Flores Radio (CO)0.45) (CO)0.45)	S) Albania (PR)	Anapa Radio (0.5) RSFSR Rostov, Don Radio (0.5) RSFSR Kilya Radio (0.5) Ukraine (0.5) (5.5R)
	Hanko Radio (0.8) Finland Vaasa Radio (1.0) Finland Ustka Radio (0.5) Rep. of Poland	Kristiansand Radio (CO/I.5) Norway (CO/I.5) N	Готьау	Augusta Radio") (CO/5.0) Italy (CO/5.0) Italy (CO/5.0) Italy Napoli Radio") (CO/5.0) Italy Roma Radio") (CO/5.0) Italy Roma Radio") (CO/5.0) Italy Venezia Radio") (CO/5.0) Italy Venezia Radio") (CO/5.0) Italy Venezia Radio") (CO/5.0) Italy Venezia Radio") (CO/5.0) Italy Reyrouth Radio (2.0) Lebanon	Trabzon Radio (1.0) Turkey Zonguldak Radio (1.0) Turkey

• Directional actial, protection South-West.

TABLE II

Classified in alphabetical order of countries
(For notes, see p. 52)

Countries	Name of Stations	Frequencies kc/s	Power kW
Albania (People's Republic of)	Durres Radio	522 476	0.5 0.2
Belgium	Anvers Radio <sup>8</sup> ) (Ostende Radio) Ostende Radio <sup>3</sup> ) (Anvers Radio)	489 435	2.0 2.0
Bulgaria (People's Republic of)	Burgas Radio	421 489	0.5 2.0
Cyprus	Larnaca Radio	450	1.0
Denmark	Blaavand Radio Köbenhavn-Lyngby Radio Köbenhavn-Lyngby Radio (CO) Skagen Radio Skamlebaek-Lyngby Radio Skamlebaek-Lyngby Radio	429 487 461 464 487 519	0.9 0.1 1.0 0.35 0.75 1.0
Denmark (Faroe Islands)	Thorshavn Radio	447	1.0
Egypt	Alexandria Radio	444 421	2.0 0.5
Estonia (Soviet Socialist Republic of)	Tallinn Radio	450 461	0.5 1.0
Finland	Hanko Radio Helsinki Radio Kemi Radio Kotka Radio Marichamn Radio Vaasa Radio	524 438 474 519 438 524	0.8 1.0 0.5 0.8 1.0 1.0
France	Agde Radio Alger Radio Bayonne Radio Bordeaux-Port Radio Bordeaux-Port Radio Boulogne-sur-Mer Radio Calais Radio Cherbourg-Rouges-Terres Radio Dieppe Radio Dunkerque-Port Radio Gouesnou Radio¹) Gouesnou Radio¹) Havre-Port Radio (Le) Lorient Radio Marseille Radio Oran-Aïn-el-Turk Radio Rouen-Port Radio StNazaire Radio Toulon La Crau Radio	421 416 447 461 450 429 458 429 472 416 487 472 444 432 438 419.5 432 458	5.0 1.0 0.1 1.0 1.0 0.1 0.5 0.1 0.15 1.0 5.0 0.2 1.0 0.5 0.2
Germany (British Zone)	Elbe-Weser Radio Kiel Radio Norddeich Radio	474 474 474 444	0.3 0.3 1.0

Countries	Name of Stations	Frequencies hc/s	Power kW
Germany (USSR Zone)	Ruegen Radio	432 522 522	1.0 0.1 0.2
Gibraltar	Gibraltar Radio	464	5.0
Great Britain	Burnham-on-Sea Radio Cullercoats Radio Folkestone Harbour Radio Guernsey Harbour Radio Humber Radio Jersey Harbour Radio Land's End Radio Land's End Radio Mallaig Radio Mallaig Radio Niton Radio North Foreland Radio Parkestone Quay Radio Portpatrick Radio Seaforth Radio Stonehaven Radio Wick Radio	476 484 429 516 441 516 438 522 464 429 464 418 429 472 447 458 432	1.0 0.5 0.25 0.05 0.5 0.05 5.0 5.0 0.35 0.25 0.5 0.5 0.5
Greece	Athinai Radio Athinai Radio Corinth Radio Kerkyra Radio Rhodos Radio	418 464 421 516 432	1.5 0.2 0.2 0.5 0.5
Iceland	Isafjördur Radio Reykjavik Radio Seydisfjördur Radio Siglufjördur Radio Vestmannaeyjar Radio	472 484 489 418 418	0.1 3.0 0.5 0.1 0.1
Ireland	Cork Radio	516 421 429	0.1 0.5 1.0
Italy	Ancona Radio Augusta Radio Augusta Radio Augusta Radio Cagliari Radio Maddalena Radio Maddalena Radio Maddalena Radio Mapoli Radio Napoli Radio Napoli Radio CO) <sup>7</sup> Roma Radio Roma Radio CO) <sup>7</sup> Spezia Radio Taranto Radio Taranto Radio Venezia Radio Venezia Radio Venezia Radio CO) <sup>7</sup> Trapani Radio Venezia Radio	489 429 524 432 472 489 524 487 516 444 472 435 524 464 472 524 464 472 524 450 429 524	1.0 1.0 5.0 1.0 0.5 1.0 2.0 2.0 0.5 1.0 1.0 5.0 1.0 1.0 5.0

Countries	Name of Stations	Frequencies ke/s	Power kW
Latvia (Soviet Socialist Republic of)	Libava Radio Libava Radio Riga Radio Riga Radio Vindava Radio	441 476 489 522 429	0.5 0.5 1.0 1.0 0.5
Lebanon	Beyrouth Radio	524 461	2.0 0.5
Libya	Bengasi Radio	435 487 474 476	1.0 1.0 1.0 1.0
Lithuania (Soviet Socialist Republic of)	Klaipeda Radio	464	0.25
Malta	Malta Radio	461	3.0
Morocco	Agadir Radio	461 441 447	2.0 2.0 2.0
Netherlands	Scheveningen Radio	421 461	2.0 2.0
Norway	Aalesund Radio Bergen, Norge Radio Bodö Radio (CO) Farsund Radio Hammerfest Radio Harstad Radio Kristiansand Radio (CO) Rörvik Radio Stavanger Radio Tjöme Radio Tromsö Radio Vardö Radio	487 416 524 476 438 516 524 441 516 438 444 522	1.0 2.0 1.5 1.0 1.0 1.5 1.0 1.0 1.0
Palestine		489	1.0
Poland (Republic of) .	Darlowo Radio Gdansk Radio Gdynia Radio Gdynia Radio Gdynia Radio Kolobrzeg Radio Swinoujscia Radio Swinoujscia Radio Szczecin Radio Tolkmicko Radio Ustka Radio	447 435 421°) 458 435 435 447°) 458 444 524	0.5 1.0 1.0 2.0 0.5 2.0 1.0 1.0 0.25 0.5
Portugal	Apulia Radio (CO) Apulia Radio (CO) Boa Nova Radio (CO) Boa Nova Radio (CO) Cascais Radio (CO) Cascais Radio (CO) Faro Radio (CO) Faro Radio (CO) Lisboa Radio Monsanto Radio (CO)	418 487 418 450 418 476 418 522 435 418	1.0 1.0 0.35 0.35 0.35 0.35 0.75 0.75 0.75 3.0 2.5

Countries	Name of Stations	Frequencies kc/s	Power kW
	Monsanto Radio (CO)	516 418 458 418 450	2.5 1.0 1.0 0.35 0.35
Portugal (Azores)	Flores Radio (CO) Flores Radio (CO) Horta Radio (CO) Horta Radio (CO) Ponta Delgada Radio Ponta Delgada Radio (CO) Ponta Delgada Radio (CO) Santa Maria Radio (CO) Santa Maria Radio (CO)	418 522 418 458 421 418 487 418 516	0.45 0.45 2.0 2.0 0.5 0.45 0.45 0.45
Portugal (Madeira) .	Funchal Radio (CO)	418 450 444	0.35 0.35 0.5
Roumanian People's Republic	Constanta Radio	461 484	2.0 0.5
Russia Soviet Federal Socialist Republic (RSFSR)	Adler Radio (CO) Alkhtari Radio (CO) Anapa Radio Arkhangelsk Radio Belomorsk Radio Belomorsk Radio Belomorsk Radio Bokovo Radio Eisk Radio Evpatoria Radio Feodosia Radio Ialta Radio Kaliningrad Radio Kaliningrad Radio Kaliningrad Radio Kaliningrad Radio Ken Radio Kertch Radio Kertch Radio Kertch Radio Kertch Radio Leningrad Radio Leningrad Radio Leningrad Radio Murmansk Radio Murmansk Radio Novorossiisk Radio Novorossiisk Radio Novorossiisk Radio Rostov, Don Radio Rostov, Don Radio Rostov, Don Radio Taganrog Radio Taganrog Radio Taman Radio Temruk Radio Tuapse Radio Tuapse Radio Tuapse Radio	447 461 522 416 476 461 458 450 421 435 464 472 484 447 450 416 444 484 487 458 476 416 487 458 472 429 489 441 464 487 438 435 472	0.07 0.5 0.5 1.0 5.0 1.25 0.005 0.5 0.25 0.5 0.12 0.1 1.0 0.005 0.5 0.12 0.1 1.0 0.005 0.5 0.12 0.1 1.0 0.005 0.5 0.12 0.1 1.0 0.005 0.5 0.12 0.1 1.0 0.005 0.5 0.12 0.1 1.0 0.005 0.5 0.1 0.1 0.0 0.5 0.1 0.0 0.5 0.1 0.0 0.5 0.1 0.0 0.5 0.1 0.0 0.5 0.1 0.0 0.5 0.1 0.0 0.5 0.1 0.0 0.0 0.0 0.0 0.0 0.0 0.0

Countries	Name of Stations	Frequencies kc/s	Power kW
Spain	Cabo de Palos Radio <sup>6</sup> ) Cabo Finistere Radio (Vigo Radio) <sup>5</sup> ) Cabo Mayor Radio <sup>6</sup> ) Cadiz Radio <sup>6</sup> ) Coruña Radio <sup>5</sup> ) Coruña Radio <sup>5</sup> ) Soller Radio (Palma de Mallorca Radio) <sup>6</sup> )	476 484 441 484 472 450	0.5 0.5 0.5 0.35 0.35
Sweden	Boden Radio Göteborg Radio Härnösand Radio Karlskrona Radio Stavsnäs Radio Tingstäde Radio	464 450 464 416 416 418	1.0 1.0 1.0 1.0 1.0
Trieste (Anglo-American Zone	Trieste Radio	474	0.4
Tunisia	Bizerte Radio	441	0.5
Turkey	Adana Radio Istanbul Radio Iatanbul Radio Izmir Radio Samsun Radio Trabzon Radio Zonguldak Radio	516 416 441 458 416 524 524	1.0 0.8 3.0 2.0 2.0 1.0
Ukraine (Soviet Socialist Republic of the)	Genitchesk Radio Ismail Radio Kherson Radio Khorly Radio (CO) Kilya Radio Mariupol Radio Nikolaev Radio Nikolaev Radio Odessa Radio Odessa Radio Osipenko Radio Otchakov Radio (CO) Skadovsk Radio	432 432 487 444 522 444 438 418 447 476 519 418 429 516	0.05 1.0 0.5 0.5 0.5 0.3 1.0 0.75 0.5 0.5 0.5
Union of Soviet Social- ist Republics (USSR)	Batumi Radio Batumi Radio Gagry Radio Otchemtchiri Radio (CO) Poti Radio Sukhumi Radio Viborg Radio	472 484 461 519 421 450 444	0.07 1.5 0.07 0.1 0.5 0.5
Yugoslavia (Federal People's Republic of)	Dubrovnik Radio	447 4384) 484 438 4844)	0.12 0.5 0.5 1.0 1.0

IN WITNESS WHEREOF, the Plenipotentiaries of the above-named Governments have signed this Plan in each of the English, French and Russian languages, in a single copy, in which in case of dispute, the French text shall be authentic, and which shall remain deposited in the archives of the Government of Denmark and one copy of which shall be forwarded to each signatory Government and to the Secretary General of the Union.

Done at Copenhagen, 17th September 1948.

[Same signatures as those of the Convention. — See p. 44]

#### **STATEMENTS**

STATEMENT OF THE UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND

The Delegation of the United Kingdom of Great Britain and Northern Ireland declare that in their opinion the allocations to the German coast stations contained in the Plan do not enable these stations to offer to international shipping a satisfactory service. In consequence it is possible that His Majesty's Government in the United Kingdom may not be in a position to apply the Convention and Plan to the British Zone of Occupation in Germany.

## STATEMENT OF THE UNION OF SOVIET SOCIALIST REPUBLICS

Considering the declaration made by the Delegation of the United Kingdom concerning the allocation of frequencies to Germany which it deems to be unsatisfactory and on account of which the Delegation reserves the right not to apply the Convention and the Plan in the British Zone of Occupation in Germany, the Soviet Delegation is obliged to make the following declaration:

Committee 4 had given to the Plan Committee directives to allocate to Germany the technical minimum. However, in the Plan Committee, the Delegation of the United Kingdom asked that Germany be granted six frequencies for six stations and a substantial increase of power for the latter over the pre-war level.

The Soviet Delegation considered that it would be sufficient to allocate to Germany three frequencies along with the pre-war level of the power of radio-stations. The Delegation holds that the Allied Control Council should be invested with the right to take final decisions with regard to the use to be made of the allocated frequencies.

As a result of mutual concessions an agreement was reached with regard to determined frequencies and their number. However, the United Kingdom continued to insist that the power of the radio-station Kiel Radio should be increased to a level more than three times higher than pre-war.

The Soviet Delegation could not, and cannot, consent to this demand. It considers it to be without justification and believes that its acceptance would give Germany a privileged situation in comparison with other countries.

The special increase of the power of German radio-stations, and particularly of that of Kiel Radio, to a level above that noted in the present Plan, might result in the Soviet Union's being forced to take such steps as it may deem indispensable.

#### RESOLUTION

The European Maritime Regional Radio Conference resolves that the Frequency Allocation Plan, as a whole, shall be notified as soon as possible by the Chairman of the Conference to the Provisional Frequency Board and communicated under the same conditions to the Secretary General of the International Telecommunication Union.

The notifications shall be supplemented as soon as possible by individual notifications from Administrations when the Provisional Frequency Board requests them.

The frequencies allocated by the Plan to stations of the Maritime Mobile Service shall bear as a date of notification in the International Frequency List the date of signature of the Convention.

#### RECOMMENDATIONS

RECOMMENDATION NO. I TO THE ADMINISTRATIONS

regarding interference caused to the reception of transmissions from stations of the Maritime Mobile Service by the harmonics of broadcasting transmissions

The Maritime Regional Radio Conference, Copenhagen (1948),

# considering:

(a) that the harmonics of the transmissions from broadcasting stations cause interference to the reception of transmissions from stations of the Maritime Mobile Service;

(b) that the harmonics of the frequencies 167 kc/s, 205 kc/s, 250 kc/s, 727 kc/s and 1091 kc/s coincide with the international distress frequencies of the maritime mobile service and with the normal radio direction-finding frequency of the maritime radio navigation service;

#### recommends:

- (a) that the necessary steps be taken as soon as possible to reduce to the standards specified in Appendix 4 to the Radio Regulations, Atlantic City, 1947, the powers of harmonic and parasitic emissions from broadcasting stations, in the bands allocated to the maritime mobile service;
- (b) that these steps be taken particularly with regard to broadcasting stations which may operate on the above-named frequencies.

RECOMMENDATION No. 2 TO THE NEXT INTERNATIONAL RADIO CONFERENCE

regarding the exclusion of broadcasting stations from operating in derogation in the bands allocated to the maritime mobile service

The Maritime Regional Radio Conference, Copenhagen (1948),

## considering:

the increased requirements of the Maritime Mobile Service and the difficulties of satisfying those requirements owing to the limitations placed on the use of certain frequencies by the presence of broadcasting stations operating in derogation;

#### recommends:

to the next International Radio Conference that it should draw up a frequency table such that the frequency bands allocated will make it possible in future to exclude broadcasting stations from operating in derogation in the maritime mobile bands.

RECOMMENDATION No. 3 TO ADMINISTRATIONS AND TO THE C.C.I.R. on the levels of interference to radioreception on ships caused by electrical installations on ships

The Maritime Regional Radio Conference, Copenhagen (1948),

# considering:

(a) that the level of interference to radioreception on ships is a complicated question on which little data is available;

(b) that the Safety of Life at Sea Conference, London (1948) requested that all steps be taken to eliminate as far as possible the causes of radio interference from electrical and other apparatus on board;

#### recommends to Administrations and the C.C.I.R.:

to study the question of interference to radioreception caused by electrical installations on board ship:

## and draws the attention of Administrations:

to the need to take all steps possible to eliminate or at least to reduce to a minimum the level of such interference.

RECOMMENDATION No. 4 TO ADMINISTRATIONS AND THE C.C.I.R on the subject of interference to radioreception caused by radar apparatus

The Maritime Regional Radio Conference, Copenhagen (1948),

# considering:

- (a) that there is a possibility of interference to radioreception due to ships' radar;
- (b) that there is a lack of information on the extent and value of such interference;
- (c) that the Safety of Life at Sea Conference, London (1948) recommended that Governments consider the possibility of issuing specifications to indicate the standards desired;

#### recommends to Administrations concerned and the C.C.I.R.:

that performance specifications for the installation and operating of ships' radar apparatus should include the provisions necessary to ensure that such apparatus does not cause interference with the radio-communication apparatus on board.

RECOMMENDATION No. 5 to Administrations and the C.C.I.R. on the question of interference to radioreception due to atmospheric causes

The Maritime Regional Radio Conference, Copenhagen (1948),

# considering:

- (a) that interference to radioreception due to atmospheric causes results in great difficulties for the maritime mobile service;
- (b) that no definite figures are available indicating the general levels of such interference;

#### recommends to Administrations and the C.C.I.R.:

- (a) to study the question of interference to radioreception at sea due to atmospheric causes and subsequently
- (b) to determine figures for the level of atmospheric interference in the frequency bands allocated to the maritime mobile service for the different regions of the European Maritime Area.

#### RECOMMENDATION No. 6 TO ADMINISTRATIONS

on the subject of the minimum depth of modulation and the level of non-linear distortion for coast station transmitters

The Maritime Regional Radio Conference, Copenhagen (1948),

# considering:

that it is desirable

- to specify a minimum depth of modulation for Type A2 emissions from coast stations;
- and to avoid a widening of the radiated bands,

#### recommends:

- that the minimum depth of modulation for coast station transmitters using Type A2 be 70 per cent.;
- and that the non-linear distortion should not exceed 10 per cent. with a modulation depth of 80 per cent.

#### RECOMMENDATION1

to be brought to the attention of all Administrations through the intermediary of the Secretary General of the Union:

RECOMMENDATION No. 7 to Administrations regarding the class of emission to be used by coast and ship stations

The Maritime Regional Radio Conference, Copenhagen (1948),

# considering:

that Type A2 emissions occupy a greater bandwidth than Type A1 emissions, thus causing interference to transmissions on adjacent frequencies;

#### recommends:

that coast stations and ship stations should, to the greatest extent possible, make use of Type A1 emissions when operating on their working frequencies.

<sup>&</sup>lt;sup>1</sup> See p. 50 of this volume (article 4).