



This electronic version (PDF) was scanned by the International Telecommunication Union (ITU) Library & Archives Service from an original paper document in the ITU Library & Archives collections.

La présente version électronique (PDF) a été numérisée par le Service de la bibliothèque et des archives de l'Union internationale des télécommunications (UIT) à partir d'un document papier original des collections de ce service.

Esta versión electrónica (PDF) ha sido escaneada por el Servicio de Biblioteca y Archivos de la Unión Internacional de Telecomunicaciones (UIT) a partir de un documento impreso original de las colecciones del Servicio de Biblioteca y Archivos de la UIT.

(ITU) للاتصالات الدولي الاتحاد في والمحفوظات المكتبة قسم أجراه الضوئي بالمسح تصوير نتاج (PDF) الإلكترونية النسخة هذه والمحفوظات المكتبة قسم في المتوفرة الوثائق ضمن أصلية ورقية وثيقة من نقلًا.

此电子版（PDF版本）由国际电信联盟（ITU）图书馆和档案室利用存于该处的纸质文件扫描提供。

Настоящий электронный вариант (PDF) был подготовлен в библиотечно-архивной службе Международного союза электросвязи путем сканирования исходного документа в бумажной форме из библиотечно-архивной службы МСЭ.

REGIONAL ARRANGEMENT
CONCERNING
MARITIME RADIOBEACONS IN THE EUROPEAN AREA
OF REGION I

PARIS - 1951

INTERNATIONAL TELECOMMUNICATION UNION



REGIONAL ARRANGEMENT
CONCERNING
MARITIME RADIOBEACONS IN THE EUROPEAN AREA
OF REGION I

PARIS - 1951



PAGE INTENTIONALLY LEFT BLANK

PAGE LAISSEE EN BLANC INTENTIONNELLEMENT

REGIONAL ARRANGEMENT

CONCERNING

MARITIME RADIOBEACONS IN THE EUROPEAN AREA

OF REGION I

The delegates of the Administrations of the under mentioned countries having taken part in the Conference for the reorganization of maritime radiobeacons in the European Area convened in Paris in conformity with Article 4 of the Radio Regulations annexed to the International Telecommunication Convention (Atlantic City, 1947) and with Recommendation No. 9 of the Administrative Radio Conference for Region 1 (Geneva, 1949), have drawn up the present Arrangement :

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

Article 1

PURPOSE AND SCOPE OF THE ARRANGEMENT

The purpose of this Arrangement is to organize the operation of maritime radiobeacons transmitting on frequencies between 285 and 315 kc/s, which are or may be established in the European Area of Region 1 as defined in Article 5 (No. 107) of the Radio Regulations annexed to the International Telecommunication Convention (Atlantic City, 1947).

This Arrangement is a regional arrangement within the meaning of Article 40 of the International Telecommunication Convention (Atlantic City, 1947). In conformity with this Article, each provision of this Arrangement is subject to the provisions of the said Convention and of the Radio Regulations annexed thereto.

The following Annexes complete and form an integral part of this Arrangement :

- Annexe 1 - Recommended minimum technical characteristics for radio direction-finders working on frequencies between 285 and 315 kc/s.
- Annexe 2 - Recommended minimum technical characteristics for maritime radiobeacons.
- Annexe 3 - List of frequencies and other characteristics of maritime radiobeacons.

Article 2

SIGNATURE AND ACCEPTANCE

1. Administrations may become parties to this Arrangement by :

- (i) signature without reservation as to acceptance;
- (ii) signature subject to acceptance followed by acceptance; or
- (iii) acceptance.

2. Acceptance shall be effected by notification to the International Telecommunication Union, which shall inform the Administrations of all Governments that have already accepted the Arrangement of each acceptance received and of the date of its receipt.

3. Administrations which have become parties to this Arrangement are hereafter referred to as "Participating Administrations".

Article 3

FREQUENCIES (1)

The frequencies allocated to maritime radiobeacons are as follows :

<u>Frequency</u>	<u>Type of Emission</u>
287.3 kc/s	A2 (modulated waves)
289.6 "	"
291.9 "	"
294.2 "	"
296.5 "	"
298.8 "	"
301.1 "	"
303.4 "	"
305.7 "	"
308.0 "	"
310.3 "	"
312.6 "	In principle A1 (continuous waves)
313.5 "	" " "
314.5 " (2)	A1

Article 4

NOMINAL RANGE

The nominal range of a maritime radiobeacon entered in the List in Annex 3 is the distance at which the RMS value of the field strength over water during the day is :

50 μ V/m (microvolts per metre) for maritime radiobeacons situated North of latitude 43°N.

75 μ V/m for maritime radiobeacons situated South of latitude 43°N.

Article 5

RADIATED POWER

The power radiated by each maritime radiobeacon shall be adjusted to the minimum required to produce, at the limit of range, the field strength prescribed in Article 4 above.

Article 6

NOTE FREQUENCIES

The note frequencies are chosen in principle from the following list :

A	354 c/s	G	670 c/s
B	395 c/s	H	752 c/s
C	444 c/s	I	846 c/s
D	498 c/s	J	950 c/s
E	545 c/s	K	1052 c/s
F	600 c/s		

(1) In the sense of No. 57 of the Radio Regulations (Atlantic City, 1947).

(2) Experimental frequency, see article 12.

Article 7

IDENTIFICATION SIGNAL

Each maritime radiobeacon is in principle distinguished by an identification signal of two letters.

Article 8

COMPOSITION AND LENGTH OF THE MARITIME RADIOBEACON SIGNAL

In principle, each maritime radiobeacon transmits a signal at a speed of 6 to 10 words per minute, composed as follows :

a) Maritime radiobeacons situated North of latitude 46°North (area of six-beacon grouping)

1. the identification signal transmitted from three to six times for approximately	22 seconds
2. a long dash lasting for	25 seconds
3. the identification signal transmitted once or twice for approximately	8 seconds
4. a silent period of at least	5 seconds
Total	60 seconds

b) Maritime radiobeacons situated South of latitude 46°North (area of three-beacon grouping)

1. the identification signal transmitted from three to six times for approximately	22 seconds
2. a long dash lasting for	25 seconds
3. the identification signal transmitted from four to eight times for approximately	30 seconds
4. a long dash lasting for	25 seconds
5. the identification signal transmitted once or twice for approximately	8 seconds
6. a silent period of at least	10 seconds
Total	120 seconds

Article 9

TRANSMISSION SCHEDULE

1. The length of a complete cycle of transmissions is taken as six minutes. A transmission schedule is designated by the number (s) of the minute (s) in which transmission occurs, in accordance with the following table, except as stated in paragraphs 2 and 3.

<u>Length of signal</u>	<u>Number of radiobeacons in group</u>	<u>Schedule designation</u>
1 minute	2	1,3,5 or 2,4,6
	3	1,4 or 2,5 or 3,6
	6	1 or 2 or 3 etc...
2 minutes	3	1,2 or 3,4 or 5,6

2. The transmission schedules of maritime radiobeacons grouped in twos and using a 2-minute length of signal are designated "a" or "b".

Schedule "a" signifies	{	1,2 and 5,6	In the first, third, etc.... six-minute period of the hour.
		3,4	In the second, fourth, etc.... six-minute period of the hour.
Schedule "b" signifies	{	3,4	In the first, third, etc.... six-minute period of the hour.
		1,2 and 5,6	In the second, fourth, etc.... six-minute period of the hour.

3. The transmission schedule of maritime radiobeacons transmitting continuously is designated "c".
4. Operation in "fog". In "fog", every maritime radiobeacon transmits ten consecutive cycles in the hour.
5. Operation in "clear weather". In "clear weather" a maritime radiobeacon may either :
 - (a) cease transmitting,
 - (b) transmit at least two consecutive cycles in the hour, or
 - (c) operate as in "fog",

in accordance with one of the schedules indicated in note 5 to Annex 3.

Article 10

ADDITIONS TO OR AMENDMENTS OF THE LIST IN ANNEX 3

1. Any participating administration wishing to put into service, in the area covered by this Arrangement, an additional maritime radiobeacon transmitting with a range of more than 10 miles in the band 285-315 kc/s shall first give three months' notice to the other participating administrations and shall take account of any comments which may be made by those administrations. Any additional maritime radiobeacon shall not cause harmful interference within the nominal range of any maritime radiobeacon provided for in this Arrangement.
2. The provisions of paragraph 1 shall also apply to any alteration to the List in Annex 3.

Article 11

MARITIME RADIOBEACONS WITH A RANGE OF 10 MILES OR LESS

Participating administrations may put into service maritime radiobeacons transmitting with a range of 10 miles or less in the band 285-315 kc/s, in addition to those included in Annex 3, provided that harmful interference is not caused thereby within the nominal range of any radiobeacon provided for in the present Arrangement. Such maritime radiobeacons shall not be installed within 40 miles of a neighbouring country, without prior agreement between the administrations concerned.

Article 12

EXPERIMENTAL TRANSMISSIONS

1. The frequency of 314.5 kc/s is reserved for experimental transmissions on A1.
2. Transmissions on the experimental frequency shall not cause harmful interference within the nominal range of any maritime radiobeacon provided for in this Arrangement.
3. Any participating administration may carry out experimental transmissions using either A1 or A2 waves on any frequency in the band 285-315 kc/s, provided that harmful interference is not caused within the nominal range of any maritime radiobeacon provided for in this Arrangement.

Article 13

COMING INTO FORCE

1. The present Arrangement shall come into force on the first day of August one thousand nine hundred and fifty-three, unless the Extraordinary Administrative Radio Conference (Geneva, 1951) lays down a different year, in which case the date of 1st August shall still be retained.

The maritime radiobeacon modifications shall be made during the preceding month.

2. Maritime radiobeacons shall not commence to transmit with their new characteristics before the said first of August. If they transmit during the preceding month, they may only do so with their old characteristics.

The participating Administrations have taken note of the advice given to the Conference by the delegate of Spain that the CONSOL stations at Lugo and Seville will not operate on their present frequencies at the time when the present Arrangement comes into force. The List in Annex 3 has been drawn up on the basis that these stations, which are at present registered with the I. T. U. as aeronautical radiobeacons but are also used by mariners, will not transmit on frequencies within the maritime radiobeacon band and that, if they are assigned frequencies close to that band, the station at Lugo will transmit on or below 285 kc/s and the station at Seville on or above 315 kc/s. These frequencies are those proposed by the Spanish Administration.

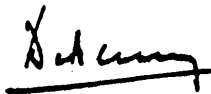
The participating Administrations agree that the List in Annex 3 shall be notified to the Provisional Frequency Board for inclusion in the draft new international frequency List.

IN WITNESS WHEREOF, the duly authorized Delegates of the participating Administrations have signed this Arrangement in each of the English, Spanish and French languages, in a single copy; in the event of a dispute the French text shall be authoritative; the original texts shall be deposited in the archives of the Government of France.

A certified copy thereof shall be forwarded to the Government of each of the member countries of the International Telecommunication Union having a sea coast within Region 1 and to the Secretary General of the International Telecommunication Union.

Done at Paris, this third day of August 1951.

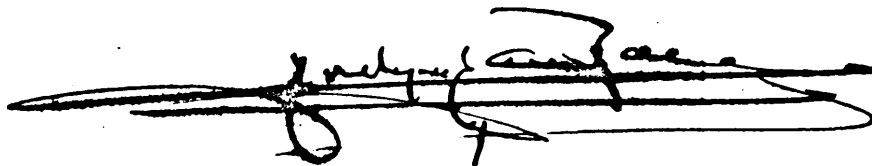
For Belgium :



DEBEULE

(subject to ratification)

For the Overseas Territories of Portugal :



Jose AIRES GOMES RAMOS

(subject to ratification)

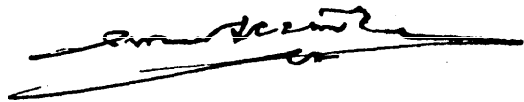
For Danemark :



SINDING

(subject to ratification)

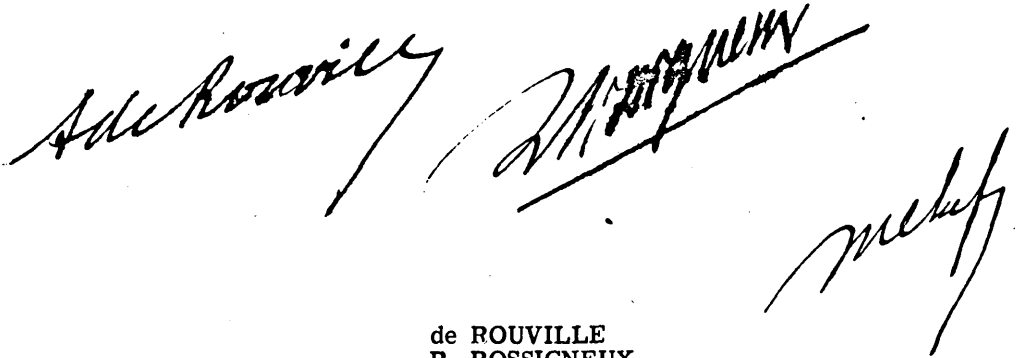
For Spain :



Carlos ALCON SANZ

(subject to ratification)

For France :



de ROUVILLE
R. ROSSIGNEUX
M. CHEF

For Italy :



Mario FORNARI

(subject to ratification)

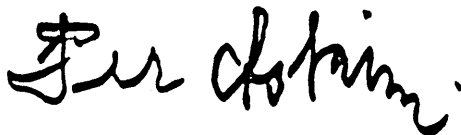
For Monaco :



AILLIERES

(subject to ratification)

For Norway :



Per ASKIM
A. TORGET

(subject to ratification)

For the Netherlands :

Kuyper

M. H. W. Moorrees

Vreede

KUYPER
M. H. W. MOORREES
VREEDÉ

For Portugal :

Jose Aires Gomes Ramos

Jose AIRES GOMES RAMOS

(subject to ratification)

For French Protectorates of Morocco and Tunisia :

Vigneron

VIGNERON

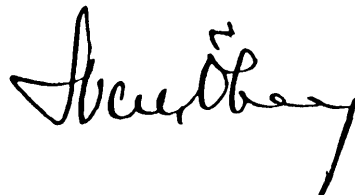
For the United Kingdom of Great Britain and Northern Ireland :

C. P. Scott-Malden
C. St. G. Glasson
W. Swanson
J. Wylie

C. P. SCOTT-MALDEN
C. St. G. GLASSON
W. SWANSON
J. WYLIE

We declare that our signatures given on behalf of the United Kingdom of Great Britain and Northern Ireland include also the Channel Isles and the Isle of Man.

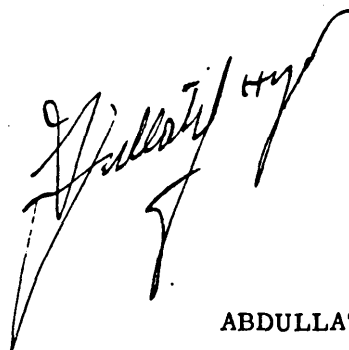
For Sweden :



Sven ÖBERG

(subject to ratification)

For Turkey :



ABDULLATIF HIZ'ER

(subject to ratification)

ANNEX I

RECOMMENDED MINIMUM TECHNICAL CHARACTERISTICS FOR RADIO DIRECTION-FINDERS WORKING ON FREQUENCIES BETWEEN 285 AND 315 KC/S

1. FREQUENCY BANDS

Radio direction-finders should permit bearings to be taken on class A1 and A2 emissions in the maritime radiobeacon frequency band.

2. SELECTIVITY

For the reception of Class A2 signals, the overall RF and IF selectivity of the direction-finder should be :

- bandwidth between 2 and 2.5 kc/s for 6 db attenuation;
- bandwidth less than 8 kc/s for 30 db attenuation;
- bandwidth less than 16 kc/s for 60 db attenuation.

In order to improve the reception of Class A1 signals one of the following alternatives should be adopted :

a) a filter in the first intermediate frequency stage giving a frequency characteristic as shown below :

- bandwidth between 0,4 and 0,8 kc/s for 6 db attenuation;
- bandwidth less than 2 kc/s for 30 db attenuation.

b) a notch filter in the AF stage having a midfrequency of about 1000 c/s and a bandwidth of :

- about 100 c/s for 6 db attenuation;
- less than 400 c/s for 20 db attenuation.

It should be easily possible to switch out of circuit the filters referred to above without any appreciable variation of IF and AF gain.

For frequency-changer types of receiver, the image frequency and IF protection ratios should be higher than 80 db.

3. SENSITIVITY

The field strength required at the loop, orientated for maximum signal, in order to produce 1 milliwatt in the headphones, with a signal/noise ratio of 20 db, should be less than $50 \mu\text{V/m}$ both for A1 and A2 signals (400 c/s modulation, 70% depth). Background noise should be measured without any signal. (1).

Sensitivity measurements should be made with the IF and AF filters switched out of circuit.

4. MISCELLANEOUS CHARACTERISTICS

- 4.1 - The apparatus should be fitted with a compensating device to improve the aural-null.
- 4.2 - The minimum angle between the two directions, read when the radiogoniometer control is reversed in taking bearings, should be greater than 178° .
- 4.3 - The sense-finding device should give a ratio of at least 15 db between the signals on the direct and reciprocal bearings.

(1) A direction-finder having this sensitivity is capable of taking bearings in the presence of receiver noise with a rotation of the radiogoniometer control not exceeding $+ 3^\circ$.

5. TECHNICAL CONDITIONS FOR THE INSTALLATION OF RADIO DIRECTION-FINDERS IN VESSELS

- 5.1 - The loop aerial assembly should be mounted as near as practicable to the ships' centre line, and should be as remote as is practicable from large movable metal objects and conductors, such as derricks, wires and the ships' aerials.
- 5.2 - The sense-finding aerial should be as short as practicable.
- 5.3 - In order to inform the operator of the accuracy to be expected of bearings taken, the receiver could usefully be fitted with a light-signal which lights up when the aerials near the loop (except the sense-finding antenna) are earthed.
- 5.4 - The connecting cables between the loops and antenna and the apparatus should either be of the solid dielectric screened type or enclosed in metal tubes. All joints should be watertight.
- 5.5 - The receiver should be earthed to the hull of the vessel by means of a conductor with as low a resistance as possible.

6. CALIBRATION OF RADIO DIRECTION-FINDERS

The calibration curve of the direction-finder should be plotted before the latter is put into operation, and each time the position of the aerials or the conductors referred to above are changed.

In any case the direction-finder should be recalibrated at yearly intervals if possible.

When calibrating the radio direction-finder for use in the frequency band the frequency used should be as close as possible to 300 kc/s.

The calibration curve should preferably be plotted by means of bearings on the radiobeacons specially provided for the calibration of radio direction-finders.

"

—

ANNEX 2

RECOMMENDED MINIMUM TECHNICAL CHARACTERISTICS FOR MARITIME RADIOBEACONS

1. AERIAL AND EARTH SYSTEM

The aerial and earth system should be so designed as to restrict radiation of horizontally polarized waves and signals directed towards the ionosphere.

A vertical or T antenna should be used for preference.

The earthing system or counterpoise associated with the antenna should, as far as possible, preserve the symmetry of the radiation system as a whole.

Horizontal power and telecommunication lines at less than 100 metres from the antenna should be underground.

2. TRANSMITTERS

2.1 - Frequency

Transmitters should be crystal-controlled so as to maintain the frequency within a tolerance of $\pm 0,02\%$.

The radio frequency harmonics must conform to the tolerances as laid down in the Table for the intensity of harmonics and parasitic emissions in Appendix 4 to the Radio Regulations annexed to the International Telecommunication Convention (Atlantic City, 1947).

2.2 - Modulation

The modulation depth for class A2 emissions shall be at least 70%.

The level of harmonics of the modulation frequencies should be as low as possible.

2.3 - Accuracy of timing

All maritime radiobeacons shall be controlled by a device ensuring the accuracy of the transmission schedules.

The accuracy of the timing device shall be such that in no case shall transmissions deviate from the schedule by more than two seconds for maritime radiobeacons with a 1-minute length of signal or five seconds for maritime radiobeacons with a 2-minute length of signal.

2.4 - Field strength measurements

When a maritime radiobeacon is put into service or if alterations are made to the equipment or aerial and earth system of a maritime radiobeacon in service, field strength measurements should be made to adjust the radiated power to the correct values to give the nominal day and night ranges. The corresponding aerial currents should also be measured.

Such measurements should be taken again at regular intervals.

3. STANDBY DEVICES

Maritime radiobeacons should have the necessary standby devices to prevent any stoppage due to the breakdown of the electric supply, the transmitter, or the timing device.

PAGE INTENTIONALLY LEFT BLANK

PAGE LAISSEE EN BLANC INTENTIONNELLEMENT

ANNEX 3

LIST OF FREQUENCIES AND OTHER CHARACTERISTICS OF MARITIME RADIOBEACONS

1. In general, the radiobeacons included in the List are shown in numerical order of frequencies. Radiobeacons using the same frequency are shown in geographical order; the grouping is indicated where applicable.

2. The List includes a certain number of characteristics, and in particular frequencies, for certain radiobeacons of countries the Administrations of which are not yet parties to the present Arrangement. Also included in the List are radiobeacons, existing or projected, belonging to countries who are not members of the International Telecommunication Union. Their inclusion implies no recognition of the status of those countries in relation to the International Telecommunication Union.

3. Where two figures are given in the column, "Range" in the List (e.g. 100/70) the second is the range to be used at night.

4. Night means the period between sunset and sunrise at the radiobeacon site.

5. Transmissions in "clear weather".

The letters appearing in the column "Transmissions in clear weather" in the List have the meaning shown in the table below. The numbers in the table indicate the minutes between which transmission takes place, minute 0 corresponding to the beginning of each hour.

o	-	no transmissions in "clear weather"
p	-	0 to 12
q	-	6 to 18
r	-	12 to 24
s	-	18 to 30
t	-	24 to 36
u	-	30 to 42
v	-	36 to 48
w	-	42 to 54
x	-	48 to 60
y	-	54 to 6
z	-	transmissions as in "fog"

6. For the purpose of information, a map in two sheets has been added.

1	2	3	4	5	6	7	8	9	10	11
Número de référence	Nom du radiophare	Pays	Ordre d'émission	Fréquence de modulation c/s	Portée nominale m. m.	Intensité de champ à limite de portée μ V/m	Classe d'émission	Emissions en temps clair	En service = x	Observations
Reference Number	Name of radiobeacon	Country	Sequence	Note Frequency c/s	Nominal range n. m.	Field strength at limit of range μ V/m	Type of emission	Transmissions in clear weather	Established = x	Remarks
Número de referencia	Nombre del radiofaro	País	Orden de emisión	Frecuencia de modulación c/s	Alcance nominal m. m.	Intensidad del campo en el límite del alcance μ V/m	Tipo de emisión	Emissiones en tiempo claro	En servicio = x	Observaciones
0101	YSTAD	S.	1. 3. 5.	498	30	50	A2			
0102	SIMRISHAMN	S.	2. 4. 6.	498	30	50	A2			
0103	UTÖ	Finl.	1. 2.	950	60	50	A2		x	
0104	RISTNA	URSS	3. 4.	950	60	50	A2	t y	x	#
0105	GUSTAVSVÄRN	Finl.	5. 6.	950	60	50	A2		x	
0106	USTKA	Polo.	1. 2.	1070	40	50	A2	q v		#
0107	LEBA	Polo.	3. 4.	1070	30	50	A2	q v		#
0108	ROZEWIE	Polo.	5. 6.	1070	60	50	A2	q v		#
0109	FORNAES	Dnk.	1. 4.	395	50	50	A2			
0110	SCHULTZ'S GRUND B.F.	Dnk.	2. 5.	395	30	50	A2		x	
0111	SLETTERHAGE	Dnk.	3. 6.	395	50	50	A2		x	
0112	AKUREYRI	Isla.	c	752	30	50	A2			
0113	FRUHOLMEN	Nor.		670	50	50	A2			
0114	TORSVÅG	Nor.		670	50	50	A2			
0115	SMITHS KNOLL B.F.	G.	1	670	50	50	A2	z	x	
0116	DUDGEON B.F.	G.	3	670	50	50	A2	z		
0117	CROMER	G.	5	670	50	50	A2	z	x	
0118	MAAS B.F. (GOEREE)	Holl.	2	670	50	50	A2	z	x	
0119	OUTER GABBARD B.F.	G.	4	670	50	50	A2	z		
0120	NOORD HINDER B.F.	Holl.	6	670	50	50	A2	z		
0121	C. CARVOEIRO	Port.	1. 2.	1052	20	75	A2		x	
0122	I. BERLENGA	Port.	3. 4.	1052	100	75	A2		x	
0123	C. MONDEGO	Port.	5. 6.	1052	100	75	A2		x	
0124	CAP BEAR	F.	1. 2.	600	100	50	A2	z	x	
0125	PORQUEROLLES	F.	3. 4.	600	100	50	A2	z	x	
0126	LA GAROUPPE	F.	5. 6.	600	100	50	A2	z	x	
0127	PANTELLERIA	I.	1. 2.	752	90	75	A2	p u		
0128	LAMPEDUSA	I.	3. 4.	752	100	75	A2	p u		
0129	MALTA	G.	5. 6.	752	50	75	A2	p u		
0130	EILAT (AKABA)	Isra.	1. 2.	545	50	100	A2			
0131	TEL AVIV	Isra.	3. 4.	545	100	75	A2			
0132	HAIFA	Isra.	5. 6.	545	200	75	A2			

* Il n'a pas été possible de prévoir un groupe de deux ou trois fréquences de modulation comme dans le plan de Genève de 1949, par suite de la nécessité d'éviter les brouillages.

It has not been able to suggest the allocation of a group of two or three note frequencies as in the Geneva Plan of 1949, because of the necessity to avoid interference.

No ha sido posible prever un grupo de dos o tres frecuencias de modulación como en el plan de Génova de 1949, a causa de la necesidad de evitar las interferencias.

1	2	3	4	5	6	7	8	9	10	11
Número de référence	Nom du radiophare	Pays	Ordre d'émission	Fréquence de modulation c/s	Portée nominale m. m.	Intensité de champ à limite de portée $\mu V/m$	Classe d'émission	Emissions en temps clair	En service = x	Observations
Reference Number	Name of radiobeacon	Country	Sequence	Note Frequency c/s	Nominal range n. m.	Field strength at limit of range $\mu V/m$	Type of emission	Transmissions in clear weather	Established = x	Remarks
Número de referencia	Nombre del radiofaro	País	Orden de emisión	Frecuencia de modulación c/s	Alcance nominal m. m.	Intensidad del campo en el límite del alcance $\mu V/m$	Tipo de emisión	Emissiones en tiempo claro	En servicio = x	Observaciones
0201	SCHEPELEVSKI	URSS	1.2.	475	50	50	A2	t y	x	#
0202	KAJBOLOWO	URSS	3.4.	475	50	50	A2	t y	x	#
0203	KRONSTADT	URSS	5.6.	475	30	50	A2	t y		#
0204	MIDDELGRUND	Dnk.	1.3.5.	545	20	50	A2		x	
0205	FALSTERBOREVI B.F.	S.	2.4.6.	545	20	50	A2		x	
0206	LANGÖYTANGEN	Nor.	1.4.	444	20	50	A2			
0207	FULEHUK	Nor.	2.5.	444	30	50	A2		x	
0208	STAVERNSODDEN	Nor.	3.6.	444	20	50	A2			
0209	VESTRAHORN	Isla.	c	600	80	50	A2		x	
0210	BÖKFJORD	Nor.		950	50	50	A2			
0211	GRINNA	Nor.		1052	15	50	A2			
0212	VYL B.F.	Dnk.		498	20	50	A2	p	x	
0213	THYVORN	Dnk.		498	30	50	A2	p	x	
0214	PLADDA	G.	1.3.5.	752	20	50	A2	o		
0215	MORECAMBE BAY B.F.	G.	1.3.5.	395	20	50	A2	o		
0216	DOUGLAS	G.	2.4.6.	395	20	50	A2	o	x	
0217	DAUNT ROCK	Irla.	1.3.5.	444	30	50	A2	o	x	
0218	BATZ	F.	1.3.5.	846	30	50	A2	z	x	
0219	St MATHIEU	F.	2.4.6.	846	20	50	A2	o	x	
0220	St NAZAIRE	F.	2.4.6.	752	20	50	A2	o	x	
0221	CHIPIONA	E.		600	10	75	A2			
0222	CADIZ	E.		600	10	75	A2			
0223	PUNTA CAPRARA	I.	1.2.	670	100	75	A2	t y		
0224	ISOLA SAN PIETRO	I.	3.4.	670	100	75	A2	t y		
0225	I. ROSSA	I.	5.6.	670	60	75	A2	t y		
0226	I. TREMITI	I.	1.2.	1052	80	75	A2	r w		
0227	CIVITANOVA	I.	3.4.	1052	80	75	A2	r w		
0228	PESCARA	I.	5.6.	1052	80	75	A2	r w		

* Il n'a pas été possible de prévoir un groupe de deux ou trois fréquences de modulation comme dans le plan de Genève de 1949, par suite de la nécessité d'éviter les brouillages.

It has not been able to suggest the allocation of a group of two or three note frequencies as in the Geneva Plan of 1949, because of the necessity to avoid interference.

No ha sido posible prever un grupo de dos o tres frecuencias de modulación como en el plan de Génova de 1949, a causa de la necesidad de evitar las interferencias.

1	2	3	4	5	6	7	8	9	10	11
Numéro de référence	Nom du radiophare	Pays	Ordre d'émission	Fréquence de modulation c/s	Portée nominale m. m.	Intensité de champ à limite de portée $\mu V/m$	Classe d'émission	Emissions en temps clair	En service = x	Observations
Reference Number	Name of radiobeacon	Country	Sequence	Note Frequency c/s	Nominal range n. m.	Field strength at limit of range $\mu V/m$	Type of emission	Transmissions in clear weather	Established = x	Remarks
Número de referencia	Nombre del radiofaro	País	Orden de emisión	Frecuencia de modulación c/s	Alcance nominal m. m.	Intensidad del campo en el límite del alcance $\mu V/m$	Tipo de emisión	Emisiones en tiempo claro	En servicio = x	Observaciones
0301 0302 0303	HOLMÖGADD SYDOSTBROTTEN B.F. NURRSKÅR	S. S. Finl.	1. 4. 2. 5. 3. 6.	752 752 752	60 40 60	50 50 50	A2 A2 A2		x x x	
0304 0305 0306	ADLERGRUND B. F. DUE ODDE STUBBENKAMMER	Dnk. D.	1. 2. 3. 4. 5. 6.	670 670	50 50 50	50 50 50	A2 A2 A2	p u	x	≠
0307 0308 0309	LAKE VÄNERN (western part)	S. S. S.	1. 4. 2. 5. 3. 6.	498 498 498	15 à 30	50 50 50	A2 A2 A2			
0310 0311	SKRÄVEN BARÖY	Nor. Nor.		600 600	100/70 30	50 50	A2 A2	s	x	
0312 0313	WESER B.F. HELGOLAND	D. D.	1. 3. 5. 2. 4. 6.	846 846	10 10	50 50	A2 A2	o o	x	
0314 0315 0316 0317 0318 0319	MYGGENAES NOLSO MUCKLE FLUGGA BARRA HEAD SULE SKERRY BUTT OF LEWIS	Dnk. Dnk. G. G. G. G.	1. 3 5 2 4 6	395 395 395 395 395 395	50 100/70 100/70 200/70 100/70 150/70	50 50 50 50 50 50	A2 A2 A2 A2 A2 A2	z z z z z z	x x x x x x	
0320 0321 0322 0323 0324 0325	St CATHERINES PT LE HAVRE B.F. GATTEVILLE CASQUETS ROCHES DOUVRES START POINT	G. F. F. G. F. G.	1 3 5 2 4 6	950 950 950 950 950 950	50 50 50 50 50 50	50 50 50 50 50 50	A2 A2 A2 A2 A2 A2	z z z z z z	x x x x	
0326 0327 0328	AVEIRO MONTEODOR LECA	Port. Port. Port.	1. 2. 3. 4. 5. 6.	846 846 846	50 50 100/70	75 75 75	A2 A2 A2		x x x	
0329 0330 0331	PUNTA LLOBREGAT MAHON CABO SAN SEBASTIAN	E. E. E.	1. 2. 3. 4. 5. 6.	1052 1052 1052	50 100 50	75 75 75	A2 A2 A2	p u p u p u		
0332 0333 0334	CAPO SAN VITO SANTA MARIA DI LEUCA C. COLONNE	I. I. I.	1. 2. 3. 4. 5. 6.	600 600 600	100 90 100	75 75 75	A2 A2 A2	t y t y t y	x x	

≠

Il n'a pas été possible de prévoir un groupe de deux ou trois fréquences de modulation comme dans le plan de Genève de 1949, par suite de la nécessité d'éviter les brouillages.

It has not been able to suggest the allocation of a group of two or three note frequencies as in the Geneva Plan of 1949, because of the necessity to avoid interference.

No ha sido posible prever un grupo de dos o tres frecuencias de modulación como en el plan de Génova de 1949, a causa de la necesidad de evitar las interferencias.

1	2	3	4	5	6	7	8	9	10	11
Número de référence	Nom du radiophare	Pays	Ordre d'émission	Fréquence de modulation c/s	Portée nominale m. m.	Intensité de champ à limite de portée de portée $\mu V/m$	Classe d'émission	Emissions en temps clair	En service = x	Observations
Reference Number	Name of radiobeacon	Country	Sequence	Note Frequency c/s	Nominal range n. m.	Field strength at limit of range $\mu V/m$	Type of emission	Transmissions in clear weather	Established = x	Remarks
Número de referencia	Nombre del radiofaro	País	Orden de emision	Frecuencia de modulacion c/s	Alcance nominal m. m.	Intensidad del campo en el limite del alcance $\mu V/m$	Tipo de emision	Emisiones en tiempo claro	En servicio = x	Observaciones
0401	FÄRÖ	S.	1	545	50	50	A2			
0402	HÄVRINGE B.F.	S.	3	545	30	50	A2			
0403	GOTSKA SANDÖN	S.	5	545	60	50	A2		x	
0404	LANDSÖRT	S.	2	545	50	50	A2		x	
0405	SPÄRÖ (IDÖ)	S.	4	545	30	50	A2			
0406	ALMAGRUNDET B.F.	S.	6	545	40	50	A2		x	
0407	SANDHAMN	S.	6	545	40	50	A2			(1)
0408	ORRENGRUND	Finl.	c	354/670	25	50	A2			(2)
0409	KIEL B.F.	D.	1. 4.	395	30	50	A2		x	
0410	FERMARNBELT B.F.	D.	2. 5.	395	30	50	A2		x	
0411	NEULAND	D.	3. 6.	395	30	50	A2			
0412	GILLELEJE FLAK B.F.	Dnk.	1. 4.	444	30	50	A2		x	
0413	NAKKEHOVED	Dnk.	1. 4.	444	50	50	A2		x	
0414	NIDINGEN	S.	2. 5.	444	30	50	A2		x	
0415	ANHOLT KNOB B.F.	Dnk.	3. 6.	444	30	50	A2		x	(3)
0416	DALATANGI	Isla.	c	354	80	50	A2		x	
0417	VARDÖ	Nor.		1052	70	50	A2			
0418	BJÖRNSUND	Nor.	1. 3. 5.	752	20	50	A2			
0419	BUHOLMRÅSA	Nor.	2. 4. 6.	752	20	50	A2			
0420	HOLMENGRÄ	Nor.	1. 3. 5.	670	20	50	A2		x	
0421	GRESSÖYENE	Nor.	2. 4. 6.	670	20	50	A2		x	
0422	EIERLAND	Holl.	1. 3. 5.	1052	20	50	A2	o		
0423	AMELAND	Holl.	2. 4. 6.	1052	20	50	A2	o		
0424	ABERTAY B.F.	G.	1. 3. 5.	950	20	50	A2	o	x	
0425	ROCKER PIER	G.	1. 3. 5.	498	20	50	A2	o		
0426	TEES	G.	2. 4. 6.	498	20	50	A2	o		
0427	RUYTINGEN B.F.	F.	1. 4.	752	20	50	A2	z		
0428	BOULOGNE	F.	2. 5.	752	20	50	A2	o	x	
0429	TONGUE B.F.	G.	3. 6.	752	30	50	A2	o		
0430	MEW ISLAND	G.	1. 3. 5.	545	20	50	A2	o	x	

(1) SANDHAMN secours pour ALMAGRUNDET B.F. - SANDHAMN reserve for ALMAGRUNDET L V - SANDHAMN reservado para ALMAGRUNDET F.F.

(2) Radiophare combiné: émission circulaire (ordre d'émission 1, fréquence de modulation basse) et émission directionnelle (ordre d'émission 2, 3, 4, 5, 6., fréquence de modulation élevée)

Combined circular (sequence 1, low note frequency) and directional (sequence 2, 3, 4, 5, 6., high note frequency)

Radiofaro combinado: emisión circular (orden de emisión 1, frecuencia de modulación baja) y emisión direccional (orden de emisión 2, 3, 4, 5, 6., frecuencia de modulación elevada).

(3) NAKKEHOVED secours pour GILLELEJE FLAK B.F. - NAKKEHOVED reserve for GILLELEJE FLAK L V - NAKKEHOVED reserva do para GILLELEJE FLAK F.F.

FRÉQUENCE - FREQUENCY - FRECUENCIA : 294,2 kc/s (suite)

1	2	3	4	5	6	7	8	9	10	11
Numéro de référence	Nom du radiophare	Pays	Ordre d'émission	Fréquence de modulation c/s	Portée nominale m. m.	Intensité de champ à limite de portée μ V/m	Classe d'émission	Emissions en temps clair	En service = x	Observations
Reference Number	Name of radiobeacon	Country	Sequence	Note Frequency c/s	Nominal range n. m.	Field strength at limit of range μ V/m	Type of emission	Transmissions in clear weather	Established = x	Remarks
Número de referencia	Nombre del radiofaro	País	Orden de emisión	Frecuencia de modulación c/s	Alcance nominal m. m.	Intensidad del campo en el límite del alcance μ V/m	Tipo de emisión	Emissiones en tiempo claro	En servicio = x	Observaciones
0431	CAP DE L'AIGUILLE	F(Alg)	1. 2.	670	100	75	A2	z	x	
0432	CABO PALOS	E.	3. 4.	670	50	75	A2	q v		
0433	CABO NAO	E.	5. 6.	670	50	75	A2	q v		
0434	SENETOSE	F.	1. 2.	846	100	75	A2	s x	x	
0435	LA REVELLATA	F.	3. 4.	846	100	75	A2	s x		
0436	LAVEZZI	F.	5. 6.	846	30	75	A2			
0437	EL AGHEILA	Liby.	1. 2.	545	50	75	A2			
0438	DERNA	Liby.	3. 4.	545	50	75	A2			
0439	BENGASI	Liby.	5. 6.	545	50	75	A2			

"

1	2	3	4	5	6	7	8	9	10	11
Número de référence	Nom du radiophare	Pays	Ordre d'émission	Fréquence de modulation c/s	Portée nominale m. m.	Intensité de champ à limite de portée $\mu V/m$	Classe d'émission	Emissions en temps clair	En service = x	Observations
Reference Number	Name of radiobeacon	Country	Sequence	Note Frequency c/s	Nominal range n. m.	Field strength at limit of range $\mu V/m$	Type of emission	Transmissions in clear weather	Established = x	Remarks
Número de referencia	Nombre del radiofaro	País	Orden de emisión	Frecuencia de modulación c/s	Alcance nominal m. m.	Intensidad del campo en el límite del alcance $\mu V/m$	Tipo de emisión	Emisiones en tiempo claro	En servicio = x	Observaciones
0501	RÖDHAMN	Finl.	c	498/1052	20	50	A2		x	(1)
0502	KIHNU	URSS	3.4.	846	40	50	A2	s x		#
0503	GDYNIA	Polo.	c		20	50	A2	o	x	
0504	SWINOJSCIA	Polo.	c		10	50	A2	o		
0505 0506 0507	SKOMVAER TENNHOLMEN TRAENEN	Nor. Nor. Nor.		846 846 846	100/70 50 50	50 50 50	A2 A2 A2			
0508 0509 0510 0511 0512	H.R. 1. B. F. LISTA GRAADYB B. F. (FÄNÖ) HANSTHOLM HORNS REV B. F. (BLAAVANDSHUK)	Dnk. Nor. Dnk. Dnk. Dnk.	1. 2. 3.6. 4. 5.	600 600 600 600 600	50 100/70 100/70 100/70 100/70	50 50 50 50 50	A2 A2 A2 A2 A2	p p u p p p	x x x x x	
0513	SUMBÖ	Dnk.	1.4.	950	100/70	50	A2			
0514 0515 0516 0517 0518 0519	TUSKAR ROCK SOUTH BISHOP NORTH LUNDY SKERRIES KISH B. F. CREGNEISH	Irla. G. G. G. Irla. G.	1. 3. 5. 2. 4. 6.	1052 1052 1052 1052 1052 1052	50 50 50 50 50 50	50 50 50 50 50 50	A2 A2 A2 A2 A2 A2	z z z z z z	x x x x x x	
0520 0521 0522	CAP FERRET CABO MACHICHACO CABO MAYOR	F. E. E.	1.2. 3.4. 5.6.	950 950 950	100 100 50	50 50 50	A2 A2 A2	z	x x	
0523 0524 0525	MEHDYA LARACHE GIBALTAR	Mar.F Mar.E G.	1.2. 3.4. 5.6.	752 752 752	50 50 50	75 75 75	A2 A2 A2	z z		

* Il n'a pas été possible de prévoir un groupe de deux ou trois fréquences de modulation comme dans le plan de Genève de 1949, par suite de la nécessité d'éviter les brouillages.

It has not been able to suggest the allocation of a group of two or three note frequencies as in the Geneva Plan of 1949, because of the necessity to avoid interference.

No ha sido posible prever un grupo de dos o tres frecuencias de modulación como en el plan de Génova de 1949, a causa de la necesidad de evitar las interferencias.

(1) Radiophare combiné : émission circulaire (ordre d'émission 1, fréquence de modulation basse) et émission directionnelle (ordre d'émission 2.3.4.5.6., fréquence de modulation élevée)

(1) Combined circular (sequence 1, low note frequency) and directional (sequence 2.3.4.5.6., high note frequency)

(1) Radiofaro combinado : emisión circular (orden de emisión 1, frecuencia de modulación baja) y emisión direccional (orden de emisión 2.3.4.5.6., frecuencia de modulación elevada).

FRÉQUENCE - FREQUENCY - FRECUENCIA : 296,5 kc/s (suite)

1	2	3	4	5	6	7	8	9	10	11
Numéro de référence	Nom du radiophare	Pays	Ordre d'émission	Fréquence de modulation c/s	Portée nominale m. m.	Intensité de champ à limite de portée μ V/m	Classe d'émission	Emissions en temps clair	En service = x	Observations
Reference Number	Name of radiobeacon	Country	Sequence	Note Frequency c/s	Nominal range n. m.	Field strength at limit of range μ V/m	Type of emission	Transmissions in clear weather	Established = x	Remarks
Número de referencia	Nombre del radiofaro	Pais	Orden de emisión	Frecuencia de modulación c/s	Alcance nominal m. m.	Intensidad del campo en el limite del alcance μ V/m	Tipo de emisión	Emisiones en tiempo claro	En servicio = x	Observaciones
0526	CAP MATIFOU	F(Alg)	1. 2.	600	30	75	A2	z	x	
0527	BOUGIE	F(Alg)	5. 6. 3. 4.	600	20	75	A2	o		
0528	PUNTA CARENA	I.	1. 2.	670	100	75	A2		x	
0529	C. PALINURO	I.	3. 4.	670	80	75	A2			
0530	C. VATICANO	I.	5. 6.	670	100	75	A2			
0531	SAÏDA	Liba.	1. 2.	846	200	75	A2	z	x	
0532	LATTAQUIÉ	Syri.	3. 4.	846	100	75	A2			

"

1	2	3	4	5	6	7	8	9	10	11
Numéro de référence	Nom du radiophare	Pays	Ordre d'émission	Fréquence de modulation c/s	Portée nominale m. m.	Intensité de champ à limite de portée $\mu\text{V/m}$	Classe d'émission	Emissions en temps clair	En service = x	Observations
Reference Number	Name of radiobeacon	Country	Sequence	Note Frequency c/s	Nominal range n. m.	Field strength at limit of range $\mu\text{V/m}$	Type of emission	Transmissions in clear weather	Established = x	Remarks
Número de referencia	Nombre del radiofaro	País	Orden de emisión	Frecuencia de modulación c/s	Alcance nominal m. m.	Intensidad del campo en el límite del alcance $\mu\text{V/m}$	Tipo de emisión	Emissiones en tiempo claro	En servicio = x	Observaciones
0601	AJOS	Finl.	1. 4.	846	60	50	A2			
0602	MERIKALLAT	Finl.	3.	846	60	50	A2			
0603	BJURÖKLUBB	S.	5.	846	70	50	A2		x	
0604	RÖDKALLEN	S.	2.	846	60	50	A2		x	
0605	ULKOKALLA	Finl.	6.	846	60	50	A2			
0606	UTKLIPPAN	S.	1.	354	50	50	A2		x	
0607	HAMMER ODDE	Dnk.	3.	354	50	50	A2		x	
0608	SANDHAMMAREN	S.	5.	354	40	50	A2		x	
0609	ÖLANDS NORRA UDDE	S.	2.	354	70	50	A2		x	
0610	HÖBURG	S.	4.	354	70	50	A2			
0611	ÖLANDS SÖDRA GRUND	S.	6.	354	70	50	A2		x	
0612	HARMAJA (GRÅHARA)	Finl.	c	395/752	25	50	A2		x	(1)
0613	LAPPEGRUND	Dnk.	1. 4.	670	20	50	A2			
0614	TYLÖ	S.	2. 5.	670	30	50	A2			
0615	LANDSKRONA	S.	3. 6.	670	10	50	A2			
0616	NCRDKOSTER	S.	1. 3. 5.	600	20	50	A2			
0617	HÖRNBÄRG	Isla.		600	80	50	A2		x	
0618	BCRKUM	D.	2. 4. 6.	498	20	50	A2	o		
0619	HCEK VAN HOLLAND	Holl.	1. 3. 5.	1052	20	50	A2	o	x	
0620	YMUIDEN	Holl.	2. 4. 6.	1052	20	50	A2	o	x	
0621	STROMA	G.	1. 3. 5.	752	30	50	A2	o	x	
0622	BRESSAY	G.	2. 4. 6.	752	20	50	A2	o		
0623	LONGSTONE	G.	1. 3. 5.	444	20	50	A2	o		
0624	NORTH CARR B.F.	G.	2. 4. 6.	444	10	50	A2	o		
0625	VER	F.	1. 4.	600	20	50	A2	o	x	
0626	CHERBOURG	F.	2. 5.	600	30	50	A2	o	x	
0627	NAB TOWER	G.	3. 6.	600	20	50	A2	o	x	
0628	LITTLE CUMBRAE	G.	c	846	20	50	A3	o	x	parlant speech hablando
0629	EDDYSTONE	G.	1. 3. 5.	670	20	50	A2	o		
0630	LIZARD PT	G.	2. 4. 6.	670	30	50	A2	o		

(1) Radiophare combiné : émission circulaire (ordre d'émission 1, fréquence de modulation basse) et émission directionnelle (ordre d'émission 2. 3. 4. 5. 6., fréquence de modulation élevée).

(1) Combined circular (sequence 1, low note frequency) and directional (sequence 2. 3. 4. 5. 6., high note frequency)

(1) Radiofaro combinado : emisión circular (orden de emisión 1, frecuencia de modulación baja) y emisión direccional (orden de emisión 2. 3. 4. 5. 6., frecuencia de modulación elevada).

1	2	3	4	5	6	7	8	9	10	11
Número de référence	Nom du radiophare	Pays	Ordre d'émission	Fréquence de modulation c/s	Portée nominale m. m.	Intensité de champ à limite de portée $\mu V/m$	Classe d'émission	Emissions en temps clair	En service = x	Observations
Reference Number	Name of radiobeacon	Country	Sequence	Note Frequency c/s	Nominal range n. m.	Field strength at limit of range $\mu V/m$	Type of emission	Transmissions in clear weather	Established = x	Remarks
Número de referencia	Nombre del radiofaro	País	Orden de emisión	Frecuencia de modulación c/s	Alcance nominal m. m.	Intensidad del campo en el límite del alcance $\mu V/m$	Tipo de emisión	Emissiones en tiempo claro	En servicio = x	Observaciones
0631 0632 0633	MALAGA CABO TRES FORCAS CABO GATA	E. Mar.E E.	1.2. 3.4. 5.6.	1052 1052 1052	30 50 30	75 75 75	A2 A2 A2		x	
0634 0635 0636	CASTELLON ISLA BUDA CALAFIGUERA	E. E. E.	1.2. 3.4. 5.6.	752 752 752	30 50 30	75 75 75	A2 A2 A2			
0637 0638 0639	CAP DE GARDE LE GALITON PHILIPPEVILLE	F(Alg) Tuni. F(Alg)	1.2. 3.4. 5.6.	846 846 846	50 50 20	75 75 75	A2 A2 A2	o		
0640 0641 0642	SENIGALLIA GRADO PUNTA MAESTRA	I. I. I.	1.2. 3.4. 5.6.	395 395 395	80 100 80	50 50 50	A2 A2 A2		x	

//

1	2	3	4	5	6	7	8	9	10	11
Número de référence	Nom du radiophare	Pays	Ordre d'émission	Fréquence de modulation c/s	Portée nominale m. m.	Intensité de champ à limite de portée $\mu V/m$	Classe d'émission	Emissions en temps clair	En service = x	Observations
Reference Number	Name of radiobeacon	Country	Sequence	Note Frequency c/s	Nominal range n. m.	Field strength at limit of range $\mu V/m$	Type of emission	Transmissions in clear weather	Established = x	Remarks
Número de referencia	Nombre del radiofaro	País	Orden de emisión	Frecuencia de modulación c/s	Alcance nominal m. m.	Intensidad del campo en el límite del alcance $\mu V/m$	Tipo de emisión	Emisiones en tiempo claro	En servicio = x	Observaciones
0701	UNDERSTEN	S.	1. 4.	752	70	50	A2		x	
0702	SVENSKA BJÖRN B.F.	S.	3.	752	50	50	A2		x	
0703	EGGEGRUND	S.	5.	752	50	50	A2		x	
0704	FINNGRUNDET B.F.	S.	2.	752	60	50	A2		x	
0705	ÖRSKÅR	S.	6.	752	40	50	A2			
0706	BRÜSTERORT	URSS	1. 2.	670	70	50	A2	p u	x	#
0707	PILLAU	URSS	3. 4.	670	50	50	A2	p u		#
0708	KLAIPEDA (MEMEL)	URSS	5. 6.	670	50	50	A2	p u	x	#
0709	TRAVEMUNDE	D.	1. 3. 5.	444	20	50	A2			
0710	KELSNOR	Dnk.	2. 4. 6.	444	20	50	A2			
0711	LAESÖ TRINDEL B.F.	Dnk.	1. 4.	498	30	50	A2		x	
0712	VINGA FYRSKEPP B.F.	S.	2. 5.	498	30	50	A2		x	
0713	HIPSHOLM	Dnk.	3. 6.	498	30	50	A2		x	
0714	VESTMANNAEYJAR	Isla.	c.	670	80	50	A2		x	
0715	HELNES	Nor.		846	50	50	A2			
0716	SLETNES	Nor.		846	50	50	A2			
0717	HALTEN	Nor.		600	50	50	A2			
0718	GRIP	Nor.		600	50	50	A2		x	
0719	RCTEKLIF	D.	1. 3. 5.	395	20	50	A2	o		
0720	NORTH FORELAND	G.	c	354	50	50	A2	z	x	
0721	EILEAN GLAS	G.	1. 3. 5.	444	30	50	A2	o		
0722	OIGH SKEIR	G.	2. 4. 6.	444	20	50	A2	o		
0723	CLOCH POINT	G.	c	545	10	50	A3	o	x	parlant speech hablando
0724	SOUTH ROCK	G.	2. 4. 6.	498	20	50	A2	o		
0725	ARRAN NORTH	Irla.	1. 3. 5.	395	20	50	A2	o		
0726	LOOP HEAD	Irla.	2. 4. 6.	395	30	50	A2	o		
0727	ESTACA DE BARES	E.	1. 2.	600	100	50	A2			
0728	PEÑAS	E.	3. 4.	600	50	50	A2			
0729	LLANES	E.	5. 6.	600	30	50	A2			

**

Il n'a pas été possible de prévoir un groupe de deux ou trois fréquences de modulation comme dans le plan de Genève de 1949, par suite de la nécessité d'éviter les brouillages.

It has not been able to suggest the allocation of a group of two or three note frequencies as in the Geneva Plan of 1949, because of the necessity to avoid interference.

No ha sido posible prever un grupo de dos o tres frecuencias de modulación como en el plan de Génova de 1949, a causa de la necesidad de evitar las interferencias.

FRÉQUENCE - FREQUENCY - FRECUENCIA : 301.1 kc/s (suite)

1	2	3	4	5	6	7	8	9	10	11
Número de référence	Nom du radiophare	Pays	Ordre d'émission	Fréquence de modulation c/s	Portée nominale m. m.	Intensité de champ à limite de portée $\mu V/m$	Classe d'émission	Emissions en temps clair	En service = x	Observations
Reference Number	Name of radiobeacon	Country	Sequence	Note Frequency c/s	Nominal range n. m.	Field strength at limit of range $\mu V/m$	Type of emission	Transmissions in clear weather	Established = x	Remarks
Número de referencia	Nombre del radiofaro	Pais	Orden de emisión	Frecuencia de modulación c/s	Alcanca nominal m. m.	Intensidad del campo en el limite del alcance $\mu V/m$	Tipo de emisión	Emissiones en tiempo claro	En servicio = x	Observaciones
0730	CAP SIM	Mar.F	1. 2.	846	100	75	A2	z		
0731	CAP CANTIN	Mar.F	3. 4.	846	50	75	A2	z		
0732	EL HANK	Mar.F	5. 6.	846	100	75	A2	z	x	
0733	CARTAGENA	E.	c	498	10	75	A2			
0734	TINO	I.	1. 2.	1052	70	50	A2	q v		
0735	GENOVA	I.	3. 4.	1052	70	50	A2	q v	x	
0736	CAPO MELE	I.	5. 6.	1052	75	50	A2	q v		
0737	COZZO SPADARO	I.	1. 2.	950	100	75	A2	s x		
0738	AUGUSTA	I.	3. 4.	950	100	75	A2	s x		
0739	C. SPARTIVENTO (CALABRO)	I.	5. 6.	950	100	75	A2	s x		
0740	RUMELI FENER	Turq.	1. 2.	545	150	75	A2	z	x	

"

1	2	3	4	5	6	7	8	9	10	11
Numéro de référence	Nom du radiophare	Pays	Ordre d'émission	Fréquence de modulation c/s	Portée nominale m. m.	Intensité de champ à limite de portée $\mu\text{V/m}$	Classe d'émission	Emissions en temps clair	En service = x	Observations
Reference Number	Name of radiobeacon	Country	Sequence	Note Frequency c/s	Nominal range n. m.	Field strength at limit of range $\mu\text{V/m}$	Type of emission	Transmissions in clear weather	Established = x	Remarks
Número de referencia	Nombre del radiofaro	País	Orden de emisión	Frecuencia de modulación c/s	Alcance nominal m. m.	Intensidad del campo en el límite del alcance $\mu\text{V/m}$	Tipo de emisión	Emisiones en tiempo claro	En servicio = x	Observaciones
0801	STORA FJÄDERÄGG	S.	1. 3. 5.	444	20	50	A2			
0802	RATASKÄR	S.	2. 4. 6.	444	40	50	A2			
0803	HOGLAND	URSS	1. 2.	600	40	50	A2	q v		#
0804	KALBÅDAGRUND	Finl.	3. 4.	600	60	50	A2			
0805	SOMERI	URSS	5. 6.	600	60	50	A2	q v		#
0806	WARNEMUNDE	D.	1. 2.	475	20	50	A2	r w	x	#
0807	GEDSER REV B.F.	Dnk.	5. 6.	498	30	50	A2		x	
0808	LAKE VÄNERN	S.	1. 4.	395	15	50	A2			
0809	(EASTERN PART)	S.	2. 5.	395	à	50	A2			
0810		S.	3. 6.	395	30	50	A2			
0811	VIK I MYRDAL	Isla.	c	846	30	50	A2		x	
0812	HEKKINGEN	Nor.		752	50	50	A2			
0813	ANDENES	Nor.		752	50	50	A2			
0814	SPURN B.F.	G.	1	1052	50	50	A2	z	x	
0815	TYNEMOUTH	G.	3	1052	70	50	A2	z	x	
0816	FLAMBOROUGH HD	G.	5	1052	70	50	A2	z	x	
0817	MAY ISLAND	G.	2	1052	100/70	50	A2	z	x	
0818	KINNAIRD HD	G.	4	1052	100/70	50	A2	z	x	
0819	NORTH RONALDSHAY	G.	6	1052	100/70	50	A2	z	x	
0820	ECHMÜHL	F.	1	670	50	50	A2	z	x	
0821	SEIN	F.	3	670	50	50	A2	z	x	
0822	GROIX	F.	5	670	50	50	A2	z	x	
0823	LES BALEINES	F.	2	670	50	50	A2	z	x	
0824	YEU	F.	4	670	100	50	A2	z	x	
0825	BELLE-ILE	F.	6	670	100	50	A2	z	x	
0826	VILLA REAL DE S. ANTONIO	Port.	1. 2.	752	20	75	A2		x	
0827	C.S. MARIA	Port.	3. 4.	752	20	75	A2		x	
0828	C.S. VICENTE	Port.	5. 6.	752	100	75	A2		x	
0829	I. PONZA	I.	1. 2.	600	100	75	A2			
0830	CAPO BELLAVISTA	I.	3. 4.	600	90	75	A2			
0831	CAPO FERRO	I.	5. 6.	600	90	75	A2			
0832	ALEXANDRIE	Egyp.	1. 2.	752	150	75	A2			
0833	KALEDONNYA	Turq.	3. 4.	752	150	75	A2			
0834	ROSETTE	Egyp.	5. 6.	752	200	75	A2			

* Il n'a pas été possible de prévoir un groupe de deux ou trois fréquences de modulation comme dans le plan de Genève de 1949, par suite de la nécessité d'éviter les brouillages.

It has not been able to suggest the allocation of a group of two or three note frequencies as in the Geneva Plan of 1949, because of the necessity to avoid interference.

No ha sido posible prever un grupo de dos o tres frecuencias de modulación como en el plan de Génova de 1949, a causa de la necesidad de evitar las interferencias.



1	2	3	4	5	6	7	8	9	10	11
Numéro de référence	Nom du radiophare	Pays	Ordre d'émission	Fréquence de modulation c/s	Portée nominale m. m.	Intensité de champ à limite de portée $\mu V/m$	Classe d'émission	Emissions en temps clair	En service = x	Observations
Reference Number	Name of radiobeacon	Country	Sequence	Note Frequency c/s	Nominal range n. m.	Field strength at limit of range $\mu V/m$	Type of emission	Transmissions in clear weather	Established = x	Remarks
Número de referencia	Nombre del radiofaro	País	Orden de emisión	Frecuencia de modulación c/s	Alcance nominal m. m.	Intensidad del campo en el límite del alcance $\mu V/m$	Tipo de emisión	Emissiones en tiempo claro	En servicio = x	Observaciones
0901	VENTSPILS (WINDAU)	URSS	1.2.	752	50	50	A2	t y		#
0902	LIEPAJA (LIBAU)	URSS	3.4.	752	50	50	A2	t y	x	#
0903	OSTERGARN	S.	5.6.	498	50	50	A2			
0904	NYBORG	Dnk.		846	20	50	A2		x	
0905	OMÖ	Dnk.		846	20	50	A2		x	
0906	KORSÖR	Dnk.		846	20	50	A2		x	
0907	OKSÖY	Nor.	1	950	50	50	A2			
0908	HIRTSHALS	Dnk.	3	950	50	50	A2			
0909	TORUNGEN	Nor.	5	950	50	50	A2			
0910	SKAGENS REV B.F.	Dnk.	2	950	50	50	A2		x	
0911	HÄLLÖ	S.	4	950	50	50	A2		x	
0912	FAERDER	Nor.	6	950	70	50	A2		x	
0913	REYKJANES	Isla.	c	498	30	50	A2		x	
0914	WEST HINDER B.F.	Belg.	1.2.	600	10	50	A2	p u	x	
0915	OSTENDE	Belg.	3.4.	600	10	50	A2	p u	x	
0916	WANDELAAR B.F.	Belg.	5.6.	600	10	50	A2	p u	x	
0917	ANTIFER	F.	1.3.5.	444	20	50	A2	z	x	
0918	ROYAL SOVEREIGN B.F.	G.	2.4.6.	444	20	50	A2	o	x	
0919	CORBIERE	G.	2.4.6.	498	10	50	A2	o		
0920	CAPE WRATH	G.	1.3.5.	545	30	50	A2	o		
0921	SOUTH RONA	G.	2.4.6.	545	20	50	A2	o		
0922	BAR B.F.	G.	1.3.5.	846	30	50	A2	o	x	
0923	POINT OF AYRE	G.	2.4.6.	846	10	50	A2	o		
0924	SHAMBLES B.F.	G.	1.3.5.	752	20	50	A2	o	x	
0925	BREAKSEA B.F.	G.	2.4.6.	752	30	50	A2	o	x	
0926	SENOCZULUA	E.		545	20	50	A2			
0927	CORUÑA	E.		395	20	50	A2			
0928	CUKACHA	Mar.F		950	20	75	A2	o		

* Il n'a pas été possible de prévoir un groupe de deux ou trois fréquences de modulation comme dans le plan de Genève de 1949, par suite de la nécessité d'éviter les brouillages.

It has not been able to suggest the allocation of a group of two or three note frequencies as in the Geneva Plan of 1949, because of the necessity to avoid interference.

No ha sido posible prever un grupo de dos o tres frecuencias de modulación como en el plan de Génova de 1949, a causa de la necesidad de evitar las interferencias.

FRÉQUENCE - FREQUENCY - FRECUENCIA : 305.7 kc/s (suite)

1	2	3	4	5	6	7	8	9	10	11
Numéro de référence	Nom du radiophare	Pays	Ordre d'émission	Fréquence de modulation c/s	Portée nominale m. m.	Intensité de champ à limite de portée $\mu\text{V/m}$	Classe d'émission	Emissions en temps clair	En service = x	Observations
Reference Number	Name of radiobeacon	Country	Sequence	Note Frequency c/s	Nominal range n. m.	Field strength at limit of range $\mu\text{V/m}$	Type of emission	Transmissions in clear weather	Established = x	Remarks
Número de referencia	Nombre del radiofaro	País	Orden de emisión	Frecuencia de modulación c/s	Alcance nominal m. m.	Intensidad del campo en el límite del alcance $\mu\text{V/m}$	Tipo de emisión	Emissiones en tiempo claro	En servicio = x	Observaciones
0929	MELILLA	Mar.E	c	395	10	75	A2			
0930	ALMERIA	E.	c	600	10	75	A2			
0931	ALICANTE	E.	c	752	10	75	A2			
0932	VALENCIA	E.	c	444	10	75	A2			
0933	TARRAGONA	E.	c	498	10	75	A2			
0934	ALGER	F.(Alg)	c	950	20	75	A2		x	
0935 0936	SETE MARSEILLE	F. F.	1. 2. 3. 4. 5. 6.	846 846	20 20	50 50	A2 A2	o o	x	
0937 0938 0939	S. CATALDO DI LECCE VIESTE MOLA	I. I. I.	1. 2. 3. 4. 5. 6.	670 670 670	100 100 70	75 75 75	A2 A2 A2			
0940	BEYROUTH	Liba.	c	395	10	75	A2			

1	2	3	4	5	6	7	8	9	10	11
Número de référence	Nom du radiophare	Pays	Ordre d'émission	Fréquence de modulation c/s	Portée nominale m. m.	Intensité de champ à limite de portée $\mu\text{V/m}$	Classe d'émission	Emissions en temps clair	En service = x	Observations
Reference Number	Name of radiobeacon	Country	Sequence	Note Frequency c/s	Nominal range n. m.	Field strength at limit of range $\mu\text{V/m}$	Type of emission	Transmissions in clear weather	Established = x	Remarks
Número de referencia	Nombre del radiofaro	País	Orden de emisión	Frecuencia de modulación c/s	Alcance nominal m. m.	Intensidad del campo en el límite del alcance $\mu\text{V/m}$	Tipo de emisión	Emissiones en tiempo claro	En servicio = x	Observaciones
1001	SKAG	S.	1	846	40	50	A2			
1002	HÄRNÖ (HEMSÖ)	S.	3	846	60	50	A2			
1003	BRÄMON	S.	5	846	50	50	A2		x	
1004	SÄLGRUND	Finl.	2	444	60	50	A2			
1005	REPOSAARI (RÄFSÖ)	Finl.	4	444	60	50	A2		x	
1006	KYLMÄPIHLAIA	Finl.	6	444	60	50	A2			
1007	STORA KARLSÖ	S.	1.4.	498	40	50	A2		x	
1008	KAPELLUDDEN	S.	2.5.	498	40	50	A2			
1009	ÖLANDS SÖDRA UDDE	S.	3.6.	498	20	50	A2			
1010	AINAZI	URSS	1.2.	600	30	50	A2	r w		#
1011	MERSRAGS	UPSS	3.4.	600	30	50	A2	r w		#
1012	DAUGAVGRIVA (RIGA)	URSS	5.6.	600	30	50	A2	r w	x	#
1013	DFOGDEN	Dnk.	1.4.	354	20	50	A2		x	
1014	TRELLEBORG	S.	3.6.	354	30	50	A2		x	
1015	STEVNS	Dnk.	5.	354	50	50	A2		x	
1016	MCEN	Dnk.	2.	354	30	50	A2			
1017	TERSCHELLINGERBANK	Holl.	1	545	100/70	50	A2	z	x	
1018	B.F.	D.	3	545	50	50	A2	z	x	
1019	BORKUM RIFF B.F.	Holl.	5	545	50	50	A2	z	x	
1020	HAAKS B.F. (TEXEL)	D.	2	545	50	50	A2	z	x	
1021	AMRUM BANK B.F.	D.	4	545	50	50	A2	z	x	
1022	NORDERNEY	D.	6	545	50	50	A2	z	x	
1023	EAGLE ISLAND	Irla.	1	1052	100/70	50	A2	z	x	
1024	MULL OF KINTYRE	G.	3	1052	100/70	50	A2	z	x	
1025	TORY ISLAND	Irla.	5	1052	100/70	50	A2	z	x	
1026	MIZEN HEAD	Irla.	2	1052	100/70	50	A2	z	x	
1027	ROUND ISLAND	G.	4	1052	200/100	50	A2	z	x	
1028	CREAC'H D'OUessant	F.	6	1052	100	50	A2	z	x	
1029	C. ROCCA	Port.	1.2.	670	50	75	A2		x	
1030	C. SINES	Port.	3.4.	670	50	75	A2		x	
1031	C. ESPICHEL	Port.	5.6.	670	50	75	A2		x	
1032	LA GIRAGLIA	F.	1.2.	752	100	75	A2	z		
1033	LA CHIAPPA	F.	3.4.	752	100	75	A2	r w	x	
1034	PORTOFERRAIO	I.	5.6.	752	50	75	A2	r w		
1035	TRIPOLI	Liby.	1.2.	846	50	75	A2	p u		
1036	EL ATTAYA	Tuni.	3.4.	846	100	75	A2	p u		
1037	MISURATA	Liby.	5.6.	846	100	75	A2	p u		

* Il n'a pas été possible de prévoir un groupe de deux ou trois fréquences de modulation comme dans le plan de Genève de 1949, par suite de la nécessité d'éviter les brouillages.

It has not been able to suggest the allocation of a group of two or three note frequencies as in the Geneva Plan of 1949, because of the necessity to avoid interference.

No ha sido posible prever un grupo de dos o tres frecuencias de modulación como en el plan de Génova de 1949, a causa de la necesidad de evitar las interferencias.

1	2	3	4	5	6	7	8	9	10	11
Numéro de référence	Nom du radiophare	Pays	Ordre d'émission	Fréquence de modulation c/s	Portée nominale m. m.	Intensité de champ à limite de portée $\mu\text{V/m}$	Classe d'émission	Emissions en temps clair	En service = x	Observations
Reference Number	Name of radiobeacon	Country	Sequence	Note Frequency c/s	Nominal range n. m.	Field strength at limit of range $\mu\text{V/m}$	Type of emission	Transmissions in clear weather	Established = x	Remarks
Número de referencia	Nombre del radiofaro	País	Orden de emisión	Frecuencia de modulación c/s	Alcance nominal m. m.	Intensidad del campo en el límite del alcance $\mu\text{V/m}$	Tipo de emisión	Emisiones en tiempo claro	En servicio = x	Observaciones
1101	PAKRI	URSS	1. 2.	670	50	50	A2	r w		*
1102	PORKKALA	URSS	3. 4.	670	50	50	A2	r w	x	*
1103	TALLINN	URSS	5. 6.	670	30	50	A2	r w	x	*
1104	HEL	Polo.	1. 2.	376	80	50	A2	r w	x	*
1105	NOWY PORT	Polo.	3. 4.	376	30	50	A2	r w	x	*
1106	KRYNICA MORSKA	Polo.	5. 6.	376	30	50	A2	r w	x	*
1107	FLENSBURG B.F.	D.	c	498	10	50	A2			
1108	ÖSTRE FLAK B.F.	Dnk.	1. 4.	1052	50	50	A2		x	
1109	HALS BARRE	Dnk.	2. 5.	1052	50	50	A2		x	
1110	LÁSÓ RENDE	Dnk.	3. 6.	1052	30	50	A2			
1111	ISFJORD (Svalbard)	Nor.	c	752	50	50	A2		x	
1112	HVALSNES	Isla.	c	950	150	50	A2		x	
1113	AILLY	F.	1	846	50	50	A2	z	x	
1114	GRIS NEZ	F.	3	846	50	50	A2	z	x	
1115	DUNGENESS	G.	5	846	50	50	A2	z	x	
1116	DYCK B.F.	F.	2	846	20	50	A2	z	x	
1117	SANDETTIE B.F.	F.	4	846	50	50	A2	z		
1118	EAST GOODWIN B.F.	G.	6	846	30	50	A2	z	x	
1119	C. VILLANO	E.	1. 2.	950	100	50	A2		x	
1120	C. FINISTERRE	E.	3. 4.	950	100	75	A2		x	
1121	C. SILLEIRO	E.	5. 6.	950	100	75	A2		x	
1122	I. DEI CAVOLI	I.	1. 2.	545	100	75	A2			
1123	CAP BLANC	Tuni.	3. 4.	545	100	75	A2	z		
1124	USTICA	I.	5. 6.	545	150	75	A2			
1125	DAMIETTE	Egyp.	1. 2.	670	100	75	A2			
1126	TOR (Mer Rouge)	Egyp.	3. 4.	670	50	100	A2			
1127	PORT SAID	Egyp.	5. 6.	670	50	75	A2			

* Il n'a pas été possible de prévoir un groupe de deux ou trois fréquences de modulation comme dans le plan de Genève de 1949, par suite de la nécessité d'éviter les brouillages.

It has not been able to suggest the allocation of a group of two or three note frequencies as in the Geneva Plan of 1949, because of the necessity to avoid interference.

No ha sido posible prever un grupo de dos o tres frecuencias de modulación como en el plan de Génova de 1949, a causa de la necesidad de evitar las interferencias.

1	2	3	4	5	6	7	8	9	10	11
Número de référence	Nom du radiophare	Pays	Ordre d'émission	Fréquence de modulation c/s	Portée nominale m. m.	Intensité de champ à limite de portée $\mu\text{V/m}$	Classe d'émission	Emissions en temps clair	En service = x	Observations
Reference Number	Name of radiobeacon	Country	Sequence	Note Frequency c/s	Nominal range n. m.	Field strength at limit of range $\mu\text{V/m}$	Type of emission	Transmissions in clear weather	Established = x	Remarks
Número de referencia	Nombre del radiofaro	País	Orden de emisión	Frecuencia de modulación c/s	Alcance nominal m. m.	Intensidad del campo en el límite del alcance $\mu\text{V/m}$	Tipo de emisión	Emissiones en tiempo claro	En servicio = x	Observaciones
1201 1202	RÖNNSKÅR MALÖREN	S. S.	1. 3. 5. 2. 4. 6.	846 846	40 30	50 50	A2 A2			
1203 1204 1205	SÖRVE (ZEREL) OVISI KOLKASRAGS	URSS URSS URSS	1. 2. 3. 4. 5. 6.	376 376 376	70 50 50	50 50 50	A2 A2 A2	p u p u p u	x x x	# # #
1206 1207 1208	SWINOUJSCIA KOLOBROZEG JAROSLAWIEC	Polo. Polo. Polo.	1. 2. 3. 4. 5. 6.	600 600 600	50 40 50	50 50 50	A2 A2 A2	s x s x s x		# # #
1209 1210 1211 1213 1214 1215	SVINÖY MARSTEIN UTVAER UTSIRA FEIESTEIN GEITUNGEN	Nor. Nor. Nor. Nor. Nor. Nor.	1 3 5 2 4 6	752 752 752 752 752 752	100/70 50 100/70 100/70 50 50	50 50 50 50 50 50	A2 A2 A2 A2 A2 A2	t y t y t y	x x x x	
1216 1217 1218	CAP SPARTEL LA COUBRE CAP GHIR	Int. zone F. Mar.F	1. 2. 3. 4. 5. 6.	- - -	200 300/100 200	75 50 75	A1 A1 A1	z z z	x x x	

#

Il n'a pas été possible de prévoir un groupe de deux ou trois fréquences de modulation comme dans le plan de Genève de 1949, par suite de la nécessité d'éviter les brouillages.

It has not been able to suggest the allocation of a group of two or three note frequencies as in the Geneva Plan of 1949, because of the necessity to avoid interference.

No ha sido posible prever un grupo de dos o tres frecuencias de modulación como en el plan de Génova de 1949, a causa de la necesidad de evitar las interferencias.

1	2	3	4	5	6	7	8	9	10	11
Número de référence	Nom du radiophare	Pays	Ordre d'émission	Fréquence de modulation c/s	Portée nominale m. m.	Intensité de champ à limite de portée $\mu V/m$	Classe d'émission	Emissions en temps clair	En service = x	Observations
Reference Number	Name of radiobeacon	Country	Sequence	Note Frequency c/s	Nominal range n. m.	Field strength at limit of r $\mu V/m$	Type of emission	Transmissions in clear weather	Established = x	Remarks
Número de referencia	Nombre del radiofaro	País	Orden de emisión	Frecuencia de modulación c/s	Alcance nominal m. m.	Intensidad del campo en el límite del alcance $\mu V/m$	Tipo de emisión	Emissiones en tiempo claro	En servicio = x	Observaciones
1301	CAP BON	Tuni.	1. 2.	-	200	75	A1	z		
1302	CAP CAXINE	F.(Alg)	3. 4.	-	200	75	A1	z	x	
1303	PLANIER	F.	5. 6.	-	200	50	A1	z	x	

1	2	3	4	5	6	7	8	9	10	11
Numéro de référence	Nom du radiophare	Pays	Ordre d'émission	Fréquence de modulation c/s	Portée nominale m. m.	Intensité de champ à limite de portée μ V/m	Classe d'émission	Emissions en temps clair	En service = x	Observations
Reference Number	Name of radiobeacon	Country	Sequence	Note Frequency c/s	Nominal range n. m.	Field strength at limit of range μ V/m	Type of emission	Transmissions in clear weather	Established = x	Remarks
Número de referencia	Nombre del radiofaro	País	Orden de emisión	Frecuencia de modulación c/s	Alcance nominal m. m.	Intensidad del campo en el límite del alcance μ V/m	Tipo de emisión	Emisiones en tiempo claro	En servicio = x	Observaciones
1401	LA PALMYRE	F.	c.	-	100	50	A1		x	

PROTOCOL
to the
Regional Arrangement concerning Maritime Radiobeacons
in the European Area of Region I

At the time of signing the Regional Arrangement concerning Maritime Radiobeacons in the European Area, Paris 1951, the undersigned, delegates of their respective Administrations, agree as follows :

As it has not been possible to apply the fundamental principles adopted for the preparation of the List in Annex 3 of the said Arrangement to the organization of the maritime radiobeacons in the Baltic Sea and adjacent waters, the List may be revised as regards the maritime radiobeacons of the Baltic Sea and adjacent waters up to a line joining the maritime radiobeacons of Lista in Norway and Hanstholm in Denmark. The foregoing provisions also apply to the maritime radiobeacons on the coast of Norway within the Arctic Circle. The List shall remain unchanged as regards the remainder of the European Area.

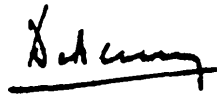
Any such revision shall be decided in conference by the interested Administrations, and the changes arising from it shall not result in harmful interference within the nominal range of any maritime radiobeacon included in the List and situated outside the area in which revision is permitted.

IN WITNESS WHEREOF, the duly authorized Delegates of the participating Administrations have signed the Final Protocol in each of the English, Spanish and French languages, in a single copy; in the event of a dispute the French text shall be authoritative; the original texts shall be deposited in the archives of the Government of France.

A certified copy thereof shall be forwarded to the Government of each of the member countries of the International Telecommunication Union having a sea coast within Region 1 and to the Secretary General of the International Telecommunication Union.

Done at Paris, this third day of August 1951.

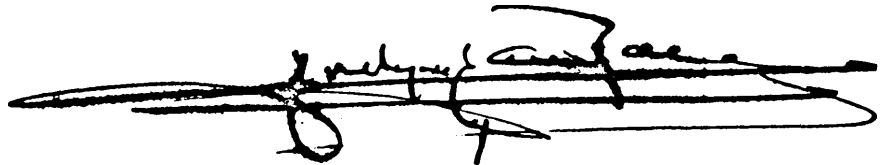
For Belgium :



DEBEULE

(subject to ratification)

For the Overseas Territories of Portugal :



Jose AIRES GOMES RAMOS

(subject to ratification)

For Denmark :



SINDING

(subject to ratification)

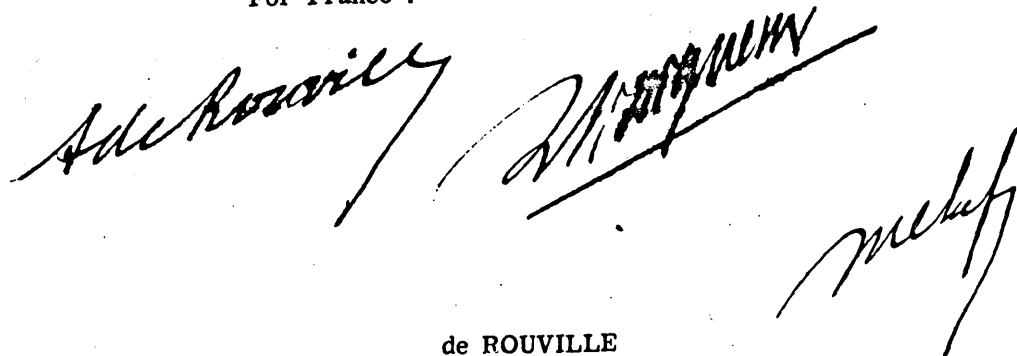
For Spain :



Carlos ALCON SANZ

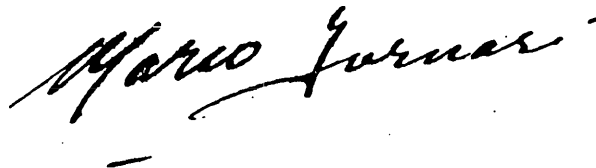
(subject to ratification)

For France :



de ROUVILLE
R. ROSSIGNEUX
M. CHEF

For Italy :



Mario FURNARI

(subject to ratification)

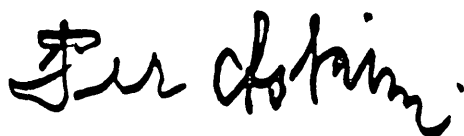
For Monaco :



AILLIERES

(subject to ratification)

For Norway :



Per ASKIM
A. TORGET

(subject to ratification)

For the Netherlands :

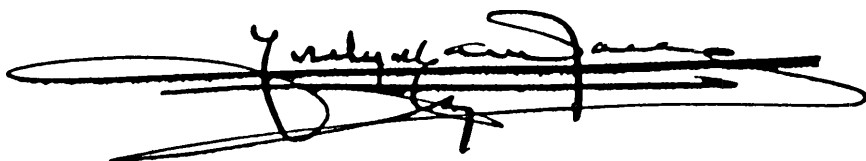
Kuyper

M. H. W. Moorrees

Vreede

KUYPER
M. H. W. MOORREES
VREEDE

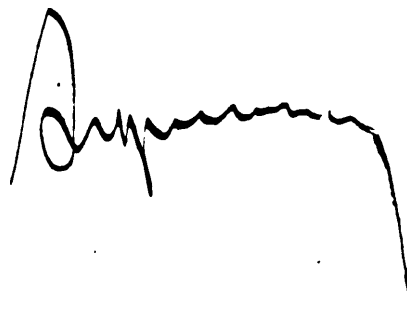
For Portugal :



Jose AIRES GOMES RAMOS

(subject to ratification)

For French Protectorates of Morocco and Tunisia :



VIGNERON

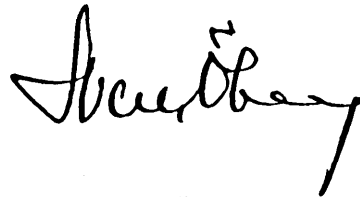
For the United Kingdom of Great Britain and Northern Ireland :

C. P. Scott-Malden
C. St. G. Glasson
W. Swanson
J. Wylie

C. P. SCOTT-MALDEN
C. St. G. GLASSON
W. SWANSON
J. WYLIE

We declare that our signatures given on behalf of the United Kingdom of Great Britain and Northern Ireland include also the Channel Isles and the Isle of Man.

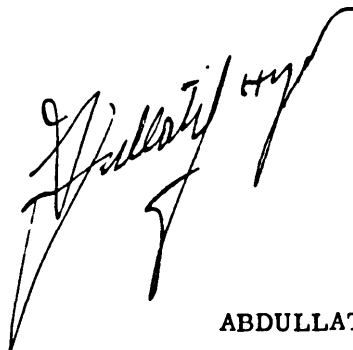
For Sweden :

"


Sven ÖBERG

(subject to ratification)

For Turkey :



ABDULLATIF HIZ'ER

(subject to ratification)

RECOMMENDATIONS

RECOMMENDATION N° 1

The Conference for the reorganization of maritime radiobeacons in the European Area,
CONSIDERING

a) that certain signals transmitted in the frequency band reserved for maritime radiobeacons by other stations cause harmful interference within the area of the nominal range of maritime radiobeacons;

b) that the stations emitting such signals are operating in derogation of the Radio Regulations;

RECOMMENDS

that Administrations monitor systematically such irregular signals and measure their field strength, so that the necessary steps may be taken to eliminate the harmful interference caused thereby.

RECOMMENDATION N° 2

The Conference for the reorganization of maritime radiobeacons in the European Area,
CONSIDERING

a) that aeronautical radiobeacons are not necessarily installed in the vicinity of the coast, as is the case with maritime radiobeacons;

b) that the path of electromagnetic waves near sea-level may be deflected at the coast, even when the land path of such waves is relatively short, and that bearings of aeronautical radiobeacons taken by mariners may thus be subject to considerable error;

RECOMMENDS

1) that Administrations should inform mariners that bearings of aeronautical radiobeacons may be inaccurate owing to the possibility of coastal refraction and that in the absence of instructions care should be exercised in their use;

2) that Administrations should carry out investigations at sea in the vicinity of aeronautical radiobeacons which may be of use to mariners with a view to assessing the possibility of errors and giving appropriate guidance.

RECOMMENDATION N° 3

The Conference for the reorganization of maritime radiobeacons in the European Area,
CONSIDERING,

a) that it is impossible for the operators of a radiobeacon of 50 miles range or more to be easily informed of the atmospheric conditions in the whole area within the nominal range of the radiobeacon;

b) that it is in the interests of mariners that radiobeacons should operate in "clear weather" in the same way as in "fog";

c) that the additional cost of such operation is in general not large in comparison with the capital cost of a radiobeacon and the necessary cost of transmission in "clear weather";

RECOMMENDS

that maritime radiobeacons of 50 miles range or more should operate in "clear weather" in the same way as in "fog".

RECOMMENDATION N° 4

The Conference for the reorganization of maritime radiobeacons in the European Area,

CONSIDERING

a) that it is essential for the safety of mariners that they should be rapidly informed of any failures in the radiobeacon service;

b) that the notification of such failures to mariners is not at present effected in a uniform manner and that general rules should be adopted;

RECOMMENDS

1) that Administrations should immediately notify the appropriate coast stations of failures in the operation of their maritime radiobeacons;

2) that coast stations should then inform mariners as soon as possible in accordance with the procedure laid down in Section XI of Article 37 of the International Radio Regulations (Atlantic City - 1947).

RECOMMENDATION N° 5

The Conference for the reorganization of maritime radiobeacons in the European Area,

CONSIDERING

a) that in the identification of radiobeacons which are not separated by a large distance ambiguity may arise from similarities of grouping in the Morse characters making up the identification signal;

b) that it is necessary to take account of the fact that certain aeronautical radiobeacons may produce a considerable field within the nominal range of maritime radiobeacons;

RECOMMENDS

1) that where possible, any two radiobeacons operating on either the same frequency and geographically separated by less than three times the sum of their nominal ranges shall not

a) use the same identification signals or such combinations of Morse characters as may lead to confusion, e. g.

VA ...- .-

SK ... -.-

b) use any pair of letters in the reverse order, (e. g. AK and KA)

2) similar precautions should be taken in the case of radiobeacons transmitting on adjacent frequency channels;

3) in allocating identification signals to maritime radiobeacons due consideration should be given to the identification signals used by aeronautical radiobeacons transmitting in the frequency bands adjacent to the maritime radiobeacon band.

RECOMMENDATION N° 6

The Conference for the reorganization of maritime radiobeacons in the European Area,

CONSIDERING

a) that the plan prepared by the Conference covers only maritime radiobeacons North of latitude 30°N;

b) that radiobeacons situated near the boundaries of the European area might cause harmful interference within the nominal range of maritime radiobeacons situated within that area;

RECOMMENDS

1) that the frequencies and other characteristics of radiobeacons which are or may be established near the boundaries of the European area should be so chosen as not to cause harmful interference within the nominal range of any maritime radiobeacon provided for in this Arrangement,

2) that, in particular, the frequencies and other characteristics of the maritime radiobeacons of Isleta, Entallada, and Bojador should be as in the following table :

Frequency kc/s	Name of radiobeacon	Country	Note frequency c/s	Nominal range (miles)	Field strength at limit of Range μ V/m	Type of emission
291.9	Isleta	Spain	545	200/100	100	A2
	Entallada	Spain	545	200/100	100	A2
	Bojador	Spain	545	200/100	100	A2

CONFÉRENCE POUR LA RÉORGANISATION
DES RADIOPHARES MARITIMES
DANS LA ZONE EUROPÉENNE

PARIS 1951

CARTE DÉTAILLÉE DE LA ZONE A
(voir carte d'ensemble)

CONFERENCE FOR THE REORGANISATION
OF MARITIME RADIOBEACONS
IN THE EUROPEAN AREA

PARIS 1951

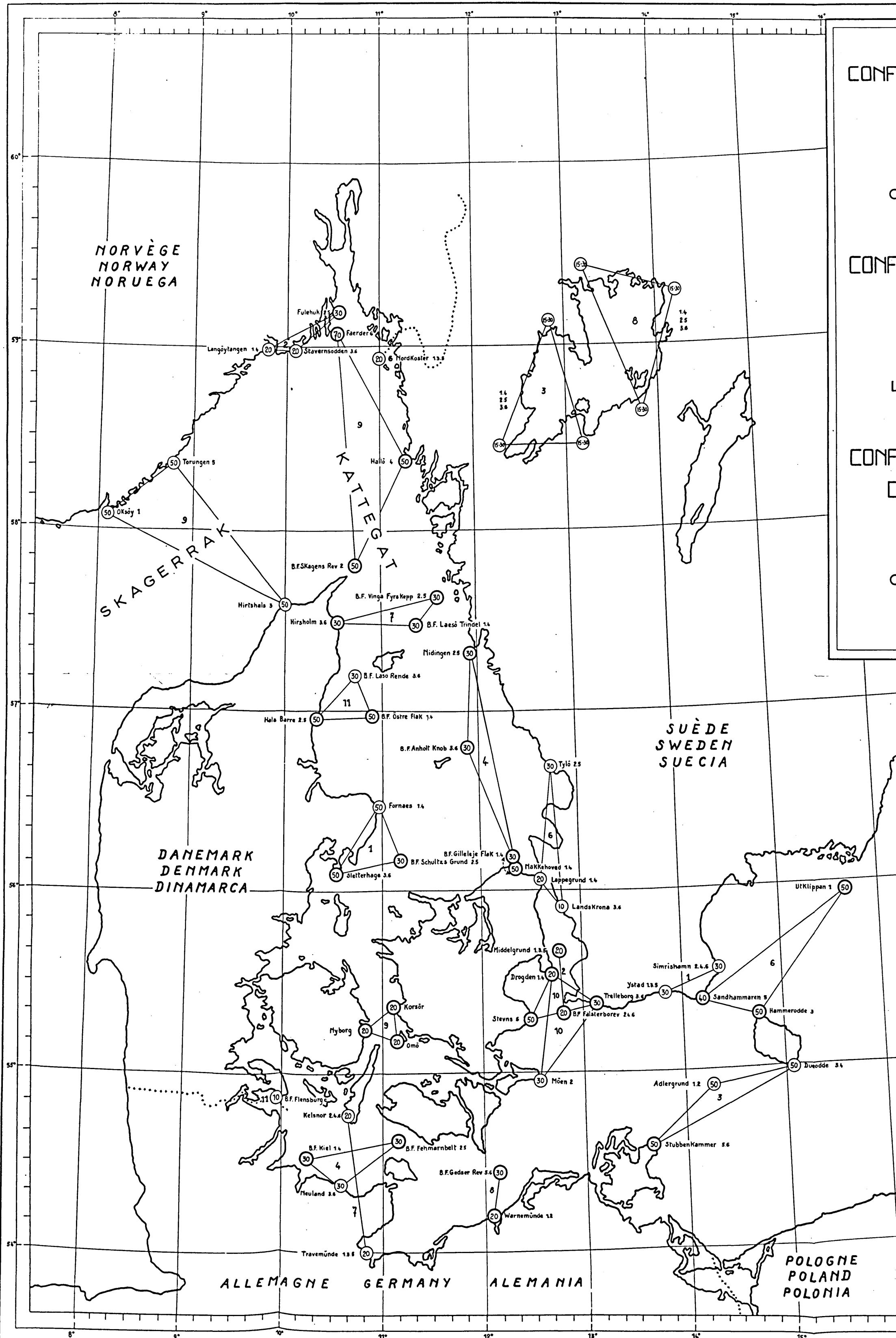
LARGE SCALE CHART OF ZONE A
(see general chart)

CONFERENCIA PARA LA REORGANIZACIÓN
DE LOS RADIOFAROS MARITIMOS
EN LA ZONA EUROPEA

PARIS 1951

CARTA DETALLADA DE LA ZONA A
(ver carta de conjunto)

ARCHIVES
U.I.T.
GENÈVE



MER BALTIQUE
BALTIC SEA
MAR BALTICO

LÉGENDE — KEY — LEYENDA

○ Radiophares en service - Radiobeacons in operation - Radiofaros en servicio.
○ Radiophares en projet - Radiobeacons proposed - Radiofaros en proyecto.
La portée nominale des radiophares, en milles marins, est inscrite dans le cercle figurant leur position.
The nominal range of radiobeacons, in nautical miles, is written in the circle denoting their position.
El alcance nominal de los radiofaros, en millas marinas, está inscripto en el círculo señalando su posición.

FRÉQUENCES — FREQUENCIES — FRECUENCIAS

1	287,3 Kc/s	8	303,4 Kc/s
2	289,6 Kc/s	9	305,7 Kc/s
3	291,9 Kc/s	10	308,0 Kc/s
4	294,2 Kc/s	11	310,3 Kc/s
5	296,5 Kc/s	12	312,6 Kc/s
6	298,8 Kc/s	13	313,5 Kc/s
7	301,1 Kc/s	14	314,5 Kc/s

Echelle: 1/1.000.000 Projection conique de Lambert, sécante par 30° et 52°45' de latitude Nord.
Scale: 1/1.000.000 Conical projection according to Lambert, secant at 30° and 52°45' of latitude North.
Escala: 1/1.000.000 Proyección cónica de Lambert, secante por 30° al 52°45' de latitud Norte.

CONFÉRENCE POUR LA RÉORGANISATION
DES RADIOPHARES MARITIMES
DANS LA ZONE EUROPÉENNE

PARIS 1951

CARTE D'ENSEMBLE

CONFERENCE FOR THE REORGANISATION
OF MARITIME RADIOBEACONS
IN THE EUROPEAN AREA

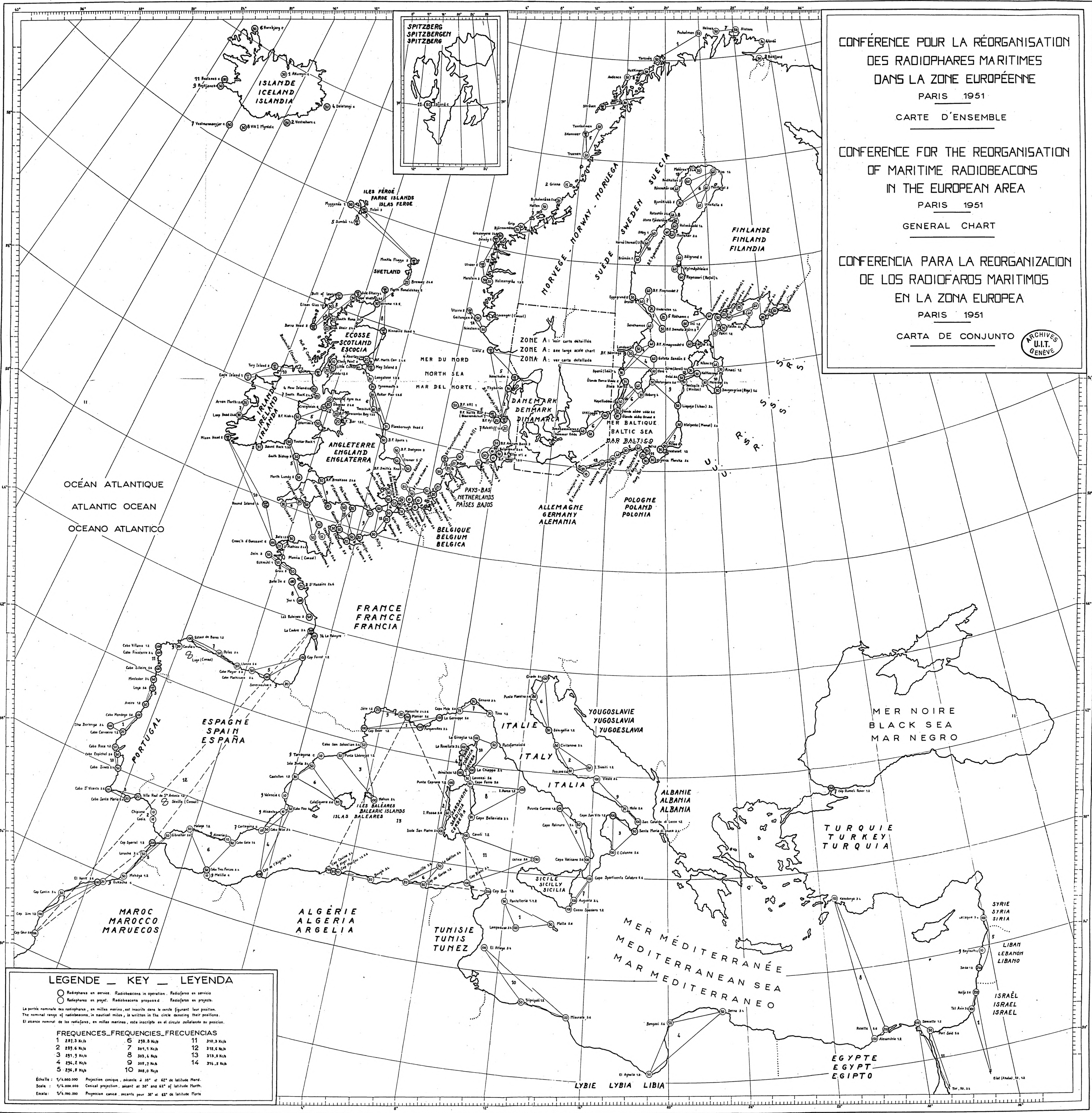
PARIS 1951

GENERAL CHART

CONFERENCIA PARA LA REORGANIZACION
DE LOS RADIOFAROS MARITIMOS
EN LA ZONA EUROPEA

PARIS 1951

CARTA DE CONJUNTO



LEGENDE — KEY — LEYENDA

○ Radiophares en service. Radiobeacons in operation. Radiofaro en servicio.
○ Radiophares en projet. Radiobeacons proposed. Radiofaro en proyecto.
La portée nominale des radiophares, en milles marins, est inscrite dans le cercle figurant leur position.
The nominal range of radio beacons, in nautical miles, is written in the circle denoting their position.
El alcance nominal de los radiofaro, en millas marinas, está inscrito en el círculo señalando su posición.

FREQUENCES — FRECUENCIAS — FRECUENCIAS		
1 297,3 Kc/s	6 259,8 Kc/s	11 310,3 Kc/s
2 299,6 Kc/s	7 301,1 Kc/s	12 312,6 Kc/s
3 291,3 Kc/s	8 303,4 Kc/s	13 313,8 Kc/s
4 294,2 Kc/s	9 305,7 Kc/s	14 314,1 Kc/s
5 296,8 Kc/s	10 308,0 Kc/s	

Échelle: 1/4.000.000 Projection conique, sécante à 38° et 62° de latitude Nord.
Scale: 1/4.000.000 Conical projection, secant at 38° and 62° of latitude North.
Escala: 1/4.000.000 Proyección cónica, secante a 38° y 62° de latitud Norte.

