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# EUROPEAN BROADCASTING CONVENTION

COPENHAGEN, 1948

# COPENHAGEN PLAN

Annexed to the European Broadcasting Convention

# FINAL PROTOCOL

Annexed to the European Broadcasting Convention



#### BERNE

GENERAL SECRETARIAT
OF THE INTERNATIONAL TELECOMMUNICATION UNION

1948

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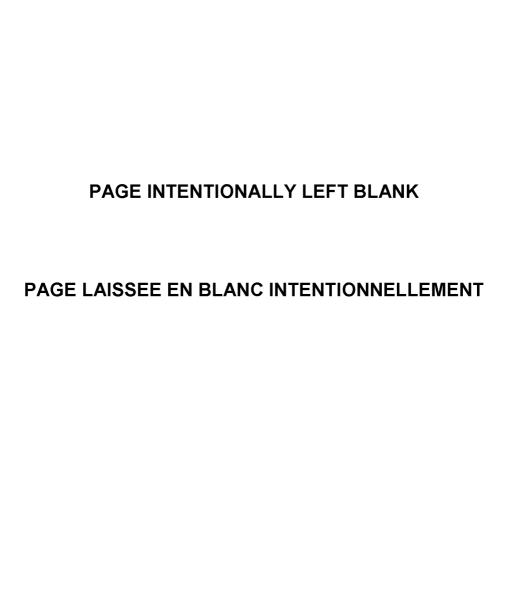
Annexed to the European Broadcasting Convention

#### BERNE

GENERAL SECRETARIAT
OF THE INTERNATIONAL TELECOMMUNICATION UNION

1948





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# EUROPEAN BROADCASTING CONVENTION

concluded between the Governments of the following countries:

People's Republic of Albania, Belgium, Soviet Socialist Republic of Bielorussia, People's Republic of Bulgaria, State of the Vatican City, Denmark, Finland, France, Greece, Hungary, Ireland, Italy, Monaco, Norway, Netherlands, Republic of Poland, Portugal, French Protectorates of Morocco and Tunisia, Federal People's Republic of Yugoslavia, Roumanian People's Republic, Soviet Socialist Republic of the Ukraine, United Kingdom of Great Britain and Northern Ireland, Swiss Confederation, Czechoslovakia, Union of Soviet Socialist Republics.

#### **PREAMBLE**

The undersigned, plenipotentiaries of the Governments of the above named countries, being assembled at Copenhagen by virtue of the Additional Protocol to the Acts of the International Radio Conference signed at Atlantic City on the 2nd October, 1947, by the Delegates of the countries of the European Broadcasting Area, have, by mutual consent and subject to ratification, adopted the provisions contained in the following Convention and the Plan annexed thereto, concerning broadcasting in the European Area.

#### 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.
- 2. (1) The Governments undertake not to use for their broadcasting stations situated in the European Broadcasting Area, in the bands provided for in the Plan, any frequencies other than those mentioned in the Plan.
- (2) The Governments undertake, furthermore, neither to instal nor to put into operation, in the bands provided for in the Plan, any broadcasting stations other than those mentioned in the Plan, except under the conditions provided for in Article 8.

#### ARTICLE 2

#### Definitions.

In this Convention

- (1) the words «International Telecommunication Convention» denote 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;
- (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 after the entry into force of such revision;
- (4) the word «Administration» denotes a governmental administration of a contracting Government;
- (5) the words «Secretary General of the Union» denote the Secretary General of the International Telecommunication Union;
- (6) the expression «European Broadcasting Area» shall mean the area bounded: on the *South* by parallel 30° North; on the *West* by a line extending from the North Pole along meridian 10° West of Greenwich to its intersection with parallel 72° North, thence by great circle arc to the point of intersection of meridian 50° West and

parallel 40° North, and thence by a line leading to the point of intersection of meridian 40° West and parallel 30° North; on the *East* by meridian 40° East of Greenwich, so as to include the Western part of the Union of Soviet Socialist Republics (U.S.S.R.) and the territories bordering on the Mediterranean Sea, with the exception of the parts of Arabia and Saudi Arabia which are included in this sector.

#### ARTICLE 3

#### 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 other signatory Governments and each acceding Government and the Secretary General of the Union of each ratification.
  - 3. Ratification of the Convention shall include approval of the Plan.

#### ARTICLE 4

#### Accession to the Convention.

- 1. The Government of a country of the European Broadcasting 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 each signatory and each acceding Government and the Secretary General of the Union.
- 3. The accession shall take effect on the day of deposit unless the act of accession contains any stipulation to the contrary.

### 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 thereof.
- 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 6

### 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 7

#### 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 countries of the European Broadcasting Area. The Conference shall be convened as soon as possible, and within eighteen months at the latest after the close of the Radio Administrative Conference, unless otherwise decided by the meeting of the Delegates of the countries of the European Broadcasting Area, which shall be held during the Radio Administrative Conference, to establish all directives for the European Conference.
- 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 of the Governments invited to the European Broadcasting Conference assembled at Copenhagen in 1948, after prior mutual agreement, to the Secretary General of the Union.

#### Modification of the Plan.

- 1. Any Administration wishing to alter the characteristics (such as frequency, power, aerial directivity, geographical position, etc.) laid down in the Plan for one of its stations, or to operate a new station, or to use one of its frequencies for a network of synchronised stations shall:
  - a) When the frequency proposed is in one of the bands exclusively reserved for broadcasting by the Radio Regulations and appearing in the Plan, observe the provisions of the Plan, or the procedure laid down in paragraphs 2 and 3 of this Article;
  - b) When the frequency is outside the bands referred to in subparagraph a) observe the provisions of the Radio Regulations.
- 2. (1) Such Administration shall inform the other Administrations which it considers to be directly concerned. 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 ensure, by all means at his disposal, that communications are received by all Administrations.
- (2) Any Administration which considers that such agreement may affect its own services unfavourably, shall communicate 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 proposal may be adopted if no objection has been raised or if all Administrations concerned have agreed.
- 3. Where agreement is not reached under the provisions of paragraph 2 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 the dispute may submit the dispute to arbitration in accordance with the procedure defined in Annex 3 to the International Telecommunication Convention.

#### ARTICLE 9

### Notification of Frequencies.

- 1. Frequencies allocated by the Plan 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 Article 8, shall be notified as soon as possible in accordance with the provisions of Article 11, Section II, of the Radio Regulations.

#### ARTICLE 10

### General Technical Provisions.

- 1. Administrations shall take the necessary steps:
- a) to ensure, with due regard to the latest technical progress, that their broadcasting stations keep to the nominal frequencies assigned to them, according to the standards permitted for the category to which the frequency used belongs;
- b) to avoid, in transmissions from broadcasting stations, any overmodulation or spurious or harmonic frequencies liable to cause harmful interference to other stations;
- c) to make international control of broadcast transmissions as efficacious as possible;
- d) to remedy as rapidly as possible breaches which may be brought to their notice.
- 2. (1) When the use of a frequency by a broadcasting station causes harmful interference which had not been foreseen at the time of signing the Plan, the Administrations concerned shall endeavour to reach agreements with a view to eliminating such harmful interference, taking into account the provisions of the Plan.
- (2) In the case of harmful interference caused by a broadcasting station placed in a band other than those reserved by the Radio Regu-

lations either exclusively for broadcasting or for sharing with other services, the services to which this band is allocated by the said Regulations shall take precedence over the broadcasting service.

#### ARTICLE 11

### International Expert Organisation.

- 1. An international expert organisation may be called upon:
  - a) to facilitate the entry into force of the Plan and
  - b) to supervise its effective and regular implementation.

Such organisation may also be called upon to collaborate with governments and administrations in the preparation and execution of any technical agreements relating to broadcasting.

- 2. Such organisation shall have at its disposal, throughout the duration of its mandate, the staff and the technical resources necessary to the fulfilment of the tasks defined in Article 8 of the Preamble of the Plan.
- 3. In principle such organisation shall alone bear any current expenses arising from the normal exercise of its mandate. Extraordinary expenses arising from the revision of the Plan, pursuant to Article 7 of the Convention, shall be a charge on all the participants in the revision and shall be included in the general expenses of the Conference for revising the Plan.
- 4. The international organisation referred to above shall be named in a communication addressed to the Governments of the countries of the European Broadcasting Area by the Secretary General of the Union as soon as he has confirmed that approval of this nomination has been accorded by at least twenty eight of the thirty three Governments invited to the European Broadcasting Conference assembled at Copenhagen in 1948.

#### ARTICLE 12

### Conference Expenses.

1. The expenses of European Broadcasting 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 13

## Entry into Force of the Convention.

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

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, 15 September 1948.

For the People's Republic of Albania:

Ретво Кіто

For Belgium:

R. CORTEIL

For the Soviet Socialist Republic of Bielorussia:

J. LIKHOUCHINE

For the People's Republic of Bulgaria:

A. Grigorov

ING. AS. MARINOV

For the State of the Vatican City:

FILIPPO SOCCORSI

For Denmark:

N. E. HOLMBLAD GUNNAR PEDERSEN JUL. BOMHOLT

T. C. CHRISTENSEN

For Finland:

HELLA WUOLIJOKI

#### For France:

JACQUES MEYER

L. DAUMARD

J. LEPROUX

L. LAMOITIER

C. MERCIER

#### For Greece:

S. Eleftheriou

#### For Hungary:

G. Kodolányi

Dr. Kálmán Takács

#### For Ireland:

T. J. Monaghan

#### For Italy:

Antonio Pennetta

G. GNEME

#### For Monaco:

A. CROVETTO

#### For Norway:

OLAF MOE

S. SKOLEM

TORALY ØKSNEVAD

#### For the Netherlands:

J. D. H. VAN DER TOORN

J. M. MADSEN

F. H. P. SCHOTEL

#### For the Republic of Poland:

STANISLAW WASKIEWICZ

#### For Portugal:

Fernando da Cunha de Eça

JOSÉ LUIZ DA SILVA DIAS

RAUL LOPES COELHO DUARTE

ALBERTO LIMA BASTO

# For the French Protectorates of Morocco and Tunisia:

PIERRE SCHAEFFER

# For the Federal People's Republic of Yugoslavia:

VOLIN POPOVIC

# For the Roumanian People's Republic:

MATEI SOCOR

ERNEST GROSS

# For the Soviet Socialist Republic of the Ukraine:

BORIS CHAMCHA

#### For the United Kingdom of Great Britain and Northern Ireland:

H. FAULKNER

G. R. Parsons

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

#### For the Swiss Confederation:

Dr. E. Metzler

C. GILLIOZ

### For Czechoslovakia:

ING. JOSEF EHRLICH

Dr. Jan Busak

Ing. Vladimir Caha

Ing. Milan Zahradnicek

Dr. Josef Urban

# For the Union of Soviet Socialist Republics:

OLEG MAKAROV MICHAIL ARBUZOV

VALENTINE ZJELEZOVA

ASHOT BADALOV

MICHAIL KOKONIN

PIERRE GOROSHKIN

### COPENHAGEN PLAN

for the distribution of frequencies between the broadcasting stations of the European Broadcasting Area.

#### **PREAMBLE**

#### CHAPTER I

#### General Provisions.

#### ARTICLE 1

#### Definitions.

In the present Plan:

- (1) the word «Convention» denotes the European Broadcasting Convention of Copenhagen (1948):
  - (2) the word «Plan» denotes the Copenhagen Plan (1948);
- (3) the words «European Area» denote the European Broadcasting Area defined in Article 2 of the Convention;
- (4) the word «power» denotes the unmodulated power measured in the aerial;
- (5) the words «exclusive frequency» denote a frequency assigned for the use of only one country of the European Broadcasting Area and indicated in the Plan;
- (6) the words «shared frequency» denote a frequency assigned to two or more countries for simultaneous use by stations indicated in the Plan;
- (7) the words «international common frequency» denote a frequency used simultaneously by stations belonging to different countries in the European Area, and fulfilling the conditions stipulated in paragraph 2. c) of Article 2. International common frequencies shall be called «International Common Frequency Type I» and «International Common Frequency Type II»;

- (8) the words «synchronised stations» denote two or more stations transmitting the same programme on frequencies differing from each other by a maximum of 0.2 c/s:
- (9) the words «directional aerials» denote aerials of special construction, which are used in order to strengthen the radiated power in given directions and simultaneously to reduce radiation in other directions:
- (10) the word «expert» denotes the international expert organisation provided for in Article 11 of the Convention.

#### Power.

- 1. The powers of stations as indicated in the Plan denote the maximum powers of broadcasting stations in the European Area during the period of application of the Plan.
- 2. The powers of stations are determined taking account of technical standards such as to provide for a national broadcasting service of good quality, subject to the following conditions:
  - a) the power of broadcasting stations operating in the band 155—285 kc/s, shall not exceed 200 kW except in certain special cases specified in the Plan;
  - b) the power of broadcasting stations operating in the band 525—1605 kc/s shall not exceed 150 kW;
  - c) the power of stations operating on international common frequencies must not exceed:
    - -2 kW for stations working on international common frequencies Type I; such stations, or the countries which may use such stations, are mentioned in the Plan;
    - —0.25 kW for stations working on international common frequencies Type II; such stations are not mentioned in the Plan;
  - d) the total power of all the stations forming a synchronised network indicated as such in the Plan shall not be greater than 1.5

times the maximum power permissible for a single station. However the power of any one station of such synchronised network shall not be greater than the maximum power permissible for a single station working on the same frequency.

- 3. (1) The power of stations mentioned in the Plan can be altered only by mutual agreement between the Administrations concerned, and on condition that experience supported by measurements shows that this alteration is useful and necessary.
- (2) Modifications shall be limited, in the case of a decrease of power, to the value which makes it possible to avoid interference, or, in the case of an increase, to the values specified in paragraph 2 of this Article.

#### ARTICLE 3

#### Frequency Tolerances.

- 1. The frequency tolerances for broadcasting stations which use exclusive or shared frequencies are as follows:
  - a) For existing stations or stations brought into service before the 1st January 1950:

Before the 1st January 1952	$\pm$ 20 c/s;
After the 1st January 1952	$\pm$ 10 c/s;

- 2. Stations operating on international common frequencies Types I and II shall, after the entry into force of the Plan, comply with a frequency tolerance of  $\pm$  20 c/s.
- 3. The Administrations must take all the measures necessary to ensure that the above mentioned tolerances are rigorously respected; they must endeavour to attain in practice the highest practicable stability.

#### ARTICLE 4

# Use of Frequencies.

Frequencies indicated in the Plan shall be used by broadcasting stations only for the transmission of sound.

#### Directional Aerials.

- 1. The Plan specifically mentions the broadcasting stations which must use directional aerials. No modification regarding the use of such aerials may be introduced without consulting the expert and without the consent of the Administrations concerned.
- 2. (1) The directional aerials used by these stations shall give a reduction of the radiated power, in the secondary zone and for the protected direction, of approximately 10 db relative to that from a non-directional aerial radiating the same total power, unless otherwise specified in the Plan.
- (2) The Administration responsible shall ensure that the polar diagram of the aerial corresponds to the conditions given above by taking measurements of field strength on the frequency indicated in the Plan at a distance of several wave lengths from the aerial.
- 3. The use of directional aerials by stations other than those for which such use is specifically mentioned in the Plan may be admitted by preliminary consent of the Administrations concerned, on condition that the provisions of paragraphs 1 and 2 of this article be observed and that no interference be caused in relation to neighbouring broadcasting stations or to the stations of other services.

#### ARTICLE 6

#### Interference between Stations.

- 1. All broadcasting stations of the countries of the European Area shall operate in such a manner as to avoid, as far as possible, causing any interference to the broadcasting stations of other countries or to other services using neighbouring frequencies.
- 2. If the use of a frequency, allocated by the Plan to a broadcasting station, causes an interference, which was unforeseen at the time of signing of this Convention, the Administrations concerned shall, by mutual agreement, take the necessary steps to eliminate such interference.
- 3. In accordance with paragraph 2 of Article 10 of the Convention and with paragraphs 6, 7, and 8 of the Document Annexed to

the Additional Protocol to the Acts of the International Radio Conference of Atlantic City (1947):

- a) The maritime mobile services, operating in the band 150—160 kc/s, shall not cause harmful interference to the reception of broadcasting stations working in the same band within the limits of the national territory served by those stations;
- b) Broadcasting stations operating in derogation in the bands 325
   —365 kc/s and 395—405 kc/s shall not cause harmful interference to stations of the aeronautical mobile and aeronautical navigational services;
- c) Broadcasting stations operating in derogation in the bands 415
   —485 kc/s and 515—525 kc/s shall not cause harmful interference to stations of the maritime mobile services;
- d) In case of harmful interference being caused in the band 1560— 1605 kc/s between stations of the fixed services in the U.S.S.R. and broadcasting stations of neighbouring countries, the parties concerned shall, by mutual agreement, take steps to eliminate harmful interference.
- 4. (1) Administrations shall take all necessary steps in order to eliminate, as quickly as possible, interference which is brought to their notice.
- (2) As regards broadcasting stations using frequencies in bands allocated to other services, the Administrations shall observe the provisions of paragraphs 7 and 8 of the Document Annexed to the Additional Protocol to the Acts of the International Radio Conference of Atlantic City (1947).

#### ARTICLE 7

### Synchronised Networks.

- 1. For all stations of a synchronised network, the name and the power of the station shall be indicated in the Plan, with the exception of stations whose individual powers do not exceed 2 kW provided that their total power, considered separately from that of other stations of the same network, shall not exceed 5 kW.
  - 2. The maximum total power for the whole of the broadcasting sta-

tions forming a synchronised network is defined in paragraph 2, d) of Article 2 above.

- 3. Each Administration to which a frequency is allocated, in accordance with the Plan, for a network of synchronised stations, shall observe the following rules as regards any modification of the network (increase of the number of stations, change of site, modification of the technical characteristics, etc.):
  - a) The total and individual powers of the stations of a synchronised network shall not exceed the values given in paragraph 2, d) of Article 2 above.
  - b) The frequency allocated to the network concerned shall be maintained within the limits given in Article 3 above.
  - c) The positions of stations of power lower than or equal to 20 kW may be modified after consultation with the expert and after notifying the Administrations concerned, provided that they are not, in consequence, brought more than 10 % nearer to stations of other countries working on the same frequency or on an adjacent frequency.
- 4. In the case of any modification which does not satisfy all the requirements of paragraph 3, the Administrations shall observe the provisions of Article 8 of the Convention.

#### ARTICLE 8

## Functions of the Expert.

- I. Functions relating to the implementation of the Convention and the Plan.
- 1. In accordance with the provisions of Article 11 of the Convention, the expert gives its opinion on all technical questions which have a bearing on the application of the Plan, with a view to facilitating its implementation and supervising its regular and effective functioning.
- 2. The expert shall make periodic measurements of and observations on the basic technical characteristics of the broadcasting stations of the European Area. Such measurements shall relate, in particular, to the frequency and depth of modulation of transmitters; the observations shall relate, in particular, to interference to stations, and shall be accompanied by the necessary measurements of field strength.

The results shall be published by the expert and shall be communicated to the Administrations.

- 3. The expert shall make special measurements and observations, which may be requested of it by one or more Administrations or broadcasting organisations. It may, upon request, express its opinion on the technical means of avoiding any defects in the quality of transmissions.
- 4. The Administrations shall have recourse to the expert's cooperation in the international monitoring of broadcasting transmissions (see paragraph 1. c) of Art. 10 of the Convention). The expert shall fill the role of specialised monitoring organisation provided for in paragraph 5 of Art. 14 and in Annex C of the Radio Regulations.

### II. Functions relating to modifications of the Plan.

- 1. In cases of disagreement between the Administrations concerned and, if so decided by them, the expert may be called upon to give an opinion on the technical questions, in accordance with paragraph 3 of Art. 8 of the Convention.
- 2. The expert shall be consulted prior to any modification affecting a synchronised network, and to the entry into operation of any synchronised network on a frequency assigned in the Plan to a single station, and, in general, before any use, other than that specified in the Plan, is made of a given frequency.

# III. Functions relating to the preparation of new agreements between the Administrations.

1. The expert shall collect and prepare documentation for use in the work preliminary to the drafting of new technical agreements.

To this end:

- a) it shall collect general documentation of an objective character (geographical, demographical, radiophonic, legal data, etc.);
- b) it shall collect the available technical data and shall draw up reports on any technical questions to be taken into consideration in the drafting of new agreements or the revision of the Plan. The technical questions shall, more especially, be those concerning wave propagation,

standards of protection, permissible powers and frequency tolerances, intensity of industrial and atmospheric interference, the spectrum of frequencies of an emission and the percentage modulation corresponding to these frequencies, efficiency of antifading and directional aerials (especially in the secondary zone), the efficiency of synchronised networks, evaluation of the interference caused by several transmissions operating on the same frequency, etc.

- 2. It shall organise, in agreement with the Administrations, series of tests and measurements leading to the collection of data relating to the technical questions specified in the foregoing paragraph, and shall also estimate the practical results of the application of the frequency Plan. The broadcasting organisations shall facilitate, so far as possible, the preparation and the execution of such series of measurements.
- 3. Should the Administrations so decide, the expert may, subject to the conditions stipulated by them, participate in the work preparatory to the drafting of new agreements and may be entrusted with the preparation of one or more preliminary draft plans.

#### CHAPTER II

## Table showing Distribution of Frequencies.

- 1. The Table below shows the distribution of frequencies among the broadcasting stations of the countries of the European Area.
- 2. The Table provides for the assignment of frequencies both to the contracting countries of the European Area and to the countries non-signatories of the Convention.
- 3. 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.
- 4. The stations for which the installation of directional aerials is specified in the Plan are indicated in the Notes associated with the Table.

# Long Waves Band of 150 to 285 kc/s 1)

Band No.	Frequency kc/s	Station	Country	Power in kW	Observations
1	155	Brasov Tromsö	Roumanian PR Norway	150 10	2)
2	164	Allouis	France	450	
3	173	Moskva I	RSFSR	500	
4	182	Reykjavík Luleå Ankara	Iceland Sweden Turkey	100 10 120	
5	191	Motala	Sweden	200	
6	200	Droitwich I (or Ottringham)	United King- dom	400	

1) The coast stations of the:

-USSR Maritime Service shall use the following frequencies:

152 kc/s, Leningrad Radio (Coast station) power 1 kW 158 kc/s, Murmansk Radio (Coast station) kW 1.5 267 kc/s, Naryan-Mar Radio (Coast station) 0.25kW 0.025 kW 284 kc/s, Arkhangelsk Radio (Coast station)

-United Kingdom of Great Britain and Northern Ireland Maritime Service shall use the following frequencies:

152 kc/s, Plymouth Radio (Coast station) power 1.5 kW 155 kc/s, Portsmouth Radio (Coast station) 1 kW 1 260 kc/s, Plymouth Radio (Coast station) kW260 kc/s, Rosyth Radio (Coast station) 1 kW 270 kc/s, Plymouth Radio (Coast station) kW

-Italian Maritime Service shall use the following frequencies:

153.8 kc/s, Roma Radio (Coast station) power 1 kW 153.8 kc/s, Cagliari Radio (Coast station) 1 kW 1 kW 153.8 kc/s, Augusta Radio (Coast station) 157.9 kc/s, Napoli Radio (Coast station) 1 kW 157.9 kc/s, Genova Radio (Coast station) kW

2) The operation of the Norwegian station of Tromsö on the 155 kc/s frequency is authorised in conformity with the agreement concluded between the Roumanian People's Republic and Norway. This document (Protocol annexed to the European Broadcasting Convention, Copenhagen, 1948 and relating to the operation of the Norwegian station of Tromsö) is reproduced at the end of the present volume.

Band No.	Frequency kc/s	Station	Country	Power in kW	Observations
7	209	Kiev I	SSR of the Ukraine	150	
8	218	Oslo	Norway	200	
9	227	Warszawa I	Rep. of Poland	200	
10	236	Leningrad I	RSFSR	100	,
11	245	Kalundborg	Denmark	150	
12	254	Lahti	Finland	200	
13	263	Moskva II	RSFSR	150	
14	272	Československo	Czechoslovakia	200	
15	281	Minsk	SSR of Bielorussia	100	

Derogations
Bands of 415 to 490 kc/s and 510 to 525 kc/s

Band No.	Frequency kc/s	Station	Country	Power in kW	Observations
	420	Östersund	Sweden	10	1)
	433	Oulu	Finland	10	2)
	520	Hamar	Norway	1	3)

<sup>1)</sup> Directional aerial, protection south-west.

<sup>2)</sup> Directional aerial, protection south-west.

<sup>3)</sup> Directional aerial, protection south.

# Medium Waves Band of 525 to 1605 kc/s

Band No.	Frequency kc/s	Station	Country	Power in kW	Observations
1	529	Beromünster	Switzerland	150	
2	539	Budapest I	Hungary	135	
3	548	Ouchta	SSR of Finno-Carelia	20	
		Simferopol	RSFSR	100	
4	557	Cairo II	Egypt	20	
		Helsinki	Finland '	100	1)
		Monte Ceneri	Switzerland	50	
5	566	Athlone I	Ireland	100	
		∫Catania	· Italy	5	
		{Palermo		10	
6	575	Riga	SSR of Latvia	100	
7	584	Wien I	Austria	120	
8	593	Sofia II	PR of Bulgaria	60	2)
		Sundsvall	Sweden	150	3)
9	602	Lyon	France	150	· · · · · · · · · · · · · · · · · · ·
10	611	Petrozavodsk	SSR of		
			Finno-Carelia	100	
		Eidar	Iceland	5	
		Rabat I	Morocco	120	
		Sarajevo	FPR		
			of Yugoslavia	60	

Directional aerial, protection Monte Ceneri.
 Directional aerial. Apparent power in direction Sundsvall 10 kW.
 Directional aerial. Apparent power in direction Sofia II 20 kW.

Band No.	Frequency kc/s	Station .	Country	Power in kW	Observations
11	620	Bruxelles I Moalatya	Belgium Turkey	150 50	
12	629	Vigra Tunis II	Norway Tunisia	100 120	1)
13	638	Praha I	Czechoslovakia	150	
14	647	Burghead Droitwich II (or Daventry) Stagshaw Westerglen Kharkov	United King- dom  SSR of the Ukraine	15 120 15 15 15	} 2)
15	656	Bolzano Firenze I Napoli I Torino I Murmansk	Italy RSFSR	20 80 80 45 150	by night
16	665	Vilnus	SSR of Lithuania	100	
17	674	Marseille Bodö Rostov, Don	France Norway RSFSR	100 10 100	
18	683	Beograd I	FPR of Yugoslavia	150	
19	692	Nicosia Moorside Edge	Cyprus United King- dom	10 150	

Directional aerial, protection Vigra.
 If the synchronised stations of Westerglen, Burghead and Stagshaw are not put into operation, the power of Droitwich II (or Daventry) may be increased to 150 kW.

Band No.	Frequency kc/s	Station	Country	Power in kW	Observations
20	701	Rabat II	Morocco	120	
		Finnmark	Norway	20	
		Banská-Bystrica		100	
		and synchron- ised network	Czechoslovakia	5	
 21	710	Limoges	France	150	
		Stalino	SSR of		
			the Ukraine	150	
22	719	Lisboa Nacional	Portugal	120	
		Damas I	Syria	50	
23	728	Athinai	Greece	100	
24	737	Sevilla	Spain	50	
		Akureyri	<b>I</b> celand	1	
		Jerusalem I	Palestine	20	
		Gliwice	Rep. of Poland	50	
25	746	Hilversum I	Netherlands	120	
26	755	Kuopio	Finland	20	
		Norte Nacional	Portugal	50	
		Timisoara	Roumanian PR	50	1)
27	764	Sottens	Switzerland	150	
28	773	Cairo I	Egypt	50	
		Stockholm	Sweden	150	2)
29	782	Kiev II	SSR of		
			the Ukraine	100	
		Soviet troops			
		in Germany		70	

<sup>1)</sup> Unless a directional aerial protecting Norte Nacional is used, the power shall not exceed 20 kW.

<sup>2)</sup> The apparent power of the station of Stockholm in the direction of Cairo I shall not exceed 20 kW.

Band No.	Frequency kc/s	Station	Country	Power in kW	Observations
30	791	Rennes Thessaloniki	France Greece	150 50	
31	800	Leningrad II	RSFSR	100	
32	809	(Burghead Dundee Redmoss Westerglen Skopje	United King- dom FPR of Yugoslavia	100 5 20 100	
33	818	Poznań	Rep. of Poland	100	
34	827	Sofia I	PR of Bulgaria	100	
35	836	Nancy Beyrouth I	France Lebanon	150 20	1-44
36	845	Roma I	Italy	150	
37	854	Bucuresti	Roumanian PR	150	
38	863	Paris I	France	150	
39	872	Moskva III	RSFSR	150	
40	881	Aberystwyth Penmon Washford Wrexham Cetinje	United King- dom FPR of Yugoslavia	5 20 150 5 20	1)

<sup>&</sup>lt;sup>1</sup>) Directional aerial. The apparent power in the direction Cetinje shall not exceed 150 kW.

Band No.	Frequency kc/s	Station	Country	Power in kW	Observations
41	890	Alger I {Bergen Norge {Kristiansand {Tröndelag Dniepropetrovsk	Algeria Norway SSR of the Ukraine	100 20 20 20 20	1)
42 .	899	Milano I	Italy	150	
43	908	London (Brookmans Park)	United King- dom	150	
44	917	Ljubljana	FPR of Yugoslavia	135	
45	926	Bruxelles II	Belgium	150	
46	935	Lvov	SSR of the Ukraine	100	
47	944	Toulouse Voronej	France RSFSR	100 20	
48	953	Morava	Czechoslovakia	150	
49	962	Turku Tunis I	Finland Tunisia	100 120	2) 3)
50	971	Germany (British Zone)	Germany	70	
		{Kalinin {Smolensk Izmir	RSFSR Turkey	20 20 50	

Directional aerial, protection Norway.
 Directional aerial, protection Tunis.
 Directional aerial, protection Turku.

Band No.	Frequency kc/s	Station	Country	Power in kW	Observations
51	980	Alger II Göteborg	Algeria Sweden	100 150	1) 2)
		Goteborg	Sweden	130	
<b>52</b>	989	Germany (American Zone)	Germany	70	
		Rovaniemi	Finland	10	
		Beyrouth II	Lebanon	20	
53	998	Kichinev	SSR of Moldavia	100	
54	1007	Hilversum II	Netherlands	120	
34	1007	Aleppo I	Syria	20	4
		Aleppo 1	5y11a	20	
55	1016	Istanbul	Turkey	150	
56	1025	Graz-Dobl	Austria	100	
-		Jerusalem II	Palestine	20	
57	1034	Tallinn	SSR of Estonia	100	
		Torino II	Italy	10	
		Radio-Club portugûês	Portugal	40	
58	1043	Germany (USSR Zone)	Germany	70	
		Kalamata	Greece	5	•
		(Agadir I		20	
	Marrakech I	Morocco	20		
		(Oujda I		20	
59 1052	1052	Tripoli	Libya	50	3)
		∫Jassi	Roumanian PR	10	
		(Focsani		5	
		Hartland Point     Start Point	United King- dom	10 150	4)

Directional aerial, protection Göteborg.
 Directional aerial, protection Alger.
 Directional aerial, protection Start Point.
 Directional aerial, protection Tripoli.

Band No.	Frequency kc/s	Station	Country	Power in kW	Observations
60	1061	Denmark (East) Cagliari Lisboa Regional	Denmark Italy Portugal	60 10 15	
61	. 1070	Paris II Krasnodar	France RSFSR	100 20	
62	1079	Wroclaw	Rep. of Poland	50	
63	1088	{Korça {Shkodra {Droitwich III {Norwich	PR of Albania United King- dom	10 10 150 20	
64	1097	Bratislava and synchro- nised network	Czechoslovakia	150 5	
65	1106	Moghilev	SSR of Bielorussia	100	
66	1115	Bari I Bologna I S. Remo Norwegian synchronised	Italy	50 50 5	
		network	Norway	5	
67	1124	Bruxelles III Varna Viborg	Belgium PR of Bulgaria RSFSR	20 5 20	
68	1133	Zagreb	FPR of Yugoslavia	135	
69	1142	Constantine I Oran I Kaliningrad	Algeria RSFSR	20 40 20	

Band No.	Frequency kc/s	Station	Country	Power in kW	Observations
70	1151	Baia Mare Cluj Oradea (Carlisle Lisnagarvey Londonderry Stagshaw	Roumanian PR United King- dom	5 20 5 5 100 5 100	
71	1160	Strasbourg I	France	150	
72	1169	Odessa	SSR of the Ukraine	150	
73	1178	Hörby	Sweden	100	
74	1187	Budapest II	Hungary	135	
75	1196	Germany (French Zone) Kerkyra (Agadir II (Marrakech II Oujda II	Germany Greece Morocco	70 15 20 20 20	
76	1205	Bordeaux Haifa Lublin	France Palestine Rep. of Poland	100 5 10	

Band No.	Frequency kc/s	Station	Country	Power in kW	Observations
77	1214	Atlantico Regional (Ayr Brookmans Park Burghead Dundee Lisnagarvey Londonderry Moorside Edge	Azores — Portugal  . United Kingdom	2 5 60 20 5 10 1 58 2	
		Redmoss Redruth Stagshaw Westerglen British troops in Germany Kursk	RSFSR	2 2 2 10 50 70 20	1)
78	1223	Stara Zagora Barcelona Falun	PR of Bulgaria Spain Sweden	20 20 100	
79	1232	Budějovice Cechy-Západ Morava-Východ Praha II	Czechoslovakia	5 25 25 100	
80	1241	Vaasa (Bayonne Clermont- Ferrand Corse (Grenoble Le Havre Montbéliard Nice (Quimper Tiraspol	Finland France	50 20 20 10 20 20 20 20 20	
		Tiraspoi	of Moldavia	20	: -

<sup>1)</sup> The power shown against British troops in Germany is permitted as an exceptional addition to the normal maximum for a synchronised network.

Band No.	Frequency kc/s	Station	Country	Power in kW	Observations
81	1250	Lower Egypt	Egypt	5 5	
		Nyiregyhaza Zalaegerszeg (or Szombathely)	Hungary	10 20	1)
	·	Athlone II	Ireland	50	
82	1259	Szczecin	Rep. of Poland	100	
83	1268	Beograd II	FPR of Yugoslavia	135	
84	1277	Lille	France	150	
85	1286	Radio Catolica Košice	Portugal Czechoslovakia	20 100	
86	1295	Ottringham	United King- dom	150	
87	1304	Constantine II	Algeria	20 40	
		Gdansk	Rep. of Poland	50	
88	1313	Stavanger	Norway	100	
89	1322	Ouchgorod	SSR of the Ukraine	100	
90	1331	Genova I Messina Pescara Roma II Venezia I	Italy	50 25 25 50 25	
		·			

<sup>1)</sup> Directional aerial, protection Athlone.

Band No.	Frequency kc/s	Station	Country	Power in kW	Observations
91	1340	Alexandria	Egypt	5	
		Budapest		5	
		Magyaróvár Miskolc	Hungary	5· 5	
		Pécs		5	
		Crowborough	United King-		•
	,	(or Stagshaw)	dom	150	
92	1349	Corse		10	
		Marseille	France	50	
		Nantes	France	10	
	,	Toulouse		50	٠
		∫Kuldiga \Madona	SSR of Latvia	20 20	
		(Madona		20	
93	1358	Tiranë I	PR of Albania	100	
94	1367	Thorshavn	Faroe Islands	5	
		Caltanissetta	Italy	25	
		Toruń	Rep. of Poland	24	
		Porto Regional	Portugal	5	
95	1376	Strasbourg II	France	150	
96	1385	Madrid	Spain	100	
		Kaunas	SSR		
			of Lithuania	150	
97	1394	Dornbirn		5	,
		Graz	Austria	15	
		Innsbruck Linz		5 5	
		Rhodos	Greece	5	
		Swedish	, arctic		
		synchronised			
		network (South)	Sweden	20	
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Band No.	Frequency kc/s	Station	Country	Power in kW	Observations
98	1403	Baranovitchi	SSR of Bielorussia	20	
		Bayonne	•	20	
		Lille Paris		20 10	
	,	Quimper		20	
		Montpellier	France	10	
•		Nice		20	
		French troops			
		lin Germany		25	
		Komotini	Greece	5	
99	1412	Banja Luka		20	
	1	Bitolja		20	
		Maribor	FPR	20	
•		Pristina	of Yugoslavia	20	
		Rijeka		20 60	
		Split		00	
100	1421	Sarrebruck	Saar	20	
		Sfax I	Tunisia	5	
		Tchernigov	SSR of the Ukraine	5	•
101	1430	Girocastro	PR of Albania	5	
		(West)	D	70	
		Köbenhavn	Denmark	10	
		Madrid II	Spain	50	
102	1439	Luxembourg	Luxembourg	150	
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Band No.	Frequency kc/s	Station	Country	Power in kW	Observations
103	1448	Ancona Firenze II Genova II Milano II Napoli II Venezia II	Italy	25 3 5 50 5 5	
		Portuguese synchronised network Swedish	Portugal	5	
		synchronised network (North)	Sweden	20	
104	1457	Craiova {Bartley {Clevedon	Roumanian PR United King- dom	20 60 60	
105	1466	Monte-Carlo Norwegian synchronised network	Monaco Norway	120	
106	1475	Wien II Salzburg Klagenfurt	Austria	30 20 20	
			•		

Band No.	Frequency kc/s	Station	Country	Power in kW	Observations
107	1484	International common frequency Types I and II	PR of Albania Germany (British Zone) Austria Belgium Cyprus Vatican City Denmark Spain Finland France Gibraltar Greece United Kingdom Hungary Ireland Italy SSR of Lithuania Malta Morocco Norway Rep. of Poland Portugal Roumanian PR Rep. of S.Marino Syria Czechoslovakia Trieste Tripoli Tunisia SSR of the Ukraine FPR of Yugoslavia RSFSR		1)

<sup>1)</sup> The Vatican City is authorised to use this wave with a power of 5 kW until receivers allowing of reception of the 1529 kc/s frequency are in widespread use among listeners.

	Frequency			Power	
Band No.	kc/s	Station	Country	in kW	Observations
108	1493	Gomel French	SSR of Bielorussia	20	
		synchronised network	France	60	
109	1502	Zaragoza	Spain	50	
		Kraków Warszawa II	Rep. of Poland	50 10	
110	1511	Bruxelles IV	Belgium	20	
		Chania	Greece	5	
111	1520	Jihlava Ostrava	Czechoslovakia	5 30	
		Plzeň		30	
		Coruña	Spain	20	
112	1529	Città del Vati- cano	Vatican City	100	
		Funchal	Madeira — Por- tugal	1	
		Swedish synchronised network (North)	Sweden	20	
113	1538	Germany (French Zone) Spanish	Germany	70	
		synchronised network	Spain	5	
		1			
				-	
j.					

Band No.	Frequency kc/s	Station	Country	Power in kW	Observations
114	1546	Belfast Bournemouth Brighton Bristol Cardiff Dundee Edinburgh Exeter Fareham Glasgow Hull Leeds Liverpool London Manchester Middlesborough Newcastle-on- Tyne Plymouth Preston Redmoss Redruth Sheffield Vinnitza	United King- dom  SSR of the Ukraine	5 2 5 5 5 5 5 5 5 5 2 2 2 2 2 5 5 5 5 5	
115	1554	Germany (American Zone, occupation troops) Turi Nice	Germany SSR of Estonia France	70 20 75	1)

<sup>1)</sup> The methods of use of the frequency 1554 kc/s by the station of Nice, on the one hand, and by the station of the Army of Occupation of the United States of America in Germany, on the other hand, shall be the subject of a special agreement between the Governments concerned.

Band No.	Frequency kc/s	Station	Country	Power in kW	Observations
116	1562	Portuguese synchronised network Swedish	Portugal	5	
		synchronised network (South) Swiss synchronised	Sweden	20	
		network	Switzerland	5	
117	1570	Germany (USSR Zone) Spanish synchronised	Germany	70	
		network Sfax II	Spain Tunisia	5 5	
118	1578	Italian synchronised network (Bol-	Italy	10	
		zano region) Fredrikstad	Norway	10	
119	1586	Germany (British Zone) Spanish	Germany	70	
		synchronised network	Spain	5	
	.				

Band No.	Frequency	Station	Country	Power	Observations
120	Frequency kc/s  1594	International common frequency Types I and II	Andorra Austria Belgium PR of Bulgaria Cyrenaica Denmark Spain Finland France Greece Ireland SSR of Latvia Madeira — Portugal Morocco (Tangier) Norway Netherlands Rep. of Poland Portugal United Kingdom Switzerland Syria Czechoslovakia Trieste FPR	Power in kW	Observations
121	1602	Germany (American Zone) Norwegian synchronised network Portuguese synchronised network	of Yugoslavia  Germany  Norway  Portugal	70	

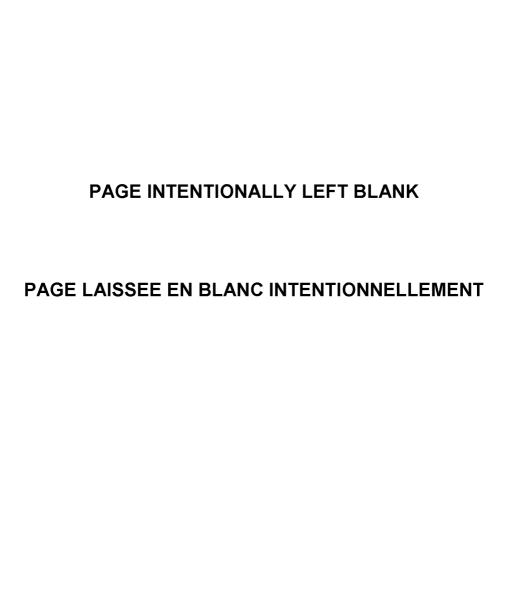
<sup>1)</sup> Hilversum III (or synchronised network) is authorised to use a power of 5 kW.

Note: It has been agreed that, as an exception, low-power transmitters serving certain Swiss valleys may use appropriate shared frequencies, provided the protection given by the Plan to other broadcasting stations be maintained.

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, 15 September 1948.

The signatures following the Plan are the same as those which follow the Convention.



## FINAL PROTOCOL

# Annexed to the European Broadcasting Convention Copenhagen, 1948.

At the time of signing the European Broadcasting Convention of Copenhagen, the undersigned plenipotentiaries take note of the following reservation:

## Portugal.

1. The Portuguese Delegation wishes to point out that its country's requests have always been based on the minimum requirements of Portuguese broadcasting in Europe and that, in a spirit of sacrifice and international collaboration, Portugal has, during this Conference, reduced its requests for exclusive waves to one only, and this has not even been allocated. However, Portugal in no way relinquishes her claim to the exclusive frequency which was allocated to her in the Montreux Plan in exchange for the long wave which she had by the Lucerne Plan, for the «Lisboa Nacional» transmitter.

Portugal formally reserves the right to revert to its request for an exclusive wave at a future Conference.

- 2. The Portuguese Delegation keenly regrets the hastiness with which the revision of the successive variants of the Copenhagen Plan, submitted too tardily to the Conference, was embarked on; it also regrets that several of its well-founded observations were not taken into account and it has doubts concerning the protection of the frequencies allocated to Portugal, this protection being considered insufficient both in the case of some sharings, and above all in regard to adjacent channels.
- 3. The Portuguese Delegation notes, moreover, that the frequencies allocated to the most important Portuguese transmitters are in too

close proximity to other frequencies used at present by Spain, and that it is impossible to foresee either what will be the attitude of this country to a frequency allocation plan on which it has not expressed its opinion, or to what extent it will be willing or able to modify its frequencies.

4. For the reasons given in paragraphs 2 and 3 above, the Portuguese Delegation declares that the Government of Portugal formally reserves the right to take all measures which may prove necessary to ensure a satisfactory quality in its national broadcasting service, while endeavouring to avoid interference with the national broadcasting services of other countries. The Government of Portugal undertakes to give, in no case, protections lower than the minima established by the Copenhagen Plan to sharing stations and/or to stations operating on neighbouring channels, following the siting of stations and the powers indicated in the Plan.

In witness whereof, the Plenipotentiaries of the above-named Governments have signed this Final Protocol 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, 15 September 1948.

The signatures following the Final Protocol are the same as those which follow the Convention.

# **STATEMENTS**

# Made at the European Broadcasting Conference Copenhagen, 1948.

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## Statements of signatory countries.

#### BELGIUM

The Belgian Delegation declares formally that, in the event that broadcasting stations operating in the shared band 255—285 kc/s cause harmful interference to the Belgian aeronautical radionavigation services, its Government reserves the right, on the bases of the stipulations of the Atlantic City Convention and of the Radio Regulations, to take all necessary measures to safeguard its interests.

Furthemore, the Belgian Government cannot assume responsibility for any harmful interference to Western European broadcasting services which might be caused by the legitimate functioning of its aeronautical radio services.

#### П

The Belgian Delegation has not been satisfied in its request th at four international common waves be included in the Plan. The Copenhagen Plan includes only two international common waves, of which only one will, in practice, be usable at the date of entry into force of the Plan. In view of the fact that, in these conditions, it will not be possible for Belgium to compensate for the inadequacy of its regional services, Belgium reserves the right to have recourse, if possible in agreement with other countries, to the use of low-powered stations to meet its regional requirements.

#### SSR of BIELORUSSIA

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Whilst agreeing to sign the Convention and the Plan, the Delegatior of the Soviet Socialist Republic of Bielorussia states the following:

1. The frequencies provided by the Copenhagen Plan for the broadcasting stations of Moghilev, Gomel and Baranovitchi are too high, and they do not, in view of the great extent of the Republic's territory, quite meet the broadcasting requirements of the SSR of Bielorussia; therefore, the Delegation of the SSR of Bielorussia, whilst agreeing to sign the Convention and the Plan, trusts that the next European Broadcasting Conference will grant lower frequencies to the SSR of Bielorussia for the above-mentioned stations.

- 2. The date fixed for the implementation of the Convention and of the Plan (15 March, 1950) is considered by the Delegation of the SSR of Bielorussia as unnecessarily distant, and it would consider it more expedient to implement the Convention and the Plan during the autumn of 1949.
- 3. The stipulations of Article 4, para. 1 of the Convention do not allow of all European States acceding to the Convention on an equal basis. The Resolution, at the end of this brochure, which makes dependent the date of notification of frequencies used by broadcasting stations operating in «derogation» on the date of approval of the International Frequency List, is a decision which is considered by the Delegation of the SSR of Bielorussia as not strengthening the Copenhagen Plan, but, on the contrary, as weakening it.

#### II

In accepting the Copenhagen Plan and in order to complement the above statement, the Delegation of the SSR of Bielorussia wishes to intimate the following:

In view of the proximity of the broadcasting stations of Minsk (281 kc/s) and Československo (272 kc/s), the Government of the SSR of Bielorussia reserves the right to take the necessary action, within the provisions of the Convention, and without causing interference to other broadcasting stations, to reduce mutual interference between the broadcasting stations of Minsk and Československo.

#### PR of BULGARIA

The Delegation of the People's Republic of Bulgaria considers that the Copenhagen Plan is acceptable to Bulgaria, although this Plan does not satisfy all the broadcasting requirements of the People's Republic of Bulgaria. The Delegation of the People's Republic of Bulgaria has, on many occasions, drawn attention to the poor propagation conditions for radio waves on the territory of the People's Republic of Bulgaria, which result from the mountainous character of the country. It is for this reason that she has requested the allocation of lower frequencies for her transmitters and an increase in the power of her national stations.

Despite this, and in a spirit of international collaboration, the PR of Bulgaria has consented to forego, provisionally, the lowering of the frequencies, and to reduce the power fixed for the broadcasting stations of Varna and Stara Zagora.

The Delegation of the People's Republic of Bulgaria reserves the right to demand, at a future European Broadcasting Conference, a lowering of the frequency of the national transmitter and an increased power for regional stations.

#### DENMARK

As the requests of the Danish Delegation with regard to the quality of the frequencies allocated to Denmark have not been met, it has been necessary to change the broadcasting plans for Denmark.

As time has not permitted a complete study of the possibilities of obtaining the best results with the allocated frequencies, Denmark reserves the right to permutate the frequencies 1061 and 1430 kc/s between the stations:

Denmark (East), Denmark (West), and Köbenhavn.

after obtaining the agreement of the Governments concerned, and in conformity with the Copenhagen Convention and Plan. Considering the small distances involved, these changes will probably not have any effect on other countries.

The frequency 1430 kc/s allocated to the station Denmark (West) with a power of 70 kW is to be shared with Madrid II, with 50 kW. As the Spanish station is not bound by the power restriction, Denmark reserves the right to increase the power of the Danish station up to a maximum value of 150 kW in order to avoid interference in

Denmark, while endeavouring to avoid interfering with other stations of the contracting Governments.

In the event of the Prague broadcasting station on 272 kc/s causing harmful interference to the Danish aeronautical services, Denmark reserves the right to take all necessary steps within the Radio Regulations.

#### **FINLAND**

According to the Copenhagen Plan the Finnish broadcasting stations Helsinki and Turku must be equipped with directional aerials. As there is a new broadcasting station under construction in Helsinki, the directional aerial will be installed at this station. Until this new station is put into operation the power of the old station will be limited to 20 kW with an omni-directional aerial. Correspondingly, the power of Turku station will be limited to 30 kW as long as there is no directional aerial

#### FRANCE

T

The French Delegation notes that its requests have not been completely met. France has, in fact, been allocated one frequency less than the number required and than the number obtained at Montreux. Moreover, the frequencies are, in general, quite considerably higher than those requested, and this is true, in particular, of those in the upper part of the frequency range. Finally, the distance between the French stations and other stations operating in adjacent channels will probably not always suffice to ensure adequate protection. While hoping to be able to achieve a satisfactory service, the French Government reserves the right, if experience should prove it necessary, to make certain permutations in the French frequencies, after obtaining the agreement of the Governments concerned, in conformity with the provisions of the Copenhagen Convention and Plan.

H

As the allocations for France provided for in the Copenhagen Plan do not compare closely enough with the requests made, a considerable rearrangement of the French broadcasting network will be necessitated.

The extent of this rearrangement cannot be determined without previous study.

For this reason the French Delegation cannot at present announce the names of the stations which will use the frequency 1493 kc/s.

French broadcasting will not place stations whose individual power exceeds 10 kW on this frequency, within the limits of the stipulated total power of 60 kW.

#### Ш

The French Delegation states, in regard to the broadcasting stations operating on the shared band of 255—285 kc/s that, in the event that these stations produce harmful interference in the operation of the French aeronautical radionavigation services operating in conformity with international regulations, the French Government reserves the right to have recourse to the appropriate stipulations of the Convention and Radio Regulations of Atlantic City, 1947, and to transmit to the Secretary General of the International Telecommunication Union such requests as it may deem justified.

Considering that the greater part of the 255—285 kc/s band of the Copenhagen Plan will no longer be usable in France for aeronautical radionavigation, the French Delegation declares that the French Government reserves the right to study all appropriate measures with a view to remedying this situation, which would render ineffective the numerous radionavigation installations which it has undertaken pursuant to international engagements.

#### IV

In view of the present uncertainty regarding the future attitude of Spain towards the Copenhagen Plan, the French Delegation wishes to intimate that it reserves the right to take any appropriate steps, within the framework of the international arrangements in force, in the event of one or several Spanish stations not provided for in the Plan interfering with the operation of the French network.

#### GREECE

The Delegation of Greece presents the following statement:

The Greek Government has always insisted, at the Conferences of Lucerne, Montreux and Copenhagen, that the 601 kc/s frequency, allocated to the Athinai national station by the Lucerne plan, be made exclusive, for reasons set forth in Documents submitted before and during the said Conferences.

With reference to the 728 kc/s frequency allocated to the Athinai national station by the Copenhagen Plan, we note that this frequency has been shifted by 127 kc/s from that allocated by the Lucerne Plan (601 kc/s). We must consider, on the one hand, the fact that the 728 kc/s frequency is exclusive and, on the other hand, the disadvantages for propagation which this frequency increase might produce. In view, therefore, of the low conductivity of the soil and the very mountainous nature of our country, we reserve the right to revert, at the next Broadcasting Conference, to our request for a more suitable frequency for the Athinai national station and for appropriate frequencies for other Greek stations, in order to provide our country with a national service of a reasonably satisfactory quality.

#### HUNGARY

Ι

The Hungarian Delegation, in the name of its Government, declares that, in accepting the Copenhagen Plan, it reserves the right to demand, on the revision of the frequency allocations or in the event of a new frequency plan:

1. A frequency below 900 kc/s for Budapest II, as the frequency of 1187 kc/s which has been allocated is too high;

- 2. The improvement of the unsatisfactory protection of the Hungarian stations (Zalaegerszeg 20 kW, Nyiregyháza 10 kW) on 1250 kc/s;
- 3. The improvement of the inadequate protection of the stations operating on 1340 kc/s (Budapest 5 kW, Magyaróvár 5 kW, Miskolc 5 kW, Pécs 5 kW).

#### II

The Hungarian Delegation, in the name of its Government, declares that as Article 4, 1. of the Convention allows only Members of the I.T.U. to accede to the Convention, it does not consider that this Article serves the interests of European broadcasting.

#### **TRELAND**

The Government of Ireland reserves the right to take whatever steps may be necessary, within the Radio Regulations, should the broadcasting station of Československo on 272 kc/s cause harmful interference to the aeronautical radionavigation services of Ireland.

#### ITALY

The Italian Delegation wishes to make the following statement:

1. Should the broadcasting stations operating in the mixed band 255—285 kc/s cause harmful interference to the aeronautical radionavigation services of Italy operating in conformity with international agreements, the Italian Government reserves the right, under the provisions of the Atlantic City Convention and the Radio Regulations, to take the necessary action to ensure the safety of life as well as the interests of Italian aviation.

The Italian Government states, furthermore, that it cannot assume any responsibility for harmful interference which might possibly be caused by the legitimate operation of its aeronautical services to the Western European broadcasting services operating in the adjacent 251—255 kc/s band.

- 2. Italy's requests have not been entirely satisfied:
- a) The frequencies allocated, and, in particular, those of Roma I and Milano I, are generally perceptibly higher than either the frequencies requested or the frequencies hitherto used by Italian broadcasting services under the provisions of the Lucerne Plan.
- b) The number of exclusive frequencies has been reduced from 5 to 3. Italy consequently reserves the right to claim, at the next revision of the Plan, an increase in the number of exclusive frequencies and an improvement in the quality of the majority of the frequencies allocated her by the Plan.
- 3. Italy reserves the right to claim a long wave at the next Conference, or even before the next Conference, in conformity with the provisions in force.
- 4. Italy makes all reservations against the event of her stations being interfered with by stations belonging to contracting countries.

#### **MOROCCO** and **TUNISIA**

The Delegation of Morocco and Tunisia, on agreeing to sign the Copenhagen Plan, wishes to make the following statement:

The requests of Morocco and Tunisia have been voluntarily reduced to the strict minimum:

for both of the countries, to the frequencies indispensable for two programmes only, in spite of the multilingual character of the listening public;

for Morocco, to shared frequencies, with protection standards as defined in Document RD 69 of 12 July, 1948 of the Delegation;

for Tunisia, to the minimum of one exclusive frequency, among other allocations.

The Delegation of Morocco and Tunisia, noting that the Copenhagen Plan does not meet these two minimum requirements, wishes to state that:

1. As regards the sharings, if these do not allow of a reasonably satisfactory service, or of a service in conformity with the stipulations of RD 69, the two countries concerned will, after trial, have recourse to the provisions of Article 8 of the Copenhagen Convention.

2. As regards directional aerials, the use of which is stipulated for Tunis I and II, although the principle thereof is accepted by the Delegation, the material conditions of accomplishment and the time required for installation are conditional upon subsequent examination, the result of which cannot be anticipated.

#### NORWAY

Norway reserves the right to take, within the Radio Regulations, the necessary steps to ensure the security of her air services, should the Czechoslovak broadcasting station on 272 kc/s cause harmful interference to the aeronautical radionavigation services in her country.

#### **NETHERLANDS**

The Netherlands Delegation formally declares that in the event of the broadcasting stations operating in the shared band of 255—285 kc/s causing harmful interference to the aeronautical radionavigation services of the Netherlands, operating in accordance with international arrangements, its Government reserves the right, on the basis of the provisions of the Atlantic City Convention and Radio Regular CHIVES tions, to take all appropriate steps for safeguarding its interests.

Futhermore, the Netherlands Government cannot assume respondeneve sibility for any harmful interference which may be caused to Western European broadcasting services operating in the frequency band of 251—255 kc/s by the legitimate operation of its aeronautical radionavigation services.

## REPUBLIC OF POLAND

I

The Polish Delegation reserves the right for the Administration of its country to assure, by appropriate measures, an adequate broadcasting service for the stations Kraków and Warszawa II, synchronised on the frequency of 1502 kc/s (channel 109) pursuant to the Copenhagen Plan.

Such measures as are taken in conformity with the stipulations of international agreements will not cause harmful interference to other broadcasting stations in the European Area.

#### П

The Delegation of the Republic of Poland, having studied meticulously the Copenhagen Frequency Distribution Plan, has the honour to make the following statement:

1. The consecutive variants of the Copenhagen Plan have introduced notable changes in the quantity and quality of frequencies allocated to Polish broadcasting, especially in comparison with the Lucerne and Montreux allocations, with the applications of the Polish Government to the Committee of Eight Countries and to the Copenhagen Conference, and finally with the present state of affairs.

These changes may be summarised as follows:

a) The number of frequencies allocated has been reduced by comparison with the Polish application to the Committee of Eight Countries. Instead of 13 frequencies, Polish broadcasting has virtually received only 9.

As a result, Polish broadcasting finds that it is obliged either to abandon or to reduce the transmissions of the stations of Bialystok, Rzeszow, Lodz (henceforth on an international frequency) and Kraków (synchronised with Warszawa II).

- b) There has been allocated to the transmitting station of Wroclaw, Poland's second station, a frequency (1079 kc/s) which not only reduces its effective range, but which involves substantial changes in the aerial and the transmitter, which are costly and difficult to carry out.
- c) The Polish proposal to convert the broadcasting station of Lublin into a synchronised network has not been accepted, and a vast part of Polish territory is liable, as a result, to be deprived of its second programme.
- d) The present synchronised broadcasting stations, Warszawa II and Kraków, have been moved to the highest part of the spectrum (1502 kc/s), and this reduces their effective range and renders recep-

tion unreliable in view of the quality of receivers. The result of this change is that Polish broadcasting will henceforth have no less than three stations in the least favourable part of the spectrum.

- e) The quality of the transmissions of the stations of Szczecin, Toruń, Gdansk, Warszawa II and Kraków has been lowered as a result of the allocation of low quality frequencies.
- 2. To sum up, the Polish Delegation notes that, notwithstanding the exceptional circumstances of Polish broadcasting, reconstructed with an immense effort and spirit of sacrifice after the total and barbaric destruction by the Germans, the Copenhagen Plan consigns it to the extreme limit of the minimum broadcasting requirements of Poland, if not below that limit.

This state of affairs is due, in the first place, to the intransigeant and egoistic attitude of certain Western Governments which have suffered comparatively little by the War and which are willing to sacrifice nothing, or next to nothing, of their acquired broadcasting potentials.

- 3. Nevertheless, the Polish Delegation, animated by a spirit of international co-operation, and recognising the importance of the Copenhagen Plan as an element of order in the chaotic and confused state of the European ether, has decided to make the above-mentioned heavy concessions, and it declares that it accepts the Copenhagen Plan, subject to ratification by its Government.
- 4. The Polish Delegation sincerely hopes that its sacrifices in the common interest will be borne in mind, and that, at the next Conference for the revision of the Copenhagen Plan, the legitimate claims for Polish broadcasting will be better satisfied.

#### ROUMANIAN PR

The situation created by the Copenhagen frequency distribution Plan for the broadcasting system of the Roumanian People's Republic is such that it necessitates important reservations on the part of the Roumanian Delegation. In view of the conditions in which the European Broadcasting Conference of Copenhagen has taken place the Roumanian Delegation is nevertheless prepared to sign this Plan, and its country is prepared to apply it.

Our reservations concern:

- 1. The absence of a second exclusive frequency in the medium wave range. This frequency was requested for the Timisoara station and is absolutely necessary in view of the importance of the Banat region which it should serve.
- 2. The poor protection of all our stations against sharing stations and neighbouring stations.

It is to be noted that all the foreign stations sharing with Roumanian stations enjoy a higher protection.

Roumanian broadcasting reserves the right, in the event of the service of its stations being unsatisfactory to take, in accordance with international agreement, the necessary measures for improvement, while avoiding interference to other stations.

3. The quality of our frequencies, which are too high in view of the poor propagation conditions of the country.

As a result of these disadvantages, the effective range of the Roumanian transmitters on medium waves is entirely inadequate. Therefore, despite the 155 kc/s frequency of the Brasov station, which does not itself cover all the territory of the country, Roumanian broadcasting will encounter insurmountable difficulties in accomplishing the task which devolves upon it, i.e. to present programmes in three languages for regions which are highly varied from a demographic, economic, and cultural point of view.

For these reasons, while prepared to sign the Copenhagen Plan, the Delegation of the Roumanian PR considers the frequencies allocated to Roumanian stations unsatisfactory, and reserves to the Roumanian P.R. the right to claim the necessary frequencies at the next European Broadcasting Conference.

# UNITED KINGDOM of GREAT BRITAIN and NORTHERN IRELAND

I

Should harmful interference to aeronautical navigation services in the United Kingdom be caused by the Československo broadcasting station to which the frequency of 272 kc/s is assigned in the Plan, His Majesty's Government in the United Kingdom reserves the right to take such action as it may deem fit within the Radio Regulations of Atlantic City, 1947.

11

The Delegation of the United Kingdom of Great Britain and Northern Ireland considers that the statements of the USSR which were contained in Document RD No. 396 and which are reproduced in section A of the Statements under the heading USSR I, do not appear to be in conformity with the obligations entailed by Articles 1 and 8 of the Copenhagen Convention. These provisions must be observed, or at least the agreement of all the Governments concerned should be obtained before a frequency can be used in a different manner than that provided for in the Copenhagen Plan by a broadcasting station of a contracting Government in the European Broadcasting Area.

#### CZECHOSLOVAKIA

The Czechoslovak Delegation, in signing the Copenhagen Plan, reserves for the Czechoslovak Administration the right to take necessary measures, within the framework of international agreements, to assure a broadcasting service of satisfactory quality for the population of that area served until now by the station Ostrava, in the event that, after the implementation of the Plan, it proves that the frequency 1520 kc/s allocated to the station Ostrava does not provide a satisfactory service on account of the difficult receiving conditions of this mountainous terrain. Such measures will not cause harmful interference to the broadcasting services of the countries of the European Broadcasting Area.

#### SSR of the UKRAINE

The Delegation of the SSR of the Ukraine, whilst agreeing to the Copenhagen Convention and the Frequency Allocation Plan, must point out that the minimum requests made by its Government are not satisfied by the Plan.

The frequencies assigned to Odessa — 1169 kc/s, Tchernigov — 1421 kc/s, Ouchgorod — 1322 kc/s, and Vinnitza — 1546 kc/s are too high and cannot ensure a normal service for these areas.

The number of exclusive frequencies allocated is absolutely inadequate for the broadcasting service of this vast territory.

The Ukrainian Delegation declares its disagreement with Article 4, 1. and Article 7, 2. of the Convention, the provisions of which are inimical to the accession of the Governments of several sovereign countries of Europe to the Convention and the Plan.

The Delegation of the SSR of the Ukraine, while emphasising the above, expresses its hope and confidence that the next Broadcasting Conference will take into consideration the real requirements of the SSR of the Ukraine and that heed will be paid to its desires.

# UNION of SOVIET SOCIALIST REPUBLICS (USSR)

Ι

The number of frequencies allocated to the USSR does not meet the Soviet Union's requirements.

To some of the most important stations of the USSR, such as Rostov, Don, Simferopol and Murmansk, and also to the stations of the capitals of the Estonian and the Carelo-Finnish Soviet Socialist Republics, shared frequencies have been allocated instead of the exclusive ones requested. To the stations of the capitals of Union Republics, viz. Vilnus, Kichinev and Tallinn, higher frequencies in the medium wave spectrum have been allocated than was the case in the Plan of Lucerne. To the station of Kaunas, which in the Lucerne Plan was given a long wave, an extremely high frequency has been allocated. To the stations of Smolensk and Kalinin the same frequency has been allocated, so that they are deprived of the possibility of simultaneous functioning. The stations of Madona and Kuldiga are in a similar position.

Moreover, the Soviet Delegation considers that Articles 4, 7 and 13 of the Convention unjustly deprive European countries, which had not been invited to the Conference, in particular the SSR's of Estonia, Latvia, Lithuania, Finno-Carelia and Moldavia, of the right of accession to the Convention.

Notwithstanding the above remarks, the USSR is prepared, with a view to contributing to the success of the Conference and in the general interest, to sign the Plan and to proceed to its implementation on condition that all countries will observe its provisions rigidly and that stations will operate only in the bands which have been allocated to them by the Plan. The USSR reserves the right, should this not be the case, to take the necessary technical measures to eliminate interference in the work of its stations.

П

The Delegation of the USSR declares that, if Spain does not observe the Copenhagen Plan and uses frequencies allocated by this Plan to broadcasting stations of the USSR, the USSR will be obliged to reserve the right to place its stations on frequencies which afford a service, under normal conditions, to the population of the Union of Soviet Socialist Republics.

#### III

The Delegation of the USSR, considering that Luxembourg refuses to sign the Copenhagen Plan, deems it necessary to make the following reservation:

The USSR, wishing to satisfy the needs of its population, reserves the right, having regard to generally recognised international procedure, to place its stations on such frequencies as will ensure a normal broadcasting service, in the event of Luxembourg using frequencies allocated by the Copenhagen Plan to the USSR.

#### FPR of YUGOSLAVIA

The Delegation of the Federal People's Republic of Yugoslavia wishes to make the following statement:

1. It is indispensable that the station of Skopje should be allocated an exclusive frequency, it being the only station which can broadcast the Macedonian programme intended for the Macedonian people.

According to the directives given at the Plenary Assembly of the Conference to the Planning Group, the principal national station transmitting in the official language should have priority in the allocation of exclusive frequencies. The Copenhagen frequency allocation Plan, however, allocates to the station of Skopje a frequency shared

with the synchronised network of the United Kingdom. The latter at its maximum power would render it impossible for the station of Skopje to ensure satisfactory reception throughout the area of the People's Republic of Macedonia.

In view of the above, the Delegation of the Federal People's Republic of Yugoslavia reserves the right, on behalf of its Government, to demand for the station of Skopje an exclusive frequency of an adequate quality at the time of revision of the Copenhagen Plan or of the elaboration of a new Plan.

2. The frequency allocated to the station of Ljubljana is 160 kc/s higher than was claimed in the request, although the station of Ljubljana is known to be the only one transmitting programmes in the Slovenian language in the Slovenian People's Republic. It is equally well known that the territory of this Republic is mountainous (the mountains having an altitude of over 2500 metres) with conditions of propagation of electromagnetic waves most unfavourable owing to considerable fading and to the reflection of waves in the mountains; the lowest figures of soil conductivity therefore become, in this case, meaningless.

For the above reasons, the Delegation of the Federal People's Republic of Yugoslavia reserves the right to demand in future a lower exclusive frequency for the station of Ljubljana.

3. The shared frequency allocated to the station of Cetinje is not adequate in view of the power ratio, and of the small geographic distance between the station of Cetinje and the British synchronised network in the South of England with which the station of Cetinje shares the frequency. Moreover, the frequency allocated is 260 kc/s higher than the one which was claimed in the request.

In view of the above-stated circumstances, the working conditions of the station of Cetinje, situated as it is in the People's Republic of Montenegro, the most mountainous of the Yugoslav Republics, could not be worse than they are.

The Delegation of the FPR of Yugoslavia reserves the right to demand in future a better sharing and a lower frequency for the station of Cetinie.

Futhermore, should the action of the directional aerial of the English station Washford interfere with the normal working of the station

of Cetinje, the Government of the Federal People's Republic of Yugoslavia reserves the right to take action within the limits prescribed by the Convention and the Plan of Copenhagen and without prejudice to the broadcasting services of other countries.

The Delegation of the FPR of Yugoslavia, with a view to ensuring the central programme for all of the Yugoslav territory, requested frequencies for a synchronised network and for two groups of relays. The Copenhagen Plan, however, allocates the Federal People's Republic of Yugoslavia one frequency only for a single synchronised network. As a result, it will not be possible to avoid zones of interference throughout the territory of the Republic between the stations of the network in question. The Government of the Federal People's Republic of Yugoslavia therefore reserves the right either to insist upon being allocated for the second synchronised network an additional frequency lower than the one which has been provided, or to demand a long wave capable of ensuring the transmission of a main programme for the whole of Yugoslavia. The allocation of such a long wave would be justifiable in view of the size of the territory and of the orographic conditions prevailing in Yugoslavia.

# B. Statements of non-signatory participating countries.

## **AUSTRIA**

I

Statement based on Variant III of the Copenhagen Plan. (12.9.1948)

The 3rd. variant of the Copenhagen Plan allocates to Austria frequencies which, with the exception of 584 kc/s for Wien I, are all much too high in view of the mountainous surface of Austria and the extremely bad propagation conditions which result from this and from the poor conductivity of the soil which, according to the O.I.R. conductivity map of Europe, is as low as 3.10<sup>-15</sup> E.M.U. over large areas of Austria.

In consequence, the service areas of all the Austrian transmitters are considerably reduced, even at the high power which they have been allocated by the 3rd. variant. For instance, in spite of the possible increase in power up to 10 kW, the service area of Dornbirn would be reduced by 80%, i.e. to 20% of the present area, by the frequency change from 519 kc/s to 1394 kc/s, thus virtually closing down this transmitter.

Moreover, all these allocations have been made in complete disregard of the stipulations of paragraphs 4, 2 and 4, 3 of the Document Annexed to the Additional Protocol of Atlantic City. The implementation of the present 3rd. variant of the Plan would therefore involve Austria in heavy expenditure, which she cannot meet and which, in view of the aforesaid, would be unavailing. In addition, transmitters on 1574 kc/s and on 1594 kc/s would, for many years, be of no use to Austrian listeners, as the vast majority of their receivers can be tuned only up to 1490 kc/s and as the poor economic condition of the Austrian population prevents their buying new receivers; the poorer classes, in particular, would thus be deprived of the benefit of listening to broadcasting, on which they are dependent as the only sound source of education and entertainment within their means.

Austria cannot, therefore, accept the Plan in its present form, and cannot, accordingly, sign the Convention and bind herself to the Plan. She is obliged to reserve the right to use frequencies appropriate to Austrian broadcasting conditions and will select such frequencies in the band  $525-1605~\rm kc/s$ . In so doing she is willing to give as great a protection as possible to shared and adjacent channels, but she cannot enter into any commitments in this respect.

II

The Copenhagen Plan as it now stands shows no improvement as compared with Variant III with regard to Austria, despite the well-founded objections made by the Austrian Delegation at the Planning Group. This Delegation is therefore obliged to maintain in full its declaration of September 12th., 1948 concerning Variant III.

The Austrian Delegation reaffirms that it cannot accept this Plan and that it will not, therefore, sign the Copenhagen Convention.

The Austrian Delegation states that its country reserves the right to use, in order to assure its broadcasting service, suitable frequencies chosen on technical grounds and, as far as possible, in mutual agreement with the Administrations concerned. These observations apply especially to the low powered relay transmitters used to overcome broadcasting difficulties in remote narrow valleys.

#### EGYPT and SYRIA

Following the publication of the first Variant of the frequency allocation Plan, the Egyptian and the Syrian Delegations declared their dissatisfaction with the frequencies allocated by the Plan to their respective countries.

The technical reasons for this dissatisfaction were given in documents addressed to the Chairman of Committee 5.

The Delegations of Egypt and of Syria endeavoured on several occasions to offer reasonable solutions, but these representations were not heeded. They perceived, on the contrary, a tendency to render the situation for the countries in question more difficult, rather than to improve it.

In order to serve their large surface areas and their scattered populations, Egypt and Syria use primarily the sky waves of their principal transmitters; they have no other technical means available for serving their territories. It is for this reason that the Delegations asked for the application of the Directives of Atlantic City and of the Plenary Assembly of the present Conference which provided, in conformity with the decision taken by the Plenary Assembly at its Meeting of 23rd. July, that the Copenhagen Conference should take, as a basis for the new Plan, the principle of allocating to each country of the European area one or more exclusive waves, if general and technical conditions render this necessary.

Not only have the Directives not been followed, but Egypt and Syria have been presented with a final Plan whereby they would receive no exclusive wave.

This hasty Plan was drawn up during the last week of the Conference and, under the pretext of lack of time, was adopted without study or technical analysis, and this notwithstanding the fact that the Conference devoted much time to the analysis of the Brussels Plans which were not adopted, whilst a Plan which will be operative during the next five or ten years has been adopted without study or detailed technical analysis.

The Delegations of Egypt and of Syria wish to state that they cannot accept a Plan prepared in such a manner. They reserve the right, meanwhile, to use, within the Radio Regulations, the frequencies and powers which they consider necessary for a satisfactory broadcasting service in their respective countries, whilst avoiding, as far as possible, causing harmful interference to the broadcasting services of other countries.

#### **ICELAND**

The Delegation of Iceland wishes to make a formal statement as follows:

The frequencies allocated to the broadcasting stations in Iceland by the frequency allocation Plan are all shared, and the sharings are so unsatisfactory that they do not permit of a workable broadcasting service in half of the country.

The Delegation of Iceland regrets very much, therefore, that it cannot sign the Copenhagen Convention.

Furthermore, the Delegation of Iceland declares that, in seeking other possible solutions for the broadcasting stations in Iceland, great care will be taken, in accordance with the provisions of Article 3 of the Radio Regulations, to avoid causing harmful interference to the services of other countries.

#### SWEDEN

The Swedish Delegation wishes to make the following statement:

As no guarantees have been given that the östersund station on 420 kc/s may continue to work under unchanged conditions until the next European broadcasting conference, the Swedish Administration

considers this allocation of doubtful value. If it proves necessary, the Administration must try to find a suitable sharing for östersund within the ordinary broadcasting bands.

The frequencies allocated for the stations of Stockholm, Göteborg, Hörby and Falun, as well as the frequencies for the synchronised networks, are considerably higher than the frequencies used at present.

The proposed sharings for the station of Falun and for the four synchronised networks are far from being such as to ensure the service for the areas covered by these stations.

The Swedish Administration, for the reasons mentioned above, is not in a position to accept the Plan as a whole.

Sweden reserves the right to take, within the Radio Regulations, whatever action may be necessary in the event of Československo on 272 kc/s causing harmful interference to the Swedish aeronautical radionavigation services.

#### TURKEY

## Long Waves.

Statement by the Turkish Delegation in the event of its request for a 10 kc/s separation between Moskva I and Ankara not being satisfied.

The Delegation of Turkey is obliged to make the following statement:

In view of the short geographical distance between the stations of Ankara and Moskva I and the separation of 9 kc/s between the two stations — insufficient by reason of the high power of 500 kW used by Moskva I —

Turkey reserves the right to take suitable steps, while endeavouring to avoid prejudicing the functioning of long-wave stations of the contracting countries, for the elimination of any interference which might arise.

#### Medium Waves.

Moreover, the Turkish Delegation formally reserves the right to claim, at the next Conference, or even before, the use of exclusive frequencies below 800 kc/s for the stations of Istanbul and Izmir, should the provisions of the Plan prove inefficacious for the assurance of a reasonably satisfactory service of good quality in Turkey, where the conductivity of the soil is very bad and the relief excessively mountainous. This would be done without prejudice to the operation of medium wave stations of the contracting countries.

# C. Statements of Occupying Countries in Germany.

### UNITED STATES of AMERICA

Although the United States Government cannot be signatory to the Copenhagen Convention and Plan, it has hoped that any Plan which might be adopted by the Conference would be acceptable, so that the United States would be in a position to implement the Plan in its areas of responsibility.

The United States Government regrets that the Brussels Committee of Eight Countries did not see fit to consider seriously the frequency requirements of the United States areas of occupation in Germany during the period of occupation, and that the Copenhagen Conference has not considered Germany in the light of the current situation.

In view of its overall commitments, the United States Government has instructed its delegation to inform the Copenhagen Conference that the United States Government is not prepared to implement any allocation Plan which envisages only one programme per zone in Germany with minimal frequencies for this purpose, and only one shared frequency for United States troop broadcasting.

#### FRANCE

# Statement Concerning the French Occupation Zone in Germany.

The French Delegation, which is not legally authorised to represent the part of Germany under French occupation, considers that the allocations provided for Germany constitute a reasonable solution in respect to the number and sharing of frequencies. On the other hand the position, in the highest part of the spectrum, of the second frequency assigned to the French Zone is such that it will render difficult the carrying out of the minimum service required.

The French Delegation considers it desirable that an agreement be reached so that the Convention and the Plan may be legally applied in Germany by all the occupying powers.

On the occasion of such agreement, or in default of same, the French Government will seek, within the framework of the Convention, and taking into account the situation of the various occupying powers, measures to be taken in order to ensure the best possible broadcasting service in the French Occupation Zone.

# UNITED KINGDOM of GREAT BRITAIN and NORTHERN IRELAND

His Britannic Majesty's Government in the United Kingdom considers that the frequency allocations for Germany are unsatisfactory as not providing adequate facilities for the agreed minimum of one programme per zone; it therefore enters a general reservation in regard to the Plan as it applies to the British Zone of Germany and the British Sector of Berlin.

Furthermore, if for any reason one or more of the other occupying powers in Germany should not find it possible to implement whatever frequency allocations are mutually agreed to be adequate for the above purpose, His Majesty's Government reserves the right to make such adjustments as it may deem necessary to the allocations for broadcasting transmitters in the British controlled areas.

# UNION of SOVIET SOCIALIST REPUBLICS (USSR)

The Delegation of the Union of Soviet Socialist Republics wishes to point out that the application of the Copenhagen Plan in Germany must be carried out by the Inter-Allied Control Commission in Germany until such time as a central German Government is created.

The Delegation of the USSR declares that the USSR will apply the Copenhagen Plan in Germany on condition that the Plan is applied by the other countries occupying Germany.

The Union of Soviet Socialist Republics reserves the right to revise the question of frequency distribution for the requirements of the occupation troops in Germany, in the event that the above-mentioned conditions are not fulfilled.

## PROTOCOL

# annexed to the European Broadcasting Convention of Copenhagen 1948,

and relating to the operation of the Norwegian station of Tromsö.

The following agreement, for the regulation of the working conditions of the Norwegian station Tromsö on frequency 155 kc/s assigned exclusively to the Roumanian station of Brazov by the Copenhagen Plan for the distribution of frequencies, has been reached between the undersigned, plenipotentiary Delegates for Norway and for the Roumanian People's Republic.

The broadcasting service of the Roumanian People's Republic agrees that the Norwegian broadcasting service may operate the Tromsö transmitter on  $155~\rm kc/s$ .

The broadcasting service of the Roumanian People's Republic consents thereto on condition:

- 1. that the transmitter of Tromsö operates with a power not exceeding 10 kW;
- 2. that the protection afforded to the transmissions of Brasov for a field of 3 mV/m during night-time and of 1 mV/m during the day is at least 40 db. in the territory of the Roumanian People's Republic. It is understood that it is night-time and day-time in Roumania which are concerned;
- 3. that the power of the Tromsö transmitter is reduced to 5 kW during the winter (from 22nd September to 21st March), should experience show that this reduction is necessary to ensure the above mentioned protection;
- 4. that the Tromsö as well as the Brasov transmitter maintains a frequency stability as high as possible with the object of avoiding any defects in the transmissions of the two stations. In no case should the maximum tolerance exceed  $\pm$  10 c/s;

5. that Norwegian broadcasting undertakes to operate no other station, whether synchronised or not, on the frequency of 155 kc/s.

This agreement is entered into by the broadcasting service of the Roumanian People's Republic for the effective duration of the Copenhagen Convention and of the Plan for the distribution of frequencies. It may be extended beyond the end of this period if Norwegian broadcasting so desires and if Roumanian broadcasting sees no objection thereto. It may be withdrawn during this period if the conditions laid down in this Protocol are not respected, or in the event of Norway denouncing the Copenhagen Convention or Plan for the distribution of frequencies. In this latter event, neither the Tromsö transmitter nor any other Norwegian station shall any longer have the right to operate on the frequency of 155 kc/s assigned exclusively to the Brasov station by the Copenhagen Plan for the distribution of frequencies. Continued operation on the Brasov exclusive frequency would then render Norwegian broadcasting liable to the consequences envisaged by the Conventions and international Radio Regulations in force and covering cases of use of frequencies allocated to other countries.

In cases where one or several of the conditions laid down in the present Protocol are not respected by Norwegian broadcasting, the broadcasting service of the Roumanian People's Republic may address a notification to the Norwegian broadcasting service through the intermediary of the I.T.U. or the Legation of the Roumanian People's Republic at Oslo, or through any other normal diplomatic channel.

The Norwegian broadcasting service shall be obliged to take action on such notification by carrying out, within a period of four weeks, the technical and other measures necessary to fulfill the conditions laid down in this Protocol. It shall also, within the same period, intimate the measures taken to the broadcasting service of the Roumanian People's Republic through the intermediary of the I.T.U. or the Legation of Norway at Bucharest, or through any other normal diplomatic channel.

Should the Norwegian broadcasting service fail to take action on any notification from the broadcasting service of the Roumanian People's Republic, or should the measures taken by the Norwegian broadcasting service prove to be inefficacious, a joint committee shall be set up, to be composed of a representative of the broadcasting service of the Roumanian People's Republic, and a representative of the Norwegian broadcasting service, and under the Chairmanship of a representative of the Expert appointed by the European Broadcasting Convention of Copenhagen, this representative to be nominated by the Expert itself. This committee shall examine all complaints and, as necessary, shall to this end proceed to the territory of the Roumanian People's Republic or to the territory of Norway, as the case may be. The two parties undertake to place at the disposal of the joint committee all the resources necessary to facilitate its journey and its investigations.

The decisions of the joint committee, including those regarding the expenses arising from its work, shall be binding on both parties.

This Protocol has been drawn up in French, English and Russian, the French text being authentic.

For the Roumanian People's Republic:

For Norway:

Matei SOCOR Ernest GROSS Olaf MOE Toraly ØKSNEVAD

# RECOMMENDATION RESOLUTIONS OPINION

#### Recommendation.

The European Broadcasting Conference, considering

the great difficulties encountered in finding frequency space for broadcasting stations within the bands for the maritime and aeronautical services

## requests

the next International Radio Conference dealing with the revision of the frequency table to examine the possibility of separating broadcasting from the said services.

## I Resolution.

# The European Broadcasting Conference, considering

- 1. that, after lengthy consideration of measures required for the technical implementation of the Copenhagen Plan, it has decided by majority vote to fix the date of 15th March 1950 for the date of entry into force of the Plan and the Convention;
- 2. that the present chaotic conditions in the field of broadcasting would create a difficult situation in Europe if the implementation of the Copenhagen Plan in whole or in part had to be delayed until the New International Frequency List comes into force;

3. that the Atlantic City frequency table allocated to European broadcasting the following long and medium wave bands:

```
a) maritime mobile service
 150— 160 kc/s
                 b) broadcasting
 160-- 255 kc/s
                 broadcasting
 255— 285 kc/s
                 a) maritime mobile service
                 b) broadcasting
                 c) aeronautical radionavigation
525-1605 \text{ kc/s}
                broadcasting
whereas the Cairo frequency table allocated in this respect
 150— 160 kc/s
                  mobile service
 160-- 240 kc/s
                  broadcasting
 240— 255 kc/s
                  a) services not open to public correspondence
                 b) broadcasting
                  a) aeronautical service
 255— 265 kc/s
                  b) broadcasting
                  aeronautical service
 265 - 290 \text{ kc/s}
 380-- 395 kc/s
                  services not open to public correspondence
 515— 550 kc/s
                  services not open to public correspondence
 550 - 1500 \text{ kc/s}
                  a) broadcasting
                  b) 1364 kc/s wave A1, A2 for mobile services
                     exclusively
                  broadcasting
1500—1560 kc/s
                 mobile service (except aeronautical);
1560-1600 kc/s
```

4. that the decision to put the Copenhagen Plan into force prior to the effective date of the New International Frequency List renders it necessary to make special arrangements for those bands which were not open for broadcasting under the Cairo Radio Regulations, but in which broadcasting is entitled to operate under the Atlantic City Regulations,

#### requests

the Provisional Frequency Board to give their urgent consideration to the measures which may be taken by the Governments concerned in order to facilitate the implementation of the Copenhagen Plan as of 15th March 1950, in accordance with the decision of the Conference, throughout the Atlantic City bands referred to under 3. above and to take such action as will assist the Governments concerned to conclude the necessary special arrangements.

#### II

#### Resolution.

The European Broadcasting Conference decides 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 assigned by the Plan shall bear as a date of notification in the International Frequency List the date of the signature of the present Convention, except in the case of stations operating in the shared bands or in derogation, for which the date of notification shall be the date of approval of the International Frequency List.

# Opinion.

The Conference desires the Secretary General of the International Telecommunication Union to take all steps likely to facilitate the forwarding of the communications addressed to the different Administrations and to guarantee their arrival at their destination.