Documents of the European VHF/UHF Broadcasting Conference (Special Regional Conference, CER)

(Stockholm, 1961)

To reduce download time, the ITU Library and Archives Service has divided the conference documents into sections.

- This PDF includes Document DT No. 1 - 41.
- The complete set of conference documents includes Document No. 1 - 196, DL No. 1 - 3, DT No. 1 - 41.

Working Document No. DT 1-E
26 May, 1961
Original : French

COMMITTEE 3

NOTE BY THE SECRETARY OF THE CONFERENCE

The annexes hereto are issued for the information of the Finance Committee

They are :

Annex 1 - Article 5 of Chapter 9 of the General Regulations annexed to the International Telecommunication Convention, Geneva, 1959.

Annex 2 - Administrative Council Resolution No. 83.

Annex 3 - Provisional list of participants in the expenses of the Regional Broadcasting Conference together with the number of contributory units.

Clifford STEAD

Secretary of the Conference

Annexes : 3

PAGE INTENTIONALLY LEFT BLANK

PAGE LAISSEE EN BLANC INTENTIONNELLEMENT

A N N E X 1

ARTICLE 5 OF CHAPTER 9 OF THE GENERAL REGULATIONS ANNEXED TO THE INTERNATIONAL TELECOMMUNICATION CONVENTION GENEVA, 1959

RULE 5

Budget Control Committee

1. At the opening of each conference or meeting, the Plenary Assembly shall appoint a budget control committee to determine the organization and the facilities available to the delegates, and to examine and approve the accounts for expenditure incurred throughout the duration of the conference or meeting. In addition to the members of delegations who wish to participate, this committee shall include a representative of the Secretary-General and where there is an inviting government, a representative of that country.

2. Before the budget approved by the Administrative Council for the conference or meeting is exhausted, the budget control committee, in collaboration with the secretariat of the conference or meeting, shall present an interim statement of the expenditure already incurred to the Plenary Assembly. The Plenary Assembly shall take this statement into account in considering the question whether the progress made is sufficient to justify a prolongation of the conference or meeting after the date when the approved budget will be exhausted.

3. At the end of each conference or meeting, the budget control committee shall present a report to the Plenary Assembly showing as accurately as possible, the estimated total expenditure at the close of the conference or meeting.

4. After consideration and approval by the Plenary Assembly, this report, together with the observations of the Plenary Assembly, shall be transmitted to the Secretary-General for submission to the Administrative Council at its next annual session.

PAGE INTENTIONALLY LEFT BLANK

PAGE LAISSEE EN BLANC INTENTIONNELLEMENT

ANNEX 2

RESOLUTION NO. 83 OF THE ADMINISTRATIVE COUNCIL

No. 83.-
(amended)

ORGANIZATION, FINANCING AND LIQUIDATION OF THE ACCOUNTS OF CONFERENCES AND MEETINGS
(cf. PV CA3/19, October 1948,
PV CA4/34, September 1949,
PV CA5/20 and 36, October 1950,
PV CA9/25, Doc. 1606/CA9, May 1954
PV CA15/12, Doc. 2499/CA15, July 1960)

The Administrative Council,

considering

a) that all conferences and meetings of the Union should be uniformly organized, as regards both the material provisions and the accounting and liquidation of accounts;

b) that conferences and meetings referred to in 197 and 198 of the Geneva Convention, 1959, should not exceed the expenditure authorized by the Administrative Council;

c) that every effort should be made to reduce the expenditure of conferences and meetings and in the case of conferences the expenses of which are not included in the consolidated budget to accelerate the recovery of participants' contributory shares;

d) that it is advisable to include, in the agreements to be concluded with inviting administrations for the preparation of conferences or meetings, provisions covering the possible cancellation, postponement or change of meeting place, so that such eventualities should not cause unnecessary prejudice to the Union;

resolves

that the following provisions shall be applied for all conferences and meetings organized under the aegis of the Union.

A. Organization of conferences and meetings when there is an inviting administration

1. At such time as he deems appropriate, the Secretary-General shall negotiate an agreement with the inviting administration on the arrangements to be made by both the General Secretariat of the Union

and that administration, in order to supply the conference or meeting with the necessary material means for the satisfactory progress of the work;

2. this agreement, which shall specify the respective functions of both parties, shall be based, as regards its principles, on the arrangements described in Document No. 166/CA3. It may deviate from them to take into account the views of each inviting administration and, in particular, the services which that administration is in a position to offer free of charge;

3. in order, however, that the General Secretariat shall not be implicated in matters for which it does not have to assume responsibility, the agreement to be concluded should not deal with any question concerning the application of the Convention or the General Regulations, which falls exclusively within the competence of the conference or meeting, or of the inviting administration;

4. in particular, the agreement shall include no stipulation concerning the right of administrations in the matter of participation in the conferences, or concerning the Rules of Procedure of the conferences.

B. Financing of conferences and meetings when there is an inviting administration

The agreement to be reached with the inviting administration should in so far as possible, be based on the following data :

5. where it does not cover the expenses itself the inviting administration shall advance the necessary funds for the renting and preparation of premises, the reproduction and distribution of documents, the payments of salaries of the Secretariat personnel recruited locally, the purchase of supplies, the purchase or renting of office equipment and any other equipment, deemed necessary for the work of the conference or meeting;

6. these expenses shall be refunded as soon as possible to the inviting administration by the General Secretariat of the Union;

7. the inviting administration shall bear the expenses pertaining to a Reception Committee and, if the occasion arises, the entertainments and other diversions organized for the delegates;

8. for all other expenses, the Secretary-General shall also endeavour to obtain the advance of the necessary funds from the inviting administration; these funds shall be refunded as soon as possible by the General Secretariat;

9. no conference or meeting may be held under Nos. 197 and 198 of the Convention unless the Council has provided the appropriate credits for the year or years in question. As far as possible when the Council authorizes such credits, it shall be in possession of the agreement entered into with the inviting administration but, in exceptional circumstances, it may authorize these credits subject to the later conclusion of this agreement by the Secretary-General The provisions of the agreement and the amount of the credits available must always be brought to the notice of the Budget Control Committee (cf Chapter 9 of the General Regulations, Article 5), at the first meeting of this Committee;

10 for conferences and meetings organized under Nos. 199 and 200 of the Convention, the agreement and draft budget shall be submitted to the Council if the Council holds a session before the conference or meeting begins. If it holds no session, approval must be given by the Budget Control Committee at its first meeting, at the same time as the agreement and draft budget are referred to it;

11 the agreement with the inviting administration must contain provisions covering cases where conferences or meetings are cancelled or postponed, or their meeting place is changed, as a result of a decision by the Union, adopted by its competent organs :

11.1 in general it shall be clearly established that in such an eventuality the Union shall be responsible to the inviting administration only for its commitments or actual expenditure in preparation for the conference - provided the administration has not agreed to bear such expenses itself - and only in so far as they are indispensable and cannot be cancelled or reduced;

11.2 if the cost of preparing premises to house the conference is to be borne by the Union, the agreement shall stipulate the details of the work to be done and its cost, and the maximum economy shall be sought compatible with satisfactory organization of the conference;

11.3 except in very special cases, the reservation of accommodation for delegates, staff, etc., must not entail any financial commitment for the Union;

12. if the inviting administration, instead of convening the conference or meeting, announces that it cannot receive the conference at the agreed place or time, the Union shall not be responsible for the expenses incurred by the inviting administration in preparation for the Conference or meeting;

13. on request by the inviting administration, and if exchange conditions are suitable, contributions owed to the Union by that administration may be accepted in local currency in such a proportion as will enable the conference expenses to be settled in that currency to be met.

C. Settlement of the accounts of conferences the expenses of which are not included in the consolidated budget

14. So as to reduce, as far as possible, the total interest of any sums advanced by the Swiss Government it is important that the contributory shares of participants in these conferences should be recovered without delay. To this end :

14.1 when a conference covers a period running into the next financial year, the Secretary-General shall forward to the administrations or organizations concerned an account of their share of the expenses incurred during the current financial year;

14.2 if, at the close of a conference, it appears that the final accounts cannot be drawn up within one month, the Secretary-General shall immediately forward to the participants a provisional account of their share of the expenses on the basis of the statement of expenditure approved by the closing Plenary Assembly; an additional account shall be subsequently forwarded if, when the accounts are finally closed, a balance remains to be recovered.

D. Limit of the prerogatives of conferences in financial matters

15. A conference has no power to arrange for future sessions of the same conference after the termination of the original session, or for further conferences, except by the procedure prescribed in Article 7 of the Geneva Convention 1959.

16. No conference other than a Plenipotentiary Conference has the power to authorize the Secretary-General to ask the inviting administration to advance funds or to request the advance of funds from the Swiss Confederation. The Secretary-General can only act in this matter

in accordance with the prescriptions of the Convention and the directives of a Plenipotentiary Conference, or of the Administrative Council.

17. Administrative Conferences and Plenary Assemblies of Consultative Committeesmust observe the provisions of paragraphs 8 and 9 of Additional Protocol II to the Geneva Conference.

E. Publication of the Final Acts of conferences or meetings

18. In principle, the Final Acts of conferences or meetings, whatever their method of reproduction shall be published by the General Secretariat in their usual place of publication and with the minimum of cost.

19. However, this rule may be disregarded in recognized cases of urgency and at the special request of the conference or meeting.

20. In this connection:

20.1 if a conference or meeting prints, for its own use, documents of which typographical composition can subsequently be used, in whole or in part, for the printing of the Final Acts, it must bear a percentage of the composition costs and the whole of the printing costs of the said document;

20.2 when this is not so, the printing costs of the Final Acts shall, in principle, be posted to the printed matter account, but the conference or meeting may decide, in special circumstances, to subsidize these costs;

20.3 the percentage of the composition cost mentioned in a) above, or the subsidy mentioned in b) above, shall be decided by the Plenary Assembly of the conference or meeting.

21. Apart from the Final Acts distributed to the persons concerned as a conference document, no copy shall be supplied free of charge to participants in the conference or meeting.

22. The provisions of this Resolution shall apply tc C.C.I.s Plenary Assemblies. But the C.C.I. Directors shall be responsible for organizing these Plenary Assemblies; they must, however, obtain the Secretary-General's approval of the administrative and financial measures involved. The agreement with the inviting administration shall be signed by the Director of the C.C.I. concerned on behalf of the Secretary-General.

PAGE INTENTIONALLY LEFT BLANK

PAGE LAISSEE EN BLANC INTENTIONNELLEMENT

A N N E X 3

PROVISIONAL LIST OF COUNTRIES AND ORGANIZATIONS DEFRAYING THE COSTS OF THE E.B.C. WITH AN INDICATION OF CLASSES OF CONTRIBUTIONS

A. Union Members	Class of contribiton
Albania (People's Republic of)	½
Austria	1
Belgium	4
Bielorussian Soviet Socialist Republic	1
Bulgaria (People's Republic of)	1
Vatican City State	½
Denmark	5
Spain	3
Finland	3
France	30
Greece	1
Hungarian People's Republic	1
Iraq (Republic of)	1
Ireland	3
Iceland	½
Israel (State of)	1
Italy	8
Jordan (Hashemite Kingdom of)	½
Lebanon	1
Libye (United Kingdom of)	½
Luxembourg (Kingdom of)	½
Morocco (Kingdom of)	1
Monaco	½
Norway	5
Netherlands (Kingdom of the)	10
Poland (People's Republic of)	3
Portugal	8
United Arab Republic	5
Federal Republic of Germany	20

	Class of contribution
Federal People's Republic of Yugoslavia	1
Ukrainian Societ Socialist Republic	3
Roumanian People's Republic	1
United Kingdom of Great Britain and Northern Ireland	30
Sweden	10
Switzerland (Confederation)	10
Czechoslovak Socialist Republic	5
Overseas Territories for the international relations of which the Government of the United Kingdom of Great Britain and Northern Ireland are responsible	1
Tunisia	1
Turkey	5
Union of Soviet Socialist Republics	30
B. Recognized private operating agencies	
British Broadcasting Corporation (B.B.C.)	?
Independent Television Authority (I.T.A.)	?
Nippon Hoso Kyokai	?
Nippon Minka Hose Remei	?
Swedish Broadcasting Corporation	?
Total contributory units	216 ½

Document No. DT 2-E
30 May, 1961
Original: English

COMMITTEE 4

TECHNICAL COMMITTEE

REPORT AND PROPOSALS OF WORKING GROUP 4A

Working Group 4A was set up to consider Document No. 3 and the problem of mixed land-sea path propagation at UHF. The Working Group has held two meetings and submits the following proposals for the approval of the technical committee.

It is proposed that, for the facilitation of calculation at the European Broadcasting Conference involving mixed land-sea paths, the following modification and additions should be applied to the Cannes C.C.I.R. Document No. 64, which has been circulated as conference Document No. 2.

Page 18. Section 1.2.11

The words "if the path from an interfering transmitter to any part of a service area to be protected is 80% or more over sea" to be deleted.

The sub-paragraphs a) and b) to be replaced by sub-paragraphs a) and b) at the foot of page 2 of Document No. 3.

Page 19. Line 8

The words "In all other cases, the overland propagation should be used" to be deleted.

Additional sub-paragraphs d), e) and f), as follows, to be added after sub-paragraph c):

d) When there are more than two land/sea intersections along a propagation path, i.e. with one or more intervening portions of land, the calculation of field strength should normally be made as follows:

i) the curves of Figure 13 b) should be applied to the land-sea intersection nearest to the transmitter;

ii) the curves of Figure 13 a) should be applied to the sum of the lengths of all the remaining land portions of the propagation path.

e) Application of the method for the determination of field strength over mixed land and sea paths may lead to an erroneous result in certain special cases where either the length of a sea portion of the path is short or the percentage of the total path that is over sea, is small. In such cases the method should be used with extreme caution and only after consultation between the Administrations concerned.

f) In the case of effective transmitting aerial heights considerably in excess of 300 metres, the result obtained by the method of calculation described above should be compared with the result obtained by the assumption of an all-land path, the use of the curves of Figures 8, 9 and 10 and the provisions of paragraph 1.2.5; the higher of the two results obtained should be adopted.

R.A. ROWDEN

Chairman, Working Group 4A

Document No. DT-3-E
30 May, 1961
Original: French

COMMITTEE 4

ANNEX 2 - TELEVISION STANDARDS

The following table gives the parameters proposed by various European countries for preparation of the 625-line television frequency plan with a channel spacing of 8 Mc/s in Bands IV and V (information received up to 30 May, 1961).

Country	Video Bandwidth (Mc/s) (a)	Picture/Sound Separation (Mc/s) (b)	Residual Sideband Mc/s (c)	Picture modulation direction (d)	Nature of Sound Modulation (e)	Frequency of the chrominance sub-carrier (Mc/s) (f)	Power ratio picture/sound (g)
AUSTRIA	5	5,5	0,75	Neg.	FM	4,43	5/1
BELGIUM (1)	5	5,5(2)	0,75 and 1,25(2)	Neg.	FM	4,43	5/1
DENMARK	5	5,5	0,75(1)	Neg.	FM	4,43	5/1
FINLAND	5	5,5	0,75	Neg.	FM	4,43	5/1
FRANCE (1)	6	6,5	1,25	Pos.	AM	4,43 (2)	8/1
GREECE	5	5,5	0,75	Neg.	FM	-	5/1
HUNGARIAN P.R.	6	6,5	0,75(1)	Neg.	FM	4,43	5/1
IRELAND (1)	5,5	6	1,25	Neg.	FM	4,43	5/1
ICELAND (1)	5	5,5	0,75	Neg.	FM	4,43	5/1
ISRAEL	5	5,5	1,25(1)	Neg.	FM	4,43	5/1
ITALY	5	5,5	1,25(1)	Neg.	FM	4,43	5/1
LUXEMBOURG	5	5,5	1,25	Neg.	FM	4,43	5/1
MONACO	6	6,5	1,25	Pos.	AM	4,43	8/1
NORWAY	5	5,5	0,75	Neg.	FM	4,43	5/1
NETHERLANDS	5	5,5	0,75(1) and 1,25	Neg.	FM	4,43	5/1
POLAND	6	6,5	0,75	Neg.	FM	4,43	5/1
PORTUGAL	5	5,5	0,75	Neg.	FM	4,43	5/1
FED.REP. of GERMANY	5	5,5	0,75	Neg.	FM	4,43	5/1
ROUMANIA	6	6,5	0,75	Neg.	FM	4,43	5/1
UNITED KINGDOM of G.B.and N.I.(1)	5,5	6	1,25	Neg.	FM	4,43	5/1
SWEDEN	5	5,5	0,75	Neg.	FM	4,43	5/1
SWITZERLAND	5	5,5(1)	0,75	Neg.	FM	4,43	5/1
CZECHOSLOVAK S.R.	6	6,5	1,25	Neg.	FM	4,43	5/1
TURKEY	5	5,5	1,25	Neg.	FM	4,43	5/1
U.S.S.R.	6	6,5	0,75(1)	Neg.	FM	4,43	5/1
YUGOSLAVIA	5	5,5	1,25	Neg.	FM	4,43	5/1
U.K. OVERSEAS TERRITORIES	5	5,5	1,25	Neg.	FM	4,43	5/1

Notes on the table

AUSTRIA

(1) Reserves the right to use additional FM-modulated sound carriers in the spaces between the deviations of 5.75 and 7.75 Mc/s in relation to the picture carrier.

BELGIUM

(1) A final decision on the standards to be adopted in Belgium will, to a very great extent, depend on the arrangements made by adjacent countries.

(2) Belgium could accept a picture/sound deviation of 5.5 Mc/s, for planning purposes.

(3) Belgium also wants 0.75 and 1.25 Mc/s to be considered as widths of the residual sidebands.

DENMARK

(1) Has taken no final decision, but could accept a residual sideband of 0.75 Mc/s for planning purposes.

FRANCE

(1) The French Government has decided to use a 625-line system for television in Bands IV and V. The characteristics thereof are described in the Table under "France".

(2) A probable figure, on the assumption that a common colour-television standard will be adopted in Europe.

HUNGARIAN R.P.

(1) Is considering the possibility of increasing the residual sideband to 1.25 Mc/s.

IRELAND

(1) No final decision has been taken about the standards to be adopted in Ireland. But for planning requirements, subject to a final decision being taken later, the parameters shown in the Table under "Ireland" are those preferred for Bands IV and V.

ICELAND

(1) Does not at present intent to use Bands IV and V, but accepts the parameters shown under "Iceland" as the television standards in those bands.

ISRAEL

(1) No final decision has yet been taken about the residual sideband. But for planning purposes the figure shown in the Table (1.25 Mc/s) under the appropriate heading should be adopted.

ITALY	(1) For planning purposes can accept the figure shown in the Table (1.25 Mc/s).
NETHERLANDS	(1) Reserves the right to increase the residual sideband to 1.25 Mc/s. But for planning purposes 0.75 Mc/s, as shown in the Table, could be used.
UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND	(1) Parameters preferred for a 625-line system. No decision has yet been taken about the standards to be used in the United Kingdom in Bands IV and V, nor has a decision been taken about the number of lines.
SWITZERLAND	(1) Intends to introduce additional FM-modulated sound carriers in the frequency spaces between the deviations of 5.5 and 6.5 Mc/s in relation to the picture carrier, at levels equal to or less than the ordinary level of the sound carrier, for additional sound-tracks or sound broadcast programme.
U.S.S.R.	(1) Is considering the possibility of extending the residual sideband (picture) to 1.25 Mc/s.

Document No. DT 4-E
31 May, 1961
Original: English

COMMITTEE 6

REPORT AND PROPOSALS OF THE AD HOC GROUP OF COMMITTE 6

1. The Ad Hoc Group had one meeting and according to the terms of reference discussed the following questions:

a) The establishment of a theoretical channel distribution network for the countries of the European Broadcasting Area not belonging to the I.B.T.O.

b) The adaptation of this theoretical network to the I.B.T.O. lattice, as proposed by Poland (Document No. 4, Addendum No. 3).

2. First of all the possibility was discussed to accept the I.B.T.O. lattice for the whole European Area. After some discussion it became clear that it was not possible for several reasons, the most important being:

a) The protection for oscillator radiation (Channel number difference 5) is insufficient.

b) The channel number difference between co-sited channels is 17 which is too high compared with the difference of 2, 3 or 6 as proposed by other countries.

After comparison of the I.B.T.O. lattice with the channel distribution given in fig. 3 of the E.B.U. proposal (Document No. 4, Addendum No. 1), the experts of the countries outside the I.B.T.O. present at the meeting were of the opinion that the lattice of fig. 3 was very suitable as a basis for the planning.

An advantage of this lattice is that it is also suitable for a lower number of channels (see Document No. 4, Addendum No. 2) without losing the advantageous properties.

The experts from France indicated that the lattice of fig. 3 was also acceptable for France as the lattice proposed by France (Document No. 4, Addendum No. 4) with some minor modifications could be derived from this lattice.

The delegate of the United Kingdom also expressed the opinion that the requirements of the United Kingdom would not be too difficult to fulfil if the lattice of fig. 3 formed a basis for the planning on the Continent.

3. As to the second term of reference none of the experts present saw a possibility of adapting the two lattices to each other theoretically.

The conclusion was that this adaptation had to be done in working out the practical planning. It was pointed out by a few experts that this would lead to certain sacrifices on both sides of the border line between the two lattices, although it was not yet clear how serious the sacrifices would have to be.

F. MAARLEVELD
Chairman, Ad Hoc Group

Document No. DT 5-E
1 June, 1961
Original : English

COMMITTEE 4

PROVISIONAL LIST OF DISTANCES TO REPLACE FIGURES IN ANNEX 1 OF THE STOCKHOLM AGREEMENT, 1952

Annex to Summary Record of 2nd Meeting of Committee 4

A. Sound Broadcasting in Band II

Effective Radiated Power kW	Distance km
0.0001	40
0.0003	50
0.001	60
0.003	80
0.01	100
0.03	120
0.1	160
0.3	200
1	250
3	300
10	340
30	400
100	450
300	500

B. Television

Effective Radiated Power kW	Distance km	
	Band I	Band III
0.0001	75	60
0.0003	90	75
0.001	110	90
0.003	135	110
0.01	170	135
0.03	210	170
0.1	270	210
0.3	320	260
1	375	310
3	440	365
10	510	430
30	585	500
100	710	570
300	835	680

The DOCUMENTS DT 6, 7 and 8 are annulated.

Document No. DT 9-E (Rev.)
2 June, 1961
Original: English

COMMITTEE 6

PROPOSED WORDING OF STATEMENT RELATING TO USE OF THE SHARED BANDS FOR BROADCASTING AND RADIONAVIGATION SERVICES

Committee 6 would advise the Working Group concerned with the planning of the band 582-606 Mc/s allocated to two primary services, the Broadcasting service and the Radionavigation service that, in those areas in which there may be a possibility of mutual interference between the two services, the three 8 Mc/s channels in the band should be planned as follows:

Channel 35 - Broadcasting stations with primary status.

Channel 36 - Radionavigation stations with primary status.

Channel 37 - Low power radionavigation stations, which cannot be accommodated in Channel 36, and broadcasting stations and as far as practicable only low power stations, with equal status and on a planned basis.

In other parts of Bands IV and V which, in accordance with the radio regulations, are also shared between the broadcasting and radionavigation services with equal status, the Working Groups, when establishing the frequency-plans in these bands, should take this sharing into account, and frequency assignments should be planned on the basis of mutual agreements between the administrations concerned.

Document No. DT 9-E
1 June, 1961
Original : English

COMMITTEE 6

PROPOSED WORDING OF STATEMENT RELATING TO USE OF THE BAND 582-606 Mc/s.

Committee 6 would advise the Working Group concerned with the planning of the band 582-606 Mc/s allocated to two primary services, the Broadcasting service and the Radionavigation service that, in those areas in which there may be a possibility of mutual interference between the two services, the three 8 Mc/s channels in the band should be planned as follows :

Channel 35 - Broadcasting stations with primary status.

Channel 36 - Radionavigation stations with primary status.

Channel 37 - Low power radionavigation stations, which cannot be accommodated in Channel 36, and broadcasting stations and as far as practicable only low power stations, with equal status and on a planned basis.

Document No. DT 10-E
1 June, 1961
Original: French/English

COMMITTEE 6

NOTE BY THE SECRETARIAT

The attached extracts from Radio Division Circulars Nos. 788 and 797 concerning the use of the band 606--614 Mc/s are published for the information of Committee 6.

Annexes: 3

PAGE INTENTIONALLY LEFT BLANK

PAGE LAISSEE EN BLANC INTENTIONNELLEMENT

A N N E X 1

BELGIUM

Radioastronomy observatory at HUMAIN (Luxembourg Province)

Position	: 50°32'N 05°13'E.
Type of equipment	: Radiotelescope
Centre frequency	: 610 Mc/s
Bandwidth	: 8 Mc/s
Sweep	:
horizontally	: 0-360°
vertically	: 0-90°
Observations made	: sun and sky

PAGE INTENTIONALLY LEFT BLANK

PAGE LAISSEE EN BLANC INTENTIONNELLEMENT

A N N E X 2

UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND

Manchester University, Jodrell Bank

Position	:	53° 14' 12'' N 02° 18' 24'' W.
Frequency	:	610 Mc/s ± 4·0 Mc/s
Passive equipment	:	250-foot radiotelescope for continuum observations.

PAGE INTENTIONALLY LEFT BLANK

PAGE LAISSEE EN BLANC INTENTIONNELLEMENT

A N N E X 3

FEDERAL REPUBLIC OF GERMANY

The following institutes carrying out radioastronomical observations will be using the frequency band 606-614 Mc/s in the near future:

Institute	Geographical coordinates	Height above sea level
Universitätssternwarte Bonn (Stockert)	50° 36' N 6° 42' E	435m
Universitätssternwarte Kiel	54° 20' 32" N 10° 7' 20" E	33.8 m
Aussenstelle Weissenau	47° 46' N 9° 35' E	445 m
Fraunhofer Institut Freiburg-Schauinsland	47° 54' 51" N 7° 54' 21" E	1240 m
FTZ Funkwetter-Beobachtungsstelle Detmold	51° 40' N 8° 56' E	408 m

Document No. DT 11-E
1 June, 1961
Original: English

WORKING GROUP 6A

AGENDA

First meeting of Working Group 6A

Friday, 2nd June 1961 at 11.00 a.m. in room A

1. Terms of reference

To make draft plans for the use of U.H.F. broadcasting in the Northern part of the European Broadcasting Area.

The Working Group consist of representatives from the following countries: Norway, Sweden, Finland, U.S.S.R., Denmark, United Kingdom, Poland, F. R. of Germany, Czechoslovak Socialist Republic, Bielorussia, Austria, Hungarian People's Republic, Switzerland, and further more Mr. Götze and Mr. Albrecht.

2. Nomination of reporters for taking down notes in English and French.

3. List of pertinent documents and organization of the work.

4. Miscellaneous.

Sven GEJER

Chairman Working Group 6A

Document No. DT 12-E
2 June, 1961
Original: English

COMMITTEE 6

Note by the Secretariat

The attached extract from Document No. 11[x)] of the C.C.I.R. Meeting of Experts, Cannes 1961, is published for the information of the working groups of Committee 6.

The theoretical lattice shown in Figure 1, the "density pattern" shown in Figure 2 and the frequency assignments, transmitter sites and transmitter names shown in Figure 3 are given as examples only and must be considered as entirely arbitrary.

x) Document No. 11 was published only in English and French.

Annex: 1

PAGE INTENTIONALLY LEFT BLANK

PAGE LAISSEE EN BLANC INTENTIONNELLEMENT

A N N E X

EXTRACT FROM DOCUMENT No. 11-E, C.C.I.R. MEETING OF EXPERTS CANNES 1961

. . . . . .

6. Establishment of a practical frequency plan

In the following text is described a practical procedure for assigning the frequencies to transmitters, which procedure may be designated as a deformation of the theoretical network. This is done in the following manner:

A theoretical rhombus of approximately the same area is placed on a quadrilateral. The channel numbers in the rhombus that may not be used in the country within the quadrilateral are then eliminated (for example, the channel numbers corresponding to the band 790-960 Mc/s).

Next, one distributes the remaining channel numbers, beginning for example in one corner of the quadrilateral, among the transmitters close by, the term "close by" not necessarily signifying the nearest number. This amounts to saying that there is a more or less limited number of channel numbers that may be assigned to a particular transmitter. One determines the most favourable numbers among those possible by evaluating or calculating the effect of interference due to other transmitters to which frequencies have already been assigned. It goes without saying that it is necessary to consider the frequency assignments already effected in the neighbouring quadrilaterals. The methods of evaluation or calculation are briefly described in section 7.

It is only now that enter into consideration the conditions particular to each transmitter: power, geographical situation, in brief, everything concerning the coverage that it is desired to obtain with this transmitter.

The essential difference between this method of assignment of frequencies and a method that is not based on a theoretical network is that the choice is made from a restricted number of favourable channels, whereas in the other case, it is necessary to choose in principle each time, from the total number of channels available, the channel that is suitable, which is difficult or even impossible, because of the extensive number of interference conditions existing on decimetric waves.

It is moreover useful to begin this task by the quadrilateral that is found in the region with the maximum transmitter density - the same as with the planning methods utilised up to present.

Figure 3 shows on a larger scale the quadrilateral outlined by a thick line in Fig. 2. In this quadrilateral the real locations of thirtyfour transmitters may be seen, to which should be assigned channel numbers between 1 and 40. There may also be seen (dotted line) the rhombus with the theoretical locations marked by either the symbol (channel used), X (channels Nos. 41 to 60 used) or ○ (channels remaining free). These latter channel numbers, in this case, 3, 17, 24, 29, 30 and 40, constitute the reserve of which mention has been made. They may, for example, be utilized subsequently for low-power satellite transmitters.

If two or three transmitters are at the same, or neighbouring, locations, their frequency separation corresponds to three channels. A closer examination of the figure shows how the deformations necessary vary in direction and in length; the reason for each of these deformations does not always lie in the figure itself because they may depend on the assignments made in the neighbouring quadrilaterals. The exceptional case of channel 34, which is transposed by a distance which corresponds practically to the length of the quadrilateral, may for example signify that this frequency has remained unassigned in the quadrilateral situated to the east of the quadrilateral under consideration (the position of this channel in the neighbouring rhombus is indicated by a dotted sign).

The above-mentioned work, which can be carried out only by way of negotiations between delegations, are basically of the same nature as those that took place during the previous conference with, however, the essential difference that in the present case there does exist a logical and rational conception which is likely to alleviate these negotiations considerably.

In the past, the preparatory work for these negotiations was normally carried out by the members of a small group called, for example, "Planning Group", and without wishing to prejudice the procedure for the next European conference, it is permissible to say that this manner of proceeding would also be very useful in the case of the proposed methods being adopted. It would in any case be of value for some specialists to participate in the work, who have already a certain amount of experience concerning the particular methods in question.

The advantage of this procedure lies in the fact that all the participants in the conference are at all times fully informed so far as their own countries are concerned; the liberty of decision of the delegations is not affected at any time.

This is indispensable, for, among others, the following reasons:

1) There may arise cases where, at certain locations, certain channels cannot be utilized (interference by or with other services,

interference by radiation from oscillators of receivers adjusted to receive certain Band-III channels).

2) Certain Administrations might be led to demand a greater degree of protection than normally provided against interference at certain locations, for example, by taking into account propagation over maritime paths, etc.

In conclusion, it may be said that the proposed method makes it possible to satisfy all the desiderata of the delegations concerning the technical characteristics of all the transmitters in the transmitter network and to give the best coverage possible with these transmitters.

There are good reasons to hope that even the first draft plan will provide a sufficiently good basis for negotiating the details, if each Administration proposes a transmitter network that can be achieved reasonably in the portion of the spectrum available, in the sense of what has been discussed in the first section of the present document.

We have already stated that the verification of the coverage takes very little time with an electronic computer. In the next section will be given some details concerning this calculation.

. . . . . .

. . . . . .

Figures 1 a, b, c

Theoretical lattice *)

In the rhombus of Fig. 1a appear each of the figures from 1 to 60; the dotted circles belong already to the neighbouring rhombi. It is therefore necessary to imagine that identical rhombi are attached in all directions to the rhombus of Fig. 1a.

The example of channel distribution is one of about two hundred possible solutions for sixty channels. It represents an optimum for the following conditions (chosen more or less arbitrarily) :

1. Cases of interference in decreasing order of importance :
   a) in the same channel without offset;
   b) in the same channel with offset 2/3 of the line frequency;
   c) in the adjacent channels;
   d) in the "oscillator channels" (separation 5 channels);
   e) in the second channel (separation 9 channels).

2. Desirable frequency separation of two or three transmissions that are to be radiated from the same location : 3 channels.

In order to bring out the distribution of frequency offset the symbols 0, + or − have been marked against channel No. 60. In this way it will be seen that transmitter No. 60 is surrounded by six co-channel transmitters with offset (three with positive and three with negative offset), spaced at a distance equal to the side of the rhombus, and six co-channel transmitters without offset, the distance of which corresponds to the diagonal of the rhombus. The directions in which these transmitters are located appear clearly in Fig. 1b (arrows of the outside circle).

On this figure also are marked the directions from which occurs the greatest interference of types c), d) and e) (there is obviously only one second channel).

Fig. 1c shows the relation between the minimum distances for cases a, b, c, d, and e.

The "linearity" of the channel distribution is shown by the fact that all that has just been said concerning Fig. 1 applies for each of the numbers from 1 to 60. This can be verified by replacing the

---

*) Note of the Secretariat: This lattice, given as an example, differs from the lattice Fig. No. 3 of Annex of Document No. 4

figure c in Fig. 1b by any number between 1 and 60 (it is, however, evident that for c = 1, 2... 5 and c = 52, 53 ... 60, some of the interfering transmissions of cases c, d and e do not exist in practice).

As regards adjacent channel interference, which is here considered as being exceeded in severity only by co-channel interference, it will also be seen that each wanted transmitter is situated practically at the centre of gravity of an equilateral triangle formed by three transmitters to which have been assigned the adjacent channels (the centre of gravity of this triangle for the wanted channel c = 59 is represented by an * in Fig. 1a): it is not possible either in practice or in theory to find a better protection against interference of this type.

. . . . . .

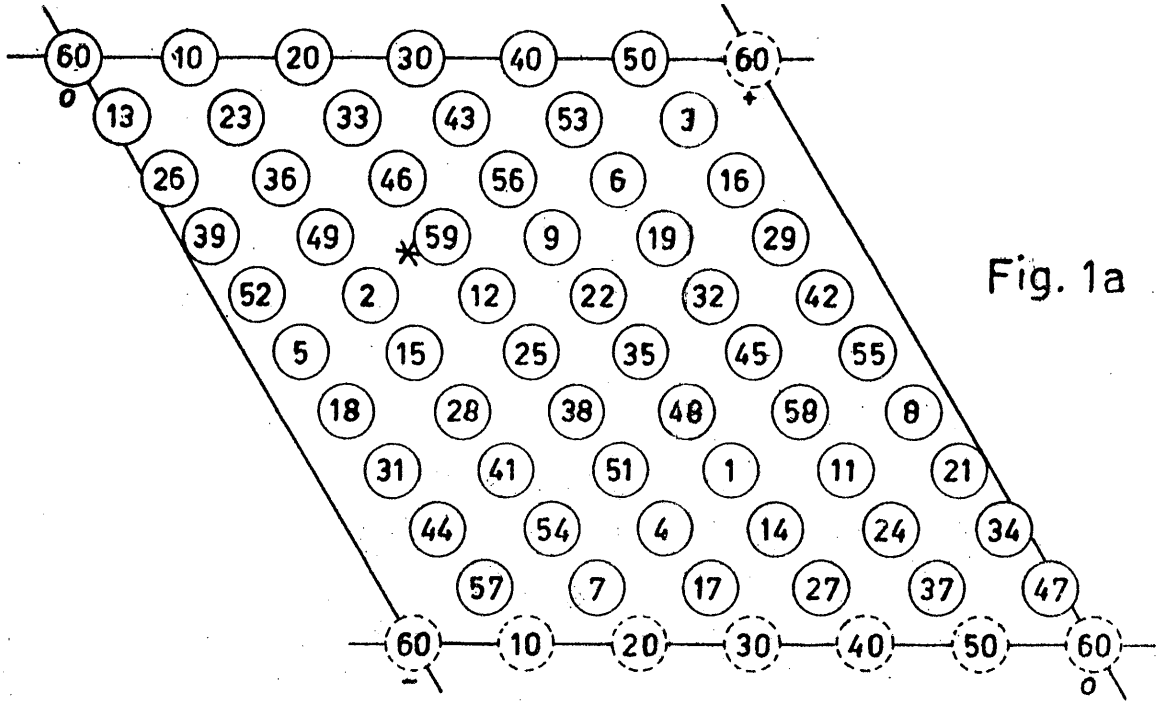


Fig. 1a

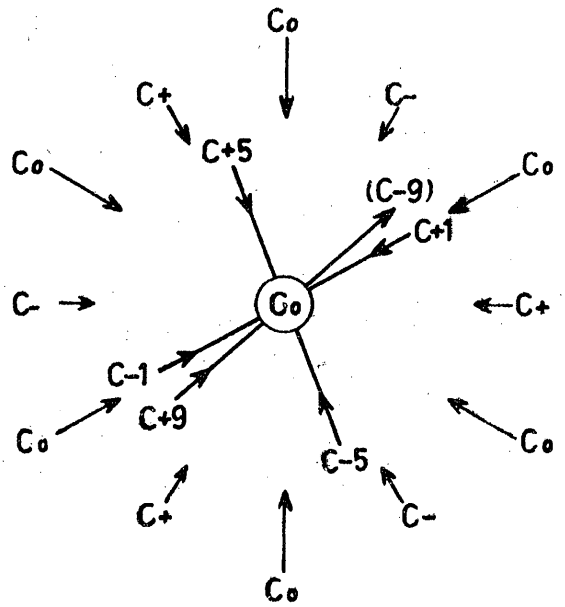


Fig. 1b

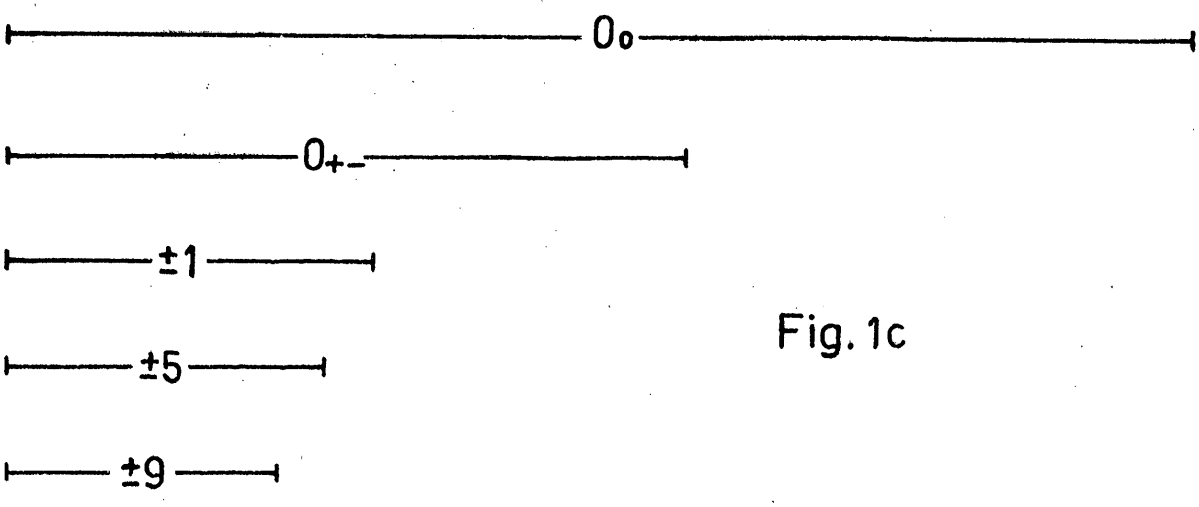


Fig. 1c

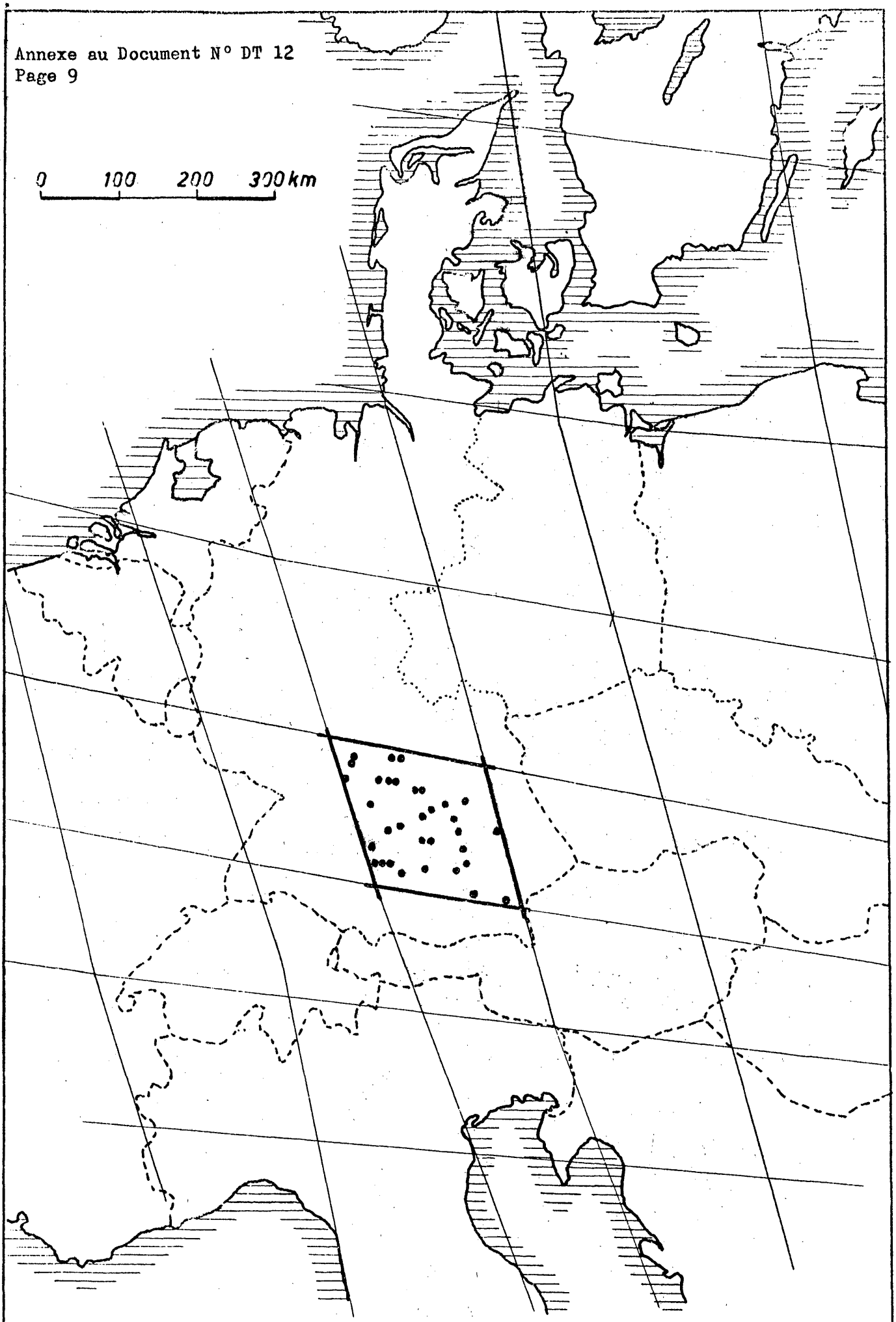


Fig. 2

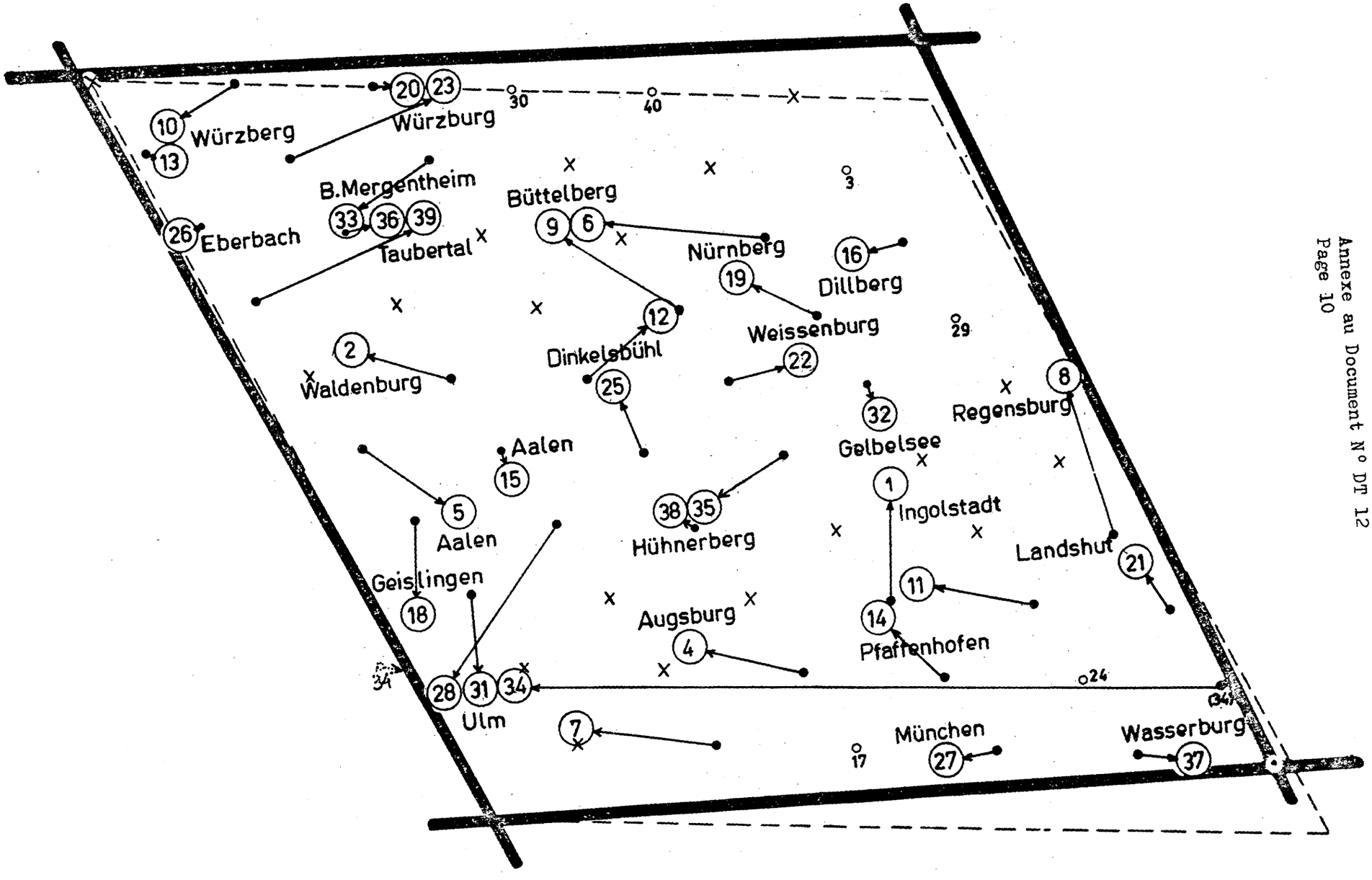

Würzberg
Würzburg
B.Mergentheim
Eberbach
Taubertal
Büttelberg
Nürnberg
Dillberg
Weissenburg
Dinkelsbühl
Waldenburg
Regensburg
Aalen
Gelbelsee
Ingolstadt
Aalen
Hühnerberg
Landshut
Geislingen
Augsburg
Pfaffenhofen
Ulm
München
Wasserburg

Fig.3

Document No.DT 13-E
3 June 1961
Original: English

COMMITTEE 4

DRAFT

REPORT No. 1 OF COMMITTEE 4

Committee 4 submits the following technical material to be used as basis for planning in Committees 5 and 6 :

1. Propagation

A. Part 1 of the Cannes Report, when paragraph 1.2.11 is substituted by :

" (1.2.11) Insufficient date exist for determining field strength over mixed land and sea paths, but the following procedure is proposed :

a) The field strength decreases, relative to the value for one all-sea path, in accordance with the distance from the receiving point to the coast, in the manner shown in Fig. 13a.

b) The field strength decreases, relative to the value for an all-sea path, in accordance with the distance from the transmitter site to the coast, in the manner shown in Fig. 13b.

c) It should be noted that the corrections are zero if the coastal boundary is within the radio horizon from the receiving or transmitting aerials (for heights of 10 m and 300 m respectively). The total corrections must not exceed 45 db, 31 db or 22 db for the 1%, 5% or 10% time values respectively, because these corrections would reduce the field strength values to those for an overland path of the same total length.

d) When there are more than two land/sea intersections along a propagation path, i.e. with one or more intervening portions of land, the calculation of field strength should normally be made as follows:

i) the curves of Figure 13 b) should be applied to the land-sea intersection nearest to the transmitter;

ii) the curves of Figure 13 a) should be applied to the sun of the length of all the remaining land portions of the propagation path.

e) Application of the method for the determination of field strength over mixed land and sea paths may lead to an erroneous result in certain special cases where either the length of a sea portion of the path is short or the percentage of the total path that is over sea, is small. In such cases the method should be used with extreme caution and only after consultation between the Administrations concerned.

f) In the case of effective transmitting aerial heights considerably in excess of 300 metres, the result obtained by the method of calculation described above should be compared with the result obtained by the assumption of an all-land path, the use of the curves of Figures 8, 9 and 10 and the provisions of paragraph 1.2.5; the higher of the two results obtained should be adopted."

B. In Figure 11 of the Cannes Report indications on the curves are missing, and the corrected figure is reproduced in Annex 1.

C. The Delegation of the U.S.S.R. informed the Committee (Document No. 17), that a frequency plan for certain countries, Members of the I.B.T.O., has been based on propagation curves as contained in Annex 2 to this report. These curves only apply to propagation over relatively short distances under terrain conditions, characteristics of the topography of some of the countries which have submitted the regional plan to which they agree.

As these curves were not intended to replace the Cannes curves in the general works of the Conference, Committee 4 book note of the information given, and it was agreed that countries which are not party to the I.B.T.O. frequency plan would use the Cannes curves in discussions of mutual problems with the I.B.T.O. countries.

2. Television Standards

Part 2 of the Cannes report served as basis for discussion. A number of modifications and additions were introduced. The list of standards to be used in the planning work of the Conference is given in Annex 3. This list is still incomplete, as it does not contain all the countries within the European Broadcasting Area.

3. Protection ratios for sound broadcasting and television

The Committee recommends Part 3 of the Cannes Report to be used in planning.

For the case of interference by a television signal to an FM sound broadcasting signal Document No. 31 gives an example of the necessary protection ratio which might be used as a guidance in the planning work.

A minor modification to the protection ratio curves for colour television, as given in Figure 26 of the Cannes Report, has been adopted. The corrected figure is reproduced in Annex 4.

4. Minimum field strengths to be protected in Television and Sound Broadcasting

The Committee approved Part 4 of the Cannes Report.

5. Table of Consultation Distances

A. Preliminary table

For the purpose of facilitating planning, the Committee adopted a table of consultation distances, similar to that in Annex 1 of the Stockholm Agreement, 1952, but extended to lower values of power. This table, Annex 5, was only intended for preliminary use in order to expedite the work of Committee 5, the table being based upon 1952 data except for band II where a higher figure of protection ratio (28 db) has been applied instead of the value (20 db) as used in 1952. The table shall not be used for transmitting antenna heights greater than 300 m.

When a new table, based upon the most recent data, becomes available, Annex 5 should no longer be used.

6. Protection Ratios in Shared Bands

A. Television and Radionavigation in the Band 582-606 Mc/s

Document No. 25 was approved to serve as guidance when planning this shared band. The two figures of Annex 6 deals with cases of interference to television and radionavigation respectively. As to the basis on which these curves were established, reference shall be made to Document No. 25.

B. NIELSEN
Chairman of Committee 4

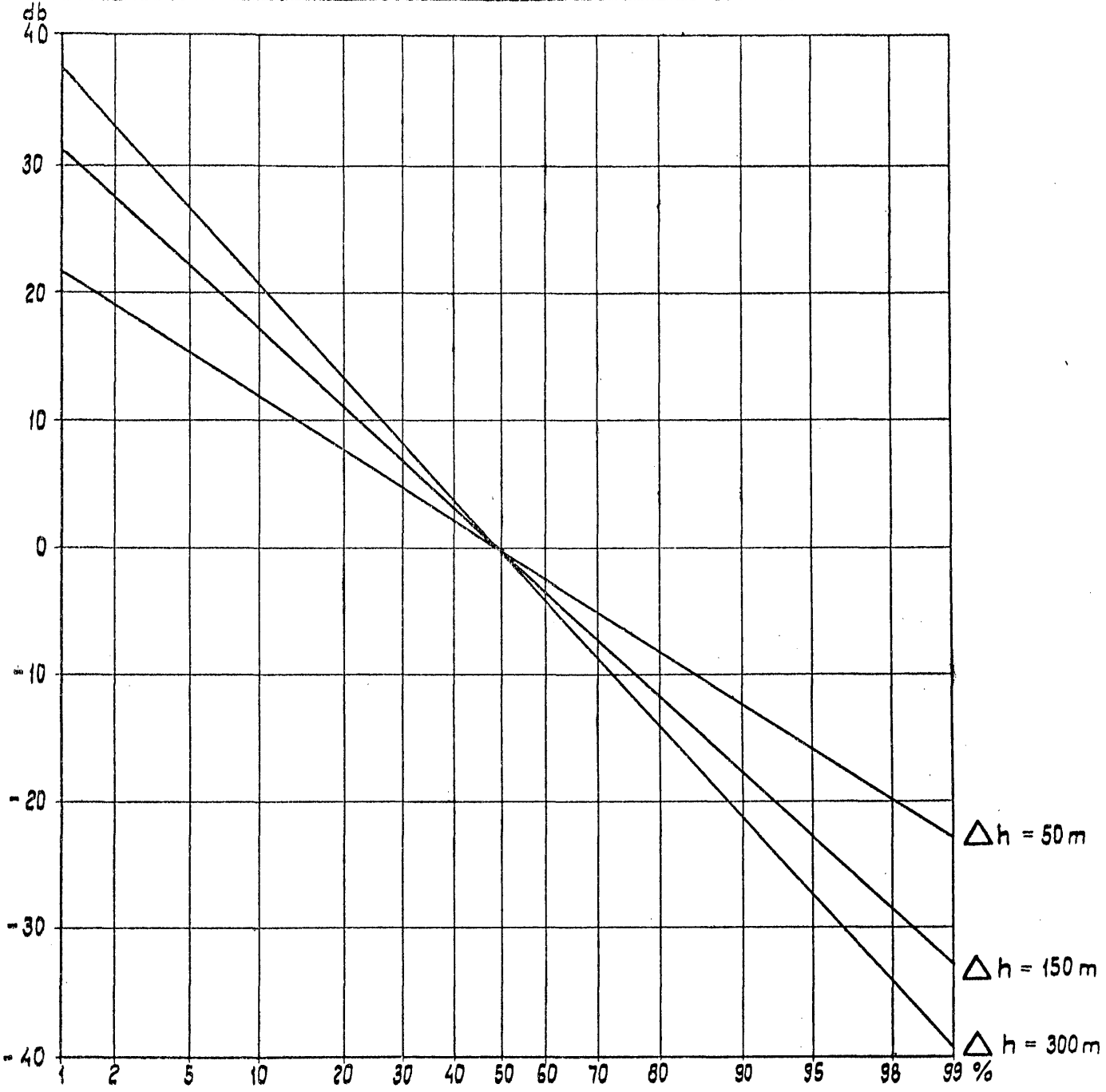
Annexes: 6

PAGE INTENTIONALLY LEFT BLANK

PAGE LAISSEE EN BLANC INTENTIONNELLEMENT

ANNEXE 1 - ANNEX 1 - ANEXO 1

FIGURE DE LA PAGE 31 DU DOCUMENT N° 64 DE LA REUNION D'EXPERTS DE CANNES
FIGURE ON PAGE 31 OF DOCUMENT No. 64 (CANNES MEETING OF EXPERTS)
FIGURA DE LA PÁGINA 31 DEL DOCUMENTO N.° 64 DE LA REUNIÓN DE EXPERTOS DE CANNES



Pourcentage des emplacements de réception - Percentage of receiving locations - Porcentaje de puntos de recepción

Rapport, en décibels, entre l'intensité de champ pour un pourcentage quelconque des emplacements de réception et l'intensité de champ pour 50% des emplacements de réception.

Ratio, in decibels, of the field strength for a given percentage of receiving locations to the field strength for 50% of receiving locations.

Relación, en decibelios, entre la intensidad de campo correspondiente a un porcentaje dado de puntos de recepción y la correspondiente al 50% de ellos.

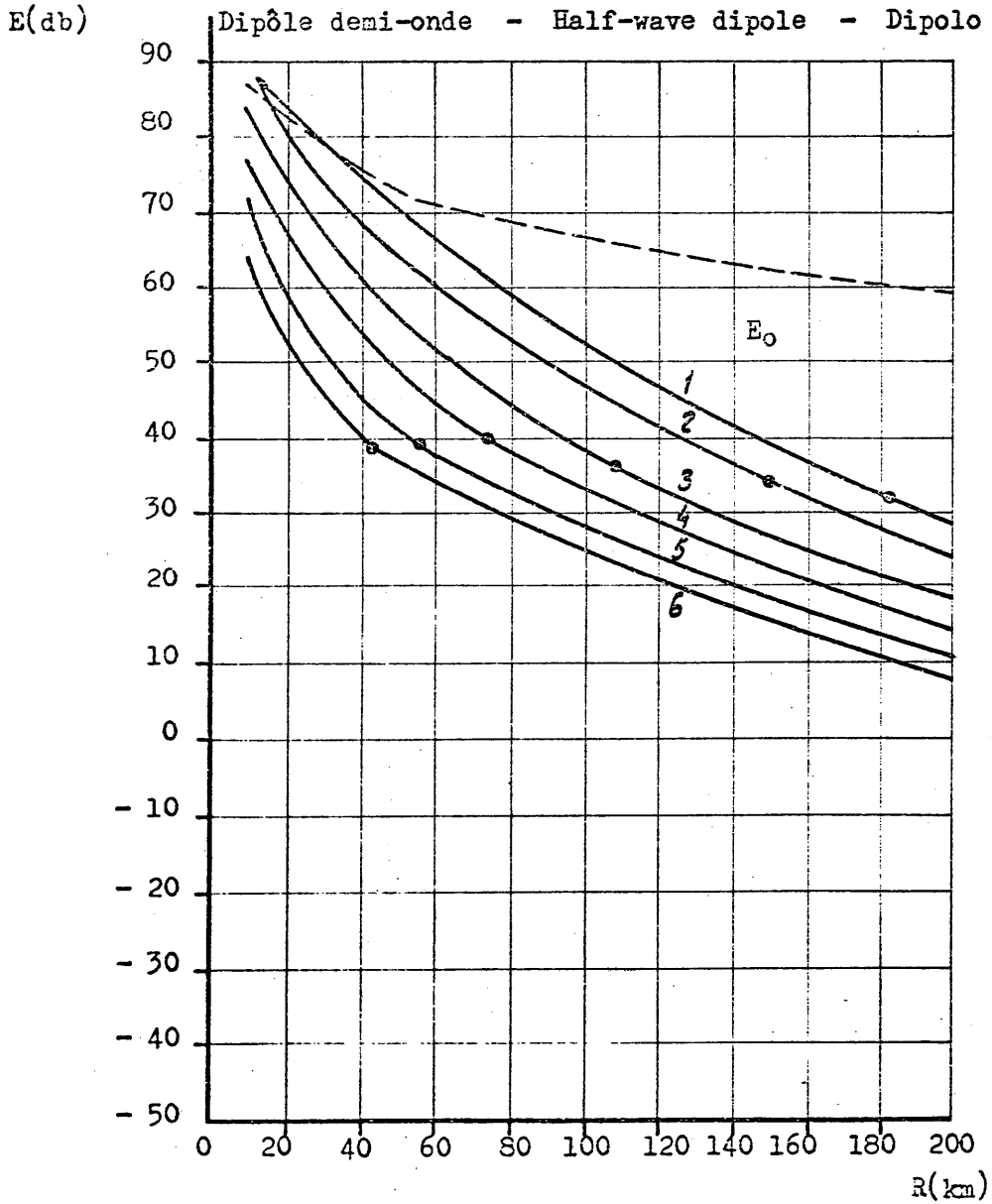
FIGURE 11 - FIGURA 11

PAGE INTENTIONALLY LEFT BLANK

PAGE LAISSEE EN BLANC INTENTIONNELLEMENT

ANNEXE 2 - ANNEX 2 - ANEXO 2

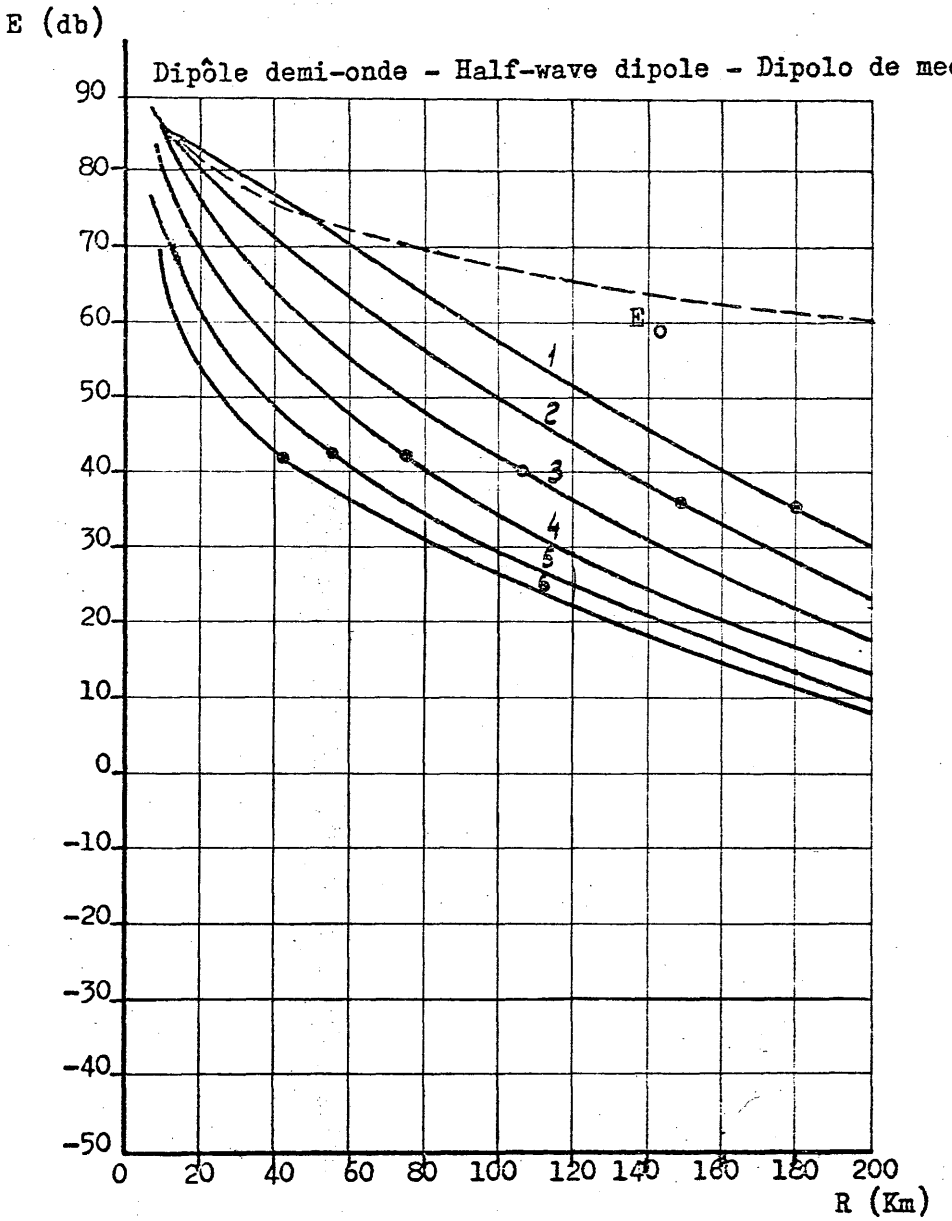
COURBES 1-5 - CURVES 1-5 - CURVAS 1-5



f = 60 MHz (λ = 5 m) T = 50%
f = 60 Mc/s

1-hl = 1500 m 2-hl = 1000 m 3-hl = 500 m
4-hl = 200 m 5-hl = 100 m 6-hl = 50 m

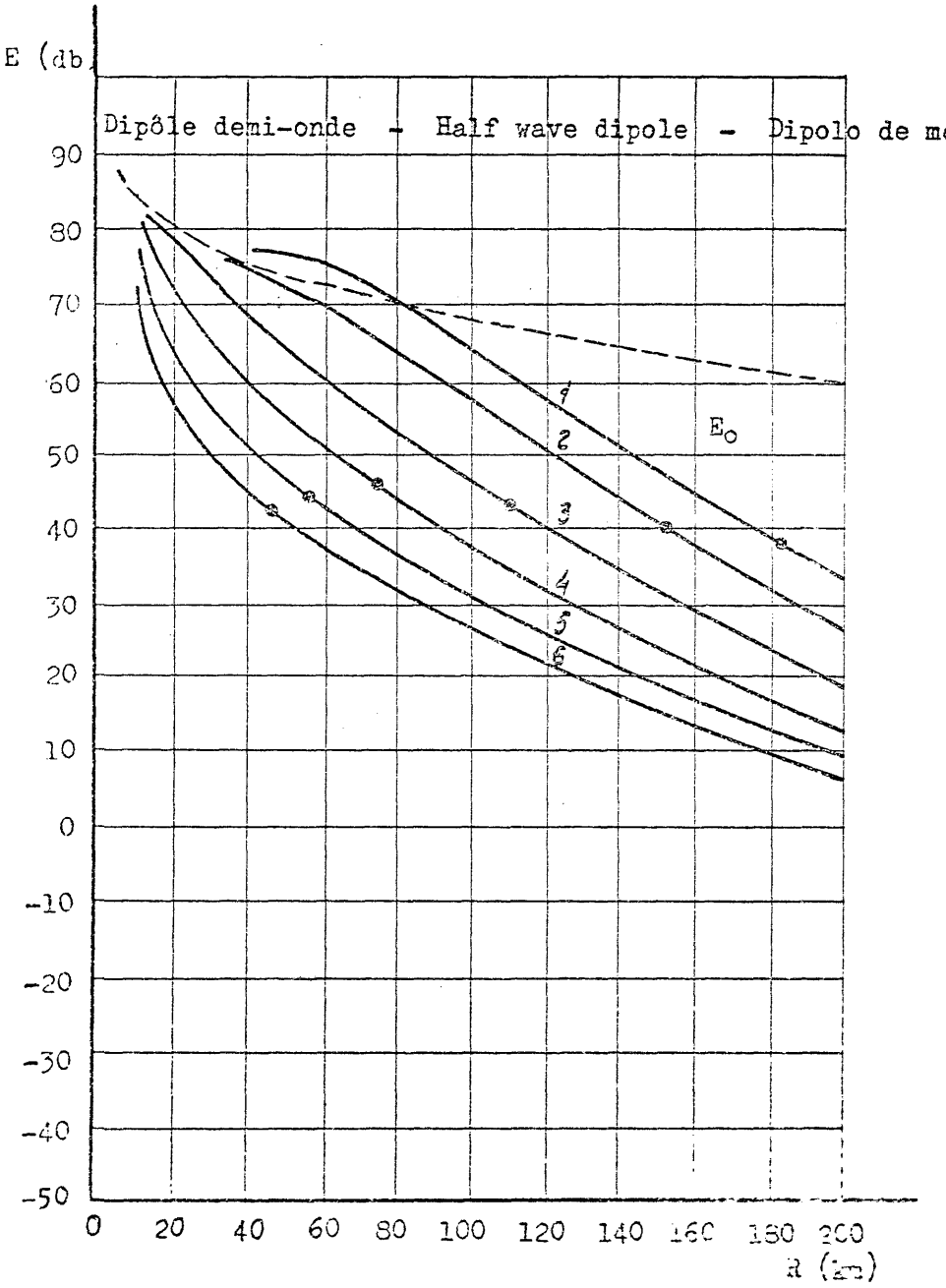
Figure 1 - Figura 1



f = 100 MHz (λ = 3 m) T = 50%
f = 100 Mc/s

1-hl = 1500 m 2-hl = 1000 m 3-hl = 500 m
4-hl = 200 m 5-hl = 100 m 6-hl = 50 m

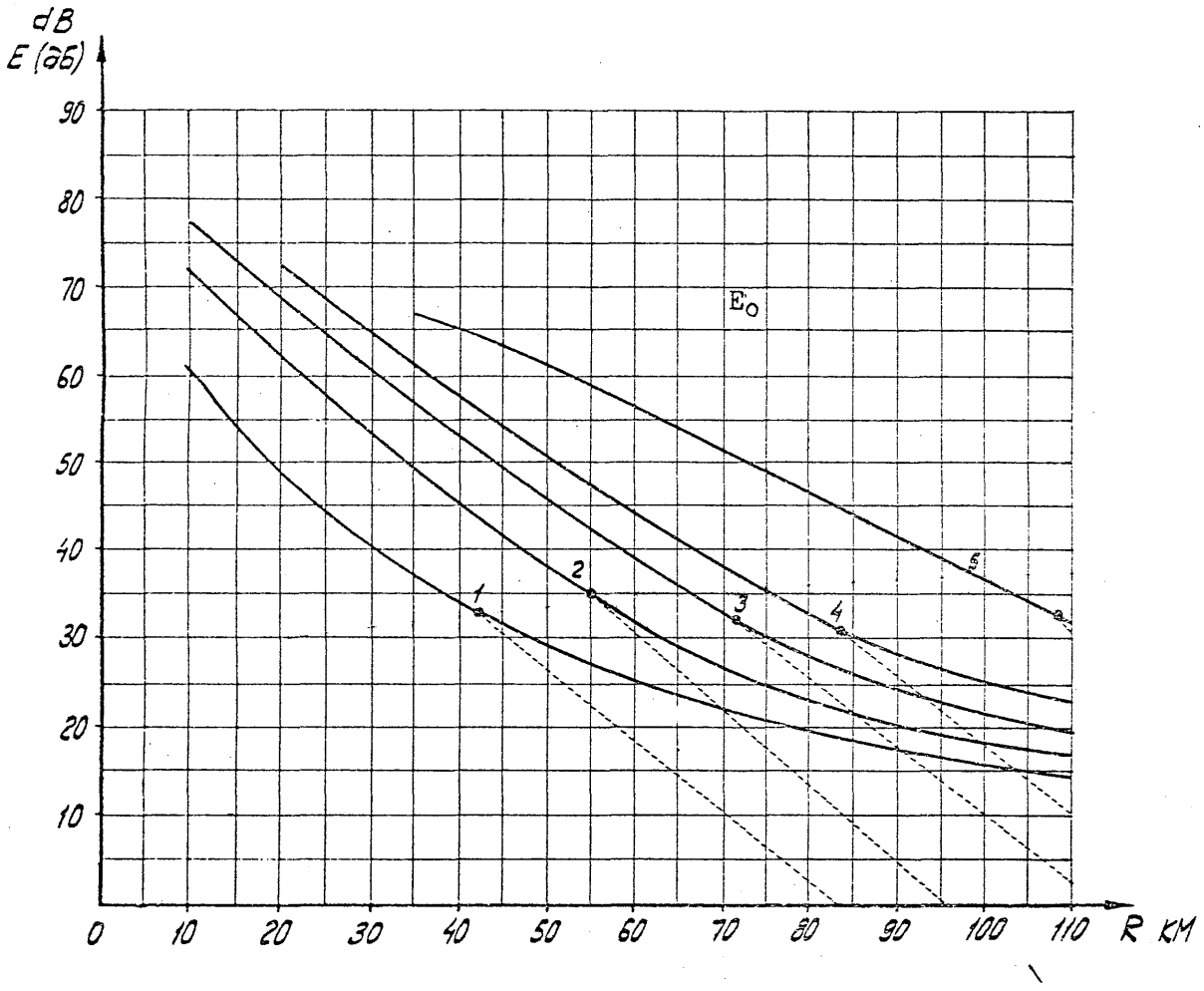
Figure 2 — Figurá 2



f = 200 MHz (λ = 1,5 m) T = 50%
f = 200 Mc/s

1-h1 = 1500 m 2-h1 = 1000 m 3-h1 = 500 m
4-h1 = 200 m 5-h1 = 100 m 6-h1 = 50 m

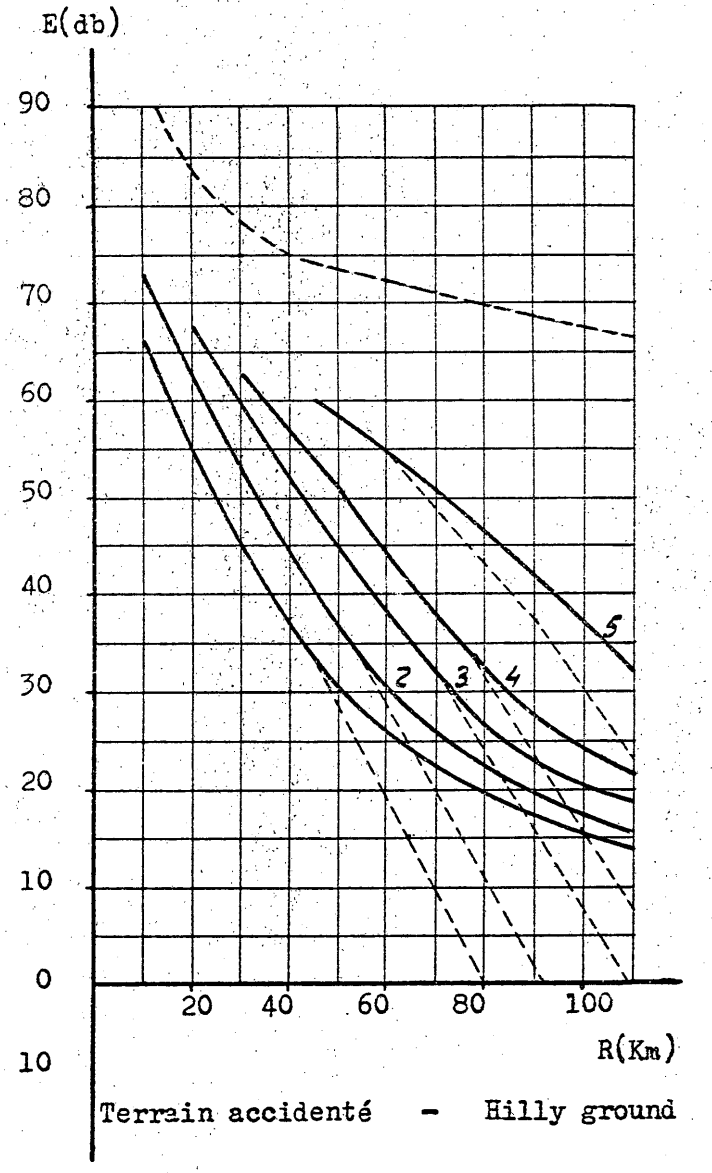
Figure 3 - Figura 3



f = 500 MHz F (50,50) h_2 = 10 m
f = 500 Mc/s
1 - h_1 = 50 m 2 - h_1 = 100 m
3 - h_1 = 200 m 4 - h_1 = 300 m
5 - h_1 = 500 m

Figure 4 - Figura 4

Terrain accidenté - Hilly ground - Terreno accidentado



f = 800 MHz F(50,50) h2 = 10 m
f = 800 Mc/s

1-h1 = 50 m 2-h1 = 100 m 3-h1 = 200 m
4-h1 = 300 m 5-h1 = 500 m

Figure 5 - Figura 5

Terrain accidenté - Hilly ground - Terreno accidentado

PAGE INTENTIONALLY LEFT BLANK

PAGE LAISSEE EN BLANC INTENTIONNELLEMENT

ANNEX 3

TELEVISION STANDARDS

The following table gives the parameters proposed by various European countries for preparation of the 625-line television frequency plan with a channel spacing of 8 Mc/s in Bands IV and V (Information received up to 30 May, 1961).

Country	Video Bandwidth (Mc/s) (a)	Picture/Sound Separation (Mc/s) (b)	Vestigial Sideband Mc/s (c)	Picture modulation (d)	Sound modulation (e)	Frequency of chrominance sub-carrier (Mc/s) (f)	Power ratio picture/sound (g)
AUSTRIA (1)	5	5.5	0.75	Neg.	FM	4.43	5:1
BELGIUM (1)	5	5.5(2)	(0.75 (and 1.25(3)	Neg.	FM	4.43	5:1
BULGARIA	6	6.5	0.75(1)	Neg.	FM	4.43	5:1
DENMARK	5	5.5	0.75(1)	Neg.	FM	4.43	5:1
FINLAND	5	5.5	0.75	Neg.	FM	4.43	5:1
FRANCE(1)	6	6.5	1.25	Pos.	AM	4.43(2)	8:1
GREECE	5	5.5	0.75(1)	Neg.	FM	-	5:1
HUNGARIAN P.R.	6	6.5	0.75(1)	Neg.	FM	4.43	5:1
IRELAND(1)	5.5	6	1.25	Neg.	FM	4.43	5:1
ICELAND(1)	5	5.5	0.75	Neg.	FM	4.43	5:1
ISRAEL	5	5.5	1.25(1)	Neg.	FM	4.43	5:1
ITALY	5	5.5	1.25(1)	Neg.	FM	4.43	5:1
LUXEMBURG	5	5.5	1.25	Neg.	FM	4.43	5:1
MONACO	6	6.5	1.25	Pos.	AM	4.43	8:1
NORWAY	5	5.5	0.75	Neg.	FM	4.43	5:1
NETHERLANDS	5	5.5	(0.75 (or (1.25(1)	Neg.	FM	4.43	5:1
POLAND	6	6.5	0.75(1)	Neg.	FM	4.43	5:1
PORTUGAL	5	5.5	0.75	Neg.	FM	4.43	5:1
FED.REP. of GERMANY	5	5.5	0.75	Neg.	FM	4.43	5:1
EASTERN GERMANY	5	5.5	0.75(1)	Neg.	FM	4.43	5:1
ROUMANIA	6	6.5	0.75(1)	Neg.	FM	4.43	5:1
UNITED KINGDOM of G.B. and N.I.(1)	5.5	6	1.25	Neg.	FM	4.43	5:1
SWEDEN	5	5.5	0.75(1)	Neg.	FM	4.43	5:1
SWITZERLAND(1)	5	5.5	0.75(2)	Neg.	FM	4.43	5:1
CZECHOSLOVAK S.R.	6	6.5	0.75(1)	Neg.	FM	4.43	5:1
TURKEY	5	5.5	1.25(1)	Neg.	FM	4.43	5:1
U.S.S.R.	6	6.5	0.75(1)	Neg.	FM	4.43	5:1
YUGOSLAVIA	5	5.5	1.25	Neg.	FM	4.43	5:1
U.K.OVERSEAS TERRITORIES	5	5.5	1.25	Neg.	FM	4.43	5:1

Notes on the table

AUSTRIA (1) Reserves the right to use additional FM-modulated sound carriers in the space between 5.75 and 6.75 Mc/s in relation to the picture carrier.

BELGIUM (1) A final decision on the standards to be adopted in Belgium will, to a very great extent, depend on the arrangements made by adjacent countries.

(2) Belgium could accept a picture/sound separation of 5.5 Mc/s, for planning purposes.

(3) Belgium also wants 0.75 and 1.25 Mc/s to be considered as widths of the vestigial sidebands.

P.R. of BULGARIA (1) is studying the possibility of widening the vestigial sideband up to 1.25 Mc/s, and would prefer this value to be used for planning.

DENMARK (1) Has taken no final decision, but could accept a vestigial sideband of 0.75 Mc/s for planning purposes.

FRANCE (1) The French Government has decided to use a 625-line system for television in Bands IV and V. The essential characteristics thereof will very probably be those described in the Table under "France".

(2) A probable figure, on the assumption that a common colour television standard will be adopted in Europe.

GREECE (1) Has taken no final decision but could accept a vestigial sideband of 0.75 Mc/s for planning purposes.

HUNGARIAN P.R. (1) Is considering the possibility of increasing the vestigial sideband to 1.25 Mc/s.

IRELAND (1) No final decision has been taken about the standards to be adopted in Ireland. But for planning requirements, subject to a final decision being taken later, the parameters shown in the Table under "Ireland" are those preferred for Bands IV and V.

ICELAND	(1)	Does not at present intend to use Bands IV and V, but accepts the parameters shown under "Iceland" as the television standards in those bands.
ISRAEL	(1)	No final decision has yet been taken about the vestigial sideband. But for planning purposes the figure shown in the Table (1.25 Mc/s) under the appropriate heading should be adopted.
ITALY	(1)	For planning purposes can accept the figure shown in the Table (1.25 Mc/s).
NETHERLANDS	(1)	Reserves the right to increase the vestigial sideband to 1.25 Mc/s. But for planning purposes 0.75 Mc/s, as shown in the Table, could be used.
P.O. of POLAND	(1)	Is studying the possibility of widening vestigial sideband up to 1.25 Mc/s.
EASTERN GERMANY	(1)	Is considering the possibility of extending the vestigial sideband to 1.25 Mc/s.
ROUMANIAN P.R.	(1)	Is studying the possibility of widening the vestigial sideband to 1.25 Mc/s and would prefer this value to be used for planning.
UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND	(1)	The parameters preferred for use in the planning of a 625-line system; the standards, including the number of lines, to be adopted in the United Kingdom for Bands IV and V, have not yet been decided.
SWEDEN	(1)	Has taken no final decision but could accept a vestigial sideband of 0.75 Mc/s for planning purposes.
SWITZERLAND	(1)	Intends to introduce additional FM-modulated sound carriers in the frequency space between 5.5 and 6.5 Mc/s in relation to the picture carrier, at levels equal to or less than the ordinary level of the sound carrier, for additional sound-tracks or sound broadcast programme.
	(2)	Is also considering the possibility of extending the vestigial sideband to 1.25 Mc/s.

CZECHOSLOVAK S.R.	(1)	Is studying the possibility of widening the vestigial sideband up to 1.25 Mc/s and would prefer this value to be used for planning purposes.
TURKEY	(1)	Could accept for planning purposes, subject to a final decision being taken later, the figure for the vestigial sideband shown in the table under the appropriate heading (1.25 Mc/s).
U.S.S.R.	(1)	Is considering the possibility of extending the vestigial sideband (picture) to 1.25 Mc/s.

COURBES POUR LA TELEVISION EN COULEUR

CURVES FOR COLOUR TV

CURVAS PARA LA TELEVISIÓN EN COLORES

ANNEXE 4

ANNEX 4

ANEXO 4

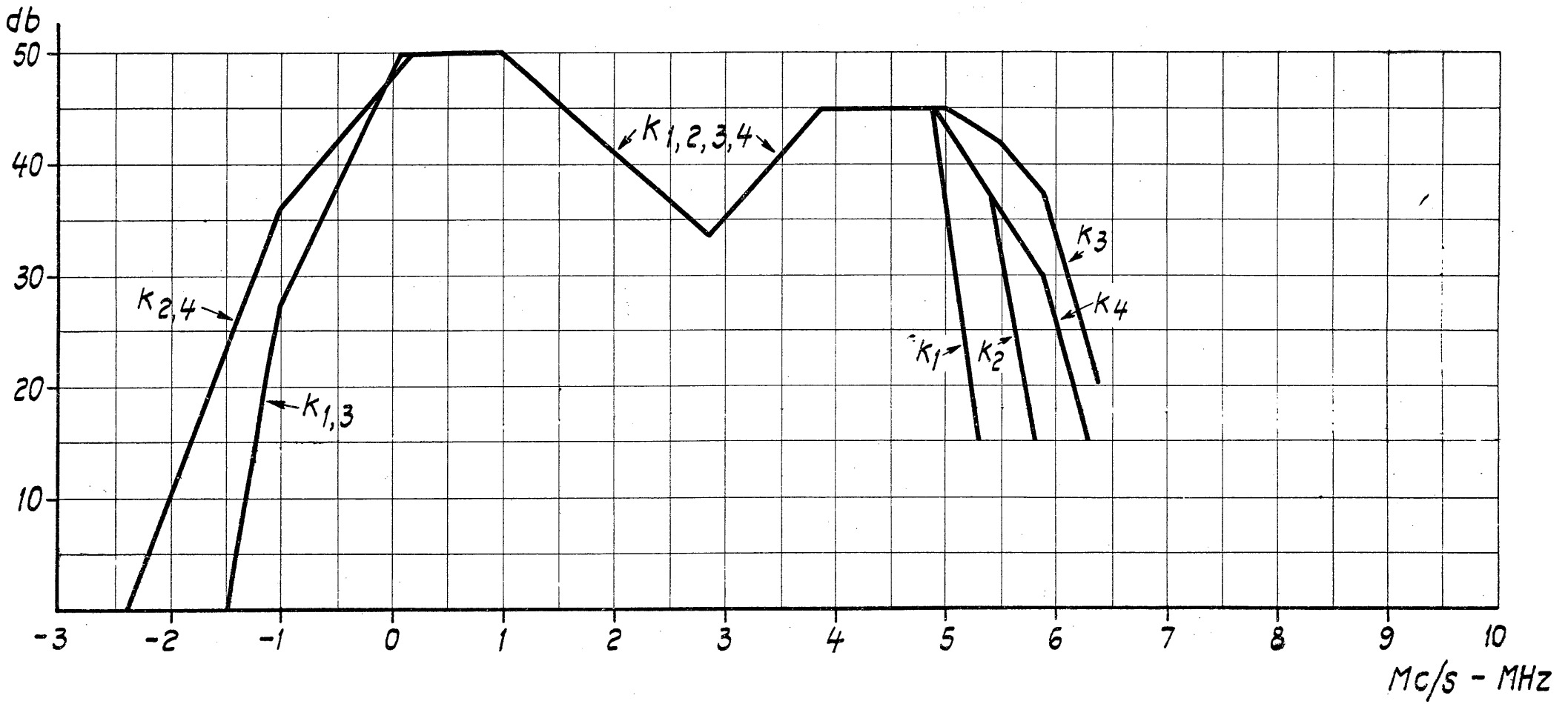


FIGURE 26 - FIGURA 26

(Revisée - Revised - Revisada)

PAGE INTENTIONALLY LEFT BLANK

PAGE LAISSEE EN BLANC INTENTIONNELLEMENT

A N N E X 5

PROVISIONAL LIST OF CONSULTATION DISTANCES TO REPLACE FIGURES IN ANNEX 1 OF THE STOCKHOLM AGREEMENT, 1952

A. Sound Broadcasting in Band II

Effective Radiated Power kW	Distance km
0.0001	40
0.0003	50
0.001	60
0.003	80
0.01	100
0.03	120
0.1	160
0.3	200
1	250
3	300
10	340
30	400
100	450
300	500

B. Television

Effective Radiated Power kW	Distance km	
	Band I	Band III
0.0001	75	60
0.0003	90	75
0.001	110	90
0.003	135	110
0.01	170	135
0.03	210	170
0.1	270	210
0.3	320	260
1	375	310
3	440	365
10	510	430
30	585	500
100	710	570
300	835	680

PAGE INTENTIONALLY LEFT BLANK

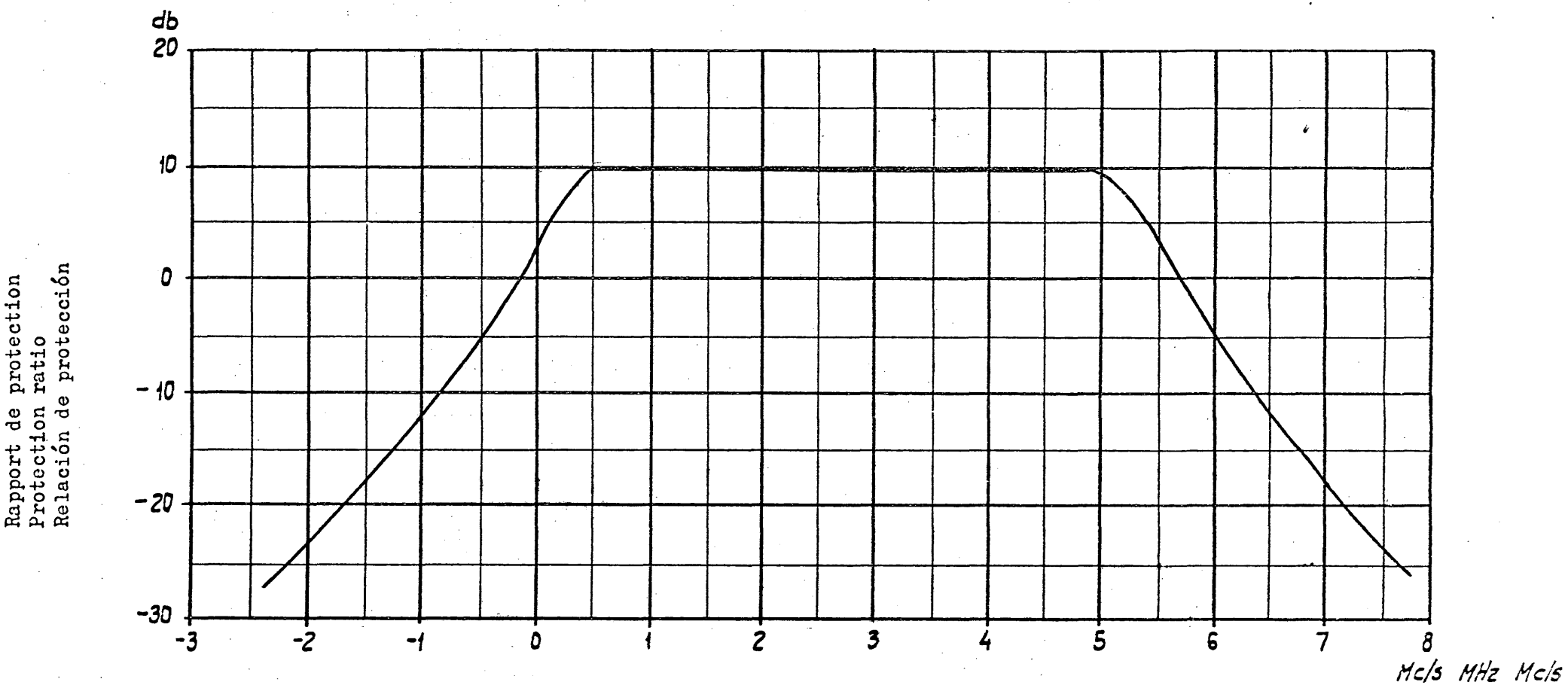
PAGE LAISSEE EN BLANC INTENTIONNELLEMENT

ANNEXE 6

Rapport de protection nécessaire à la télévision contre le service de radionavigation dans la bande 582-606 MHz

Protection ratio required by television against radionavigation in the band 582-606 Mc/s

Relación de protección necesaria para la televisión contra el servicio de radionavegación en la banda 582-606 Mc/s



Fréquence par rapport à la fréquence de la porteuse image
Frequency relative to vision carrier frequency
Frecuencia con relación a la frecuencia de la portadora imagen

Figure 1
Figura 1

Valeur maximum tolérable de l'intensité du signal brouilleur pour la protection du service de radionavigation contre la télévision dans la bande 582-606 MHz
Maximum tolerable interfering signal strength for the protection of radionavigation against television in the band 582-606 Mc/s
Valor máximo tolerable de la intensidad de la señal interferente para la protección del servicio de radionavegación contra la televisión en la banda 582-606 Mc/s

db par rapport à 1/uV/mètre
db re. 1/uV/metre
db con relación a 1/uV/metro

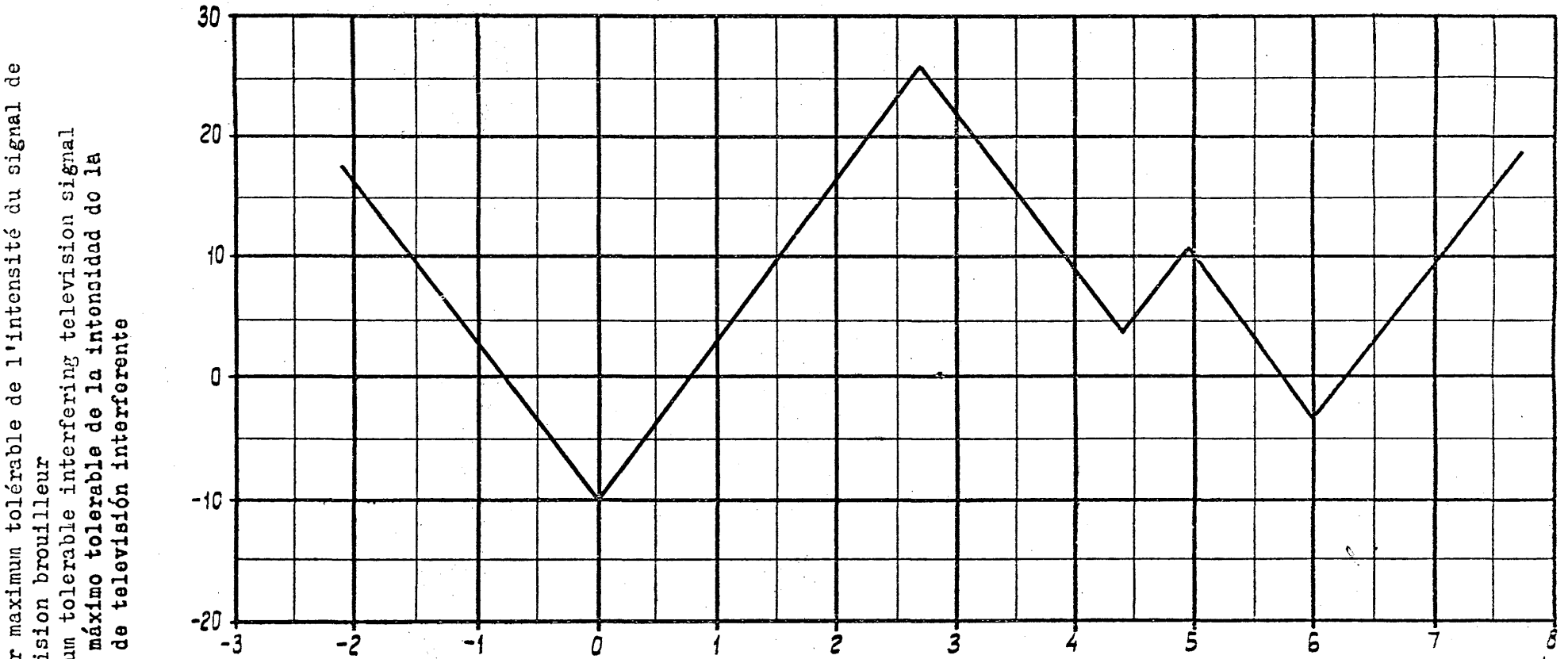


Figure 2
Figura 2

Document No. DT 14-E
5 June 1961
Original: French

WORKING GROUP 6B

NOTE

All delegations interested in the work of Working Group 6B are requested to send a representative to the first meeting of the group, which is being held on Monday, 5 June, at 4 p.m. in Room E.

Draft agenda:

1. Terms of reference and target date for finishing work.
2. List of documents.
3. Organization of the work.
4. Any other business.

B. IONITA

Chairman of Working Group 6B

Document No. DT 15-E
5 June, 1961
Original: English

COMMITTEE 6

UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND

PROTECTION OF SERVICES OTHER THAN TELEVISION IN BANDS IV AND V

The United Kingdom Administration advises that, apart from the radio astronomy centre at Jodrell Bank (details of which are given in Document No. DT-10) there are two further radio astronomy centres already in operation and a further centre planned as follows:

	Co-ordinates
Cambridge	52° 12' N, 0° 12' E
Defford	52° 10' N, 2° 20' W
Bracknell (planned)	51° 30' N, 0° 45' W

All the radio astronomy centres in Great Britain are expected to make use of the frequency band 606-614 Mc/s.

C.F. BOOTH

Document No. DT 16-E
5 June, 1961
Original : English

WORKING GROUP 6D

DRAFT AGENDA

Meeting of Working Group 6D

Tuesday, 6 June, 1961 at 3.00 p.m., Room F.

1. Terms of reference.
2. Nomination of rapporteurs.
3. Discussion on the planning procedure.
4. Organization of the work.
5. Any other business.

F. MAARLEVELD
Chairman of Working Group 6D

Document No. DT 17-E
5 June, 1961
Original : English/
French

COMMITTEE 6

REPORT OF "AD HOC" GROUP OF COMMITTEE 6 FOR "DENSITY ADAPTION"

1. This "ad hoc" group was formed as a result of a decision taken at the 3rd Meeting of Committee 6 with the following terms of reference :

To subdivide those parts of the European Brodcasting Area which do not belong to the I.B.T.O. member countries (also including Finland) into quadrilaterals following the method of "density adaptation", taking into account

a) the general agreement of the administrations concerned to plan on the broad basis of the theoretical lattice No. 3 of Document No. 4;

b) the omission of transmitters of effective radiated power less than 10 kW for this purpose;

c) the desirability of allowing a margin of about 20% between the number of transmitters and the number of channels available in any particular area.

2. The group has held 4 meetings and a working subgroup was set up, consisting of Messrs. Goussot (France), Swann (U.K.), Berndts (F.R.G.), Apothéloz (Switzerland) and Gressmann (E.B.U.) to make a draft application of the method, taking into account information available in the Annexes of Document No. 7 and concerning portions of some member countries of the E.B.U.

3. The map presented as Annex 1* shows the result of applying the method of "density adaptation" using lattice No. 3 of Document No. 4 with the orientation shown in that document. In making the adaptation, all pertinent factors,

---

* This Annex will be distributed on the basis of 1 copy to each delegation.

e.g., transmitter density, topography, oversea propagation etc. were taken into account subjectively as fully as possible in the limited time available. Some modifications may well prove desirable when detailed calculations are made during actual planning.

Annex 2 gives some information regarding the method used and technical information given in Annex 3 formed the basis of the work.

U. MOHR
Chairman

Annexes: 3

EUROPEAN BROADCASTING AREA

Les lignes pointillées sur cette carte sont destinées à délimiter des zones administratives par rapport aux stations de radiodiffusion; elles ne représentent pas nécessairement des frontières internationales reconnues.

The dotted lines on this map are intended to demarcate administrative areas as far as broadcasting stations are concerned and do not necessarily represent recognized international frontiers.

Las líneas de puntos sirven para demarcar zonas administrativas en cuanto respecta a estaciones de radiodifusión y no corresponden necesariamente a fronteras internacionales reconocidas.

0 100 200 300 400 500 km

Annexe au
Annex to } Doc. 97
Anexo al

PAGE INTENTIONALLY LEFT BLANK

PAGE LAISSEE EN BLANC INTENTIONNELLEMENT

A N N E X 2

CHANNEL ASSIGNMENT WITH THE AID OF THEORETICAL LATTICES

1. A fundamental relationship exists between the following three factors involved in channel assignment and should always be borne in mind.

When C = number of channels available

d = distance between transmitters covering adjacent areas (corresponds to transmitter density)

D = distance between transmitters working on the same channel

then $D = d\ C$

This relationship is rigorously true for a network of transmitters with equal E.R.P., equal transmitting aerial height and operating in an area with even and homogeneous terrain. However, the relationship remains true in a general way for a practical transmitter network where the E.R.P., aerial height and topographical characteristics show considerable variation.

2. It is necessary, in designing a network, either to choose, for a given network, the most favourable from the given number of possible channel distributions or to determine the most favourable network for a given channel distribution, i.e. to fix the length of the sides of the quadrilateral. The most favourable solution in both cases is that with which the largest number of transmitters can be obtained without contravening the minimum separation requirements. Density adaptation is performed by drawing on a map, showing all the transmitter sites, a network of lines such that the whole area is covered by quadrilaterals, each of which contains a maximum of C transmitters.

Because of differences in transmitter density, which may vary considerably from region to region, it is not possible in practice to draw the lines so that this maximum of C transmitters is attained in each quadrilateral; in some cases, the number of transmitters in a quadrilateral may even be considerably less than the total number of channels available. In practice, in order to obtain the flexibility needed in actual channel assignment work, it is in fact desirable to draw the quadrilaterals so that there is a margin of about 20 per cent between the total number of channels and the number of transmitters.

Once quadrilaterals arrived at in the way described above have been drawn on the map, each transmitter in each quadrilateral is assigned a channel so that the pattern of channel distribution within the quadrilateral follows as closely as possible that of the theoretical lattice used. The orientation of the theoretical lattice with respect to the quadrilaterals must, of course, be the same throughout the area being planned. Using this method, it is possible to find, with the minimum delay, optimum channel distributions for real networks with numerous additional requirements, as are found in an actual frequency plan.

A N N E X E 3 - A N N E X 3

Pays Country	Bandes de fréquence utilisable Usable frequency band MHz Mc/s	 N° canaux Channel No.	Nombre de canaux Number of channels	Séparation des canaux en un même endroit Separation of Channels at the same site	Séparation non désirée de canaux Undesirable Separation of channels
1	2a	2b	3	4	5
AUT	470 - 598, 606 - 790	21 - 36 38 - 60	39	3, 6	
BEL	470 - 582, 614 - 860	21 - 34, 39 - 69	45	3, 6	
CYP	470 - 582, 606 - 790	21 - 34, 38 - 60	37		
CVA	470 - 582, 606 - 790, 806 - 830	21 - 34, 38 - 60, 63 - 65	41		1, 4, 5, 6, 9, 11
DNK	470 - 582 606 - 790	21 - 34 38 - 60	37	3, 6	
E	470 - 960	21 - 81	61		
FNL	470 - 960	21 - 81	61		
F[4]	470 - 860	21 - 69	49	3, 6	
GRC	470 - 790	21 - 60	40	3	
IRQ	Pas d'information No information				
IRL	470 - 582, 606 - 790 (860)	21 - 34, 38 - 60 (69)	37 (46)		
ISL	Pas d'information No information				
ISR	470 - 582, 606 - 718	21 - 34, 38 - 51	38	6	

Voir notes page 9 - See notes page 9.

1	2a	2b	3	4	5
I	470 - 582, 606 - 790, 806 - 830	21 - 34, 38 - 60, 63 - 65	40		1, 4, 5, 6, 9, 11
JOR		Pas d'information No information			
LBN	470 - 960	21 - 81	61	6	
LBY	470 - 790	21 - 60	40	3	
LUX	470 - 582 614 - 790	21 - 34, 39 - 60	36	6	
MRC		Pas de demandes No requirements			
MCO	470 - 790	21 - 60	40	3	
NCR[1]	470 - 598, 614 - 790, 798 - 822	21 - 36, 39 - 60, 62 - 64	41	3	
HOL[2]	470 - 790	21 - 60	40	3 ou 6 or	
POR	470 - 606 814 - 790	21 - 35 39 - 60	38		
UAR		Pas d'information No information			
D[3]	470 - 790	21 - 60	40		
YUG	470 - 606, 614 - 960	21 - 37, 39 - 81	80	3	
G	470 - 582, 606 - 854	21 - 34, 38 - 68	45		
S	470 - 582 590 - 598 598 - 606 614 - 902	21 - 34[6] 36 37[7] 39 - 74	52	3, 10	
SUI[5]	470 - 790	21 - 60	40	2,3,6,7,8	
GIB	470 - 582, 606 - 854	21 - 34 38 - 68	45	2	
MLT	470 - 582, 606 - 854	21 - 34 38 - 68	45		
TUN		Pas d'information No information			
TUR	470 - 560 568 - 790	21 - 35 37 - 60	39	3, 6	

Voir notes page 9 - See notes page 9.

1) Les canaux N°s 56 à 58 et 60 sont préférés dans le sud et l'ouest de la NOR; les canaux 60 à 64 ne peuvent pas être assignés à des stations de grande puissance.

Channels Nos. 56-58, 60 in the south and west part of NOR preferred; Nos. 60 to 64 should not be assigned to high power stations.

2) cf. Corrig. N° 1 à l'Add. 19 du Document N° 7.

s. Corrig. No. 1 to Add. 19, Document No. 7.

3) Un canal dans la bande 582 - 606 MHz pour la radionavigation.

One channel in frequency band 582 - 606 Mc/s for radionavigation.

4) En France on évitera d'assigner les canaux 36 et 38 à des stations de grande portée.

In France channels 36 and 38 will not be assigned in high power stations.

5) En Suisse on évitera d'assigner les canaux 35, 36 et 37 à des stations de grande portée.

In Switzerland channels 35, 36 and 37 will not be assigned to high power stations.

6) Canal N° 35 pour radionavigation.

Channel No. 35 for radionavigation.

7) Canal N° 38 exclusivement pour radioastronomie.

Channel No. 38 exclusively for radioastronomy.

Document No. DT 18-E
6 June, 1961
Original: English

COMMITTEE 4

DRAFT

REPORT No. 2 OF COMMITTEE 4

The following paragraphs are to be added under the appropriate headings in draft Report No. 1 (DT 13) :

5. Table of Consultation Distances

B. Final table

For the purpose of assisting in planning and also for the possible inclusion in the Final Acts of the Conference a new table of consultation distances has been made.

This table, which is reproduced in Annex 1 to this report, is applicable only for those parts of the bands which are exclusively or primarily allocated to television, or exclusively or primarily allocated to sound broadcasting.

It is proposed that for planning work, when dealing with the powers different from those quoted in the tables, the distance corresponding to the next higher power quoted should be used. For future use of the tables, however, it is proposed that linear interpolation shall be applied.

The following data served as basis for preparation of the tables :

		Band I	Band II	Band III
Minimum field strength to be protected 10 m above ground at receiver sites for 99% of time [6] and 50% of locations	db (µV/m	48 [1]	48 [2]	55 [1]
Protection ratio	db	45 [3]	28 [4] - 36 [5,6]	45 [3]
Max. permitted interfering field strength	db (µV/m)	3	20-12	10

1) Cannes Document No. 64, Para. 4.2 (p.84);
2) ibid Para. 4.1 (p.83);
3) ibid Para. 3.2.1 (p.53);
4) ibid Fig. 16 (p.49), tropospheric propagation;
5) ibid Fig. 16 (p.49), steady interference;
6) The band II distances have been produced using a protection ratio of 28 db in conjunction with the 1 % time curve for distances in the tropospheric regions and a protection ratio of 36 db in conjunction with the 50 % curve for the shorter distances.

Propagation curves as given in Cannes Document No.64, Fig. 28 and 30 (pp.113 and 117) have been used. The following Tables A, B and C indicate distances for both overland and oversea propagation. In order to make allowance for special propagation conditions over the Mediterranean sea a list of distances to be applied in such cases has been derived from the figures for sea propagation by taking the figures for a 10 db higher power.

Regard has been taken to multiple interference in bands I and III by choosing the lowest useful values for protected field strengths given at Cannes.

In the application of the tables the following should be observed :

1) Where a directional transmitter aerial is used, the power and distance requirements must be met in all directions towards the countries concerned.

2) Where different distances are given for propagation over land and over sea, both sea and land paths must be checked in relevant cases. For mixed paths either the total length of the path must be above the required distance for sea in the table, or the sum of the parts over land at each end of the path must be above the required distance for land in the table.

3) For transmitter aerial heights different from those quoted in the tables, the distance corresponding to the next higher height should be used.

It still remains to prepare similar Tables D and E for bands IV and V.

6. B. Protection ratios in the band 790-960 Mc/s stand with fixed services

Three documents, Nos. 27 (Sweden), 33 (F.R. of Germany), and 49 (United Kingdom), give figures in the necessary degree of protection. Sweden agreed for the sake of simplification to accept the figures in Document No. 33 for its services in the band 902-960 Mc/s.

Delegates of a number of countries operating portable equipment for fixed services within the band 790-960 Mc/s found the following degree of protection necessary :

The minimum field strength of the fixed service to be protected for 90 % of the time is 6-10 /u V/m (14 to 20 db above 1 /u V/m), and the necessary protection ratio is approximately 10 db in directions other than the main lobe.

For the other fixed services (non-portable) the figures in Document No. 49 were generally accepted :

The maximum tolerable values of interfering field strength occuring for not more than 1 % of the time for interfering signals arriving in directions outside the main lobe of the receiving aerial is 14 to 34 db relative to 1 /u V/m, the exact value depending upon the characteristics of the system used, in particular the receiver bandwidth. The tolerable values are much lower for directions within the main lobe.

In general, the gain of the receiving aerial will be less for narrow-band systems than for wide-band systems, and figures of 20 db and 40 db respectively are typical. The maximum tolerable interfering field for directions within the main lobe of the receiving aerial will therefore in the general case be of the order of -6 db relative to 1 /u V/m.

B. NIELSEN
Chairman of Committee 4

Annex : 1

PAGE INTENTIONALLY LEFT BLANK

PAGE LAISSEE EN BLANC INTENTIONNELLEMENT

ANNEXE - ANNEX - ANEXO

A. BANDE I - BAND I - BANDA I

P.A.R. E.R.P. P.R.A.	Distances en km pour differentes hauteurs d'antenne H au-dessus du niveau moyen du terrain Distances in km for different aerial heights H above average ground level Distancias, en km, para diferentes alturas H de antena sobre el nivel medio del terreno								
	H 75 m			H 300 m			H 1200 m		
	Terre Land Tierra	Mer (cas général) Sea (generally) Mar (generalmente)	Mer (cas de la Mediterranée) Sea (Mediterranean) Mar (Mediterráneo)	Terre Land Tierra	Mer (cas général) Sea (generally) Mar (generalmente)	Mer (cas de la Mediterranée) Sea (Mediterranean) Mar (Mediterráneo)	Terre Land Tierra	Mer (cas général) Sea (generally) Mar (generalmente)	Mer (cas de la Mediterranée) Sea (Mediterranean) Mar (Mediterráneo)
1	2	3	4	5	6	7	8	9	10
300 kW	660	920	*)	680	970	*)	760	1050	*)
100	600	830	1050	630	870	*)	700	950	*)
30	540	740	920	565	780	970	650	850	1050
10	480	630	830	520	670	870	590	750	950
3	430	530	740	465	570	780	540	650	850
1	370	450	630	420	490	670	480	560	750
300 W	320	370	530	360	410	570	420	480	650
100	270	300	450	310	330	490	370	410	560
30	220	230	370	260	270	410	330	340	480
10	170	170	300	205	205	330	290	290	410
3	130	130	230	160	160	270	240	240	340
1	100	100	170	135	135	205	200	200	290
300 mW	70	70	130	100	100	160	160	160	240
100	50	50	100	80	80	135	140	140	200
30	35	35	70	60	60	100	120	120	160
10	25	25	50	50	50	80	100	100	140
3	25	25	35	35	35	60	80	80	120
1	25	25	25	30	30	50	65	65	100

*) Consultation nécessaire - Consultation necessary - Consulta necesaria.

B. BANDE II - BAND II - BANDA II

1	2	3	4	5	6	7	8	9	10
300 kW	470	620	820	510	650	850	580	720	920
100	420	520	720	450	550	750	520	620	820
30	360	430	620	400	470	650	470	540	720
10	310	350	520	340	390	550	410	460	620
3	260	280	430	290	320	470	360	390	540
1	210	220	350	240	250	390	320	330	460
300 W	160	160	280	190	190	320	270	270	390
100	120	120	220	140	140	250	230	230	330
30	90	90	160	120	120	190	190	190	270
10	60	60	120	90	90	140	160	160	230
3	50	50	90	80	80	120	130	130	190
1	40	40	60	70	70	90	120	120	160
300 mW	35	35	50	60	60	80	100	100	130
100	30	30	40	50	50	70	90	90	120
30	25	25	35	40	40	60	80	80	100
10	20	20	30	30	30	50	65	65	90
3	20	20	25	25	25	40	55	55	80
1	20	20	20	20	20	30	40	40	65

C. BANDE III - BAND III - BANDA III

1	2	3	4	5	6	7	8	9	10
300 kW	580	810	1000	620	850	1060	690	930	*)
100	530	720	910	560	750	950	630	820	1030
30	470	610	810	510	650	850	580	720	930
10	420	520	720	450	550	750	520	630	820
3	360	430	610	400	470	650	470	540	720
1	310	350	520	340	390	550	410	460	630
300 W	260	280	430	290	320	470	360	390	540
100	210	220	350	240	250	390	320	330	460
30	160	160	280	190	190	320	270	270	390
10	120	120	220	150	150	250	230	230	330
3	90	90	160	120	120	190	190	190	270
1	60	60	120	90	90	150	160	160	230
300 mW	45	45	90	70	70	120	130	130	190
100	30	30	60	55	55	90	110	110	160
30	25	25	45	45	45	70	90	90	130
10	20	20	30	35	35	55	75	75	110
3	20	20	25	25	25	45	60	60	90
1	20	20	20	20	20	35	45	46	75

*) Consultation nécessaire - Consultation necessary - Consulta necesaria.

Document No. DT 19-E
6 June 1961
Original: French

WORKING GROUP 6C

NOTE

All delegations concerned in the activities of Working Group 6C are asked to send representatives to the first meeting of the Working Group, to be held on Tuesday, 6 June, 1961, at 4 p.m. in Room B.

DRAFT AGENDA

1. Terms of reference and target date for end of work;

2. List of relevant documents;

3. Organization of work;

4. Any other business.

E. CASTELLI
Chairman, Working Group 6C

Document No. DT 20-E
6 June, 1961
Original : French

WORKING PARTY 6C

DRAFT AGENDA

Meeting of Working Party 6C

Wednesday, 7 June, 1961, 5 o'clock p.m., in Room B

1. Adaptation of the theoretical pattern to actual frequency requirements of countries.

2. Any other business.

E. CASTELLI
Chairman

Document N° DT 21-F/E/S
7 juin 1961
Original : français/
anglais

COMMISSION 6
COMMITTEE 6
COMISIÓN 6

PROPOSITION DE L'U.E.R.

RESEAU THEORIQUE

La figure annexée à ce document représente la figure N° 3 de l'Appendice 1 du document N° 4F, dessinée sur une échelle plus grande.

E.B.U. PROPOSAL

THEORETICAL LATTICE

The figure attached to this document represents figure No. 3 of Appendix 1 of Document No. 4-E, drawn on a larger scale.

PROPOSICION DE LA U.E.R.

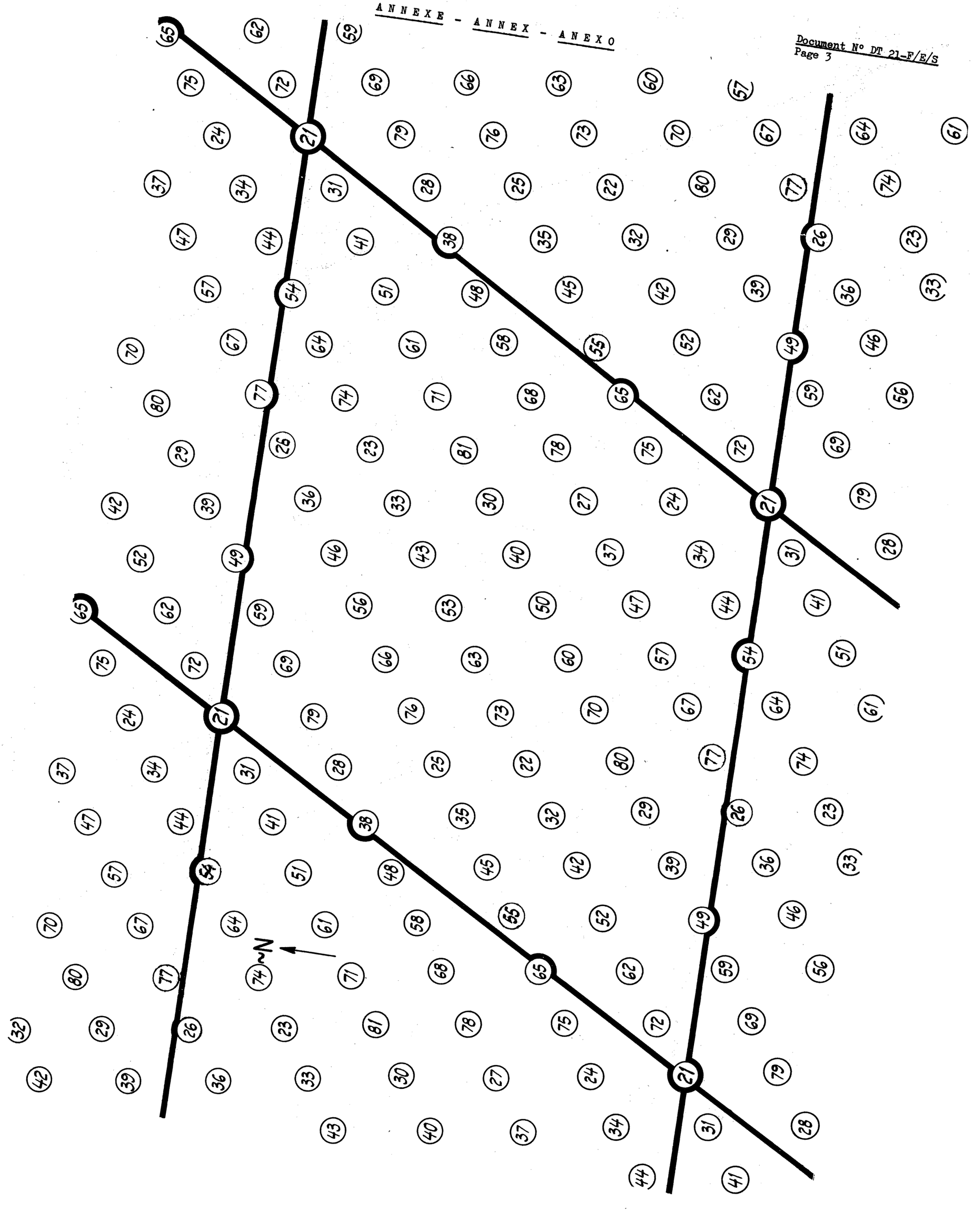
PLANTILLA TEÓRICA DE DISTRIBUCIÓN

La figura que se acompaña es la N.° 3 del Apéndice 1 al documento N.° 4, pero dibujada en escala mayor.

Annexe)
Annex) 1
Anexo)

PAGE INTENTIONALLY LEFT BLANK

PAGE LAISSEE EN BLANC INTENTIONNELLEMENT


N

Document No. DT 22-E
7 June, 1961
Original : French

SPECIAL WORKING PARTY
ON THE DRAFT AGREEMENT

A. It is proposed that the Final Acts take the following form :

FINAL ACTS OF THE CONFERENCE

1. AGREEMENT WITH ANNEXES

1.1 Agreement properly so called

1.2 Annexes

1.2.1 Annexed Agreement about the setting-up of new stations or changes in existing ones.

1.2.2 Plans

1.2.2.1 Band 41 - 68 Mc/s

1.2.2.2 Band 87.5 - 100 Mc/s

1.2.2.3 Band 174 - 223 Mc/s[1)]

1.2.2.4 Band 470 - 960 Mc/s.

1.2.3 Technical factors in the Plan

2. FINAL PROTOCOL

3. RESOLUTIONS, RECOMMENDATIONS AND OPINIONS.

---

1) 162-225 Mc/s for Belgium, France and Monaco.

B. The Agreement properly so called should, it is proposed, take the following form :

A G R E E M E N T

Preamble -

Article 1 - Definitions

Agreement

Plans

European Area (reference to the Radio Regulations, No. 133)

Reception Area

Article 2 - Implementation of the Agreement

Article 3 - Accession to the Agreement

Article 4 - Announcement of frequency assignments

Article 5 - Changes in station characteristics or bringing of new stations into use

a) in the exclusive broadcasting bands (European Area as a whole);

b) in the bands not exclusively allocated for broadcasting for the European Area as a whole and subject to a broadcasting plan;

c) in the bands not exclusively allocated for broadcasting for the European Area as a whole and for which no broadcasting plan has been produced.

Article 6 - Review of the Agreement

Article 7 - Denunciation of the Agreement

Article 8 - Entry into force.

C. It is proposed that the Special Working Party consider, too, the following points, about which proposals will be made to the Plenary Assembly :

a) Powers above which assignments must appear in the Plans

- in bands I, II and III;

- in bands IV and V;

b) tables together constituting the Plans.

Document No. DT 23-E
7 June 1961
Original : English

COMMITTEE 4

DRAFT REPORT No. 1 OF COMMITTEE 4

(Annex 3 amended)

In accordance with the wishes expressed at the sixth meeting of Committee 4, a new version of Annex 3 to Document No. DT 13 is herewith submitted. It was prepared by a small working party with Mr. Mortensen (Norway) in the Chair, assisted by Mr.Kilvington (United Kingdom) and a representative of the C.C.I.R.

"

A N N E X 3

TELEVISION STANDARDS

The parameters proposed by various European countries for preparation of the 625-line television frequency plan with a channel spacing of 8 Mc/s in Bands IV and V can be grouped into 6 categories, here called Standards A to F.

Standard	Video Bandwidth (Mc/s) (a)	Picture/ Sound Separation (Mc/s) (b)	Vestigial Sideband Mc/s (c)	Picture modulation (d)	Sound modulation (e)	Frequency of chrominance subcarrier (Mc/s) (f)	Power ratio picture sound (g)
A	5	5.5	0.75	Neg	FM	4.43	5 : 1
B	5	5.5	1.25	Neg	FM	4.43	5 : 1
C	5.5	6	1.25	Neg	FM	4.43	5 : 1
D	6	6.5	0.75*)	Neg	FM	4.43	5 : 1
E	6	6.5	1.25**)	Neg	FM	4.43	5 : 1
F	6	6.5	1.25	POS	AM	4.43	8 : 1

*) Administrations proposing this Standard are studying the possibility of extending the vestigial sideband to 1.25 Mc/s

**) Administrations proposing this Standard are studying the possibility of extending the picture vestigial sideband to 1.25 Mc/s and would prefer this figure to be used for planning purposes.

The following list shows the Standards proposed by the various countries for planning purposes:

Standard A	Standard B	Standard D
Austria	Belgium (see notes)	Hungarian P.R.
Belgium (see notes)	Israel	P.R. of Poland
Denmark	Italy	U.S.S.R.
Spain	Luxembourg	Standard E
Finland	Turkey	P.R. of Bulgaria
Greece	Yugoslavia (F.P.R.)	Roumanian P.R.
Iceland	U.K. Oversea Territories	Czechoslovak S.R.
Norway	Standard C	Standard F
Netherlands	Ireland	France
Portugal	United Kingdom	Monaco
Federal Republic of Germany		
Eastern Germany		
Sweden		
Switzerland		

Notes: The notes relating to the columns of the table summarizing the Standards are given below for each column.

Country	Columns in the table	
AUSTRIA		Reserves the right to use additional FM-modulated sound carriers in the space between 5.75 and 6.75 Mc/s in relation to the picture carrier.
BELGIUM		A final decision on the standards to be adopted in Belgium will, to a very great extent, depend on the arrangements made by adjacent countries.
	(b)	Belgium could accept a picture/sound separation of 5.5 Mc/s for planning purposes.
	(c)	Belgium also wants 0.75 and 1.25 Mc/s to be considered as widths of the vestigial sidebands.
DENMARK	(c)	Has taken no final decision, but could accept a vestigial sideband of 0.75 Mc/s for planning purposes.

Country	Columns in the table	
FRANCE		The French Government has decided to use a 625-line system for television in Bands IV and V. The essential characteristics thereof will very probably be those described in the Table under "Standard F".
	(f)	A probable figure, on the assumption that a common colour television standard will be adopted in Europe.
GREECE	(c)	See under Denmark column (c).
IRELAND		No final decision has been taken about the standards to be adopted in Ireland. But for planning requirements, subject to a final decision being taken later, the parameters shown in the Table for "Standard C" are those preferred for Bands IV and V.
ICELAND		Does not at present intend to use Bands IV and V, but accepts the parameters shown for "Standard A" as the television standards in those bands.
ISRAEL	(c)	No final decision has yet been taken about the vestigial sideband. But for planning purposes the figure shown in the Table (1.25 Mc/s) under "Standard B" should be adopted.
ITALY	(c)	For planning purposes can accept the figure shown in the Table under "Standard B".
NORWAY	(c)	See under Denmark column (c).
NETHERLANDS	(c)	Reserves the right to increase the vestigial sideband to 1.25 Mc/s. But for planning purposes 0.75 Mc/s, as shown in the Table, could be used.
EASTERN GERMANY	(c)	Is considering the possibility of extending the vestigial sideband to 1.25 Mc/s.
UNITED KINGDOM		The parameters preferred for use in the planning of a 625-line system; the standards, including the number of lines, to be adopted in the United Kingdom for Bands IV and V, have not yet been decided.
SWEDEN	(c)	See under Denmark, column (c).
SWITZERLAND		Intends to introduce additional FM-modulated sound carriers in the frequency space between 5.5 and 6.5 Mc/s in relation to the picture carrier, at levels equal to or less than the ordinary level of the sound carrier, for additional sound-tracks or sound broadcast programme.

Country	Columns in the table	
SWITZERLAND (cont.)	(c)	Is also considering the possibility of extending the vestigial sideband to 1.25 Mc/s.
TURKEY	(c)	Could accept for planning purposes, subject to a final decision being taken later, the figure for the vestigial sideband shown in the table under "Standard B".

Document No. DT 24-E
8 June, 1961
Original: English

COMMITTEE 2

FIRST REPORT
OF COMMITTEE 2 WORKING GROUP TO COMMITTEE 2

1. The Working Group, which had been set up at the First Meeting of Committee 2, proceeded on 6 June to examine the credentials submitted in respect of the following delegations:

> Belgium, Vatican City State, Denmark, Spain, Finland, France, Iceland, Italy, Lebanon, Libya, Luxembourg, Monaco, Kingdom of the Netherlands, P.R. of Poland, Portugal, Federal Republic of Germany, F.P.R. of Yugoslavia, Roumanian P.R., United Kingdom of Great Britain and Northern Ireland, Sweden, Confederation of Switzerland, Czechoslovakia Socialist Republic, Overseas Territories for the International Relations of which the Government of the United Kingdom of Great Britain and Northern Ireland are responsible.

It was noted that credentials for 15 delegations present had not been received up to the time of the meeting.

2. The credentials in respect of the following delegations were duly verified, it being noted that full power had been given to sign the Final Acts of the Conference:

> Belgium, Vatican City State, Denmark, France, Iceland, Italy, Lebanon, Luxembourg, Monaco, Kingdom of the Netherlands, P.R. of Poland, Portugal, Federal Republic of Germany, F.P.R. of Yugoslavia, Roumanian P.R., United Kingdom of Great Britain and Northern Ireland, Czechoslovak Socialist Republic, Overseas Territories for the International Relations of which the Government of Great Britain and Northern Ireland are responsible.

3. The credentials of the following delegations were found to be incomplete, as no powers had been given to sign the Final Acts of the Conference:

Spain, Libya, Confederation of Switzerland;

and the following delegation had not been accredited in accordance with Chapter 5 Nos. 529-530, 532-534 of the General Regulations annexed to the International Telecommunication Convention (Geneva 1959):

Finland

4. The Secretary of the Conference (Mr. Stead) was requested by the Working Group to draw the attention of the delegations concerned to the points in (3) above.

5. It was agreed that the next meeting of the Working Group would take place on Tuesday, 13 June at 5.00 p.m.

F. NICOTERA
Chairman, Committee 2 Working Group

Document No. DT 25-E
8 June, 1961
Original: English

COMMITTEE 4

DRAFT
REPORT No. 3 OF COMMITTEE 4

6. C. Television and Radionavigation in the Bands 216-223 Mc/s and 223-230 Mc/s

Document No. 58 was approved to serve as guidance when planning this shared band. However, certain delegates made reservations as to the prospect of fulfilling the technical criteria in the actual planning. The substance of document No. 58 is as follows:-

" The aeronautical radionavigation service, known as D.M.E. (distance measuring equipment), employs ground based beacons with a peak pulse power of 1 kW. The airborne receivers operate to a maximum range of about 300 km and at heights up to 20.000 metres.

The protection ratios necessary for satisfactory operation of the equipment have been determined by experiment to be as follows:-

Within the receiver pass-band of ± 1.4 Mc/s	+ 6 db
± 2 Mc/s from the centre of the passband	- 3 db
± 3 Mc/s from the centre of the passband	-20 db
± 4 Mc/s from the centre of the passband	-39 db

At the maximum operating range and height the D.M.E. airborne receiver will be within optical range of the D.M.E. beacon and the received field strength will be approximately equivalent to the free space field for a distance of 300 km (see C.C.I.R. Second Atlas of Ground-Wave Propagation Curves). To afford a protection ratio of at least 6 db an interfering television transmitter also at a distance of 300 km from the D.M.E. receiver would need to be limited to an e.r.p. of 250 watts. A geographical separation of 600 km would therefore, in general, be required between the D.M.E. beacon and an interfering transmitter of 250 watts e.r.p.

If the operational range of the D.M.E. system is less than the maximum range of 300 km the necessary separation distance is correspondingly reduced. The required separation distance is also reduced as the frequency separation of the centre of the D.M.E. receiver pass-band and the vision or sound carrier frequency of the interfering television transmission increases.

The required separation distance increases rapidly as the power of the interfering television station is increased but beyond the distance at which the path between the airborne D.M.E. receiver and the television station is no longer optical a large increase in the power of the television station will require a comparatively small increase in the separation distance.

On the basis of the data given above and making use of the C.C.I.R. Second Atlas the following table, giving the required geographical separation distances, has been prepared.

Separation between D.M.E. frequency and vision or sound carrier frequency of interfering television station Mc/s	Television transmitter e.r.p. kW	Necessary separation between D.M.E. beacon and interfering television station in km for D.M.E. Range of 300 km
± 1.4 Mc/s	0.1	520
	1	900
	10	970
	100	990
	1000	1000
2 Mc/s	0.1	350
	1	500
	10	950
	100	970
	1000	990
3 Mc/s	0.1	-
	1	320
	10	400
	100	600
	1000	950
4 Mc/s	0.1	-
	1	-
	10	-
	100	320
	1000	400

Using the same basic material similar tables can be prepared for values of the maximum D.M.E. range different from 300 km.

For low-power television stations there are other considerations to be taken into account. If, for example, a television station was sited very close to the D.M.E. beacon, from consideration of interference to the D.M.E. airborne receiver only, it could operate with an e.r.p. of the order of 250 watts since this would provide the necessary protection ratio of 6 db at the airborne D.M.E. receiver at all ranges. Correspondingly higher e.r.p's could be accepted when the vision or sound carrier frequencies of the television stations are separated by more than $\pm$ 1.4 Mc/s from the D.M.E. frequency.

For a frequency separation 3 Mc/s or more a television station with an e.r.p. of 0.1 kW may be sited anywhere within or beyond the service area of the D.M.E. beacon and for a frequency separation of 4 Mc/s the permissible e.r.p. is increased to about 5 kW. However where low-power television stations may be sited close to a D.M.E. beacon special consideration will have to be given to the question of possible interference to the ground receiver of the D.M.E. station."

B. NIELSEN
Chairman

Document No. DT 26-E
8 June, 1961
Original : English

WORKING GROUP 1 AD HOC

NETHERLANDS

PROPOSAL

Article 4

1. Any Administration wishing to change the characteristics in the Plans for any of its stations or to operate stations not mentioned in the Plans shall take the following action :

a) if the distances from the station in question to the nearest points of the boundaries of other countries whose Administrations are parties to this agreement are less than the distance specified in Annex 1, corresponding to the power of the station, the Administrations of those countries must be consulted. The information to be furnished shall contain all particulars mentioned in Appendix 1 to the Radio Regulations, Geneva, 1959;

b) implement these changes only when agreement has been reached between the Administrations concerned. Any Administration that has not replied within a period of 3 months after receipt of the proposed change, shall be deemed to be in agreement with it;

c) notify these changes to the I.F.R.B. in accordance with Article 9 of the Radio Regulations, Geneva, 1959;

d) in other cases than those mentioned in a) above, the changes may be implemented without consulting other Administrations, but a notice containing the same information as mentioned in a) above shall be sent to the I.F.R.B.;

e) in case of changes in the Plans in bands shared with other services, all Administrations of the European Broadcasting Area shall be informed of this through the I.F.R.B.;

f) inform the Secretary-General of changes affecting the Plans.

2. The I.F.R.B. shall deal with the notifications mentioned in para. 1 c) and d) above in accordance with Article 9 of the Radio Regulations, Geneva, 1959, by :

a) publishing all notifications in the weekly I.F.R.B. Circular, with an indication of any coordination which has been successfully carried out;

b) undertaking, in appropriate cases (e.g. on request of Administrations, or when agreement between the interested Administrations could not successfully be reached), technical examinations based on the technical standards annexed to this Agreement;

c) informing the notifying and affected Administrations of the results of the technical examinations;

d) publishing the assignments in the weekly I.F.R.B. Circular with the Board's findings as to the probability of harmful interference being caused to existing assignments.

3. Should any changes made in accordance with para. 1 a) and d) above cause harmful interference to stations of other countries, the countries making the changes shall take action to eliminate such interference.

4. Should no agreement be reached after the action taken under para. 1 a) or 1 b) above, Administrations unable to agree to the changes proposed may have recourse to the procedure set forth in Article 15 of the Radio Regulations, Geneva, 1959, or, where appropriate, to that described in Article 27 of the International Telecommunications Convention, Geneva, 1959.

Article 4 (a)

All changes in the Plans which, after verification by the electronic computer or by other means, will have to be made in order to improve the Plans, but which could not yet be incorporated, shall be subject to the procedure outlined in Article 4 of this Agreement.

Article 7

Whenever an assignment in conformity with the Plans, or for which the procedure outlined in Article 4 of this Agreement has been applied, is put into service, the Administration concerned shall notify that assignment to the I.F.R.B. in accordance with Article 9 of the Radio Regulations, Geneva, 1959.

Document No. DT 27-E
10 June, 1961
Original : English

WORKING GROUPS: 6A 6B, 6C, 6D

OBSERVER OF THE E.B.U.

FREQUENCY OFFSET FOR UHF CO-CHANNEL TRANSMITTERS

When assigning channels to stations with the aid of a given theoretical lattice it is not necessary to fix the actual absolute value of the offset for co-channel transmitters. It is sufficient to bear in mind that two transmitters oriented in the directions of the long diagonals of the quadrilaterals must have greater mutual separations (non-offset minimum distance, protection ratio 45 db) than those oriented in the directions of the sides (or the short diagonal) of the quadrilaterals (offset minimum distance, protection ratio 30 db). This is shown in Figure 1.

If the entire European Broadcasting Area would have been planned for with one theoretical pattern and one network of quadrilaterals, the actual offset values for all stations and for all channels could be fixed in the manner shown in Figure 2.

This means that all stations in a given quadrilateral would be offset from the nominal frequency by either

+ 2/3 of the line-frequency (sign +)

or - 2/3 of the line-frequency (sign -)

or not offset with respect to the line-frequency (sign 0)

The comparison of Figures 1 and 2 shows how the offset and non-offset conditions are then fulfilled.

However, although this is the simplest way from every point of view, the result would be identical, if "+, -, 0 pattern" were not the same for each channel number. This is because obviously the fixing of the offset conditions for the particular channel number is entirely independent from what happens with another channel number.

It may be assumed that the Working Groups of Committee 6 produce draft plans which incorporate the plan - or at least large parts of it - submitted to the Conference for the I.B.T.O. member

countries. In this latter plan the offset values have already been fixed.

Therefore, and in order to save time, it seems to be advisable to use the border line regions between the I.B.T.O. member countries and the others as a starting point for the fixing of absolute offset values. This work should be done channel by channel and - as far as the countries are concerned for which an adaptation of density was performed - following in each case the appropriate scheme similar to Figure 2.

R. GRESSMANN

Annex : 1

ANNEXE - ANNEX - ANEXO

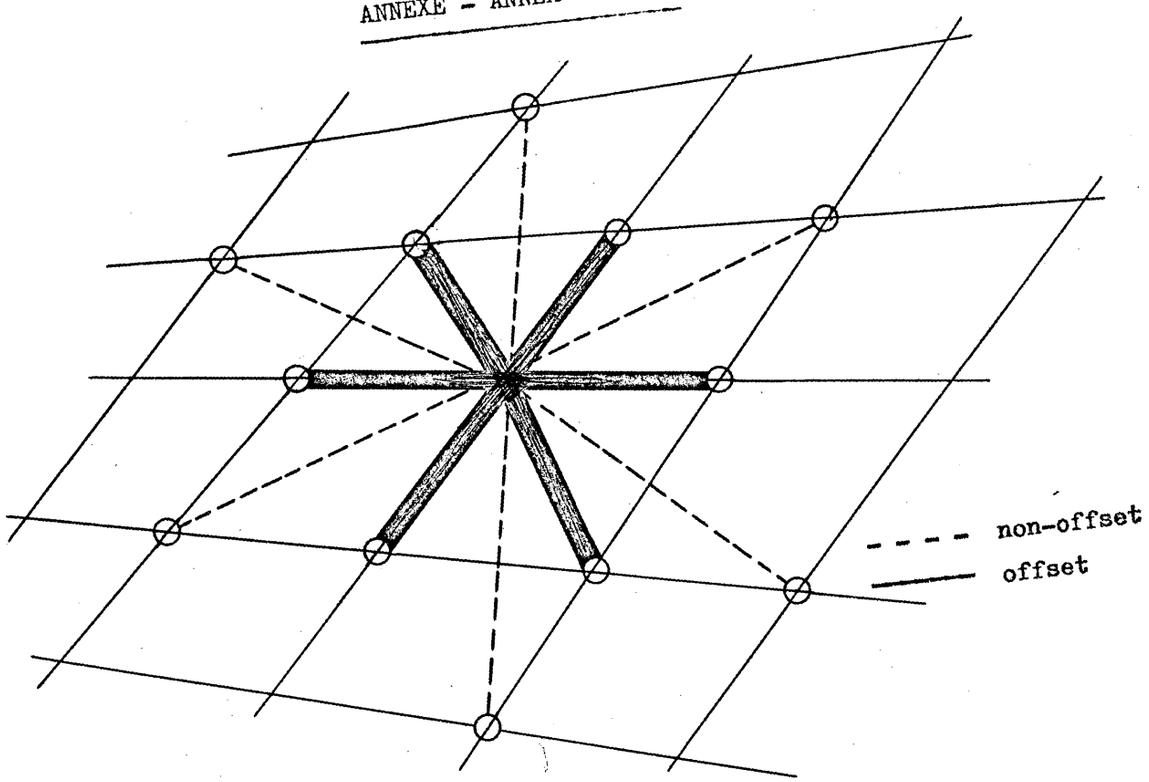


Fig. 1

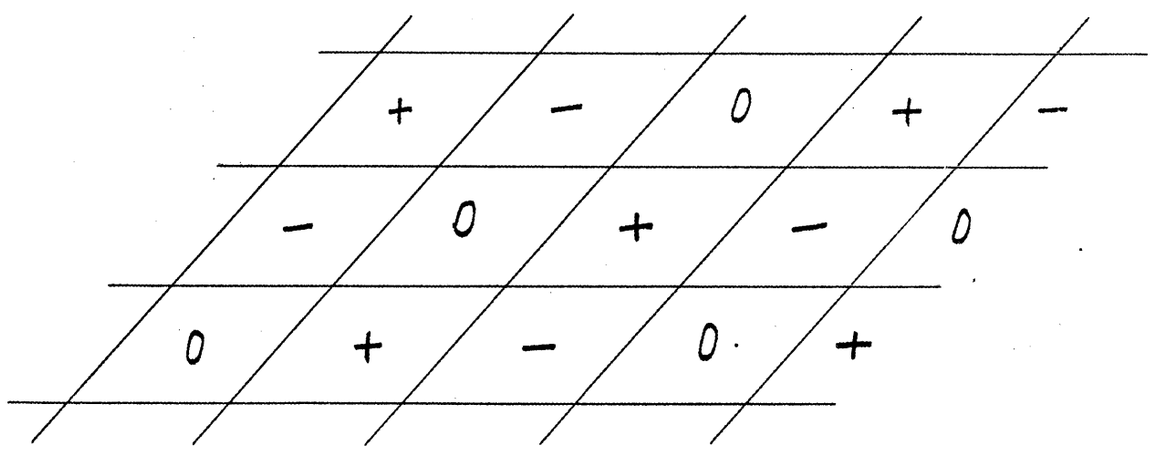


Fig. 2

Document No. VT 28-E
10 June, 1961
Original: English

COMMITTEE 4

REPORT OF WORKING GROUP 4C

The Working Group has held one meeting, attended by the following delegates: Mr. Maarleveld (Netherlands, Chairman), Dr. Gressmann (F.R. Germany), Mr. Goussot (France), Dr. Haantjes (Netherlands) and Mr. Smith (I.F.R.B.).

The Working Group discussed the necessity of modification in the protection ratios given in the C.C.I.R. Report of the Cannes Meeting, in view of the new proposed television standard B(H) of Document No. DT23 (Vestigial sideband 1.25 Mc/s, picture/sound separation 5.5 Mc/s).

As far as this increase in the vestigial sideband is applied to the transmitters only, no changes in the protection ratios are necessary.

If a corresponding change in the Nyquist slope of the receiver selectivity curve is made, the system will be more susceptible to interference from the lower adjacent channel. It is however the opinion of the Working Group that this may complicate the planning considerably and the countries belonging to the standard B(H) are therefore advised to accept also for the purpose of planning the protection ratios given for system A(6).

The following table gives the protection ratios for the system B(H) for the lower adjacent channel.

Interfering signal	Protection ratio for the lower adjacent channel
A(6)	-6 db
B(H)	-6 db
C(I)	-6 db
D(K)	+16 db
E(L)	+18 db

F. MAARLEVELD
Chairman of Working Group 4C

Document No. DT 29-E
11 June 1961
Original: French

COMMITTEE 5

FIRST REPORT BY WORKING GROUP 5B

The terms of reference and composition of the Group are set out in Document No. 38. Group 5B was also joined by the Hungarian P.R.

Nine meetings were held, on 1, 2, 3, 5, 6, 7, 8, 9 and 12 June.

Of the twenty countries members of Group 5B, the following three: P.R. of Albania, Jordan and Tunisia were not represented in the Group and did not send requests for frequency assignments in Bands I, II and III. Iraq did not attend the meetings of the Group but sent in its requirements, which have been taken into consideration in this report.

Group 5B set up a drafting sub-group under the chairmanship of Mr. Prout (United Kingdom Territories), which was responsible for the preparation of the agreements reached between the various delegations in the form prescribed by the Conference.

Thanks to the spirit of collaboration prevailing in the Group, it was possible to find satisfactory solutions to a large majority of the difficult cases encountered, particularly in Band III, which appeared to be inadequate for broadcasting requirements.

Cases for which the Group could find no satisfactory solution will be submitted verbally to Committee 5.

In this connection the Delegation of France made the following statement:

" "The situation in Bands I and III for the Mediterranean Region, which interests Italy and France, has been studied by the delegates of the two countries. In particular, it appeared that no technically valid solution could be found for providing a suitable service for Corsica because of the interference caused in Bands I and III by the following Italian stations:

Monte Faito
Monte Serra
Punta Badde Urbara
Monte Argentario
Monte Peglia
Monte Limbara

France cannot consider that the present situation in that region is satisfactory and reserves its attitude concerning the stations in question until technical studies have been made which will provide an acceptable solution to the problem raised."

The Group considered that the problem of a service for Corsica in Bands I and III might be solved by direct agreements between France and Italy after the relevant technical questions had been thoroughly studied.

Group 5B will send Committee 5 the files containing the frequency assignments in the 41 - 68 Mc/s and 174 - 230 Mc/s bands to the broadcasting transmitters of the following countries:

Austria, P.R. of Bulgaria, Cyprus, Vatican City, Greece, Hungarian P.R. Iraq, Israel, Italy, Lebanon, Libya, United Arab Republic, Roumanian P.R., Oversea Territories of the United Kingdom (Malta), Turkey, Ukrainian S.S.R., F.P.R. of Yugoslavia.

Group 5B recommends Committee 5 to include the above-mentioned assignments in the Stockholm Plan, 1961.

C. TERZANI
Chairman of Group 5B

Document No. DT 30-E
12 June, 1961
Original: English
French

FORMAT OF PLANS

SYMBOLS WHICH ARE BEING USED TO SHOW VISION CARRIER OFFSETS FOR TELEVISION STATIONS IN ALL BANDS

SUGGESTED NOTES FOR INSERTION, IN SPECIAL CASES, IN THE "REMARKS" COLUMN OF THE PLANS

Annexes : 5

PAGE INTENTIONALLY LEFT BLANK

PAGE LAISSEE EN BLANC INTENTIONNELLEMENT

A N N E X 1

FORMAT OF PLANS FOR TELEVISION STATIONS IN BANDS I, II AND III

Assigned frequency (Mc/s)		Vision carrier offset[1]	Name of transmitting station	Country designator	Geographical coordinates of transmitting station	Television system[2]	Maximum effective radiated power (kW)		Azimuth of maximum radiation[3]	Maximum effective height of transmitting antenna (metres)[4]	Polarization of radiation	Remarks[5]
Vision	Sound						Vision	Sound				
1a	1b	2	3	4	5	6	7a	7b	8	9	10	11

Explanatory Note:

1) The Vision carrier offset will be given as a fraction of the line frequency in coded form (See Annex 4).
2) The television system will be given in coded form, in accordance with a table to be established by Committee 4.
3) Symbol ND to be inserted if antenna is non-directional.
4) As defined in paragraph 1.1.4 of the Cannes Report.
5) In appropriate cases a note would be inserted in the Remarks Column as follows:
   1/...-.../... Within the sector ...° - ...° (or in the direction of ...°) the effective radiated power is reduced to ... kW.

PAGE INTENTIONALLY LEFT BLANK

PAGE LAISSEE EN BLANC INTENTIONNELLEMENT

A N N E X 2

FORMAT OF PLANS FOR SOUND BROADCASTING STATIONS IN BANDS I AND II

Assigned frequency (Mc/s)	Name of the transmitting station	Country designator	Geographical coordinates of transmitting station	Class of emission and necessary bandwidth	Maximum effective radiated power (kW)	Azimuth of maximum radiation1)	Maximum effective height of transmitting antenna (metres)2)	Polarization of radiation	Remarks3)
1	2	3	4	5	6	7	8	9	10

Explanatory notes :

1) Symbol ND to be inserted if antenna is non-directional.
2) As defined in paragraph 1.1.4 of the Cannes Report.
3) In appropriate cases a note would be inserted in the Remarks Column as follows : 1/...-.../... Within the sector ...°-...° (or in the direction of ...°) the effective radiated power is reduced to ... kW.

PAGE INTENTIONALLY LEFT BLANK

PAGE LAISSEE EN BLANC INTENTIONNELLEMENT

A N N E X 3

FORMAT OF PLAN FOR TELEVISION STATIONS IN BANDS IV AND V

Assigned channel number 1)	Vision carrier offset 2)	Name of transmitting station	Country designator	Geographical coordinates of transmitting station	Television system 3)	Maximum effective radiated power of vision carrier (kW)	Azimuth of maximum radiation 4)	Maximum effective height of transmitting antenna (metres) 5)	Polarisation of Radiation	Remarks 6)
1	2	3	4	5	6	7	8	9	10	11

Explanatory notes :

1) As defined in paragraph 5.2 of the Cannes Report.
2) The vision carrier offset will be given as a fraction of the line frequency, in coded form (See Annex 4).
3) The television system will be given in coded for, in accordance with a table to be established by Committee 4.
4) Symbol ND to be inserted if antenna is non-directional.
5) As defined in paragraph 1.2.5 of the Cannes Report.
6) In appropriate cases a note would be inserted in the Remarks Column as follows:
   1/... - .../... Within the sector ... ° - ... ° (or in the direction of ... °)
   the effective radiated power is reduced to ... kW.

PAGE INTENTIONALLY LEFT BLANK

PAGE LAISSEE EN BLANC INTENTIONNELLEMENT

A N N E X 4

SYMBOLS WHICH ARE BEING USED TO SHOW VISION CARRIER OFFSETS FOR TELEVISION STATIONS IN ALL BANDS

Vision carrier offset as a fraction of the line frequency for the television system concerned	Symbol	Vision carrier offset as a fraction of the line frequency for the television system concerned	Symbol
0	0	0	0
+1/12	1 P	-1/12	1 M
+2/12	2 P	-2/12	2 M
+3/12	3 P	-3/12	3 M
+4/12	4 P	-4/12	4 M
+5/12	5 P	-5/12	5 M
+6/12	6 P	-6/12	6 M
+7/12	7 P	-7/12	7 M
+8/12	8 P	-8/12	8 M
+9/12	9 P	-9/12	9 M
+10/12	10 P	-10/12	10 M
+11/12	11 P	-11/12	11 M
+12/12	12 P	-12/12	12 M
+13/12	13 P	-13/12	13 M
+14/12	14 P	-14/12	14 M
+15/12	15 P	-15/12	15 M
+16/12	16 P	-16/12	16 M
+17/12	17 P	-17/12	17 M
+18/12	18 P	-18/12	18 M
+19/12	19 P	-19/12	19 M
+20/12	20 P	-20/12	20 M

These symbols will be used when the vision carrier offset is expressed as a fraction of the line frequency and will be inserted in Col. 3 of the Plans for television stations in Bands I, II and III and in Col. 2 of the Plans for television stations in Bands IV and V.

PAGE INTENTIONALLY LEFT BLANK

PAGE LAISSEE EN BLANC INTENTIONNELLEMENT

ANNEX 5

SUGGESTED NOTES FOR INSERTION, IN SPECIAL CASES, IN THE "REMARKS" COLUMN OF THE PLANS

	Note	Meaning
Note 1	1/... - .../...	Within the sector ...°-...° (or in the direction of ...°) the effective radiated power is reduced to ... kW.
Note 2	2/TV (or TS)/...	The vision (or sound) carrier offset is plus ...kc/s.
Note 3	3/TV (or TS)/...	The vision (or sound) carrier offset is minus ... kc/s.
Note 4	4/...-.../...	Within the sector ...°-...° (or in the direction of ...°) the effective height of the antenna is reduced to .... metres.
Note 5	5/ ...	This assignment is to be co-ordinated with .....

Notes 2 and 3 are designed to cover (a) cases where the vision carrier offset has not been expressed as a fraction of the line frequency; (b) cases where a specific sound carrier offset has been included. In cases where the vision carrier is offset by a fraction of the line frequency, the offset will be shown in coded form in the appropriate column of the Plans (col. 3 in the case of television stations in Bands I, II and III and col. 2 in the case of Bands IV and V).

Document N° DT 31-F/E/S
13 juin 1961
Original: anglais/français

Tableau N°

Table No.

Cuadro N.°

CANAUX POUR LES STATIONS DE TELEVISION DANS LES BANDES IV ET V
CHANNELS FOR TELEVISION STATIONS IN BANDS IV AND V
CANALES PARA LAS ESTACIONES DE TELEVISION EN LAS BANDAS IV Y V

Correspondance entre le numéro du canal, les limites du canal et la fréquence porteuse image nominale.

Correspondance between channel number, channel limits and nominal picture carrier frequency.

Correspondencia entre el número del canal, los límites del canal y la frecuencia portadora imagen nominal.

Numéro du canal Channel number Número del canal	Limites du canal Frequency limits Límites del canal	Fréquence porteuse image nominale Nominal picture carrier frequency Frecuencia portadora imagen nominal
21	470 - 478	471,25
22	478 - 486	479,25
23	486 - 494	487,25
24	494 - 502	495,25
25	502 - 510	503,25
26	510 - 518	511,25
27	518 - 526	519,25
28	526 - 534	527,25
29	534 - 542	535,25
30	542 - 550	543,25
31	550 - 558	551,25
32	558 - 566	559,25
33	566 - 574	567,25
34	574 - 582	575,25
35	582 - 590	583,25
36	590 - 598	591,25
37	598 - 606	599,25
38	606 - 614	607,25
39	614 - 622	615,25
40	622 - 630	623,25

Numéro du canal Channel number Número del canal	Limites du canal Frequency limits Límites del canal	Fréquence porteuse image nominale Nominal picture carrier frequency Frecuencia portadora imagen nominal
41	630 - 638	631,25
42	638 - 646	639,25
43	646 - 654	647,25
44	654 - 662	655,25
45	662 - 670	663,25
46	670 - 678	671,25
47	678 - 686	679,25
48	686 - 694	687,25
49	694 - 702	695,25
50	702 - 710	703,25
51	710 - 718	711,25
52	718 - 726	719,25
53	726 - 734	727,25
54	734 - 742	735,25
55	742 - 750	743,25
56	750 - 758	751,25
57	758 - 766	759,25
58	766 - 774	767,25
59	774 - 782	775,25
60	782 - 790	783,25
61	790 - 798	791,25
62	798 - 806	799,25
63	806 - 814	807,25
64	814 - 822	815,25
65	822 - 830	823,25
66	830 - 838	831,25
67	838 - 846	839,25
68	846 - 854	847,25
69	854 - 862	855,25
70	862 - 870	863,25
71	870 - 878	871,25
72	878 - 886	879,25
73	886 - 894	887,25
74	894 - 902	895,25
75	902 - 910	903,25
76	910 - 918	911,25
77	918 - 926	919,25
78	926 - 934	927,25
79	934 - 942	935,25
80	942 - 950	943,25
81	950 - 958	951,25

Document No. DT 32-E
13 June, 1961
Original: English

COMMITTEE 6

AD HOC SUB-WORKING GROUP ON "OFFSETS"

As an initial approach to the assignment of offsets to stations of countries participating in the work of Group D of Committee 6, the following systematic approach is being used:

1. All the quadrilaterals of the density adaptation map (Annex 1 of Document No. DT 17) have been serially numbered.

2. Each quadrilateral is assigned an offset colour.

3. Offset colours are assigned to stations on the basis that each station takes the colour of the quadrilateral from which its channel was obtained and not of that in which it is actually sited. Channel 21 is considered always to be situated at the Western apex of each quadrilateral.

4. Lists are being prepared for each channel, giving for each station its code (as in the Annexes of Document No. 7), the number of the quadrilateral from which it was considered to have obtained, its channel, and the offset colour assigned. Where any departure from the system described above is made because of special factors, e.g. oversea propagation, an indication of this is given.

Annex: 1

PAGE INTENTIONALLY LEFT BLANK

PAGE LAISSEE EN BLANC INTENTIONNELLEMENT

A N N E X E - A N N E X - A N E X O

Canal 21 (Exemple) Channel 21 (Example) Canal 21 (Ejemplo)					
Numéro du quadrilatère Quadrilateral number Número del cuadrilátero	N° de code de la station Station code Código de la estación	Rouge Red Rojo	Vert Green Verde	Noir Black Negro	Hors norme Non standard Sin norma
29					
30					
31					
32	D 019	x			
33	G 055	x			x
34	G 018			x	
35	G 009		x		
36					
37	G 043	x			x
38					
39	IRL 012	x			x
40	G 068		x		x
41	G 011			x	x
42	HOL 007	x			
43					
44	D 003			x	
	D 002		x		
	D 096	x			
45	D 026				
46				x	
47	G 013		x		
48	F 003	x			
49	LUX 002		x		
50					
51					
Etc.					

Document No. DT 33-E
14 June, 1961
Original: French

COMMITTEE 5

FIRST REPORT BY WORKING GROUP 5A

Working Group 5A was instructed to examine the frequency assignment lists for Bands I, II, and III submitted by Belgium, Spain, Ireland, France, Luxembourg, Morocco, Monaco, the Netherlands, Portugal, Switzerland, the United Kingdom and the Overseas Territories for which the Government of the United Kingdom of Great Britain and Northern Ireland are responsible (for Gibraltar).

This first report concerns television stations in Bands I and III only.

In accordance with instructions received, the Working Group restricted itself to consideration of stations with an e.r.p. of 1 kW at least. It is to be deplored that this decision was not taken as soon as the working party was set up, since it would have meant that most of the delegates taking part in the working party's activities would not have been obliged, in the very short time available, to consider numerous requirements relating to low-powered stations.

The following statement has been received in English:

"The Delegation of the United Kingdom Overseas Territories has accepted, subject to confirmation, when the amended tabulation has been issued by the I.F.R.B., the stations with a power of 1 kW or more agreed by the Sub-Group for South West Europe, for inclusion in the new Plan.

" The Delegation has pointed out that the effect of the exclusion of all stations below 1 kW is that the total requirement, although it still exists, as submitted to the Conference, of at least one delegation, will be excluded from the Plan."

Band 1

No special comment.

Band III

Morocco has made the following reservation about the characteristics of transmissions by the Spanish station Sierra de Luna:

"The Moroccan Administration makes a reservation about the political and economic implications of the installation of a television station in the immediate neighbourhood of Moroccan territory at Sierra Luna.

" In accordance with No. 423 of the Geneva Radio Regulations (1959), Article 7, the Moroccan Administration invites the Spanish Administration to arrange for the e.r.p. to be reduced to whatever is necessary to provide coverage within the frontiers of Spain."

Spain has made the following reservation about Tetuan (Morocco), entered in the list drawn up by the Working Group:

"The Delegation of Spain has been unable to reach an agreement with the Delegation of Morocco at meetings of the Working Party about the transmitter to be set up at Tetuan (Band III), because of the interference this station is likely to cause in Southern Spain. Hence the Administration of Spain reserves its right to take action to ensure television services in this area, which includes Ceuta and Melilla, for which a frequency usage reservation appears in Chapter II of the Final Protocol to the European Broadcasting Agreement (Stockholm, 1952).

" The Administration of Spain is ready to undertake technical inquiries in conjunction with the Moroccan Administration, with a view to reaching an acceptable solution."

The French representative questioned the validity of the frequency assignment requirements submitted by Spain for two television stations in Andorra, but the Working Group

felt unable to deal with such questions of principle, and examined the requirements in question with an eye only to the technical problems involved.

Requirements for television assignments in the band 216-230 Mc/s:

a) The Dutch and Belgian representatives said they could agree to the operation of a television station in that band only subject to notes 297 and 302 of the Radio Regulations.

b) The Working Group however, considered (the French representative alone dissenting) that a plan could be drawn up in the band 216-223 Mc/s, provided it was made clear which stations were not in accordance with note 297, and provided it was indicated that those stations could begin working only when the band in question was no longer used for aeronautical radionavigation purposes.

The representative of France felt that such a plan should be drawn up in the countries using the band for aeronautical radionavigation only when the band could be occupied without restriction by broadcasting. His views were shared by no one else. Accordingly, he said that his Administration reserved the right to begin operating high-powered stations at any point in French territory when the band was no longer occupied for aeronautical radionavigation purposes.

c) The representative of the Netherlands said that his Administration maintained the reservation appearing in the Stockholm Plan (1952) Article 3, paragraph 2), about the Belgian station Anlier.

d) Stations planned in Switzerland between 216 and 230 Mc/s:

- the French Administration would have to be informed beforehand about the date on which the station at BASEL would begin operations;

- None of the other Swiss stations would begin operating unless the Administrations of the countries concerned had been informed beforehand about their characteristics and until any necessary tests had been performed. -

Marie HUET

Chairman, Working Group 5A

Document No. DT 34-E (Rev)
14 June, 1961
Original : English

COMMITTEE 3

SUPPLEMENTARY AGREEMENT BETWEEN THE SWEDISH ADMINISTRATION AND THE SECRETARY-GENERAL OF THE INTERNATIONAL TELECOMMUNICATION UNION

relating to the use of electronic computers by the European VHF/UHF Broadcasting Conference, Stockholm, 1961 (hereinafter referred as "the Conference").

In accordance with Resolution No.83 (amended) of the Administrative Council of the Union, concerning the organization, financing and liquidation of the accounts of conferences and meetings of the Union, the Swedish Administration and the Secretary-General of the International Telecommunication Union have concluded the following Supplementary Agreement on the conditions under which electronic computers and peripheral equipment or other necessary installations or services related thereto shall be made available to the Conference.

A. Definitions

Computer : Electronic computers of the FACIT EDB type, equipped with an immediate access store of 2048 whole words, with input equipment able to read punched paper tape and with output equipment able to punch paper tape.

Services : Services supplied by staff employed by the proprietor of the computer.

B. General provisions

1. Premises

One office and a room where punching and copying equipment reserved for use on Conference computations will be

installed shall be made available at the Swedish Board for Computing Machinery to the staff associated with the use of the computer for the work of the Conference.

2. Computers

a) Most of the initial use of the computers shall take place at the Swedish Board for Computing Machinery.

b) It is expressly laid down that more than one computer can be used at the same time.

c) Should there be a failure in a computer during the hours when it is normally available to the Conference the Swedish Administration will do its utmost to ensure that an alternative be placed at the disposal thereof. This does not however apply to additional facilities.

3. Code copying and punching devices

Two BESK code copying and punching devices shall be provided for the duration of the Conference.

4. Teleprinters

a) Four teleprinters (not connected to the Telex network) shall be provided for the duration of the Conference.

b) Should this equipment prove incapable of furnishing results at a rate commensurable with the output of the computers the Swedish Administration will do its utmost to make a further number of teleprinters available.

C. Technical standards

1. Computers

The computers as well as their input and output equipment shall be in faultless condition.

2. Teleprinters

Teleprinters used for the printing out of results should be equipped to print an original and several carbon copies with a minimum of supervision.

D. Availability

1. The Swedish Administration shall take steps to ensure that until June 22, 1961, the premises and equipment mentioned under B afore, are available to the Conference and that computing time is available subject to booking by an authorized official.

a) at the Swedish Board for Computing Machinery between 0001 hrs and 0700 hrs local time, Tuesdays to Saturdays inclusive, subject to booking by an authorized official not later than 1500 hrs on the previous day;

b) at Facit Electronics Company between 1700 hrs and 2359 hrs local time Mondays to Saturdays inclusive; subject to booking by an authorized official not later than 1500 hrs on the same day;

c) if necessary, at other times subject to prior booking with the respective organizations.

2. unrequired bookings shall be cancelled at least one hour before the beginning of the time booked.

E. Financial conditions

1. Computers

a) Machine time shall be counted from the moment the computer is occupied until computation is definitely broken off by the person in charge of the computation run.

b) Such machine time shall be charged to the Conference at the rate of 480 Swedish Crowns per hour.

c) If the machinery does not function satisfactorily during a certain time of use, the same length of time shall be allowed for correcting purposes free of charge.

2. Code copying and punching devices and teleprinters

The equipment referred to in Section B paragraphs 3 and 4 a) above shall be made available for the duration of the Conference for the sums of 1,200 Swedish Crowns and 3,180 Swedish Crowns respectively, chargeable to the Conference.

3. Services

a) Services provided for punching input tapes shall be charged to the Conference at the rate of 15 Swedish Crowns per hour.

b) Services provided for conversion of output tapes to printed form shall also be charged to the Conference at the rate of 15 Swedish Crowns per hour.

4. Contract numbers

The following contract numbers are allocated:

N°. 0878 for work done at the Swedish Board for Computing Machinery and N° 11351 for work done on computers installed in computing centres belonging to Facit Electronics Company.

5. Detailed statements of time and work involved in respect of work chargeable to the contract numbers mentioned under E 4. above, as well as of costs for equipment, shall be submitted to the Conference by the Swedish Administration.

F. Publicity

Facit Electronics Company and the Swedish Board for Computing Machinery are authorized to use this application of a computer - immaterial of the location or ownership thereof - in their publicity, on condition that it may not be construed therefrom that the FACIT EDB computer was selected for this work in view of its features or facilities.

Done at Stockholm
15th June, 1961

For the Swedish Administration:

Erik ESPING

For the Secretary-General of the Union:

Clifford STEAD

Document No. DT 34-E
14 June, 1961
Original : English

COMMITTEE 3

SUPPLEMENTARY AGREEMENT BETWEEN THE SWEDISH ADMINISTRATION AND THE SECRETARY-GENERAL OF THE INTERNATIONAL TELECOMMUNICATION UNION

relating to the use of electronic computers by the European VHF/UHF Broadcasting Conference, Stockholm, 1961 (hereinafter referred as "the Conference").

In accordance with Resolution No.83 (amended) of the Administrative Council of the Union, concerning the organization, financing and liquidation of the accounts of conferences and meetings of the Union, the Swedish Administration and the Secretary-General of the International Telecommunication Union have concluded the following Supplementary Agreement on the conditions under which electronic computers and peripheral equipment or other necessary installations or services related thereto shall be made available to the Conference.

A. Definitions

Computer : Electronic computers of the FACIT EDB type, equipped with an immediate access store of 2048 whole words, with input equipment able to read punched paper tape and with output equipment able to punch paper tape.

Services : Services supplied by staff employed by the proprietor of the computer.

B. General provisions

1. Premises

One office and a room where punching and copying equipment reserved for use on Conference computations will be

installed shall be made available at the Swedish Board for Computing Machinery to the staff associated with the use of the computer for the work of the Conference.

2. Computers

a) Most of the initial use of the computers shall take place at the Swedish Board for Computing Machinery.

b) It is expressly laid down that more than one computer can be used at the same time.

c) Should there be a failure in a computer during the hours when it is normally available to the Conference the Swedish Administration will do its utmost to ensure that an alternative be placed at the disposal thereof. This does not however apply to facilities.

3. Code copying and punching devices

Two BESK code copying and punching devices shall be provided for the duration of the Conference.

4. Teleprinters

a) Four teleprinters (not connected to the Telex network) shall be provided for the duration of the Conference.

b) Should this equipment prove incapable of furnishing results at a rate commensurable with the output of the computers the Swedish Administration will do its utmost to make a further number of teleprinters available.

C. Technical standards

1. Computers

The computers as well as their input and output equipment shall be in faultless condition.

2. Teleprinters

Teleprinters used for the printing out of results should be equipped to print an original and several carbon copies with a minimum of supervision.

D. Availability

The Swedish Administration ~~shall take~~ steps to ensure that until June 22nd, 1961, the premises and equipment mentioned under B above are available to the Conference and that computing time is available subject to booking by an authorized official

a) at the Swedish Board for Computing Machinery between 0001 hrs and 0700 hrs local time, Tuesdays to Saturdays inclusive;

b) at Atvidaberg Co. between 1700 hrs and 2400 hrs local time Mondays to Saturdays inclusive;

c) if necessary, at other times subject to prior booking with the respective organizations.

E. Financial conditions

1. Computers

a) Machine time shall be counted from the moment the computer is occupied until computation is definitely broken off by the person in charge of the computation time.

b) Such machine time shall be charged to the Conference at the rate of 480 Swedish Crowns per hour.

c) If the machinery does not function satisfactorily during a certain time of use, the same length of time shall be allowed for correcting purposes free of charge.

2. Code copying and punching devices and teleprinters

The equipment referred to in Section B paras 3 and 4 a) above shall be made available for the duration of the Conference for the sums of 1,200 Swedish Crowns and 3,180 Swedish Crowns respectively, chargeable to the Conference.

3. Services

a) Services provided for punching input tapes shall be charged to the Conference at the rate of 15 Swedish crowns per hour.

b) Services provided for conversion of output tapes to printed form shall also be charged to the Conference at the rate of 15 Swedish crowns per hour.

4. Contract numbers

The following contract numbers are allocated :

No. 0878 for work done at the Swedish Board for Computing Machinery and

No. 11351 for work done on computers installed in computing centres belonging to Åtvidaberg AB.

5. Detailed statements of time and work involved in respect of work chargeable to the contract numbers mentioned under E 4. above, as well as of costs for equipment, shall be submitted to the Conference by the Swedish Administration.

F. Publicity

Åtvidaberg AB and the Swedish Board for Computing Machinery are authorized to use this application of a computer - immaterial of the location or ownership thereof - in their publicity, on condition that it may not be construed therefrom that the FACIT EDB computer was selected for this work in view of its features or facilities.

Done at Stockholm
15th June, 1961

For the Swedish Administration :

Hakan STERKY

For the Secretary-General of the Union :

Clifford STEAD

Document No. DT 35-E
14 June, 1961
Original : French

COMMITTEE 6

DRAFT REPORT BY COMMITTEE 6
(First Part)

1. Terms of reference

Our Committee was called upon to draft the agreements and associated plans for UHF broadcasting in the European Broadcasting Area. However, after talks with the chairmen of the committees concerned, it was decided that there should be but one agreement, covering the entire frequency range, and that a special working party should be set up to consider the matter.

2. Bands for consideration in planning

The UHF band allocated to broadcasting, either for exclusive use or sharing with other services, ranges from 470 to 960 Mc/s. But a large majority of countries have said that they intend to use no more than the band 470-790 Mc/s for broadcasting. It was decided that general planning should extend up to 790 Mc/s, but that allowance should be made, too, for the requirements of the countries not satisfied with that limit. But nothing was decided about the submission and status of the allocations in this band.

3. Use of shared bands

3.1 Radio Astronomy

The Committee made a thorough study of the requirements submitted by Dr. Sterky and Dr. Smith-Rose on behalf of I.U.C.A.F. (a body dealing with the allocation of frequencies for radio astronomy and space research). These concerned the protection of channel 38, from 606 to 614 Mc/s, jointly used by radio astronomy and broadcasting, and protection of the band 1400 to 1427 Mc/s, allocated to radio astronomy, but liable to suffer interference from the harmonics of channels 21, 50, and 51.

Channel 38 : certain countries are resolved on its integral protection. Other countries are ready to do so too, provided a general agreement can be obtained to this effect. But some countries cannot entirely forego use of this channel; they are, however, willing to use it only for low-powered transmitters.

It would be well, the Committee considers, to have more accurate data to hand in connection with the requisite protection between sources of interference likly to hamper radio astronomy. In the meantime, it urges countries to do all in their power (in accordance with the Radio Regulations) to protect radio astronomy in channel 38, and trusts they will take steps to reduce harmonics from channels 21, 50, and 51, to a minimum. Annex 1 hereinafter provides information about radio astronomy centres, existing or planned, in so far as these have been brought to the attention of the Conference, for the benefit of the countries which, while using channel 38, want to protect these stations as far as they can.

3.2 Radio navigation

Both broadcasting and radio navigation are permitted in the Band 582 to 606 Mc/s (channels 35, 36, and 37) and requirements vary from country to country. Hence the Committee endeavoured to reach an agreement whereby interference between the two might be avoided. No very definite agreement was reached, but Annex 2 herinafter (Working Document No. 9 revised) gives an idea of how, after lengthy debate, some measure of agreement was reached, with a view to avoiding interference between broadcasting and radio navigation.

3.3 Port radar equipment

The Committee felt that broadcasting, as defined in the Geneva Radio Regulations (1959) was not quite the same thing as the process whereby pictures are transmitted by port radar equipment to ships in coastal waters. Hence it will be for individual countries to make provision for this service, where it exists, within the limits of the Radio Regulations.

4. Theoretical latties

The Committee considered that for preparation of a frequency allocation plan in Bands IV and V, the general use of a theoretical lattice presented very great advantages. Since the member countries of I.B.T.O. had already produced a plan, based on a lattice adapted to the requirements peculiar to their part of the world, a special working party, under Mr. Maarleveld (Netherlands) was given the following terms of reference:

a) to draft a recommendation for Committee 6, showing what would be the best lattice for the E.B.U. countries, and to consider whether it could be adapted to I.B.T.O. requirements:

b) to consider the problem of transition between the E.B.U. and I.B.T.O. latties:

The report by the special working party (Working Document No. 4) was adopted by the Committee; it appears as Annex 3 hereinafter.

Annex 4 shows the theoretical lattice proposed by the I.B.T.O. and used by the I.B.T.O. member countries for their planning (Annex to Addendum 3 to Document No. 4).

Annex 5 shows the theoretical lattice No. 3 proposed by E.B.U. and adopted as a basis for planning in countries in the European Area outside the I.B.T.O. and by Finland (Annex to Document No.DT 21).

5. Adaption of the theoretical lattice to the transmitter density

In order to apply the theoretical lattice agreed on by the Committee it remained to fix the dimensions and position of the quadrilaterals to which the theoretical lattice will apply on the map of the European Broadcasting Area, with the exception of the countries which have adopted the I.B.T.O. Plan.

An ad hoc density distribution group, under the chairmanship of Mr. Mohr (F.R. of Germany), was entrusted with this work.

The terms of reference of the ad hoc group, and the results of their work, are given in Annexes 6,7,8 and 9 to this report. Annex 7 is the map of Europe with the distribution of the quadrilaterals in the E.B.U. countries. Annex 9 contains technical information which may be used as a basis for planning and details of the channels which will be used or not by the various countries and of the restrictions envisaged when they are used.

Chairman:

W. KLEIN

Annexes: 9

PAGE INTENTIONALLY LEFT BLANK

PAGE LAISSEE EN BLANC INTENTIONNELLEMENT

A N N E X 1

RADIOASTRONOMY STATIONS IN THE EUROPEAN AREA

Institute and/or site	Coordinates		Height above sea level	Frequency range
	Latitude	Longitude		
Humain Observatory Province of Luxembourg	50°32'N	05°13'E		610 ±4 Mc/s
Manchester University Jodrell Bank	53°14'12"N	02°18'24"W		610 ±4 Mc/s
Cambridge	52°12'N	0°12'E		606-614 Mc/s
Defford	52°10'N	02°20'W		606-614 Mc/s
Bracknell (projected)	51°30'N	0°45'W		606-614 Mc/s
Universitätssternwarte Bonn (Stocker)	50°36'N	06°42'E	435	606-614 Mc/s
Universitätssternwarte Kiel	54°20'32"N	10°7'20"E	338	606-614 Mc/s
Aussenstelle Weissenau	47°46'N	09°35'E	445	606-614 Mc/s
Frauenhofer Institut Freiburg-Schauinsland	47°54'51"N	07°54'21"E	1240	606-614 Mc/s
PTZ Funkwetterbeobachtungsstelle Detmold	51°40'N	08°56'E	408	606-614 Mc/s

PAGE INTENTIONALLY LEFT BLANK

PAGE LAISSEE EN BLANC INTENTIONNELLEMENT

A N N E X 2

USE OF THE SHARED BANDS FOR BROADCASTING AND RADIONAVIGATION

Committee 6 informs the Working Groups concerned with the planning of the band 582-606 Mc/s allocated to two primary services (broadcasting and radionavigation) that, in those areas in which there may be a possibility of mutual interference between the two services, the three 8 Mc/s channels in the band should be planned as follows:

Channel 35 - Broadcasting stations with primary status.

Channel 36 - Radionavigation stations with primary status.

Channel 37 - Low power radionavigation stations, which cannot be accommodated in Channel 36, and broadcasting stations and as far as practicable only low power stations, with equal status and on a planned basis.

In other parts of Bands IV and V which, in accordance with the radio regulations, are also shared between the broadcasting and radionavigation services with equal status, the Working Groups, when establishing the frequency-plans in these bands, should take this sharing into account, and frequency assignments should be planned on the basis of mutual agreements between the administrations concerned.

PAGE INTENTIONALLY LEFT BLANK

PAGE LAISSEE EN BLANC INTENTIONNELLEMENT

ANNEX 3

REPORT AND PROPOSALS OF THE AD HOC GROUP OF COMMITTEE 6

1. The Ad Hoc Group had one meeting and according to the terms of reference discussed the following questions :

a) The establishment of a theoretical channel distribution network for the countries of the European Broadcasting Area not belonging to the I.B.T.O.;

b) The adaptation of this theoretical network to the I.B.T.O. lattice, as proposed by Poland (Document No. 4, Addendum No. 3).

2. First of all the possibility was discussed to accept the I.B.T.O. lattice for the whole European Area. After some discussion it became clear that it wasnot possible for several reasons, the most important being :

a) The protection for oscillator radiation (Channel number difference 5) is insufficient.

b) The channel number difference between co-sited channels is 17 which is too high compared with the difference of 2, 3 or 6 as proposed by other countries.

After comparison of the I.B.T.O. lattice with the channel distribution given in figure 3 of the E.B.U. proposal (Document No. 4, Addendum No. 1), the experts of the countries outside the I.B.T.O. present at the meeting were of the opinion that the lattice of figure 3 was very suitable as a basis for the planning.

An advantage of this lattice is that it is also suitable for a lower number of channels (see Document No. 4, Addendum No. 2) without losing the advantageous properties.

The experts from France indicated that the lattice of figure 3 was also acceptable for France as the lattice proposed by France (Document No. 4, Addendum No. 4) with some minor modifications could be derived from this lattice.

The delegate of the United Kingdom of Great Britain and Northern Ireland also expressed the opinion that the requirements of the United Kingdom would not be too difficult to fulfil if the lattice of Figure 3 formed a basis for the planning on the Continent.

3. As to the second term of reference none of the experts present saw a possibility of adapting the two lattices to each other theoretically.

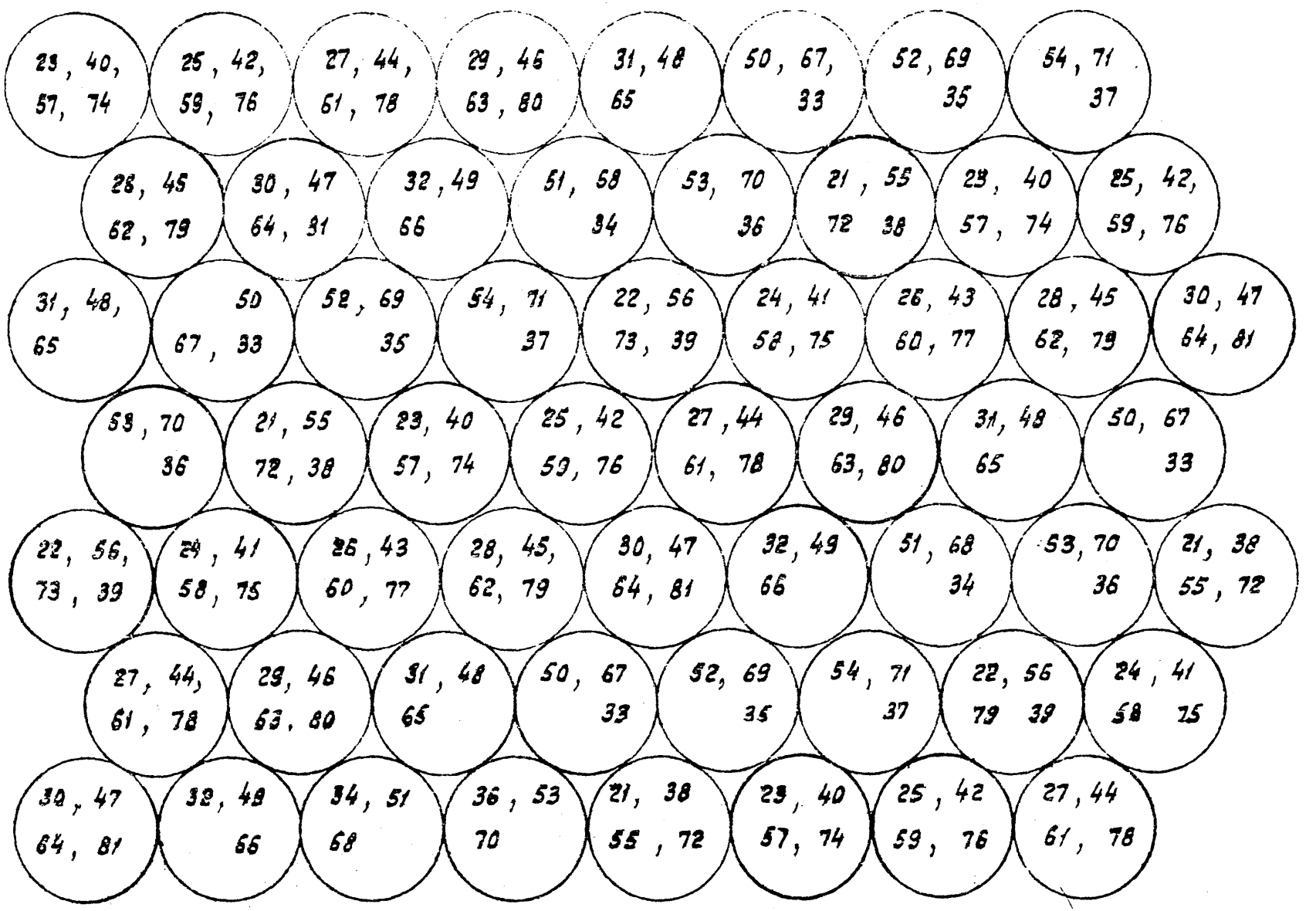
The conclusion was that this adaptation had to be done in working out the practical planning. It was pointed out by a few experts that this would lead to certain sacrifices on both sides of the border line between the two lattices, although it was not yet clear how serious the sacrifices would have to be.

F. MAARLEVELD
Chairman, Ad Hoc Group

Réseau théorique de répartition des fréquences entre les émetteurs de télévision dans les bandes IV et V, dans les pays utilisant les normes de l'Organisation internationale de radiodiffusion et des télévision.

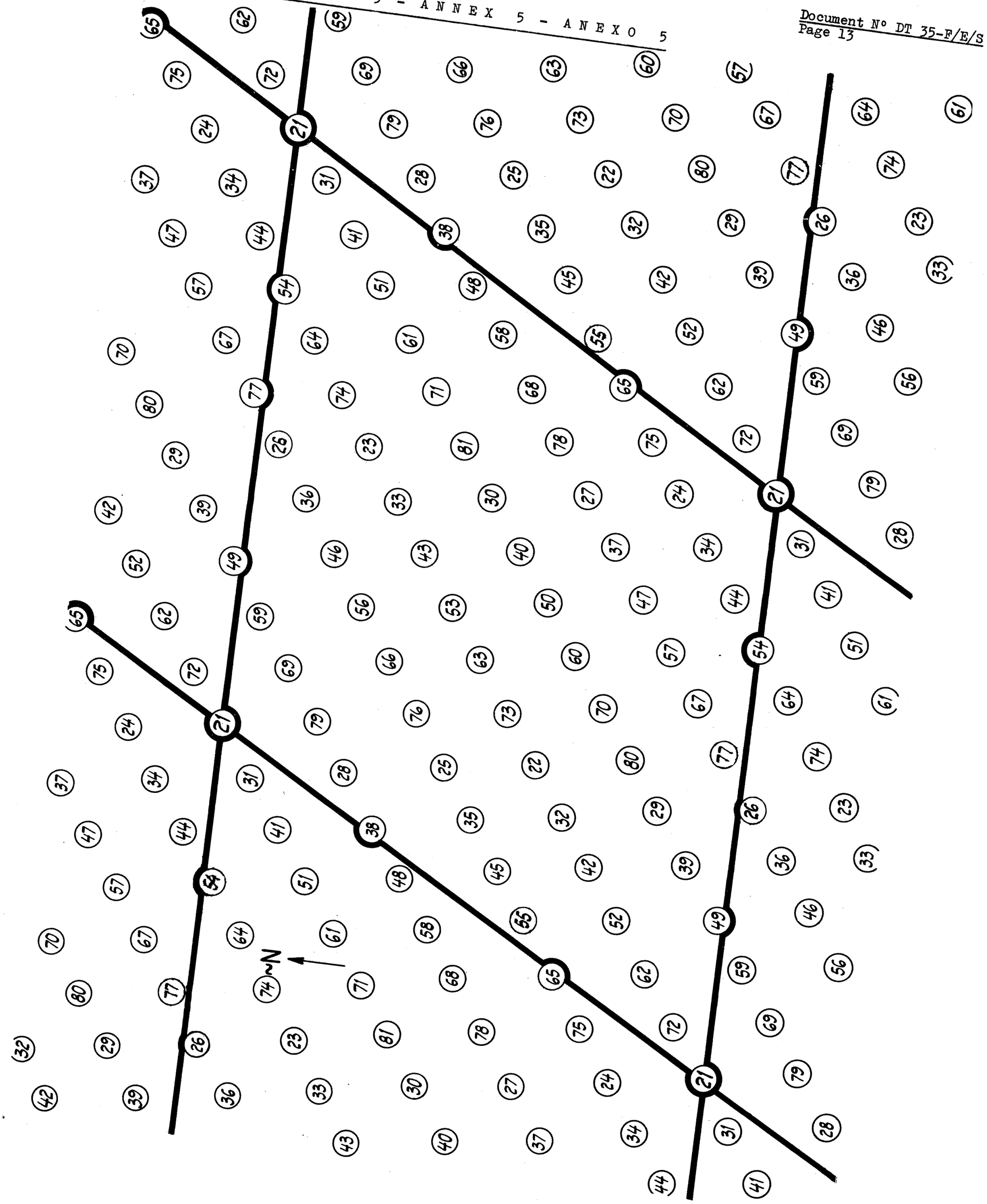
Theoretical Pattern for Apportionment of frequencies between television transmitters in Bands IV and V in countries using the International Broadcasting and Television Organization standard.

Distribución teórica tipo para la repartición de frecuencias entre transmisores de televisión en las Bandas IV y V, en los países que usan la norma de la Organización Internacional de Radiodifusión y Televisión.



PAGE INTENTIONALLY LEFT BLANK

PAGE LAISSEE EN BLANC INTENTIONNELLEMENT


N

PAGE INTENTIONALLY LEFT BLANK

PAGE LAISSEE EN BLANC INTENTIONNELLEMENT

A N N E X 6

REPORT BY THE AD HOC GROUP OF COMMITTEE 6 FOR "DENSITY ADAPTATION"

1. This Group had the following terms of reference :

To subdivide those parts of the European Broadcasting Area which do not belong to the I.B.T.O. member countries (also including Finland) into quadrilaterals following the method of "density adaptation" taking into account

a) the general agreement of the administrations concerned to plan on the broad basis of the theoretical lattice No. 3 of Document No. 4;

b) the omission of transmitters of effective radiated power less than 10 kW for this purpose;

c) the desirability of allowing a margin of about 20 % between the number of transmitters and the number of channels available in any particular area.

2. The Group has held 4 meetings and a working sub-group was set up, consisting of Messrs. Goussot (France), Swann (United Kingdom), Berndts (F.R. of Germany), Apothéloz (Switzerland) and Gressmann (E.B.U.) to make a draft application of the method taking into account information available in the Annexes of Document No. 7 and concerning portions of some member countries of the E.B.U.

3. The map presented as Annex 7 shows the result of applying the method of "density adaptation" using lattice No. 3 of Document No. 4 with the orientation shown in that document. In making the adaptation, all pertinent factors, e.g. transmitter density, topography, oversea propagation etc. were taken into account objectively as fully as possible in the limited time available. Some modifications may well prove desirable when detailed calculations are made during actual planning.

Annex 8 gives some information regarding the method used and technical information given in Annex 9 formed the basis of the work.

U. MOHR
Chairman

Annexes : 3

PAGE INTENTIONALLY LEFT BLANK

PAGE LAISSEE EN BLANC INTENTIONNELLEMENT

EUROPEAN BROADCASTING AREA

Les lignes pointillées sur cette carte sont destinées à délimiter des zones administratives par rapport aux stations de radiodiffusion; elles ne représentent pas nécessairement des frontières internationales reconnues.

The dotted lines on this map are intended to demarcate administrative areas as far as broadcasting stations are concerned and do not necessarily represent recognized international frontiers.

Las líneas de puntos sirven para demarcar zonas administrativas en cuanto respecta a estaciones de radiodifusión y no corresponden necesariamente a fronteras internacionales reconocidas.

0 100 200 300 400 500 km

Annexe au
Annex to } Doc. 97
Anexo al

PAGE INTENTIONALLY LEFT BLANK

PAGE LAISSEE EN BLANC INTENTIONNELLEMENT

A N N E X 8

CHANNEL ASSIGNMENT WITH THE AID OF THEORETICAL LATTICES

1. A fundamental relationship exists between the following three factors involved in channel assignment and should always be borne in mind.

When C = number of channels available

d = distance between transmitters covering adjacent areas (corresponds to transmitter density)

D = distance between transmitters working on the same channel

then $D = d\sqrt{C}$

This relationship is rigorously true for a network of transmitters with equal E.R.P., equal transmitting aerial height and operating in an area with even and homogeneous terrain. However, the relationship remains true in a general way for a practical transmitter network where the E.R.P., aerial height and topographical characteristics show considerable variation.

2. It is necessary, in designing a network, either to choose, for a given network, the most favourable from the given number of possible channel distributions or to determine the most favourable network for a given channel distribution, i.e. to fix the length of the sides of the quadrilateral. The most favourable solution in both cases is that with which the largest number of transmitters can be obtained without contravening the minimum separation requirements. Density adaptation is performed by drawing on a map, showing all the transmitter sites, a network of lines such that the whole area is covered by quadrilaterals, each of which contains a maximum of C transmitters.

Because of differences in transmitter density, which may vary considerably from region to region, it is not possible in practice to draw the lines so that this maximum of C transmitters is attained in each quadrilateral; in some cases, the number of transmitters in a quadrilateral may even be considerably less than the total number of channels available. In practice, in order to obtain the flexibility

needed in actual channel assignment work, it is in fact desirable to draw the quadrilaterals so that there is a margin of about 20 % between the total number of channels and the number of transmitters.

Once quadrilaterals arrived at in the way described above have been drawn on the map, each transmitter in each quadrilateral is assigned a channel so that the pattern of channel distribution within the quadrilateral follows as closely as possible that of the theoretical lattice used. The orientation of the theoretical lattice with respect to the quadrilaterals must, of course, be the same throughout the area being planned. Using this method, it is possible to find, with the minimum delay, optimum channel distributions for real networks with numerous additional requirements, as are found in an actual frequency plan.

ANNEX 9

Country	Usable frequency band		Number of channels	Separation of Channels at the same site	Undesirable Separation of channels
	Mc/s	Channel No.			
1	2a	2b	3	4	5
AUT	470 - 598, 606 - 790	21 - 36 38 - 60	39	3, 6	
BEL	470 - 582, 614 - 860	21 - 34, 39 - 69	45	3, 6	
CYP	470 - 582, 606 - 790	21 - 34, 38 - 60	37		
CVA	470 - 582, 606 - 790, 806 - 830	21 - 34, 38 - 60, 63 - 65	41		1, 4, 5, 6, 9, 11
DNK	470 - 582 606 - 790	21 - 34 38 - 60	37	3, 6	
E	470 - 960	21 - 81	61		
FNL	470 - 960	21 - 81	61		
F [1]	470 - 860	21 - 69	49	3, 6	
GRC [2]	470 - 790	21 - 60	40	3	
IRQ		No information			
IRL	470 - 582, 606 - 790 (860)	21 - 34, 38 - 60 (69)	37 (46)		
ISL		No information			
ISR	470 - 582, 606 - 718	21 - 34, 38 - 51	38	6	
I	470 - 582, 606 - 790, 806 - 830	21 - 34, 38 - 60, 63 - 65	40		1, 4, 5, 6, 9, 11

See notes page 23.

1	2a	2b	3	4	5
JOR		No information			
LBN	470 - 960	21 - 81	61	6	
LBY	470 - 790	21 - 60	40	3	
LUX	470 - 582 614 - 790	21 - 34, 39 - 60	36	3 or 6	
MRC		No requirements			
MCO	470 - 790	21 - 60	40	3	
NOR[3]	470 - 598, 614 - 790, 798 - 822	21 - 36, 39 - 60 62 - 64	41	3	
HOL[4]	470 - 790	21 - 60	40	3 or 6	
POR	470 - 606 814 - 790	21 - 35 39 - 60	38		
UAR		No information			
D[5]	470 - 790	21 - 60	40		
YUG	470 - 606, 614 - 960	21 - 37, 39 - 81	80	3	
G	470 - 582, 606 - 854	21 - 34, 38 - 68	45	3	1, 5, 9
S	470 - 582 590 - 598 598 - 606 614 - 902	21 - 34[7] 36 37[8] 39 - 74	52	3, 10	
SUI[9]	470 - 790	21 - 60	40	2,3,6,7,8	
GIB	470 - 582, 606 - 854	21 - 34 38 - 68	45	2	
MLT	470 - 582, 606 - 854	21 - 34 38 - 68	45		
TUN		No information			
TUR	470 - 560 568 - 790	21 - 35 37 - 60	39	3, 6	

See notes page 23.

Notes:

1) In France channels Nos. 36 and 38 will not be assigned to high power stations with extensive coverages.

2) Channels Nos. 57 and 60 for two transmitters at Kefalima, channel No. 58 for a transmitter at Pilion. and channels Nos. 49 and 52 for two transmitters at Vitsi are preferred.

3) Channels Nos. 56-58, 60 in the south and west part of Norway preferred; Nos. 60 to 64 should not be assigned to high power stations.

4) s. Corrig. No. 1 to Add. 19, Document No. 7.

5) One channel in the band 582 - 606 Mc/s for radionavigation.

6) In the United Kingdom of Great Britain and Northern Ireland channel No. 38 will not be assigned to high-powered stations.

7) Channel No. 35 for radionavigation.

8) Channel No. 38 exclusively for radioastronomy.

9) In Switzerland at least one of the channels Nos. 35, 36 and 37 will not be assigned to stations with an extensive coverage.
Channel No. 38 will not for the time being be used at all for broadcasting.

Document No. DT 36-E
14 June, 1961
Original : English/
French

COMMITTEE 5

SECOND REPORT BY WORKING GROUP 5B

Working Group 5B held its tenth and last meeting on 14 June, 1961.

It considered the attached telegram from Jordan, showing the requirements of the Jordanian Administration.

These requirements are not complete, and are partly in a band which Committee 5 decided not to include in the new Stockholm Plan. Hence the Working Group, with the agreement of the Committee's Chairman, asked the Chairman of the Conference to send the attached telegram to Jordan.

Working Group 5B asks Committee 5 to take a decision on this point as soon as the information requested from Jordan has been received.

The Working Group has supplied the Conference Secretariat with the files containing the frequency assignments in the band 87.5-100 Mc/s, made to the broadcasting transmitters in the following countries :

Austria, People's Republic of Bulgaria, Cyprus, Israel, Vatican City, Greece, Hungarian People's Republic, Italy, Lebanon, United Kingdom of Libya, United Arab Republic, Roumanian People's Republic, Overseas Territories for the International Relations of which the Government of the United Kingdom of Great Britain and Northern Ireland are responsible (Malta), Turkey, the Ukrainian Soviet Socialist Republic, and the Federal People's Republic of Yugoslavia.

Working Group 5B recommends to Committee 5 that the afore-mentioned assignments be included in the Stockholm Plan, 1961.

C. TERZANI
Chairman, Working Group 5B

Annexes : 2

PAGE INTENTIONALLY LEFT BLANK

PAGE LAISSEE EN BLANC INTENTIONNELLEMENT

A N N E X 1

TELEGRAM FROM JORDAN

EUROPEAN BROADCASTING CONFERENCE STOCKHOLM DE GENTEL AMMAN

JORDAN REQUESTS REGISTRATION FOLLOWING TELEVISION CHANNELS EDWARD THREE EDWARD SIX EDWARD SEVEN EDWARD EIGHT EDWARD 10 STOP REGISTER ALSO ONE ZERO THREE AND ONE ZERO FIVE MEGACYCLES FOR SOUND PROGRAMME LINKS ALREADY IN USE

PAGE INTENTIONALLY LEFT BLANK

PAGE LAISSEE EN BLANC INTENTIONNELLEMENT

A N N E X 2

DRAFT URGENT SERVICE TELEGRAM

GENTEL AMMAN

REFERENCE YOUR TELEGRAM CONFERENCE NEEDS FOLLOWING MINIMUM DATA TO BE ABLE TO CONSIDER JORDAN FREQUENCY REQUIREMENTS PRIMO NAME AND GEOGRAPHICAL COORDINATES OF EACH STATION SECUNDO MAXIMUM EFFECTIVE RADIATED POWER OF VISION CARRIER TERTIO AZIMUTH OF MAXIMUM RADIATION QUARTO MAXIMUM EFFECTIVE HEIGHT OF TRANSMITTING ANTENNA QUINTO POLARISATION OF RADIATION STOP AS DRAFT NEW STOCKHOLM PLANS FOR FREQUENCY BANDS CONCERNED ARE ALREADY ESTABLISHED AND BEING FINALISED DURING NEXT FEW DAYS COMMA CANNOT GUARANTEE YOUR REQUIREMENTS RECEIVED IN REPLY TO PRESENT TELEGRAM WILL BE INCLUDED IN FINAL ACTS THIS CONFERENCE STOP HOWEVER IF MINIMUM DATA IS SUPPLIED BY RETURN TELEGRAM EVERYTHING POSSIBLE WILL BE DONE STOP ADDITIONALLY CONFERENCE HAS DECIDED NOT TO INCLUDE ASSIGNMENTS IN BAND ONE HUNDRED TO ONE HUNDRED AND FOUR MC/S IN PLANS TO BE ANNEXED TO NEW STOCKHOLM AGREEMENT STOP REGARDS

ESPING
CHAIRMAN EUROPEAN BROADCASTING CONFERENCE

Document No. DT 37-E
15 June, 1961
Original: French

COMMITTEE 5

REPORT TO COMMITTEE 5
BY WORKING GROUP 5C

Working Group 5C was set up by decision of Committee 5, taken on 30 May, 1961 (Document No. 38), with the following terms of reference :

a) To consider the existing position with regard to VHF broadcasting in that part of the European Broadcasting Area constituted by the countries represented in the Working Group;

b) To make proposals to Committee 5 for such action as might be considered essential, particularly after implementation of the Radio Regulations (Geneva, 1959).

The following countries were represented : The Bielorussian Soviet Socialist Republic, Denmark, Finland, Iceland, Norway, The People's Republic of Poland, The Federal Republic of Germany, Sweden, The Czechoslovak Socialist Republic and The Union of Soviet Socialist Republics.

In accordance with the decision taken by Committee 5, Messrs. Götze and Albrecht also attended.

The planning of television and FM broadcasting stations by the countries represented in the Working Group, as far as the VHF bands were concerned, was discussed in all its aspects, in the course of bilateral talks as well as at formal meetings. The delegations of other countries, too, took part in some of the Working Group's debates.

The plans, corrected as a result of these discussions, were handed in to the Secretariat of the Conference :

12 June, 1961 : for television stations in Bands I, II and III;

14 June, 1961 : for sound broadcasting stations in Bands I and II.

Since the plan for frequency allocation in Band II for the Federal Republic of Germany was submitted only at this Conference, the Delegate of France made the following reservation :

" The French Delegation hereby announces that, having not had time to make a full and thorough study of the problem in all its aspects, it cannot give its agreement to the entry of the frequencies requested by the Federal Republic of Germany in the band 87.5 - 100 Mc/s, except for those already appearing in the 1952 Stockholm Plan.

" But the French Delegation, considering as it does that the technical factors on which the Federal German proposals are based are such as would permit an extension of broadcasting networks (FM), is ready, after the Conference, to seek agreement with a view to the joint organization of FM networks by the two countries."

Mr Götze made the following statement :

" Considering that :

a) the VHF/FM broadcasting plan in the band 87.5-100 Mc/s, submitted by the Federal Republic of Germany, diminishes the values of protection ratios in Central Europe, due to the high density of the network and the use of transmitters with a high effective radiated power;

b) as a result, additional coordination with a number of neighbouring countries will prove to be necessary;

The German Democratic Republic intends

1. to notify additional frequencies for broadcasting stations, taking into account frequencies already agreed upon with neighbouring countries and after previous coordination of those frequencies with neighbouring countries;

2. to participate in coordination work to follow between the Federal Republic of Germany and the neighbouring countries concerned."

The Delegate of the Czechoslovak Socialist Republic made the following reservation :

" In view of the statement made by the French Delegation, to the effect that, after the European Broadcasting Conference (Stockholm, 1961), further coordination of FM broadcasting plans will be required between the Federal Republic of Germany and France in Band II, and with reference, too, to the statement made in connection therewith by the German Democratic Republic, the Czechoslovak Delegation reserves the right, should such coordination affect the protection of Czechoslovak stations in this band, to make such changes in its frequency plans as will ensure that Czechoslovak broadcasting stations in this band will have the protection provided for in the frequency allocation plan adopted at this Conference."

The Working Group unanimously decided that these statements should be included, as footnotes, in the Plan for Band II.

M. JOACHIM
Chairman, Working Group 5C

Document No. DT 38-E
17 June, 1961
Original: French

COMMITTEE 3

DRAFT

REPORT BY THE BUDGET CONTROL COMMITTEE TO THE PLENARY ASSEMBLY

The Budget Control Committee held three meetings (on 31 May, 12 June and 21 June, 1961) and considered the various items of its agenda.

Further to its labours, and in accordance with Rule 5 of Chapter 9 of the General Regulations annexed to the International Telecommunication Convention (Geneva, 1959), the following report is submitted to the plenary meeting for consideration.

1. Organization of the Conference and facilities made available to delegates

The Committee was called upon (see the Convention, No. 572) to assess the organization of the Conference and the facilities available to delegates. They were, the Committee considered, satisfactory and adequate.

2. Agreement between the Swedish Administration and the Secretary-General of the I.T.U. (Document No. 1 and Document No. DT 34/Rev)

The Committee considered, and has no comments to make on, the agreement between the Swedish Administration and the Secretary-General of the I.T.U. for the organization of the Conference and the additional agreement about the use of an electronic computer.

3. The Conference budget (Document No. 8)

The Committee took note of the budget submitted to the Administrative Council and adopted by it at its 16th session.

4. E.B.C. expenditure

According to Rule 5 of Chapter 9 of the General Regulations annexed to the International Telecommunication Convention (Geneva, 1959),

the Committee is expected to provide the plenary meeting with a report showing estimated total expenditure by the end of the conference.

Unhappily, rigorous observance of this clause proved impossible, since the Secretariat was unable to draw up figures for certain items of expenditure. The reason was that most of the expenditure in connection therewith had been incurred by the Swedish Administration, which, in the time available, had been unable to provide an account showing the amounts chargeable to the E.B.C.

Nevertheless, the position now is such that it may be reasonably assumed that total E.B.C. expenditure, including the cost of the regional meeting in Cannes, will not exceed the total in the budget adopted by the Council.

A table showing the position up to 18 June, 1961, as far as the Secretariat is aware of it, is attached.

To reduce the amounts debited as interest, the Committee proposes that the Conference ask the Secretary-General of the I.T.U. to send provisional accounts with all possible speed to the Administrations which will have to share in defraying the costs of the Conference.

5. List of Administrations and agencies expected to share in defraying E.B.C. expenses

The Committee considered to what extent certain recognized private operating agencies represented at the Cannes Meeting should share in defraying the expenses of the Conference, since no recognized private operating agency has been represented at the Conference itself.

It eventually decided that only the 41 Members of the Union belonging to the European Broadcasting Area should share in defraying the costs of the Stockholm Conference, to which costs would be added the cost of the Cannes preparatory meeting, in accordance with Administrative Council Resolution No. 431.

At the Committee's request, telegrams were sent to the three European Broadcasting Area Administrations not represented at this Conference, reminding them that in accordance with the Convention (No. 199), they would nevertheless have to share in defraying expenses (see attachment). No answers have yet been received.

Annex 3 hereinafter shows the countries which will together pay for the Conference.

The four international organizations represented are not required to contribute, in accordance with Administrative Council Resolution No. 222 amended.

Marko Dakić
Chairman, Committee 3

Annexes: 3

PAGE INTENTIONALLY LEFT BLANK

PAGE LAISSEE EN BLANC INTENTIONNELLEMENT

A N N E X 1

E.B.C. EXPENDITURE UP TO 18 JUNE, 1961

This annex will be made up of the table attached to Document No. 118.

PAGE INTENTIONALLY LEFT BLANK

PAGE LAISSEE EN BLANC INTENTIONNELLEMENT

A N N E X 2

Telegram

Telegram sent to the Administrations of :

The PEOPLE'S REPUBLIC OF ALBANIA

The REPUBLIC OF IRAQ

The HASHEMITE KINGDOM OF JORDAN

"REGRET THAT YOUR COUNTRY IS NOT REPRESENTED AT EUROPEAN VHF/UHF BROADCASTING CONFERENCE NOW MEETING IN STOCKHOLM STOP BEG TO REMIND YOU THAT UNDER NO. 199 INTERNATIONAL TELECOMMUNICATION CONVENTION GENEVA 1959 YOU WILL NEVERTHELESS BE CALLED UPON TO CONTRIBUTE TO EXPENSES THEREOF = ESPING CHAIRMAN OF CONFERENCE."

PAGE INTENTIONALLY LEFT BLANK

PAGE LAISSEE EN BLANC INTENTIONNELLEMENT

A N N E X 3

A LIST OF THE COUNTRIES AND ORGANIZATIONS WHICH WILL SHARE IN DEFRAYING E.B.C. EXPENSES

A. Members of the Union	Represented at the E.B.C.	Number of units
People's Republic of Albania		½
Austria	x	1
Belgium	x	4
Bielorussian Soviet Socialst Republic	x	1
People's Republic of Bulgaria	x	1
Republic of Cyprus	x	½
Vatican City State	x	½
Denmark	x	5
Spain	x	3
Finland	x	3
France	x	30
Greece	x	1
Hungarian People's Republic	x	1
Republic of Iraq		1
Ireland	x	3
Iceland	x	½
Israel	x	1
Italy	x	8
Jordan		½
Lebanon	x	½
United Kingdom of Libya	x	½
Luxembourg	x	½
Morocco	x	1
Monaco	x	½
Norway	x	5
Netherlands	x	10
People's Republic of Poland	x	3
Portugal	x	8
United Arab Republic	x	5
Federal Republic of Germany	x	20
Federal People's Republic of Yugoslavia	x	1
Ukrainian Soviet Socialist Republic	x	3
Roumanian People's Republic	x	1
United Kingdom of Great Britain and Northern Ireland	x	30
Sweden	x	10
Switzerland	x	10
Czechoslovak Socialist Republic	x	5
Overseas Territories for the International Relations of which the Government of the United Kingdom of Great Britain and Northern Ireland is responsible	x	1

Tunisia	x	1
Turkey	x	5
Union of Soviet Socialist Republics	x	30

B. International organizations

International Maritime Radio Committee (C.I.R.M.)	x	*)
Inter-Union Committee for the Allocation of Frequencies for Radio Astronomy and Space Research (I.U.C.A.F.)	x	*)
International Broadcasting and Television Organization (I.B.T.O.)	x	*)
European Broadcasting Organization (E.B.U.)	x	*)
		216 $\frac{1}{2}$

*) An international organization exempted from any share in defraying expenses, in accordance with the Convention (Article 15, No. 212) and Administrative Council Resolution No. 222 (amended).

o

Document No. DT 39-E
17 June, 1961
Original : French

COMMITTEE 5

In accordance with a decision taken at the meeting of Heads of Delegation on 16 June, 1961, the following draft resolution is referred to Committee 5 for consideration:

DRAFT RESOLUTION

No. ... The European VHF/UHF Broadcasting Conference, (Stockholm, 1961):

Mindful that:

the plans for the bands between 41 and 230 Mc/s, annexed to the Stockholm Agreement, were drawn up with an eye to a number of stations having and E.R.P. of less than 1 kW;

Resolves:

a) to instruct the International Frequency Registration Board to publish the list (produced by the I.F.R.B. for the 1961 Stockholm Conference) of stations with an E.R.P. of less than 1 kW, as brought up to date by the delegations attending the Stockholm Conference;

b) that the status enjoyed by the assignments appearing in the Stockholm Plan (1961) shall be accorded to those among the assignments shown in the list mentioned in a) above for which no Administration which has signed the Stockholm Agreement (1961) has, within ninety days from the date of publication of the above list, submitted a comment to the Administration concerned (and supplied the I.F.R.B. with a copy of its comment).

M. JOACHIM

Chairman, Committee 5

Document No. DT 40-E
19 June, 1961
Original : English

COMMITTEE 6

WORKING GROUP 6D

REPORT ON "OFFSET"

1. During a meeting of Working Group 6D, a small sub-group was set up under the Chairmanship of Mr. Swann (United Kingdom) with the following terms of reference :

   - To prepare and offset pattern for the countries belonging to the Working Group 6D and to assure the necessary coordination with the other Working Groups.

2. The results of this work have been incorporated in the draft plan of the Working Group 6D which was handed in to the Secretariat of the Conference on 17 June, 1961.

3. A report of the small sub-group on "offsets" is given in an annex. The Working Group 6D fully agrees with the conclusions and recommendations in this report.

4. Particular attention of Committee 6 should be drawn to the following sentence of the report of the Ad Hoc Group :

   - "It is therefore strongly recommended that the offset assigned to stations should be regarded as provisional".

F. MAARLEVELD
Chairman of Working Group 6D

Annex : 1

PAGE INTENTIONALLY LEFT BLANK

PAGE LAISSEE EN BLANC INTENTIONNELLEMENT

A N N E X

REPORT OF "AD HOC" SUB-GROUP ON "OFFSETS"

A small working sub-group, comprising Messrs. Swann (United Kingdom), Haantjes (Netherlands), Berndts (Federal Republic of Germany), assisted by members of other Delegations, was given the task of preparing an offset pattern for the area of Europe of concern to the Group.

This work was commenced as soon as possible when some stability of channel assignments in the area was evident, and completed as quickly as possible in order that the offset pattern should be available by the time computer calculations were issued to Delegations.

Owing to the short time available for this work, and the impossibility of careful checking - essential for work of this kind - errors and omissions were inevitable. Furthermore, as a result of changes to channel assignments made after the work was started and subsequently to its completion, the offset pattern prepared is far from an optimum one for the area.

Additional difficulties occur in the border region containing member countries of the E.B.U. and the I.B.T.O.; a special sub-group consisting of delegates from the countries concerned made a special study of the possibility of integrating the E.B.U. and I.B.T.O. offset patterns. The conclusion reached was that no solution was possible in the time available and that extensive negotiations would be necessary.

It is therefore strongly recommended that the offsets assigned to stations should be regarded as provisional; it was impossible for the "Ad Hoc" sub-group to consider any offset scheme more complex than one using simple 2/3 line frequency offsets, although such more complex arrangements could be used locally to arrive at an optimum solution, and could be agreed between the countries concerned.

It would be impossible, at this stage of the Conference, to reconsider the whole offset pattern, and it is now evident that no definitive offset scheme could be produced until every channel assignment had been agreed. Even then, the preparation of an optimum scheme would be a long and difficult task, calling for negotiation between countries and taking into account topographical factors, coverage requirements in detail, and the use of other than simple 2/3 line frequency offsets.

G. F. SWANN

Document No. DT 41-E
19 June, 1961
Original: English

COMMITTEE 2

SECOND REPORT OF

COMMITTEE 2 WORKING GROUP TO COMMITTEE 2

1. The Working Group proceeded on 14 June and 19 June to examine the credentials submitted in respect of the following Delegations:

Austria, Bielorussian S.S.R., P.R. of Bulgaria, Cyprus, Spain, Finland, Greece, Hungarian P.R., Iceland, State of Israel, Kingdom of Morocco, Norway, Ukrainian S.S.R., Switzerland, Turkey, Union of Soviet Socialist Republics.

2. The credentials in respect of the following Delegations were duly verified, it being noted that full power had been given to sign the Final Acts of the Conference:

Austria, Bielorussian S.S.R., P.R. of Bulgaria, Spain, Finland, Greece, Iceland, Norway, State of Israel, Kingdom of Morocco, Ukrainian S.S.R., Switzerland, Turkey, Union of Soviet Socialist Republics.

3. The credentials of the following Delegation were found to be incomplete, as no powers had been given to sign the Final Acts of the Conference:

Cyprus.

4. The credentials of the Delegation of the Hungarian P.R. were also examined and were found to be in conformity with the requirements of the Convention. A number of members of the Group remarked that they had been given by a Government whose credentials were not formally approved by the United Nations General Assembly.

5. It was noted that credentials had not been presented in respect of the following Delegations:

United Arab Republic and Tunisia.

6. The Secretary of the Conference (Mr. Stead) was requested by the Working Group to draw the attention of the Delegations concerned to the point raised in 3. above.

F. NICOTERA
Chairman, Committee 2 Working Group