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INTERNATIONAL RADIO CONSULTATIVE COMMITTEE
C.C.I.R.

DOCUMENTS
OF
VIIIth PLENARY ASSEMBLY
WARSAW 1956

VOLUME III

MINUTES OF PLENARY MEETINGS.



INTERNATIONAL TELECOMMUNICATION UNION
GENEVA

INTERNATIONAL RADIO CONSULTATIVE COMMITTEE
C.C.I.R.

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OF
VIIIth PLENARY ASSEMBLY
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VOLUME III

MINUTES OF PLENARY MEETINGS



INTERNATIONAL TELECOMMUNICATION UNION
GENEVA

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MINUTES
OF THE INAUGURAL MEETING
OF THE VIIIth PLENARY ASSEMBLY OF THE C.C.I.R.

held on Thursday, 9 August 1956, at 11.15 a.m.
in the Congress Hall of the Palace of Culture and Science

1. OPENING OF THE SESSION

Prof. Dr. Balth. van der Pol, Director of the C.C.I.R., opened the meeting and announced that the Government of the People's Republic of Poland, the host of the VIIIth Plenary Assembly, had appointed Prof. Paweł Szulkin as the Chairman.

(Prolonged applause)

The Chairman thanked the Assembly for the confidence it had placed in him in accepting him as Chairman, and gave his assurance that he would do everything he could to lead the discussions impartially and conscientiously.

(Prolonged applause)

He then gave the floor to the Vice-Chairman of the Council of Ministers of the People's Republic of Poland, Dr. Stephan Jedrychowski.

2. Dr. Stephan Jedrychowski, Vice-Chairman of the Council of Ministers of the People's Republic of Poland, spoke as follows:

"Ladies and Gentlemen,

"On behalf of the Government of the People's Republic of Poland and all the Polish people, I have the honour to extend a welcome to the representatives of the forty countries assembled in Warsaw for the VIIIth Plenary Assembly of the C.C.I.R.

"I should like to remind you on this occasion that in 1936 the C.C.I.T., another organ of the I.T.U., held its Vth Plenary Assembly in Warsaw. The town in which you are now meeting was systematically destroyed by the invaders during the second world war. However, thanks to the peaceful

efforts of the Polish people, Warsaw is coming to life again. It is being rebuilt - a new town, but modelled on the old one. And although you can still see traces of the devastation, even opposite the building where we are meeting, it seems to me that all the rebuilding that has already been done is adequate evidence of our efforts at reconstruction.

"The people of Poland earnestly desire a lasting peace which will enable them to develop their economy, to improve their welfare and to restore their cultural standards. Poland does not want to live in isolation, and she is opposed to autarky in the sphere of economics, culture and science. She is anxious to foster international cooperation in all spheres; she seeks this cooperation unreservedly and without any discrimination whatsoever, with all countries, regardless of their political or social structure, or the colour of their inhabitants. The People's Republic of Poland now enjoys friendly relations with all her neighbours - neighbours with whom, in former times, our country was constantly at loggerheads, and the building in which your Assembly is being held is an appropriate symbol. It is our desire to strengthen these friendly relations with all countries, even with distant countries and especially countries overseas.

"We consider that the international organizations can contribute in a large measure to the development of cooperation and friendship between the different countries, and that they should direct their efforts to that end.

"We attach special importance to the exchange of scientific and technical knowledge. We hope that our country will thereby profit greatly, and that we, for our part, will also make a valuable contribution to progress in science and technique.

"Conscious of the importance of radiocommunications in international cooperation and mutual understanding, we should like to see the splendid technical achievements in this sphere at the exclusive service of these altruistic and peaceful aims.

"Poland has direct radio connections with many countries and will continue to extend her network. We are planning in the near future to establish a network of radio-telephone cables and a television service. The Polish broadcasting service already has well-established traditions in the matter of international cooperation, and in spite of certain difficulties which still exist, it is anxious to develop that cooperation. Polish television is still in its infancy, but we have established a programme to develop it in the years to come.

"The work of the C.C.I.R., which is based on the knowledge and experience of eminent scientists and specialists, and in which more and more countries and organs are taking part, will no doubt be of valuable assistance to us in the realisation of our plans.

"We therefore have many reasons for hoping that the work of the Plenary Assembly in Warsaw will be crowned with success. And may I add one more wish: that all the delegates may feel at home in our town."

(Prolonged applause)

3. Mr. Federowicz, Vice-Chairman of the Municipal Council of Warsaw, then made the following speech:

"Ladies and Gentlemen,

"On behalf of the People's Council of the town of Warsaw and the inhabitants of the capital, I extend a cordial welcome to the delegates to the VIIIth Plenary Assembly of the C.C.I.R.

"Exactly twenty years ago Warsaw received the representatives of another Consultative Committee of the I.T.U. Possibly some of the delegates here at the present time also attended that conference.

"Since then we have been through some difficult times, which were particularly tragic for our town. The trials it underwent during the last war were very severe, for hardly one house was spared. After the liberation it seemed impossible that anyone could bring our capital back to life. But patriotic zeal, and the immense efforts and sacrifices of hundreds of thousands of workers, have achieved this superhuman task. By building new districts, making new roads and providing communal housing, we have tried to fulfil all the conditions necessary to ensure that the inhabitants of this old town, rebuilt once more, should have opportunities for cultural development and a better and healthier life. The plans for building a Warsaw that would be more beautiful than the pre-war Warsaw have not yet been fully completed, as you will see for yourselves when you visit our town.

"However, at this time when we have the pleasure of welcoming you here, I must not recall tragic memories. The people of Warsaw look to the future with confidence, and if they often cast their thoughts into the past it is because their town suffered more during the war than any other town in the world.

"You will be able to judge for yourselves what has been done in Warsaw in the past eleven years.

"We shall do everything we can to help you in your work during this Assembly, and to make your stay in Warsaw as agreeable as possible.

"On behalf of the People's Council of Warsaw may I, in the name of peace and mutual cooperation, wish you every success in your work."

(Prolonged applause)

4. Capt. C.F. Booth, as Head of the delegation of the country in which the C.C.I.R. had been invited to hold its previous Plenary Assembly, spoke in the following terms:

"Ladies and gentlemen, it is my great privilege and pleasure to tender to our hosts the grateful thanks of the many delegations attending the VIIIth Plenary Assembly of the C.C.I.R. for the very pleasing welcome we have just been given and for the excellent arrangements made - both for our wellbeing and our work."

"To the Vice-President of the Council of Ministers of the People's Republic in Poland, to the Deputy Minister of Posts and Telecommunications and to the President of the City Council of Warsaw, and to all our hosts here this morning, I would first offer my regrets that I am unable to speak in Polish - but I know that the spirit of my words will be conveyed to them through our able interpreters."

"You will remember, Ladies and Gentlemen, that we accepted with acclamation the invitation given by our hosts during the London Conference in 1953. Many of us who had been privileged to organise Plenary Meetings of the C.C.I.R. since Stockholm, 1948, realized the immensity of the task our hosts had set themselves - though we had no doubt of the outcome of their labours. That they have been successful I know you will all agree."

"It would appear we are to have a record attendance - there has certainly been a record number of preparatory documents - and the soundness of the organisation is evident from the smooth running of the registration, the hotel arrangements and the excellence of the accommodation provided for our work. This is indeed a beautiful room, and the working rooms give the impression of efficiency and dignity which bodes well for our technical labours."

"In my country we have a saying that 'all work and no play makes Jack a dull boy'. I believe there must be a similar one in Poland, since the programme clearly demonstrates that our hosts appreciate the importance of mixing some relaxation with our work."

The programme of social occasions, both in the City and further afield are extremely welcome to us. We look forward to seeing Warsaw, the ancient City of Cracow and your sea coast, and some of your art.

"As one who comes from a country which has achieved some "notoriety" in respect of its "weather" - I assume our hosts have "arranged" the weather with the same quiet efficiency they have shown in organizing the Conference.

"Becoming more serious for a moment, the C.C.I.R. is an international organisation, it can achieve maximum success only if we all make constructive contributions - both to the studies between Plenary Meetings and to the deliberations at those meetings. Since the Vth Meeting at Stockholm in 1948, the contribution made by C.C.I.R. to the development of radio communications in all its aspects has steadily increased.

"Here we have the opportunity to make a further contribution, and our hosts have laid sound foundation for this by the excellence of their arrangements. It is for us to show our appreciation of their efforts by building on that foundation a series of sound technical recommendations and a good programme - short of non-essentials - for our future labours. If we do this, our hosts will be well repaid for their efforts on our behalf, and we will all be able to look back on a successful VIIIth Plenary Assembly.

"Ladies and Gentlemen, on behalf of all the visiting delegations, I offer our sincere and grateful thanks to our hosts, through the Vice-President of the Council of Ministers, for their very considerable efforts, and for the kindly welcome they have all given us. I would ask you to show your appreciation with acclamation."

(Prolonged applause)

5. The Chairman then gave the floor to Prof. Dr. Balth. van der Pol, Director of the C.C.I.R., who made the following speech :

"Mr. Vice-President of the Council of Ministers of the People's Republic of Poland,

Members of the Cabinet,

Mr. President of the City Council of Warsaw,

Members of Diplomatic Corps,

Ladies and Gentlemen,

"Perhaps I might also be allowed, as Director of the C.C.I.R., to say a few words now that we are assembled here in this very beautiful

building in a town which, after having been completely demolished in the last war, is now rapidly being rebuilt.

"We are now gathered in the centre of the People's Republic of Poland, in its capital Warsaw. I remember visiting this city before the war, and finding as the first sentence in a guide to this capital: "Warsaw is the centre of Europe". This statement induced me to investigate it somewhat closer, and I had a large map of Europe pasted on plywood and carefully sawn out along the coast, so that the wood which was left corresponded to the dry land of Europe. Then I took a needle and tried to balance Europe on one point to find out where the continent should be supported to be in complete balance, or, in other words, to find the centre of gravity of Europe. In fact I found that the statement in the old Warsaw guide was not far wrong, and that the centre of gravity of Europe was only slightly to the South-East of Warsaw. So we might say, in a certain sense, that we are here met together in the very centre of Europe.

"But this fact is obviously not the only distinction of which our Polish friends can boast. We certainly all remember some of their great pioneers. In this building, which is dedicated to culture and science, it is most appropriate to recall some of the very greatest Polish bearers of culture and science.

"In the first place we should mention Nicolas Copernicus, who was born in Torun in 1473, and studied at the famous university of Krakow. He is known, of course, as one of the greatest astronomers of all time; but he not only studied astronomy, he was also a scholar in mathematics, Latin, Greek, Hebrew, philosophy, philology, engineering, finance, geography, history, literature, law and medicine. It is astonishing that he should have been able to meet in Rome the only equivalent figure in history, Leonardo da Vinci.

"His best known work, of course, is his thesis stating that it is not the sun and the planets that revolve round the earth, but that it is the sun that is stationary and the earth and the other planets that revolve round the sun. His fundamental work was published in the year of his death and, according to history, the book containing his revolutionary thoughts, under the title "De revolutionibus orbium coelestium", was put into his hands on his death bed.

"To quote one point, it seems little known that Copernicus introduced into trigonometry the concept of the secant and the cosecant. Broadly speaking it may be said that Copernicus was the precursor of modern mathematical physical science.

"Of course his views on the planetary system were altogether revolutionary in his day, and it certainly simplifies considerably the equations describing planetary motion when one uses his system of coordinates. I will not elaborate more on modern views based on the theory of relativity just now.

"But also in the field of art we should mention a Polish subject whose work will last through the centuries. I am referring to Frédéric François Chopin, who was born in 1809 near Warsaw. Like Mozart he was an infant prodigy and at the age of six he could play on the piano the compositions of his great predecessors. At that tender age he was already improvising at the piano and composing music. His romantic compositions are known all over the world, where his concertos, mazurkas, preludes, nocturnes, waltzes, impromptus, scherzos, fantasies, polonaises and his funeral march are played over and over again. Incidentally, the well known musical expression "polonaise" is derived from Polish dance forms. He died at the early age of 40, leaving an extensive collection of piano works which, among other things, are characterized by the elegance of his melodies and their figurations, and by the distribution of his chords over the keyboard in such a way that this music is always pleasing to the ear. I think that modern theory of sound could explain these pleasing effects which, of course, were originally written down purely intuitively on an empirical basis. As yet, I think, theory is incapable of explaining the elegance of the melodies. It is said of Chopin that he was "The song, the soul of Poland."

"Returning to the field of science we should also mention the great Polish scientist Smoluchowski whose theoretical work on Brownian motion has been fundamental for the later understanding of the wide problems relating to the thermal noise in our modern radio circuits.

"And then we should certainly also mention Madame Marie Curie, who was born in Warsaw in 1867 and who, together with her husband Pierre Curie and Henri Becquerel, obtained the Nobel Prize for physics in 1903 for the discovery of radium. She was also awarded the Nobel Prize for chemistry in 1911, for the discovery of polonium which was called after Poland.

"I need not elaborate here on the enormous consequences this discovery has brought about. It has changed completely the atomic aspect of physics, and is even beginning to change the industrial aspect of the whole world.

"I well remember the great dilemma of physics in my own student days when it was found that radium emitted all the time energy without apparent loss of mass. I also personally recall meeting Madame Curie in the years just after the first world war and can still remember her slight unobtrusive figure in a simple black dress when she came to visit Lorentz while I was working with him in Holland. Lorentz, I know, had a great admiration for her. I would like to quote here Albert Einstein who said: "Madame Curie is, of all the famous people, the only one whom glory has not corrupted."

"I could go on to mention the present outstanding activity of several Polish citizens, e.g. in modern fields of mathematics and physics such as topology, theory of numbers, non-linear oscillations, unified field theory, information theory, eigenfrequencies of cavities ..., but, I have to return to the work of the C.C.I.R.

"First of all I would like to draw your attention to the very extensive documentation which has been sent to us by the various administrations. This documentation, which has been issued by the secretariat in the three working languages of the Union, is now in size comparable to the large documentation of the famous atomic conference held in Geneva last year. It is nearly double that submitted in London at the VIIth Plenary Assembly, though for economy reasons we have fixed the duration of this Plenary Assembly here for about the same length of time as in London. This naturally means that, in a given time, more documents must be discussed here than was formerly the case, placing an increased burden on the shoulders of the delegates.

"I have unfortunately to announce that the Chairmen of Study Groups II and VI, Mr. Pierre David (France) and Dr. Howard Dellinger (U.S.A.) were, to their great regret, unable to be present here, so that you will have to consider the appointment of deputy chairmen to preside over the meetings of these Study Groups here in Warsaw.

"Finally, I come to a special item on our agenda, the election of a new Director of the C.C.I.R. I have now filled this post for 8 years and have organized the secretariat from the outset. When I resign at the end of December, I will have prepared and organized three Plenary Assemblies and during all these years I have been, in the most pleasant way, in close touch with the able Chairmen of our Study Groups, with many of the members, with the delegates and the work in general.

"It certainly is not easy to evolve a proper grasp of all the varied subjects belonging to the extensive modern radio field, which are studied and discussed by the C.C.I.R. in its Study Groups. It is my feeling that a proper insight into such a vast range of subjects cannot be maintained satisfactorily by a specialist in some particular branch of radio, but that it requires a scientist or technician who has had a proper basic training in physics and mathematics. The extensive range of subjects covered by the documentation before us plainly demonstrates this fact. A large part of it for instance, presents its arguments in mathematical form, which is often highly interesting but seldom easy to read, and we may surely expect from

a new Director the ability to understand the documents which are discussed in the meetings.

"May I, as departing Director, with experience of research in the higher branches of radio for over 40 years, emphatically stress this point for you to bear in mind when electing a new Director, since the preservation of the dignity and the technical and scientific status of the C.C.I.R. in future will depend in large measure on the man you choose.

"I am sure I am speaking on behalf of you all when I thank the Vice-President of the Polish People's Republic and the President of the City Council of Warsaw for their kind words and for the hospitality offered here in this monument to culture and science. I hope that this VIIIth Plenary Assembly will contribute to these ends in no less a degree than it has done on former occasions. Of course in modern days it is hard to discriminate between science and technology, but at a riper age I find it gets harder and harder also to discriminate between art and science because the inspiration which leads, say, to a new physical experiment or mathematical theorem is of exactly the same nature as the inspiration which may lead to a new work of art, be it music or any other art.

"Science and art are now more interwoven than ever before. It is possible, e.g. by the use of purely physical apparatus, to give an ordinary photograph the typical aspect of an old painting and electronic digital calculating machines are now able to compose church hymns and songs.

"Before I close, I would like to announce to you that while coming on to the platform here I received a letter from the Chairman of the United States delegation from which I quote :

"Dear Dr. van der Pol,

"It is a pleasure to inform you that I have been authorized by my Government to extend an invitation to the International Radio Consultative Committee (C.C.I.R.) to hold its next Plenary Assembly in the United States. Accordingly, at the appropriate time the United States Delegation will extend such an invitation to the C.C.I.R."

"Again let me thank our hosts for their very kind reception, while expressing my sincere hope that this Plenary Assembly of the C.C.I.R. will contribute materially to the world wide rationalized use of radio communications.

Thank you - Dziękuję "

(Prolonged applause)

6. The Chairman thanked Prof. Dr. van der Pol, Director of the C.C.I.R. and the previous speakers.

He stressed the importance of the progress made in latter years in the C.C.I.R., evidence of which was provided by the exceptional number of documents received by the Polish Administration and which he had studied with the greatest interest.

The work of the C.C.I.R. acted as a spur to research on modern theoretical data, and its Assemblies afforded a valuable opportunity for an exchange of views. The success of the VIIIth Plenary Assembly would certainly depend largely on the extent to which delegates, representing countries where conditions were very different, expressed their views in a spirit of good will and mutual concession. Such a spirit was essential in the debates if, as he hoped, the meeting was to produce fruitful results.

(Prolonged applause)

The Chairman announced that the first plenary meeting would be held in the afternoon at 3 p.m., and then closed the inaugural meeting of the session.

The meeting rose at 12.10 p.m.

Rapporteur :

M. Cahn-Bunel

Secretary :

R.V. Lindsay

Chairman :

P. Szulkin

PLENARY

MINUTES
OF THE FIRST PLENARY MEETING

Thursday, 9 August, 1956, at 3 p.m.

Subjects discussed:

1. Election of Vice-Chairmen of the VIIIth Plenary Assembly
2. Election of Director of the C.C.I.R. (Doc. 437)
3. Formation of Committees:
 - a) for the election of the Director of the C.C.I.R.
 - b) Drafting
 - c) Finance
 - d) Technical Assistance
4. Approval of Secretariat
5. Languages
6. Working hours
7. Changes in Chairmanship of Study Groups:
 - a) Confirmation of Vice-Chairmen elected by Study Groups between the VIIth and VIIIth Plenary Assemblies
 - b) Acting Chairmen of Study Groups during the VIIIth Plenary Assembly
8. Documents submitted to the Plenary Assembly direct:
(Docs. 115, 429, 437, 453 and 491)
9. Other business

Chairman: Professor Pawel Szulkin

Present

Administrations :

Members of the I.T.U. :

People's Republic of Albania, Argentine Republic, Australia, Austria, Belgium, Bielorussian S.S.R., People's Republic of Bulgaria, Canada, China, Denmark, Egypt, Spain, United States of America, Finland, France, Hungarian People's Republic, India, Ireland, Italy, Japan, Norway, New Zealand, Netherlands, People's Republic of Poland, Federal German Republic, F.P.R. of Yugoslavia, Ukrainian S.S.R., Roumanian People's Republic, United Kingdom of Great Britain and Northern Ireland, Sweden, Switzerland, Syrian Republic, Czechoslovakia, Oversea Territories of the French Republic, Turkey, Union of South Africa, U.S.S.R., Venezuela.

Recognized Private Operating Agencies :

A.T.T., B.B.C., Cable and Wireless, Independent Television Authority, I.M.R.C., K.D.D., M.I.M.C.C., N.H.K., N.T.T., R.A.I., Radiojänst, Transradio Española, B.I.H., C.I.S.P.R., C.I.R.M., I.C.S., I.B.O.

Permanent Organs of the I.T.U. :

General Secretariat, C.C.I.T., I.F.R.B.

The Secretary General of the I.T.U. was represented by Mr. Hugh Townshend, Assistant Secretary General.

Secretary : Mr. Robert V. Lindsey

* * * * *

1. Election of Vice-Chairmen of the VIIIth Plenary Assembly

The Chairman proposed that the following four delegates should be Vice-Chairmen of the Assembly, at the same time acting as Chairmen of the four special Committees :

Mr. van der TOORN (Netherlands) : Committee on Election Procedure

Mr. BRAMEL de CLEJOULX (France) : Drafting Committee

Mr. BALIGA (India) : Finance Committee

Mr. TOPURIA (U.S.S.R.) : Technical Assistance Committee

The proposal was accepted with acclamation.

2. Election of Director of the C.C.I.R. (Doc. 437)

Dr. van der Pol, Director of the C.C.I.R., presenting Document 437, read out the following terms of reference for the special Committee on Election Procedure, agreed upon at the meeting of Heads of Delegations :

"1) to examine the validity of the six applications for the post of Director of the C.C.I.R. which have been registered by the Secretary-General and transmitted to the Chairman of the Plenary Assembly and furnish a report to the Plenary Assembly;

2) to prepare and submit to the Plenary Assembly a list of the Administrations of countries Members of the Union represented at the VIIIth Plenary Assembly which, under the provisions of the International Telecommunication Convention, have the right to exercise a vote."

After a short discussion, the terms of reference were approved.

3. Formation of Committees

The following membership of the four special Committees was approved :

a) Committee on Election Procedure :

Australia, Japan, Denmark, U.S.S.R., Canada and the Argentine Republic

b) Drafting Committee :

United Kingdom and Northern Ireland, United States of America, Spain, Venezuela, Belgium and France

c) Finance Committee :

Poland, the Netherlands, France, United Kingdom, United States and Switzerland

d) Technical Assistance :

Mr. Topuria, (U.S.S.R.), Chairman of the Committee, said that, as there had been insufficient time to study the relevant documents, the membership could perhaps be fixed at a later meeting.

Agreed

4. Approval of Secretariat

The following secretariat was approved :

Secretary of the Assembly	:	Mr. Robert V. Lindsey, Administrative Secretary, C.C.I.R.
Assistant Secretary (Documents)	:	Mr. Jean Revoy, Engineer, I.T.U. General Secretariat
Assistant Secretary (Finance and Personnel)	:	Mr. René Prélaz, I.T.U. General Secretariat
Assistant Secretary (Delegates)	:	Mr. Dobrosielski, Polish Administration

5. Languages

The Chairman announced that :

a) In accordance with Chapter 14, paragraph 1, of the General Regulations and Article 14 of the Buenos Aires Convention, the working languages of the Conference would be English, French and Spanish;

b) In addition, in accordance with Article 14, paragraph 6 of the Convention, the Administrations of the U.S.S.R. and the People's Republic of Bulgaria had requested and agreed to pay for simultaneous interpretation into Russian during the VIIIth Plenary Assembly.

6. Working hours

The following working hours were adopted :

Mornings : 09.30 - 12.30 hours

Afternoons : 15.00 - 18.00 hours

Saturdays : Open

7. Changes in Chairmanship of Study Groups :

- a) Confirmation of Vice-Chairmen elected by Study Groups between the VIIth and VIIIth Plenary Assemblies

The Plenary Assembly confirmed the election of Mr. G. Turner to be Vice-Chairman of Study Group VIII and Mr. K. Miller as Vice-Chairman of Study Group X.

- b) Acting Chairmen of Study Groups during the VIIIth Plenary Assembly

It was decided that Mr. Abadie would be Acting Chairman of Study Group II, Dr. Dana Bailey Acting Chairman of Study Group VI, and Mr. Cooke Acting Vice-Chairman of Study Group III.

8. Documents submitted to the VIIIth Plenary Assembly direct :

- a) Document No. 115 - Report of Director of C.C.I.R.

It was decided that the financial parts of Document No. 115 would be studied by the Finance Committee, while the report as a whole would be examined at a later plenary meeting.

- b) Document No. 429 - Report by the Director of C.C.I.R. - Organization Committee

It was decided that Document No. 429 would be referred to the Organization Committee for study.

- c) Document No. 437 - Note by the Secretariat of C.C.I.R. - Election of Director

It was decided that Document No. 437 would be referred to Mr. van der Toorn's Committee.

Mr. van der Toorn (the Netherlands) suggested that it was not quite within the terms of reference of his Committee to take a decision on the voting procedure proposed in the document. He would like the Secretariat to prepare a separate document setting out full details of the voting procedure, which could be discussed in Committee before the Plenary Assembly came to a final decision.

Agreed

- d) Document No. 453 - Report of joint C.C.I.T./C.C.I.R. Study Group on Phototelegraphy

In view of the technical nature of the report, it was decided to defer examination thereof to a later meeting.

- e) Document No. 491 - Technical Assistance

Referred to the special Committee on Technical Assistance.

9. Other business

Mr. Topuria (.S.S.R.), Mr. Joachim (Czechoslovakia), Mr. Trifonov (People's Republic of Bulgaria), Mr. Stavitzky (Ukrainian S.S.R.), Mr. Kachel (Bielorussian S.S.R.), Mr. Naco (People's Republic of Albania), Mr. Dima (Roumanian People's Republic), Professor Groszkowski (People's Republic of Poland), and Mr. Baczynski (Hungarian People's Republic) asked for statements they had issued on the representation of China at the VIIIth Plenary Assembly to be attached to the minutes of the meeting.

Agreed.

Mr. Tchen (China) made a similar request.

Agreed.

The meeting rose at 17.25 hours.

Rapporteur:

H. Heaton

Secretary:

R.V. Lindsey

Chairman:

P. Szulkin

Annex: 1

A N N E X

STATEMENTS CONCERNING THE REPRESENTATION OF CHINA AT THE VIIIth
PLENARY ASSEMBLY OF THE C.C.I.R.

1. Union of Soviet Socialist Republics, Ukrainian Soviet Socialist
Republic, Bielorussian Soviet Socialist Republic

"The Delegations of the Soviet Union, the Ukrainian S.S.R. and the Bielorussian S.S.R. express their satisfaction on the occasion of the inauguration of the VIIIth Plenary Assembly of the International Radio Consultative Committee. Scientists, engineers and other specialists - representatives of nearly 40 countries - have now arrived in Warsaw.

"The Plenary Assembly of the C.C.I.R. will no doubt find a way to promote the further development of radio technique in all countries of the world and establish a better understanding between Administrations for the purpose of strengthening international cooperation in this sphere.

"Nevertheless, our Delegations note with regret that, owing to the fact that the question of China's representation has so far remained unsolved in the International Telecommunication Union, the Chinese People's Republic - a great country with a population of six hundred million - is not represented at the present Plenary Assembly.

"Mr. Tohen, whose name appears in the list of Delegates (Doc. Adm. 1, 6 August) is not entitled to represent China, since that country can be lawfully represented only by the Central People's Government of the Chinese People's Republic.

"Our Delegations consider that the participation of representatives of the Chinese People's Republic would contribute greatly towards international cooperation.

"The Delegations of the Soviet Union, the Ukrainian S.S.R. and the Bielorussian S.S.R. are sure that this important question will in the end be correctly solved by the International Telecommunication Union."

signed :

Z. Topuria, N. Stavitzky, A. Kaohel

2. Czechoslovakia

"The Delegation of Czechoslovakia associates itself with the statement made by the Heads of the Delegations of the U.S.S.R., the Ukrainian S.S.R. and the Bielorussian S.S.R. (Doc. 493).

"The members of our Delegation have had the privilege of close acquaintance with the radiocommunication service of the Chinese People's Republic and have often worked together with the friendly and industrious representatives of the Chinese People's Republic at radio conferences. They know them for the sincere upholders of international collaboration.

"For these reasons, our Delegation deeply regrets the lack of universality in the membership of this Assembly and expresses the earnest conviction that a solution to this problem will soon be found."

signed : M. Joachim

3. People's Republic of Bulgaria

"The Delegation of the People's Republic of Bulgaria fully associates itself with the statement made by the Delegations of the U.S.S.R., the Ukrainian S.S.R. and the Bielorussian S.S.R., presented in Doc. 493 of August 9, 1956."

signed : I. Trifonov.

4. People's Republic of Albania

"The Delegation of the People's Republic of Albania to the VIIIth Plenary Assembly of the C.C.I.R. supports the statements by the U.S.S.R., the Ukrainian S.S.R. and the Bielorussian S.S.R. concerning the representation of China at this Assembly. The Chinese People's Republic of 600 millions of inhabitants is not taking part in the work of our Plenary Assembly and the question of the representation of China has still not been solved in the International Telecommunication Union.

"The Delegation of the People's Republic of Albania to the VIIIth Plenary Assembly of the C.C.I.R. also considers that China can be legitimately represented only by a delegate nominated by the Central People's Government of the Chinese People's Republic and not by Mr. Tchen whose name appears in the list of delegates of 6th August, 1956.

"Our Delegation expresses its conviction that this important question will ultimately find a legal solution in the International Telecommunication Union since the participation of a representative of the Chinese People's Republic in the work of the Plenary Assembly will be a noteworthy contribution to international collaboration.

signed : R.Naço

5. Roumanian People's Republic

"The Delegation of the Roumanian People's Republic considers that the Plenary Assembly of Warsaw marks a clear progress in the activities of the C.C.I.R. by the participation of experts from more than 40 countries and by the volume of the contributions submitted to the Assembly for study in the form of documents.

"Nevertheless, we cannot but observe that one of the basic principles which should inspire the I.T.U., from its very object, the principle of universality, has not yet been entirely respected. It is with regret that we note an obvious disparity between certain representations and the territories they pretend to represent.

"Thus, the Chinese People's Republic, whose representation would be amply justified both by the extent of its territory and the numerical importance of its population, is not actually represented, since Mr. Tchen, whose name is given as Delegate of China, has in practice no access to the territory he pretends to represent.

"In a similar order of ideas, we also note the absence of representatives of the Administration of the Democratic German Republic.

"We are convinced that the Delegations of these two countries would certainly have been able to bring a valuable technical contribution to the success of the work of the C.C.I.R. and that their presence would most certainly have been a positive contribution to international understanding and collaboration.

"The Delegation of the Roumanian People's Republic hopes that the I.T.U. will shortly solve the question of the membership of these two countries, which will be an important step forward towards the application in its entirety of the principle of universality of the I.T.U."

signed : G. Dima

6. People's Republic of Poland

"At the beginning of the debates of the VIIIth Plenary Assembly of the C.C.I.R. I should like to draw your attention to the absence of the representative of the Chinese nation of 600 million inhabitants, that is, the delegate of the Chinese People's Republic.

"The fact of the absence of the representative of the country of which the territory extends over a great part of the continent of Asia, a country which has considerable technical power in radio communications and broadcasting, leads us to a paradoxical situation in which we ourselves, whose object it is to develop international collaboration in the sphere of radio, are creating an artificial vacuum over a large part of the world.

"This situation is all the more paradoxical and regrettable in that several Administrations represented here have diplomatic relations with the Chinese People's Republic and an even greater number of countries collaborate with that Republic in the sphere of radio-communications.

"The Polish Delegation, whilst stressing its deep conviction that this incomprehensible situation is harmful to international cooperation, wishes to express the desire that the representative of the great Chinese nation, comprising 600 million inhabitants, may, as soon as possible, find his legitimate place in our Organisation."

signed : Prof. J. Groszkowski

7. Hungarian People's Republic

"As regards the representation of China at the VIIIth Plenary Assembly of the C.C.I.R., the views of the Delegation of the Hungarian People's Republic are entirely those expressed in the Statement by the Delegations of the U.S.S.R., the Ukrainian S.S.R. and the Bielorussian S.S.R., which it fully supports. "

signed : Baczynski

8. China.

"The Delegation of the Republic of China is happy to take part in the work of the VIIIth Plenary Assembly of the C.C.I.R. and greets the many scientists and engineers who are collaborating in the Study Groups for the worldwide improvement of radio communications.

"The Delegation of the Republic of China is the only legitimate representative of China in the International Telecommunication Union as in all the international organisations of which it is a member.

"Accordingly, this Plenary Assembly, which is a purely technical meeting, is not in a position to question the participation of the Republic of China as a Member of the Union.

"The Delegation of the Republic of China wishes to assert that its Government is the only legal Government of China. It alone represents the interests and aspirations of the Great Chinese nation and contributes to the joint efforts of the civilized world towards a new lasting era of justice and international collaboration. "

signed : H. Tchen

PLENARY

MINUTES
OF THE
SECOND PLENARY MEETING

Wednesday, 15 August 1956, at 9.30 a.m.

Chairman: Professor Pawel Szulkin (P.R. of Poland)
then
Mr. J.D.H. van der Toorn (Netherlands)

Subjects discussed:

1. Report by the Committee on the election of the Director of the C.C.I.R. (Doc. No. 517)
2. Election of the Director
 - a) Discussion
 - b) First ballot.

The meeting was resumed at 3 p.m. for a second ballot and at 6 p.m. for the third and last ballot.

Present:

Administrations Members of the I.T.U. :

P.R. of Albania, Argentine Republic, Australia, Austria, Belgium, Bielorussian S.S.R., P.R. of Bulgaria, Canada, China, Denmark, Egypt, Spain, United States of America, Finland, France, Hungarian P.R., India, Ireland, Italy, Japan, Laos, Monaco, Norway, New Zealand, Pakistan, Netherlands, P.R. of Poland, Federal German Republic, F.P.R. of Yugoslavia, Ukrainian S.S.R., Roumanian P.R., United Kingdom of Great Britain and Northern Ireland, Sweden, Switzerland, Syrian Republic *), Czechoslovakia, Oversea Territories of the French Republic, Turkey, Union of South Africa, U.S.S.R., Venezuela *).

Recognized Private Operating Agencies :

British Broadcasting Corporation, Cable and Wireless, Independent Television Authority, International Marine Radio Co. (I.M.R.C.), Italcable, Kokusai Denshin Denwa Co. (K.D.D.), Nippon Hoso Kyokai (N.H.K.), Radio Austria, Radio Italiana (R.A.I.), Radiotjänst, S.A.B.C. Transradio española.

*) without the right to vote.

International Organizations:

C.I.S.P.R.

International Radio-Maritime Committee (I.R.M.C.)

International Broadcasting Organization (I.B.O.)

Specialized Agency of the United Nations:

World Meteorological Organization.

Permanent Organs of the I.T.U.:

C.C.I.T., I.F.R.B.

The Secretary-General was represented by Mr. Hugh Townshend,
Assistant Secretary-General.

Secretary: Mr. Robert V. Lindsey.

Opening the meeting, the Chairman recalled that the new Director was to be elected and, since he himself was a candidate, he suggested that Mr. van der Toorn, Vice-Chairman of the Assembly, should take the Chair.

It was so agreed.

Mr. van der Toorn took his place in the Chair.

The Chairman emphasized the importance of the election which was about to take place; it was important not only for the six candidates but also for the C.C.I.R., whose progress would depend considerably on the person chosen.

He requested the Assembly to show a spirit of impartiality and to accept the result of the ballot in a sporting manner.

After the agenda (Doc. ADM/27) had been approved, the Chairman opened the discussion on the first item.

1. Report by the Committee on the election of the Director of the C.C.I.R.
(Doc. 517)

Mr. Baliga (India) drew the Assembly's attention to paragraph 5.2 of Resolution No. 339, (Doc 437) at the end of which reference was made to the prerogatives of the Director elect between the time of his nomination and the date on which he took up his post. He thought they should be explained to the Assembly.

The Chairman pointed out that the last sentence in the third sub-paragraph of paragraph 5 of Doc. 517 answered that question. Nevertheless, although the Director elect was asked to familiarize himself with his new duties, the work of the C.C.I.R. would remain the responsibility of the present Director until January 1957.

Mr. Baliga (India) noted that in paragraph 5.2 of Resolution No. 339 (Doc. 437) it was stated that the Director elect might officially convey his views on any decisions the Plenary Assembly might take. However, familiarizing oneself with one's functions did not imply participating in the work, so he suggested that the last part of paragraph 5 in Doc. 517 should read: "to take part in the work and familiarize himself with his new duties".

The Chairman considered that the amendment was pertinent.

The addition of the words "to take part in the work and" was approved.

Mr. El Bardai (Egypt) asked who would draft the letter of appointment and whether the question of pension would be clarified.

Mr. Townshend, Assistant Secretary-General of the I.T.U., confirmed that full details regarding admission to the Pension Fund would be given in the letter of appointment, the draft of which had been prepared by the I.T.U. Secretariat. He would submit that letter to the Chairman of the Assembly for signature, and would countersign it.

The Plenary Assembly would therefore have to give its Chairman the necessary authority.

Mr. Nicotera (Italy) suggested that the draft letter of appointment should be submitted to the Assembly for approval.

Mr. Siforov (U.S.S.R.) supported him.

It was so agreed.

Mr. Arto (Spain) asked for some clarification as to the figure of 20 votes indicated for the absolute majority.

The Chairman made a reference to Docs. 504 and 526, wherein attention was called to the provision regarding the voting procedure recommended by the Administrative Council and the interpretation to be given to it.

The figure of 20 votes indicated as the absolute majority was calculated on the total number of countries attending the Assembly, with the exception of those whose Administrations had not yet deposited their instruments of ratification. Since 39 countries had at present fulfilled that condition, 20 votes would give an absolute majority.

Mr. Arto (Spain) pointed out that if only 38 countries voted, 20 votes would still be required for an absolute majority. He considered that one half plus one of the number voting would be a preferable basis.

The Chairman said that in that case 21 votes would be required to give an absolute majority, which he thought exaggerated.

Mr. Siforov (U.S.S.R.) supported the Chairman. Before the figure of 20 votes had been fixed the matter had already been studied in committee in the light of the provisions of the Convention.

The Chairman consulted the Assembly and as there were no objections the figure of 20 votes was retained as the absolute majority.

Mr. Siforov (U.S.S.R.) pointed out that, according to paragraph b) of Doc. 526, at the fourth ballot the election would be made by a simple majority, but the Soviet Delegation thought that that was an arbitrary interpretation of the Regulations. The post of Director of the C.C.I.R. was an important one, and the holder should be elected only by the absolute majority.

The Delegation of the U.S.S.R. therefore suggested deleting paragraph b) of Doc. 526 and amending paragraph a) to read as follows:

- "a) any candidate obtaining 20 or more votes at any of the ballots shall be declared elected to the post of Director."

The Chairman explained that the interpretation given in Doc. 526 was in line with the practice followed by the Administrative Council.

Mr. Townshend, Assistant Secretary-General of the I.T.U., confirmed that the Administrative Council applied the procedure set out in Doc. 504 in the way explained in Doc. 526.

Mr. Nicotera (Italy), while agreeing with the substance of Doc. 526, thought it would be preferable not to word sub-paragraph a) so precisely, but merely to state, without indicating the number of votes: "the absolute majority of votes", and then to add: "If the number voting is 39, the absolute majority is 20 votes."

The Chairman explained that the figure of 39 did not represent the number of countries registered, but those with the right to vote.

Mr. Sterky (Sweden) asked what would happen if, for example, there were 20 abstentions?

Mr. Nicotera (Italy) recalled that Rule 15 of the Rules of Procedure for conferences referring to delegations "present and voting".

The Chairman pointed out that that was the definition of a simple majority. The procedure for defining the absolute majority was explained in Doc. 504, and was the one laid down by the Administrative Council.

Mr. Townshend, Assistant Secretary-General of the I.T.U., explained that in the Administrative Council Rules of Procedure two distinct voting procedures were prescribed: one similar to that defined in Rule 15 of the Conference Rules of Procedure annexed to the Convention, for ordinary decisions of the Council by a simple majority of Members present and voting, abstentions not being taken into account; the other, defined in Rule 20 of the Council Rules of Procedure, for the election of a Secretary-General or an Assistant Secretary-General - which for the C.C.I.R. corresponded to the election of its Director - whereby it was necessary to have an absolute majority of votes of the Members of the Council, regardless of the number of Members present. Only in the fourth ballot, when the voting was on the two candidates having secured the greatest number of votes in the third ballot, was an absolute majority unnecessary.

Mr. Siforov (U.S.S.R.) said that in that case, if only those voting were counted, and there were 20 abstentions, the result might be a majority of 10 or 11 votes, i.e. about a quarter of the members of the C.C.I.R. The Director of such an important organ could not be elected by a quarter of its member countries. Obviously the election had to be by the absolute majority.

Mr. Coffey (Canada) recalled that according to the Convention the Administrative Council was the organ which could issue directives in the case of doubt. In its Resolution No. 339 the Council had issued such directives and, in view of the decision by the Council, it was pointless for the Assembly to discuss the matter.

Capt. Booth (United Kingdom of Great Britain and Northern Ireland) fully agreed with the delegate of Canada. The Administrative Council had wisely recommended that a uniform practice be followed.

Mr. Joachim (Czechoslovakia) also thought that there was nothing to add in this respect. However, he agreed with the U.S.S.R. delegation regarding sub-paragraph a) of Doc. 526.

Mr. Dima (Roumanian P.R.) also emphasized the importance of the post of Director of the C.C.I.R. Its future holder must have the confidence of the majority of the delegations, and he must therefore secure an absolute majority.

Mr. Markon (F.P.R. of Yugoslavia) recalled that Rule 15 of the Conference Rules of Procedure prescribed that if the number of abstentions exceeded fifty per cent, the election should be postponed to a later meeting at which abstentions would not be taken into account, and asked the Chairman to explain the Assembly's position in that respect.

He also drew attention to paragraph 8 of Doc. 504: a question as important as the choice of the Director of the C.C.I.R. could not be settled by drawing lots.

Mr. Townshend, Assistant Secretary-General of the I.T.U., pointed out that the procedure to which the delegate of Yugoslavia had referred was the ordinary procedure which did not apply in the present case. The procedure recommended by the Administrative Council was the special one defined in Rule 20 of its Rules of Procedure.

Mr. El Bardai (Egypt) thought that the Administrative Council had not considered the possibility of there being more than 50 per cent of abstentions, and he hoped and thought that such a thing would not happen.

The Chairman suggested that if it were to happen, there could be a fifth ballot the next day.

Mr. Markon (F.P.R. of Yugoslavia) agreed with the comments made by the Chairman and the delegate of Egypt.

The Chairman suggested an addition to sub-paragraph b), which would then read:

- "b) if there has to be a fourth ballot, only two candidates are then voted on, and the one who gets more votes than the other (however many or few) is declared elected, provided that at least 20 votes in all have been recorded for the two candidates together. If not, a fifth ballot between the same candidates will be held, without this limitation".

The Chairman asked the delegate of the U.S.S.R. whether he was prepared to support that wording, or whether he maintained his own proposal.

Mr. Siforov (U.S.S.R.) preferred his own proposal.

The Chairman put to the vote the U.S.S.R. proposal to delete sub-paragraph b) of Doc. 526 and amend sub-paragraph a) to read:

"any candidate obtaining 20 or more votes at any of the ballots shall be declared elected."

By 23 votes to 9, with 3 abstentions, the U.S.S.R. proposal was rejected.

The Chairman then asked the Assembly to approve Doc. 526 with the suggested addition to sub-paragraph b), but with the words in brackets: "(however many or few)" deleted at the suggestion of Mr. Jeudy (Oversea Territories of the French Republic).

There being no objections, Doc. 526 was approved and the election procedure was thus decided upon.

The Chairman recalled that, as decided, the draft letter of appointment would be submitted to the Assembly for consideration.

2. Election of the Director

The Chairman explained the voting arrangements, which would be by secret ballot, the names of the member countries being called out in alphabetical order.

He suggested that the following should act as tellers: Mr. Clarkson (New Zealand), Mr. Joachim (Czechoslovakia) and Mr. Bramel de Cléjoulx (France).

Mr. Lindsey, Secretary of the Assembly, said he had learned from Geneva that the situation was unchanged regarding the two countries which had registered but had not deposited their instruments of ratification. In the circumstances the number of countries entitled to vote was still 39.

The first ballot was held, and the Chairman announced the result:

One invalid voting slip had been deposited in the ballot box.

Mr. Helmer <u>DAHL</u>	1 vote
Mr. Erik <u>ESPING</u>	3 votes
Mr. Leslie W. <u>HAYES</u>	6 votes
Mr. Axel G. <u>JENSEN</u>	9 votes
Dr. Ernst <u>METZLER</u>	8 votes
Prof. Pawel <u>SZULKIN</u>	11 votes

As no candidate had secured an absolute majority, there would be a second ballot at 3 p.m.

The meeting was suspended at 12.10 hrs.

The meeting reopened at 1500 hrs for the second ballot, of which the result was:

One blank voting slip.

Mr. Helmer <u>DAHL</u>	1 vote
Mr. Erik <u>ESPING</u>	1 vote
Mr. Leslie <u>HAYES</u>	0
Mr. Axel <u>JENSEN</u>	16 votes
Dr. Ernst <u>METZLER</u>	9 votes
Prof. Pawel <u>SZULKIN</u>	11 votes

As an absolute majority had not been secured, the meeting was again suspended until 6 p.m., when the third ballot would be held.

At the opening of the meeting, the Chairman read out two letters which he had received from the heads of the Swedish and Norwegian delegations respectively, wherein Mr. Esping and Mr. Dahl withdrew their candidacies.

The third ballot produced the following result:

Mr. L. <u>HAYES</u>	0 votes
Mr. Axel <u>JENSEN</u>	17 votes
Dr. Ernst <u>METZLER</u>	22 votes
Prof. Pawel <u>SZULKIN</u>	0 votes

Having obtained an absolute majority, Dr. Ernst Metzler was declared elected to the post of Director of the C.C.I.R., to the hearty applause of the Assembly.

Dr. Metzler was informed, and entered the hall.

The Chairman thanked the three tellers, who has zealously and efficiently performed their task, and gave the floor to the delegate of the United States of America.

Mr. Cross (United States of America) said that the United States delegation had wholeheartedly supported its candidate. Now that the outcome of the voting was known, his delegation wished to be the first to congratulate the successful candidate.

(Hearty applause)

Mr. Groszkowski (P.R. of Poland) expressed the profound satisfaction of the Polish delegation that someone as eminent as Dr. Metzler should have been chosen.

It hoped that the new Director of the C.C.I.R. would carry on the task to which Prof. Dr. van der Pol had devoted himself so earnestly and with such brilliant results.

(Hearty applause)

Prof. Dr. van der Pol (Director of the C.C.I.R.) thanked the delegate of the P.R. of Poland for his kind words.

Mr. Siforov (U.S.S.R.), speaking on behalf of the Soviet delegation, offered the new Director its congratulations on being elected to the highest post in the C.C.I.R. It was particularly gratifying that a specialist as qualified as Dr. Metzler should have been elected.

(Prolonged applause)

The Chairman made the following speech:

"Sir,

"You have obtained at the third ballot the absolute majority, and have therefore been elected Director of the C.C.I.R. as from 1 January 1957. You will of course get an official letter of appointment, and after having read the conditions of your contract carefully you will still have an opportunity of accepting or rejecting this appointment. I want to convey to you however, at this instance, the congratulations of this Assembly.

"We have laid on your shoulders an important task. You will have it in your hands to stimulate and promote international cooperation in the radio field. You will have to look ahead into the future of a rapidly developing branch of technique and science; you will need the many faculties required for executing the difficult and delicate task of an international official. You will need firmness and pushing power to bring things forward at the right time and the right speed.

"Your task will not be easy in that you are the successor of an eminent scientist and a man of such high qualities as our present Director, Prof. Dr. van der Pol. We know you from many years of international cooperation, and that you can do all this and much more. We assure you, from our side, that you have our full and cordial support, our good will, sympathy and cooperation.

"We wish you every success in the execution of your future new duties, and once more we offer you our congratulations."

(Prolonged applause)

Dr. Metzler thanked the Chairman of the Assembly and its members. He was profoundly moved at the honour which had been bestowed on him and on his country, Switzerland, in appointing him successor of the eminent Director of the C.C.I.R., Prof. Dr. van der Pol.

He knew that he could count on the support of the unsuccessful candidates, and he hoped, too, that he could count on their continued friendship.

For his part, he would devote his wholehearted efforts to the task awaiting him - a task which he knew would not be without difficulties.

However, he hoped that with the cooperation of everyone he would succeed in developing telecommunications throughout the world and in fostering international understanding.

(Prolonged applause)

Mr. Townshend, Assistant Secretary-General, speaking on behalf of the Secretary-General whom he was representing, and on behalf of the I.T.U. as a whole, extended a welcome to the new Director of the C.C.I.R. He, Mr. Townshend, knew that everyone would be pleased at his having been elected and, without waiting until he took up his duties officially, he wanted to say how much those in Geneva would look forward to receiving him into the family of the I.T.U.

(Prolonged applause)

Mr. Hayes, Vice-Director of the C.C.I.R., spoke as follows:

"Mr. Chairman, Ladies and Gentlemen,

"I am sorry you haven't elected me, but I do want to congratulate Dr. Metzler and indeed to thank him for the excellent dinner he gave me and the other unsuccessful candidates last night! I want to congratulate him on his success and to assure him that as Vice-Director of the C.C.I.R. I shall do all I can to help him to run the C.C.I.R. and to make it an effective and efficient organization in the future, as I think it has been up to now."

(Hearty applause)

Prof. Dr. van der Pol, Director of the C.C.I.R., warmly congratulated his old friend, Dr. Metzler, on his success. He had known him for more than 25 years, and had always appreciated his complete impartiality and endless patience. It was true that the task had its attendant difficulties, which were not always easy to solve, but he could assure the future Director that he would be given all the necessary information, and that he, Dr. van der Pol, would help him to familiarize himself with the work he would be doing.

(Prolonged applause)

The meeting rose at 6.55 p.m.

Rapporteur:

M. CAPN-BUNEL

Secretary:

R.V. LINDSEY

Chairmen:

Pawel SZULKIN
J.D.H. van der TOORN

PLENARY

MINUTES

OF THE THIRD PLENARY MEETING

Friday, 24 August 1956, at 9.30 a.m.

Subjects discussed:

1. Minutes of 1st and 2nd Plenary Meetings (Docs. 525 and 574).
2. Letter of Appointment for Director of the C.C.I.R. (Doc. 559).
3. Formation of Technical Assistance Committee.
4. Documents submitted by Joint C.C.I.T./C.C.I.R. Study Group on Phototelegraphy (Docs. 453, 459, 551 and 552).
5. Other Business.

Chairman: Professor Pawel Szulkin

Present:

Administrations:

Members of the I.T.U.:

Argentine Republic, Australia, Austria, Belgium, Bielorussian S.S.R. People's Republic of Bulgaria, Canada, Denmark, Egypt, Spain, United States of America, Finland, France, Hungarian People's Republic, India, Italy, Japan, Norway, New Zealand, Pakistan, Netherlands, People's Republic of Poland, Federal German Republic, F.P.R. of Yugoslavia, Roumanian People's Republic, United Kingdom, Sweden, Switzerland, Syrian Republic, Czechoslovakia, Oversea Territories of the French Republic, Turkey, Union of South Africa, U.S.S.R., Venezuela.

Recognized Private Operating Agencies:

K.D.D., Transradio Española.

International Organizations:

C.I.S.P.R., I.C.S., O.I.R.

Scientific and Industrial Organizations:

Magneti Marelli

Specialized Agency of the United Nations:

W.M.O.

Secretary of the Conference: Mr. R.V. Lindsey.

1. Approval of the Minutes of the 1st and 2nd Plenary Meetings (Docs. 525 and 574)

Minutes of the first Plenary Meeting (Doc. 525)

Mr. Topuria (U.S.S.R.) asked for the last two lines of the fourth paragraph on page 7 to be amended to read: "country can be lawfully represented only by a delegate appointed by the Central People's Government of the Chinese People's Republic", to bring the text into line with that of Doc. 493.

Mr. Popović (Yugoslavia) made a statement on the representation of China, which he wished to have included as an annex to the Minutes of the present meeting.

Mr. Hayes (Vice-Director, C.C.I.R.) drew attention to an error in the list of participation, where 5 international organizations had been included amongst the operating agencies.

With the above amendments, Doc. 525 was approved.

Minutes of the second Plenary Meeting (Doc. 574)

Mr. Joachim (Czechoslovakia) asked for his statement on page 5 to be amended to read: "...also thought that there was nothing to add in this respect. Doc. 504, corresponding to Administrative Council Resolution No. 339, clearly stated that an absolute majority of the votes of the members of the Plenary Assembly was necessary. He therefore agreed with the U.S.S.R. delegation regarding sub-paragraph a) of Doc. 526."

Mr. El Bardai (Egypt) wished to add the following sentence to his statement on page 6: "In case this would happen he agreed with the Delegate of Yugoslavia that Rule 15 of the Rules of Procedure should apply."

With the above amendments, Doc. 574 was approved.

2. Letter of Appointment for the Director of the C.C.I.R. (Doc. 559)

The Chairman recalled that it had been decided at the last Plenary Meeting to submit this letter to the Plenary Assembly for approval.

The letter was unanimously approved.

The Chairman would undertake to have it delivered to Dr. Metzler.

3. Formation of the Technical Assistance Committee

The delegations of the following countries expressed their desire to take part in the work of the Technical Assistance Committee under the Chairmanship of Mr. Topuria (U.S.S.R.):

Italy, Egypt, France, Netherlands, Spain, Federal German Republic, P.R. of Poland, United Kingdom of Great Britain and Northern Ireland, Syrian Republic, F.P.R. of Yugoslavia, Roumanian P.R., U.S.A., New Zealand, French Oversea Territories, Czechoslovakia, Turkey, Hungarian P.R., Switzerland, Japan and Belgium.

Mr. Gayer, Chairman of the I.F.R.B., also asked for the I.F.R.B. to be represented.

The above membership was approved.

Mr. Topuria (U.S.S.R.) had drawn up terms of reference for the Committee, based on Resolution No. 346 of the I.T.U. Administrative Council (11th Session). They would be distributed in the form of a working document.

4. Documents submitted by the Joint C.C.I.T./C.C.I.R. Study Group on Phototelegraphy (Docs. 453, 549, 551 and 552)

The Chairman announced that a further contribution on the subject had recently been received from the World Meteorological Organization and had been issued as Doc. 516.

After Mr. Stanesby (United Kingdom), Vice-Chairman of the Joint C.C.I.T./C.C.I.R. Study Group, had introduced the documents, Mr. Gross (U.S.A.) pointed out that the "Remarks" on page 3 of Doc. 552 gave the impression that the United States only was concerned, which he believed was not the case.

It was decided to amend the first line of the "Remarks" to read: "It is the general understanding that the recommendations appearing in paragraph 2....".

In reply to a question from Mr. Bramel de Cléjoulx (France), Mr. Stanesby explained that the draft new question was not intended to replace any existing question and that the frequencies specified (high-frequency and low-frequency) corresponded to the definitions of those bands in the Radio Regulations.

Subject to the above clarifications, Docs. 453, 549, 551 and 552 were approved.

5. Any other business

Mr. Popović (Yugoslavia) asked for discussion of Doc. 604.

However, since the document had been distributed in French only, it was decided to place the matter on the agenda of the next Plenary Meeting.

The Meeting rose at 10.30 a.m.

Rapporteur:

Secretary:

Chairman:

H. HEATON

R.V. LINDSEY

Paweł SZULKIN

Annex: 1

A N N E X

STATEMENT BY THE DELEGATION OF THE F.P.R. OF YUGOSLAVIA

"The Yugoslav Delegation wishes to explain its point of view on the representation of China at the VIIIth Plenary Assembly of the C.C.I.R.

The International Telecommunication Union is a technical organization, the aims of which are clearly defined in Article 3 of the Convention. The problems discussed in the C.C.I.R. are exclusively technical. Thus, for the study and solution of these problems in the most satisfactory manner, it is advisable that specialists from as many countries as possible should take part in the work of the Assembly and its Study Groups. Purely political motives should therefore not play a preponderant part in I.T.U. meetings such as those of the C.C.I.R.

The principle of universality remains one of the basic principles of the Union. We believe that if this principle is not respected, it will only harm the successful operation of the Union and its organs, that is, it will hamper the development of telecommunications throughout the world and create difficulties in international collaboration, which is indispensable in the telecommunication field, especially in the sphere of radio.

For the above reasons, we regret to note the absence of representatives of the Chinese People's Republic, delegated by the Government of the Chinese People's Republic, the Government which is competent to designate the representatives of China."

PLENARY

MINUTES

OF THE FOURTH PLENARY MEETING

Monday, 3 September 1956, at 3 p.m.

Subjects discussed:

1. Communication by the Director of the C.C.I.R. concerning additional ratifications of the Buenos Aires Convention.
2. Approval of Minutes of Third Plenary Assembly (Doc. 655).
3. Draft Resolution presented by the F.P.R. of Yugoslavia (Doc. 604).
4. Documents presented by the Drafting Committee:
 - (a) Joint C.C.I.T./C.C.I.R. Study Group on Phototelegraphy (Docs. 642, 643, 645);
 - (b) Study Group I (Doc. 675);
 - (c) Study Group V (Docs. 701, 702);
 - (d) Study Group VI (Docs. 644, 656, 676, 677, 678, 679);
 - (e) Study Group VII (Doc. 703);
 - (f) Study Group IX (Docs. 704, 705, 706).

Chairman: Professor Pawel Szulkin

Present:

Administrations:

Members of the I.T.U.:

P.R. of Albania, Australia, Austria, Belgium, Bielorussian S.S.R., P.R. of Bulgaria, Canada, Denmark, Egypt, Spain, United States of America, Finland, France, Hungarian P.R., India, Ireland, Italy, Japan, Laos, Norway, New Zealand, Netherlands, P.R. of Poland, Federal German Republic, F.P.R. of Yugoslavia, Ukrainian S.S.R., Roumanian P.R., United Kingdom, Sweden, Switzerland, Czechoslovakia, Turkey, Union of South Africa, U.S.S.R., Venezuela.

Recognized Private Operating Agencies:

B.B.C., Cable and Wireless, Cie. Gén. de T.S.F., I.T.A., I.M.R.C., K.D.D., M.I.M.C.C., N.T.T., R.A.I., S.A.B.C., Transradio Española.

International Organizations

B.I.H., C.I.S.P.R., C.I.R.M., I.C.S., O.I.R., U.R.S.I.

Permanent Organs of the I.T.U.:

C.C.I.F., C.C.I.T., I.F.R.B.

Secretary: Mr. R.V. Lindsey.

1. Communication by the Director of the C.C.I.R. concerning additional ratifications of the Buenos Aires Convention

Prof. Dr. van der Pol (Director, C.C.I.R.) made the following announcement:

"The General Secretariat of the I.T.U. has communicated to me the following additional ratifications of the International Telecommunication Convention, Buenos Aires, 1952, registered by the Secretary-General on the following dates:

on 24 August 1956: the Republic of Venezuela,
on 27 August 1956: Thailand.

Furthermore, we are informed that ratification of the Convention by Portugal is also valid for the Portuguese Oversea Territories".

2. Approval of the Minutes of the Third Meeting (Doc. 655)

Mr. Roberts, Member of the I.F.R.B., pointed out that on page 3, paragraph 3, Mr. Gayer should be referred to as "Vice-Chairman", not "Chairman".

Mr. Hayes (Vice-Director, C.C.I.R.) asked for the Industrial Organization Magnetti Morelli to be deleted, since industrial organizations officially took part in the work of the Study Groups, but not of the Plenary Assembly.

Mr. Popović (F.P.R. of Yugoslavia) asked for his intervention on page 2 to be amended to read:

"Mr. Popović declared that the statement by Mr. Tchen, annexed to the Minutes of the Plenary Meeting of 9th August, was not pronounced at the meeting itself, and that after becoming acquainted with the statement later, the Yugoslavia Delegation wished to make its point of view known."

The Cie. Générale de T.S.F. and the C.I.R.M. wished to be added to the list on page 1.

With the above amendments Doc. 655 was approved.

3. Draft Resolution submitted by the F.P.R. of Yugoslavia (Doc. 604)

Mr. Popović (F.P.R. of Yugoslavia) introduced the document as follows:

"We have submitted this draft Resolution to the Assembly because, in our opinion, it can help forward the work of the C.C.I.R. It is unnecessary to stress the fact that the work of the C.C.I.R. and its Study Groups covers the field of radio technique, which knows neither geographical not political frontiers. It is also a known fact that, without close collaboration in this field of radiocommunications, it will be very difficult, if not impossible, to apply the results of our work, in view of the nature of the installations, the means of propagation and their dissemination throughout the world. We therefore thought that the C.C.I.R. was a suitable forum for expounding the idea that the principle of universality should be fully respected in the work of the Union. We must surely all agree that the main object of the Union remains that which is defined in Article 3 of the Convention, which reads: "..... to maintain and extend international cooperation for the improvement and rational use of telecommunication of all kinds".

"In our draft Resolution we propose that the Administrative Council of the I.T.U. should take practical steps to make certain that the principle of universality is applied as soon as possible in the work of the C.C.I.R. because, among the duties given by the Convention itself to the Administrative Council, we find (Art. 5, 11. (1)): "The Administrative Council shall be responsible for taking all steps to facilitate the implementation by the Members and Associate Members of ... the decisions of other conferences and meetings of the Union". The Resolution we are submitting comes under this provision. Article 7 of the Convention also states that "a Consultative Committee shall likewise issue its recommendations on questions the study of which has been decided upon by its Plenary Assembly", while Chapter 12 of the General Regulations, paragraph g), states that "The Plenary Assembly shall ... consider any other matters deemed necessary within the provisions of Article 7 of the Convention and Part II of the General Regulations". Thus, apart from our own point of view of principle which led us to submit this document, the text of the Convention and the General Regulations amply justifies this procedure. We would stress that the reasons which led us to raise this question are practical reasons - the success of our work and that of future Plenary Assemblies - since an adequate solution of the problems with which our Study Groups have to deal is almost always dependent on the world-wide application of the technical recommendations issued."

Mr. Clarkson (New Zealand): "I wish to raise a motion of order, which is to close the debate on this particular question in the belief that it is inappropriate to this Assembly. I have closely studied Doc. 604, I have listened with great interest to the explanations of the Delegate of the F.P.R. of Yugoslavia, and this leads me to the opinion that the subject is indeed inappropriate to study by the C.C.I.R. I believe that further consideration of this subject would take up the time of this Assembly and yet lead to no useful result, and that is the reason for proposing that it should not be discussed further. The reasons in more detail are as follows:

"The duties of this Plenary Assembly are strictly governed by the Convention and General Regulations, Buenos Aires, 1952. If we go in the slightest degree outside the provisions of the Convention and the General Regulations, we will undoubtedly encounter difficulties; for example, the Administrative Council, which is itself governed by the provisions of the Convention, could not take action on a matter raised by this Plenary Assembly if the subject matter is inappropriate. I would like to refer to the provisions of the General Regulations annexed to the Buenos Aires Convention, Chapter 12, which define the duties of this Assembly, as the principal chapter to be referred to. It specifies quite clearly the various types of subjects to be dealt with by the Plenary Assembly in the last paragraph, which refers to general matters which might be raised within the provisions of Article 7 of the Convention, and Part II of the General Regulations. It will be noted thereby that there is no provision for the matters of Article 3 - referring to universality - to be studied by this Plenary Assembly.

"So much for the General Regulations. I would now like to refer to the Convention itself. This is the highest authority we have to guide us in our work. Article 7, paragraph 3, clearly defines who can participate in the work of the C.C.I.R. - that is Members or Associate Members on the one hand and private operating agencies on the other. It therefore deals explicitly with the question of participation. Next I would like to refer to the clause in the Convention, Article 7, which defines the duties of the C.C.I.R. These duties are very clearly defined simply as: "to study technical radio and operating questions, the solution of which depends principally on considerations of a technical radio character, and to issue recommendations on them". I submit that this does not give us any room to embark on the kind of action foreseen in the proposal put forward by the F.P.R. of Yugoslavia, and I therefore submit that the provisions of the Convention, under which our work is conducted, do not admit the kind of subject that has been introduced in this document, and I therefore submit that the debate on this matter be closed."

Mr. Cross (United States of America) seconded the motion of order raised by Mr. Clarkson. He considered that, regardless of its merits, the draft Resolution was out of order.

Prof. Siforcy (U.S.S.R.) said that the proposal in Doc. 604 was aimed at improving the work of the C.C.I.R. and strengthening international cooperation in the radio field. The Delegation of the U.S.S.R. could therefore not agree with Mr. Clarkson that the resolution was out of order. Article 7 of the Convention defined the duties of the C.C.I.R., namely, to issue recommendations on technical questions, and it was precisely to improve the application of such recommendations throughout the world that the Resolution had been submitted. Such questions as the international exchange of programmes, the rational use of the radio spectrum, more effective communication between different countries, etc., required the participation of all the countries in the world without exception.

He therefore considered the resolution in Doc. 604 to be well-founded and would support it.

Prof. Groszkowsky (P.R. of Poland) agreed with the Delegate of Yugoslavia. He fully supported the draft Resolution, which was worthy of consideration by the Assembly. The motives adduced were sufficiently clear and important and approval of the Resolution would only further that international collaboration which was the very aim of the I.T.U.

Mr. Baliga (India) said: "Doc. 604 raises some fundamental principles of universality and international cooperation in the radiocommunication field. These principles need to be pondered very carefully by this Assembly. My Administration recognizes that there are large areas, with large populations, particularly in our Region 3, where radiocommunications have been progressing during the last few years and international cooperation would go a long way in developing radiocommunication along the right lines, according to the standards laid down by the C.C.I.R. Full cooperation in this field by all countries would, I think, help us to continue this work. My Delegation would therefore support Doc. 604."

Captain Booth (United Kingdom) strongly supported the motion of order raised by Mr. Clarkson and seconded by Mr. Cross. The Plenary Assembly of the C.C.I.R. was not competent to deal with questions of representation.

Mr. Joachim (Czechoslovakia) supported the draft Resolution submitted by the F.P.R. of Yugoslavia. It was quite in order, as it conformed to the definition of a C.C.I.R. Resolution given on page 8 of Vol. I of the London documents: "Statement of an opinion of the C.C.I.R. on a non-technical subject". In addition, it would be a great step forward towards full international collaboration.

Mr. Bramel de Cléjoux (France) supported the motion of order raised by the Delegate of New Zealand.

Mr. Bouchier (Belgium) and Mr. Campbell (Australia) also supported the motion of order.

Mr. Gross (Roumanian P.R.) said that the view had been advanced that the Assembly was incompetent to deal with the Resolution, since its terms of reference were only technical. He considered, on the other hand, that it was the duty of the Assembly to discuss and approve the Resolution, since its repercussions could only improve the technical aspect of the work of the C.C.I.R. The task of the C.C.I.R. was to issue recommendations on technical matters, but it was obviously in the interest of the C.C.I.R. to see that its recommendations were universally applied. What was the use of issuing recommendations if they could not be applied in a vast part of the world? The Assembly was entirely competent to discuss Doc. 604 and to reach the necessary conclusions.

The Delegates of the Ukrainian S.S.R., the Bielorussian S.S.R., the P.R. of Bulgaria, the P.R. of Albania and the Hungarian P.R. also supported the draft Resolution in Doc. 604.

The Delegates of Spain, the Union of South Africa, Turkey, the Netherlands, the Federal German Republic, Austria and Canada supported the motion of order raised by Mr. Clarkson.

The Chairman observed that two divergent views on the matter had been expressed and the Assembly was divided between the two. He would suggest that a full recording of the debate in the minutes of the meeting might suffice. Would Mr. Popović agree to such a procedure?

Mr. Popović (F.P.R. of Yugoslavia): "In submitting this Doc. 604, we were convinced that its subject, although not basically technical, could have been discussed here, particularly since the definition of a Resolution in the London documents covers cases of this kind. That is why we gave it the form of a draft Resolution. But, having heard the various speakers who have taken the floor, we should like to add that we had no intention of starting a discussion which has threatened to divide our Assembly into two camps and to recall past occasions when debates have ended in a cleavage of opinion. Our aim was to take a step forward towards greater international collaboration. We decided to put this matter before the Assembly of the C.C.I.R. because its repercussions do directly affect technical progress throughout the world.

"However, the discussion that has just taken place has been restricted to purely formal questions of competence, although everyone agrees that full international cooperation is desirable. We therefore feel that our aims have been misinterpreted, as the discussion has not even touched on the technical advantages to be derived from our proposal.

"It is far from our wishes to see the Assembly divided into two camps or to decide this very important question by means of a vote; we therefore

agree, Mr. Chairman, that it will suffice for this discussion to be recorded in its entirety in the minutes of this meeting. We would also thank all those delegates that have given their views on this matter."

4. Documents submitted by the Drafting Committee

- a) Joint C.C.I.T./C.C.I.R. Study Group on Phototelegraphy (Docs. 642, 643 and 645)

Mr. Besseyre (Senior Counsellor, C.C.I.T.) pointed out that the C.C.I.T. was not represented at the Plenary Meeting at which it was decided to redraft the note on page 3 of Doc. 643. He felt that the Assembly should exercise caution in amending joint C.C.I.T./C.C.I.R. texts without consulting the C.C.I.T. He therefore proposed that the original text should be restored or that the note should be deleted, on the understanding that the matter would in any case be put before the Plenary Assembly of the C.C.I.T.

Mr. Cross (United States of America) said that the note as it stood represented the C.C.I.R. view. It would, of course, be submitted to the C.C.I.T. Plenary Assembly, where comparisons could be made. The United States would do everything in its power to have the note adopted by the C.C.I.T.

Documents 642, 643 and 645 were approved.

- b) Study Group I (Doc. 675)

Approved.

- c) Study Group V (Docs. 701, 702)

Approved with minor drafting changes.

- d) Study Group VI (Docs. 644, 656, 676, 677, 678 and 679)

In connection with paragraph 1 of Doc. 644, Captain Booth (United Kingdom) asked whether Dr. Metzler would desire to continue the work done by Dr. van der Pol.

Dr. van der Pol explained that he was not personally solely responsible for the work, which was done by the Secretariat under his guidance.

Dr. Metzler intimated his agreement.

It was decided to insert the word "monthly" in paragraph 4 of Doc. 644.

With the above amendment, Doc. 644 was approved.

In connection with Docs. 676, Mr. Bramel de Cléjoulx (France) insisted that the text of Doc. 677 (Comments by the French Delegation on Doc. 676) should be annexed to the body of the report in Doc. 676.

Mr. Siforov (U.S.S.R.) asked for the Ionospheric Propagation Institute of the U.S.S.R. to be added as paragraph g) on page 2 of Doc. 676.

After a short discussion, it was decided that a working party composed of Mr. Bailey, Dr. Smith-Rose, Mr. Halley and Prof. Kazantsev would meet to redraft Doc. 676.

Docs. 656, 677, 678 and 679 were approved without comment.

e) Study Group VII (Doc. 703)

Approved without comment.

f) Study Group IX (Docs. 704, 705 and 706)

Docs. 704, 705 and 706 were approved with minor drafting changes.

The meeting rose at 18.00 hours.

Rapporteurs:

H. HEATON
J. HAUBEN-UMBERG

Secretary:

R.V. LINDSEY

Chairman:

Pawel SZULKIN

PLENARY

MINUTES

OF THE FIFTH PLENARY MEETING

Tuesday, 4 September 1956, at 9.30 a.m.

Subjects discussed:

Examination and approval of documents submitted by the Drafting Committee.

- a) S.G. No. IX (Nos. 707, 708, 709, 710, 711, 729, 730, 731, 732, 733 and 738)
- b) S.G. V (Nos. 770, 771, 772, 773 and 774)
- c) S.G. XIII (Nos. 739, 740, 748, 749, 751, 752, 753, 757, 758, 759, 760, 761, 762, 763 and 764)

Chairman: Professor Pawel Szulkin

Present:

Administrations:

Members of the I.T.U.:

Australia, Austria, Belgium, Bielorussian S.S.R., P.R. of Bulgaria, Canada, Denmark, Egypt, Spain, United States of America, Finland, France, Hungarian P.R., India, Ireland, Italy, Japan, Laos, Norway, New Zealand, Netherlands, P.R. of Poland, Federal German Republic, F.P.R. of Yugoslavia, Ukrainian S.S.R., Roumanian P.R., United Kingdom of Great Britain and Northern Ireland, Sweden, Switzerland, Czechoslovakia, Turkey, Union of South Africa, U.S.S.R., Venezuela.

Recognized Private Operating Agencies:

British Broadcasting Corporation, Cie. Générale de T.S.F., I.M.R.C., K.D.D., M.I.M.C.C., N.T.T., Transradio Española.

International Organizations:

C.I.S.P.R., C.I.R.M., I.C.S., O.I.R., U.R.S.I.

Permanent Organs of the I.T.U.:

C.C.I.F.: Mr. Lalou
C.C.I.T.: Mr. Besseyre
I.F.R.B.: Mr. Roberts

Secretary: Mr. R.V. Lindsey

1. Examination and approval of documents submitted by the Drafting Committee

Opening the meeting, the Chairman said that before broaching the Agenda, Docs. Nos. 707 to 711 inclusive left over from the previous meeting, should be examined. Docs. Nos. 729, 730, 731, 732, 733 and 738 could be considered immediately after Docs. Nos. 707 to 711 inclusive since they too emanated from Study Group IX.

It was so agreed.

Study Group IX

The Chairman asked Mr. Stanesby, Chairman of Study Group IX to introduce the documents.

Document 707: New Recommendation: Interconnection at Audio Frequencies of Multi-Channel Radio Telephone Systems Using Time-Division Multiplex and Operating at Frequencies Above About 30 Mc/s.

Mr. Stanesby recalled that the two amendments adopted at the previous meeting for Doc. 706 also applied to Doc. 707 in which the third line of consideration c) should read: "... already covered by Recommendation No. 40 relating to systems operating above about 30 Mc/s" and the last line of the document:

"2. the method of signalling over international circuits".

The Recommendation (Doc. 707) thus amended was unanimously adopted.

Document 708: Question : Preferred characteristics of radio-relay systems for the transmission of monochrome television.

Mr. Stanesby explained that the new question contained in that document was designed to replace Question No. 91.

Document 708 was unanimously adopted.

Document 709: Recommendation: Interconnection at Baseband Frequencies of Multi-Channel Radio Systems Using Frequency-Division Multiplex and Operating at Frequencies Above About 30 Mc/s.

Mr. Stanesby, introducing the document, said that the following words should be inserted in the first sentence of Note 1) on page 2:

"excepting those for 120 channels".

With that amendment Document 709 was unanimously adopted.

Document 710: Recommendation: Frequency Tolerances for Transmitters Used in Wide-Band Radio-Relay Systems Operating at Frequencies Above About 30 Mc/s.

Mr. Stanesby stated that the recommendation in that document was likewise contained in a proposal submitted to the Drafting Committee by Study Group I. In the circumstances it might be better if Study Group IX withdrew its text.

After a discussion in which Mr. Metzler (Switzerland), Mr. Bramel de Cléjoulx (France), Professor Szulkin (P.R. of Poland) and Professor Siforov (U.S.S.R.) took part, it was so agreed.

Document 711: Resolution: Operational Characteristics of Long-Distance Radio-Relay Systems.

Mr. Stanesby said that since the text was not a technical one, it had been submitted in the form of a Resolution.

Document 711 was unanimously approved.

Document 729: Report: Preferred Characteristics for Multi-Channel Radio Systems Using Frequency-Division Multiplex and Operating at Frequencies Above About 30 Mc/s.

After Mr. Stanesby had introduced the document, Mr. Bramel de Cléjoulx proposed a slight amendment to the French text.

Document 729 was approved.

Document 730: Recommendation: Interconnection at Intermediate and Radio Frequencies of Frequency Modulated Multi-Channel Radio Systems Using Frequency-Division Multiplex and Operating at Frequencies Above About 30 Mc/s.

Mr. Stanesby stated that on page 2 of the English text the sentence following the table should read: "Larger capacity systems are not excluded".

Mr. Bramel de Cléjoulx commented on the French text.

Subject to these reservations, Document 730 was approved.

Document 731: Recommendation: Interconnection at Intermediate Frequencies of Multi-Channel Radio-Relay Systems Using Frequency-Division Multiplex and Operating at Frequencies Above About 30 Mc/s.

Introducing the document, Mr. Stanesby stated that it contained, for circuits at intermediate frequencies, the preferred values of the intermediate frequency, the input and output levels of the signal and the impedance.

The Recommendation (Doc. 731) was unanimously adopted.

Document 732: Recommendation: Procedure for International Connections Between Radio-Relay Systems with Different Characteristics.

After a brief recapitulation by Mr. Stanesby, the Recommendation was unanimously adopted.

Document 733: Report: Preferred Characteristics of Multi-Channel Radio Telephone Systems Using Time-Division Multiplex and Operating on Frequencies Above About 30 Mc/s.

Technical Characteristics which should be specified in order to be able to interconnect any two time-division multiplex systems.

After the document had been introduced by Mr. Stanesby, Mr. Bramel de Cléjoulx proposed two amendments to the French text.

Document 733 was approved.

Document 738: Recommendation: International Wide-Band Radio-Relay Systems Operating on Frequencies Above About 30 Mc/s Interconnection of Multiplex Systems.

The draft recommendation introduced by Mr. Stanesby, was unanimously adopted without comment.

The set of documents submitted by Study Group IX having been examined, the Chairman congratulated Mr. Stanesby, Chairman of the Group, on the excellent way in which the Group has carried out its difficult task.

Study Group V

Document 770: Question: Measurement of Field Strength in the Neighbourhood of Obstacles.

Dr. Smith-Rose, Chairman of Study Group V recalled that this draft question was designed to replace London Question No. 86, and proposed that the words "of any nature" in line 2 of consideration c), be deleted.

The amendment was approved.

The Question (Doc. 770), thus amended, was unanimously approved.

Document 771: Recommendation: Field Strength Measurements.

Dr. Smith-Rose pointed out that the note at the bottom of the page had been omitted in the English text. Mr. Bramel de Cléjoux supplied a correction to the French text.

With these corrections, Document 771 was unanimously adopted.

Document 772: Question: Measurement of Field Strengths for VHF and UHF Broadcast Services, including Television.

The Question was approved with an amendment to the English text only.

Document 773: Study Programme: Tropospheric Wave Propagation.

Dr. Smith-Rose recalled that this Study Programme was designed to replace Study Programme No. 56.

The Study Programme (Doc. 773) was unanimously adopted.

Document 774: Modifications to the titles of reports Nos. 4, 5 and 22.

The Document was unanimously approved.

The Chairman thanked Dr. Smith-Rose, Chairman of Study Group V, for the work accomplished and invited the Assembly to examine the documents from Study Group XIII.

Study Group XIII

Document 739: Recommendation: Identification of Radio Stations.

Mr. Söberg, Vice-Chairman of the Study Group said that the paper contained a modification to Recommendation No. 132.

Prof. Siforov (U.S.S.R.) stated that the U.S.S.R. Delegation, having carefully considered the document wished to reiterate in Plenary Assembly the views which it had already expressed in Sub-Group XIII-A. The Delegation was opposed to the use of an additional modulation since it considered the experience available to be inadequate and since such modulations, if used, might give rise to interference. Moreover, the introduction of any additional modulation was unnecessary and offered no advantages from the financial point of view. Any decision in that sphere would be premature and he therefore requested that the reservations which his delegation had expressed with regard to Doc. 739 and which were equally applicable to Docs. 740 and 757, be recorded in the minutes.

Mr. Kachel (Bielorussian S.S.R.) on behalf of his own Delegation and that of the Ukrainian S.S.R. which he was representing, made a similar reservation.

Mr. Trifonov (P.R. of Bulgaria) was of the opinion that the Recommendation, if implemented, would lead to technical difficulties. Therefore he, too, wished to make a reservation with regard to Docs. 739, 740 and 757.

Subject to these reservations; the Recommendation in Doc. 739 was adopted.

Document 740: Study Programme: Identification of Radio Stations.

The Chairman pointed out that the previous reservations also applied to this document. Subject to these reservations, Doc. 740 was adopted.

Document 748: Recommendation: Inter-ship radar identification

Mr. Söberg, introducing the document, said that in the note at the bottom of the page the number of the document which had passed through the Drafting Committee was now 749.

Mr. Bramel de Cléjoulx offered an amendment to the French text of consideration c).

With these amendments document 748 was adopted.

Document 749: Question: Marine identification devices.

Mr. Söberg, introducing the document suggested that the last two lines be amended. Mr. Bramel de Cléjoulx proposed the following text:

- a) identification of a ship on the radar of another ship,
- b) identification of a ship on the radar of a station on shore.

At the request of Mr. Söberg, Mr. Gleadle (United Kingdom), as Chairman of Sub-Group XIII-B, declared that the new text was more precise and therefore preferable.

The Question in Doc. 749, thus amended, was unanimously adopted.

Document 751: Question: Bearing and position classification for direction in the VHF, HF and 2 Mc/s bands.

Mr. Söberg stated that the document number of the report quoted in the last line but one should read 752 instead of 618.

Mr. Bramel de Cléjoulx pointed out that the title of the Radio Regulations was incorrectly quoted in the English text.

With these slight amendments, the Question intended to replace Question No. 106 was unanimously adopted.

Document 752: Report: HF and VHF Direction finding.

Mr. Bramel de Cléjoulx offered the following drafting amendment: on page 3 of the document the sentence opposite Class B and Class C should read: "Bearing appears FAIR (or POOR) being degraded by one or more of the following factors:".

The amendment was adopted.

The Report as amended, was approved.

Document 753: Revision of Recommendations Nos. 72, 78 and 125.

The Document was unanimously approved.

Document 757: Report: Identification of Radio Stations.

The Chairman once again recalled that the reservations made with regard to Doc. 739 also applied to this document.

Document 757 was unanimously approved.

Document 758: Question: Technical characteristics of single-sideband aeronautical mobile and maritime radiotelephone equipments.

Mr. Söberg, introducing the document said that it contained a new Question.

The Question (Doc. 758) was adopted without comment.

Document 759: Question: Spurious emission from frequency modulated VHF (metric) maritime equipment.

Introducing this new Question, Mr. Söberg suggested that the English text be brought into line with the French text by deleting the words "especially those" in line 3 of consideration a).

Dr. Metzler (Switzerland) wished to make a comment on the terminology used. Study Group I had suggested to the Drafting Committee that the term "unwanted emissions" be replaced by "spurious radiation". He was in favour of using the latter.

Capt. Booth (United Kingdom) preferred to retain "spurious emissions" in the English text.

Mr. Bramel de Cléjoulx suggested that the matter be left in abeyance. Should the proposal submitted by Study Group I be adopted by the Drafting Committee, the Secretariat would make the necessary corrections.

Dr. Metzler agreed.

Subject to the above reservations and with the above amendments, Doc. 759 was approved.

Document 760: Recommendation: Technical characteristics of frequency-modulated VHF (metric) maritime equipments.

Subject to a possible replacement, at the request of Dr. Metzler, in line 1, paragraph 1.7.3, page 3 of the expression "any harmonic or spurious emission" by "any spurious radiation", the recommendation contained in Doc. 760 was unanimously adopted.

Document 761: Question:

Selective calling devices for use in the international VHF (metric) maritime mobile service.

Mr. Söberg recalled that the document contained a new Question and pointed out that the number of the document referred to at the beginning of consideration a) should be altered to 760.

Document 761 was unanimously adopted.

Document 762: Recommendation:

Testing of 500 kc/s radio telegraphic auto-alarm receiving equipment on board ships.

Mr. Söberg stated that the study of Question No. 108 would be brought to an end by the adoption of this Recommendation.

The Recommendation in Doc. 762 was unanimously adopted.

Document 763:

Modification to Recommendation No. 141.

Mr. Söberg stated that certain expressions in the document differed from those used by other Study Groups. It would be advisable for the Drafting Committee to bring the terminology into line.

At the request of Mr. Besseyre (C.C.I.T.) it was agreed to amend, to that end, the first two expressions in Table I. (French text only).

Document 763 was approved.

Document 764:

Modification to Resolution No. 18.

With a drafting amendment to line 1 in the English text, which would now read: "3. - That Administrations should consider", Doc. 764 was approved.

The Chairman thanked Mr. Söberg for the work accomplished by Study Group XIII whose documents the Plenary Assembly had just approved.

He announced that, in view of the progress made, the next meeting of the Plenary Assembly would be held on Thursday, 6 September.

The meeting rose at 12.10 p.m.

Rapporteur:

Secretary:

Chairman:

Mlle. CAHN-BUNEL

R.V. LINDSEY

Pawel SZULKIN

PLENARY

MINUTES
OF THE SIXTH PLENARY MEETING

Thursday, 6 September 1956, at 9.30 a.m.

Subjects discussed :

1. Telegram of sympathy to Mr. Ruiz de Gopegui of the Spanish Delegation
2. Documents presented by the Drafting Committee :

S.G. I (Nos. 775, 776, 778, 779, 780, 819, 820)
S.G.IV (Nos. 803, 826)
S.G.IV and S.G. VI (No. 782)
S.G.VI (Nos. 797, 805, 806, 807)
S.G.VIII (Nos. 787, 788, 789, 790, 791, 794, 795, 796)
S.G.IX (Nos. 783, 784, 798, 799, 801, 802, 808, 809, 810, 811,
817, 821, 827, 828)
S.G.XIII (No. 814)

Chairman : Prof. Paweł Szulkin

Present:

Administrations Members of the I.T.U.:

Australia, Austria, Belgium, Bielorussian S.S.R., P.R. of Bulgaria, Canada, Denmark, Egypt, Spain, United States of America, Finland, France, Hungarian P.R., India, Ireland, Italy, Japan, Laos, Norway, New Zealand, Pakistan, Netherlands, P.R. of Poland, Federal German Republic, F.P.R. of Yugoslavia, Ukrainian S.S.R., Roumanian P.R., United Kingdom, Sweden, Switzerland, Syrian Republic, Czechoslovakia, Oversea Territories of the French Republic, Turkey, Union of South Africa, U.S.S.R.

Recognized private operating agencies :

B.B.C., Cable and Wireless, Compagnie générale de T.S.F., I.M.R.C., K.D.D., M.I.M.C.C., N.T.T., R.A.I., Transradio Española

International organizations :

B.I.H., C.I.S.P.R., C.I.R.M., I.C.S., I.B.O., U.R.S.I.

Permanent organs of the I.T.U.:

C.C.I.T., I.F.R.B.

Secretary: Mr. Robert V. Lindsey

1. Telegram of sympathy to Mr. Ruiz de Gopegui of the Spanish Delegation

The Chairman expressed his regret at learning that Mr. Ruiz de Gopegui had fallen seriously ill and suggested that the following telegram be sent to him on behalf of the Assembly: "Learning with regret that you are ill the delegates meeting together in plenary assembly send you their best wishes for a speedy recovery hoping to see you quickly back among them."

Mr. de Erice y O'Shea (Spain) expressed the heartfelt thanks of the Spanish Delegation for the kind consideration shown by the Assembly. He trusted that Mr. Ruiz would very soon recover in the beautiful modern clinic where he was being treated thanks to the kindness of the Polish authorities.

It was decided that the Chairman would send the telegram on behalf of the Assembly.

2. Documents presented by the Drafting Committee:

Study Group I (Docs. Nos. 775, 776, 778, 779, 780, 819, 820).

The above documents were approved with minor drafting changes.

Study Group IV (Docs. Nos. 803 and 826)

Doc. 803 was approved with minor drafting changes.

In connection with Doc. 826, Mr. Bramel de Cléjoulx (France) having raised the question of the exact meaning of "very high frequencies", it was agreed to reword paragraph 3 as follows: "3. the siting of aeriels for frequencies above 30 Mc/s."

Study Groups IV and VI (Doc. No. 782).

On a suggestion by Prof. Dr. van der Pol, Director of the C.C.I.R., it was agreed to add the words "even in daytime" to the first sentence of the second paragraph.

Mr. Roberts, representative of the I.F.R.B., thanked the Assembly for the advice which it had given on this question which had been posed on account of a case in the experience of the I.F.R.B. in which the ground wave, even beyond 2000 km, appeared to predominate.

With the above amendment, Doc. 782 was approved.

Study Group VI (Docs. Nos. 797, 805, 806, 807)

Introducing Doc. No. 797, Mr. Bailey (United States), Acting Chairman of Study Group VI, said that he would hand in the minor drafting changes to the Secretariat but wished to indicate a slightly more important change in the last line of the text proper on page 10, where "percentage" should read "percentile."

Mr. Baliga (India) asked whether the report, together with the curves taken from Doc. 490, were for provisional use or for information only.

Mr. Bailey replied that the first paragraph of Doc. 838 contained the answer to that question.

With the drafting changes mentioned above, Doc. 797 was approved.

After Mr. Bailey had introduced Doc. 805, Prof. Dr. vander Pol said that the recommendation would be of great value to radio astronomers. It concerned a new field in which many important developments were bound to take place. He therefore asked for a second note to be added reading: "2. The Director of the C.C.I.R. should communicate this Recommendation to U.R.S.I."

Agreed.

With the above amendment and minor drafting changes, Doc. 805 was approved.

In connection with Doc. 806, Mr. Topuria (U.S.S.R.) reminded the assembly that Recommendation No. 121 had not been accepted in London by the U.S.S.R., which considered that the matter should be treated by the meteorological organizations and not by the C.C.I.R.

Mr. Kachel (Bielorussian S.S.R.) then stated that the Delegations of the Ukrainian S.S.R. and the Bielorussian S.S.R. shared the views of the U.S.S.R.

Dr. Joachim (Czechoslovakia) said: "Our Delegation is sorry to have to revert to the question dealt with in Doc. 806 in a plenary meeting. But, in view of the quite special conditions in Study Group VI, it was not possible for our Delegation to express its views in the Study Group meetings. We consider that, as the number of C.C.I.R. documents has greatly increased, we cannot afford to accept documents which are entirely within the province of other international organizations."

"As regards the text of the Resolution itself, we consider that points 1 and 2 can be met by the parties concerned without the need for this Resolution. As regards point 3, our Delegation would like to know the opinion of Dr. Metzler: how is he going to ensure the introduction of local lightning flash counters into regular use and what, in his opinion, will be the practical use of such action for the C.C.I.R.?"

"We feel that this matter falls within the province of the World Meteorological Organization and that Doc. 806 should consequently be excluded from the final documents of the VIIIth Plenary Assembly of the C.C.I.R."

Dr. Metzler (Switzerland), Director-elect of the C.C.I.R., said that the present wording of the document made it difficult to understand what exactly was required of the Director of the C.C.I.R. For instance, who was to authorize the Director to take the steps mentioned in paragraph 3? Was he in a position to take such steps?

Prof. Dr. vander Pol (Director of the C.C.I.R.) explained that the most cordial relations had always existed between the C.C.I.R. and W.M.O., which latter had never complained that the C.C.I.R. was trespassing on its territory. He could fully confirm that as soon as there was agreement on the specifications within the C.C.I.R., the matter would be handed over to W.M.O.

In an endeavour to reach agreement, various drafting changes were suggested by Dr. Smith-Rose, Mr. Bailey, Dr. Metzler and Mr. Bramel de Cléjoulx.

It was finally decided to make the following amendments:

In paragraph c) under "considering", add the words "by the World Meteorological Organization" after "introduction".

Alter the first line of the resolution proper to read:

"2. That the group present the final specifications to the"

Paragraph 3. of the resolution proper to be amended to read:

"3. That the Director of the C.C.I.R. take the necessary measures to facilitate the introduction by World Meteorological Organization of the local lightning flash counters into regular use."

With the above amendments, Doc. 806 was approved.

In connection with Doc. 807, Mr. Topuria (U.S.S.R.) said that, although his Delegation supported the principle of the document, he could not agree that one form of equipment should be recommended to the exclusion of all others. He felt that each country should be free to use its own equipment on the understanding that the results obtained should be applicable on a world-wide scale.

In an endeavour to reach unanimity, a discussion arose which led to considerable redrafting of Document 807.

The amendments approved were :

Amend the beginning of paragraph b) under "considering" to read: "b) that a type of equipment suitable for obtaining this information has been developed..."

Amend paragraph c) under "considering" to read: "c) that, although other equipments developed in other countries may also be used to make such measurements, the Control Radio Propagation Laboratory equipment is being installed in a network of stations to be operated by a number of Administrations (see Annex) during the International Geophysical Year and possibly for several years thereafter;"

Amend the recommendation proper to read:

"recommends:

1. that interested Administrations should cooperate in implementing and carrying out this measurement programme;
2. that the results of this world-wide measurement programme, as well as the results of other measurement programmes, should be considered in making a future revision of Report No.....(Doc. 490)."

In the list on page 4, delete "University of Witwatersrand" and replace by "TRL-CSIR"; also replace "US Army SCEI" by "SCRPA".

Document 807, as amended, was approved.

Study Group VIII (Docs. Nos. 787, 788, 789, 790, 791, 794, 795, 796).

The above documents were approved with minor drafting changes.

Study Group IX (Docs. Nos. 783, 784, 798, 799, 801, 802, 808, 809, 810, 811, 817, 821, 827, 828).

The above documents were approved with minor drafting changes.

In connection with Document 817, however, Mr. Nicotera (Italy) made the following reservation:

"We have followed with very great interest the work of Study Group IX both in Geneva in 1954 and in Warsaw and we highly appreciate the remarkable results obtained in the standardization of wide-band radio systems. However, as regards the radio channels of such systems, although we realise that they must be standardised as quickly as possible, we consider that more thorough study of the matter is required before reaching a decision which will have repercussions for dozens of years to come. We consequently cannot agree to approve the Recommendation contained in Document No. 817 and would ask for this statement to be recorded."

Study Group XIII (Doc. No. 814)

Document 814 was approved with minor drafting changes.

The meeting rose at 1.20 p.m.

Rapporteur:

H. Heaton

Secretary:

R.V. Lindsey

Chairman:

Pawel Szulkin

MINUTES

OF THE SEVENTH PLENARY MEETING

Friday, 7 September 1956, at 9.45 a.m.

PLENARY

Subjects discussed :

1. Possible amalgamation of the CCIT Study Group for phototelegraphy and facsimile and the joint CCIR/CCIT Study Group for phototelegraphy (Doc. 631)
2. Documents submitted by the Drafting Committee :
 - Study Group I (Docs. No. 844, 845, 846, 847, 860)
 - Study Group II (Doc. No. 781)
 - Study Group III (Doc. No. 818)
 - Study Group IV (Doc. No. 834)
 - Study Group V (Docs. No. 812, 841, 842, 843)
 - Study Group VI (Docs. No. 838, 839, 840, 856)
 - Study Group VII (Docs. No. 813, 835, 836, 859)
 - Study Group VIII (Docs. No. 861, 862)
 - Study Group IX (Docs. No. 848, 853, 854, 855)

Chairman : Professor Paweł Szulkin

Present :

Administrations Members of the I.T.U. :

Australia, Austria, Belgium, Bielorussian SSR, PR of Bulgaria, Canada, Denmark, Egypt, Spain, United States of America, Finland, France, Hungarian PR, India, Ireland, Italy, Japan, Norway, New Zealand, Pakistan, Netherlands, PR of Poland, Federal German Republic, FPR of Yugoslavia, Ukrainian SSR, Roumanian PR, United Kingdom of Great Britain and Northern Ireland, Sweden, Switzerland, Syrian Republic, Czechoslovakia, Turkey, Union of South Africa, USSR, Venezuela.

Recognized private operating agencies :

BBC, Cable and Wireless, Cie Générale de TSF, IMRC, KDD, MIMCC, NTT, RAI, SABC, Transradio Española.

International organisations :

BIH, CISPR, CIRM, OIR, URSI.

Permanent Organs of the ITU :

CCIT, IFRB

Secretary : Mr. Robert V. Lindsey

Opening the Meeting, the Chairman recalled that, in addition to examining the documents submitted by the Drafting Committee, the agenda called upon the Assembly to consider a proposal concerning the possible amalgamation, in pursuance of Administrative Council Resolution No. 319, of the CCIT Study Group for Phototelegraphy and Facsimile and the joint CCIR/CCIT Study Group for Phototelegraphy. He invited the Assembly to express its views on the matter.

The Agenda was unanimously adopted.

1. Possible Amalgamation of the CCIT Study Group for Phototelegraphy and Facsimile and the Joint CCIR/CCIT Study Group for Phototelegraphy (Doc. 631)

The Chairman invited Mr. Besseyre (CCIT) to introduce the document.

Mr. Besseyre recalled that when the Administrative Council had decided to amalgamate the CCIT and the CCIF, it had been agreed that the Chairmen and the Vice-Chairmen of the Study Groups would hold a meeting in order to prepare a list of Study Groups to be established within the new organ. At that meeting in March 1956, efforts had been made to restrict the number of Study Groups, and to that end the possible amalgamation of the CCIT Study Group on Phototelegraphy with that of the Joint CCIT/CCIR Study Group had been envisaged.

The CCIT Study Group dealt with the standardisation of facsimile and phototelegraphy equipment and the methods of using such equipment, while the activities of the Joint Study Group were more limited.

Since the decision rested solely with the Plenary Assemblies of both organs, it would be helpful if the CCIR Plenary Assembly which was meeting first, expressed its opinion, so that the Plenary Assembly of the new CCIT, which was due to meet the following December, might do likewise.

The Chairman invited Mr. Stanesby (Chairman of CCIR Study Group IX), as the most competent authority on the matter, to state his views.

Mr. Stanesby (United Kingdom), who was also Vice-Chairman of the Joint Study Group, was in favour of leaving things as they were. Amalgamation would be untimely, since any extension of the Joint Study Group's duties would inevitably impair the efficiency with which it carried out its work.

Mr. Baliga (India) said that Mr. Stanesby's statement faithfully reflected the CCIR's point of view.

The Chairman took note of the statements and expressed a hope that the Joint Study Group which had achieved such outstanding results, would continue its work in an equally efficient manner. The task of formulating the CCIR's views could, no doubt, be left to the Secretariat. This was agreed.

2. Examination and approval of documents submitted by the Drafting Committee

Study Group I:

The Chairman invited Dr. Metzler, Chairman of Study Group I, to introduce the documents.

Doc. 844 - Recommendation - Frequency shift keying

Dr. Metzler explained that the Recommendation was designed to replace Recommendation No. 92.

Mr. Joachim (Czechoslovakia) recalled that Study Group VI had approved a draft question on the Doppler effect in ionospheric propagation. The question provided for the study of the frequency deviation to be recommended for long distance circuits using frequency shift keying.

He therefore believed that a reference at the end of para. 3 to a note such as : "for long-distance circuits, see draft question (Doc.223) adopted by Study Group VI" might serve a useful purpose.

Dr. Metzler supported the suggestion.

Following a discussion, it was agreed to insert a note explaining the connection between the work of Study Group No. I and that of Study Group No. VI.

Mr. Hamada (Japan) suggested that the terminology be brought into line with that in Doc. No. 778.

Dr. Metzler agreed.

Subject to these modifications, the amendment to Recommendation No. 92 was unanimously adopted.

Doc. 845 - Recommendation - (Modification to Recommendation No. 93)
Telegraph Distortion

Dr. Metzler recalled that the study of Question No. 17 fell within the province of the CCIT; nevertheless, the CCIR was also cooperating in the matter.

Mr. Topuria (USSR) asked for certain points to be clarified.

Dr. Metzler explained that any decision by the CCIR was subject to approval by the Plenary Assembly of the CCIT. That was the reason for the reservation regarding incorporation in the list of definitions.

Mr. Topuria (USSR) thanked Dr. Metzler for the explanation.

The modification to Recommendation No. 93 (Doc. No. 845) was unanimously adopted.

Doc. 846 - Study Programme - (Modification to Study Programme No. 39)
Bandwidth of Emissions

At Dr. Metzler's suggestion, the document was examined jointly with Doc. No. 857.

Doc. 857 - Report - Determination of the type of emission producing
minimum interference

Dr. Metzler explained that the amendment proposed in Doc. 846 was an outcome of the latest technical developments in that sphere.

The report in Doc. 857, prepared by Colonel Lochard, Vice-Chairman of Study Group I, who was an expert on questions of bandwidth, contained a summary of information collected from all parts of the world on the shape of the spectrum of random signals, the reduction of out-of-band radiation, and the reductions of bandwidth. Dr. Metzler regretted that Colonel Lochard had been recalled to Paris and was thus unable to introduce his noteworthy paper in person.

Docs. 846 and 857 were unanimously approved.

Doc. 847 - Recommendation - Definition of the bandwidth of emissions

Dr. Metzler recalled that the definition of the bandwidth occupied, as set out in the Atlantic City Regulations, gave rise to numerous practical difficulties. That was why the Recommendation had been prepared. It was, of course, for the Administrations participating in the next Administrative Radio Conference to accept or to reject the Recommendation.

The Recommendation in Doc. 847 was unanimously approved.

Doc. 860 - Recommendation - Spurious radiation

Mr. Bramel de Cléjoulx (France), Chairman of the Drafting Committee, said that the title of the English version of the document did not imply that that term had been accepted; the English speaking members of the Drafting Committee were still in favour of "spurious emissions".

Mr. Nielsen (Denmark) said that there had been some delay in distributing the document, which was of great interest to all Delegations and thus deserved careful study; he therefore asked that examination of that document be deferred to the following meeting. It was so agreed.

The Chairman thanked Dr. Metzler, Chairman of Study Group I, for the efficient way in which he had carried out his work.

Study Group II:

Doc. 781 - Question - Selectivity of receivers

Mr. Abadie, Vice-Chairman of Study Group II, said that the text submitted to the Assembly for approval merely reiterated the provisions of Study Programme No. 42 which it was designed to replace.

The question had been prepared because there had been some doubt as to whether measurements of phase/frequency characteristics would serve a useful purpose.

The Question (Doc. 781) was unanimously adopted.

Study Group III

Doc. 818 - Question - The use of radio circuits in association with 5-unit start-stop telegraph apparatus

Dr. van Duuren (Netherlands), Chairman of Study Group No. III, stated that since a partial answer had been provided by a new Recommendation it had been necessary to redraft the text.

The Question (Doc. 818) was unanimously adopted.

Study Group IV:

Doc. 834 - Report - Temporal variation of ground-wave field strengths

Professor Sacco (Italy), Chairman of the Study Group, said that the Report covered the same ground as that dealt with in Reports Nos. 20 and 52.

Professor van der Pol, Director of the CCIR, Mr. Bramel de Cléjoulx (France), Dr. Smith-Rose (United Kingdom), Mr. Joachim (Czechoslovakia) and Mr. Cross (USA) offered drafting amendments to the last two paragraphs of the text.

The Chairman summarised the amendments with a view to providing a compromise solution.

It was finally agreed that a note, worded as follows, be inserted:

"This report brings to an end the study of Study Programme No. 52. URSI is invited to study the question further."

With that amendment the Report (Doc. 834) was unanimously approved.

Study Group V:

Doc. 812 - Report - Tropospheric propagation across mountain ridges

Dr. Smith-Rose (United Kingdom), Chairman, Study Group V, said the document referred to a programme approved by correspondence since the London Assembly.

The Report (Doc. 812) was approved without discussion.

Doc. 841 - Recommendation - Presentation of data in studies of tropospheric wave propagation

Dr. Smith-Rose pointed out that the document was an amendment to Recommendation 110 and was intended to facilitate the study of tropospheric wave propagation.

The Recommendation (Doc. 841) was unanimously adopted.

The Chairman asked the Assembly to study Docs. 842 and 843 together.

Doc. 842 - Report - Propagation data required for wide-band radio systems
Doc. 843 - Question - " " " " " " " "

With regard to Doc. 842, Dr. Smith-Rose said that it was the first report prepared in reply to Question 85. It was based on the latest data, which had resulted in an amendment to the text of the Question (Doc. 843).

Mr. Hamada (Japan) drew attention to the last two lines of Doc. 842. He did not think that the measurements referred to would be necessary in every case, and suggested altering the text accordingly.

Dr. Smith-Rose suggested the following amendment, to which Mr. Hamada agreed: "... and that it may be desirable to obtain more reliable figures over the path."

With the above amendment to Doc. 842, Docs. 842 and 843 were unanimously approved.

Study Group VI:

The Chairman suggested that Docs. 838 and 839 should be studied together.

Doc. 838 - Recommendation - Atmospheric radio noise data

Doc. 839 - Study Programme - Measurement of atmospheric radio noise

Dr. Bailey (United States), Acting Chairman, said that with the adoption of the documents the study of Question 1 would be completed.

Regarding Doc. 838, he asked whether, in view of the existing relationship between the CCIR and the WMO, the delegation of the USSR would be prepared to agree to the addition of the following para. c) under "considering":

"c) that several years will elapse before sufficient data are available as a result of

- 1) the application of a standard objective method of measuring noise;
- 2) the use of a system of lightning-counters installed by the WHO."

He thought, moreover, that there was a slight difference between the English and French texts in the part of paragraph 1 of the Recommendation reading: "Que les renseignements ... soient utilisés avec une certaine prudence ...". The English "should be" was somewhat stronger.

The Chairman suggested that the meeting be suspended, so that a compromise text might be found.

When the meeting was resumed there was a long discussion during which a number of amendments were proposed by Dr. Bailey, Mr. Joachim (Czechoslovakia) Mr. Coffey (Canada) and the Chairman. Mr. Cross (United States) and Mr. Topuria (USSR) were adamant in their views.

A motion of order, moved by Mr. Nicotera (Italy) to close the debate in the plenary meeting and ask a small working group to prepare a compromise text, was put to the vote and rejected.

Capt. Booth (United Kingdom) said his delegation could not agree to an adjournment, as the question had already been discussed at length in the working group, the sub-group and the Study Group.

The Chairman suggested that the Assembly should revert to the original French text to which, in his view, the English text corresponded perfectly well.

Mr. Topuria (USSR) then said he would agree to that text provided nothing were added.

Mr. Joachim (Czechoslovakia) recalled that that was the form in which it had come from the Drafting Committee.

The Chairman thought it was useless to continue the discussion, and put the following to the vote :

1. the original text of Doc. 838,
2. the text with the addition of a para. c) under "considering".

There were fourteen votes in favour of the first and eight in favour of the second. The Recommendation in Doc. 838 was thus adopted in its original form.

The Chairman then asked the Assembly to consider the corresponding Study Programme (Doc. 839).

With some amendments in the drafting and presentation, suggested by Dr. Bailey and Prof. van der Pol, the Study Programme (Doc. 839) was adopted.

Doc. 840 - Study Programme - Use of special modulation on the standard frequency transmissions for assessing the reliability of propagation forecasts

The Study Programme was unanimously adopted.

Doc. 856 - Report - Fading of HF (decametric) and MF (hectometric) signals propagated by the ionosphere

Dr. Bailey asked for a drafting amendment, the text of which he would hand to the Secretariat.

Subject to that amendment, the Report (Doc. 856) was unanimously approved.

The Chairman thanked Dr. Bailey, Acting Chairman, for the work he had done and asked the Assembly to study the documents of Study Group VII.

Study Group VII :

Doc. 813 - Question - Stability of standard frequency transmissions and time signals as received

Mr. Decaux (France), Chairman, pointed out a typing error in the French text.

Doc. 813 was then adopted.

The Chairman suggested that the following documents should be considered together :

Doc. 835 - Study Programme - Standard frequency transmissions and time signals

Doc. 836 - Question - Standard frequency transmissions and time signals

Doc. 859 - Recommendation - " " " " " "

Mr. Decaux explained that Doc. 836 was a new Question, to which the Study Programme and Recommendation were related.

Having pointed out several typing errors in the English text of Docs. 835 and 859, Mr. Decaux, speaking as the representative of the International Time Bureau, made a reservation regarding the numerical value of the frequency indicated in para. 10 of the Recommendation, and asked for his statement to be included in the Minutes.

Subject to this reservation, the Study Programme, Question and Recommendation in Docs. 836, 835 and 859 were adopted.

The Chairman thanked Mr. Decaux for the competent way in which he had directed the work of his Study Group.

Study Group VIII :

The Chairman then proposed that Docs. 861 and 862 be studied together.

Doc. 861 - Question - Frequency measurements at monitoring stations

Doc. 862 - Recommendation - Accuracy of frequency measurements at monitoring stations

Mr. Campbell (Australia), Chairman said that Doc. 861 contained the text of a new question, the draft of which had been unanimously approved in the Study Group. Doc. 862 contained the text of a new recommendation to replace Recommendation 20.

The two documents were unanimously approved.

The Chairman thanked Mr. Campbell and congratulated him on the successful outcome of his work.

Study Group IX : -

The Chairman asked Mr. Stanesby (U.K.), the Study Group Chairman, to introduce the documents of his Group.

Doc. 848 - Study Programme - Standardisation of multi-channel radio systems using frequency-division multiplex and operating at frequencies above about 30 Mc/s

Adopted unanimously.

Doc. 853 - Report - Transmission of pilot frequencies over circuits consisting of cable paths and radio relay links

Approved unanimously.

Doc. 854 - Recommendation - Standardisation of multi-channel radio systems: Radio-frequency interconnection of 240-channel telephony systems

Adopted unanimously.

Doc. 855 - Recommendation - Hypothetical reference circuit for time-division multiplex radio relay systems with 60 or less telephone channels

Adopted unanimously

The Chairman thanked Mr. Stanesby for the excellent results obtained under his chairmanship.

In view of the late hour he suggested that the Assembly should resume its study of the documents from the Drafting Committee at the next meeting, which would take place on Monday, 10 September, at 9.a.m.

It was so agreed.

The Meeting rose at 1.10 p.m.

Rapporteur :
M. Cahn-Bunel

Secretary :
R.V. Lindsey

Chairman :
Paweł Szulkin

PLENARY

MINUTES OF THE EIGHTH PLENARY MEETING

Monday, 10 September 1956, at 9 a.m.

Subjects discussed:

1. Approval of the minutes of the 4th (Doc. 833) and 5th (Doc. 875) Plenary Meetings.
2. Documents submitted by the Drafting Committee:
 - a) Study Group I (Docs. 860, 899)
 - b) Study Group III (Docs. 886, 887, 888, 895)
 - c) Study Group IV (Doc. 885)
 - d) Study Group V (Doc. 889)
 - e) Study Group X (Docs. 863, 892, 891, 866, 879, 867, 865, 868)

Chairman: Professor Paweł Szulkin

Present:

Administrations:

Members of the I.T.U.:

Australia, Austria, Belgium, Bielorussian S.S.R., P.R. of Bulgaria, Canada, Denmark, Egypt, Spain, United States of America, Finland, France, Hungarian P.R., India, Ireland, Italy, Japan, Laos, Norway, New Zealand, Netherlands, P.R. of Poland, Federal German Republic, F.P.R. of Yugoslavia, Ukrainian S.S.R., Roumanian P.R., United Kingdom of Great Britain and Northern Ireland, Sweden, Switzerland, Syrian Republic, Czechoslovakia, Turkey, Union of South Africa, U.S.S.R., Venezuela.

Recognized Private Operating Agencies:

B.B.C., Cable and Wireless, Cie. Gén. de T.S.F., K.D.D., M.I.M.C.C., R.A.I., S.A.B.C., Transradio Española.

International Organizations:

C.I.S.P.R., C.I.R.M., O.I.R., U.R.S.I.

Acting Secretary: Mr. J. Revoy

1. Approval of the Minutes of the 4th (Doc. 833) and 5th (Doc. 875) Plenary Meetings

a) Document 833

Mr. Cross (United States of America), referring to his statement on page 7 of Doc. 833, asked for the last sentence to be amended to read: "The United States would strongly support having the note adopted by the C.C.I.T."

Mr. Baliga (India) asked for his statement on page 5 to be replaced by the following: "Doc. 604 raises some fundamental principles of universality and international co-operation in the radio-communication field. These principles need to be pondered very carefully by this Assembly. My Administration recognizes that there are large areas, with large populations, particularly in Region 3, where radiocommunication has progressed rapidly during the last few years and international co-operation would go a long way in developing radio-communication along the right lines according to the standards laid down by the C.C.I.R. Full co-operation in this field by all countries would, I think, help us to continue our work on a truly worldwide basis. My delegation would therefore support Doc. 604."

With the above amendments Doc. 833 was approved.

b) Document 875

Document 875 was approved without amendment.

2. Documents submitted by the Drafting Committee

a) Study Group I (Docs. 860, 899)

Document 860

Mr. Clarkson (New Zealand) said he had recently been discussing the tolerances for the intensity of spurious radiation with the participants in the Study Group; and as a result he wished to propose an amendment to the text of the third paragraph of Section 3.1 on page 3 of Doc. 860, which would provide for an exception to be made in the case of the aeronautical and maritime mobile services. The paragraph, with this amendment, would read:

"For any spurious radiation the mid-frequency of which is above 60 Mc/s the figure of 200 mW is replaced by 25 mW, with a possible exception in the case of mobile transmitters."

He wanted to make it clear that the intention was not to fix definitely the use of the higher figure for mobile transmitters, but to make provision for that exception during such times as there might be difficulty in meeting a lower figure than 200 mW.

Mr. Pedersen (Denmark) was impressed with the work done by Study Group I.

He regretted to say, however, that in his opinion Section 3 of Doc. 860 was not clear and should be left out. There were two points of substance in it with which he was not in agreement: 1) the limit of 30 Mc/s fixed in Appendix 4 to the Radio Regulations had been expanded to 60 Mc/s; 2) a new limit of 10 mW was made applicable for low-power transmitters, which was not in conformity with the Study Programme.

As had been pointed out, it was of paramount importance that something should be done about interference with television transmissions, and it was therefore surprising to find that the tolerances were being made less severe.

In his opinion the problem should be given further study.

Mr. Esping (Sweden) and Mr. Sjøberg (Norway) wished to associate themselves with the views expressed by the Delegate of Denmark,

Dr. Metzler, Chairman of Study Group I, thought that Mr. Clarkson's proposal would be acceptable, subject to the confirmation of the member countries present.

With regard to Mr. Pedersen's comments, he felt it would be difficult to revert at the present stage to a text which had been discussed at length and approved by the Study Group. The C.C.I.R. was merely making a proposal for consideration by Administrations, and it would be for the Administrative Radio Conference to decide whether to accept the figures suggested.

Mr. Cross (United States of America) said he would prefer the document to be retained as it was. As time went on the tolerances would have to be made more severe, and unless the C.C.I.R. did something to point the way, time was just being wasted.

Mr. Coffey (Canada) agreed with Mr. Cross.

The Chairman hoped that the recommendation, as amended by Mr. Clarkson, would be approved.

There being no further comment, Document 860 was approved, as amended by Mr. Clarkson. Reservations were made by the Delegations of Denmark, Norway, Sweden and the United States of America.

Document 899

Dr. Metzler introduced Doc. 899 and pointed out that France had made a reservation regarding Item III on page 2.

Mr. Bramel de Clejoulx (France) agreed to withdraw the reservations made during the Study Group meeting. He stressed, however, that his Administration might bring the matter up again when the Radio Conference would discuss this recommendation.

With regard to the inclusion of frequency tolerances for radio relay systems (Doc. 710) in Doc. 899, he thought that Administrations and private operating agencies should be urged to implement the recommendations regarding the frequency tolerances for wide band radio relay systems without awaiting the approval of an Administrative Radio Conference, and he therefore wished to propose an additional sentence at the end of the document, reading as follows:

"Nevertheless, in order to facilitate the international interconnection of wide-band radio relay systems, Administrations and private operating agencies are recommended to apply the tolerances laid down in III e), IV c) and V, without waiting for these figures to be adopted by an Administrative Radio Conference."

He hoped that Dr. Metzler and Mr. Stanesby would agree to his proposal.

Dr. Metzler, Chairman of Study Group I, and Mr. Stanesby, Chairman of Study Group IX, were both prepared to accept Mr. Bramel de Clajoulx' suggestion.

Mr. Baliga (India) said: "I note that Doc. 899 recommends more stringent frequency tolerances for the use of the frequency spectrum. India would like to go along with other countries in the adoption of these tolerances. However, India, amongst the other under-developed countries, may have to view these recommendations with some concern until it has been able to assess the repercussions on the radio connection systems of my country. I should like provisionally to make a reservation on this document, but hope to withdraw this reservation before the publication of the green book."

Mr. Pedersen (Denmark) suggested a drafting amendment in paragraph IV b), which was accepted.

With this drafting amendment, the addition at the end of page 3 and the reservation by India, Document 899 was approved.

b) Study Group III (Docs. 886, 887, 888, 895)

Docs. 886, 887, 888 and 895 were approved with minor drafting amendments.

c) Study Group IV (Doc. 885)

Doc. 885 was approved.

d) Study Group V (Doc. 889)

Mr. Pedersen (Denmark) proposed that sub-paragraph 6) on page 2 of Doc. 889 should be deleted, since it dealt with a subject which was the province of S.G. IX.

Dr. Smith-Rose, Chairman of Study Group V, agreed, and with this deletion Doc. 889 was approved.

e) Study Group X (Docs. 863, 892, 891, 866, 879, 867, 865, 868)

The above documents were approved, with minor drafting amendments, and with Mr. Cross's reservation to the effect that in the United States the pre-emphasis time constant was 75 and not 50 microseconds (para. 2).

The meeting rose at 10.30 a.m.

Rapporteur:

B.J. Dazar

Acting Secretary :

J. Revoy

Chairman:

Pawel Szulkin

PLENARY

MINUTES
OF THE NINTH PLENARY MEETING

Monday, 10 September 1956, at 3 p.m.

Questions discussed :

Documents submitted by the Drafting Committee :

- a) Study Group X (Nos. 869, 881, 882, 880, 901, 871, 870, 883, 884, 890, 864, and 905)
- b) Study Group XI (Nos. 872, 902)
- c) Study Group XII (Nos. 804, 837)
- d) Study Group XIII (No. 849)

Chairman : Professor Paweł Szulkin

Present :

Administrations - Members of the I.T.U.

Australia, Austria, Belgium, Bielorussian Soviet Socialist Republic, People's Republic of Bulgaria, Canada, Denmark, Egypt, Spain, the United States, Finland, France, the Hungarian People's Republic, India, Ireland, Italy, Japan, Norway, New Zealand, the Netherlands, the People's Republic of Poland, the Federal German Republic, the Federal People's Republic of Yugoslavia, the Ukrainian Soviet Socialist Republic, the Roumanian People's Republic, the United Kingdom of Great Britain and Northern Ireland, Sweden, Switzerland, the Syrian Republic, Czechoslovakia, Overseas Territories of the French Republic, Turkey, the Union of South Africa, the Union of Soviet Socialist Republics.

Recognized private operating agencies :

B.B.C., Cable and Wireless Ltd., Cie Générale de T.S.F., the Independent Television Authority, K.D.D., M.I.M.C.C., R.A.I., S.A.B.C., Transradio Española.

International Organizations :

B.I.H., C.I.S.P.R., U.R.S.I.

Acting Secretary : Mr. J. Revoy

The Chairman, declaring the meeting open, offered the floor to Mr. de Erice y O'Shea (Spain), who expressed the extreme pleasure felt by his delegation at having attended, no more than a few hours before, the ceremony at which Dr. van der Pol, the Director of the C.C.I.R., had been made a doctor (honorary) of the Warsaw Polytechnic. He would propose that the Assembly ask its Chairman, Prof. Szulkin, to transmit the C.C.I.R.'s most cordial congratulations to the Warsaw Polytechnic for its exceedingly felicitous choice.

Capt. Booth (United Kingdom) immediately concurred. It had been a very great pleasure to see so richly deserved a distinction conferred on Dr. van der Pol. The United Kingdom Delegation, in particular was extremely pleased.

Mr. Bramel de Cléjoulx (France), on behalf of the French Delegation, associated himself with the sentiments expressed by Mr. de Erice y O'Shea and Capt. Booth.

Mr. Topuria (U.S.S.R.), wanted to be associated with them too, for he had been very happy to see Dr. van der Pol the recipient of so high a distinction. Dr. van der Pol's work, even that which was most recent in date, was well known in the Soviet Union.

Mr. Terzani (Italy), in his turn, congratulated Dr. van der Pol most cordially.

Dr. van der Pol (Director, C.C.I.R.), much moved, said how grateful he was for what had been said.

The Chairman said that in accordance with the proposal made, he would transmit the C.C.I.R.'s congratulations to the Warsaw Polytechnic.

1. Documents submitted by the Drafting Committee :

Study Group X :

The Chairman invited the Assembly to revert to consideration of the documents issued by the Drafting Committee, and to begin with Nos.881 and 882, from Study Group X. Mr. Prose Walker (United States), the Study Group Chairman, had agreed that they be jointly considered.

Doc. No.881 : Study Programme : Measurement of modulation levels

Doc. No.882 : Question : Measurement of modulation levels

Mr. Prose Walker (United States) recalled that questions set by the C.C.I.F. were the origin of the above-mentioned studies, as a result of which some exceedingly interesting information had been obtained.

Capt. Booth (United Kingdom) said it would be well to recall, either in the text itself or in the title, that the question concerned sound broadcasting.

Mr. Hayes (Vice-Director, C.C.I.R.), felt that the best thing to do would be to add "in sound broadcasting" to the title.

Subject to this amendment and to correction of a typing slip noticed by Mr. de Keyser (Belgium), the Study Programme and Question set forth in Documents Nos. 881 and 882 were unanimously adopted.

Doc. No. 869 : Report : The minimum number of frequencies necessary for the transmission of a HF broadcasting programme :

The Chairman asked whether any revised version had been evolved.

Mr. Prose Walker (Chairman, Study Group X) said that he had had a talk with Mr. Topuria (U.S.S.R.), during the break, and they had agreed that the second line should read "....in certain favourable conditions."

He had also discussed paragraph 1 of Report No. 13 with Mr. Topuria, who was not satisfied with it, but he had been unable to rally Mr. Topuria to its support.

Mr. Topuria (Union of Soviet Socialist Republics) was not, in fact, very happy about the formula used in Report No. 13. The latter dated back to the VIIth Plenary Assembly, at which, he had to admit, his delegation had accepted it. Hence, and since the formula was open to a variety of interpretations, he would no longer oppose it.

Subject to the amendment proposed, the modification to Report No. 13 in Doc. No. 869 was unanimously adopted.

Doc. No. 880 : Recommendation : Measurements of wow and flutter :

Doc. No. 901 : Report : Measurements of wow and flutter :

Mr. Prose Walker (United States) said that in the Study Group it had been asserted that some Administrations preferred to use a frequency other than that recommended in the text.

Mr. Bouchier (Belgium) said that the title in English was more general than in French; hence he suggested a drafting change to the latter.

Thus amended, Docs. Nos. 901 and 880 were unanimously adopted.

Doc. No. 871 : Recommendation : Standards of sound recording for the international exchange of programmes

Lateral cut recording on discs

Mr. Prose Walker pointed out some amendments and typing errors in the text and, referring to the curve mentioned in the document, stressed the desirability of unifying the reference curves on the international level. They existed in all countries and there was practically no difference between them. It should not, therefore be difficult to agree on model curves which would greatly simplify subsequent studies.

Mr. Bramel de Cléjoulx (France) noted certain differences in the writing of the mathematical formula. That would be checked.

The modification to Recommendation No.134 (Doc. No.871) was adopted unanimously, subject to the amendments mentioned.

Doc. No.870 : Report : Standards of sound recording for the international exchange of programmes

The Report (Doc. No.870) was adopted unanimously, subject to a slight modification in the text.

Doc. No.883 : Recommendation : Standards of sound recording for international exchange of programmes. Single track recording on magnetic tapes

Mr. Prose Walker suggested an amendment to the text to be added in paragraph 2, page 2, of the English version, which would thus correspond to the French.

The Recommendation (Doc. No.883) was adopted unanimously, subject to this amendment.

Doc. No.884 : Report : Width of magnetic tapes

Doc. No.890 : Resolution : Width of magnetic tapes

Mr. Prose Walker recalled that the Resolution (Doc. No.890) had originated in the impossibility of reaching an agreement on the new standards for tape widths, as described in the report. He also pointed out, as did Mr. Bramel Cléjoulx, certain mistakes in the lay-out or typing.

Mr. Hayes, Vice-Director of the C.C.I.R., remarked that they might have to come back to Doc. No.890 when the report by the Budget Committee was discussed, for no provision had been made for a meeting of Study Group X, referred to in paragraph 3.

The Chairman observed that the Organisation Committee would likewise study the matter and the Resolution would only be passed if that Committee approved the proposal.

Capt. Booth (United Kingdom) was surprised that there would be talk of submitting such a question to the Budget Committee. He considered that the matter referred to in paragraph 3 of the Resolution could and should be settled by correspondence. He wanted it to be included in the minutes that the delegation of the United Kingdom was, in principle, against a new meeting of Study Group X, unless it proved to be absolutely essential.

Docs. Nos. 884 and 890 were approved, subject to the above reservations.

Doc. No. 864 : Resolution : Organizations qualified to take
action on questions of recording

Mr. Prose Walker mentioned a remark by the French delegation in the Sub-Group to the effect that only the Plenary Assembly could decide on this matter.

Mr. Bramel de Cléjoulx (France) wished to make some remarks both on the form of the document and on its substance.

With regard to the form, he thought it was essential to state in the title that sound recording was referred to.

With regard to the substance, paragraph a) mentioned that difference of opinion might exist as to which was the most qualified organization; but the Resolution itself did not state clearly which was that Organization. It was nevertheless essential to specify which organization should have the last word. In the opinion of the French delegation, that was without a doubt the C.C.I.R., which represented Administrations and private operating agencies, it being taken for granted, of course, that the C.C.I.R. would bear in mind the work of other organizations.

Hence he proposed the following first paragraph for the Resolution : "That the C.C.I.R. should be considered as the organization qualified to deal with questions of sound recording for the international exchange of programmes"; the second paragraph would more or less repeat the text of the Resolution submitted to the Assembly, and would read : "that the C.C.I.R., the I.E.C., and the International Standardisation Organization (I.S.O.) should keep in close touch with each other with a view to avoiding unnecessary duplication of work".

Mr. Prose Walker pointed out that the I.S.O. and various organizations connected with it had carried out extremely advanced research in the matter, and especially in the field of sound recording on filmed bands.

Capt. Booth (United Kingdom) had given much thought to the Question and, although he agreed in principle with the opinion of the French delegation, he could not actually support it. The size of the job for which the C.C.I.R. was already responsible should not be underestimated. Moreover, where other specialised organizations did their job competently it really would be a duplication of work if the C.C.I.R. were to study the same questions. That surely was what they were trying to avoid. He would like to see the Resolution worded in such a way as to bring out this aim.

Mr. Popović (F.P.R. of Yugoslavia) shared Capt. Booth's view and noted that the C.C.I.R., which according to Mr. Bramel de Cléjoulx ought to be entrusted with questions of programme exchanges, was not the only organization busying itself with the matter on the international level at that moment.

Mr. Bornemann (Federal German Republic) likewise supported the view expressed by Capt. Booth.

Mr. Popović seemed to recall that in Study Group X, the French delegate, Mr. Lacharnay, had expressed the opinion that the Plenary Assembly ought to take over the Resolution in question, and not only for questions of sound broadcasting but also in connection with all the other subjects under study.

Mr. Bramel de Cléjoulx strongly denied that. There must have been a misunderstanding, for the position of the French delegation was quite clear. It had said that the question was too important to be considered by a Study Group, for it was a question of principle. But it had never suggested that the C.C.I.R. could pass part of its duties, allotted to it by the Convention, to other organisations.

Mr. Bouchier (Belgium), while understanding the arguments put forward by Capt. Booth, believed he could see what was worrying the French delegate. One way of satisfying both points of view might be to state in the Resolution that as the C.C.I.R. was the chief organisation concerned with the exchange of programmes it might lay down technical standards.

Capt. Booth (United Kingdom) wanted, on the contrary, to draw up a draft Resolution in more general terms.

The Chairman felt that an agreement was possible and he entrusted the task of working out a compromise formula to a small group consisting of the following: Mr. Prose-Walker, Mr. Mallein, Capt. Booth, Mr. Popovic, and Mr. de Keyser.

It was decided that the Assembly should subsequently re-examine Doc. No.864.

Doc. No.905 : Report : High-frequency broadcasting, Directional antennae with reduced subsidiary lobes

Mr. Prose Walker introduced the document, adding that he would like to hear an explanation of certain points. Perhaps the delegation of the People's Republic of Poland, from whom the document came, could supply those explanations.

Mr. Flisak (P.R. of Poland) proposed that the document should be discussed on the following day, so that he might discuss it privately with Mr. Prose Walker.

It was so decided.

The Chairman thanked Mr. Prose Walker, and congratulated him on the numerous studies undertaken under his leadership.

Study Group No.XI

Doc. No.872 : Study Programme : Ratio of the wanted to the unwanted signal in television

The Study Programme (Doc. No.872) was adopted unanimously, after a slight layout change had been made on the proposal of Mr. Esping (Sweden) Chairman of Study Group No.XI.

Doc. No.902 : Question : Assessment of the quality of television pictures.

The new text of the Question was approved unanimously, after a slight drafting change had been made.

Study Group No.XII

Doc. No.804 : Question : Margin against fading in tropical broadcasting

Mr. Baliga (India), Chairman, proposed to make two drafting amendments to the document.

Subject to those amendments, the Question (Doc. No.804) was approved unanimously.

Doc. No.837 : Report : Best method for calculating the sky-wave field strength produced by a tropical broadcasting transmitter

Mr. Hamada (Japan) asked for a drafting change which only affected the English version.

The Report (Doc. No.837) was approved unanimously, subject to that change.

Study Group No.XIII

Doc. No.849 : Question : Characteristics of equipments and principles governing the allocation of channels in the VHF (metric) and UHF (decimetric) land mobile services

Mr. Söberg (Norway), Vice-Chairman, stressed the topical interest of the question (Doc. No.849), which, after a slight change had been made in the English text, was approved unanimously.

The Chairman reminded the Assembly that the time had come for the scheduled meeting of the Organisation Committee, and invited it to continue the examination of the documents issued by the Drafting Committee on the following day at 9.30 a.m.

The meeting adjourned at 4.45 p.m.

Reporter :

M. Cahn-Bunel

Acting Secretary

J. Revoy

Chairman :

Pawel Szulkin

PLENARY

MINUTES
OF THE TENTH PLENARY MEETING

Tuesday, 11 September 1956, at 9.30 a.m.

Subjects discussed :

Documents presented by the Drafting Committee :

- a) Study Group I (Doc. No. 904)
- b) Study Group II (Docs. Nos. 912, 913, 923, 924, 925, 926, 927, 928)
- c) Study Group III (Docs. Nos. 920, 921, 930, 931, 932, 939, 940, 941)
- d) Study Group IV (Docs. Nos. 936, 937)
- e) Study Group VI (Docs. Nos. 908, 909, 922, 934, 935, 945, 946, 951, 676(rev.))
- f) Study Group VII (Doc. No. 903)
- g) Study Group IX (Docs. Nos. 916, 918)
- h) Study Group X (Docs. Nos. 905, 919, 943)
- i) Study Group XI (Docs. Nos. 910, 914, 915, 917, 938).

Chairman : Prof. Paweł Szulkin

Present :

Administrations Members of the I.T.U. :

Australia, Austria, Belgium, Bielorussian SSR, PR of Bulgaria, Canada, Denmark, Egypt, Spain, United States of America, Finland, France, Hungarian PR, India, Ireland, Italy, Japan, Laos, Norway, New Zealand, Netherlands, PR of Poland, Federal German Republic, FPR of Yugoslavia, Ukrainian SSR, Roumanian PR, United Kingdom of Great Britain and Northern Ireland, Sweden, Switzerland, Syrian Republic, Czechoslovakia, Turkey, Union of South Africa, USSR.

Recognized private operating agencies :

BBC, Cable and Wireless, Compagnie générale de TSF, KDD, MIMCC, SABC, Transradio Española.

International organisations :

BIH, CISPR, CIRM, URSI.

Permanent Organs of the I.T.U. :

IFRB

Acting Secretary : Mr. Jean Revoy

Documents presented by the Drafting Committee :

a) Study Group I (Doc. No. 904)

Approved without comment.

b) Study Group II (Docs. Nos. 912, 913, 923, 924, 925, 926, 927, 928)

Doc. 912 was approved with minor drafting changes.

Doc. 913 was approved with the deletion of the last paragraph of the Annex, at the proposal of Mr. Coffey (Canada).

Docs. 923, 924, 925, 926, 927 and 928 were approved without comment.

c) Study Group III (Docs. Nos. 920, 921, 930, 931, 932, 939, 940, 941)

Docs. 920, 921 and 930 were approved with minor drafting changes.

In connection with Docs. 931, 932 and 941, the Delegations of the USSR, Czechoslovakia, the Ukrainian SSR, the PR of Bulgaria, the Bielorussian SSR and the Hungarian PR reserved their position on the grounds that the decisions contained therein were arbitrary and premature. The matter should be given further study in the Study Groups so that a unanimous decision might be reached at the next Plenary Assembly.

The Chairman asked the Director of the CCIR to bear this point in mind when preparing the Study Group programme for the following year.

With the above reservations, Docs. 931, 932 and 941 were approved.

Doc. 939 was approved without comment.

In connection with Doc. 940, Mr. Bornemann (Federal German Republic) reserved the position of his Delegation as far as the figures in the Annex (page 3) were concerned, since study of the matter by his Administration was not yet terminated.

With the above reservation, Doc. 940 was approved.

d) Study Group IV (Docs. Nos. 936 and 937)

Docs. 936 and 937 were approved with minor drafting changes.

e) Study Group VI (Docs. Nos. 908, 909, 922, 934, 935, 945, 946, 951, 676(rev))

Doc. 908 was approved with the addition of the words: "in URSI" at the end of the third paragraph.

After a short discussion, Doc. 909 was approved with the deletion of the beginning of the second sentence, from: "On the basis..." to: "... it is clear that".

Doc. 922 was approved with the addition of the word :"(Czechoslovakia)" after the reference to Doc.No. 122.

Doc. 934 was approved without comment.

Doc. 935 was approved with minor drafting changes and the insertion of the words: "(People's Republic of Poland)" after the reference to Doc.No.213.

At the request of Mr. Topuria (USSR), approval of Doc. 945 was deferred to the next meeting, where it would be examined in the light of the final version of Doc. TEMP.207, still in the hands of the Drafting Committee.

Doc. 946 was approved without comment.

Docs. 951 and 676(rev.) were examined together and approved with the insertion of paragraph g) of Doc. 676(rev.) into Doc. 951 and the addition of "Radio Research Committee, New Delhi, India". Paragraph c) on page 2 of Doc. 676(rev.) was also to be amended to read : "Radio Research Laboratory, Ministry of Postal Services, Kokubunji, Tokyo."

f) Study Group VII (Doc. No. 903)

Doc. 903 was approved with minor drafting changes.

g) Study Group IX (Docs. Nos. 916, 918)

Docs. 916 and 918 were approved without comment.

h) Study Group X (Docs. Nos. 905, 919, 943)

Doc. 905 was approved with minor drafting changes and the deletion of the paragraph beginning : "The high value of the radiation resistance..." on page 2.

Docs. 919 and 943 were approved with minor drafting changes.

i) Study Group XI (Docs. Nos. 910, 914, 915, 917, 938)

Docs. 910 and 914 were approved without comment.

Doc. 915 was approved with minor drafting changes.

Doc. 917 was approved with the following amendment : Delete the second paragraph and replace by :

"Note 3. It follows from Documents 209 and 224 that, for receivers of the types used in the tests described in these documents, within the vestigial sideband, the line marked: "systems in which the frequency spacing of vision and adjacent channel sound carriers is 2.85 Mc/s" would be preferable for systems in which the frequency spacing of vision and adjacent channel sound carriers is 1.5 Mc/s to the actual dotted line of the diagram. However, further experimental confirmation including tests on other types of receivers is necessary before a change to the curve could be recommended."

Doc. 938 was approved without comment.

The meeting rose at 12.45 p.m.

Rapporteur:

H. Heaton

Acting Secretary :

Jean Revoy

Chairman :

Paweł Szulkin

PLENARY

MINUTES
OF THE ELEVENTH PLENARY MEETING

Wednesday, 12 September 1956, at 9.30 a.m.

Subjects discussed :

1. Letter from the Chairman of Study Group XIII (Doc. 657)
2. Draft new question submitted by Denmark (Doc. 992)
3. Examination and approval of documents submitted by the Drafting Committee:
 - a) Study Group IV (Docs. Nos. 956, 960, 962, 963, 964, 976, 978)
 - b) Study Group V (Doc. No. 984)
 - c) Study Group XI (Docs. Nos. 907, 948, 949, 974)
 - d) Study Group XII (Docs. Nos. 911, 929, 982, 983)
 - e) Study Group XIV (Docs. Nos. 987, 988, 989, 990)

Chairman : Professeur Paweł Szulkin

Present :

Administrations Members of the I.T.U. :

Australia, Austria, Belgium, Bielorussian SSR, Bulgarian PR, Canada, Denmark, Egypt, Spain, United States of America, Finland, France, Hungarian PR, India, Ireland, Italy, Japan, Laos, Norway, New Zealand, Netherlands, PR of Poland, Federal German Republic, FPR of Yugoslavia, Ukrainian SSR, Roumanian PR, United Kingdom of Great Britain and Northern Ireland, Sweden, Switzerland, Syrian Republic, Czechoslovakia, Oversea Territories of the French Republic, Turkey, Union of South Africa, USSR, Venezuela.

Recognized private operating agencies :

BBC, Cable and Wireless, Cie générale de TSF, KDD, MIMCC, SABC, Transradio Española.

International Organisations :

CISPR, CIRM, URSI

Permanent Organs of the I.T.U. :

IFRB

Acting Secretary : Mr. Jean Revoy

1. Letter from the Chairman of Study Group XIII (Doc. 657)

Mr. Sjøberg (Norway), Vice-Chairman of Study Group XIII, recalled that the letter from Mr. van der Toorn was intended to draw the attention of Administrations to the coordination of aeronautical and maritime services with a view to safeguarding human life at sea and in the air.

Mr. Sjøberg, while expressing his appreciation for the initiative in this matter of the Director of the CCIR, pointed out that, as it stood, the wording of the last sentence of paragraph one might give the idea that the present time was not an opportune moment. It was therefore preferable to replace "..... cannot at this stage be justified" by " is not yet practicable".

It was so decided. Subject to this amendment, Doc. 657 was approved unanimously.

2. Draft new question submitted by Denmark : Radio-relay systems employing ionospheric scatter propagation (Doc. 992)

Mr. Pedersen (Denmark) mentioned that the Chairman of Study Group III, where the draft question had been suggested, had thought of submitting it directly to the Plenary Assembly in order to save time.

An exchange of views then followed between Dr. van Duuren (Netherlands), Mr. Pedersen and Mr. Joachim (Czechoslovakia), as to whether the new question could be accepted, for Docs. 952 and 955 already dealt with a very similar subject. The Chairman emphasised that the document under consideration was concerned with systems employing ionospheric scatter propagation and not with that type of scatter in itself. Since these systems varied considerably, it appeared desirable to study the proposed new question.

As the result of an objection by Dr. van Duuren, it was decided to suppress the word "multiplex" in the third line of para. 3. It was also decided to delete the word "relay" from the title.

With these modifications Doc. 992 was unanimously approved.

3. Examination and approval of documents submitted by the Drafting Committee

a) Study Group IV :

Doc. 956 - Study Programme - Effects of tropospheric refraction on frequencies below 10 Mc/s

Professor Sacco (Italy), Chairman, recalled that the proposed amendment to Study Programme 51 was designed to meet certain requirements of the aeronautical service.

Mr. Millington (United Kingdom), Vice-Chairman, suggested that the title should be made to refer clearly to the effects of normal tropospheric refraction, and proposed that the text should be re-worded as follows :

"Investigation of the possible influence of tropospheric refraction on the phase of the ground wave".

It was so decided, and Doc. 956 was unanimously adopted.

Doc. 960 - Resolution - Supplement to CCIR Atlas of Propagation Curves

Doc. 978 - Resolution - Publication of new ground-wave propagation curves

Professor Sacco, Chairman S.G. IV, specified that the draft Resolution contained in Doc. 960 was directed at a better utilisation of the curves given in the existing Atlas, while the Resolution contained in Doc. 978 related to the establishment of a new atlas.

Mr. Bornemann (Federal German Republic) wanted to know how much money would have to be set aside for the preparation of the new atlas.

Professor van der Pol, Director CCIR, estimated that the cost of the calculations would be about one half of what it had been for the first atlas. He could not remember the exact figures but could give them at the following meeting.

He also suggested that it was desirable to suppress the word "average" in considerandum b) of Doc. 960.

Mr. Cross (United States) suggested that para. 1.9 of Doc. 978 should be amplified.

Mr. Bramel de Cléjoux (France) suggested a new wording of paragraph 1.12 which would then be in line with the English text.

The resolutions embodied in Docs. 960 and 978, thus amended, were unanimously adopted.

Doc. 962 - Study Programme - Ground-wave propagation over mixed paths

Doc. 963 - Report

Doc. 964 - Resolution

Docs. 962, 963 and 964 were unanimously adopted after some slight alternations had been made in the drafting.

Doc. 976 - Report - Ground-wave propagation over irregular terrain

Mr. Millington (Vice-Chairman, S.G. IV) suggested that the sub-heading should indicate that the report was a summary of documents submitted to the Warsaw Plenary Assembly.

Mr. Joachim (Czechoslovakia) pointed out that in the penultimate line of the summary of the documents submitted by his delegation, the phrase "and on artificial obstacles" should be inserted after "....in mountainous regions".

Once these amendments and a drafting alteration requested by Mr. Bramel de Cléjoux had been made, Doc. 976 was unanimously approved.

b) Study Group V

Doc. 984 - Recommendation - Radio transmission caused by inhomogeneities in the troposphere (commonly called "scattering")

Dr. Smith-Rose (United Kingdom), Chairman, said that the recommendation had been formulated as the result of the adoption of a new study programme, and that it was designed to draw the IFRB's attention to the matter.

Mr. Pedersen (Denmark) stated that his delegation intended to make reservations with regard to para. b) of the consideranda and that these reservations would also apply to Doc. 955; in his opinion, the recommendation should not be interpreted as encouraging the use of scatter systems for long-distance fixed services for reasons of frequency economy; the problem of interference with existing services and of frequency economy arising from a possible transfer of long-distance fixed services from medium and high-frequency bands to scatter systems had not yet been clarified.

Capt. Booth (United Kingdom) shared that opinion and strongly recommended that para. 2 be suppressed. There was no reason for the CCIR to encourage administrations to use that type of propagation. The British Administration was certainly prepared to take the greatest possible advantage of it, but it was desirable to be prudent, as it was not yet known how much interference would occur.

Mr. Bouchier (Belgium) wondered whether the text under consideration should not take the form of a resolution rather than a recommendation.

Dr. Smith-Rose replied that Study Group V had felt that a resolution would be too strict a formula.

Mr. Cross (United States) preferred the text to be drafted as a resolution.

In any case, the objections made by Mr. Pedersen to para. b) of the consideranda might be answered by changing "will tend" in the first line to "may tend", and Mr. Pedersen nodded assent.

Mr. Popović (FPR of Yugoslavia) and Mr. Joachim (Czechoslovakia) also preferred a resolution to a recommendation, but if the Assembly meant only to make a recommendation then para. 2 could be preserved.

Mr. Nicotera (Italy) could not accept the suppression of para. 2, which was, in his opinion, the most useful. If any paragraph had to be deleted, it would be para. 1, for the IFRB was not concerned with assigning frequencies.

Mr. Joachim suggested a compromise solution, which was supplemented by a proposal from Dr. Smith-Rose; according to this solution, para. 2 would be dispensed with, while the first line of para. 1 would read : "... that the attention of the administrations and of the IFRB should be drawn ..." and the end of the fourth line : "..... should be invited to keep in touch ...".

It was so decided and, after the aforementioned amendments had been made, Doc. 984, in the form of a Resolution, was unanimously adopted.

c) Study Group XI

Doc. 907 - Report - Requirements for the transmission of television over long distances

Mr. Esping (Sweden), Chairman, asked that the report should be re-drafted (at the bottom of page 2 and at the top of page 3) and that a note should be added to Annex 2.

The report was approved unanimously.

Doc. 948 - Study Programme - Distortion of television signals due to the use of vestigial sideband transmission.

As the result of a proposal by Mr. Esping, Chairman, it was decided to indicate in a sub-heading that this Study Programme was connected with Question 64.

The Study Programme (Doc. 948) was adopted unanimously.

Doc. 949 - Report - Advantages to be obtained from consideration of polarisation in the planning of broadcasting services in the VHF (metric) and UHF (decimetric) bands - Television and sound.

Mr. Esping said that Study Group V had accepted to undertake the study mentioned in the penultimate paragraph.

Mr. Joachim (Czechoslovakia) thought it desirable that the last paragraph should specify which radio conference was referred to.

With this modification, the report was adopted unanimously.

Doc. 974 - Recommendation - Gain of a television transmission circuit
Approved unanimously.

d) Study Group XII

Doc. 911 - Recommendation - Maximum power for short-distance high-frequency broadcasting in the tropical zone.

Mr. Baliga (India), Chairman, said that the document under consideration had been discussed at length, and that wide divisions of opinion had arisen in the working party, the sub-study group and the Study Group itself, as to the power to be adopted. Although the Study Group agreed unanimously to all the considerations of the recommendation and to paras. 2, 3 and 4 in the body of the recommendation, various reservations had been expressed with regard to sub-para. a), b) and c) of para. 1, and it was therefore those that ought to be discussed.

As regards para. c), it was, above all, important to decide whether, as he suggested should be done, a power limit of more than 50 kW should be set.

Mr. Popović (FPR of Yugoslavia) said that his delegation fully understood how important that question was for the tropical countries, where broadcasting was done on decametric waves, whereas other countries used such waves for other purposes, for which quality of service was less important.

Mr. Jeudy (Oversea Territories of the French Republic) thereupon stated :

"My delegation cannot accept the draft recommendation as set forth in Doc. 911, dated 8 September, and this for the following reasons :

Doc. 911 is derived from Doc. TEMP-215, submitted to S.G. XII on 5 September by Working Group XII-B.

Now, in Doc. TEMP-215, para. 1 of the draft recommendation, the sentence which followed para. b) ran thus :

'The powers shown above hold good for frequencies less or greater than 5,060 kc/s, used in tropical broadcasting for these ranges.'

In Doc. 911, now before us, this sentence has been replaced by the following :

'The powers mentioned above are for frequencies below 5,060 kc/s, used in tropical broadcasting for such ranges.'

And a paragraph c) has been introduced. This runs as follows :

'For frequencies above 5,060 kc/s, where tropical broadcasting services use the same frequency bands as the high-frequency broadcasting services, the same power limit as recommended by the Mexico City Conference (1949) shall apply.'

This amendment, adopted, incidentally, by a very feeble majority in the Study Group, and on the initiative of but a single delegation, completely changes the nature and point of the recommendation now before us.

A tropical broadcasting programme, the range of which, be it carefully remembered, does not exceed 500 miles, is generally provided by a single transmitter which must have two frequencies available, since the low frequencies are not propagated, or are ill-propagated, in daytime.

Hence, for the morning and evening programmes, a low frequency in the shared bands between 2 and 5 Mc/s will be used, more often than not.

For the daytime programme, a higher frequency, from 6 to 10 Mc/s, will be used, according to the particular solar phase.

Technically, the power required to broadcast thus, on this higher frequency, during daytime, will be less than that required for a lower frequency.

Note that in the draft recommendation we are dealing with the nominal power (unmodulated carrier) of the transmitter used.

To assess the effective radiated power, we must bear in mind the addition due to the modulation and antenna gain.

Now modulation multiplies the carrier power some 1.2 times.

"On the average, aerials appropriate for tropical broadcasting can give, throughout the service area, a power gain of :

2 for a distance of 250 miles; and

1.5 for a distance of 500 miles.

Hence we shall see that with the nominal powers indicated in the draft recommendation, the effective radiated power, for the angles covering the service area, and with the aerials favourably directed, is at least :

20 kW for 250 miles; and

50 kW for 500 miles.

Hence several delegations had made strenuous efforts to reach a compromise by accepting the same powers for all the frequencies used, these powers, incidentally, being much higher than those mentioned in Geneva Recommendation 84.

It is now being suggested that for frequencies above 5 Mc/s we accept the Mexico City power limits, i.e., 150 kW, whilst maintaining, in principle, a limit of 10 or 30 kW for frequencies below 5 Mc/s.

We are deluding ourselves if we believe that in practice those responsible for running a transmitter of more than 100 kW, broadcasting a programme on 8 Mc/s, for example, to a point 500 miles away, are going to reduce power to 30 kW for a 4 Mc/s morning and evening programme.

In fact, adoption of this amendment eliminates all limitation of power for tropical broadcasting services and cancels the work done by the CCIR, with this end in view, for the last eight years.

The objection sometimes made, to the effect that above 5 Mc/s there can be no limitation other than that imposed on long-distance decametric-wave broadcasting carries some weight, but is by no means insuperable.

I would recall that tropical broadcasting on decametric waves, but over short distances (not more than 500 miles) will not use very high frequencies. By day, with solar activity at its peak, a 10 Mc/s frequency ought to do very well for this distance.

On the other hand, for normal decametric-wave long-distance broadcasting, higher frequencies will be required, of about 15 Mc/s.

The two services would indeed use the same bands, but not the shared ones. More often than not the two services would use frequencies sufficiently far apart for there to be no harmful interference.

Incidentally, a delegation has observed, in connection with a remark by the IFRB representative, that it would be desirable to take into account the power restrictions agreed to by tropical broadcasting in drawing up long-distance broadcasting plans, either with the help of the IFRB, or at regional conferences dealing with such plans.

This is the course, we feel, to take. There must be no race for power increases which can but lead to harmful interference and to excessive expenses (in both establishment and running) for the majority of Administrations.

Hence my delegation formally asks the Assembly to consider the following amendments to para. 1 of the draft recommendation in Doc. 911 :

1. After para. b), put back the wording used in Doc. TEMP-215,
'..... for frequencies less or greater than 5,060 kc/s.....'
2. Strike out paragraph c)."

The Chairman felt that a break might enable the Assembly to agree on a compromise.

When the meeting resumed, Mr. Damant (Union of South Africa) fully supported the proposals made by the delegate of the French Oversea Territories. As it stood, he could not accept Doc. 911.

Mr. Clarkson (New Zealand) supported the proposal, too. An administrative radio conference would be a more appropriate body to discuss the question of power limits.

Mr. Campbell (Australia) said that above 5,060 kc/s there should be no power limit for broadcasting, any more than for other services.

Mr. Cross (United States) suggested that para. 1 as a whole be struck out. Otherwise, reservations would be numerous.

Mr. Topuria (U.S.S.R.) said that the United States proposal rendered the whole of Doc. 911 completely pointless. He fully agreed with the delegate of Australia as regards frequencies above 5,060 kc/s. But, as far as he was aware, the document accurately reflected the position. It was entirely satisfactory, and he would propose its adoption.

Mr. Coffey (Canada) supported the United States proposal to strike out para. 1. Like the delegate of New Zealand, he felt that there was no technical justification for transmitter power limits. Such matters were points open to negotiation, and could properly be dealt with by an administrative conference.

The Chairman, summing up, said that there were three proposals : that proposed by Mr. Cross and seconded by Mr. Coffey, for deletion of para. 1 and the reference thereto in para. 2. The second, from Mr. Jeudy, was for an amendment of para. 1. The third was for leaving the document as it stood.

Capt. Booth (United Kingdom) would vote for Mr. Jeudy's proposal, and failing that, for Mr. Cross's.

The Chairman thereupon called for a vote on Mr. Cross's proposal, as being the farthest removed from the original.

There were 14 votes in favour, 13 against, and 3 abstentions. Hence the Chairman declared the proposal adopted.

Mr. Popovic (FPR of Yugoslavia) said that as no absolute majority had been attained, he would raise a point of order. Incidentally, he rejected the argument according to which the CCIR could not appropriately lay down power limits. Had not the London Assembly issued Recommendation 84 in that connection?

Mr. Jeudy (Oversea Territories of the French Republic) called for a vote on all three proposals.

Mr. Topuria (U.S.S.R.) called for a vote by nominal roll.

The Chairman said that to meet the wishes of the Assembly, he would take a roll-call vote on the United States proposal to delete para.1.

For : Australia, Austria, Belgium, Canada, Denmark, United States of America, Finland, Ireland, Norway, New Zealand, Netherlands, Federal German Republic, the United Kingdom, Sweden, Turkey, and the Union of South Africa.

Against : PR of Albania, Bielorussian SSR, PR of Bulgaria, Egypt, Spain, France, Hungarian PR, India, Laos, PR of Poland, FPR of Yugoslavia, Ukrainian SSR, Roumanian PR, Czechoslovakia, Oversea Territories of the French Republic, the USSR, Venezuela.

Abstentions : Italy, Japan, Switzerland.

Hence, by 17 votes to 16, with 3 abstentions, the United States proposal was rejected.

Mr. Jeudy's proposal, for keeping para. 1 as in Doc. TEMP-215 and total deletion of para. c) was thereupon put to the vote, by roll call.

For : Canada, Denmark, France, Ireland, Norway, New Zealand, the Netherlands, Federal German Republic, the United Kingdom, Oversea Territories of the French Republic, Turkey and the Union of South Africa.

Against : PR of Albania, Australia, Belgium, Bielorussian SSR, PR of Bulgaria, Egypt, Spain, Hungarian PR, India, Laos, PR of Poland, the FPR of Yugoslavia, the Ukrainian SSR, the Roumanian PR, Czechoslovakia, the USSR and Venezuela.

Abstentions : Austria, Finland, Italy, Japan, Sweden, Switzerland and the United States of America.

Hence Mr. Jeudy's proposal was rejected by 17 votes to 12, with 7 abstentions.

Mr. Baliga (India) said that technical considerations, based on investigations carried out over the last few years, had clearly proved that in areas with high noise levels, powers of 100 kW or so were necessary to cover distances of up to 500 miles on frequencies below 5,060 kc/s. However, as a compromise, India had agreed to 50 kW being the upper limit. Hence, while India did not object to the document as it stood, he wished his views to be recorder.

Capt. Booth (United Kingdom) said his delegation reserved its attitude as regards para. c) in para.1.

Mr. Bramel de Cléjoulx (France) said that France, too made reservations about the document as a whole, especially as regards para 1, c).

Mr. Jeudy (Oversea Territories of the French Republic) made the same reservations.

Mr. Damant (Union of South Africa) announced that his delegation made every possible reservation about the document.

Mr. Santin (Turkey) wished it to be recorded that the Turkish delegation reserved its opinion on para. 1, c).

With these reservations, the Recommendation in Doc. 911 was adopted.

The Chairman then invited the Assembly to examine, together, Doc. 929 (Report : Interference in the bands shared with broadcasting) and Doc. 982 (Study Programme : Interference in the bands shared with broadcasting).

Subject to a drafting change on page 5 of Doc. 929, both Report and Study Programme were unanimously adopted.

Doc. 983 - Report - Specification for tropical broadcasting transmission antennas

Adopted, without comment.

e) Study Group XIV :

Prof. Gorio (Italy), Chairman, presented the following documents from his Study Group :

Doc. 987 - Recommendation - List of frequency bands and wavelengths used in radio

Doc. 988 - Report - Means of expression

Doc. 989 - Resolution - Definition of some basic terms used in the International Telecommunication Convention

Doc. 990 - Report - Decimal Classification

One by one, these documents were unanimously adopted.

The Meeting rose at 1310 hours.

Rapporteur :

Mireille Cahn-Bunel

Acting Secretary :

J. Revoy

Chairman :

P. Szulkin

PLENARY

MINUTES

OF THE TWELFTH PLENARY MEETING

Wednesday, 12 September 1956, at 3 p.m.

Subjects discussed :

1. Documents submitted by the Drafting Committee :

- a) Study Group I : Doc. No. 961
- b) Study Group II : Docs. Nos. 972, 973, 979, 981, 994
- c) Study Group VI : Docs. Nos. 945, 969, 952, 955, 953, 954, 957, 970,
975, 977, 980
- d) Study Group IX : Doc. No. 947
- e) Study Group X : Doc. No. 864
- f) Study Group XIII : Doc. No. 971

2. Finance Committee : Chairman's Report (Doc. No. 944)

3. Organisation Committee (Doc. No. 967)

Chairman : Professor : Paweł Szulkin

Present : Administrations Members of the I.T.U. :

Australia, Austria, Belgium, Bielorussian S.S.R., P.R. of Bulgaria, Canada, Denmark, Egypt, Spain, United States of America, Finland, France, Hungarian P.R., India, Ireland, Italy, Japan, Laos, Norway, New Zealand, Pakistan, Netherlands, P.R. of Poland, Federal German Republic, F.P.R. of Yugoslavia, Ukrainian S.S.R., Roumanian S.S.R., United Kingdom of Great Britain and Northern Ireland, Sweden, Switzerland, Syrian Republic, Czechoslovakia, Turkey, Union of South Africa, U.S.S.R.

Recognized Private Operating Agencies :

B.B.C., Cable & Wireless, Compagnie Générale de T.S.F., K.D.D., M.I.M.C.C., Transradio Española.

International Organisations :

C.I.S.P.R., U.R.S.I.

Permanent Organ of the I.T.U. :

I.F.R.B.

Acting Secretary : Mr. Jean Revoy

1. Documents submitted by the Drafting Committee :

a) Study Group I : (Doc. No. 961)

Approved without comment.

b) Study Group II : (Docs. Nos. 972, 973, 979, 981, 994)

Docs. 972, 973 and 981 were approved without comment.

In connection with Docs. 979 and 994, Mr. Baliga (India) provisionally reserved the attitude of his Administration, since there had not been enough time for a thorough study of the documents. He hoped to be in a position to withdraw the reservation before the publication of the final documents.

With the above reservations, Docs. 979 and 994 were approved.

c) Study Group VI : (Docs. Nos. 945, 969, 952, 955, 953, 954, 957, 970, 975, 977, 980)

Docs. 945 and 969

In introducing the documents, Dr. Bailey (United States), Acting Chairman of Study Group VI, explained that they were complementary. The IFRB had asked for advice in the solution of a difficult problem. Doc. 945 drew attention to a comparison between NBS Circular 462, which had long been in use in the ITU, and RPU Technical Report No. 9, which was a detailed revision of the former. Since the IFRB was in urgent need of an assessment of the precision of the new method, Doc. 969 recommended the setting up of a small Working Party to study the matter without delay.

Mr. Joachim (Czechoslovakia) could not agree that the documents were complementary, since Doc. 945 recommended use of the methods mentioned, whereas Doc. 969 referred the study to a Working Party. He could accept Doc. 969, but not Doc. 945, especially as it had not been studied in the Study Group meetings.

Dr. Bailey explained that Doc. 945, which could not be completed in time for discussion in the Study Group, had been submitted to the Plenary meeting in accordance with the emergency procedure for late material which had been approved by the Group.

Mr. Topuria (USSR) agreed with Mr. Joachim. The two documents were mutually contradictory. Doc. 945 should be discarded.

Mr. Danant (Union of South Africa) felt that the two documents were not in conflict, since Doc. 945 was of a temporary nature.

Mr. Joachim proposed that Doc. 945 should be forwarded for study to the Working Party mentioned in Doc. 969.

Mr. Topuria supported that proposal.

Mr. Roberts, representing the IFRB, believed that the two documents were complementary. Doc. 945 was an interim answer to a question put by the IFRB and gave valuable advice. Doc. 969 was intended to assist the IFRB in assessing the importance of considering a change in the method already used.

Mr. Topuria (USSR) pointed out that many Delegations had been unable to take full cognizance of Doc. 945. It might have merits, but they should at least be known. Careful study was required and the competent body for that purpose was the Working Party mentioned in Doc. 969.

The Chairman said that, as there was a divergence of views, he would put Mr. Joachim's proposal to the vote.

The proposal by Mr. Joachim that Doc. 945 should be referred to the Working Party was put to the vote and was defeated by 12 votes to 8, with 8 abstentions.

Doc. 969^(*) was approved unanimously.

In connection with Doc. 945, the Delegations of the USSR, the Bielorussian SSR, the Ukrainian SSR, Czechoslovakia, the PR of Bulgaria, the Roumanian PR and the Hungarian PR reserved their positions.

Doc. 945 was approved with the above reservations.

Docs. 952 and 955

Doc. 952 was approved unanimously.

In connection with Doc. 955, Captain Booth (United Kingdom) said that in his view para. 3 should be deleted for the same reasons as those he had put forward at the previous meeting with regard to Doc. 984.

Mr. Pedersen (Denmark) entirely agreed with Captain Booth and asked for the Minutes to contain an appropriate reference to the statement he had made in connection with Doc. 984 (see Minutes of the 11th Meeting, Doc. No. 1004, page 4).

The title of Doc. 955 was changed from "Recommendation" to "Resolution" and the first line of para. 1 amended to read: "1. that the attention of Administrations and of the IFRB should be drawn".

Subject to the above, Doc. 955 was approved.

Docs. 953 and 954 were approved with drafting changes.

Doc. 957 was approved with the addition of the words: "after the I.G.Y." to the title.

When Doc. 970, presented by the IFRB, came up for discussion, Prof. van der Pol (Director, CCIR), referring to para. 1 of this document, remarked that it did not seem to him to be an entirely correct procedure that the results of these studies should be transmitted by the Chairman of Study Group VI directly to the IFRB. Surely, such data should be sent first to the Director of the CCIR, who would transmit them to the IFRB, as was the customary procedure.

(*) See Note under Doc. 970, on page 4.

Dr. Bailey (Acting Chairman, S.G.VI) entirely agreed with Prof. van der Pol, and apologized for this omission, which should be corrected.

Mr. Roberts (IFRB) also expressed his regret at the present wording of the document, and fully approved that the data should be submitted first to the Director of the CCIR.

Doc. 970^(*) was approved, with the following amendments :

The third line under Recommends to read : "... this Study Group should forward the results of this study through the Director of the CCIR to the IFRB at the".

The second paragraph under Recommends to read : "2. That Administrations should make available to the IFRB for information through the Chairman of Study Group VI and the Director of the CCIR operational data which may permit comparison" (the rest unchanged).

In connection with Doc. 975, Mr. Topuria (USSR) said that para. c) under considering was unnecessary. It was misleading, since it took into account neither multipath effects nor the influence of wavelength.

Mr. Popović (FPR of Yugoslavia) agreed with Mr. Topuria.

Dr. Bailey explained that the paragraph in question had been taken from a document submitted by the United Kingdom and that the Delegate of the USSR had approved it in the Study Group. He therefore proposed that it should be retained.

Mr. Branel de Cléjoulx (France), Chairman of the Drafting Committee, said that his point of view was well-known. He thought too many consideranda were always dangerous and proposed that they should all be deleted in Doc. 975.

Mr. Joachim (Czechoslovakia) agreed with Mr. Branel de Cléjoulx.

Dr. Bailey agreed that sometimes there were too many consideranda. But such was not the case here. Paragraph c) was the justification for turning over the matter to URSI.

But he had to point out that all the members of the Working Group had unanimously approved that paragraph and, as Acting Chairman of the Study Group, he felt bound to protest against meddling with texts that had already been approved in the meetings of the Group.

(*) Note by the Director of the CCIR : Subsequently it has been found that Doc. 969 also needs a similar minor amendment in paras. 3 and 4 of the Recommendation, which now read as follows :

- "3. that the work of the Working Party be organized by correspondence and be coordinated by its Chairman who will keep the Chairman of Study Group VI and the Director of the CCIR informed of the progress;
4. that a meeting of the Working Party be convened within one year of the close of the VIIIth Plenary Assembly, and, if possible, within six months, for an exchange of views for the purpose of establishing at the earliest date possible an interim report to be presented through the Chairman of Study Group VI to the Director of the CCIR for further action."

The Chairman of the Plenary Assembly has approved this amendment.

He agreed with Mr. Branel de Cléjoulx that consideranda could almost always be dispensed with. They had their use, however, since they provided a background for readers unfamiliar with the subject under study. In the present case, he was neutral and would, of course, accept the decision of the Assembly.

Prof. Kazantsev (USSR) and Mr. Joachim (Czechoslovakia) asked for the following statement to be included in the Minutes :

"In connection with the intervention of Mr. Bailey concerning the approval of Doc. 975 (TEMP-Doc.199), the Delegations of Czechoslovakia and the USSR wish to point out that they did not accept point c) of the consideranda of this document at the 8th meeting of Study Group VI on 31 August and that the summary record of that meeting (Doc. No. 968) does not reflect the views of these two Delegations, who were unable to express their opinions on account of the inappropriate procedure utilised in certain cases by the Chairman of Study Group VI."

Doc. 975 was approved with the deletion of the consideranda.

Doc. 977 was approved with minor drafting changes.

Introducing Doc. 980, Dr. Bailey explained that the text had been approved in Study Group VI, apart from the last two paragraphs which were submitted under the emergency procedure to which he had already referred.

After discussion with the representative of the IFRB in Working Group VIB, he felt it would be more accurate to amend the first paragraph on page 2 as follows : In the fourth line, for : "... have revealed considerable differences", read : "... have revealed differences most of which are minor." In the sixth line, for : "... have revealed similar differences", read : "... have revealed differences which are somewhat more marked."

Mr. Roberts, representing the IFRB, stated that the draft which he had originally prepared and presented to Sub-Group VI-E as Doc. TEMP 139 included the phrase "but more marked" with reference to the data derived from Doc. 219, but that the Sub-Group deleted that phrase.

Mr. Joachim (Czechoslovakia) pointed out that the suggested amendments had been discussed in the Study Group, but that the text as it stood had been unanimously approved.

Mr. Topuria (USSR) agreed with Dr. Bailey that it was wrong to meddle with texts that had been unanimously approved. The text should be considered as it stood.

The Chairman asked Dr. Bailey if he wished to withdraw his amendments.

Dr. Bailey insisted that his amendments made the text more exact and he could therefore not withdraw them.

He personally had not attended the Study Group meeting at which the text had been approved. In any case, every delegation had the right to submit amendments.

The Chairman proposed that the text should be approved as it stood and the discussion recorded in the Minutes.

Dr. Bailey moved that his amendments should be adopted, although the matter was not of the greatest importance.

The Chairman asked : Was Dr. Bailey seconded ?

There was no response.

Doc. 980 was therefore approved without amendment.

d) Study Group IX : (Doc. No. 947)

Approved with minor drafting changes and the addition of "for FDM radio relay systems" to the title.

e) Study Group X : (Doc. No. 864)

After discussion between Mr. Prose Walker (United States), Chairman of the Study Group, Mr. Branel de Cléjoulx (France) and Captain Booth (United Kingdom), the following modifications were agreed :

- the addition of "sound" between "of" and "recording" in the title;
- in considering b) : "..... work may be the result", to read :
"..... work, and a multiplicity of standards, may result" ;
- under resolves : the proposed paragraph to be numbered 2) and to be preceded by the following text :

"1) that the CCIR should determine the acceptability of existing standards and should collaborate with other international organisations in formulating new standards when the existing ones are unsuitable for the international exchange of programmes."

As amended, Doc. 864 was unanimously adopted.

f) Study Group XIII : (Doc. No. 971)

Mr. Sjøberg (Norway), Vice-Chairman of Study Group XIII, introducing the document, asked for the addition of a paragraph 10, reading as follows :

"10. Final remark

The Director of the CCIR is invited to send a letter to the Interim Director of the CCIT informing him of the substance of this Report."

Mr. Branel de Cléjoulx (France), Chairman of the Drafting Committee, said that the paragraph existed in the original draft but he had proposed its deletion on the grounds that the Director of the CCIR did not require instructions from the Plenary Assembly before cooperating with the Interim Director of the CCIT. He was not in favour of restoring the paragraph.

In reply to the Chairman, Mr. Sjøberg said that he would not insist if the matter were recorded in the Minutes.

Doc. 971 was approved without amendment.

2. Finance Committee : Chairman's Report (Doc. No. 944)

Mr. Baliga (India), Chairman of the Finance Committee, introducing the report, announced that he had received a letter from the Secretary General of the ITU, stating that the budget estimates in Annex 1 would have to be slightly modified, since 11 staff members had been granted increased daily allowances. The additional expenditure amounted to 3,388 Swiss francs and the balance shown in the Annex therefore became a deficit of 2,106.25 Swiss francs. There was also an additional expenditure of some 3,000 Swiss francs for microphones, transport, etc. The additional figures would be studied by the Sub-Group and incorporated in the final report.

Prof. van der Pol, Director of the CCIR, drew the attention of the Assembly to para. 3.2 of the report, which expressed appreciation of the services rendered by the Polish Administration.

(Applause).

The Chairman thanked the Assembly on behalf of the Polish Administration.

Doc. 944 was unanimously approved.

3. Organisation Committee : (Doc. No. 967)

Prof. van der Pol, Director, CCIR, Chairman of the Organisation Committee, introducing the document, explained that the new proposals contained in the 4 annexes had been unanimously approved in a spirit of pleasant collaboration.

Interest in the work of the CCIR had been steadily growing during the last few years. That was very gratifying, but it had made the present working methods somewhat unsatisfactory - hence the new proposals.

Mr. Nicotera (Italy) said :

"The way in which the work of the CCIR is now organized is, in my view, not entirely satisfactory. During the period of almost three weeks allotted to Study Group work, from 30 to 40 Study Groups, Sub-groups and Working Parties meet at the same time. This prevents any Delegation, even a very large one, from making an adequate contribution to the work of the CCIR because, as everyone knows, the basic work is done not by the Plenary Assembly, nor by the Study Groups, but by the Sub-groups and Working Parties. Consequently, in the period allotted to meetings of the Plenary Assembly, a very great number of documents have to be examined and insufficient time has been available in which to study them. Thus, time is wasted in Plenary and the work is not as serious as it might be. The work of the CCIR should thus be reorganized in such a way as to get rid of these drawbacks. In principle, I am whole-heartedly in favour of any proposal along these lines.

The Resolution submitted by the Organisation Committee, however, is not, in my view, a solution to the problem. It is merely an expedient which, in practice, leaves things as they are. The Study Groups will still meet for two weeks, as at present, with a number of documents from Administrations to examine; Sub-groups and Working Parties, almost as numerous as at present, will inevitably be set up and the same disadvantages as at present will be in evidence.

There will be a fortnight of Study Group meetings 9 to 15 months before the Plenary Assembly. There will be Study Group meetings for a fortnight immediately before the Plenary Assembly and then the plenary meetings as at present.

Thus, the length of the work will have been increased, together with the overall expenditure, and the required results will not have been obtained.

I therefore could not give my agreement to the adoption of the Resolution which is before us. I should prefer a more radical, efficient solution, on the following lines :

The Study Groups should meet only a few months before the Plenary Assembly and - this is the important point - no new document should be accepted after the Study Group meetings. The final meetings of the Study Groups during the Plenary Assembly should merely put the finishing touches to decisions already taken and should not last more than one week. The time devoted to the Plenary Assembly proper, on the other hand, should be slightly longer than at present, i.e., about 2 weeks.

We should thus have Study Group meetings in the period, for instance, of 3 to 7 months before the Plenary Assembly and a general plenary period of three weeks instead of five as at present. These are my general remarks and I should like to reserve the right to take the floor again later on points of detail."

Mr. Baliga (India) considered that Annex III amply covered the method to be adopted for re-organising the work of the CTR. In particular, para 3 indicated arrangements that might obtain the maximum efficiency and economy. However, one aspect of coordination had been raised in the Organisation Committee, but not included in the report. There were certain problems that were of common interest to several Study Groups and it would be a good thing if a small coordination committee could be set up to deal with them. He proposed the addition of a paragraph to this effect.

Mr. Popović (FPR of Yugoslavia) was in general agreement with the report. He also appreciated Mr. Nicotera's suggestions.

There were two points, however, that required clarification: With reference to point 4 of Annex III, did Administrations have to be members of all the Study Groups before they could receive all the documents? With reference to point 11: did the 10 days for final meetings imply simultaneous or separate meetings of the Study Groups ?

Mr. Clarkson (New Zealand) in general supported the proposals. However, the holding of interim Study Group meetings, although advantageous for Administrations and private operating agencies near the seat of the Union, would cause difficulties for more distant countries wishing to participate. He felt, nevertheless, that the new step towards more interim meetings was inevitable and it should solve many difficulties, particularly with regard to documents.

A more specific point was the availability of documents for study before meetings. He felt that there was not enough safeguard in Annex 3 against the late arrival of material. Could not point 10 be amended to say that such late material could be accepted only if received in sufficient time to ensure distribution at least one month before the Plenary Assembly?

In conclusion, he assumed that provision would be made for the Resolution, if and when accepted, to replace Stockholm Resolution No. 33.

Dr. Metzler (Switzerland) expressed his appreciation of the points raised by Mr. Nicotera. His proposal was worthy of every consideration.

He felt that there was some discrepancy between paras. 7 and 12 of the report. Para. 12 specified that preparatory documents should consist only of the 14 Study Group Chairmen's Reports and the Director's Report. In point 5 there was a distinction between two sorts of documents and in point 7 a stipulation that the participants in each Study Group should submit their documents at least six months before the Plenary Assembly, which would be in contradiction with point 12.

He was very much in favour of the idea suggested by Mr. Baliga, namely, that a small coordination committee should be set up. Its terms of reference could perhaps be added to those of the 14 Study Groups.

Prof. van der Pol, Director of the CCIR, clarified the points raised by Mr. Popović. Para. 4 did not notably diverge from existing practice. When an Administration had informed the CCIR Secretariat of its desire to take part in the work of a Study Group, it automatically received all the relevant documents. As far as the final Study Group meetings were concerned, 10 days in all were envisaged. As there was another Resolution restricting the size and number of documents, he believed the shorter time would suffice. The documents would also be better prepared as the Study Group Chairmen would have more time at their disposal.

After some discussion between Mr. Bramel de Cléjoulx (France), Mr. Allen (United States) and Mr. Topuria (USSR), Mr. Joachim (Czechoslovakia) proposed that the Assembly approve forthwith those Annexes which had not given rise to any discussion and defer the debate on Annex III, rather than come to too hasty a decision that might hinder rather than help progress. Annex III could then be circulated among all Administrations and, if necessary, the Organisation Committee could be convened again under more favourable working conditions than the Plenary Assembly.

Mr. Gross (Roumanian PR) also pointed out that problems would arise in having the interim Study Group meetings too long before the Plenary Assembly and shared Mr. Nicotera's view that it would perhaps be wiser to hold them much earlier, possibly 5 or 6 months before. The meetings could thus discuss all documents arriving 2 to 2½ years after the last Assembly.

He was not quite clear whether the Administrations writing to Geneva would receive all the documents, including any that might appear just before the Plenary Assembly. If an Administration found it impossible to send a delegation, would it still receive the documents ?

The Chairman suggested that Mr. Joachim's proposal be followed : that Annexes I (with Dr. Metzler's amendment concerning the Coordination Committee), II and IV be approved and discussion of Annex III deferred.

Captain Booth (United Kingdom) agreed to the first part of the proposal but felt that the Assembly should not close without a positive discussion of

Annex III, leading to definite approval. It was very important from the stand-points of efficiency and economy and he felt that with the guidance of the Director, Vice-Director and Study Group Chairmen and Vice-Chairmen, some final decision could be reached. The time was ripe for a re-organisation, particularly as the new Director, Dr. Metzler, would be taking office the following January.

He thought that Mr. Gross's point that the period of interim meetings should be shortened was good, and he would like to see more interim meetings. He cited the fruitful results of the interim meeting of Study Group IX in 1954 as an example, and would like to see such a practice generalized throughout the Study Groups.

Mr. Branel de Cléjoulx (France), Chairman of the Drafting Committee, proposed that the whole document be referred to the following meeting, to give the Drafting Committee time to prepare a revised text which would form a firm basis for discussion.

The Chairman agreed to this proposal, but stressed that any comments and amendments should be clear and brief, so as to waste no time at the next meeting.

The Meeting rose at 7.35 p.m.

Rapporteurs : H. Heaton
R. Umberg

Acting Secretary :
J. Revoy

Chairman :
P. Szulkin

PLENARY

MINUTES
OF THE THIRTEENTH PLENARY MEETING

Thursday, 13 September 1956, at 9.30 a.m.

Subjects discussed :

1. Approval of Minutes of Sixth Plenary Meeting (Doc. 933)
2. Documents submitted by the Drafting Committee :
Doc. 995 (Terms of Reference of CCIR Study Groups)
" 996 (Resolution on Reduction of Preparatory Documentation)
" 998 (Resolution on Work of CCIR Study Groups)
" 997 (Resolution on Organisation of CCIR Work)
" 1001 (Resolution on Technical Assistance)
" 1002 (Concerning Allocation of Questions, etc., to Study Groups).
3. Confirmation of Chairmen and Vice-Chairmen of CCIR
4. Publication of Final Documents of the Findings of the Warsaw Plenary Assembly
5. International Astronautical Federation

Chairman : Professeur Paweł Szulkin

Present :

Administrations Members of the ITU :

Australia, Austria, Belgium, Bielorussian SSR, PR of Bulgaria, Canada, Denmark, Spain, United States of America, France, Hungarian PR, India, Ireland, Italy, Japan, New Zealand, Netherlands, PR of Poland, Federal German Republic, FPR of Yugoslavia, Ukrainian SSR, Roumanian PR, United Kingdom of Great Britain and Northern Ireland, Sweden, Switzerland, Syrian Republic, Czechoslovakia, Turkey, Union of South Africa, USSR.

Recognized Private Operating Agencies :

BBC, Cable & Wireless Ltd., KDD, MIMCC, RAI, SABC, Transradio Española.

International Organisations :

BIH, CISPR, OIR, URSI

Permanent Organs of the ITU :

IFRB

Acting Secretary : Mr. J. Revoy

1. Approval of Minutes of Sixth Plenary Meeting (Doc. 993)

Dr. Sarwate (India) remarked that on page 3, para. 2, the statement by Mr. Baliga was not accurate, and should read as follows :

"Mr. Baliga (India) stated that the noise level data and curves given in Doc. 490 did not appear to report correctly Indian conditions in so far as that part of the world was concerned, and asked whether the report, together with the curves, was for use or for information only."

Mr. Joachim (Czechoslovakia) drew attention to an inversion in the French and English texts of the I.B.O. (O.I.R.), in both Docs. 933 and 985.

With these amendments Doc. 933 was approved.

Mr. Roberts (IFRB) :

"Mr. Chairman, Ladies and Gentlemen,

To save the time of this Assembly at previous meetings, the IFRB representatives have very often refrained from commenting on individual matters which greatly concern them. For instance, I did not intervene in the lengthy discussion last week on atmospheric noise data, although it is important for the Board to assess the impact of the new charts on its 2000 IUF curves based on the old data. Intervention was unnecessary as it was already clear, from attendance at Sub-Group level, that the Board would need to make its own assessment.

Also we have temporarily dropped, or not even raised, some other points which we shall follow up after this Assembly.

In some cases, including for example a Study Group XII subject discussed yesterday, there are provisions of the Radio Regulations which, in effect, prevent the IFRB from fully applying the CCIR decisions, at present at least. In such cases, we must reserve our position.

I have been able to hold back from discussion in previous meetings because our needs were well looked after by certain delegates, some of whom experienced difficulties which, if I may say so, may not be fully appreciated by others who did not take part in the work of the groups concerned, especially Study Group VI, which had a heavy agenda, including several controversial subjects.

I venture now to refer to two specific matters of importance to the IFRB.

Firstly, our question on MUF data. I am sorry to say that in this matter we find ourselves left rather in mid-air, but in view of yesterday's discussion, we felt it would not be profitable to pursue the matter further here. The Board will have to proceed as best it can, but it will be helped by what it learned from the discussions here and by the Recommendation adopted yesterday which seeks to provide operational data against which to check the IFRB's predicted curves.

My last point is that of sky wave field strength calculation. Here we have been given a study programme and two recommendations to assist us. One recommendation, although adopted with reservations, takes account of the only

paper submitted in answer to the IFRB's London question on this subject and will be of great value to the Board. It, however, needs to be supplemented, and is supplemented, in my opinion, by the other recommendation adopted yesterday, which sets up a Working Party to advise the Board. My only regret is that some of the countries invited to participate in the Working Party have felt constrained to reserve on the first recommendation. The Board hopes that these Administrations may find it possible in due time to drop their reservations, and it trusts that the existence of the reservations will not lead to any delay in the successful termination of the work. The Board urgently requires an answer, and if this answer is not forthcoming soon, the IFRB will have to try to reply to its own queries and to take any measures in its power to obtain the answer.

In spite of what I have just said, the Board has in fact received much help, and I thank the Assembly, in the name of the IFRB, most sincerely for all the assistance which has been given both through the official actions and through less formal contacts.

Thank you very much, Mr. Chairman."

2. Documents submitted by the Drafting Committee :

Doc. 995 (Terms of Reference of CCIR Study Groups)

The Chairman recalled Dr. Metzler's proposal to form a Coordination Committee and asked Dr. Metzler whether this would be permanent or temporary.

Dr. Metzler (Switzerland) proposed the following terms of reference :

"Ad hoc committees for the coordination of work common to two or more Study Groups, composed of the Chairmen and Vice-Chairmen of the Study Groups concerned and presided over by the Director of the CCIR."

It was not a question of a standing committee, but of machinery that could be put into action when a Study Group Chairman so desired.

Mr. Bramel de Cléjoulx (France) felt that the terms of reference for Study Group XIII should be more precise, because these "operational questions" did not only interest the mobile services, but also the complete services, and suggested adding "of concern to several services". Agreed.

Mr. Allen (United States) recalled that in the Organisation Committee he had given examples of operational questions which would be handled by the various systems concerned, rather than by those of just Study Group XIII, and it was for this reason that the word "Miscellaneous" had been added to the text. He pointed out that in the Radio Regulations the radio navigational service was listed as part of the radio location services. He would therefore like to add the words : "radio location and" before "radio navigation". This was agreed.

Mr. Joachim (Czechoslovakia) had two points regarding Study Groups III and IX. If Study Group III was going to deal with frequencies above 30 Mc/s then the words "below about 30 Mc/s" should come out of the title. As for Study Group IX, he suggested that the title should read: "Radio Relay Systems".

Mr. Stanesby (United Kingdom), Chairman, Study Group IX, was not opposed to changing the title to "Radio Relay Systems", which was agreed.

Dr. van Duuren (Netherlands), Chairman, Study Group III, thought that if Study Group IX was called "Radio Relay Systems" then Study Group III should be called "Fixed Services".

Mr. Joachim suggested that in the terms of reference for Study Group III should be added "with the exclusion of radio relay systems". This was agreed.

Mr. Gross (Roumanian PR) wanted to add the words : "sound reproduction" to the terms of reference of Study Group X. Agreed.

With these modifications Doc. 995 was then aproveved.

Docs. 996 (Resolution on Reduction of Preparatory Documentation) and 998 (Resolution on Work of CCIR Study Groups) were unanimously approved.

Doc. 997 (Organisation of CCIR Work)

Mr. Nicotera (Italy) considered that in the Draft Resolution there were fundamental points, and other points which merely concerned detail. To follow a logical order the fundamental points should be settled first and they were three in number, namely :

1. Period for Interim Study Group Meetings to be held before the Plenary Assembly;
2. Acceptance or non-acceptance of documents in the interval between the interim Study Group meetings and the Plenary Assembly;
3. Character of Study Group work during the Plenary Assembly.

He proposed the following rulings on these three points :

1. Interim Study Group meetings should be held as short a period as possible before the Plenary Assembly;
2. No documents representing contributions to Study Programmes would be accepted after the interim meetings;
3. The meetings of Study Groups during the Plenary Assembly would have as an aim merely the final issue of, and amendments to documents approved at the interim meetings.

Mr. Nicotera then added a final point - 4, in which he proposed that the length of the Plenary Assembly, together with the final Study Group meetings, should not be more than 25 days.

The Chairman congratulated Mr. Nicotera on his very thorough and complete review of the situation, and thought that if his proposals could be accepted, it would not be difficult to draft a final text.

Mr. Allen (United States) agreed with all Mr. Nicotera's points in principle. However, he did not feel that there should be an inviolable rule, and suggested that documents of vital interest might, in exceptional cases, be accepted between the interim meetings and the Plenary Assembly.

Mr. Nicotera agreed to this modification. In answer to a query by Mr. Branel de Cléjoulx (France) he explained that he meant the Assembly to last for 25 calendar days - 18 working days in all. He added that he felt the interim Study Group meetings should not be all together, but staggered, and should be held 4 to 6 months before the Plenary Assembly, no longer.

A long discussion ensued about point 4 of the "resolves", Mr. Topuria (USSR) fearing that, with the present wording, Administrations desirous of receiving Study Group documentation would not get it.

Prof van der Pol (Director, CCIR) explained the financial aspects, and that, in principle, the existing situation remained unchanged. An Administration had only to express a written request to participate in the work of any or all of the Study Groups, and the relevant documentation would automatically be forwarded. The present wording was merely intended to restrict the amount of unnecessary and bulky documentation prior to a Plenary Assembly.

It was finally agreed to leave para. 4 as it stood.

Capt. Booth (U.K.) proposed that it should be made quite clear that 18 working days be allotted to the Plenary Assembly plus the Study Group meetings, the Assembly itself to last approximately 8 days. The intentions were not only to increase efficiency but also to achieve economy.

Prof. van der Pol thought it would perhaps be wiser to leave a certain latitude in such cases. The proposals before the Assembly now were quite new, and it was not yet known how they would work out. Experience would prove the best guide in this new departure in the life of the CCIR.

Mr. Gross (Roumania) proposed an interval of 5 to 8 months before the Plenary Assembly for interim Study Group meetings.

Mr. Allen (U.S.A.) suggested from 6 to 12 months, which, in the opinion of many delegates, was too long.

Dr. van Duuren (Netherlands) thought the wording should be more elastic, and suggested : "as soon as possible before the Plenary Assembly", which was agreed.

Mr. Popović (FPR of Yugoslavia) had a query as to the arrangement of successive Study Group meetings immediately prior to the Plenary Assembly, and wished to know details in advance, to enable Administrations to attend as many meetings as possible.

After some debate, Prof. van der Pol explained that this point had been adequately covered in General Regulations, Chapter 17, para. 1, which laid the responsibility of the coordination and organisation of the Plenary Assembly fully on the shoulders of the Director. He would arrange it as best he could for Administrations to be able to attend as many Study Group meetings as possible.

Mr. Popović was in agreement, and hoped that the Director, when arranging for the next Plenary Assembly, would take account of the desires his Administration had expressed, and wished these to be noted in the Minutes.

Mr. Bornemann (Fed. German Republic) wondered whether the possibility had not been excluded of a Study Group holding an interim meeting to discuss very urgent questions at an earlier date than that just laid down.

Mr. Hayes (Vice-Director) pointed out that allowance had been made for this point in the wording of para. 3 : "that unless otherwise approved by the Plenary Assembly...". It was decided that these words would be changed to : "as a general rule."

Doc. 997 was then unanimously approved with the above amendments, and some changes in the numbering of the paragraphs.

Mr. Hayes remarked that the Report of the Finance Committee, which had been approved the day before, was based on provision for having interim Study Group meetings mostly in the second year. Now, although the overall figures for the three-year period remained unchanged, the distribution of these expenses would be changed by the acceptance of the new proposals. It might be well to note this in the Minutes of the present meeting, so that when the Administrative Council came to examine it, they would understand why the recommendations of the Finance Committee were not being followed in detail.

Doc. 1001 (Resolution on Technical Assistance)

Mr. Topuria (USSR), as Chairman of the Technical Assistance Committee, presented the document, which was based on the terms of reference contained in Doc. 491 of the Specialized Secretariat. Representatives of 24 countries and organisations had held three meetings, during which the following two questions had been studied, namely, how to get information on work already carried out, and how best to submit proposals whereby Technical Assistance could be granted to countries requiring it.

The document proposed that a temporary joint CCIR-CCIT Committee be established to study this matter, membership to include 7 members of the CCI's. Mr. Topuria proposed as members : Czechoslovakia, Yugoslavia, Switzerland, the United States, the United Kingdom, the Soviet Union and Poland.

Mr. Cross (United States) considered that the formation of such a Committee was unnecessary, and that the advisory task could continue to be carried out by the Director and Vice-Director of the CCIR and the Director of the CCIT.

He was supported in this viewpoint by the delegates of Canada, Spain, the Federal German Republic and New Zealand.

Mr. Topuria considered that such a group was essential, and was supported by the Delegates of Czechoslovakia, the Roumania, PR, the PR of Bulgaria and the FPR of Yugoslavia.

Mr. Nicotera (Italy) wanted to be sure that the personal expenses incurred by members of this committee would be borne by their respective Administrations.

Capt. Booth (United Kingdom) felt that all present were interested in Technical Assistance and wished some suitable methods to be put into effect. Therefore he was not anxious to accept the Chairman's proposal to put the matter to the vote, and suggested a compromise solution, namely, that the Director and Vice-Director of the CCIR and the Director of the CCIT should represent 3 of the proposed 7 members of the Committee, the other 4 being 2 members of the CCIR, 2 of the CCIT.

Mr. Topuria was prepared to agree to this, but thought that either the Director, or the Vice-Director of the CCIR should be represented, and left this to their discretion.

As opinions could not be reconciled, and discussion was prolonged, the Chairman put Mr. Cross's proposed amendment to the vote.

Result : In favour : 10, Against : 16, Abstentions : 6

The amendment was therefore rejected.

The Chairman then put Capt. Booth's proposal to the vote.

Result : In favour : 25, Against : 0, Abstentions : 7

The proposal was therefore accepted.

The Assembly started to propose membership of this Committee, bearing in mind the suggestion by Mr. Popović (FPR of Yugoslavia) that members should not be taken from countries already members of the Administrative Council.

However, Mr. de Erice y O'Shea (Spain) pointed out that the CCIT had also to choose its 2 members, and thought the moment was premature for such a decision. He suggested that a circular letter be sent out to all Administrations, in collaboration with the CCIT, asking for candidates.

After some discussion this proposal was put to the vote.

Result : In favour : 18, Against : 10, Abstentions : 3

The nomination of members for this Committee was therefore postponed until a suitable circular letter could be prepared.

With the above modifications, Doc. 1001 was then accepted.

Doc. 1002 (Concerning Allocation of Questions, Study Programmes, etc. to Study Groups)

This document had been prepared by Mr. van der Mark, Counsellor, CCIR, and the Chairman proposed that any modifications or suggestions concerning it be submitted in writing to the Secretariat of the CCIR.

This was agreed.

3. Confirmation of Chairmen and Vice-Chairmen of CCIR

The Chairman gave the floor to Prof. van der Pol (Director, CCIR), who explained that it was customary for the Plenary Assembly to confirm Chairmen and Vice-Chairmen in their present positions, and to elect new ones if necessary.

Study Group I (Transmitters)

Following upon the election of Dr. Metzler as future Director of the CCIR, a new Chairman must now be found for Study Group I (Transmitters).

Mr. Pedersen (Denmark) : "I would propose that the present Vice-Chairman, Colonel Lochard, become Chairman, and that the Polish Administration be invited to nominate a member of their country as Vice-Chairman."

This proposal was accepted with acclamation.

The Chairman thanked the Assembly for the honour, and said his Administration would be delighted to accept. He proposed the nomination of Professor S. Ryżko, of the Warsaw Polytechnic, who was an expert on the subject of transmitters.

Professor Ryżko was accepted with acclamation.

	<u>Chairman</u>	<u>Vice-Chairman</u>
<u>Study Group II (Receivers) :</u>	<u>Mr. P. David</u> (France)	<u>Mr. Abadie</u> (France)
	<u>confirmed with acclamation</u>	

Study Group III (Fixed Service Systems)

Capt. Booth (United Kingdom) said that it was with regret that his Administration must inform the Meeting that Mr. Smale, well-known for his contributions in the radio field, had found it necessary to reduce his commitments to the CCIR. He would like to propose Mr. Cook, who had been Acting-Vice-Chairman in Warsaw, to hold this position permanently.

This was accepted with acclamation, as was the confirmation of Dr. van Duuren (Netherlands) as Chairman.

<u>Study Group IV (Ground Wave Propagation) :</u>	<u>Prof. L. Sacco</u> (Italy)	<u>Mr. G. Millington</u> (UK)
	<u>confirmed with acclamation</u>	

<u>Study Group V (Tropospheric Propagation) :</u>	<u>Dr. R.L. Smith-Rose</u> (UK)	<u>Mr. E.W. Allen</u> (USA)
	<u>confirmed with acclamation</u>	

Study Group VI (Ionospheric Propagation) :

Prof. van der Pol reminded the Assembly that at the unofficial session of the Heads of Delegations he had announced that Dr. Newbern-Smith wished to retire from being Vice-Chairman of Study Group VI, and proposed that Dr. D.K. Bailey, who had been Acting-Vice-Chairman in Warsaw, become Vice-Chairman.

Mr. Cross (USA) accepted with thanks on behalf of Dr. Bailey.

<u>Dr. J. Howard Dellinger</u>	<u>Dr. D.K. Bailey</u>
(United States)	
<u>confirmed with acclamation</u>	

- Study Group VII (Standard Frequencies and Time Signals) : Mr. B. Decaux (France) Prof. M. Boella (Italy)
confirmed with acclamation
- Study Group VIII (International Monitoring) : Mr. J.D. Campbell (Australia) Mr. G. Turner (U.S.A.)
confirmed with acclamation
- Study Group IX (Radio Relay Systems) : Mr. H. Stanesby (U.K.) Mr. G. Pedersen (Denmark)
confirmed with acclamation
- Study Group X (Broadcasting) : Mr. Prose Walker (USA) Mr. K. Miller (USA)
confirmed with acclamation
- Study Group XI (Television) : Mr. E. Esping (Sweden) Mr. G. Hansen (Belgium)
confirmed with acclamation
- Study Group XII (Tropical Broadcasting) : Mr. B.V. Baliga (India) Dr. M.B. Sarwate (India)
confirmed with acclamation
- Study Group XIII (Mobile Services) : Mr. J.D.H. van der Toorn (Netherlands) Mr. N. Sjøberg (Norway)
confirmed with acclamation
- Study Group XIV (Vocabulary) : Prof. T. Gorio (Italy) Mr. Villeneuve (France)
confirmed with acclamation

4. Publication of Final Documents of the Findings of the Warsaw Plenary Assembly

Prof. van der Pol (Director, CCIR) suggested that the same procedure be followed as after London, namely, that the Questions, etc., were printed in such a fashion that they were found on the same page number in all three languages, and with the same references and cross references, so that these volumes were easy to use.

Mr. Hayes (Vice-Director, CCIR) added that he would like to see the Report of the Finance Committee printed in the same Volume (II) as the Chairmen's Reports and the Director's Report. This had not been done on previous years, but as it contained the estimates for the next three years, he considered this important.

Mr. Cross (USA) warmly supported the proposals of both Prof. van der Pol and Mr. Hayes, and said that he would also like to see the Report of the Organisation Committee published to make the volume complete. This was agreed.

5. The International Astronautical Federation

Prof. van der Pol (Director, CCIR) :

"Last week I received a letter from Mr. Andrew G. Hailey, Chairman of the International Affairs Committee of the International Astronautical Federation. The International Astronautical Federation is very much concerned with Space, in particular with Space law and Space vehicles and their radio communications. It is stated in this letter that the only body authorized to make studies on these subjects is the CCIR. The action requested is that the CCIR establish a new Study Group for Extraterrestrial Communications.

The action I suggest is the following. The Director of the CCIR, to answer this letter, should draw the attention of the International Astronautical Federation to the General Regulations, Chapter 11 (2) and ask them to write officially to the Secretary General, who will then take normal action to ask the consent of all Members of the Union. We hope that collaboration with this organisation would give excellent results."

Chairman : "Perhaps some future Plenary Assembly could be held outside the earth ?"

The course of action suggested by the Director was approved.

The Meeting rose at 1400 hours.

Rapporteur :

R. Umberg

Acting Secretary :

J. Revoy

Chairman :

P. Szulkin

PLENARY

MINUTES
OF THE FOURTEENTH AND LAST PLENARY MEETING

Thursday, 13th September 1956, at 4 p.m.

Subjects Discussed:

1. Place and Date of Next Plenary Assembly
2. Part of Director's Report (Doc. 115) dealing with the International Geophysical Year (I.G.Y.)
3. Speeches

Chairman: Professor Paweł Szulkin

Present:

Administrations Members of the I.T.U.:

Australia, Austria, Belgium, Bielorussian SSR, PR of Bulgaria, Canada, Denmark, Spain, United States of America, Finland, France, Hungarian PR, India, Ireland, Italy, Japan, Norway, New Zealand, Netherlands, PR of Poland, German Federal Republic, FPR of Yugoslavia, Ukrainian SSR, Roumanian PR, United Kingdom of Great Britain and Northern Ireland, Sweden, Switzerland, Syrian Republic, Czechoslovakia, French Oversea Territories, Turkey, Union of South Africa, USSR.

Recognized Private Operating Agencies:

BBC, Cable & Wireless Ltd., KDD, MIMCC, RAI, SABC, Transradio Española.

International Organisations:

BIH, CISPR, URSI.

Permanent Organs of the I.T.U.:

IFRB.

Acting-Secretary: Mr. J. Revoy

1. Place and Date of Next Plenary Assembly :

Mr. Cross (United States) : "It is a great pleasure for me, on behalf of my Government, to extend a most cordial invitation to all of the CCIR Delegations represented here to have the IXth Plenary Assembly in the United States. I am not in the position at this moment to advise you as to where in the United States this will be. Many delegates have expressed a strong preference in this regard and I wish it were in my power to say if it would be this place or that place. But the United States is a very large country, as you know, and our people will be most concerned with getting a suitable site that can house the delegates comfortably and take care of them in a meeting space that will be the best they can find.

I am not in a position to say just where it will be, but I hope that, whatever is decided, we can do as well as our present hosts from Poland have done. My Government, in authorizing me to extend this - I repeat, most cordial-welcome, either in 1959 or 1960, suggests that this Plenary Assembly leave to the Administrative Council of the ITU the choice of the exact time, and they make this suggestion only because they feel that the Administrative Council is in a better position than any other organ of the Union to suggest a time which will have the least conflict with the other meetings that are scheduled by the ITU.

So, regardless of the time - either 1959 or 1960 - we want to extend a very warm invitation to all of you to come and have your next Plenary Assembly in the U.S.A."

This invitation was accepted with prolonged acclamation.

Mr. Topuria(USSR) : "Might I make the following statement. In 1958 it is intended to hold a meeting of Study Group XI (Television). The subject is extremely interesting - namely, Colour Television. Mr. Chairman, I am most happy to invite that Study Group to the Soviet Union, this in accordance with the decision of the Soviet Government, and I hope that this invitation will be accepted. So will you please remember that in 1958 Study Group XI may meet in that place in the Soviet Union which will prove the most suitable, which will offer the best facilities to the Delegates and the opportunity to acquaint themselves with the technical aspects of Colour Television and with Black and White Television."

Mr. Esping (Chairman, Study Group XI) : "On behalf of Study Group XI I want to express my best thanks to Mr. Topuria and to his Administration, and we will come with very great pleasure to have our meeting of Study Group XI in the Soviet Union in 1958.

Prolonged applause.

2. Part of Director's Report (Doc. 115) dealing with the I.G.Y.

Before handing over the floor to Prof. van der Pol, the Chairman reminded the Meeting that various parts of the Director's Report (Doc. 115) had already been discussed and approved, either by the Finance Committee, the Organisation Committee, or in the Plenary Assembly itself.

Prof. van der Pol (Director, CCIR) : "one outstanding point remains on which some action is still necessary; you will find this on page 9 and it concerns the International Geophysical Year.

It so happens that in the course of the last two years, the CCIR has received a number of requests related to the International Geophysical Year.

Firstly, in July 1955, a question concerning radio transmissions in the Antarctic during the geophysical year, more specifically concerning the allocation of call-signs. After taking up contact with the IFRB, and in collaboration with that body, we have been able to give the necessary information.

Later, the CCIR received from the URSIgram Committee a request for help in order to facilitate the interchange of data (for alert warnings and determination of special world days) between IGY centres and sub-centres all through the world.

When, during contact with the General Secretariat of the IGY on these questions it became clear that the CCIR received the necessary information much too late, the CSAGI (Comité Spécial de l'Année Géophysique Internationale) invited the CCIR to be represented in this Committee.

Consequently, Mr. van der Mark and myself became provisionally members of this Committee.

The Secretariat puts this representation before the Plenary Assembly and requests the Plenary to decide how the CCIR should be represented in the CSAGI."

Chairman : "May I ask Dr. Metzler, as future Director, how he would undertake this task ?"

Dr. Metzler (Switzerland) : "I believe that the CCIR could not be better represented than by Prof. van der Pol, and I would propose to you that you confirm this representation, as presented in the Report of the Director."

This proposal was carried with applause.

Prof. van der Pol thanked the Meeting and remarked that now all points of his Report had been covered, but that the Assembly might be interested to know one figure that could not previously be given in the document. Namely, the number of working documents issued in connection with the Warsaw Plenary Assembly amounted to over one thousand, whereas in London it had been 839. One might wonder what would be the figure at the IXth Plenary Assembly!

No further comments being forthcoming, Doc. 115 was approved.

3. Speeches :

The Chairman : "I would like to take this opportunity, now that we have just studied the Report of the Director of the CCIR, to remind you all that it is his last report as Director of the CCIR, and I think, therefore, that this is a very suitable moment to address our thanks to him for the work he has done in the CCIR. I would ask Mr. Pedersen to take the floor."

Mr. Gunnar Pedersen (Denmark) :

"Mr. Chairman, Dr. van der Pol, Ladies and Gentlemen,

It is my privilege to tender to you, Dr. van der Pol, the appreciation of the delegations here present for what you have done for the development of radio communication and for the CCIR in particular.

Your scientific contributions cover a wide field, ranging from the theory of complex prime numbers to problems in connection with the beating of the human heart.

Within this immense field radio communications represent only a narrow band. But even so your works here are most important. I need only mention your theory of the propagation of radio waves over a plane and spherical earth, a work known to radio engineers all over the world.

Some of us have had the good luck to hear you personally giving lectures on these subjects. You manage in some magic way to bring life to the equations on the blackboard, with the strange result that the spirit of the formulae is transferred directly to the imagination of your audience.

You entered actively the field of international radio work at the Washington Radio Conference in 1927, and it was not long before you became an outstanding expert in that sphere. I believe that the reason for this is that not only do you see so clearly for yourself where to seek the fundamental solution of a problem, but also that you have a special gift for conveying your scientific ideas to the radio engineers working with the more practical problems.

Since the last war we have experienced increasing difficulties of coordinating the many new radio services and of finding frequency space. This has made it a necessity to have available for use by the radio conferences and by the IFRB the best possible technical data for solving these problems.

As a consequence of this the Atlantic City Conference decided that the CCIR should have a Specialized Secretariat organized on lines similar to those of the CCIF, which had obtained very satisfactory results in its work.

And it was quite natural that you should be the first Director. Your name would immediately give the CCIR a fine reputation and your vision be a guarantee that the planning for the future would be guided in the right direction.

The fundamental secret of the success of the C.C.I.R. - as indeed of the other C.C.I.'s - lies in that the C.C.I.R. merely gives good advice which is not binding on anybody. But as the recommendations offered are usually clear and based solely on sound technical principles they are naturally followed in most cases.

I have no doubt that the extreme clarity of the documentation, which is so typical of the C.C.I.R., and also the soundness of the underlying technical principles reflect your important contribution to the work of the C.C.I.R.

Radio engineers all over the world who will use C.C.I.R. results in years to come will be grateful to you, Dr. van der Pol, for the fine way in which the work of the C.C.I. R. has been organised.

I know of no other field of human activity where international co-operation is so highly developed as it is in radiocommunication. In spite of undeniable, serious difficulties this cooperation has, as the years have gone by, increased both in scope and depth. The international character of the radio waves makes this inevitable.

The C.C.I.R. provides a most important foundation for this international cooperation. And it is to a large extent thanks to your ability and to your authority that the soundness of this foundation has never been challenged.

Dr. van der Pol, I believe that you must have been a happy man in your work. Your hobby and your task have been closely connected, you have had honours bestowed upon you from all quarters. And the whole world has - in a way - been your play-ground.

We thank you most warmly for what you have done for the C.C.I.R. in the past and we wish you success in your future scientific activity, hoping that it will bring you full satisfaction.

I feel sure that any work that you may undertake from now on will also be a source of reflected glory for your old organization, the C.C.I.R."

(Prolonged applause)

The Chairman : "I am certain that Mr. Pedersen's speech reflects our thoughts, the thoughts of all the Delegations present, and I would merely like to recall that we have already had the occasion to stress Dr. van der Pol's exceptional qualities as a man of science, as a mathematician, and as an excellent organiser in the world field of radio.

I would just remind you that, during 40 years, he has had Mrs. van der Pol beside him, who is well-known to all of us. We know her kindness, and the interest she has shown in the work of the C.C.I.R. She has never missed any of our meetings.

I think at this moment it is quite natural for me to request Mrs. van der Pol to come up here to be near her husband."

(Mrs. van der Pol took her seat on the platform beside Prof. van der Pol. The Chairman handed the Director of the CCIR a parcel, at the same time as flowers and a gift were brought to Mrs. van der Pol.)

The Chairman : "At the request of all the Delegations of the Plenary Assembly united together, I have great pleasure in offering you and Mrs. van der Pol this modest gift on behalf of all Delegates present, and to give you both our very best wishes."

(Prolonged applause).

Pror. Dr. Balth. van der Pol (Director, CCIR) :

"Mr. Chairman, Mr. Pedersen, Ladies and Gentlemen,

I must say that I was very much touched by the kind words you said, Mr. Pedersen, and also by your kindness, Professor Szulkin. This is all quite unexpected to me, and I am quite sure that I am speaking also on behalf of my wife when I thank you - all of you - most warmly for your very lovely gifts. I am sure that we will put them in our drawing-room, and will often think back to the days - or rather to the years - spent with the CCIR.

In connection with the international aspect of the CCIR work it recently struck me that the number of countries in the world, or the number of members of the ITU, is very nearly equal to the number of existing chemical elements.

It also struck me that, apart from their number, there are many other analogies between the chemical elements on the one hand and the countries on the other. For instance, there are large molecules among the elements and there are small ones, just as there are large countries and small ones.

Moreover, nowadays many isotopes are known which show great resemblances to the mother element. Perhaps we could compare these isotopes with the associate members of the ITU, which often show a great similarity with their mother country.

It is also well known in chemistry that there are many elements which will not combine with others, whereas there are other elements which show a great affection for each other and then they combine through single, double or triple valency bonds. Perhaps the same is true of different countries.

Moreover, in chemistry and physics it often happens that an element becomes ionised when an electron suddenly leaves it and asks for asylum with another element. We read of similar cases in the daily press.

Again, some elements show great stability, whereas other elements appear less stable. History has shown that some analogy might be drawn with respect to countries.

Another well-known fact is that there are both natural and artificial elements and perhaps my first home country could be compared with an artificial element because the Netherlands are well known to have been practically reclaimed from the sea. But I cannot refrain from making another analogy with

respect to my second home country, Switzerland, the seat of the Union. I am sure that our Swiss friends will not object if I compare Switzerland, i.e. Helvetia, which could be abbreviated as H e, to Helium, which is a neutral and very stable "Edelgas".

Returning to the general analogies, there are on the one hand radioactive elements which continuously show signs of internal activity and ultimately disintegrate whereas on the other hand there are elements showing a passive tranquility. I have been told that an analogy could also be applied in this case.

Of course in chemistry there are radicals and there are also conservative elements like the inert gases, and perhaps the same is true in the other field. And we should also not forget to mention the rare earths.

Further, modern research studies the nuclei of these elements which originally were considered indivisible but which modern investigation have shown to be quite complex and composite, and we study the stability and resonance of these nuclei with respect to external excitation, but I will refrain from going into too many details here. Neither will I describe Germanium, nor even Polonium, although it would be tempting to do so. I will merely close this part of my remarks with the view that in the future we may perhaps expect another Mendeleieff to systematize this complicated material.

I now return to the CCIR, from whose Directorship I am retiring in a few months. I know that some people consider a retirement as a catastrophe in a man's life. Let me say at once that I do not in the least regard my retirement as such, because, as some of you may know, I have many personal interests which I am eager to find time to pursue. I do, however, regret having to depart from so many good friends amongst the delegates of the CCIR Plenary Assembly. I am happy and proud to say that I am on very good terms with all of you and that there are several delegates whom I have known for a very long time, and whom I may call my personal friends. I admit that it is sad to depart from them after so many years of pleasant collaboration.

Now that the CCIR will soon be in the hands of my old friend Dr. Metzler, I am feeling somewhat like a father whose daughter, brought up with great care and affection, is on the verge of marrying somebody she has selected and elected herself, and on which selection I, as her father, had no influence whatsoever. Under these circumstances, I might say to my future son-in-law, Dr. Metzler, that he will certainly have her affection if he treats her gently, and from the outset recognizes and tolerates some of her peculiarities, which do look worse than they really are. I might also say that she is a nice girl, worthy of his affection and that she is clever, well brought up, if I may say so, but that on rare occasions she is a bit headstrong, and he should not forget that she is all the time strongly influenced by some 90 countries as I have described above.

I, as her father, am now giving the bride away, and I do hope that there will be large offspring of recommendations, questions, study programmes, etc..

Now I will not close this farewell speech without thanking all my colleagues in the Secretariat for their helpful collaboration during the last eight years.

In the first place, Mr. Hayes, as Vice-Director, specialized in broadcasting, and certainly a helpful colleague, especially in matters concerning the English language.

I also wish to thank my secretary, Miss Mickey Knight, who was my very first collaborator and has been with me since the CCIR was first established, when we had two rooms in a temporary hut next door to the Palais Wilson. Her unselfish help in all matters concerning my correspondence and her excellent memory have been of great assistance to me.

Then I should mention Mr. van der Mark an old collaborator of mine, on whose help in physical and technical matters I could always count.

Mr. Lindsey has been the Administrative Secretary, whose good memory for recent and remote details has been invaluable.

Then I should mention our patient friend Mr. Mao, and also Messrs. Pouliquen, Bobillier, Stettler and Julliard, Miss Garetto, Mrs. de Montfalcon, Mrs. Umberg and Miss de Laive.

In conclusion, let me tell you that I have found the eight years I was with the CCIR quite interesting. I have certainly learned a lot from all of you and the experience I have gained has been very valuable to me.

May I close with the best wishes for you all personally and for the CCIR in particular.

Au revoir !-"

(Prolonged applause).

The Chairman : "Thank you, Prof. van der Pol, for your speech full of eloquence and wit.

I note that we have thus come to the end of our agenda of the Plenary Assembly. We have finished our work and have arrived at the close. I believe I can say that we have had a very satisfactory conference. In fact we have managed to approve an impressive number of documents : Recommendations, Questions, and Study Programmes to be studied, which will bring about progress in the field of telecommunications, and will serve various countries in the development of their radiocommunication services. Thus I think we have completed our task.

A very good spirit of cooperation and good-will on the part of all delegates has reigned throughout this Assembly. I think most of us feel - and speaking for myself I can say I have felt - that it has been a very pleasant experience which will remain in our memory.

During this Assembly we have elected our new Director, and the choice is a great pleasure to all of us. We know him as an expert in radiocommunications and we know that in his able hands the work of the CCIR will continue to develop.

Now I have a specially agreeable task * to thank all those people who have been in the wings of our Conference : the Secretariat of the CCIR for the excellent preparation of our Conference, the interpreters and translators, and also the technical personnel.

I would particularly like to express my appreciation to the Study Group Chairmen and Vice-Chairmen for the efficient work they have done before and during the meeting, helped by various specialists.

Finally, I wish to thank all the delegates whose good will and humour helped me considerably in my task, and for the cooperation they have given me.

I thank you warmly on behalf of the Polish Administration and the Polish Delegation. We have done all in our power to help the CCIR.

To close, may I wish you all "Bon Voyage", a happy and safe return to your homes, and I hope we will all meet again at the IXth Plenary Assembly!"

Mr. Cross (U.S.A.) : "Mr. Chairman, Ladies and Gentlemen :

It is indeed a pleasure for me to take this opportunity to say a few words of appreciation to the Polish Administration, to the City Council of Warsaw and to the Polish people on behalf of all the delegations attending this Eighth Plenary Assembly.

First, I should like to express the appreciation of all of us for the excellent working spaces that have been made available by the Polish Administration in this beautiful Palace of Culture & Science. We have enjoyed using this fine auditorium for the plenary sessions and are grateful for the excellent arrangements for document distribution and for the efficient layout of the committee rooms. Moreover, we especially appreciate the fine lounge with its facilities for reading and writing and for getting coffee and tea. We are also grateful for your thoughtfulness in providing the little store and the gift shop. Really our hosts seem to have thought of everything and it is rare indeed when you find so many and such excellent facilities all in one building. All this has, of course, made for a pleasant and very efficient working arrangement.

Next I should like to express the appreciation of all of us to the Polish Administration for the good quarters that have been provided for us here in the hotels in Warsaw and for the efforts made by our hosts to insure our comfort and well-being while we have been here. These factors are important items, because unsatisfactory quarters make for unhappy delegates, even with working facilities as excellent as our hosts have provided for us. The Polish Administration, in collaboration with the City Fathers of Warsaw have realized this and have made their best hotels available for us at what I am sure must have been considerable sacrifice.

Next I should like to express our appreciation to the City Councils of Warsaw, Kraków and Sopot, to the Polish Administration, to the Polish Delegation, to Polskie Radio and to the Polish people for the splendid entertainment that has been provided for us. The two-day trip to the seacoast, the two-day trip to Kraków, the sight-seeing trip around Warsaw, the excellent folk dancing programme, the beautiful Chopin concert, the motor trip to Chopin's birth-place and vicinity, the opera, the several sumptuous receptions, was each a notable experience in itself and altogether were such as to leave us all with fond memories of the hospitality and generosity of Poland. There were side trips also to let the delegates view various radio and television installations and other technical matters of interest, all of which were very noteworthy.

Next I should like to express the deep appreciation of all of us to Professor Szulkin for the efficient and effective way he has run our meetings. He has proved to be a most able presiding officer and it has been a real pleasure to sit under his Chairmanship.

Next I want to express our appreciation to our own CCIR officials - Professor van der Pol, Mr. Hayes, Mr. van der Mark, Mr. Lindsey and their assistants for their fine work that has done so much to keep our meetings running smoothly and efficiently.

Next I want to express our appreciation to Dr. Andrada, the Secretary General of the ITU, for making Mr. Townshend and the other ITU officials available to assist us.

Last but by no means least, I want to congratulate and to express our deep appreciation to the many people who worked so diligently behind the scenes to assist us. I refer to the interpreters, the Orbis people, the translators, typists, mimeograph operators, clerks, messengers and the many others whom we usually refer to in general terms as the Secretariat, and without whom such an Assembly as this would be impossible. You have all done your work well and on behalf of all the Assembly it is a great pleasure to commend you for it.

There is one other item, Mr. Chairman, that has fired the imagination of all of us - that is the remarkable amount of re-building that has been accomplished here in Warsaw since the war. This is even more remarkable when it is realized that the construction season here is a relatively short one due to the severe winters. The results have been nothing short of amazing and we cannot help but congratulate all concerned for such outstanding achievements.

To sum up, Mr. Chairman, we have had a very pleasant stay in your remarkable country and our Assembly has done much constructive work here. However, the time has now come to leave, so to the Polish Administration and the Polish people, who have been such admirable hosts, we say good-bye, good luck and our best thanks for everything."

Dr. Metzler (Switzerland) : "Mr. Chairman, Ladies and Gentlemen,

Let me in my capacity as Director-Elect, associate myself most warmly with the words that have just been pronounced to my predecessor, Dr. van der Pol, whose work in the scientific domain and on the international plane in the CCIR justly merits our greatest admiration.

I would like to assure my "father-in-law", Prof. van der Pol, that I will treat his daughter, the CCIR, with the greatest consideration, always keeping before me the example of her distinguished and eminent father.

Professor Szulkin, I would like to thank you for the excellent work you have done to bring this international conference to a happy conclusion. Thanks to your competence and your ability as Chairman, you have earned the expression of our profound gratitude.

A sincere word of thanks - and here I associate myself with the words which have been pronounced by Mr. Cross - is due to the Polish authorities, who have facilitated the success of this Plenary Assembly in putting such a meticulously and impeccably prepared organisation at our disposal, which merits the appreciation of all the Delegates.

In conclusion, I am sure of being the interpreter of all the delegates present when I add all our thanks and our most sincere wishes for the Polish people, for their happy and prosperous future."

Mr. Topuria (U.S.S.R.) : "Mr. Chairman, Ladies and Gentlemen,

It is only with emotion that I can express the feelings which fill my heart and which reflect the whole state of mind and soul of all our delegations. We now see the VIIIth Plenary Assembly coming to an end - this meeting, held in Warsaw, and all were pleased with such fine organisation and such fruitful work and effort on the part of the Polish Administration. We would like to express our appreciation to the Polish Government for the exceptionally suitable site of the Conference, for the remarkably good organisation, for the ever-willing services.

The soul and spirit of this Conference was different from what it was in years gone by and I think that we should state that this soul and spirit was fully impregnated with the spirit of the Administration which organised the Conference - the Polish Administration - and I believe that this is clear in everything we have seen here. I recall that everything has already been stated here, but I would like to repeat how much we admire the enormous work of reconstruction which has been done by Poland, which we have seen in the North and in the South of this new city of Warsaw. We saw this country destroyed by war, this town razed to the ground arising from the ashes and becoming even finer and lovelier than it was before. It is for this spirit of the Polish people that we must be profoundly grateful, and I must state that the Polish Administration has worked steadily and unceasingly so that our work could be done well.

I would like to say something personal to the Chairman of the Conference, Professor Szulkin, who with such tact and savoir-faire did everything in his power to establish contacts with all the countries here, so that the several "elements" represented here could find some common ground, and find a means of according the common concert of radio specialists throughout the entire world, so that the result was a harmony of ideas controlled by the conductor who was leading this great orchestra.

Now I would like to say a few words to Dr. van der Pol, who has directed the CCIR for the past 8 years, to Dr. van der Pol, for it was he who, because of his great character, was able to create an atmosphere of international goodwill, which is the basis for scientific knowledge and instruction. His clear brain saw that it was necessary to find some kind of common thought and synthesis. It is this scientific expert who, without making any differences between nations and people, has grouped us together as members of a single organisation. I am sure this spirit will continue, prosper and endure under the leadership of Dr. Metzler our new Director.

I would like to associate myself with previous speakers and point out that the past months have provided us with many remarkable results, not only from the point of view of technicians, but also from the point of view of scientists. We would like to tender all our gratitude to the Polish Delegation, to the Polish Administration and to Professor Szulkin, for it is this brilliancy of organisation at such a high scientific level which has made it possible to establish these contacts amongst the radio specialists of the entire world."

Mr. de Erice y O'Shea (Spain) : "It is with deep emotion that the Spanish Delegation, who feels that this afternoon it is speaking on behalf of all the Spanish-speaking delegates of the Southern countries of the Americas as well as of Spain, wishes to associate itself with the words of gratitude and thanks we have already heard.

I would like to join with the United States, Switzerland and the USSR, and repeat to Dr. van der Pol, and to Mrs. van der Pol, his sweet and tireless companion, our appreciation of the work he has done in setting up this organisation, and we feel sure that the new Director, whom we have elected in our wisdom, will carry on his fine work.

To the Polish Delegation, who have given such a fine proof of fidelity and helpfulness, lasting all through our work in Warsaw, I would like to express our heartfelt gratitude. Their spirit follows an example of magnificent reconstruction of Warsaw which we have all seen and admired. We have seen it during our excursions, and we have seen it in the film "Varsovie Quand-même". This Warsaw we have come to know and love - this Warsaw which we would like to call : "Varsovie Toujours" - "Warsaw for Ever"! Thanks to your kindness, and thanks to your spirit of reconstruction, this Warsaw has welcomed us with open arms, and has given us this wonderful, unforgettable hospitality, which we have enjoyed during the past few weeks, with the satisfaction and joy of the marvellous cooperation which has existed among the delegations here present.

We have worked hard for a better fulfilment of our aims. We have achieved an enormous volume of final Questions, Recommendations, etc., and, in the modest opinion of this Spanish Delegation, that volume was due to the fine work of Professor Szulkin as Chairman. It is with pleasure that I have represented Spain at dozens and dozens of international conferences, but rarely have I seen such tact and perspicacity in handling the Chairmanship, as was shown by Professor Szulkin.

I would like to thank, too, Mr. Lisowski, and the members of your Secretariat, the Secretariat of the CCIR, the interpreters, translators, typists, mimeograph operators, document distribution clerks and messengers and the kind and helpful ORBIS people - all those who have been behind the scenes and who have helped to make our Conference so successful.

We have spent $1\frac{1}{2}$ months in this unforgettable Warsaw, and it is with deep emotion that I say -and I think I can sincerely speak for all of us - that from the bottom of our hearts we shall always remember this Conference of the CCIR."

The Chairman : "I should like to thank all delegates most warmly for their very kind words, which are perhaps too full of praise for the Polish Administration and for myself personally. I do appreciate the kind thoughts and wishes you have addressed to me. I thank you again, all of you, most warmly. I give you all my best wishes, and I declare the VIIIth Plenary Assembly of the CCIR closed."

(Prolonged applause).

Rapporteur :

R. Umberg

Acting-Secretary :

J. Revoy

Chairman :

P. Szulkin

