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THE INTERNATIONAL TELEGRAPH AND TELEPHONE CONSULTATIVE COMMITTEE

CCITT

SIXTH PLENARY ASSEMBLY

GENEVA, 27 SEPTEMBER - 8 OCTOBER 1976

ORANGE BOOK

VOLUME I

ORGANIZATION AND WORK
OF THE VIth PLENARY ASSEMBLY

STUDY GROUPS,
JOINT WORKING PARTIES AND
AUTONOMOUS SPECIALIZED
STUDY GROUPS

ALLOCATION OF QUESTIONS

RESOLUTIONS AND OPINIONS
ISSUED BY THE PLENARY ASSEMBLIES

ORGANIZATION OF THE WORK
OF THE CCITT

MEANS OF EXPRESSIONS

GENERAL TELECOMMUNICATION
STATISTICS

Published by the
INTERNATIONAL TELECOMMUNICATION UNION
GENEVA, 1977

Corrigendum to Part III – List of Study Groups, Plan Committees and Working Parties

<i>Page No.</i>	<i>SG/GM/GAS</i>	<i>Reads</i>	<i>Should read</i>
217	COM V	Mr. H. LORKE (Germany, Fed. Rep. of)	Mr. H. LORKE (German Democratic Republic)
218	COM X	Mr. P. DAUDE	Mr. R. DAUDE
218	COM XIV	Mr. W. WINOGRADOV	Mr. W. WINOGRADOW
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**CONTENTS OF THE CCITT BOOK
APPLICABLE AFTER THE SIXTH PLENARY ASSEMBLY (1976)**

ORANGE BOOK

- Volume I** — Minutes and reports of the VIth Plenary Assembly of the CCITT.
— Resolutions and Opinions issued by the CCITT.
— General table of Study Groups and Working Parties for the period 1977-1980.
— Summary table of abridged titles of Questions under study in the period 1977-1980.
— Recommendations (Series A) on the organization of the work of the CCITT.
— Recommendations (Series B) relating to means of expression.
— Recommendations (Series C) relating to general telecommunication statistics.
- Volume II.1** — General tariff principles — Lease of circuits for private service: Series D Recommendations and Questions (Study Group III).
- Volume II.2** — Telephone operation, quality of service and tariffs: Series E Recommendations and Questions (Study Group II).
- Volume II.3** — Telegraph operations and tariffs: Series F Recommendations and Questions (Study Group I).
- Volume III** — Line transmission: Series G, H and J Recommendations and Questions (Study Groups XV, XVI, XVIII, CMBD).
- Volume IV.1** — Line maintenance and measurement: Series M and N Recommendations and Questions (Study Group IV).
- Volume IV.2** — Specifications of measuring equipment: Series O Recommendations and Questions (Study Group IV).
- Volume V** — Telephone transmission quality and telephone sets: Series P Recommendations and Questions (Study Group XII).
- Volume VI.1** — General Recommendations relating to telephone switching and signalling: Series Q Recommendations and Questions (Study Group XI).
- Volume VI.2** — Signalling System No. 6: Recommendations.
- Volume VI.3** — Signalling Systems R1 and R2: Recommendations.
- Volume VI.4** — Programming languages for stored-programme control exchanges: Series Z Recommendations.
- Volume VII** — Telegraph technique: Series R, S, T and U Recommendations and Questions (Study Groups VIII, IX, X, XIV).
- Volume VIII.1** — Data transmission over the telephone network: Series V Recommendations and Questions (Study Group XVII).
- Volume VIII.2** — Public data networks: Series X Recommendations and Questions (Study Group VII).
- Volume IX** — Protection: Series K and L Recommendations and Questions (Study Groups V, VI).

Each volume also contains, for its field and where appropriate:

- definitions of specific terms used;
- supplements for information and documentary purposes.

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PART I

ORGANIZATION AND WORK OF THE VIth PLENARY ASSEMBLY

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A – ORGANIZATION OF THE Vith PLENARY ASSEMBLY OF THE CCITT

1. The Vith Plenary Assembly of the International Telegraph and Telephone Consultative Committee met in Geneva (Switzerland) from Monday 27 September to Friday 8 October 1976. The meetings were held at the Geneva International Conference Centre.

103 countries Members of the ITU, represented by 103 Administrations and 28 recognized private operating agencies, took part in the proceedings. 13 international organizations sent observers. A total of 470 delegates and observers attended the meetings.

2. Officers of the Plenary Assembly

The Plenary Assembly was presided over by Mr. F. Locher, Director General of Telecommunications, Swiss PTT Administration, and Head of the Swiss Delegation. He was assisted by five Vice-Chairmen:

Mr. A. Do Aithnard,	Head of the Delegation of the Togolese Republic,
Mr. A. L. Freeman,	Head of the Delegation of the United States of America,
Mr. H. Mirchandani,	Head of the Delegation of the Republic of India,
Mr. P. Voronine,	Head of the Delegation of the Union of Soviet Socialist Republics.

Mr. R. Croze, Director of the CCITT, acted as Secretary at the plenary meetings, assisted by Mr. D. J. Dormer, CCITT Counsellor.

The Assembly held 16 plenary meetings in addition to the inaugural meeting.

The Heads of Delegations met twice.

3. Committees of the Plenary Assembly

The Plenary Assembly set up four committees and an editorial committee.

Committee A: Organization and working methods of the CCITT

Chairman:	D. Van den Berg (Kingdom of the Netherlands)
Vice-Chairman:	Mr. D. V. Doran-Veevers (Canada)
Secretary:	Mr. I. Savitsky, CCITT Senior Counsellor

Committee B: Work programme of the Study Groups

Chairman:	Mr. B. Williams (United Kingdom of Great Britain and Northern Ireland)
Vice-Chairman:	Mr. L. Katona-Kis (Hungarian People's Republic)
Secretary:	Mr. E. Hummel, CCITT Senior Counsellor

Committee C: Budget control

Chairman:	Mr. C. Baudazzi (Italy)
Vice-Chairman:	Mr. J.J. Hernández-G. (Mexico)
Secretary:	Mr. R. Prélaz, Chief, ITU Finance Department, assisted by Mr. A. Wolf, CCITT Administrative Officer

Committee D: Handbooks and CCITT activities in connection with seminars

Chairman:	Mr. A. Gravell (Australia)
Vice-Chairman:	Mr. Ali Belhadj (Algerian Democratic and Popular Republic)
Secretary:	Mr. R. Chapuis, CCITT Counsellor

Editorial Committee

	Mr. J. M. Larochette (France)
	Mr. R. Coleman (United Kingdom)
	Mr. A. Rodriguez Diaz (Spain)
Secretary:	Mr. M. Derzai, Chief, CCITT Technical Editing Division.

Committee A held six meetings, and Committees B, C and D two each.

**B – LIST OF PARTICIPANTS
ATTENDING THE VIth PLENARY ASSEMBLY**

I. ADMINISTRATIONS AND RECOGNIZED PRIVATE OPERATING AGENCIES

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S. MUNDAY
S. R. V. PARAMOR

D. SCREECH
W. G. SIMPSON
M. STEPHENSON
J. WALTERS
L. H. YOUNG

Cable and Wireless Ltd.

L. J. HARRIS
J. POWELL

International Marine Radio Company Ltd.

L. J. CANNING

The Marconi International Marine Company Ltd.

R. A. DENNIS

SENEGAL
(Republic of the)

S. MBAYE, Head of delegation
R. MBAYE, Deputy head
L. DIA

**SOMALI
DEMOCRATIC REPUBLIC**

A. A. QAAWANE, Head of delegation

SWEDEN

B. BJUREL, Head of delegation
T. LARSSON, Deputy Head
H. ANDERSSON
S. R. LETZEN
G. LINDBERG
R. NÄSLUND
A. B. RABERG
I. TANGE

SWITZERLAND
(Confederation of)

F. LOCHER, Head of delegation
B. DELALOYE, Deputy head
J. VALLOTON, Deputy head
G. BAGGENSTOS
K. J. BOHREN
G. DUPUIS
G. FONTANELLAZ
K. FREIBURGHANUS
W. JOST
A. KUENDIG
H. K. PFYFFER
R. RÜTSCHI
R. TRACHSEL

Radio-Suisse S.A.

R. A. BEUSCH
R. BONJOUR
J.-L. HAYOZ
A. SERMET

TANZANIA
(United Republic of)

O. ISSA, Head of delegation
C. KAZUKA, Deputy head

CHAD
(Republic of)

M. G. BALLEET, Head of delegation

CZECHOSLOVAK
SOCIALIST REPUBLIC

I. LAŠKA, Head of delegation
S. SCHNEIDER, Deputy head
B. KUBÍN
J. ZELKO

THAILAND

K. YUPHO, Head of delegation
S. BIJAYENDRAYODHIN
I. R. REOWILAISUK

TOGOLESE
REPUBLIC

A. DO AITHNARD, Head of delegation
K. NENONENE, Deputy head
D. ALI
T. SEDALO

TUNISIA

S. GHANOUCI, Head of delegation
C. HELAL, Deputy head

TURKEY

A. I. DÜNDAR, Head of delegation
O. ERYOL, Deputy head
H. UTKAN

UNION OF SOVIET
SOCIALIST REPUBLICS

P. VORONINE, Head of delegation
S. NOVIKOV, Deputy head
G. ALABIN
W. DEDOBORSCHTCH
K. EPANECHNIKOV

B. KOULBATSKI
S. LEBEDSKOI-TAMBEV
K. NIKOLSKY
V. ORLOV
V. OSSIPOV
O. SRAPIONOV
L. VACHROMITCHEVA, Mrs.
G. VEMJAN
A. ZAITSEV

VENEZUELA
(Republic of)

C. J. MARTINEZ, Head of delegation
A. F. LAZARO

YEMEN
ARAB REPUBLIC

A. TARCICI, Head of delegation

YUGOSLAVIA
(Socialist Federal Republic of)

V. RANKOVIĆ, Head of delegation
B. CAVIC, Deputy head

ZAIRE
(Republic of)

N.-K. NDEMBIKA, Head of delegation
K. SALUMU

II. INTERNATIONAL
ORGANIZATIONS**European Computer Manufacturers**
Association — ECMA

L. LAURI
J. SCHWARZ

International Air Transport
Association — IATA

M. DEKKER
L. HARVEY
K. MOLENAAR
G. A. MONNIOT
H. NEUSTADT
G. OLIVER
R. VARGUES

International Chamber of Commerce — CCI

R. BAALMAN

International Chamber of Shipping — ICS

B. BAYNHAM
G. SMITH

International Marine Radio Association — CIRM

J. D. PARKER

International Electrotechnical Commission — CEI

T. NEOVIUS

International Conference on Large High Tension Electric Systems — CIGRE

M. PAIMBOEUF

International Press Telecommunications Council — IPTC

I. RAY
O. ROBINSON
J. G. THOMPSON

European Organization for Nuclear Research — CERN

H. SLETTENHAAR

International Organization for Standardization — ISO

L. DURAND
C. K. HOUTER
E. LOHSE
M. MANIERE

Arab Telecommunication Union

M. GHAZAL

III. SPECIALIZED AGENCIES OF THE UNITED NATIONS**International Civil Aviation Organization — OACI**

R. SHAFER

World Meteorological Organization — OMM

H. BARI

IV. INTERNATIONAL TELECOMMUNICATION UNION**GENERAL SECRETARIAT**

M. MILI, Secretary-General
R. E. BUTLER, Deputy Secretary-General
R. PRÉLAZ, Chief of the Finance Department
U. PETIGNAT, Deputy Chief of the Department of Conferences and Common Services
A. WINTER-JENSEN, Administrative Officer
M. IBNOU ZEKRI, Legal Adviser
R. SMITH, Head of "Relations with Members" Division
R. FONTAINE, Head of the Public Relations Division
J. BARLEY, Miss, Chief Minute-Writer
N. HESELTINE, Mrs., Minute-writer
S. ROSSINGTON, Mrs., Minute-writer
A. BERGER, Mrs., Minute-writer
D. GARETTO, Miss, Minute-writer

IFRB

A. GROMOV, Chairman
F. G. PERRIN, Vice-Chairman
A. BERRADA, Member
S. FUJIKI, Member
C. W. SOWTON, Member
A. A. MATTHEY, Counsellor
C. GLINZ, Acting Chief of the Planning Department
W. GARCIA-RIOS, Acting Chief of the Technical Department

CCIR

R. C. KIRBY, Director
N. V. GADADHAR, Senior Counsellor
Y. Y. MAO, Senior Counsellor
J. RUTKOWSKI, Senior Counsellor
P. GUILLOT, Chief of the Editing Department
C. STETTLER, Engineer
S. SVIRIDENKO, Engineer

CCITT

R. CROZE, Director
C. VIGNEULLE, Mrs., Secretary to the Director
L. FERNANDEZ DEL PINO, Miss, Secretary to the Chairman of the Plenary Assembly
E. HUMMEL, Senior Counsellor
M. MALEK-ASHGAR, Engineer
T. OKABE, Engineer
A. K. CABRERA, Engineer
U. SUBIOTTO, Mrs., Assistant

CCITT (concluded)

I. SAVITSKY, Senior Counsellor
 F. BIGI, Engineer
 E. PIERRE, Engineer
 N. SCHULI, Miss, Assistant
 Z. BOBILEWICZ, Chief of the Laboratory
 F. CABEZAS, Deputy Chief of the Laboratory
 R. CHAPUIS, Counsellor
 M. BETANCOURT, Engineer
 Y. BOZEC, Engineer
 J. CAMPBELL, Miss, Assistant
 D. J. DORMER, Counsellor
 R. BAILLOD, Engineer
 Y. SENUMA, Engineer
 B. VOLTOLINI, Assistant
 R. LUTOLF, Draughtsman
 M. DERZAI, Chief Technical Editor
 F. J. CANTERO, Engineer – Technical Editor
 F. A. COHEN, Engineer – Technical Editor
 C. MOUSSAC, Engineer—Technical Editor

General Organization

A. WOLF, Administrative Officer
 M. GEROMEL, Assistant
 G. CLAIRO, Clerk

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Y. WISARD, Mrs., Assistant Administrative Officer
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A. ANSELMIER, Mrs., Assistant
 W. KINGSTON, Mrs., Assistant
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 M. MATTHEY-SAUSER, Mrs., Assistant

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A. BERNASCONI, Mrs.
 V. BOULADON, Mrs.
 A. CARNER, Miss
 CHANG Tieh-chen
 CHOU Shu-chi
 G. DOUNAEVA, Mrs.
 M. DUCROUX, Mrs.
 M. GUCASSOFF, Mrs.
 M. IRMAN
 L. KONDRATENKO
 D. LEVEILLE, Mrs.
 M. LEVTCHENKO, Mrs.
 LI Fu-chung
 LIN Hui-chung, Mrs.
 C. LIOU, Miss
 E. MAISSEN, Mrs.
 G. MOSSINE
 D. PORTIER, Mrs.
 A. PREGER, Miss
 W. QUINTANA, Mrs.
 M. REPOND, Mrs.
 I. SAKOV, Mrs.
 A. SIEVEKING, Miss
 F. TOW, Miss
 M. TRIVINO de BARTHEL, Mrs.
 J. UDLER, Miss
 L. de VILLOUTREYS, Mrs.
 D. WALTERS

C – LIST OF VIth PLENARY ASSEMBLY DOCUMENTS

1 – WHITE DOCUMENTS

AP VI-No.	Title
1	Final report by GAS 3 to the VIth Plenary Assembly
2	Partial final report by Joint Special Study Group C to the Plenary Assembly (Questions 2/C and 9/C)
3	Final report by Joint Special Study Group C to the Plenary Assembly
4	Final report by Special Autonomous Working Party No. 5 (GAS 5) to the VIth Plenary Assembly of the CCITT
5	Contribution by Canada (CTCA): Annex 2 to Question 10/C – Noise performance requirements for telephone circuits and systems in large countries (mentioned in Part IV of Document AP VI-No. 3, COM Sp.C-No. 67)
6	Final report by Study Group IX (Parts I and II)
7	Final report by Study Group IX (Parts III and IV)
8	Final report by Study Group IX (Part V) – Patents
9	Contribution by the Hungarian Administration: Proposal for a Part III to Annex 4 to Question 1/C, Point C
10	Contribution by the United Kingdom Post Office: Revision of Tables and figures, in supplement No. 5, <i>Green Book</i> , Volume III, as foreseen in the final report of Joint Special Study Group C
11	Contribution by the United Kingdom Post Office: Annex 7 to Question 1/C (as announced in the final report of Joint Special Study Group C)
12	Annex (to Recommendation G.223) (announced in the final report by Joint Special Study Group C)
13	Final report concerning the questions studied by Joint Working Party LTG
14	Final report by Study Group XV – Series J draft Recommendations
15	Report by the Director on the activity of the CCITT between the Vth and VIth Plenary Assemblies
16	Final report by Study Group X to the VIth Plenary Assembly
17	Final report by Study Group XI to the VIth Plenary Assembly 18Final report by Study Group XI (Part III)
19	Final report by Study Group XI (Part III) (continuation)
20	Final report by Study Group XI (Part III) (continuation)
21	Final report by Study Group XI (Parts IV and V)

AP VI-No.	Title
22	Final report by Study Group XVI to the VIth Plenary Assembly
23	Final report by Study Group XII to the VIth Plenary Assembly
24	Part VI of the final report to the VIth Plenary Assembly (proposed Part D of the Manual on national telephone networks for the automatic service)
25	Final report by Study Group VIII
26	Final report by Study Group IV
27	Study Group IV – Revised and new Recommendations in the M Series
28	Study Groups IV and XIII – Proposed new M/Q Series Recommendations
29	Study Group IV – Revised and new Recommendations in the N and O Series
30	Revised Recommendation O.22/Q.49 concerning the ATME No. 2
31	Report by Study Group XIII to the VIth Plenary Assembly
32	Part IV of the final report by Study Group XIII
33	Report on the activities of the Plan Committees in the period 1973-1976 by the Director of the CCITT
34	Parts VI and VII of the final report by Study Group XIII
35	Final report by Study Group XIV to the VIth Plenary Assembly
36	Status report (February 1976) on the studies of a new common channel signalling system for digital networks (Questions 3b/Sp.D – 1-U/VII – 4/XI)
37	Report by Study Groups XI and Special D on Question 3/D
38	Final report by Study Group XV to the VIth Plenary Assembly
39	New questions and proposed amendments for existing questions (Part VII of the final report by Study Group XV)
40	Supplement to the final report of Joint Working Party LTG
41	Report by the Director of the CCITT on delayed contributions
42	Report by the Director of the CCITT on the publication of the 1977 edition of the CCITT Book
43	Final report on the work of Special Study Group A (Parts I and II)
44	Final report on the work of Special Study Group A (Parts III and IV)
45	Final report by Joint Working Party SMM to the VIth Plenary Assembly
46	Final report by Joint Working Party SMM (Part III)
47	Final report by Study Group I (Parts I and II)
48	Final report by Study Group I to the VIth Plenary Assembly (Part III) – Series F Recommendations
49	Final report by Study Group I to the VIth Plenary Assembly (Part IV) – Proposed study programme
50	Final report by Study Group I to the VIth Plenary Assembly (Part V)
51	Final report by Study Group I to the VIth Plenary Assembly (Part VI)
52	Final report by Study Group II to the VIth Plenary Assembly (Parts I and II)
53	Final report by Study Group II to the VIth Plenary Assembly (Parts III, IV and V)
54	Final report by Study Group VII to the VIth Plenary Assembly (Parts I and II)
55	Final report by Study Group VII to the VIth Plenary Assembly (Part III)
56	Final report by Study Group VII to the VIth Plenary Assembly (Parts IV and V)
57	Final report on the questions studied by Joint Working Party CNC

AP VI-No.	Title
58	Report by the Director on the CCITT Secretariat (including the Laboratory)
59	Suggestions by the Director on the CCITT concerning the Resolutions and Opinions adopted by the Vth Plenary Assembly
60	Report by the Director of the CCITT on patent policy
61	Report by the Director of the CCITT to the VIth Plenary Assembly – Estimate of the financial needs of the CCITT
62	Final report by Study Group III to the VIth Plenary Assembly
63	Contribution by the United Kingdom Post Office: (Section 2 of Part III of Annex 2 to Question 15/XII in Document AP VI-No. 23)
64	Study Group IX – Amendment of draft Recommendation R.111
65	Final report by Special Study Group D to the VIth Plenary Assembly
66	Final report by Special Study Group D to the VIth Plenary Assembly (Part III)
67	Final report by Special Study Group D to the VIth Plenary Assembly (Part IV)
68	Contribution by the United Kingdom Post Office: Patent policy within the various CCITT study groups
69	Report by the Director of the CCITT on the CCITT handbooks and activities in connection with seminars
70	Final report by Study Group VI to the VIth Plenary Assembly
71	Report by the Director of the CCITT concerning the chairmen and vice-chairmen of CCITT study groups and working parties
72	Final report by Study Group V to the VIth Plenary Assembly
73	Supplement to the final report by GAS 3
74	Report by the Director of the CCITT on direct current telegraphy
75	Report by the Director of the CCITT on the terms of reference and meetings of the Plan Committee (Addendum No. 1 to Document AP VI-No. 33)
76	Report by the Director of the CCITT to the VIth Plenary Assembly on the estimate of the financial needs of the CCITT (Addendum No. 1 to Document AP VI-No. 61).
77	Report by the Director of the CCITT on the publication of the 1977 edition of the CCITT Book (Addendum No. 1 to Document AP VI-No. 42)
78	Report by the Director of the CCITT on study groups and joint working parties
79	Contribution by the Federal Republic of Germany: amendment to CCITT Question 13/VI
80	Proposals for amendments to the draft new questions for Special Study Group D
81	Conclusions of the interim meeting of the CMTT (SG XV)
82	Contribution by Argentina: Simplification of the public telegram service (SG I)
83	Contribution by the Republic of Liberia: Maritime accounting (JWP SMM)
84	Contribution by the United Kingdom Post Office: The work of Study Group XV and Special Study Group D
85	Contribution by France: Coordination of work on terminology
86	Report by the Director of the CCITT on definition of the terms “telegraphy” and “telephony”
87	Contribution by the International Chamber of Shipping: Mobile station charges (JWP SMM)
88	Report by the Director of the CCITT: URSI/ITU liaison Committee
89	Contribution by ISO on draft Recommendation X.25 (SG VII)
90	List of Plenary Assembly documents

AP VI-No.	Title
91	CCIR Secretariat — Report of the Joint Study Group for Vocabulary (CMV)
92	Contribution by the Swiss Administration: Proposal for the Organization of the work of Study Group XV and Special Study Group D
93	Contribution by Norway: Coordination of CCITT studies related to the maritime mobile satellite service studied by CCIR
94	Addendum to Document AP VI-No. 54
95	Contribution by Uganda: Noise performance requirement for international circuits (and national circuits which form part of international circuits)
96	Proposal for the suppression of Recommendation H.33 (COM XV)
97	Contribution by the United Kingdom Administration: Comments on Document AP VI-No. 42: Publication of the 1977 edition of the CCITT Book
98	Corrigendum to the Report of Study Group XI by the Chairman of Study Group XI/3-1
99	Proposal by the Special Rapporteur for Question 4/II and Chairman of Study Group II for amendment to Document AP VI-No. 53.
100	Report on the findings of the survey on the importance attached to the activities of GAS 5 and the Handbook
101	Contribution by the United Kingdom Post Office on Study Groups and Joint Working Parties
102	Contribution by the Italian Administration on Questions to be assigned to Special Study Group D and to Study Group XV.
103	Contribution by Canada on Organization and collaboration on definitions
104	Contribution by Canada on the restructuring of CCITT Study Groups
105	Contribution by the U.S.S.R. Administration: Draft Recommendation G.612
106	Contribution by the USSR Administration: Impulsive Noise objectives
107	Addendum to Document AP VI-No. 27 concerning the revised and new Recommendations in the M Series (COM IV)
108	Contribution by the International Electrotechnical Commission: IEC standard for LF cables with polyolefein insulation for outdoor use
109	Contribution by the Ivory Coast: Venue for the Plan Committee for Africa meeting.

2 – TEMPORARY DOCUMENTS

Temp. Doc. No.	Title
	2.1 <i>Documents of Plenary Assembly</i>
1/PLEN Rev. 1	Agenda for the VIth Plenary Assembly
2/PLEN	Procedure for the election of the Director of the CCITT
3/PLEN	List of candidates for the post of Director of the CCITT with curricula vitae
4/PLEN	Withdrawal of the reservation made concerning Recommendation V.29 (United Kingdom Post Office and Canada)
5/PLEN	Chairmen and Vice-Chairmen of Study Groups
6/PLEN	Corrigendum to Study Group XI Report, (Chairman of Study Group XI and Italy (SIP))
7/PLEN	Corrigendum to texts of the final report of Study Group XIII (Editing Group of Study Group XIII)
8/PLEN	Corrigendum to Part VI of the final report of Study Group XI to the Plenary Assembly (Rapporteur for Question 6/XI)
9/PLEN	Proposals on alternative methods of accounting for mobile station charges to achieve greater simplification (International Chamber of Shipping)
10/PLEN	CCITT patent policy (United States of America)
11/PLEN	Proposal by the IEC to draw up standards for low-frequency cables
12/PLEN	Editorial amendments to Document AP VI-No. 14 to form the revised Recommendations in the J Series (Rapporteur for the revision of the J Series Recommendations)
13/PLEN + Corr. 1 + Corr. 2	Minutes of the inaugural meeting
14/PLEN	Minutes of the First Plenary Meeting
15/PLEN	Setting-up of an Autonomous Group (Delegation of Lebanon)
16/PLEN	Draft Resolution (meeting of the World Plan Committee) (Saudi Arabi)
17/PLEN	Patent application, 140 Mbit/s interface (Swiss Administration)
18/PLEN	Reasons for maintaining Study Group XIII (Belgian TT Administration)
19/PLEN	Minutes of the Second Plenary Meeting
20/PLEN	Working party on the definition of the terms "telegraphy" and "telephony" (France)
21/PLEN + Corr. 1 + Corr. 2	Minutes of the Third Plenary Meeting

Temp. Doc. No.	Title
22/PLEN + Corr. 1	Minutes of the Fourth Plenary Meeting
23/PLEN	Minutes of the Fifth Plenary Meeting
24/PLEN	List of delegates of CCITT meetings and officials of CCITT who had died or whose retirement has been announced since the Vth Plenary Assembly
25/PLEN	Agenda for the week of 2-8 October 1976
26/PLEN Rev. 1	Chairmen and Vice-Chairmen
27/PLEN	Telegram and telex "Instructions" ("Instructions" Working Party)
28/PLEN	Minutes of the Sixth Plenary Meeting
29/PLEN	Minutes of the Seventh Plenary Meeting
30/PLEN	Draft Resolution — Patented items
31/PLEN	Draft Resolution — Plan Committees
32/PLEN	CCITT patent policy (USSR)
33/PLEN	Report of the Working Party on "Resolutions and opinions" of Committee A
34/PLEN	Minutes of the Eighth Plenary Meeting
35/PLEN	Minutes of the Ninth Plenary Meeting
36/PLEN	Minutes of the Tenth Plenary Meeting
37/PLEN Rev. 1	Report of the working group on the terms of reference of the CCITT
38/PLEN	Candidacy for the Chairmanship of the TAF Group (Delegation of Mali)
39/PLEN	Candidacy for the Chairmanship of the TAF Group (African Group)
40/PLEN	Minutes of the Eleventh Plenary Meeting
41/PLEN	CCITT patent policy (India)
42/PLEN	Minutes of the Twelfth Plenary Meeting
43/PLEN	Minutes of the Thirteenth Plenary Meeting
44/PLEN	Minutes of the Fourteenth Plenary Meeting
45/PLEN	Minutes of the Fifteenth Plenary Meeting
46/PLEN	Minutes of the Sixteenth Plenary Meeting
<i>2.2 Documents of Committee A</i>	
1/COM A	Minutes of the First Meeting of Committee A
2/COM A	Minutes of the Second Meeting of Committee A
3/COM A	Report of working party on Resolutions and Opinions
4/COM A	Minutes of the Third Meeting of Committee A
5/COM A	Minutes of the Fourth Meeting of Committee A
6/COM A	Minutes of the Fifth Meeting of Committee A

Temp. Doc. No.	Title
7/COM A	Report by Committee A to the Plenary Assembly
8/COM A	Minutes of the Sixth Meeting of Committee A
<i>2.3 Documents of Committee B</i>	
1/COM B	Proposed re-allocation of Questions following rearrangement of responsibilities of Study Groups
2/COM B	Joint proposal by Mr. F. Biot (Belgium) and Mr. J. Kiil (Denmark) for the distribution of former Study Group XIII Questions
3/COM B	Assignment of new Questions of Study Group XVIII (Sp.D)
4/COM B	New Question I/XI
5/COM B	Draft Question .../II – Standardization of facilities to be offered to subscribers by automatic stored programme exchanges
6/COM B	Report by Committee B to the Plenary Assembly – first part
7/COM B	Report by Committee B to the Plenary Assembly – second and last parts
<i>2.4 Documents of Committee C</i>	
1/COM C	Organization of the VIth Plenary Assembly
2/COM C	Budget and accounts of the VIth Plenary Assembly of the CCITT
3/COM C + Corr. 1	Draft report of Committee C
4/COM C Rev. 1	Report by Committee C to the Plenary Assembly
5/COM C	Minutes of the First Meeting of Committee C
6/COM C	Minutes of the Second Meeting of Committee C
<i>2.5 Documents of Committee D</i>	
1/COM D	Minutes of the First Meeting of Committee D
2/COM D	Handbook on economic and technical aspects of the choice of switching systems
3/COM D Rev. 1	Draft text for an opinion by the VIth Plenary Assembly
4/COM D	Report by Committee D to the Plenary Assembly
5/COM D	Minutes of the Second Meeting of Committee D

D – MINUTES OF THE PLENARY MEETINGS

Chairman: Mr. F. LOCHER (Switzerland)

INAUGURAL MEETING

(Minutes amended at the fifteenth Plenary Meeting)

Monday, 27 September 1976, at 1130 hrs

Subjects discussed:

1. Opening of the VIth Plenary Assembly and election of the Chairman
2. Election of the Vice-Chairmen of the VIth Plenary Assembly
3. Address by Mr. R. Croze, Director of the CCITT
4. Address by Mr. M. Mili, Secretary-General of the ITU
5. Address by Mr. F. Locher, Chairman of the VIth Plenary Assembly
6. Statement by the delegation of the People's Republic of China
7. Statement by the representative of the ATU

1. Opening of the VIth Plenary Assembly and Election of the Chairman

Mr. Croze, Director of the CCITT, declared open the VIth Plenary Assembly of the CCITT and on behalf of the Heads of Delegations proposed Mr. F. Locher (Director-General of the Swiss PTT) as Chairman.

Mr. Locher was elected by acclamation, took his place as Chairman and made the following statement:

"Ladies and Gentlemen,

I am very moved at the honour paid to my country, my Administration and myself in asking me to chair the VIth Plenary Assembly of the CCITT and I am appreciative of the confidence thus placed in me.

With the competent aid of the Vice-Chairmen and that of the Study Group Chairmen, Mr. Croze, Director of the CCITT, and all the staff of the General Secretariat of the ITU and the CCITT Secretariat I trust we shall be able to perform our delicate and difficult task.

I shall count particularly on your cooperation, Ladies and Gentlemen, and thank you in advance for your valuable and effective support."

2. Election of the Vice-Chairmen of the VIth Plenary Assembly

The *Chairman*, on behalf of the Heads of Delegations, proposed the following as Vice-Chairmen: Mr. Freeman (United States of America), Mr. Voronine (USSR), Mr. Balduino (Brazil), Mr. Aithnard (Togo) and Mr. Mirchandani (India). Their election was approved by acclamation and the Vice-Chairmen took their place on the rostrum.

3. Address by the Director of the CCITT

Mr. Croze delivered the address reproduced in Annex I.

4. Address by the Secretary-General of the ITU

Mr. Mili delivered the address reproduced in Annex 2.

5. Address by the Chairman of the VIth Plenary Assembly

The *Chairman* delivered the address reproduced in Annex 3.

6. Statement by the delegation of the People's Republic of China

The *delegate of the People's Republic of China* made the following statement:

"On behalf of the telecommunication delegation of the People's Republic of China I should first like to congratulate the Chairman on his election. Also, we extend a warm welcome to the telecommunication delegation of the Democratic People's Republic of Korea, which is participating for the first time in the CCITT Plenary Assembly. It gives us much pleasure to work together with that delegation.

We are sure that the participation of the telecommunication Administration of the Democratic People's Republic of Korea will prove a valuable contribution to the work of the CCITT and to the Plenary Assembly.

We wish the telecommunication Administration of the Democratic People's Republic of Korea every success in its work."

7. Statement by the representative of the ATU

Mr. Ghazal, on behalf of the Arab Telecommunication Union and of Lebanon congratulated the Chairman and Vice-Chairmen on their election and thanked Mr. Croze for the constructive nature of his address and Mr. Mili for his pertinent comments.

The meeting rose at 1230 hours.

ANNEX 1

Address by Mr. R. Croze, Director of the CCITT

"Mr. Chairman, Ladies and Gentlemen,

I should first like to congratulate you very warmly, Mr. Chairman, on your election by acclamation as Chairman of this Assembly. You are the Director-General of Swiss Telecommunications which, as everybody knows, are in the vanguard of world telecommunications; your presence in the Chair, therefore, is a guarantee of the success of our work, which will augur well for the future of the CCITT. I am sure that, in your difficult task, you will receive valuable assistance from the five Vice-Chairmen just elected by the Assembly, to whom my congratulations are also due.

I should like to greet all the delegates who have come here from all regions of the world and bid them a very hearty welcome to Geneva. According to the information I have received, some 420 delegates have registered so far, and 88 countries, represented by 88 Administrations and 28 recognized private operating agencies, as well as 11 international organizations, have announced their intention of participating in this Assembly. I am very satisfied that there are more countries participating than in the Vth Plenary Assembly, held in Geneva in 1972.

I am also glad to see among us my colleagues from the ITU Coordination Committee, whose presence proves that the ITU, with its federal structure, constitutes a united whole. I should like to thank in particular Mr. Mili, the Secretary-General, for proving once more his interest in the work of the CCITT. I am especially appreciative of the fact that his attitude towards the CCITT and its Director has always been sympathetic, a feeling which I reciprocate, our friendship and cooperation being of long standing.

Allow me now to offer you a few words of personal explanation which I feel I owe you: I have had to resign as Director of the CCITT and I should not like any of the 61 countries which elected me in December 1972 to feel that, by withdrawing after a single study period, I have betrayed the confidence they placed in me. I should, on the contrary, have betrayed their confidence if I had stayed.

I was deeply affected in every way by the sudden death of my wife six months ago. I no longer feel physically or morally capable of discharging my duties properly and efficiently for another four years. To avoid the probability of leaving the CCITT without a permanent Director for a period, which would be harmful to the Committee, it was therefore my duty to withdraw as from the end of the VIth Plenary Assembly, thus giving you the opportunity to elect a new director, younger than I am, but who will also have served in the highest posts of his national Administration and gained that wide experience which is absolutely indispensable for running the CCITT, as my four years in office have shown me. It can only be of benefit to the CCITT.

This decision, I assure you, was not an easy one to take. I liked my job and, six months ago, I still felt myself capable of doing it efficiently for many years to come. My only consolation would be if my work as the head of the CCITT were not thought to have been in vain but to have yielded some useful results for the future.

It is a hopeful sign that this VIth Plenary Assembly is being held in the year which sees the hundredth anniversary of the invention of the telephone; it concludes a study period — 1973-1976 — which has been active and fruitful. But I shall not dwell here on the work that has been done or the results achieved: you will be dealing with these points in detail during the next few days when you discuss the Director's Report on the activities of the CCITT and the final reports of the Study Groups submitted by their respective Chairmen. I shall simply say that, putting into practice the improved working methods decided on by the Vth Plenary Assembly and certain organizational measures adopted by the Director, the Study Groups have, on the whole, done a great deal of work, and have done it well.

I shall also refrain from going over the history of the CCITT, with which you are all familiar. I shall merely remind you that it was set up in 1956 by the merging of the former Telegraph Committee with the former Telephone Committee. In my view, that was a very fruitful measure, as the results have shown, because it led to the coordination of techniques and services which had tended to go their separate ways, at a time when the development of telex and data transmission, coupled with the introduction of digital techniques, made it essential for telegraphy and telephony to advance hand in hand. It is absolutely imperative, therefore, to avoid any tendency in the CCITT towards the re-establishment of two sectors, one for telegraphy and one for telephony, each with its own working methods, and each jealously attempting to gain and defend a degree of autonomy, on the grounds that each has its special character and "personality". Unity of thought and action is essential for the harmonious development of world telecommunications under the auspices of the CCITT, especially at a time when the use of a single digital network integrating a variety of services is beginning to look like the technology of the future.

I should like, however, to raise two or three special points, which strike me as being of particular significance and concerning which — since I have no longer, consciously or unconsciously, any personal axe to grind — I shall speak freely on the basis of my four years' experience with the CCITT.

The criticism most frequently voiced and written concerning the work of the CCIs — and, in particular, the CCITT — relates to their low rate of progress, with Plenary Assemblies meeting every four years or so (and the criticism — you may be sure — would be just the same if the Assemblies met at three-year intervals).

In these circumstances, it is said, the CCITT's work is bound to be fairly inefficient, or even fruitless, since it cannot keep up with the speed of technical change. Only lately I found this opinion expressed once again, in great detail, in an article by J.G. Thompson, entitled "The Dark Labyrinth of World Telecommunication", which appeared in the *ITPC Newsletter* for May 1976; the author reproaches the ITU for not having "adapted its procedures to meet the rapidly changing conditions of the modern world of international communications", and the CCITT in particular for "the slow pace" of its work. He contrasts the CCITT with the CEPT. I shall not enter into this latter controversy.

It is certainly necessary, as my predecessor, Jean Rouvière, said in his opening address to the IIInd Plenary Assembly at New Delhi in 1960, for the CCITT "without betraying the traditions which are its mainspring, ... to adapt the rhythm of its work to the requirements of modern life".

At the same time, one must not forget that, in the international sphere, the best results are never achieved by rushing matters and that the search for a general consensus in the increasingly complicated technical problems which confront us today is often a long job requiring a great deal of diplomacy.

Above all, one should not forget that, by Resolution No. 2 adopted at its IVth Plenary Assembly at Mar del Plata in October 1968, the CCITT established a quicker procedure for the provisional approval of Recommendations in urgent cases where it seemed possible to take a decision without waiting for the next Plenary Assembly. That procedure was used several times during the study period which has just come to an end. It could be used more frequently in the future, whenever it is possible to obtain general agreement quickly and without too much difficulty.

But more serious criticisms can be levelled at the CCITT. I have noticed that, only too often, Recommendations, or Series of Recommendations — mainly those of a technical nature — merely “register” the *de facto* state of affairs in different industrialized countries. Each such Recommendation is thus a kind of hybrid “monster” in the sense that every Administration is bent on including the provisions or specifications it applies itself, so that the Recommendation fails to fulfil the “standardization” function which should be the primary aim of the CCITT. It would be easy to quote examples from the various branches of telecommunications (transmission, switching, data transmission equipments, etc.).

This situation arises essentially from the fact that the Administrations or recognized private operating agencies and industrial organizations usually begin by establishing their own “systems” — in the broad sense of the term — without bothering to ask themselves whether it will not be necessary, in the near future, to establish some form of international standardization. And when this need for standardization makes itself felt, we are already faced with a *fait accompli*, i.e., the existence of different systems which the CCITT is bound to take account of in its Recommendations.

In his 1960 address, which I referred to a few moments ago, Jean Rouvière noted this state of affairs when he said that “In the past, the CCITT could take time to reflect on problems before studying them and could carefully polish the solutions it found. Henceforth, however, progress in telecommunications is too rapid for such comfortable habits to be retained. As soon as a new technique appears on the horizon, the CCITT has to take it up immediately and make the speediest possible studies, for fear of being too late to ensure international standardization.”

Have we made much progress in this respect since 1960?

In my opinion, the CCITT’s principal activities should be more specifically oriented towards the future. When new systems are being designed, all Administrations should ask themselves from the outset whether they will have repercussions at the international level and, if so, they should refer the problem to the CCITT with a view to standardization; this would help to avoid the proliferation of different systems. To do this, it is not necessary to wait for a Plenary Assembly: greater use could be made of the possibilities offered by No. 308 of the Convention, which allows for the study of questions “in the interval between ... Plenary Assemblies, when requested or approved by correspondence by at least twenty Members of the Union”. This would entail a valuable saving of time in the interests of standardization and of efficiency.

The VIth Plenary Assembly might consider adopting a Resolution inviting Administrations to submit any new problem liable to have international repercussions to the CCITT, from the outset, in the form of a Question. A Resolution on those lines would help to strengthen further the authority and role of the CCITT.

In the recent history of the CCITT, I know of only one case in which international study of a system and standardization of its specifications preceded national development: that is the No. 6 Signalling System, which was the joint work of the world’s foremost signalling and switching specialists. This example shows that the procedure suggested is not a Utopian one.

There is another aspect of the same problem: one of the distinguishing features of the CCIs, among international organizations, is that scientific or industrial organizations “which are engaged in the study of telecommunication problems or in the design or manufacture of equipment intended for telecommunication services” may be admitted to participate, in an advisory capacity, in the work of their Study Groups — under No. 379 of the Convention. In the great majority of cases, this means manufacturers of telecommunication equipment, and it is very satisfactory to note that these bodies, in ever-increasing numbers, are taking a more and more active part in the deliberations of the CCIs. This is one of the most important factors in the success and effectiveness of the CCITT.

On the other hand, I am sorry to see that the meetings of certain Study Groups, or of their Working Parties, are sometimes tending to become an arena where manufacturers from different industrial countries come to do battle for their rival designs. Each one comes with a stubborn determination to defend his firm’s achievements and the systems it has developed, on its own, usually without any international coordination. Most of the time, the representatives of the Administrations watch these battles in impassive silence, when they do not simply take up the cudgels on behalf of their own manufacturers. This makes standardization extremely difficult, if not impossible; hence the adoption of Recommendations which allow several different systems to be used for the same purpose. In such cases, it is essential in my view for the Administrations to state their requirements and wishes clearly, which would certainly make it easier to agree on the standardization of a single type. In the last analysis, it is the Administrations — and the recognized private operating agencies — which must be solely responsible for the decisions taken by the CCIs, since they alone are represented by right, including the right to vote, at Plenary Assemblies. The general interests of world telecommunications should take precedence over the private interests of manufacturers.

There are many other general problems which might usefully be raised. But they will be discussed in Committee A and in the Plenary Assembly during the next few days.

Mr. Chairman, Ladies and Gentlemen,

This is the last Plenary Assembly I shall attend. I should like to take this opportunity to express my warm thanks to all the Chairmen and Vice-Chairmen of Study Groups, to the Chairmen of Working Parties and to the Special Rapporteurs: they perform, on a voluntary basis a great deal of — often difficult — work which is essential for the success of the CCITT. In particular, my good wishes go to those who are giving up their duties after this VIth Plenary Assembly.

The Director of the CCITT and his specialized Secretariat can provide only logistic support, whose role and usefulness should not, however, be underestimated. No. 413 of the Convention states that the Directors of the CCIs shall participate as of right in meetings of the Plenary Assembly and of Study Groups, but specifies that they shall do so "in an advisory capacity" only. That is a very wise provision.

For the CCITT is, and must be, above all, the point of convergence for the efforts of the Administrations who wish to participate in its work. It is essential, therefore, that the Administrations of all countries in the world should take an active part in the life of the CCITT which will, in the last analysis, be what the ITU Member countries want it to be.

One can state without hesitation that, so far, the CCITT has succeeded quite well in discharging the responsibilities entrusted to it, and is doing so more effectively from year to year. It has stimulated and played an important part in the development of international telecommunications.

This VIth Plenary Assembly has the grave responsibility of laying down guidelines for the future and of still further improving the working methods of the Study Groups and the conditions in which they operate, so that they can achieve the results expected of them more quickly, more efficiently and more fully, while always keeping in mind the need for economy.

In this way you will show that the CCITT, in its present form, is absolutely indispensable if telecommunications is to fulfil its lofty mission in the world."

ANNEX 2

Address by Mr. Mili, Secretary-General of the ITU

"Mr. Chairman,

On behalf of the ITU, allow me to congratulate you on your election to the office of Chairman of the VIth Plenary Assembly of the CCITT. This choice, which I warmly support, bears witness to the interest which both your country and yourself have unfailingly shown, not just in the work of this important permanent organ of the Union, but in all the work of the ITU in general. This is why we are so happy to see you in the Chair, giving us the benefit of your experience, competence and skill. On behalf of the Union, let me thank you. May I congratulate also our five Vice-Chairmen.

Ladies and Gentlemen,

After these few words of congratulations for our Chairman, allow me to address myself to you and above all to welcome you to Geneva.

It is always an honour and a great pleasure for me to welcome delegates to the CCITT Plenary Assembly, many of whom are former colleagues and old friends.

One of the tasks before your Assembly is to find a replacement for Mr. Raymond Croze, the Director, who has unfortunately decided that he must retire. We all understand the reasons for this decision, they have saddened us in themselves, but also because they deprive the CCITT and the Union of the collaboration, the experience and the wise and temperate counsel of an exceptionally gifted administrator. However brief, his term of office at the head of one of our Union's most dynamic organs will have left its imprint on our activities and we shall not forget him.

Ladies and Gentlemen,

Mr. Croze has just given you his views on the work of the CCITT. I should like for my part to speak of more general matters and, in the difficult times through which we are passing, you will not be surprised if I deal with practical problems, with problems of administration, which also have their importance.

The world situation, with its economic and monetary problems, affects our organization as it does all other international organizations. It is no exaggeration to say that most of these organizations are suffering from a certain disaffection among their members, who ask whether the financial sacrifices required, even though relatively modest, are really justified in terms of the benefits obtained and the progress achieved.

As I had the honour to say at the last session of the Administrative Council, I consider that the Union enjoys a great advantage in this respect. The need for its existence is not and cannot be questioned by anyone. The services it provides are indispensable for sound management and progress in world telecommunications. Lastly, and this is particularly true in the case of the International Consultative Committees, the Union's work and its objectives are those of its Members.

And yet the call for economy heard in all fields affects us too. We have to run this body as if inflation had not reached the proportions we all know it has. The programme of work which Administrations set themselves, and hence set us, has not, however, diminished. We therefore have to do more, but with the same resources and even with less, since the higher costs we have to bear like everyone else are only partially reflected in the funds we receive.

Fortunately, we have for some time been studying procedures and modernized methods which should enable us to make some savings and, in accordance with the wishes expressed by yourselves and by the Council, to publish and distribute the final documents of Plenary Assemblies more rapidly.

Until the Vth CCITT Plenary Assembly, books were composed by various printers using conventional printing processes. This took at least two years.

In full collaboration with Mr. Croze, a work programme has been prepared which will enable the *Orange Book* to be distributed in each of the Union's working languages within the twelve-month time-limit laid down by the Administrative Council.

Thus, after thorough study, the ITU Computer Department has been able to evolve a system of dealing with texts which applies the most modern techniques of data processing and photocomposition. This system will mean a substantial saving of both money and in such matters as data acquisition and storage, text composition, proof correction, page-setting and printing.

The texts thus stored can be amended immediately in accordance with the decisions of Study Groups and of the Plenary Assembly and they can be published a few months after the end of the Assembly. As regards the CCITT, these changes will be made from the VIIth Plenary Assembly onwards, for which it is hoped to have 40-50 per cent of the texts ready before the Assembly meets.

Document No. AP VI-No. 51 is an example of a text stored in this manner; it has been typed by means of a line-printer. This system obviates the need to retype a text several times, which is a very costly operation. It also considerably reduces the work of proof-correcting, since for each new version, merely the amendments, and not the entire text, have to be checked.

Thus the text making up the CCITT *Orange Book*, which is now at the data acquisition stage, will not only be used for printing the Books, but will also be available during the next study period for updating and for various printing operations; moreover, it will serve as a basis for the production of subsequent editions, which will no longer have to be retyped, and retyping is a very lengthy and expensive process.

Our services have also explored other fields in which savings might be made, even if this means breaking with tradition, without however causing complications or confusion. The Administrative Council has welcomed these suggestions warmly.

Without going into detail, I would mention that it has been decided to discontinue parallel pagination for all ITU publications other than the Final Acts of the Union's conferences and the Books of the International Consultative Committees. In future, the same pages will no longer have the same contents in the Union's three working languages, as they had in the past. In accordance with the Council's directives, all paragraphs will from now on have to be numbered which will make for easy reference, and the alignment of pages, which was costly in time and paper, will be dispensed with.

On this matter I should like to refer you to Circular-letter No. 129 of 15 September 1976, which I sent to all Administrations. You will find a copy in your pigeon-holes.

In that Circular-letter, I also mentioned other measures taken by the Administrative Council to achieve the greatest possible economy. With your valuable collaboration I am sure these measures will prove fully effective.

The Council has also urged that the number of documents reproduced should be kept to the minimum. Delegates will therefore be invited not to ask the Secretariat of Assemblies and Conferences for additional copies of documents that have already been sent to their Administrations.

In accordance with the Council's wishes, may I appeal to everyone to show the goodwill and discipline necessary to give effect to this recommendation.

Other economy measures have also been taken. You will become aware of these in the course of your work.

Ladies and Gentlemen,

I have referred to the practical aspects of our work: the documents and paper which we use at the rate of millions of sheets every month. For example, the documents for this VIth Plenary Assembly have already taken 55 tons of paper to produce. Piled one on top of the other, they would reach a height of 456 metres, or eight times the height of the ITU Tower. There are of course other areas where self-discipline on your part can lead to savings: we must avoid reproducing the same documents several times over or reproducing those which are unnecessarily long. But I know that you have anyway given yourselves directives on these matters. The same is true of the pace of work at meetings; as you are aware, at the beginning we mark time and at the end we rush. This means an excessive work load for all departments, whose strength is very carefully calculated, so that they then have to work a cruel amount of overtime.

Mr. Chairman,

If I continue, the Assembly will rightly consider that I am setting a bad example by talking too long myself. I will therefore end now, wishing you every success in your work, which I shall follow with the same interest as always."

ANNEX 3

Address by Mr. F. Locher, Chairman of the VIth Plenary Assembly

"Ladies and Gentlemen,

May I first of all welcome you and wish you a pleasant stay in Geneva, in the hope that today's inclement weather will not discourage us in our efforts.

The work programme of the VIth Plenary Assembly is heavy, but I am sure that we shall succeed in obtaining worthwhile results, largely owing to the excellent preparatory work done by the Director of the CCITT, Mr. Croze, and his Secretariat. I should like to thank them most sincerely in advance for all the efforts they have made on our behalf.

Since the last Plenary Assembly, there have been many meetings of Study Groups and Working Parties. Experts from our Administrations have sought solutions to many problems and have replied to the questions laid before them. We shall have to examine this work in detail before we finally approve the Recommendations they have submitted to us. Nevertheless, I should like already to express my wholehearted gratitude to the Chairmen and Vice-Chairmen of the Study Groups and Working Parties and to their members.

Finally, this Assembly will have an important duty to perform, that of electing a new Director of the CCITT. We all very much regret this necessity and would greatly have preferred Mr. Croze to continue the excellent work he has carried out with such skill and competence since the last Plenary Assembly. Yet we understand and respect Mr. Croze's decision to retire, and I hope that the choice of his successor will be the best we can possibly make.

We have heard Mr. Mili describe the problems now facing the ITU and the administrative worries they cause him. It must be said that many PTT administrations throughout the world are confronted with the same difficulties, especially where finances are concerned. With the rapid development of telecommunication

technology, there is more and more work to be done, while the available financial resources only decline. This situation does have the advantage of forcing us to seek unremittingly to rationalize our administration and to improve our working methods, but these efforts should not exceed the limits beyond which the efficiency of an organization is endangered. We must therefore seek an optimum, which is indeed a delicate matter.

Mr. Croze has submitted to us a general survey of the methods of work and their efficiency which will be very useful to us in our deliberations. He has drawn our attention to certain organizational shortcomings which I consider to be important and which must be duly taken into account for the future. Some criticisms have been levelled at the ITU; but criticism comes easily to people who are unaware of the difficulties encountered in international collaboration. Moreover, it would be wrong to disregard the extraordinary advances in telecommunications that have been made in recent years. The world network has developed at a prodigious rate and new services are constantly being offered to subscribers: this is the tangible evidence of the vast amount of work performed in the CCITT under the skilful guidance of its Director, Mr. Croze.

Our aim is always to do better, and I wish to express my best wishes for the success of the VIth Plenary Assembly of the CCITT."

FIRST PLENARY MEETING

(Minutes amended in the fifteenth Plenary Meeting)

Monday, 27 September 1976, at 1500 hrs

Subjects discussed:

1. Tribute to deceased delegates
2. Expression of appreciation to retired delegates
3. Setting up of the Conference Committees
4. Election of the Chairmen and Vice-Chairmen of the four Committees and the members of the Editorial Committee
5. Constitution of the Conference Secretariat
6. Approval of the provisional agenda for the first week of the Plenary Assembly
7. Adoption of timetable
8. Procedure for election of the new Director of the CCITT
9. Publication of the new CCITT Book
10. Report by the Director on the activity of the CCITT
11. Report by the Director on the CCITT Secretariat

1. Tribute to deceased delegates

The *Director of the CCITT* said that a number of delegations had not yet submitted the names of delegates who had died since the Vth Plenary Assembly. The full list of names would therefore be published at a later stage.

The Assembly observed a minute's silence as a tribute to their memory.

2. Expression of appreciation to retired delegates

The *Director of the CCITT* said that, for the same reason, a full list of delegates who had retired since the Vth Plenary Assembly would be published later.

The *Chairman*, speaking on behalf of all those present, wished the delegates who had retired good health and a happy retirement.

3. Setting up of the Conference Committees

The Assembly *decided* to establish four Conference Committees and an Editorial Committee, with the terms of reference set out in the Annex to Temporary Document No. 1.

4. Election of the Chairmen and Vice-Chairmen of the four Committees and the members of the Editorial Committee

The Assembly elected the Chairmen and Vice-Chairmen of the four Committees and the members of the Editorial Committee proposed by the meeting of Heads of Delegations, as follows:

- Committee A – Mr. VAN DEN BERG (Netherlands)
Mr. DORAN-VEEVERS (Canada)
- Committee B – Mr. WILLIAMS (United Kingdom)
Mr. KATONA KIS (Hungary)
- Committee C – Mr. BAUDAZZI (Italy)
Mr. HERNANDEZ (Mexico)
- Committee D – Mr. GRAVELL (Australia)
Mr. ALI BEL HADJ (Algeria)
- Editorial Committee – Mr. LAROCLETTE (France)
Mr. COLEMAN (United Kingdom)
Mr. RODRIGUEZ DIAZ (Spain)

5. Constitution of the Conference Secretariat

The *Director of the CCITT* informed the assembly that he would act as the Chief Secretary, with Mr. Dormer as Assistant Secretary. The following CCITT officials would act as Committee Secretaries:

- Committee A – Mr. SAVITSKY
- Committee B – Mr. HUMMEL
- Committee C – Mr. PRÉLAZ and Mr. WOLF
- Committee D – Mr. CHAPUIS
- Editorial Committee – Mr. DERZAI

6. Approval of the provisional agenda for the first week of the Plenary Assembly (Document DT-No. 1/PLEN)

The *Chairman* submitted for approval the provisional agenda contained in Temporary Document No. 1 with an amendment to the effect that the discussion on the report by the Director on the activities of the Plan Committees would be deferred until the beginning of the afternoon meeting on Wednesday, 29 September.

The *delegate of Saudi Arabia* proposed that the second ballot in the election of the Director of the CCITT should be held at the afternoon meeting on Friday, 1 October. A third ballot could then be held in the morning of Monday 4 October and a fourth ballot, if necessary, at the afternoon meeting on the same day.

The *delegates of the United Kingdom and Lebanon* seconded that proposal.

The *Director of the CCITT* pointed out that, according to paragraph 3.9 of Decision No. 377 of the Administrative Council annexed to Temporary Document No. 2, a period of twelve hours had to elapse between the third and fourth ballots. He proposed the following timetable:

First ballot: beginning of the afternoon meeting on Thursday, 30 September.

Second ballot : morning meeting on Friday, 1 October.

Third ballot: approximately 3.30 p.m. on Friday, 1 October.

Fourth ballot (if necessary): morning meeting on Monday, 4 October.

That proposal was *accepted*.

With those amendments, the provisional agenda for the first week of the Plenary Assembly was *approved*.

7. Adoption of timetable

The following timetable was adopted:

9.30 a.m. — 12.30 p.m.

2.30 p.m. — 6.30 p.m.

8. Procedure for election of the new Director of the CCITT (Document DT-No. 2/PLEN)

The *Secretary-General* drew attention to the procedure set out in Decision No. 377 of the Administrative Council, annexed to Temporary Document No. 2. It was for the Plenary Assembly to accept or amend that procedure, bearing in mind that it had already been applied in connection with other elections.

The *delegate of Lebanon* proposed the adoption of the procedure.

The procedure was *approved*.

The *Secretary-General* drew attention to the provision governing proxy votes (paragraph 3.1 of the Decision) and, in particular, to No. 370 of the Malaga-Torremolinos Convention. Powers signed by one of the authorities mentioned in No. 360 of the Convention should be handed in to the Secretariat by 10 a.m. on Thursday, 30 September, at the latest. Replying to the *delegate of Niger*, he explained that only those delegations holding a proxy and who intended to use that proxy at the election were required to produce such powers.

He proposed that the *delegations of Norway, Hungary and Nigeria* should be invited to nominate three tellers for the election.

It was so *agreed*.

The *Director of the CCITT* drew attention to the list of candidates, with curricula vitae, in Temporary Document No. 3. He pointed out that the CCITT had never had a Deputy Director, nor was there any need for such a post. The CCIR had had a Vice-Director in the past, but that post had been abolished at the Geneva Plenipotentiary Conference of 1959.

9. Publication of the new CCITT Book (Documents AP VI-Nos. 42 and 77)

The *Director of the CCITT* introduced documents AP VI-Nos. 42 and 77 and drew attention to an error in the formula in paragraph 2.3 of document No. 42. It was desirable that Committee A should consider the suggestions contained in document No. 42 at its earliest convenience and report back to the Plenary Assembly on 4 October.

10. Report by the Director on the activity of the CCITT (Document AP VI-No. 15)

The *Director of the CCITT* said he had attempted to draft his report in such a way as to enable the Assembly to draw conclusions concerning changes and improvements that might be made in the CCITT's methods of work. Since more detailed reports on the work of the Study Groups would be submitted to the Assembly by their respective Chairmen, he did not intend to elaborate on the contents of Chapter 3 of the report.

Turning to the statistical information contained in the report, he drew attention to Annex 1 (pages 31-40) and observed that the large number of meetings held by certain of the Study Groups was fully justified by the number and complexity of the questions submitted to them for consideration. Table 1 (page 3) showed that many meetings had been held outside Geneva, often without interpretation. As stated in Section 2.1.3, the Assembly would no doubt wish to take a decision on the question of proliferation of small informal meetings held in one language only, since they had certain drawbacks as well as certain advantages.

Column 8 in Table 1 gave the number of delegates who had participated in the work of each Study Group, while Annex 2 (pages 41-43) showed that the average number of countries represented at meetings was about 30. In that connection, it would certainly be desirable for a larger number of Administrations to participate in the active work of the CCITT. In view of the substantial travel and subsistence costs involved in attendance at meetings, attempts had been made to schedule Study Group meetings so that the same delegate could attend more than one of them at a time; in his view, that practice should be continued and even made more systematic in the future.

After referring to the total number of registered members of Study Groups (Table 2), he drew attention to the request made to Administrations in Circular-letter No. 129 of 15 September 1976 that all documents addressed to members of Study Groups should, as far as possible, be sent to a single address in view of the very high mailing costs involved. In that connection, it was worth noting that the number of contributions published during the last Study Period had increased by 65 per cent as compared with the preceding period. The Assembly and, in particular, Committee A would also need to consider the problem which arose from the proliferation of delayed contributions mentioned in Section 2.4.1 of the report.

The number of new and substantially amended Recommendations, given in Table 4 (page 8), was higher than it had ever been and bore witness to the intense activity of the Study Groups over the last Study Period.

Turning to Chapter 4 concerning the publication of CCITT Books, he said that the newly established Technical Editing Division in the CCITT Secretariat should enable all three language versions of the new Book to be prepared within a shorter period of time than previously. Parallel pagination, which greatly facilitated discussion, would be continued for the new Book.

Chapter 5 contained a list of the international organizations with which the CCITT had collaborated during the 1973-1976 Study Period. In view of the high costs involved, it was unfortunately not always possible to send representatives to all the meetings of interest to the CCITT that were organized by other international organizations.

The *delegate of the U.S.S.R.* said it was a cause of great satisfaction to all the Member Administrations of the ITU that the efficiency of the CCITT was constantly growing — a fact which was not surprising in view of the dynamic expansion of world telecommunications and the consequent necessity of cooperation between Administrations in laying down standard rules for operating the international telecommunication network. The policy of peaceful coexistence and the strengthening of mutual trust between States was an important prerequisite for the solution of all contemporary international problems, and it was indeed a happy coincidence that the Plenary Assembly of the CCITT was meeting in the very room which had witnessed the successful conclusion of the negotiations culminating in the signature of the Agreement on Security and Cooperation in Europe at Helsinki by the Heads of State of the European countries, the United States and Canada. The success of that Conference had promoted the strengthening of security and cooperation in all areas, including that of science and technology, which of course related to the work of the ITU. It was to be hoped that the work of the Plenary Assembly would be as successfully conducted, in the same spirit of cooperation as that which had prevailed at the Security Conference.

The noteworthy results of the 1973-1976 study period were to a large extent due to the contribution of the Director of the CCITT himself, whose energy and administrative ability were truly remarkable. It was highly regrettable for the CCITT to be taking leave of a Director who had made such great efforts in the cause of strengthening international cooperation.

In the forthcoming two weeks, the Plenary Assembly would have to examine the work done by the Study Groups and the programme for the next study period. The final Study Group meetings had produced some very valuable documents, most of which could be accepted by the Plenary, although it had proved impossible to solve some controversial problems at the expert level; there was reason to hope, however, that the spirit of cooperation in the Assembly would help to overcome any outstanding difficulties.

The Plenary Assembly and the CCITT Secretariat were also faced with important questions of organizing the execution of programmes in the light of the financial problems with which all Administrations were confronted. It was indeed a complex task to propose working methods which would ensure efficacious meetings while keeping their number and duration to a minimum, so as to avoid exceeding the CCITT budget. The Assembly must also consider the necessity of using *ad hoc* working groups meeting separately in time from the Study Groups which established them.

Finally, the Assembly would have to appoint new Chairmen of the Study Groups and a new Director of the CCITT. While it was always sad to take leave of people with whom one had worked for several years, it was interesting to see the new approaches of newly appointed leaders. The CCITT had always attracted enthusiasts, and indeed the efficiency of its work depended greatly on the enthusiasm of the Director and the Chairmen of the Study Groups. His delegation wished the future Director and Chairmen every success in their work and new achievements in international cooperation; it was convinced that the spirit of enthusiasm would not flag during the next study period and would promote even closer cooperation in improving the international telecommunication network to serve the peaceful needs of all mankind.

Document AP-VI No. 15 was *approved* subject to further discussion in Committee A.

11. Report by the Director on the CCITT Secretariat (Document AP VI-No. 58)

The *Director of the CCITT*, introducing the document, drew attention to an error in the organization chart on page 7: Mr. Y. Senuma appeared under Section A, grade P.2, instead of the same grade under Section D.

It would be seen that 7 new posts had been added to the Secretariat during the past study period. That relatively large increase had been due to the creation of a Technical Editing Division, which would certainly contribute to the efficiency of the CCITT's work, especially in connection with the publication of the Books. Finally, the geographical distribution of the Secretariat had been extended from 14 countries in 1972 to 19 in 1976: the five new countries represented were Canada, the United States, Greece, Poland and the U.S.S.R.

Document AP-VI No. 58 was *approved*.

The meeting rose at 1725 hours.

ANNEX 1

List of delegates of CCITT meetings and officials of CCITT who had died since the Vth Plenary Assembly

Mr. E. SAWKINS	Australia
Mr. R. HAEMERS	Belgium
Mr. D.F. BOWIE	Canada
Mr. W.E. CONNELLY	Canada
Mr. T.H. MacGREGOR	Canada
Mr. G.A. MUIR	Canada
Mr. D. WARNER	United States - (ATT)
Mr. H.C. INGLES	United States - (RCA)
Mr. T.H. MITCHELL	United States - (RCA)
Mr. J.H. MULLER	United States - (RCA)
Mr. I.K. GIVEN	United States - (RCA)
Mr. L.R. ENGLER	United States - (RCA)
Mr. W. BLOECKER	United States - (Bell Laboratories)
Mr. H. PUNTER	Netherlands
Mr. R.C. SNEL	Netherlands
Mr. A. VAZ PINTO	Portugal
Mr. L.D. BALTY	United Kingdom - (Post Office)
Mr. J.M. EASTERBROOK	United Kingdom - (Post Office)
Mr. D. THOMSON	United Kingdom - (Post Office)
Mr. L. HEPPESTONE	United Kingdom - (Post Office)
Mr. F.N. MARTIN	United Kingdom - (Post Office)
Mr. B.B. JACOBSEN	United Kingdom - (STC)
Mr. E.P.G. WRIGHT	United Kingdom - (ITT)
Mr. H. MEISTER	Switzerland
Mr. R. BÜCHER	CCITT

ANNEX 2

**List of delegates of CCITT meetings and officials of CCITT
whose retirement has been announced since the Vth Plenary Assembly**

Mr. L.M. HARRIS	Australia
Mr. R.W. TURNBULL	Australia
Mr. H. RIEDEL	Germany (Federal Republic of)
Mr. K. KURMAYER	Austria
Mr. W. FRANZL	Austria
Mr. F. DARTLEY-BENTLEY	Canada
Mr. E.A. ELIASSEN	Canada
Mr. D.S. ROBERTSON	Canada
Mr. G. PEDERSEN	Denmark
Mr. S.H. RAHEB	Egypt
Mr. R. BLACK	United States
Mr. A. ROSEMAN	United States
Mr. R. STROMBERG	United States
Mr. F. SKINNER	United States - (ATT)
Mr. C. DAHLBOM	United States - (ATT)
Mr. C.M. BAER	United States - (COMSAT)
Mr. E.D. BECKEN	United States - (RCA)
Mr. E.W. PETERSEN	United States - (RCA)
Mr. M. PINCUS	United States - (RCA)
Mr. FAUGERAS	France
Mr. A. BIGI	Italy
Mr. T.O. AMINDELE	Nigeria (Federal Republic of)
Mr. G.C. OKOLI	Nigeria (Federal Republic of)
Mr. V.A. HAFFNER	Nigeria (Federal Republic of)
Mr. A.A. BODADE	Nigeria (Federal Republic of) (NET)
Mr. S.V. OGUNLEYE	Nigeria (Federal Republic of) (NET)
Mr. R.O. KHALIDSON	Nigeria (Federal Republic of) (NET)
Mr. J. DULLEMOND	Netherlands
Mr. H.L. Van LOMMEL	Netherlands
Miss B. Van MANEN	Netherlands
Mr. H. DIETRICH	Poland (People's Republic of)
Mr. S. KUHN	Poland (People's Republic of)
Mr. C. RIBEIRO	Portugal
Mr. H. PEREIRA	Portugal
Mr. M. SANTOS SILVA	Portugal
Mr. J. CRUZ FILIPE	Portugal
Mr. T. de CARVALHO	Portugal
Mr. J. RHODES	United Kingdom (Post Office)
Mr. H. FIELDING	United Kingdom (Post Office)
Mr. J.R. WALTERS	United Kingdom (Post Office)
Mr. S.R.V. PARAMOR	United Kingdom (Post Office)
Mr. A.H. MOWATT	United Kingdom (Post Office)
Mr. A.G. GERMAN	United Kingdom (Post Office)
Mr. S. WELCH	United Kingdom (Post Office)
Mr. H. WILLIAMS	United Kingdom (Post Office)
Mr. W.T. DUERDOTH	United Kingdom (Post Office)
Mr. K.J. AMOS	United Kingdom (STC)
Mr. G.C. HARTLEY	United Kingdom (STC)
Mr. F.B. COPE	United Kingdom (ITT)
Mr. J.C. EMERSON	United Kingdom (ITT)
Mr. K.G. HODGSON	United Kingdom (ITT)
Mr. H. GOERLING	Sweden
Mr. G.A. PETTERSSON	Sweden
Mr. E. REHNBERG	Sweden

Mr. E. RODENIUS	Sweden
Mr. E. WALDELIUS	Sweden
Mr. MUKENGESHAIE WA BENDE	Zaire (Republic of)
Mr. J. LALOU	CCITT

SECONDARY PLENARY MEETING

(Minutes as amended in the fifteenth Plenary Meeting)

Tuesday, 28 September 1976, at 0930 hrs

Subjects discussed:

1. Report by the Director on the activities of the Plan Committees (Document AP VI-Nos. 33 and 75)
 2. Terminology questions (Document AP VI-Nos. 85, 91 and 103)
 3. Report by the Director of the CCITT on the definition of the terms "telegraphy" and "telephony" and on the CCITT terms of reference (Document AP VI-No. 86)
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1. **Report by the Director on the activities of the Plan Committees (Documents AP VI-Nos. 33 and 75)**

The *Director of the CCITT*, introducing the documents, reminded the Assembly that the terms of reference of the Plan Committees were set out in No. 78 of the International Telecommunication Convention and, in greater detail, in Administrative Council Resolution No. 448. The main points about the definition in the Convention were, first, that the Plan Committees were joint bodies of the two CCIs, secondly, that they had to develop a General Plan for the international telecommunication network — the term "General Plan" had been interpreted in different ways — and, thirdly, that questions of particular interest to the developing countries had to be referred to the CCIs. Council Resolution No. 448 specified the four Regional Plan Committees and provided that the World Plan Committee should coordinate their activities; that had been contested by some who believed that the Regional Committees were more or less autonomous. The Resolution went on to specify that the World Plan Committee was responsible for establishing a General Plan, examining technical, operating and tariff questions raised by the application of the different stages of the Plan, making an inventory of questions of interest to new or developing countries and setting such questions for study by the competent CCI or in cooperation with the two CCIs if necessary. The Resolution further provided that the Plenary Assembly of each CCI should arrange for its representation on the Plan Committees, so that very close collaboration between the CCIs was required; that the General Plan should not normally be submitted to the Plenary Assemblies, but that reports on problems of interest to developing countries should be submitted to the pertinent Assembly; and that, although the Director of the CCITT was responsible for organizing the work of the Plan Committees and providing the secretariat for them, for assembling all data about networks and existing traffic volumes as well as future requirements and collecting information on problems of interest to the new or developing countries, he had to remain in close liaison with the Director of the CCIR at all the preparatory stages of meetings and to forward all relevant information to him.

As it was stated in point 1.2 of the Report, the proposals of the *ad hoc* Working Group established by the World Plan Committee after its meeting in Venice in 1971 had been approved by the Vth Plenary Assembly and had been gradually implemented during Study Period 1973-1976.

The structure of the Plan Committees was described in point 2 of the Report. In the table on page 2, one asterisk should be placed against the name of Mr. Bigi (Italy) and two against the name of Mr. Toutan (France). The Coordination Committees of the Regional Committees and the Working Party of the World Plan Committee, established at the recommendation of the *ad hoc* Working Group to ensure continuity between plenary Plan Committee meetings, had done extremely valuable work, particularly in collecting information for guides and questionnaires. Those bodies were presided over by the Chairmen of the Plan Committees, with the exception of the Coordination Committee for Latin America and the Working Party of the World Plan Committee; it was regrettable that Mr. Gravell (Australia) would no longer be presiding over the latter body.

With regard to the publication of the Plan Books, the *ad hoc* Group's recommendations had been followed and the Books were now published in two parts, Part I, containing information on arteries, numbering plans, maps and leased services and appearing every four years, and Part II, containing data on traffic, routes and circuits based on a reference year N and followed two years later by a Supplement updating the relevant

material based on a reference year N+2. The new presentation was a great improvement, from the points of view of homogeneity, easy access and quicker publication. Excellent cooperation with the competent services of the General Secretariat and use of the ITU computer had led to a reduction in the cost price of Plan Books, but there was room for further improvement in that regard, since the circulation of the Books was still not large enough, whereas it was essential to provide all countries with reliable and up-to-date information as a basis for planning.

Where the future of the Plan Committees was concerned, each Committee had made an exhaustive review of its future role, not only from the point of view of continuing its activities, but also from that of strengthening them. At its 1975 meeting, the World Plan Committee had held an animated discussion resulting in a long and detailed report on the terms of reference of all the Committees, and the broad consensus that had been reached was summarized in Annex 4 to its Report. The Committee had recognized that the terms of reference defined in the Convention and in Administrative Council Resolution No. 448 were still relevant and should continue in force until they were reviewed at the Plenipotentiary Conference in 1980. It had been generally agreed that the Regional Plan Committees were doing useful work and that all questions relating to specific networks were the exclusive concern of countries, on a bilateral or multilateral basis, and should not be dealt with by the Plan Committees, which should concern themselves only with the General Plan. The functions generally decided upon were listed in points 7.1, 7.2 and 7.3 of Annex 4. Point 8 was in line with the general ITU policy of holding meetings only when there was something to discuss, and not convening them at regular intervals. Points 9 to 12 concerned the most controversial subject of all — the place and duration of Plan Committee meetings. One view was that efficiency and economy would be promoted by holding meetings of all the Committees at the same time and in the same place, so that the Regional Committees could report directly to and receive guidance from the World Plan Committee, and that their delegates could attend the World Plan Meeting. The contrary opinion was that meetings of the Regional Committees in the respective regions would ensure wider participation than if delegates had to be sent to Geneva. The decision was to have been taken by the Administrative Council, but that body had only had time to consider Points 1 to 8 of Annex 4 at its 1976 session and had decided, in view of the difficult financial situation, that no Plan Committee meetings should be held in 1977 and that the final decision on the matter should be taken at its next session. It was also generally agreed that the duration of the meetings should be reduced to the minimum necessary for the discussion of matters of primary importance. Finally, the last page of this report contained a statement by the delegate of Mexico expressing his delegation's disagreement with the consensus reached by the majority of the World Plan Committee concerning the terms of reference and organization of meetings of the Plan Committees.

The *delegate of Saudi Arabia*, speaking as Chairman of the Plan Committee for Asia and Oceania said that, although he did not have much to add to the description of his Committee's activities in point 3.2 of the Report, certain parts of the Document required detailed discussion and decisions by the Plenary Assembly. He therefore proposed that consideration of point 5 of the Report and Annex 4 thereto should be deferred until the following Plenary Meeting, by which time he would have submitted a document on the subject.

The *delegate of Senegal*, speaking as Chairman of the Plan Committee for Africa, supported that proposal. In any case, the African delegations to the 1975 meeting of the World Plan Committee had unanimously opposed the proposal to hold Regional Plan Committee meetings outside the regions, since that would reduce participation owing to travel costs.

The *delegate of France*, speaking as Chairman of the Plan Committee for Europe and the Mediterranean Basin, said that he had a few comments to add to the description of activities in point 3.3. In the first place, the questionnaire adopted by his Committee was more detailed than those used in the other regions, because the European network was more complicated and denser than most others, so that the graphs were plotted, not from country to country, but from one international traffic centre to another. Secondly, although the Committee had concluded that the ITU computer could be used to good advantage as a data bank, it would be interesting to know exactly what data were stored in it; since the suggestion for direct connection with the computer had not been accepted, its use would probably be limited to publications. Thirdly, the European Committee collected data on intended and projected new services, systems and facilities for each Administration, with a view to issuing a consolidated document. Similarly, exchanges of views were being held concerning the use of Signalling System No. 2 and the introduction of System No. 6, in order to obtain the highest possible degree of coordination. Finally, although the European countries were not directly concerned by the proposal to centralize Plan Committee meetings, their general view was that efficiency would be best promoted by holding Regional Committee meetings in the respective regions.

The *delegate of Mexico*, speaking on behalf of the Chairman of the Plan Committee for Latin America, said that the terms of reference laid down in Article 11, paragraph 4, No. 78 of the Convention and in Resolution No. 448 of the Administrative Council left no doubt as to the autonomy of the Regional Plan Committees. It was his delegation's firm opinion that the World Plan should only serve as a very useful guide or reference manual for individual countries, especially those without adequate resources of their own. On the subject of future activities, he said that the decision not to hold a meeting of the Plan Committee for Latin America in 1977 had been taken in view of the budget difficulties facing the Administrative Council and should on no account be construed as a decision of principle. As to the venue of meetings, his delegation was of the opinion that the Regional Plan Committees should meet in their own regions. He supported the suggestion made by the delegate of Saudi Arabia to the effect that further consideration of Section 5 and Annex 4 of Document AP VI-No. 33 should be deferred until the third plenary meeting. Lastly, he expressed appreciation of the work done by the Director of the CCITT and all those who had participated in the activities of the Regional Plan Committee for Latin America.

The *Chairman of the World Plan Committee* endorsed the statement made by the Director of the CCITT. The World Plan Committee having proved unable to reach a decision concerning the terms of reference and future meetings of the Plan Committees, it would appear expedient to maintain the status quo pending the next Plenipotentiary Conference. At the end of 12 years in office, he looked back with warm appreciation upon his association with the Director of the CCITT and his late predecessor, as well as with the CITT staff.

The *delegate of Spain*, speaking on behalf of all members of the World Plan Committee, thanked the retiring Chairman of the Committee and the Chairman of the Regional Committee for Europe and the Mediterranean Basin for their excellent work.

The *Deputy Secretary-General*, replying to a point raised by the delegate of France concerning the use of the data bank at the ITU Headquarters, referred to the General Secretariat's Circular-letter No. 127 of 31 August 1976. The letter referred to the various files and information treated with the modern electronic data processing means already at the Headquarters and foreseen in the course of the next one or two years. It covered the various operational data requirements which were treated, not only in respect of the two-yearly updating of the Plan Committee files, but also in respect of ongoing daily, weekly and monthly activities connected with information coordinated and treated for the members of the Union, including the general list processing files associated with the work of the IFRB, its responsibilities, and the General Secretariat and its responsibilities in the field of coordination of operational and related data emanating from decisions of Conferences and recommendations of Plenary Assemblies. The letter also referred to various ongoing projects, internal files used at the Headquarters which were not for publication purposes but which could be accessed at the appropriate time, and certain other activities not using the computer, such as the Yearbook of Common Carrier Statistics and related smaller publications.

The *Director of the CCITT* drew attention to the growing cooperation between the World Plan Committee and various CCITT Study Groups, as evidenced by the three questions reproduced in Annex 1 to Document AP VI-No. 33.

A matter on which the Plenary Assembly would be called to decide was whether the World Plan Committee or Study Group I should be responsible for allocating telex destination codes in cases where the Director of the CCITT found difficulty in satisfying a request. At present, that responsibility rested with the World Plan Committee, but paragraph 6(b) of Recommendation No. F.69 (Document AP VI-No. 48) implied the contrary. Either solution would entail certain advantages and drawbacks.

The *delegate of the United Kingdom* suggested that the matter should be discussed at the third plenary meeting in connection with the presentation of the Report by Study Group I.

The *delegate of Saudi Arabia* supported that suggestion.

The *delegate of the United States of America* said that the appropriate body to consider the questions was Committee B.

The *delegate of Lebanon*, while agreeing in principle with the delegate of the United States, supported the proposal that discussion of the matter should be deferred until the third plenary meeting.

The proposal was *adopted*.

2. Terminology questions (Documents AP VI-Nos. 85, 91 and 103)

The *Director of the CCIR* introduced the Report of the Joint CCIR-CCITT Study Group for Vocabulary (CMV) (Document AP VI-No. 91). It would be seen that the activity of the CMV had developed considerably during the past two years, in particular as a result of work carried out jointly with the International Electrotechnical Commission. The six joint groups of experts already in existence, listed in Table I of the Document, dealt with a number of topics of interest to the CCITT and the same would be true of at least one of the six further joint groups of experts which were in the process of being set up. The function of the CMV was not to replace the Study Groups of CCIR and CCITT but, rather, to consolidate their work on questions of terminology. It was to be hoped that the CCITT, like the CCIR, would avail itself increasingly of the possibilities thus offered.

The *delegate of France*, introducing Document AP VI-No. 85, said that a great deal of work on terminology had been done in the CCITT but that liaison with the Joint Committee on Vocabulary (CMV) was not yet as good as it might be. The suggestions contained in the Document submitted by the French Administration were designed to improve the functioning of the CMV, ensure that the necessary cooperation was maintained between CCITT and CCIR Study Groups on the one hand and between those Study Groups and other international organizations on the other, and provide for the participation of CCITT terminology specialists in the work of the joint CCI/IEC groups of experts.

The French Administration fully supported the revisions to Recommendation No. A.10 proposed in Annex 1 to Document AP VI-No. 103 submitted by the Canadian Administration, subject to the following amendments:

- the insertion, in the second paragraph after the words "where needed", of the phrase "and particularly with the International Electrotechnical Commission (IEC) in the joint CCI/IEC groups of experts in accordance with Recommendation No. A.12";
- the addition, at the end of the last paragraph, of the phrase "and participate in the work of the joint CCI/IEC groups of experts".

The *delegate of Canada*, introducing Document AP VI-No. 103, said he had nothing to add to the comments made by the French delegate and fully supported the amendments proposed by the latter.

The *delegate of the United Kingdom* supported the revisions to Recommendation No. A.10 proposed by the Canadian Administration and the amendments proposed by the French delegate. His delegation considered, however, that in elaborating a joint vocabulary it might be appropriate to exclude certain terms, particularly those used in a regulatory or operational context.

The *delegate of the United States of America* said that his delegation was not fully convinced of the need to maintain the CMV during the next study period. The individual Study Groups, which were most familiar with the problems involved and could also fully take into account the interests of the IEC, were best equipped to work out definitions which could then be consolidated and reviewed by the CCITT technical revisers. That alternative might usefully be referred to Committee A for consideration at the same time as the other proposals which had been made on the subject.

The *observer for the International Organization for Standardization*, after outlining his organization's participation in the work of various CCITT Study Groups, said that the wording of the amendments proposed by the French delegate might tend to give undue emphasis to one only of the many organizations which were called upon to collaborate with the CCITT in matters relating to definitions and terminology.

The *delegate of Italy* said that work on each definition had been completed and agreement reached at the Study Group level by the time the term in question was transmitted to the CMV. The latter therefore appeared to serve very little purpose and, as suggested by the delegate of the United States of America, it might be eliminated altogether.

The *delegate of France*, referring to the comments by the delegate of the United States of America, said that the basic function of the CMV was one of coordination and rationalization aimed at ensuring that the terms proposed by the various Study Groups did not differ in meaning according to the Group by which they were used. Replying to the observer the International Organization for Standardization, he said he had singled out the International Electrotechnical Commission for special mention because an agreement, which was the subject of both a CCIR and a CCITT Recommendation, had been concluded between the two CCIs and that organization on the joint elaboration of a telecommunication vocabulary.

The *Director of the CCITT* said that the basic work involved in drawing up draft definitions was indeed performed by the various Study Groups. Given that the drafts had to be produced as quickly as possible and also

that several Study Groups often had to deal with closely interrelated problems, the task of the CCITT Technical Editing Division was to coordinate the results of the Study Groups' work, pick up any discrepancies that might have occurred and, as necessary, refer the terms in question back to the appropriate Study Groups for further consideration.

The *Chairman* suggested that Committee A should be requested to consider the question in detail and submit proposals to the Plenary Meeting.

It was so agreed.

3. Report by the Director of the CCITT on the definition of the terms "telegraphy" and "telephony" and on the CCITT terms of reference (Document AP VI-No. 86)

The *Director of the CCITT*, introducing Document AP VI-No. 86, outlined the background history of the problem, which had first been raised at the Plenipotentiary Conference (Malaga-Torremolinos, 1973), and described the action taken by Study Groups I and II and the Joint Committee on Vocabulary (CMV) with regard to the definition of the terms "telegraphy" and "telephony". Study of the problem had led to the conclusion that it might be appropriate to alter the terms of reference of the CCITT (No. 71 of the Convention) so that they corresponded more closely to the reality of the work in which the Committee was involved, and Document AP VI-No. 86 suggested an approach based on the expression "common carrier telecommunications" which was already defined *de facto* in Recommendation C.1.

The term "telephony" did not give rise to any difficulty, since Study Group II had found no reason to alter the definition of that term as it appeared in the Convention. However, the Plenary Assembly would be required to take a stand on a single definition for the term "telegraphy", in respect of which it had not been possible to reach agreement in Study Group I.

The *delegate of the United Kingdom*, speaking as Chairman of Study Group I, said that a definition of the term "telegraphy" was proposed by Study Group I on page 26 of Document AP VI-No. 47. The Study Group had been unable to accept the definition proposed by the Special Rapporteur appointed to deal with the Question, for the reasons given on page 27 of the same document, and had concluded that further consideration should be given to the matter during the next study period.

The *delegate of Switzerland*, speaking as Chairman of Study Group II, confirmed the comments made by the Director of the CCITT, both orally and in Document AP VI-No. 86, concerning the conclusions reached by Study Group II, which considered that it would be more appropriate to amend the terms of reference of the CCITT than to attempt to define the terms "telegraphy" and "telephony" in such a way that they covered the entire field of telecommunications.

The *delegate of the United Kingdom* said that the Assembly was faced with two distinct problems which should be dealt with separately, namely, that of defining "telegraphy" and "telephony" and that of the terms of reference of the CCITT. With regard to the former, he agreed that it would serve no purpose to attempt to redefine the two terms over and over again as time went by; it would suffice to request Study Groups I and II to define them in ordinary historical terms. As for the second problem, it was clear that the CCITT needed broader terms of reference and Section 3 of Document AP VI-No. 86 suggested an approach to the Question. In that connection, he observed that while the French expression "télécommunications du secteur public" was perfectly acceptable, the same could not be said for the English expression "common carrier telecommunications", which did not correspond to the public sector and which, moreover, had a specific statutory meaning in the United Kingdom that would render its use in an international instrument unacceptable. It should therefore be replaced by the expression "public sector communications".

The *delegate of Canada* agreed in general with the previous speaker's comments and suggestions but expressed reservations concerning the use of the term "public sector". He therefore suggested that the definition of "telecommunication" as it appeared on page 137 of the Convention should be worked into the definition suggested in paragraph 3.4 of Document AP VI-No. 86, which should also specify that telecommunications might include several services such as the telegraph service, the telephone service, etc.

Following a suggestion by the *Chairman*, it was *decided* to set up a working group under the chairmanship of the delegate of France and composed of the delegates of Canada, Cyprus, the Federal Republic of Germany, Italy, Nigeria, Saudi Arabia, Spain, the United Kingdom and the United States of America to study the matter and submit proposals to the Plenary Meeting.

The *Director of the CCITT* said that the CCITT Secretariat would be represented in the working group by Mr. Hummel and Mr. Chapuis (or Mr. Bozec).

The meeting rose at 1235 hours.

THIRD PLENARY MEETING

(Minutes as amended in the fifteenth Plenary Meeting)

Wednesday, 29 September 1976, at 1435 hrs

Subjects discussed:

1. Continuation of discussions concerning the Plan Committees
 2. Report by Study Group I
1. Continuation of discussions concerning the Plan Committees (Documents AP VI-Nos. 33, 75 and Temporary Document 16/PLEN.)

The *delegate of Saudi Arabia*, introducing the draft resolution in Document AP VI-Temp. 16/PLEN., said that the draft had been prepared to take into account the views of the many delegations which considered it useful to hold Regional Plan Committee meetings in the regions themselves. His delegation was firmly convinced that that procedure was essential for the efficiency of the Regional Committees' work: the meetings had to serve as a forum for the exchange of technical and operational information resulting in the extension and improvement of international telecommunication circuits. Moreover, each region had its own special characteristics and requirements and many Administrations, including his own, used different experts for regional and inter-regional planning, so that they would be obliged to send large delegations to simultaneous meetings of the Regional Committees and the World Plan Committee. Furthermore, long distances would discourage members of Regional Committees, particularly the developing countries, from providing the full participation which was so essential for rendering all Plan Committee work effective.

With regard to the terms of reference of the Plan Committees, it would clearly be desirable to extend their functions to those set out in points 7.1, 7.2 and 7.3 of Annex 4 to Document AP VI-No. 33; that would be covered by "resolves" paragraph a) of the draft resolution. The authors of the draft also considered that it would be useful to hold symposia in conjunction with World Plan Committee meetings, in accordance with paragraph 10 of that Annex.

It would be seen from "resolves" paragraph b) that the authors wished the *status quo* with regard to the terms of reference and locations of World and Regional Plan Committee meetings to be maintained until the next Plenipotentiary Conference; that would give Administrations time to prepare well-considered proposals for submission to the Conference in 1980. On the other hand, maintenance of the *status quo* was naturally subject to the proviso that the Administrative Council would have to find another solution for the locations of meetings if there was no invitation from any country in the region concerned or if no funds were available.

The *delegates of Italy, Lebanon, the Philippines, Senegal, Bangladesh, Nigeria, Spain, Liberia, Argentina, Venezuela, Malaysia, Japan and Kuwait* supported the draft resolution.

The *delegate of Mexico* agreed broadly with the draft resolution and supported it, although he thought that it should be amended to reflect better the opinion of the majority of delegates who had stated their views on the matter during the present and previous plenary meetings, recognizing the importance of the activities of the Regional Plan Committees. It should not be specified that the meetings could only be held in the region concerned if funds were available. Such an attitude seemed negative and harmful, although he might agree, in exceptional circumstances, that the meetings should be held in conjunction with the World Plan Committee meetings in Geneva when, for instance, there was no inviting country or for the sake of economy. In that connection, No. 244 of the Convention outlined the responsibilities of the Administrative Council, which had always been conscientious in fulfilling those conditions by seeking to balance economy considerations and satisfactory results. The provision did not refer exclusively to Plan Committee activities but was valid for all the conferences and meetings of the Union. In conclusion, he again stressed that Regional Plan Committee meetings should be held in a country of the region concerned.

The delegates of *France* and *India* said they could support the draft resolution on the understanding that the alternative solution of simultaneous World and Regional Plan Committee meetings would be applied if no funds were available for separate regional meetings.

The *delegates of the Federal Republic of Germany, Morocco and Canada* also supported the draft resolution, but suggested that the text of paragraphs 1 to 8 of Annex 4 to Document AP VI-No. 33 should be set out in full, so that the reader would not be obliged to refer to another document.

The *delegate of Saudi Arabia* accepted that suggestion.

The *delegate of Australia* pointed out that a consensus had been reached at the 1975 meeting of the World Plan Committee on the undoubted value of the Plan Committees and on the continuing relevance of their broad terms of reference — that they should facilitate the development of the General Plan, but should not concern themselves with specific plans, since those were useful only to the extent to which they were capable of implementation, and implementation must be left to the countries themselves, on a bilateral or multilateral basis. With regard to the time and place of meetings, the *status quo* was of course perfectly satisfactory, but only if the Union and Administrations could afford the arrangement. It must be realized that the great strain on the CCITT budget was not a temporary phenomenon and that funds from Administrations were not likely to increase suddenly; in addition, funds are to be allocated to Study Groups as well as to the Plan Committees, and it was obviously very difficult to reduce the number of Study Groups. Against that background, some delegates to the World Plan Committee meeting had suggested that costs could be reduced by holding all Plan Committee meetings together, with consequent savings for the CCITT budget and for those Administrations which could send the same delegates to the World and the Regional Plan Committees. It had also been thought that the arrangement would provide a better opportunity for cross-fertilization of ideas between the Regional Committees since, apart from the European network, there was considerable similarity between the problems arising in regional networks. That alternative suggestion was referred to in paragraphs 9 and 10 of Annex 4 to Document AP VI-No. 33 — which, it should be noted, were not mentioned in the draft resolution. The Administrative Council had already deferred a Regional Plan Committee meeting for 1977, and it was by no means impossible that no funds would be available for such a meeting in 1978; accordingly, although his delegation could support most of the provisions of the draft resolution, it would have preferred some reference to be made to the alternative solution.

The *delegate of Venezuela* pointed out that the deferment of a Regional Plan Committee meeting in 1977 had no bearing on the importance of the meeting in question: the Administrative Council had also deferred the World Administrative Radio Conference on the Aeronautical Mobile (R) Service scheduled for that year.

The *delegate of Brazil* said that the discussion was practically identical with the long debates held on the subject at the meeting of the World Plan Committee and in the Administrative Council. Since those bodies had been unable to reach agreement on the issues raised in paragraphs 9 to 12 of Annex 4 to Document AP VI-No. 33, it was unlikely that the Plenary Assembly could do so. The best course would be to take note of the views expressed on those issues and to submit them to the Plenipotentiary Conference.

His delegation also regretted that paragraphs 9 and 10 of Annex 4 to Document AP VI-No. 33, which reflected the Brazilian points of view, had not been reproduced in Temporary Document No. 16/PLEN.

He drew attention to the Brazilian proposal in Plan Document No. 15 concerning some changes in the methods of work used in the World and Regional Plan Committees, bearing in mind the well-known development of the regional organizations. The Brazilian Administration had proposed that the Regional Plan Committees hold their meetings simultaneously, with a maximum duration of two days, immediately prior to the meeting of the World Plan Committee. If the meetings of the Regional Plan Committees could be held as suggested the regions would be able to carry out effective preparations for the meetings of the World Plan Committee. That would mean an economy for the ITU and for participating Administrations with respect to budget, performance and participation in the meetings.

The delegate of Brazil also mentioned his Administration's full support for the work of the Regional Plan Committee for Latin America of which the last two meetings had been held in Brazil.

The *delegate of the United States of America* said that his delegation would have liked the draft resolution to contain some reference to considerations raised during the World Plan Committee meeting, such as the act that Administrations were relying on regional organizations, rather than the ITU, for implementation of

plans, that traffic forecasts were being reconciled outside the Plan Committees and that the ITU computer was being used to simplify Plan Committee work. The Secretary-General had mentioned those points in his opening address to the World Plan Committee meeting; they had been discussed during the meeting and some delegations had found them persuasive. Since the draft resolution was designed for the Plenipotentiary Conference, it should contain references to such matters.

The *Secretary-General*, referring to "resolves" paragraph b), observed that it was not for the CCITT Plenary Assembly to decide that the *status quo* be maintained, since maintenance of provisions of the Convention rested only with the Plenipotentiary Conference. Moreover, it was not clear what the Secretary-General had to do under "requests the Director of the CCITT" paragraph c). Finally, the "requests the Administrative Council" paragraph was altogether too peremptory a request to one of the supreme organs of the Union, particularly since it related to a duty of the Council under No. 244 of the Convention.

The *delegate of Saudi Arabia* agreed to the deletion of the words "through the Secretary-General and/or through appropriate means" from "requests the Director of the CCITT" paragraph c).

The *Director of the CCITT* suggested that the "requests the Administrative Council" paragraph should be replaced by "Expresses the hope that the Administrative Council will be able to allocate the necessary budgetary resources".

The *Secretary-General* suggested that the words "in accordance with No. 244 of the Convention" should be added at the end of that paragraph.

The draft resolution in Document AP VI-Temp. 16/PLEN., as amended, was *approved* and forwarded to the Editorial Committee.

2. Report by Study Group I (Documents AP VI-Nos. 47, 48, 49, 50 and 51)

The *Chairman of Study Group I* (Mr. Paramor, United Kingdom) introduced the above documents which constituted the final report on the work of Study Group I, drawing attention to the salient points.

Parts I and II

In connection with the Review of Questions, he said that the Study Group had looked at the report from the Joint Working Party on the Maritime Mobile Service (see page 23 of Document No. 47) but that discussion on it could be deferred until the Chairman of that Working Party had presented the report to the Committee.

He added that there was a new service publication, *List of point-to-point radiotelegraph channels* published in accordance with Resolution No. 4 of the Telegraph and Telephone Conference; the Study Group had considered it should be amplified to include cable and satellite links. Another suggestion had been that some indication should be given as to whether telegram traffic could be handled permanently or only temporarily on those links. The title could then become *List of telecommunication channels used for the transmission of telegrams* (see Operational Bulletin No. 126).

With respect to the publication of telegram rates (deriving from Resolution No. 2 of the Telegraph and Telephone Conference), modifications had been made to the publication and although opinion in Study Group I had been divided on the utility of the table, the conclusion had been that its usefulness would be increased if full information were provided by all Administrations. As it stood, and unless there were objections, the Study Group's suggestion was that the through accounting rates should continue to be published.

Parts III, IV and V called for no particular comment.

Part VI (Instructions for the International Public Telegram Service)

The Study Group had held informal discussions on the above service although realizing that the publication of the *Instructions* was perhaps beyond its competence. There had been a suggestion that the *Telex Instructions* might be published in the form of an inexpensive booklet, A5 format, and some Administrations had queried the usefulness of printing the *Instructions* in book form at all, as most Administrations had to have them translated and others printed the *Instructions* locally in conjunction with other instructions for the service.

The Chairman of the Study Group concluded by expressing his appreciation to the Vice-Chairman, the Chairmen of Working Parties, the Administrations which had taken on special tasks, members of delegations and the CCITT Secretariat.

The *observer from the International Press Telecommunications Council* made the statement reproduced as Annex 1, urging retention of the press telegram rate as long as adequate alternative facilities were not available in the lesser developed countries.

The above view was endorsed by the *delegates of India, New Zealand, Turkey, Ghana and Algeria*, all of whom said that press telegrams were still used extensively and that the service was often the only means available. The *delegate of New Zealand* mentioned that as the service was optional, Administrations were free to withdraw the privilege at any time.

The *delegate of the Federal Republic of Germany*, supported by the *delegate of Norway*, pointed out that countries always had the possibility to make whatever bilateral, multilateral or regional arrangements they wished; they could in fact fix even lower rates than at present determined for the optional facility.

The *delegate of Argentina* said that the whole concept of optional facilities merited thorough study and referred to the document on the subject submitted by his Administration (Document AP VI-No. 82).

Mr. Hummel (CCITT), replying to a question by the Chairman of the Working Group on definitions as to whether his Group was to examine the definitions in Annex 2 to Document No. 47, doubted that the Group would have time to consider all the definitions contained therein. The *Director of the CCITT* confirmed that the Group was to restrict itself to the definitions of telegraphy, telephony and the terms of reference of the CCITT.

In connection with Part III of the report (Series F Recommendations) the *delegate of Zaire* asked whether the deadline of end December 1977 for the use of credit cards could not be extended, as his Administration, and probably others, had a large stock which would not be exhausted by that date.

In connection with new Question 11/I.b), the *observer from the International Press Telecommunications Council* wondered what the scope of the public document facsimile service would be; to his knowledge, it was operated so far only by the postal services.

The *delegate of the United Kingdom (Cable and Wireless)* explained that his organization had sponsored the Question because it had been operating such a facility between its own branches successfully for some time and felt that there was a need for a public service. It was to be hoped that in the course of the forthcoming study period some guidelines would be elaborated on the operational and tariff aspects of such a service, with a view to obtaining parity throughout the world.

The meeting rose at 1800 hours.

ANNEX

Statement by the International Press Telecommunications Council

"Mr. Chairman, Gentlemen,

The membership of this Council, which I represent, consists of some 7,000 newspapers throughout the world and most of the national and international news agencies, and it is on their behalf that I would thank the Members of the ITU for the concessionary rates for International Press Telegrams which have been in force for these past 50 years or longer. These have contributed indisputably to the spread of knowledge among the peoples of the world about other countries and their problems. And it is a knowledge which is indispensable not only to understanding but to our sense of belonging to the same human family.

It is also indisputable that the use of the International Press Telegram service has declined considerably in recent years owing to the extensive development of the international telephone and telex networks, particularly between the industrialized nations of the world. Yet, at the same time, there are many countries where it is still difficult to place an international or intercontinental telephone or telex call or where there is some considerable interval before a telephone or telex machine may be installed in a subscriber's office. This is particularly true of developing countries which are still deprived of information in a world where information is increasingly a source of power.

The realization that information is power has been one of the motivating factors behind the plan of many governments to form a non-aligned news agency pool and in this they are seeking the help of a sister agency of the United Nations — UNESCO. UNESCO has already sponsored a meeting attended by 21 Latin American countries to discuss a mass telecommunications policy. This meeting was held in San Jose, Costa Rica no more than two months ago and one of its Resolutions called for the establishment of a government-sponsored Latin American News Agency designed to correct the serious imbalance of news within the region. This Resolution

still awaits ratification at the 19th Session of the General Conference of UNESCO due to take place in Nairobi next month, but in the meantime heads of state of 85 non-aligned countries meeting in Sri Lanka last month have supported the idea of creating a joint Third World News Agency Pool.

The Resolution they adopted endorsed the setting up of a twelve-member Committee of Experts which will hold its first meeting in Baghdad for consideration of cable tariffs and for improvement of mutual communication facilities. Is this group of experts to act independently of the ITU and what may it think of the abolition of the Press Telegram provisions from the CCITT Recommendations?

Whatever the answer to these questions there is a totally understandable desire among the majority of nations of the world, most of whom are represented here in Geneva, that they become better informed about each other, and to do so they must rely upon the international telecommunications service. We have therefore the likelihood of some greater flow of information between these countries and a likelihood which could well be prejudiced by the premature withdrawal of a concessionary rate for Press Telegrams for as long as economic and efficient alternatives such as the telephone and telex are in short supply.

One of the difficulties in this most complex of worlds is that there are government delegations at one international conference who may not be altogether aware of what their sister delegations at another may be arguing or striving for. And much of this can be attributed to the dimension of time. Yet shall we today ratify the withdrawal of a concessionary rate at a juncture when so many governments throughout the world are clearly anxious to promote the exchange of news and views between their countries? And if governments have this ambition then a free and independent press cannot be denied this same concession.

May I end, Mr. Chairman, by saying that this plea should not be construed as a request for concessionary rates for Press Telegrams in perpetuity let alone between the industrialized nations of the world where adequate and alternative facilities for the exchange of news already exist. We know that a modicum of cross subsidy must exist where telecommunications Administrations offer a variety of services, some of which compete with each other, and it is not our belief that the press should always benefit at the expense of other users of international telecommunication. All that we seek is the retention of the concessionary Press Telegram rate for as long as adequate alternative facilities are not available in the developing countries and to help the less privileged of the human family to gain access to information which is their right."

FOURTH PLENARY MEETING

(Minutes as amended in the fifteenth Plenary Meeting)

Thursday, 30 September 1976, at 0930 hrs

Subjects discussed:

1. Report by Study Group I (*continued*)
 2. Report by Joint Working Party SMM
1. **Report by Study Group I (continued)** (Documents AP VI-Nos. 47, 48, 49, 50, 51 and 82)

The *Chairman* said that in view of the extensive discussion which had taken place at the previous meeting, the Plenary Assembly would examine only those Recommendations with regard to which there were any questions or proposals. All other Recommendations would be considered adopted.

The *delegate of Indonesia*, referring to the proposal for the abolition of press telegrams as a separate class (Document AP VI-No. 47, page 8, paragraph 3.3), said that, like the delegates of India and Ghana, he was against the proposal.

The *delegate of Saudi Arabia* also opposed the proposal. If any Administration wished to abolish the preferential rate for press telegrams, it could notify the ITU accordingly.

The *delegate of the Federal Republic of Germany*, speaking as the Vice-Chairman of Study Group I, said that since the question mainly concerned the non-European countries, it was for those countries to decide whether or not to maintain press telegrams as a separate class.

The *delegate of Australia* said that Study Group I had concentrated on examination of the telegram service during this plenary period. This was because circumstances had changed significantly since the inception of the service. It was no longer the sole means of telecommunication, its nature was such that costs were rising faster than revenues and there was a desire by many Administrations to streamline the service as a consequence. In particular it was clear that the present costs structure could no longer support reduced-rate categories which now represented an unacceptable subsidy of one set of users by another. Retention of press rates might benefit the receivers of news in both developing and developed countries but this would be at the expense of users of the telegram service with those in developing countries affected most. Study Group I, after taking all aspects into account, had arrived at the unanimous conclusion that the interests of both developing and developed countries would be served best by withdrawal of reduced rates for press telegrams. The drawback to the suggestion made by the *delegate of Saudi Arabia* to the effect that Administrations might withdraw the category unilaterally was that operating procedures would be rendered more complicated as a result. It would be preferable if there were universal abolition on a common date.

The *Chairman of Study Group I* remarked that it did not appear possible to achieve a consensus on the issue. It was true that the Study Group had arrived at its decision without dissent, but many of the countries now opposing the proposal had not been represented in the Study Group meetings. In view of the situation he advised the Plenary Assembly not to accept the proposal.

The *delegate of Sweden* said that preferential charges for press telegrams were to be abolished in his country as from 1 October 1976. However, if the developing countries wished to retain the existing arrangement, they should be free to do so. He was in favour of accepting the advice given by the Chairman of Study Group I and proposed accordingly that the *status quo* should be maintained.

The delegates of *Switzerland, the German Democratic Republic, Senegal, Yugoslavia, Nigeria, Zaire, Malaysia, Italy* and *France* supported that proposal.

The Study Group's proposal for the abolition of press telegrams as a separate class was *not accepted*.

The *Chairman of Study Group I* recalled that at the previous meeting the delegate of Zaire had raised the question of what Administrations were to do with their stocks of old TA cards which, under Recommendation F.41, were to be replaced by new ones by 1 January 1978 (Document AP VI-No. 48, page 131, paragraph 12). He wondered whether the validity of the old TA cards might not be extended for a limited period without infringing the advantages of the new system.

The *delegate of Australia* said that he saw no insurmountable difficulty in extending by 12 months, i.e., until 31 December 1978, the period during which both types of card were honoured. Beyond that date, however, parallel running would not be acceptable.

The *Deputy Secretary-General* concurred with those remarks, adding that the number of old cards in use was relatively small, amounting to 30,000-35,000 in all. Of that number, about 2,000 were stored at Headquarters.

The *delegate of the Federal Republic of Germany* said that extending the period of validity might give rise to inconveniences because not only the layout of the cards had been changed, but also the rules governing the two kinds of card were quite different.

The *delegate of Switzerland* said that the difficulty referred to by the delegate of Zaire might be overcome if Administrations with surplus cards of the old type were permitted to exchange them for new ones without charge. The arrangements for the entry into force of the new cards could then be accepted without change.

The *delegate of Zaire* accepted the suggestion.

The *Deputy Secretary-General* said that there was no objection to the proposed solution.

The recommendation by Study Group I was *adopted* on that understanding.

All other recommendations by Study Group I were *adopted*.

The *Chairman of Study Group I* suggested that the proposal by the delegation of Argentina on optional services (Document AP VI-No. 82) should be examined during the next study period under Question 14/I. The *delegate of Argentina* agreed to that course.

The *representative of the CCIR* drew attention to Document AP VI-No. 93 submitted by the delegation of Norway asking for some action to be added to the programme of Study Group I.

The *Chairman of Study Group I* said that, in his opinion, it would be more appropriate to discuss the Norwegian proposal in connection with the reports of Joint Working Party SMM and Study Group II.

The *delegate of Norway* said that it was incorrect to refer Document No. 93 to Joint Working Party SMM. The international maritime mobile satellite service was being studied by CCIR Study Group 8. The specific problems related to the overall technical requirements for that service were considered by CCIR Interim Working Party 8/1. The satellite system would be interconnected with the international telecommunications network. A number of Questions concerning the maritime service were therefore of direct concern to various CCITT Study Groups, as follows: Study Group IX for the definition of telegraph transmission quality; Study Groups X and XI for the signalling interworking for automatic and semi-automatic maritime satellite connections; Study Groups I and XIII for the numbering plans and routing for automatic and semi-automatic telex and telephone connections; and Study Group XVI for the inclusion of the maritime satellite service in international transmission planning. During the present study period, CCITT Study Group XIII had been represented in CCIR Interim Working Party 8/1 by a special rapporteur. The close cooperation and coordination thus achieved had been beneficial both to the CCITT and the CCIR.

The Norwegian Administration proposed that CCITT Study Groups I, IX, X, XI and XVI should also appoint special rapporteurs who could take part in the work of the Interim Working Party. The INMARSAT system was to be based on CCIR and CCITT recommendations to the extent that such recommendations existed. It was of the utmost importance that integration be achieved between that system and the international network. In order to meet the planning schedule, the CCIR Interim Working Party should finalize its work in May/June 1977. Special rapporteurs should therefore be appointed by the CCITT Study Groups as early as possible. He understood that it was intended to bring up the matter at the meeting of Chairmen and Vice-Chairmen planned for 11 and 12 October, and hoped that action would follow shortly thereafter.

The *Chairman* said that the Plenary Assembly had taken note of the statement by the delegate of Norway, and that the Chairmen of the Study Groups would take the necessary action.

The *Chairman of Study Group I* said that some discussion was perhaps required on the manner in which the operating *Instructions* should be published.

The *Deputy Secretary-General*, referring to the point raised by the Chairman of Study Group I, said that account would have to be taken of the decisions taken in the past at a higher level, in particular by the 1965 Plenipotentiary Conference and the 1973 World Administrative Telegraph and Telephone Conference. The compromise reached between Government representatives with a view to simplifying the *Telephone* and, more particularly, the *Telegraph Regulations* had made it possible to eliminate duplication between the *Telegraph Regulations* and CCI Recommendations and to bring down to CCI Recommendation status many of the operational and related provisions in the 1958 *Telegraph Regulations*. In reality, the *Instructions* consisted of a document comprising CCI Recommendations which Administrations would agree to observe in the interests of harmonization. The Telegraph and Telephone Conference had invited the Secretary-General to publish a 1974 edition of the *Telegram Instructions*, incorporating Recommendations F.1 and F.42, as a transitional measure pending further studies by the CCITT Study Groups concerned. As the General Secretariat had understood it, the intention of the Conference had been to provide a publication similar to the old *Telegraph Regulations* which could be used not only by operational personnel but also, in the case of smaller Administrations, for the administration of operational services. The definition of "operating" had been considered by Study Group I; the outcome was that the *Instructions* before the Assembly were defined in terms of meeting the requirements of operational staff and their supervisors, a sense that was perhaps a little narrower than had been foreseen.

The situation with regard to the *Instructions* for the telegram service was somewhat more complicated than that of the equivalent *Instructions* for the telephone service. Much of the material in Recommendations F.1 and F.42 (Document AP VI-No. 48) was also contained in the *Instructions* (Document AP VI-No. 51), but the drafting, numbering and references were not always the same. Another problem arose from the fact that the manual published recently for the maritime mobile service included not only the new *Telegraph Regulations* but also the relevant provisions of the 1974 edition of the *Telegram Instructions*.

As for the telex service, the situation was a little different. For one thing, the problem of duplication was not as great and, for another, the Telegraph and Telephone Conference had not specifically called for the preparation of *Instructions* for that service.

He drew attention to an error on page 211 of Document AP VI-No. 48: in paragraph 6d), the words "will be" should be replaced by "was" and the words "the ITU" by "the General Secretariat".

The *Director of the CCITT* said that the *Instructions* for the international telephone service did not duplicate any Study Group Recommendation. In the case of the telegram service, however, Recommendations F.1 and F.42 existed side by side with a manual which contained the same basic material but did not use the same numbering. A possible solution to the problem might be to consider that the two Recommendations constituted the Instructions and that the manual itself existed in the form of Volume II-B as it would appear in the *Orange Book*.

It was *decided* to set up a working group under the chairmanship of the Vice-Chairman of Study Group I and composed of the *delegates of Kuwait, Spain, the United States of America and the U.S.S.R.* and the *Deputy Secretary-General*, to study the matter and report back to the Plenary Meeting.

The *Chairman* expressed appreciation for the excellent work performed by Study Group I. On behalf of all present, he thanked the outgoing Chairman of the Study Group, Mr. Paramor, for all he had done for the ITU and the CCITT and wished him a long and happy retirement.

2. **Report by Joint Working Party SMM (Documents AP VI-Nos. 45, 46, 83, 87, 93 and Temporary Document No. 9)**

The *Chairman of Joint Working Party SMM* (Mr. van Moorsel, Netherlands), introducing the Joint Working Party's final report to the Plenary Assembly (Documents AP VI-Nos. 45 and 46), said that the numbers of the two draft Recommendations in Document AP VI-No. 46 should be altered to read, respectively, "E.190/F.111" and "E.260/F.110". After recalling the relevant discussions and recommendations of the 1974 World Maritime Administrative Radio Conference, he said that the two Questions referred to the Joint Working Party (Mar2-A and Mar2-S) had been studied together. The Joint Working Party had started its work by adopting general principles on responsibility for accounting, mobile station charges, redrafting of provisions, and provisions concerning future developments. With regard to maritime accounting, the proposals contained in draft Recommendation E.190/F.111 were designed to simplify the present complex and time-consuming accounting system by limiting the number of accounting addresses to one per country except in certain special cases, thereby specifying more accurately the responsibility for accounting.

Regarding mobile station charges, the Joint Working Party had decided that the abolition of international accounting for ship station charges would be the best way of remedying the present unsatisfactory situation. Only one Administration had opposed that decision, which affected only shore-to-ship radio traffic. Various alternative proposals had been made subsequently but the Joint Working Party, which had seen no reason to go back on its decision, had not discussed them.

As far as the redrafting of provisions was concerned, it had been decided that the material which was common to the proposed Recommendations and the Radio Regulations should be combined in the general chapters of the Recommendations and that the maritime service should be the object of a separate series of Recommendations.

With regard to future developments, preliminary discussions had taken place on single-operator and fully automatic services but there had not been sufficient time to draw up a complete set of rules on those subjects, which required further study.

The Joint Working Party had decided to propose that the two Recommendations should enter into force on 1 January 1978. They had been approved, together with the report of the Joint Working Party, at the final meetings of Study Groups I and II.

The *delegate of Norway* said that in recent years the CCITT had done valuable work to simplify the administrative and operational aspects of telecommunication services and that the activities of Joint Working Party SMM should be regarded as a continuation of that positive work. His delegation could support that body's recommendations, implementation of which would serve the interests of both Administrations and customers.

The *delegate of Liberia* made the following statement:

"The Liberian Administration has attempted to make crystal clear its position in Document AP VI No. 83. Delegates will recall that when the subject-matter relating to accounting for public correspondence in maritime communications was being considered at the last World Maritime Administrative Radio Conference in 1974, the plenary failed to adopt any formulation acceptable to all governments on the best possible method of modernizing the already cumbersome procedures of maritime accounting. Accordingly, the CCITT was requested to undertake studies and make recommendations to streamline such accounting which would be distributed to all Administrations Members of the Union before 1 January 1977, with a view to preparing proposals for the forthcoming World Administrative Radio Conference in 1979. Pursuant to this decision, the

1974 World Maritime Administrative Radio Conference adopted Resolutions Mar2-22 and Mar2-23. We are fully aware that the CCITT, charged conventionally with the responsibility of conducting studies and making recommendations on requests, convened Joint Working Party SMM to adopt general principles on:

- a) mobile stations charges;
- b) responsibility for accounting; and
- c) drafting of recommendations regarding maritime accounting and charging, among other things.

This Joint Working Party convened on three occasions between January 1975 and April 1976 and recommendations resulting therefrom are at present being submitted by the CCITT for perfunctory approval by this VIth Plenary Assembly which governments will procedurally be requested to effect as soon as possible. In the opinion of the Liberian Administration this action is inconsistent with existing ITU Regulations and should not be adhered to since the 1974 World Maritime Administrative Radio Conference in the same Recommendation (No. Mar2-18) also provides for Administrations to make proposals to the next competent World Maritime Administrative Radio Conference as to which, if any, of these draft rules should be included in the Radio Regulations. It is our view that maritime accounting procedures would vary considerably throughout the world causing tremendous confusion if governments are requested on the one hand to implement draft rules adopted by the CITT and yet, on the other hand, are asked to make concrete proposals on these identical rules as to their acceptability and/or workability at the next 1979 World Administrative Radio Conference.

Of concern to Liberia is the incongruent manner by which the CCITT is endeavouring to circumvent established ITU procedures for effecting rules and regulations. Although it is recognized that the second paragraph of the "recommends" of Resolution No. Mar2-23 suggests that "Administrations and recognized private operating agencies bring into use the amended CCITT texts as soon as possible" by this forum, it must also be appreciated that this is in direct contrast to paragraph 1 of the "recommends" of this Resolution in conjunction with paragraph 3 of the "Requests the CCITT" section of Resolution No. Mar2-22.

My delegation acknowledges the urgency for streamlining the archaic maritime accounting procedures but we fail to reconcile any unilateral attempt to assign Recommendations a higher priority than Resolutions.

The question is automatically posed, Mr. Chairman, as to whether Recommendations may or should take precedence over conference Resolutions within the framework of the ITU organization. I should be grateful, in this regard, if either the Secretary-General or the Deputy Secretary-General could elucidate on this point, as it is crucial to our case. We would also welcome further clarification on any legalistic role the Radio Regulations or Additional Radio Regulations assume vis-à-vis Resolutions and/or Recommendations.

Mr. Chairman, the Mobile Ship Station Charge was implemented as a result of the International Radiotelegraph Convention signed in London in 1912 which clearly states "the ship charge shall be fixed in accordance with the tariff per word pure and simple on the basis of a fair remuneration for radio-telegraphic work". It is inconceivable that the CCITT would by its Recommendation seek to unilaterally consent to deny the cost-effectiveness to shipowners, considering the substantial financial overhead they must underwrite in compliance with Regulations, to operate and maintain a complicated ship station. Positive action in regard to the question of the ship charge could augur well in the salesmanship of the recently-concluded INMARSAT Organization for shipowners whose interests we unswervingly support.

We genuinely share the ardent desire of the 1974 World Maritime Administrative Radio Conference to accelerate simplification of maritime accounting, but regret our disassociation with the abbreviated methods by which it seeks implementation through the CCITT. We are also discontented with the results of the work of the Joint Working Party SMM which we doubly regard as highly commendable but not replete to the point of consummating any recommendation of the CCITT to:

1. abolish the mobile ship station charge; and
2. establish any index by which a single common denominator regarding accounting authorities *can* or *may* be established to the satisfaction of each and every maritime administration.

Equally important in this equation of paramount importance of the Liberian Administration is the apparent course of action by the CCITT to legally bind governments, whose Administrations issue mobile ship station licences to guarantee final settlement by them of traffic accounts. Mr. President, under no emergent circumstance can public funds be committed to make good bad debts of private concerns by any governmental agency under our Free Enterprise Commercial Act of Legislature. Not only does Liberia oppose this issue but others have confirmed that their national laws prohibit the commitment of taxpayers money to guarantee outstanding debts incurred by private entities.

The Liberian Administration extends its arguments to yet another vital issue contained in Document AP VI-No. 46 on the question of Accounting Responsibility — “unless otherwise arranged by mutual agreement between two Administrations by bilateral negotiation” and invites clarification from member delegations on the subtle difference between this crystal call to order of a single accounting authority embodied in Document AP VI-No. 46. We dread omnibus interpretations that the issuing Administrations, pursuant to recommendations now to be experimented with, will be required to be responsible not only for processing or onward forwarding of bills to the addressees but held liable for the delinquent payment of outstanding bills of shipowners and/or charter parties. Should this be correct, we are left with the impression that no further improvement has been made over the present maritime accounting procedure as contained in No. 1509 of Article 40 of the Radio Regulations and would welcome views on this point from those delegations in the same position as we.

Having addressed the relevant issues of maritime accounting procedures, Mr. Chairman, we have recognized as no oversight that our document does not list appropriate recommendations and/or suggestions. This is resultant of the fact that many delegations here present might not have had the opportunity of digesting the thrust of the paper, and consequently any outpouring of alternatives for their consideration on an extremely controversial matter such as maritime accounting could aggravate rather than cure the ill.

We certainly commend the Joint Working Party on its presentation of Documents X and Y, but find ourselves totally unprepared to accept them *in toto* as they contravene our national laws and consequently leave no latitude for flexibility within the maritime telecommunications administrative spectrum.

Recapitulated simply, Mr. Chairman, we disagree that an exhaustive discussion has taken place in the Joint Working Party to warrant any submission of a complete report to the VIth Plenary Assembly for onward forwarding to Governments for immediate effect. Our position, in Document AP VI-No. 83, focuses on the misgivings of the Joint Working Party and urges this Plenary Assembly not to reconsider the matter of maritime accounting, but to remit the entire subject to an Intersessional Working Group that will devote itself to a more thorough in-depth study to the merits and demerits of the retention of the ship charge; and, concomitant with this study the rationale for a single accounting authority per Administration. I repeat: this Working Group should convene following the conclusion of this Plenary Assembly and its report will be submitted for the consideration of the 1979 World Administrative Radio Conference.

If this statement has in any way been lengthy, it will have accomplished the onerous task of arresting attention of delegations that the work of the Joint Working Party SMM, now presented to us, is not a *fait accompli*. We are jointly and severally charged with what is in the best interests of our respective Administrations.

In conclusion, we suggest that short of any terms of reference which might be proffered by sympathetic delegations we strongly recommend that this Plenary Assembly formulate the formation of a Working Group to meet after this Assembly, post-haste, to consider alternatives which I am given to understand will be submitted or advanced by delegations wishing to speak on this issue later. We therefore respectfully defer to those member delegations which would now wish to comment further before any decision is reached by this Plenary, and permit me, once again, Mr. Chairman and Fellow Delegates, to register my profound gratitude for the indulgence exercised by your good selves”.

The *delegate of the Netherlands* said that the Joint Working Party’s report marked a step forward and should therefore be accepted by the Plenary Assembly. The Working Party should be authorized to complete its work during the forthcoming study period.

The *delegate of Japan* said that his Administration supported the views expressed by the Liberian delegation in Document AP VI-No. 83 concerning the abolition of mobile station charges, although it had accepted that abolition rather reluctantly in the second meeting of the Working Party, taking account of the general trend of that meeting. Since then, however, it had conducted in-depth studies which had led it to the conclusion that abolition of the charges would be premature in view of the prospective rapid development of the INMARSAT system, which would have a considerable influence on ship-shore and ship charges. No hasty decision should be taken before thorough discussion of the new system.

The *delegates of Panama, Saudi Arabia, Yugoslavia, Nigeria, Argentina, Zaire and Mauritius* said they supported the Liberian document and proposals.

The *delegates of Morocco and Senegal* also supported the Liberian proposals, and considered that the suggested intersessional group should be convened immediately, so that it could provide further information for the Plenary Assembly.

The *delegate of Australia* said that there seemed to be some misunderstanding about the Joint Working Party's recommendations. It had not suggested the abolition of mobile station charges but rather the abolition of accounting for them between shore and ship. Ships would still be able to levy charges on board if they so desired. The draft Recommendations were the result of intensive study by the experts in the Joint Working Party and only one Administration had not supported them. They were partly based on the view held widely in the Joint Working Party that under contemporary conditions a ship was more like a subscriber station in a maritime mobile network than it was like an RPOA. This would become even more so as progress towards fully automatic working continued. The various propositions put forward by the International Chamber of Shipping were inconsistent with this view and therefore received limited consideration. Difficulties associated with the introduction of the Recommendations before appropriate changes in the *Radio Regulations* were acknowledged. It would be unwise, however, if for this reason all the valuable work done at considerable sacrifice by the Administrations providing experts for the Joint Working Party were cast aside. The Plenary Assembly should accept the Recommendations, but might consider setting the date of implementation after the 1979 World Administrative Radio Conference, subject to that Conference's endorsement.

The *delegate of Liberia* said he could not agree with the Australian delegate's interpretation of the Working Party's recommendation. Whereas Nos. 1559AU and 1559AV of the *Radio Regulations* clearly stated that the Administration to which the land station was subject, credited the Administration to which the mobile station of destination was subject — or the accounting authority — with the mobile station charge, Section I of Chapter I of Document AP VI-No. 46 nowhere stated that there should be a mobile station charge. Accordingly, the Recommendation was in legal contravention of the *Radio Regulations*.

The *delegate of Australia* said that the provisions of the *Radio Regulations* referred to by the Liberian delegate related only to the accounting methods to be used if mobile station charges were levied. They did not require a ship to apply a charge if it did not wish to do so. In fact most ships operating through Australian land stations did not require a ship station charge and this was believed to be the situation for some other Administrations.

The *Deputy Secretary-General*, replying to the Liberian delegate's questions concerning the status of Regulations, Decisions and Resolutions adopted by World Administrative Radio Conferences as compared to that of decisions of the CCIs said that, since decisions of World Administrative Radio Conferences represented treaty obligations under agreements between the Governments of Members of the Union, the provisions of the *Radio Regulations* legally prevailed over Recommendations of the CCIs. On the other hand, the *Regulations* allowed a certain measure of flexibility, and there had been cases where Recommendations had bypassed the *Radio Regulations* in bilateral arrangements between individual Administrations, although if any Administration insisted on the application of the *Regulations*, all Administrations in relations with it were obliged to comply. An interesting example of that flexibility was to be found in Resolution No. Spa2-6 of the 1971 Space Conference, which provided that Administrations could change certain technical criteria by a procedure agreed upon. However, if some Administrations did not accept the relevant CCIR Recommendations the *Radio Regulations* would continue to apply in relations with those Administrations concerned. On the other hand, Administrations were of course free to make their own arrangements in their relations with their shipping authorities, since these did not affect other Administrations.

The *delegate of New Zealand* said that, although his delegation did not disagree with the Working Party's conclusions, it considered that it was beyond the jurisdiction of the CCITT Plenary Assembly to adopt recommendations abolishing ship charges and requiring single accounting authorities to be established before the proper regulatory body, the CCIR, had had a chance to consider them at the 1979 World Administrative Radio Conference. There was an obvious need for further discussion between the parties directly concerned in order to resolve differences before that Conference.

The *delegate of India*, referring to the question of a single accounting authority, said that there seemed to be a need for an authority or representative to settle accounts properly even when a ship changed hands. With regard to the abolition of ship charges, there clearly had to be some procedure of compensation for ships handling telegrams, but that need might be obviated in the future by the development of automatic dialling. In any case, the problem must be examined in detail by a group comprising technicians as well as accounting experts; the Plenary Assembly had no time to deal with the matter and it should be left to the 1979 World Administrative Radio Conference.

The *delegate of the United Kingdom* observed that a CCITT Recommendation on the abolition of mobile station charges would be of no practical use unless it was substantially applied. Accordingly, the question of principle referred to by the Liberian delegate did not really arise. He agreed with the Australian delegate's views and formally proposed that the Assembly should accept the Working Party's recommendations, since the controversial questions of ship charges and accounting authorities represented only a small part of the report, but that the implementation date should be left to the 1979 World Administrative Radio Conference to decide. The Working Party should be authorized in the meantime to try to find an alternative means of remunerating ship stations for their handling of telegrams.

The *delegate of Denmark* supported that proposal.

The *representative of the International Chamber of Shipping* said that his organization, which represented over two-thirds of the world's shipping tonnage, was profoundly disturbed by the recommendation to abolish mobile station charges and by the proposed dates of implementation. The Marconi International Maritime Company had carried out a study on charging in automatic systems, which was by no means impossible, but the paper it had submitted to the Working Party had not been discussed. The ICS therefore welcomed proposals to set up an intersessional group and hoped that international shipowners would be allowed to participate fully in the discussions. Alternative solutions must be found, and the *Radio Regulations* should provide explicitly for the remuneration of shipowners.

The *delegate of the United States of America* also supported the United Kingdom proposal. It was clear from paragraph 1.7 of Chapter I of the Working Party's report that the point at issue was not the possibility that an Administration might levy a ship station charge, but the method of accounting for such a charge. He further agreed with the United Kingdom delegate that the SMM Working Party was the appropriate body to examine alternatives to the mobile station charge during the next study period, particularly in view of paragraph 1 of Question 17/I on page 7 of Document AP VI-No. 45, which gave it every latitude to conduct such studies.

The meeting rose at 1240 hours.

FIFTH PLENARY MEETING

(Minutes as amended in the fifteenth Plenary Meeting)

Thursday, 30 September 1976, at 1430 hrs

Election of the Director of the CCITT

The *Chairman* referred the Assembly to Temporary Document No. 3 which listed the six candidates in alphabetical order and to Temporary Document No. 2 which described the election procedure.

The *Secretary-General* explained the voting procedure.

The *delegates of Hungary, Nigeria and Norway* acted as tellers.

The *Secretary-General* proceeded with a roll-call vote (see Annex).

Voting was by secret ballot.

The *Chairman* announced the result of the ballot.

Number of countries voting: 95.

Valid voting papers: 95.

Votes cast in favour of

Mr. Baggenstos (Switzerland)	16
Mr. Burtz (France)	28
Mr. Gagliardi (Italy)	9
Mr. Gueorguiev (Bulgaria)	16
Mr. Hummel (Federal Republic of Germany)	23
Mr. Theys (Belgium)	3

As none of the candidates obtained the required majority of 48 votes, the *Chairman* announced that the second ballot would be held at 0930 hours on Friday, 1 October 1976.

ANNEX

List of countries voting

Algeria	Lao (P.D.R.)
Germany (Federal Republic of)	Lebanon
Saudia Arabia	Liberia
Argentina	Libya
Australia	Liechtenstein
Austria	Luxembourg
Bangladesh	Madagascar
Belgium	Malaysia
Benin	Mali
Byelorussia	Morocco
Brazil	Mauritius
Bulgaria	Mauritania
Cameroon	Mexico
Canada	Monaco
Central African Republic	Mozambique
Chile	Niger
China	Nigeria
Cyprus	Norway
Colombia	New Zealand
Congo	Uganda
Korea (Republic of)	Panama
Costa Rica	Netherlands
Ivory Coast	Philippines
Cuba	Poland (People's Republic of)
Denmark	Portugal
Egypt	Qatar
El Salvador	Syria
Spain	German Democratic Republic
United States	Democratic People's Republic of Korea
Ethiopia	Ukraine
Finland	Roumania
France	United Kingdom
Gabon	Senegal
Ghana	Somalia
Greece	Sweden
Upper Volta	Switzerland
Hungarian People's Republic	Tanzania
India	Chad
Indonesia	Czechoslovakia
Iran	Thailand
Iraq	Togo
Ireland	Tunisia
Iceland	Turkey
Israel	U.S.S.R.
Italy	Venezuela
Japan	Yugoslavia
Kenya	Zaire
Kuwait	

SIXTH PLENARY MEETING

(Minutes as amended in the fifteenth Plenary Meeting)

Friday, 1 October 1976, at 0930 hrs

Subjects discussed:

1. Election of the Director of the CCITT(*second ballot*)
2. Report by Joint Working Party SMM (*continued*)
3. Report by Study Group II
4. Report by Study Group III

1. Election of the Director of the CCITT (second ballot)

The *Secretary-General* explained the voting procedure.

The *delegates of Hungary, Nigeria and Norway* acted as tellers.

The *Secretary-General* proceeded with a roll-call vote (see Annex).

Voting was by secret ballot.

The *Chairman* announced the result of the ballot.

Number of countries voting: 97

Valid voting papers: 97

Votes cast in favour of

Mr. Baggenstos (Switzerland)	12
Mr. Burtz (France)	33
Mr. Gagliardi (Italy)	10
Mr. Gueorguiev (Bulgaria)	15
Mr. Hummel (Federal Republic of Germany)	26
Mr. Theys (Belgium)	1

As none of the candidates obtained the required majority of 49 votes, the *Chairman* announced that the third ballot would be held at 1700 hours on Friday, 1 October 1976.

2. Report by Joint Working Party SMM (continued) (Documents AP VI-Nos. 45, 46, 83, 87, 93 and Temporary Document No. 9)

The *Director of the CCITT*, referring to the criticisms which had been levelled against the CCITT earlier in the discussion, observed that the CCITT was nothing more or less than the Plenary Assembly itself. Furthermore, it was not at the CCITT's own initiative that the questions dealt with in the Joint Working Party had been taken up, but at the express request of the 1974 World Maritime Administrative Radio Conference. It was regrettable, but certainly not the fault of the CCITT Secretariat, that a greater number of Administrations had not participated actively in the work of the Joint Working Party. With regard to the proposal which had been made to set up an intersessional working group, he pointed out that such a group already existed in the form of Joint Working Party SMM. In order to make the Joint Working Party more representative, he suggested that the Administration of Liberia should be requested to provide a Vice-Chairman for it.

The *Chairman* invited comments on the proposal to establish forthwith an *ad hoc* working group which would meet during the course of the current Assembly to work out expanded terms of reference for the Joint Working Party, set a timetable for its work and possibly submit proposals concerning its composition.

The *delegate of China* said he agreed with the opinions expressed by the Director of the CCITT and shared the view of certain developing countries that no decision should be taken on the problem at the current Assembly since it required further study.

The *delegate of Mauritania* said that the working group, if established, should limit its deliberations to the one controversial point which had arisen, namely, the abolition of ship station charges.

The *Deputy Secretary-General* said that there were two separate issues to be settled by the Assembly. The 1974 WMARC had decided that a group of experts should be set up in the CCITT to study accounting and charging on the one hand and operating on the other and to submit a report to the Members of the Union by 1 January 1977 in order to permit the latter to elaborate their proposals to the 1979 WARC. Even if

unanimous agreement could not be reached, a report would have to be sent to Members not later than 12 months before the deadline for the submission of proposals to the WARC. The second issue on which the Assembly would need to take a decision was that of the two draft Recommendations proposed by Joint Working Party SMM.

The *delegate of Sweden* said he was in favour of the establishment of a working group, which should be chaired by the delegate of Liberia and the terms of reference of which would be those described by the Chairman. He also supported the suggestion that Liberia should provide a Vice-Chairman for Joint Working Party SMM.

The *delegate of the United States of America* said that, as he understood it, the main issue at stake was that of finding alternative means for remunerating shipowners if ship station charges were to be abolished from international accounting as proposed by the Joint Working Party. That specific task could presumably be entrusted to the Joint Working Party in the next study period. If that were so, there was no need to set up a working group since the terms of reference of the Joint Working Party as they appeared in paragraph 1 of Question 17/I (Document AP VI-No. 45, page 7) were perfectly adequate for that purpose. He shared the view that all interested Administrations should participate in the work of the Joint Working Party and endorsed the suggestion made by the Director of the CCITT in that connection.

The *Chairman of Joint Working Party SMM* (Mr. van Moorsel, Netherlands) suggested that the two draft Recommendations proposed by the Joint Working Party should be accepted subject to deletion of the date of their entry into force, which would be dependent upon the deliberations of the 1979 WARC. He further suggested that the terms of reference of the Joint Working Party as set out in paragraph 1 of Question 17/I should be expanded to include a specific reference to the search for alternative means for the remuneration of shipowners. The proposed working group could be requested to draft an appropriate text and also to set a deadline for the submission of the Joint Working Party's report to the Members of the Union.

The *delegate of Italy* said that the question of finding an alternative solution to the present unsatisfactory system of levying ship station charges clearly required further study, with the active participation of the Administrations which opposed the abolition of those charges.

The *delegate of Liberia* said he wished to apologize for any misunderstanding that his initial remarks on the subject might have caused, and to place on record his appreciation of the work performed by the Joint Working Party on a very contentious subject and of the tact and competence with which Mr. van Moorsel had conducted the related discussions.

The *delegate of the U.S.S.R.* said that the Plenary Assembly could only decide that the Joint Working Party should continue its work with a view to finding a solution to the problem of ship station charges that could be adopted unanimously at a later stage. At the same time, the CCITT Secretariat should be requested to launch an appeal to all interested Administrations to participate actively in the Joint Working Party's work during the next study period.

The *delegate of Norway* supported the suggestions made by the previous speaker. His delegation did not consider that it was necessary to establish an *ad hoc* working group to expand the Joint Working Party's terms of reference.

The *delegates of Liberia, Algeria, Greece* and the *Ukrainian S.S.R.* associated themselves with the views expressed by the delegates of the U.S.S.R. and Norway.

The *delegate of Cameroon* endorsed the comments made by the delegate of Norway and supported the proposal by the Director of the CCITT that Liberia should provide a Vice-Chairman for Joint Working Party SMM.

The *delegate of Australia*, supported by the *delegate of the United States of America*, said that even if the texts proposed by the Joint Working Party were not acceptable to the Assembly as Recommendations, it would be a great pity if they were not retained in some form so that they could serve as the starting point for future discussions. A deadline should also be set for the completion of the Joint Working Party's work, and a decision should be taken on the procedure for approval of its report by the Members of the CCITT before that text was submitted to the 1979 WARC.

The *observer for the International Chamber of Shipping* considered that the best course would be to refer both draft Recommendations back to the Joint Working Party, which should be requested to expand or alter the texts, having regard to the views expressed during the present discussion. For instance, it was clear that some provision relating to ship station charges would have to be included. He requested that the minutes of the Assembly should reflect what he took to be the generally accepted view that the Plenary Meeting had recognized the right of shipowners to remuneration for the work involved in the provision of the services in question.

The *Chairman of Joint Working Party SMM* suggested that both draft Recommendations might be accepted by the Assembly in principle and referred back to the Joint Working Party, which should be requested to reconsider the questions of accounting and charges and incorporate the views of the Assembly in the texts.

The *delegate of Norway* suggested that the Assembly should decide:

- that the Joint Working Party would continue its work according to a time schedule to be established by the CCITT Secretariat;
- that Liberia would provide a Vice-Chairman for the Joint Working Party;
- that, in the future work, due consideration would be given to the work already performed by the Joint Working Party.

Furthermore, with regard to the last statement by the Chairman of the Joint Working Party, the minutes of the Plenary Meeting should clearly record the extent to which agreement had been reached on substance in the matter.

After some further discussion, the *Chairman* said that if there was no objection he would take it that the Assembly agreed:

- to request Joint Working Party SMM to continue its studies;
- to adopt in principle the two draft Recommendations with the exception of the points relating to ship station charges and a single accounting authority which required further consideration;
- to request the CCITT Secretariat to draw up a schedule for the meetings of the Joint Working Party;
- to appoint the delegate of Liberia as Vice-Chairman of the Joint Working Party.

It was so agreed.

The *observer for the International Chamber of Shipping* said it was his understanding that agreement had also been reached to delete the date of entry into force from the preamble of the draft Recommendations and to insert, in an appropriate place at the beginning of the texts, a phrase such as "subject to endorsement by the 1979 WARC".

The *Chairman* said that was correct. There being no further comments on the report of Joint Working Party SMM, he extended warm thanks to the Chairman and members of the Joint Working Party for their excellent work.

3. Report by Study Group II (Documents AP VI-Nos. 52, 53 and 99)

The *Chairman of Study Group II* introduced the Study Group's report. He began by paying a tribute to the memory of Mr. D. Warner (ATT, United States of America), Vice-Chairman of the Study Group, who had died early in 1976. The post of Vice-Chairman had then been taken over temporarily by Mr. Hubbell, also of ATT, United States of America. A final decision on the matter would have to be taken by the Plenary Assembly.

He then reviewed the various questions assigned to Study Group II, inviting participants to refer to Documents AP VI-Nos. 52 and 53 for further details.

In conclusion, he expressed his sincere gratitude to all his colleagues, particularly the Chairmen and Vice-Chairmen of Working Parties. He hoped that Study Group II had performed its task satisfactorily.

The *delegate of the United Kingdom* considered that the proposed new Question E.II on credit cards should be thoroughly reconsidered by Committee B.

The *Chairman of Study Group II* said that he had no objection.

The *Chairman*, noting those remarks, said that if there were no further comments he would declare the Final Report of Study Group II *adopted*. He thanked the Chairman, Vice-Chairman and members of the Study Group for their work.

4. Report by Study Group III (Document AP VI-No. 62)

The *Chairman of Study Group III* introduced the report.

He offered his warmest thanks to his colleagues, and in particular to the Chairmen of the various Working Parties he had mentioned. He also congratulated the Chairmen of the Regional Groups on the substantial amount of work they had accomplished.

The *Chairman* thanked the Chairman of Study Group III for his statement. Discussion of the Report would be postponed until the next Plenary Meeting.

The meeting rose at 1300 hours.

ANNEX

List of countries voting

Algeria	Lebanon
Germany (Federal Republic of)	Liberia
Saudi Arabia	Libya
Argentina	Liechtenstein
Australia	Luxembourg
Austria	Madagascar
Bangladesh	Malaysia
Belgium	Mali
Benin	Morocco
Byelorussia	Mauritius
Brazil	Mauritania
Bulgaria	Mexico
Cameroon	Monaco
Canada	Mozambique
Central African Republic	Niger
Chile	Nigeria
China	Norway
Cyprus	New Zealand
Colombia	Uganda
Congo	Pakistan
Korea (Republic of)	Panama
Costa Rica	Netherlands
Ivory Coast	Philippines
Cuba	Poland (People's Republic of)
Denmark	Portugal
Egypt	Qatar
El Salvador	Syria
Ecuador	German Democratic Republic
Spain	Democratic People's Republic of Korea
United States	Ukraine
Ethiopia	Roumania
Finland	United Kingdom
France	Senegal
Gabon	Somalia
Ghana	Sweden
Greece	Switzerland
Upper Volta	Tanzania
Hungarian People's Republic	Chad
India	Czechoslovakia
Indonesia	Thailand
Iran	Togo
Ireland	Tunisia
Iceland	Turkey
Israel	U.S.S.R.
Italy	Venezuela
Japan	Yemen A.R.
Kenya	Yugoslavia
Kuwait	Zaire
Lao (P.D.R.)	

SEVENTH PLENARY MEETING

(Minutes as amended in the fifteenth Plenary Meeting)

Friday, 1 October 1976, at 1730 hrs

Election of the Director of the CCITT (third ballot)

The *delegations of Belgium, Bulgaria and Italy* announced the withdrawal of the candidatures of Mr. Theys, Mr. Gueorguiev and Mr. Gagliardi, respectively.

The *delegates of Hungary, Norway and Nigeria* acted as tellers.

The *Secretary-General* proceeded with a roll-call vote.

Voting was by secret ballot.

The *Chairman* announced the result of the ballot.

Number of countries voting: 97

Abstentions: 3

Votes cast in favour of

Mr. Baggenstos (Switzerland)	8
Mr. Burtz (France)	56
Mr. Hummel (Federal Republic of Germany)	30

Mr. Burtz (France) was therefore elected Director.

The *Chairman* congratulated Mr. Burtz on behalf of the Plenary Assembly and assured him of support in confronting the many difficult problems with which he would be faced. He wished Mr. Burtz success and satisfaction in his new office and invited him to take his seat on the rostrum for the remainder of the Plenary Assembly.

The *delegate of Lebanon*, speaking for the Arab Telecommunication Union and the Lebanon delegation, extended his warmest congratulations to the French delegation and the new Director of the CCITT and assured the latter of their fullest support.

The *delegate of Saudi Arabia* associated himself with those congratulations. All delegates were aware of Mr. Burtz's capabilities, demonstrated in the course of his attendance at numerous ITU meetings, and he was confident that he would discharge his new duties with competence. At the same time he expressed his appreciation of the Administrations which had submitted candidates and their readiness to make available to the Union their experience and knowledge. Finally, he paid tribute to the outgoing Director who had steered the CCITT so successfully during the current study period. He hoped that Mr. Croze would maintain contact with his many friends in the organization and in Administrations.

Speakers from the following delegations extended their heartiest congratulations to the new Director, Mr. Burtz, and wished him every success in carrying out his new and arduous tasks; they also expressed their regret at the departure of Mr. Croze and good wishes for the future: *Roumania, Liberia, Nigeria, Laos, Republic of Cyprus, Morocco, Brazil, Bangladesh, India, Venezuela, Turkey, Sweden, Indonesia, Greece and Netherlands*.

The delegations of *Italy, Switzerland, Bulgaria, Belgium* and the *Federal Republic of Germany*, which had submitted candidates for the post of Director, thanked the delegations which had voted in their favour and, in congratulating the successful candidate, assured him of their fullest support and wished him a very successful term of office.

Mr. Hummel Senior Counsellor, joined the previous speakers in congratulating Mr. Burtz on his election. He expressed his sincere and warm thanks to all the delegations who gave him their support during the election sessions and he wanted to assure them that he would continue to devote all his time and energy to his tasks in the CCITT Secretariat and that he would always be aware of the trust they have put in his person.

The *Secretary-General*, speaking on behalf of the Coordination Committee, presented his sincere congratulations to Mr. Burtz on his election. He was confident he would prove an excellent successor to Mr. Croze, whose abilities he had already taken the opportunity of emphasizing. Mr. Burtz's lengthy experience of the ITU would no doubt prove valuable in implementing the directives of the Administrative Council, which he had attended for many years, and he was assured of the help and close cooperation of all the members of the Coordination Committee.

Mr. Croze, outgoing Director of the CCITT, referred to the close collaboration between himself and Mr. Burtz which was of many years' standing and said that he would be pleased to be of service to the new Director in connection with any outstanding matters.

The *Head of the French delegation* thanked all the delegations which had placed confidence in its Administration and assured Mr. Burtz of their support and affection. The delegation naturally wished to associate itself with the tributes and good wishes extended to Mr. Croze, who had been greatly admired in his national functions as well as his international activities.

Mr. Burtz, Director elect, expressed his gratitude to those who had placed confidence in himself and in his Administration and to all those who had assured him of their support in the heavy task with which he was faced. He was pleased to be able to count on the cooperation of all those who were working for the common good of the CCITT and the ITU. He was sure that collaborators in all Administrations would help him to see that the Study Groups carried out their important tasks so that the CCITT found itself in the forefront of rapidly developing telecommunication techniques. The path traced by Mr. Rouvière and Mr. Croze would serve as a guide. A second important aspect was the harmonious development of telecommunications throughout all countries in the world, which could only be achieved by teamwork and close cooperation. In conclusion, he assured all participants of his optimism with regard to the future of the CCITT and that he would do his utmost, with the help of his new colleagues, to serve it successfully.

The *Chairman* thanked the voting officers and the services of the General Secretariat for the organization of the election.

The meeting rose at 1830 hours.

ANNEX

List of countries voting

Algeria	Hungarian People's Republic
Germany (Federal Republic of)	India
Saudi Arabia	Indonesia
Argentina	Iran
Australia	Iraq
Austria	Ireland
Bangladesh	Iceland
Belgium	Israel
Benin	Italy
Byelorussia	Japan
Bolivia	Kenya
Brazil	Kuwait
Bulgaria	Lao (P.D.R.)
Cameroon	Lebanon
Canada	Liberia
Central African Republic	Libya
Chile	Liechtenstein
China	Luxembourg
Cyprus	Madagascar
Colombia	Mali
Congo	Morocco
Korea (Republic of)	Mauritius
Costa Rica	Mauritania
Ivory Coast	Mexico
Cuba	Monaco
Denmark	Mozambique
Egypt	Niger
El Salvador	Nigeria
Spain	Norway
United States	New Zealand
Ethiopia	Oman
Finland	Uganda
France	Pakistan
Gabon	Panama
Ghana	Netherlands
Greece	Philippines
Upper Volta	Poland (People's Republic of)

Portugal	Chad
Qatar	Czechoslovakia
Syria	Thailand
German Democratic Republic	Togo
Democratic People's Republic of Korea	Tunisia
Ukraine	Turkey
Roumania	U.S.S.R.
United Kingdom	Venezuela
Senegal	Yemen A R
Sweden	Yugoslavia
Switzerland	Zaire
Tanzania	

EIGHTH PLENARY MEETING

(Minutes as amended in the fifteenth Plenary Meeting)

Saturday, 2 October 1976, at 0900 hrs

Subjects discussed:

1. Report by Study Group III (*continued*)
 2. Report by Study Group XVI
 3. Report by Study Group XV
 4. Report by the CMTT
 5. Report by Study Group IV
 6. Report by Study Group V
1. **Report by Study Group III (continued) (Document AP VI-No. 62)**

The *delegates of the United Kingdom and France* said that when draft Recommendation D.302 R (Document AP VI-No. 62, pages 105-112) had been considered at the final meeting of Study Group III, their delegations had expressed reservations on the provision concerning transit quotas set out in point 2.3 of Section II.

The *Chairman of Study Group III* said that the reservations of France and the United Kingdom would be inserted in the draft Recommendation in the form of a footnote to point 2.3 of Section II (page 110) ¹⁾.

The *delegate of the Federal Republic of Germany* said that if those reservations were to be the subject of a footnote in the draft Recommendation itself, his delegation wished its reservations on draft Recommendation D.300 R, Section II, point 4.1.2 and draft Recommendation D.301 R, Section II, point 3.1.2 to receive the same treatment.

The *delegate of Austria* said that his Administration, too, reserved the right to apply an amount in excess of 0.20 gold francs for the national extension.

The *Chairman of Study Group III* said that the reservations of the Federal Republic of Germany and Austria would be inserted in Recommendations D.300 R and D.301 R in the form of a footnote to the third sentence of Section II, point 4.1.2 of the former (page 82) and the third sentence of Section II, point 3.1.2 of the latter (page 98) ²⁾.

¹⁾ Text of the footnote: "The French Administration and the United Kingdom Post Office indicated that they were unable to apply this provision."

²⁾ Text of the footnote: "The Administrations of the Federal Republic of Germany and Austria reserve the right to apply a quota in excess of 0.20 gold francs per minute for the national extension."

The *delegate of Denmark*, referring to proposed Questions 7/III and 8/III (pages 142-143), said that the wording of the texts should be altered or supplemented in order to avoid the implication that it was compulsory for cost studies to be undertaken in each region during each study period.

The *Chairman of Study Group III* said that would be done.

The *delegate of Switzerland*, speaking as Chairman of the Tariff Group for Europe and the Mediterranean Basin (TEUREM Group), said that the Group had succeeded in completing its very heavy workload and in drafting three new draft Recommendations for submission to the Assembly: While the tariffs which it proposed for entry into force on 1 January 1977 were in general somewhat higher than the present ones, the increases relating to the telephone and telex services were relatively modest. The proposed tariffs were the result of serious and extensive efforts and considerable compromise, and the draft Recommendations corresponded exactly to the wishes of the members of the region.

The *delegate of Roumania* said that the Study Group III proposals for modification of the charges for telecommunication services were inconsistent with Resolution No. 19 and Opinion No. 2 of the Plenipotentiary Conference (Malaga-Torremolinos, 1973) concerning special measures in favour of the developing countries. Consequently, his Administration considered that the present charges should be maintained and subjected to further study.

The *Director of the CCITT*, replying to a question by the *delegate of Niger* concerning the Chairmanship of the Tariff Group for Africa, said that the Chairmanship and Vice-Chairmanship of Study Groups and other bodies would be considered at the next meeting of Heads of Delegations.

The *representative of the International Press Telecommunications Council (IPTC)* made the statement reproduced in Annex 1.

The *representative of the International Air Transport Association (IATA)* made the statement reproduced in Annex 2.

The *representative of the International Civil Aviation Organization (ICAO)* said that ICAO was in a similar situation to IATA. It had to use private leased circuit networks in order to cater for the requirements of civil aviation, some of which were peculiar to that branch. From the user's point of view, certain paragraphs of revised draft Recommendation D.1, Section 5 (pages 57-59) appeared to be restrictive since their rigid application might lead to neglect of customer requirements and thus jeopardize the safety and regularity of civil aviation operations. He therefore expressed the hope that the provisions in question would be revised during the next study period so that the requirements of users could be met.

The *Chairman of Study Group III*, referring to the comments by the three previous speakers, said that the establishment of a working group of the type mentioned by the representative of the IPTC came within the purview of Committee A. Study Group III, which was fully cognizant of IATA's position, had already considerably revised the D series of Recommendations, particularly Recommendation D.1, and would continue its efforts to ensure that the requirements of all concerned were met as fully as possible.

The *Chairman* thanked the Chairman, Vice-Chairmen and members of Study Group III for their valuable work and said that if he heard no objection he would take it that the Plenary Meeting wished to adopt the Study Group's report and take note of the comments and statements made during the discussion.

It was so *decided*.

2. Report by Study Group XVI (Document AP VI-No. 22)

The *Chairman of Study Group XVI* (Mr. Munday, United Kingdom) introduced the report in Document AP VI-No. 22, outlining the progress achieved with regard to each of the ten Questions referred to the Study Group and drawing particular attention to the three new Questions A/XVI, B/XVI and C/XVI which were proposed for study during the next study period (pages 76-77).

The *Director of the CCITT*, referring to Question 7/XVI (page 3), said that the *Handbook on Transmission Planning* had now been published and was on sale in the ITU.

The *delegate of the Netherlands*, after referring to Committee A's discussion on the need to phrase questions in such a way as to enable them to be studied by one Study Group only, asked whether it would be for Committee B to determine whether new Question A/XVI should be studied by Study Group XII or Study Group XVI.

The *delegate of the United Kingdom*, speaking as Chairman of Committee B, said that in cases where a Question was to be studied by more than one body, Committee B would welcome the views of the Study Group Chairmen concerned as to how responsibility should be shared.

The *Chairman of Study Group XVI*, referring to new Question A/XVI, said he believed that the technical aspects — such as the mathematical techniques used, the measurements and the other work to be done in the Laboratory — should be studied by Study Group XII. Study Group XVI would have the task of identifying the problems involved in replacing the reference equivalents in the Recommendations concerned by loudness ratings. Study Group XII would no doubt have to conduct some preliminary studies before Study Group XVI could start its work on the Question.

The *delegate of the U.S.S.R.* considered that it would be appropriate to insert in Recommendations G.111 and G.121 a reference to the need, when planning international and domestic telecommunication systems, to take account — particularly through the use of coding — of equivalent fadeouts. He also considered that Question 5/XVI should be supplemented in the light of his Administration's contribution concerning impulsive noise objectives (Document AP VI-No. 106) which drew attention to certain discrepancies between the thresholds adopted for measurement of impulsive noise values in Section C of Recommendation G.123 and the potential of the measuring equipment to which reference was made in Recommendation V.55.

The report of Study Group XVI (Document AP VI-No. 22) was *adopted*.

The *Chairman* thanked the Chairman, Vice-Chairman and members of Study Group XVI for their excellent work.

3. Report by Study Group XV (Documents AP VI-Nos. 14, 38, 39 and 81)

The *Chairman of Study Group XV* (Mr. Job, France) introduced the Study Group's report, describing the progress achieved in the study of each Question and drawing attention to the new Questions and proposed amendments to existing Questions for the coming study period. He had submitted to the CCITT Secretariat a number of minor corrections for incorporation in the final version of the report. The new draft of Recommendation J.11 proposed by the CMTT (Document AP VI-No. 81) had not been opposed by any of the members of Study Group XV and should therefore be substituted for the text which appeared on pages 2 and 3 of Document AP VI-No. 14. Both footnote 1 on page 4 of Document AP VI-No. 14 and the footnote on page 13 of the same Document could be deleted, since to his knowledge no objection had been raised by Study Group IV to the proposals in question. With regard to problems of terminology, a working group by correspondence had been established under the responsibility of Mr. Wallenstein (United States of America). As for publications, the final version of the *Handbook on Open-wire Lines* had been transmitted to the CCITT Secretariat for publication; in that connection, he wished to thank the Australian Administration for accepting the arduous task of preparing the draft. The work of Joint Working Party SGO, which was not mentioned in the documents relating to Study Group XV, would be dealt with in connection with the report by Special Study Group D. Since he would not be resuming the Chairmanship of Study Group XV, he wished to thank all those who had so ably assisted him during his term of office and to extend his best wishes to his successor.

The *Director of the CCITT* said that it would not be possible to publish the *Handbook on Open-wire Lines* before the end of 1977, since priority would have to be given to the *Orange Book*.

The *delegate of Italy* said that there was a discrepancy between the definitions of "dBm0" given, respectively, on pages 5 and 13 of Document AP VI-No. 14. He also drew attention to an error in one of the modifications proposed to Recommendation J.22 (Temporary Document No. 12, point 2.23); it was redundant to use the term "the level at a zero relative level" in conjunction with the symbol "dBm0".

The *Chairman* said that the Secretariat would take note of those comments.

The report by Study Group XV was *adopted*.

The *Chairman* thanked the Chairman, Vice-Chairman and members of Study Group XV for their valuable work and wished the outgoing Chairman every success for the future.

4. Report by the CMTT (Documents AP VI-Nos. 14 and 81)

The *Chairman of the CMTT* (Mr. Angel, France), a joint Study Group administered by the CCIR, said he had little to add to the remarks already made by the Chairman of Study Group XV on joint CCIR/CCITT activities.

The CMTT's work on the transmission of sound and television signals affected some of the J Series Recommendations of the CCITT; though it was concerned with both digital and analogue transmission, the work on the former was not sufficiently advanced for texts to be presented.

The Recommendations in Document AP VI-No. 14 had been taken into account by the Interim Meeting of the CMTT held in May 1976. Document No. 81 submitted CCIR Recommendations 502, 503, 504 and 505 which corresponded to Recommendations J.11, J.23, J.22 and J.21 of the CCITT; they had all been approved by the XIIIth Plenary Assembly of the CCIR and modified at the Interim Meeting of CMTT, and it was the modified texts now being submitted. He agreed with the point made by the delegate of Italy that expressions of certain unities should be aligned where necessary.

The *Vice-Chairman of CMTT* (Mr. Simpson, United Kingdom) added, in connection with Recommendation 502 (J.11, Hypothetical reference circuit for sound programme transmission) — now widened to include satellite as well as terrestrial services — that a similar revision was being undertaken with regard to television programme transmissions so that eventually there would be unity between the circuits defined for both services. The Recommendation was submitted because, by mutual agreement with Study Group XV, some of the J Series Recommendations were the responsibility of the CMTT. In other cases, for instance in connection with part of Study Group IV's report, material from CMTT had been used but not reproduced exactly; there was perhaps a case for aligning the procedures followed by Study Groups XV and IV.

The *Chairman of CMTT* then described unofficially the status of the work of CMTT and particularly aspects relating to television transmission.

CCIR Recommendations 421 and 451 (J.61 and J.62 of the CCITT) concerned transmission of television signals over hypothetical reference circuits of 2500 km plus indications for different lengths; since the origin of those Recommendations (1959 and 1966) there had been a concern for standardization and CMTT had gradually reviewed the situation by developing a CCIR Report (486) supplemented at its various meetings. At the end of the 1970-1974 study period the CMTT had expressed the opinion that the Report should be converted into a Recommendation but it was not yet at a sufficiently advanced stage. It was only at the May 1976 Interim Meeting that CMTT produced a draft Recommendation (AA-CMTT) but it would not become official until it had been approved by the next Plenary Assembly of the CCIR. It would have been premature to transmit the proposal for deletion of Recommendations J.61 and J.62, but the next CCIR Plenary Assembly would no doubt issue a Resolution, abolish 421 and 451 and forward a report to the CCITT proposing corresponding action.

A second draft Recommendation (AB-CMTT) had also been produced. The relationship between CMTT and CCITT was less clearly defined than between CMTT and CCIR, but at its Interim Meeting the CMTT had proposed the formation of a small permanent working group to study working methods, and he proposed to put that matter to it, in association with the Directors of the two CCIs. A text could then be prepared at the final meeting of CMTT in about one year's time.

The *Chairman of CMTT* thanked the Chairmen of the Working Parties, the Vice-Chairmen and all the members for their assistance. The *Director of the CCITT* expressed his satisfaction at the presence of the Chairman of the CMTT at the CCITT Plenary Assembly which was effective demonstration of the excellent cooperation existing between the CCIs at the Joint Study Group level.

The Report of the CMTT was *adopted*, and the *Chairman* thanked the Chairman, Vice-Chairman and all its members.

5. Report of Study Group IV (Documents AP VI-Nos. 26, 27, 28, 29, 30 and 107)

The report was introduced by the *Chairman of Study Group IV* Mr. Kiil, Denmark), who pointed out that the progress of work in Study Group IV depended largely on the activities of the other Study Groups drawing up specifications. He drew attention to the main categories of the Study Group activities and the fact that numerous Recommendations had been revised with a view to simplification and reduction of routine maintenance procedures. He thanked the representative of COMSAT and of the EBU who had given valuable assistance and said he would continue to count on their cooperation. He thanked the Chairmen of Study Group IV Working Parties, the Editing Group which had met several times, the special rapporteurs and Vice-Chairman, those delegates who had taken on the responsibility of drafting new Recommendations, the Chairman and Vice-Chairman of Study Group XIII for their efficiency and cooperation and the CCITT Secretariat.

The *Chairman of Study Group XV* referred to the Note on page 69 of Document AP VI-No. 27 (new Recommendation M.910) which was another instance of division of responsibilities of the various Study Groups concerned. At his suggestion, it was *agreed* that the footnote should be reworded as follows:

"...should continue to be studied by Joint Working Party LTG in close cooperation with Study Groups IV, Special A and XV."

The *Chairman* thanked the Chairman of Study Group IV for introducing the report and the Vice-Chairmen, Working Party Chairmen and all participants in Study Group IV.

6. Report by Study Group V (Document AP VI-No. 72)

The report was introduced by the *Vice-Chairman of Study Group V* (Mr. Gratta, Italy), in place of Dr. Riedel who had retired. He reviewed the list of Questions and explained the present state of studies.

He drew attention under Question 25/V to studies concerning the advisability of increasing the limiting value of induced voltage permitted on a telecommunications line under high reliability power-line fault conditions. The Study Group had been unable to recommend a change at present and study would continue but in the meantime Administrations which so wished could of course use a higher limit on their own initiative.

The English version of the table on page 26 would be aligned to the French in the final publication.

The report of Study Group V was *adopted* and the *Vice-Chairman* thanked all members and those who had contributed to its work.

The *Chairman* thanked the Vice-Chairman for his presentation of the Study Group's report, the special rapporteurs and all members. He also asked the Federal German Administration to forward the Plenary Assembly's thanks and good wishes to Dr. Riedel, former Chairman.

The meeting rose at 1240 hours.

ANNEX 1

Statement by the International Press Telecommunications Council (IPTC)

It is perhaps presumptuous for a representative of an international organization to intervene a second time during the course of a Plenary Assembly which consists largely of governmental delegations, and I am at some additional disadvantage — for which I must seek your forbearance — in not knowing whether my remarks are in order. Yet I do speak with the foreknowledge of the Chairman of Study Group III.

First, Mr. Chairman, I trust you will allow me to begin by congratulating Mr Burtz, whose skill and diplomacy as a chairman are legendary, and his colleagues for revising the D Series Recommendations to their own satisfaction. If these Recommendations are not entirely to the satisfaction of the press, particularly where they suggest that requirements for circuits for private lease may be subordinated to the claims of the public networks, it remains a very considerable achievement that Administrations from all over the world should agree upon the texts of a series of Recommendations covering so contentious a subject as general tariff principles. Yet if an agreement on general tariff principles is essential to the good order and regulation of the international telecommunications service, I remain impenitent in my belief that man cannot live by general tariff principles and by technical recommendations alone. What we may also need to do is to probe far deeper into the social, economic and above all the human implications of telecommunications. What, after all, is the mission of those who serve this cause of ours? I would say that it is to provide the best in telecommunications to the maximum number of people at a price each can afford. This, admittedly, is far easier to say than to achieve, for inherent in the achievement is not only the availability of the necessary resources but the reconciliation of the differing interests not only of the various telecommunications Administrations but of the people whom they serve.

There is a pressing need to know far more precisely than we know today what may be the effect of a revised tariff principle here or the exercise of a discretionary policy there upon the use and even the development of international telecommunication as a means of bringing the human family closer together. We need to be able to give better advice to governments about how to develop their telecommunications systems to meet the growing expectations of their people. This is not to deprecate in any way the work of the CCITT nor the assistance of the ITU, whether alone or in conjunction with UNDP, to many developing countries. These endeavours are an inspiration to us all. Yet what is wanted may be something more than aid and training. We may also need to tender advice on how telecommunications may benefit the majority as economically as possible.

What I would therefore propose is a new autonomous working group which would examine how to make the wisest use of present and future resources. This would identify those human needs which must be taken into account in the operation and development of future telecommunications. These could include the requirement of the sick and the elderly for a telephone, the role of telecommunications in resolving the problems of economic isolation and human loneliness and whether its contribution to the raising of living standards could be improved. The working group would clearly not produce Recommendations but only position papers, and its role would be to serve among many things as a clearing house where telecommunications Administrations could benefit from each other's experiences in tackling problems of this kind.

ANNEX 2

Statement by the International Air Transport Association (IATA)

IATA has followed the activities of Study Group III and its working groups with great interest, and takes this opportunity to record its acknowledgement of the hard work performed during the study period by the Chairman, the Vice-Chairmen and the Committee members.

During the study period just concluded, IATA has attempted to secure a rewording of paragraphs 5.1, 5.2 and 5.7 of Recommendation D.1 which, taken together, permit restriction of a customer's freedom to lease a circuit for his own business needs and could require him both to use someone else's switching equipment rather than his own and to locate such equipment on someone else's premises where he would have little control over the operation and costs, limited surveillance (if any) and probably difficulty of access to the operating site. These possibilities seem to be at variance with the desire to facilitate the advance of technology and the use of modern methods of operation and management, as well as with the need to meet the specific requirements of customers as stated in paragraph 1.1 of Recommendation D.1.

The rapid exchange of information is important within an airline and among airlines, in order to provide maximum safety and regularity of public air transport and to improve efficiency and service to the public. Moreover, the introduction on a global scale of wide body aircraft necessitates optimum use of these aircraft and a tight control of flight movements. Leased customer networks, in IATA's opinion, continue to provide the best way of meeting airline requirements.

Since application of paragraphs 5.1, 5.2 and 5.7 of Recommendation D.1 would render it more difficult, if not impossible, for Member Airlines to execute their responsibilities for operational control in accordance with the obligations prescribed in Annex 6 to the Chicago Convention on international civil aviation and/or as required by their State of registry, IATA finds itself obliged to state its continued deep concern with these paragraphs. IATA hopes that in the next study period they will be revised to allow a customer to make his own choice of Administration-provided transmission facility, to lease circuits and arrange his own network, and to provide and operate his own information switching equipment if desired.

NINTH PLENARY MEETING

(Minutes as amended in the fifteenth Plenary Meeting)

Monday, 4 October 1976, at 0905 hrs

Subjects discussed:

1. Approval of the agenda for the week of 4-8 October 1976
2. Report by Study Group VI
3. Report by Study Group XIII
4. Report by Joint Working Party LTG
5. Report by Special Study Group C

1. Approval of the agenda for the week of 4-8 October 1976 (Document AP VI-Temp. 25/PLEN.)

Approved.

2. Report by Study Group VI (Documents AP VI-Nos. 70 and 79)

The *Chairman of Study Group VI* (Mr. Walters, United Kingdom) said that apart from the specific replies to Questions, the work of the Study Group had resulted in a revised text of Recommendation L.4 on aluminium cable sheaths. Also the draft of a booklet *Jointing of plastic sheathed cables* prepared by the Editing Group under Question 4/VI was now ready for publication; since the information it contained would soon be superseded owing to rapid technical advances, Administrations were invited to supply additional data for publication, but it was stressed that such data must be based on laboratory tests and field experience. Studies on protection from attacks by insects, rodents or bacteria, had been extended to include attacks by micro-organisms. Further additions and amendments to the booklet *Recommendations concerning the construction, installation and protection of telecommunication cables in public networks* were now proposed in addition to those mentioned in ITU Circular No. 125. The corrosion caused by stray alternating currents, the study of which had continued for over a decade, had now been shown to be so small that it was almost insignificant. It had taken a very long time to come to a conclusion which was reached on the basis of many laboratory and field tests and particularly as a result of a Symposium organized by the Swiss PTT in Berne in 1975. There was now a Series L Recommendation on the subject. Other handbooks had also been completed dealing with lightning and earthing, though these were largely the work of Study Group V, with some assistance from Study Group VI.

Finally, Document AP VI-No. 79 had been received after the publication of the Study Group's final report. It had originally been a proposal by the United Kingdom to amplify Question 13/VI and had related to buried structures only, but had now become a proposal by the Federal Republic of Germany extending also to submerged structures. He had thought it unwise to postpone consideration of the matter until the next Plenary Assembly, because of activity in many oceans, especially in the North Sea, where oil and gas pipelines were laid on the sea bed over and under existing telecommunication cables and raised problems connected with cathodic protection. The question would be modified along the lines proposed by the Federal German Administration.

The *delegate of Australia* said that the reference to his country in the first paragraph of point 3 of the Annex to the reply to Question 2/VI was now inaccurate and that he would hand in an appropriate amendment to the Secretariat.

The *delegate of the U.S.S.R.* congratulated Study Group VI on its excellent report and expressed best wishes to the Chairman of the Study Group for all health and happiness in his retirement.

The report by Study Group VI was *approved*.

3. Report by Study Group XIII (Documents AP VI-Nos. 28, 31, 32 and 34)

The *Chairman of Study Group XIII* (Prof. Kuhn, Poland) said that the 15 Questions could be divided into five thematic groups : three on creation of telephone networks, three on maintenance, one on network management, three on traffic engineering and grade of service, and five on network utilization. The most important ones were Questions 15/XIII and 1/XIII — the latter being the result of collaboration with Study Group IV. A Rapporteur had been appointed to study each Question with the help of a team of volunteer experts and to submit proposals to a permanent Working Party or to the plenary Study Group, where the matter was discussed again with a view to reaching general approval. Special working teams had been organized to deal with the most important Questions.

The *delegate of France* drew attention to Document AP VI-Temp. 7/PLEN., which contained a number of corrections to the report by Study Group XIII, and added that the French text of Questions 10/XIII and 13/XIII contained some ambiguities which should be corrected.

In reply to the *delegate of Japan*, the *delegate of Belgium*, speaking as Vice-Chairman of Study Group XIII, said that the new table on page 20 of Document AP VI-No. 32 would become applicable as from its publication in the *Orange Book*. The CCITT Secretariat would no doubt issue a circular on the subject.

The report by Study Group XIII was *approved*.

The *Chairman* reminded the Plenary Assembly that the Chairman of Study Group XIII was currently celebrating the thirtieth anniversary of his service with the CCIF and the CCITT. Indeed, Professor Kuhn had first participated as a delegate of Poland in the CCIF Plenary Assembly held in Montreux in 1946 and had subsequently served with great distinction on CCITT bodies, assuming the Chairmanship of Study Group XIII for the first time at the IIIrd Plenary Assembly. All participants in the current meeting would no doubt join him in wishing Professor Kuhn health and happiness in his forthcoming retirement.

The *Chairman of Study Group XIII* thanked the Chairman for his kind words.

4. Report by Joint Working Party LTG (Documents AP VI-Nos. 13 and 40)

The *Chairman of Joint Working Party LTG*, (Mr. Guillet, France) introducing the Working Party's report, drew attention to suggested amendments by Study Group IV concerning characteristics of leased circuits and now proposed some consequential modifications of Recommendation H.12, Parts A and B. With regard to Question 26/XV, although the question of limitation of out-of-band components did not strictly fall within the purview of the CCITT, being a largely national matter, the Working Party had thought it useful to continue to provide equipment designers with information on the legislation in force in different countries. Where Question 27/XV was concerned, modifications of permissible signal power levels on telephone-type circuits were being examined in cooperation with Study Groups IX and XIV and Special Study Group A. The study of Question 28/XV involved amendments to Recommendations H.14 and H.15 and proposals were made for a new Study Group XV Question on group propagation characteristics with respect to group modulation and transfer equipment; the Working Party also believed that some delicate problems of coordination, especially with Study Group IV, might usefully be considered by Committee B. Finally, some modifications to Recommendation H.52 were proposed in connection with Question 29/XV.

The report by Joint Working Party LTG was *approved*.

The *Chairman* thanked all the officers and participants in the Working Party for their excellent work.

5. Report by Special Study Group C (Documents AP VI-Nos. 2, 3, 5, 9, 10, 11, 12 and 95)

The *Chairman of Special Study Group C*, (Mr. Wirz, Federal Republic of Germany) introducing the report, said that the Study Group had held two meetings and that the two Groups of Special Rapporteurs had held two-day meetings before each meeting of the plenary Study Group. The final report on Questions assigned to the Study Group appeared in Documents AP VI-Nos. 2 and 3; the other documents were annexes and supplements to the report, except for Document AP VI-No. 95, a paper by Uganda which the plenary Study Group had not had time to deal with fully, but which would be re-submitted as a contribution from Uganda for the next study period. Finally, he described the status of each of the Questions assigned to Special Study Group C and summarized the present situation as regards their study.

The *Chairman of Study Group XV* pointed out that the proposed Recommendation G.XYZ set out in pages 42 *et seq.* of Document AP VI-No. 3 should be modified in the light of Study Group XV's proposed amendments to Recommendation G.222, given on pages 11 and 12 of Document AP VI-No. 38.

The *delegate of Uganda* said that those developing countries which were planning or installing systems for intercommunications with their neighbours should take a particular interest in Question 10/C, since the links concerned, in the case of PANAFTEL, could be very long, up to 10 000 kilometres. The Recommendations on hypothetical reference circuits had been drawn up some 15 years previously and might well need to be modified in the light of rapid technical advances and the increasing demand by customers for good quality service.

The report by Special Study Group C was *approved*.

The *Chairman* thanked all concerned for their excellent work.

The meeting rose at 1055 hours.

TENTH PLENARY MEETING

(Minutes as amended in the fifteenth Plenary Meeting)

Monday, 4 October 1976, at 1820 hrs

Subjects discussed:

1. Report by Special Study Group D
2. Report by Joint Working Party CNC

1. **Report by Special Study Group D** (Documents AP VI-Nos. 65, 66, 67, 80, 36 and 37 and Temporary Document No. 17)

The report by Special Study Group D was introduced by the *Chairman* (Mr. Irmer, Federal Republic of Germany); he noted that numerous questions had been proposed for Study Group D in Plenary Assembly contributions but would not comment on them for the moment unless requested.

He began with general comments on the activities of the Group during the current study period and then reviewed the questions and the progress made in their study. Some general principles and suggestions for future work were set out in paragraph 1.4 of Document AP VI-No. 65; they were probably valid for all other Study Groups and had therefore been re-stated in Document AP VI-No. 78 by the Director of the CCITT. They should be considered in the discussions on the allocation of Questions.

The *Chairman of Special Study Group D* concluded by expressing his appreciation to all delegates, to the Special Rapporteurs, the Vice-Chairman and the CCITT Secretariat.

The report was *adopted* and the *Chairman* thanked the Chairman, Vice-Chairman and all participants for their valuable work.

2. **Report by Joint Working Party CNC** (Document AP VI-No. 57)

The *Chairman of Joint Working Party CNC* (Mr. Gagliardi, Italy) introduced the report which covered studies on Question 13/D (Digital transmission systems over cable).

The *delegate of the U.S.S.R.*, noting the report with satisfaction, drew attention to the footnote on page 6 which was ambiguous in its reference to reduction of the number of cables. He referred to Document AP VI-No. 105 submitted by his Administration and proposed that the note read "....an attempt should be made to reduce the number of cables of the same conductor diameter as far as possible."

The *Chairman of JWP CNC* said that the U.S.S.R. proposal was acceptable.

The report by the Joint Working Party was *adopted*.

The *Chairman* congratulated its Chairman on the excellent way in which the Working Party had handled its task; he also thanked the Vice-Chairman and all participants.

The meeting rose at 1910 hours.

ELEVENTH PLENARY MEETING

(Minutes as amended in the fifteenth Plenary Meeting)

Tuesday, 5 October 1976, at 0905 hrs

Subjects discussed:

1. Report by Special Autonomous Working Party No. 3
 2. Report by Special Autonomous Working Party No. 5
 3. Report by Study Group XI
 4. Report by Study Group VII
1. Report by Special Autonomous Group No. 3 (Documents AP VI-Nos. 1 and 73)

The *Chairman of GAS 3* (Mr. Wallenstein, USA), introducing Document AP VI-No. 1, said it was important to bear in mind the fact, recognized by the Vth Plenary Assembly and cited on page 186 of Volume I of the *Green Book*, that "... the work of the GAS Groups is of interest to all countries and should not be considered merely an aspect of technical assistance for developing countries only". His predecessors in the Chair of GAS 3, Mr. Ben Abdellah and Mr. Aoud of Morocco, had contributed greatly to ensuring that that principle prevailed throughout the work of GAS 3 and that an attempt was made to harmonize the special interests of the developing countries with the general aspects of the problems dealt with in the *Transmission Systems Manual*. The principle was also reflected in the working methods of GAS 3. The actual writing of texts was entrusted to a small, tightly coordinated Editorial Group, since it had been found impracticable to discuss drafting matters in large meetings with interpretation. Moreover, the fact that most of the responsible authors did not use the working languages of the Union as their mother tongues had been found useful in overcoming some of the difficulties of having to dispense with interpretation. The Editorial Group comprised 30 people of 10 different nationalities, thus providing a sufficiently broad input base for the production of an impartial text approved by consensus.

The result of that work was the two-volume *Transmission Systems Manual* which had appeared earlier in 1976. Although that question was of primary concern to Committee D, he felt obliged to take the opportunity of conveying to the Assembly the disappointment of the authors at the possibility that the high price of the volumes or any other material obstacle would prevent the Manual from being used by the maximum number of readers.

With regard to the main changes in the new Manual, the especially dramatic progress in PCM systems had accounted for a large volume of work, and the help of Special Study Group D had been sought in obtaining volunteers to write new chapters. At the initiative of the Chairman of the Plan Committee for Asia and Oceania, the Vth Plenary Assembly had instructed GAS 3 to prepare texts on domestic and regional satellite systems, and certain sections had been duly brought up to date, rearranged and amplified. In the case of the comparatively new section on HF radio, the authors responsible for the text had decided that they needed further expert advice, and it was noteworthy that the Collective letter asking for that advice had elicited only one reply — which, however, had proved most useful.

It might be asked why a completely new edition of the Manual had been necessary. GAS 3 had explored every possibility of presenting its work as replacements for pages of the former edition, but had found that practically every page contained out-of-date passages, particularly in view of the decision that only standard international units should be used in Union publications, and there had been no alternative to revising the whole Manual. In the next study period, however, GAS 3's activities with respect to the Manual would be to prepare, in close cooperation with the interested Study Groups, material for incorporation in it after the VIIth Plenary Assembly.

Document AP VI-No. 73 in effect related to two new Questions requiring accelerated treatment. The *Handbook on Rural Telecommunications* could be ready for final processing by the Secretariat in mid-1977, although its approval for publication of course depended on the calendar of meetings. With regard to the texts on network planning, it would be seen from point 2.2 of the document that GAS 3 was seeking authorization to prepare a more comprehensive text on the subject. Present work is confined to updating the former GAS 2 handbook on local networks. These draft texts would be completed by the end of 1976.

As another important point, it should be recognized that GAS 3 also deals with radio transmission systems studied and recommended by the CCIR. The Chairman was happy to report excellent support from the CCIR Director and Secretariat.

The *Chairman of the Plan Committee for Asia and Oceania* said that his Committee, which had originated the study of the use of satellites for domestic and regional communications, congratulated GAS 3 on the work done and assured it of its cooperation in keeping the *Transmission Systems Manual* up to date.

The *delegate of Morocco* thanked the Chairman of GAS for his kind words about the previous Chairmen of the Working Party and said that his country was prepared to continue its participation in the work of GAS.

The *delegate of Roumania* said that his country wished to participate in the Working Party of GAS preparing the *Handbook on Rural Telecommunications* and would provide information on its own rural networks, which were generally characteristic of European networks. With regard to the *Handbook on Network Planning*, he drew attention to the fact that computer techniques should be used not only for calculating circuit requirements, but also for routing.

The *delegate of Lebanon* said that all the participating developing countries appreciated the work of GAS 3, which provided a good example for the newly-formed GAS 6.

The *delegate of Algeria* said that his delegation welcomed the stress on the universal interest of the work of GAS 3 and wished to participate even more actively in that work, in order to have some of its preoccupations reflected in the final texts. For example, although the references to the Canadian domestic satellite system in the *Transmission Systems Manual* were interesting, Algeria did not believe that that system was suitable for use by the developing country and considered that satisfactory and cheaper solutions could be obtained with the INTELSAT and COMSAT systems.

The report by GAS 3 was *approved*. The *Chairman* thanked all concerned for their work.

2. Report by Special Autonomous Group No. 5 (Documents AP VI-Nos. 4, 100 and Temporary Document 15/PLEN.)

The *Chairman of GAS 5* (Mr. Longequeue, France) said he could only endorse the statement of the Chairman of GAS 3 that, in the context of GAS work, no differentiation whatsoever could be made between the developing and the developed countries: the problems were exactly the same for every country, whatever its level of telecommunication development, and every country could benefit from the experience of others. That consideration was fully reflected in GAS 5's working methods, under which the opinions of all countries were sought at every stage of the preparation of texts; the Questions assigned to GAS 5 by the Vth Plenary Assembly had thus been submitted to the whole group, the most competent authors and co-authors had been chosen, and the results of their work had again been reviewed and unanimously approved by GAS 5. In the early stages of the work, it had been observed that information was not readily available to all countries, and a questionnaire had been sent out with a view to preparing a simple, synoptic document showing how telecommunication economics functioned in all countries so that local experts could draw comparisons for themselves. Data from the *Yearbook of Telecommunication Statistics* were extensively used in that work.

Annex 2 to Document AP VI-No. 4 contained a list of the subjects proposed for study, which was tested against the information in Document AP VI-No. 100 on the response to those proposals. Questions from countries were dealt with as broadly as possible in GAS 5, which tried to ensure, first, that the Questions were fully understood and, secondly, that they were dealt with in the manner desired by the applicant. The nature of the subjects was also determined by usefulness to all countries; they might be roughly divided into studies which were both theoretical and had practical application and those which were exclusively practical. In that context, GAS 5 was certainly prepared to continue the study of conditions for the establishment of local switching equipment industries, as proposed by Lebanon in Document AP VI-Temp. 15/PLEN.

The *delegate of Lebanon* expressed his gratification at that statement and hoped that close collaboration would be established between GAS 5 and the newly-formed GAS 6.

In reply to the *delegate of Brazil*, the *Chairman of GAS 5* pointed out that the Handbook already contained a fairly comprehensive bibliography showing the various reference sources. On the other hand, the actual authors of texts remained anonymous because the publication was the joint product of GAS 5 as a whole.

The *delegate of Mali* said that the first paragraph on page 3 of Document AP VI-No. 100 gave the impression that African Administrations were not particularly interested in the Handbook, since they had bought relatively few copies. Perhaps that was due to inadequate information on the benefits of the publication, as was suggested in the fourth paragraph on that page; in any case, Mali regularly purchased the documents involved.

The *Chairman of GAS 5* said that Document AP VI-No. 100 contained an objective statement on the circulation of the Handbook. Of course, the price of the publication was a further obstacle to its availability. It was important to discuss in another forum the vital issue of ensuring easier access to a Handbook whose value largely depended on its universal use.

The report of GAS 5 was *approved*. The *Chairman* expressed thanks to all concerned in the work of the Group.

3. **Report by Study Group XI** (Documents AP VI-Nos. 17, 18, 19, 20, 21, 24, 30, 36, 37 and 98 and Temporary Documents Nos. 6 and 8)

The *Chairman of Study Group XI* (Mr. Ryan, United States) introduced the Study Group's final report and reviewed the progress achieved with regard to the 11 Questions allocated to the Study Group as well as to the subjects which it had examined in collaboration with other Study Groups. It would be seen that Study Group XI had been extremely active and its meetings had been very well attended. In that connection he appealed for an adequate number of meetings at convenient intervals to be authorized during the next study period. Despite considerable overlapping of the work of Study Group XI with that of other Study Groups, activities during the past study period had proceeded smoothly. He thanked all those concerned for their cooperation.

The *delegate of Niger*, after congratulating the Chairman and members of Study Group XI on their impressive work, referred to paragraph 2.2.5 of the revised specifications of Signalling System R2 (Document AP VI-No. 20, page 32) and wondered whether, since in principle the System R2 was specified for one-way working, it would not be more appropriate to consign the remainder of the paragraph to an annex.

The *Chairman of Study Group XI* said that he was somewhat reluctant at the present stage to modify the form of the revised specifications as drawn up by the Study Group; if it were really necessary, a small working party of Study Group XI would have to be called to deal with the passage in question.

The *delegate of Nigeria* associated himself with the congratulations addressed to the Chairman and members of Study Group XI in paragraph of the Annex to Question 11/XI (Document No. 21, page 123), he stressed the importance to the PANAFTEL countries of further study on the possible use of System R2 on satellite links.

The *delegate of Senegal* supported the previous speaker in urging Study Group XI to continue those studies which would encourage the development of telecommunications in the PANAFTEL region and, in particular, the study of the possible use of System R2 on satellite links, in submarine cables with 3 kHz band circuits.

The *Chairman of Working Party XI/1* (Mr. Rosenbrock, Federal Republic of Germany) assured the delegate of Nigeria that his remarks would be regarded as a request for interworking between Signalling System R1 and other Signalling Systems. The sentence in Annex 1 to Question E/XI to the effect should therefore be redrafted. As for the use of System R2 on satellite links, he believed that it was adequately covered by Question 11/XI.

The *delegate of Lebanon* associated himself with previous speakers in congratulating Study Group XI on the excellent work done.

The *Chairman* congratulated the Chairman, Vice-Chairmen, Chief Rapporteurs and other members of Study Group XI on their success and declared the report *adopted*, taking account of the comments made.

4. **Report by Study Group VII** (Documents AP VI-Nos. 54, 55, 56, 89 and 94)

The *Chairman of Study Group VII* (Mr. MacDonald, Canada), introducing the Study Group's report, stressed the rapid development which information processing had undergone over the past 10 years. Study Group VII, which had been in existence only since the previous Plenary Assembly, had already covered a great deal of ground, not least in proposing a list of 100 agreed definitions for approval and a further 100 terms for further study. The 25 Questions referred to the Study Group in 1972 had been somewhat hastily assembled; the new set of 33 Questions was more precise and, by the same token, would be more difficult to deal with. He emphasized the benefits of the close cooperation which existed between the Study Group and computer manufacturers, thanked his Vice-Chairmen and Chief Rapporteurs and the Director and Counsellors of the CCITT for their work and invited as many countries as possible to send contributions to Study Group VII during the next study period.

The *representative of the European Computer Manufacturers Association* expressed his appreciation of the excellent work done by Study Group VII as well as Study Groups VIII and Special A and assured them of his organization's continuing cooperation.

The *Chairman* noted that the report by Study Group VII was *adopted* unanimously, and thanked the Chairman, Vice-Chairmen, Chief Rapporteurs and all members of the Study Group for their highly successful efforts.

The meeting rose at 1240 hours.

TWELFTH PLENARY MEETING

(Minutes as amended in the sixteenth Plenary Meeting)

Tuesday, 5 October 1976, at 1710 hrs

Subjects discussed:

1. Report by Study Group XIV
2. Report by Special Study Group A
3. Report by Study Group VIII
4. Report by Study Group IX

1. **Report by Study Group XIV** (Document AP VI-No. 35)

The *Chairman of Study Group XIV* (Mr. Stephenson, United Kingdom) introduced the Study Group's report, describing the work done and conclusions reached on each of the Questions. Summing up the study programme proposed for the next study period, he said that five Questions had been deleted, four revised in order to take into account the work already done and the additional studies required, and four new ones drawn up. In conclusion, he thanked the Vice-Chairman, Special Rapporteurs and members of the Study Group as well as the CCITT Secretariat for their invaluable help throughout the study period.

The *representative of the International Press Telecommunications Council (IPTC)* congratulated the Chairman and members of Study Group XIV for the progress achieved on a subject which was of major importance from the standpoint of both the public and the press. The active cooperation of equipment manufacturers in the Study Group's work was an excellent example of how private interests could be subordinated to the general interest of improving communications. He observed, however, that the progress achieved was in the field of subscriber-to-subscriber services only. There was an equal need for progress in the field of public, and particularly international, facsimile services, and he expressed the hope that more attention would be focused on that aspect during the next study period.

Replying to a question by the *delegate of Canada* concerning the proposal to abandon the study of Question 8/XIV "for the time being" (Document AP VI-No. 35, page 25), the *Chairman of Study Group XIV* said that that phrase had been used because the Group had considered that the Question might be reintroduced into the study programme at the next Plenary Assembly should the need arise.

The Report by Study Group XIV (Document AP VI-No. 35) was *adopted* unanimously.

The *Chairman* thanked the Chairman, Vice-Chairman and members of the Study Group for their excellent work in an important and interesting field.

2. Report by Special Study Group A (Documents AP VI-Nos. 43 and 44)

The *Chairman of Special Study Group A* (Mr. Vaughan, United States of America) introduced the Study Group's report. Supplementing the information contained in Document AP VI-No. 43, he said that apart from the three Vice-Chairmen of the Study Group, who had acted as Chairmen of the three main Working Parties, eight Special Rapporteurs had met as required during the Study Group meetings and had also performed a considerable amount of work by correspondence. Furthermore, several *ad hoc* working groups had been set up in the course of the Study Group meetings to deal with specific issues. With regard to Study Point 3 and the updating of the *List of Definitions* (page 5, Section 2), he said that a sentence should be added at the end of the Section to the effect that the Chinese Administration had stated its intention to assume responsibility for the translation and editing of a Chinese text once work had been completed on the English, French and Spanish drafts.

Two working groups had been involved in the study of Point O (pages 9-13), which accounted for a large share of the Study Group's work. With regard to new draft Recommendation V.29, he was happy to announce that the Administrations of Canada and the United Kingdom had both withdrawn their reservations concerning the 9600 bit/s modem (page 11) as they had been able to reach agreement with the manufacturer in question.

Very close collaboration had been maintained with Study Group IV in respect of the work done on Point U (pages 14-16). As a result of the agreement reached under Point O to recommend modems with automatic adaptive equalizers, the Study Group had concluded that it would need to request Study Group IV to draw up more lenient specifications for leased lines.

The comparative tests of modems for use over telephone-type lines (Point AD, page 19) should be of great value to countries which were not in a position to manufacture modems themselves. In that connection, the Study Group would have to make some amendments to existing Recommendations in the next study period.

With regard to Point AE (pages 20-21), he drew attention to new Recommendations V.10 and V.11, which catered particularly for circuits with large-scale integrated circuit equipment. Turning to Document AP VI-No. 44, he said that the legend under Figure 8 on page 45 should be altered to read: "An example of interconnection of signal common return".

Point AH (page 21), which concerned the transmission of electrocardiograms, was particularly interesting from the humanitarian point of view. In the view of the Study Group, it would be desirable to standardize the modem, gain some experience in its use by the medical profession and then possibly move towards digital transmission.

All the draft Recommendations in Document AP VI-No. 44 had been unanimously approved by the Study Group, with the exception of the two reservations to which he had referred earlier and which had now been withdrawn. Finally, he wished to thank all those who had made the work of the Study Group and the preparation of its report possible.

The *representative of the International Organization for Standardization (ISO)* said that the ISO technical committee which had collaborated in the Study Group's work on interchange circuits (Point AE) would continue to devote the necessary attention to that subject. His organization wished to express its gratitude to both Special Study Group A and Study Group VII; thanks to their work, the quality, performance range and reliability of telecommunication facilities had been improved, users — who were represented collectively in ISO — had been offered a wider choice of facilities, and more traffic had been generated.

The *delegate of India* considered that the adoption of draft Recommendation V.29 concerning a 9600 bit/s modem (Document AP VI-No. 44, pages 125-139) should perhaps be deferred until the question of patent policy had been discussed.

The *Chairman of Special Study Group A* observed that draft Recommendation V.29 was only one of a number of Recommendations which might involve patents and that several such Recommendations had been adopted in the past without any difficulty. While he recognized the need for a general CCITT patent policy, he considered that it would perhaps be unwise to enter into a detailed discussion of that issue in relation to only one portion of one draft Recommendation. If the patent policy upon which agreement was finally reached contradicted the terms of Recommendation V.29 in any way, the latter would obviously have to be reconsidered, but that eventuality need not necessarily prevent it from being adopted at the current Assembly.

The *delegate of the Netherlands*, speaking as Chairman of Committee A, said that Committee A had decided that the question of patents, which had given rise to some discussion, was outside its terms of reference and should therefore be referred to the Plenary Meeting. A statement to that effect had been included in the Committee's report to the Plenary.

Following some further discussion, in which the *delegates of Australia, the U.S.S.R., India* and the *Chairman of Special Study Group A* took part, it was *decided* that the question of patents would be discussed at the same time as Committee A's report.

The report of Special Study Group A was *adopted*, taking into account the comments made on the question of patents.

The *Chairman* thanked the Chairman, Vice-Chairmen and members of Special Study Group A for their valuable work.

3. Report by Study Group VIII (Document AP VI-No. 25)

The report was introduced by the *Chairman of Study Group VIII* (Mr. Baggenstos, Switzerland). He remarked that the terms of reference for the Study Group appeared very general but in 1972 the choice of data terminal equipment had been limited and Administrations were not sure of the services they could provide using Telegraph Alphabet No. 5. Question 9/VIII had been supplemented by a number of provisions in the course of the study period. Specialists dealing with peripheral equipment had to consider the effects of the past, the standardization possible at present and the provision of directives for further study. It was evident that teleprinters were rapidly becoming more sophisticated and making increasing use of computers. A number of revisions had therefore been proposed to the Recommendations. Study Group VIII had also taken the opportunity to make some drafting amendments and to group associated provisions into a single Recommendation, e.g. S.3, S.3 *bis* and S.3 *ter* and S.6, S.6 *bis* and S.6 *ter* became S.3 revised and S.6 revised respectively.

At the Plenary Assembly in 1968 a speed of 200 bauds was considered respectable; since then 300 bauds had been standardized and that had been taken into account by supplementing Recommendations X.30, X.31 and X.32. Many problems still remained, particularly in connection with error detection. Certain command characters for example had to be clarified and the correspondence between Alphabets Nos. 2 and 5 had to be considered to convert them either at the network or at the peripheral equipment level.

More and more terminal display equipment was being connected to telecommunication networks and Study Group VIII was working towards a Recommendation; during the current study period certain results had been obtained but the elements collected needed to be worked on until the next Plenary Assembly. All those outstanding Questions constituted the work programme proposed in Part IV of the report.

The *representative of the International Standards Organization (ISO)* noted the developments in the state of the art of display terminals, at telex speed and at higher transmission rates. He apologized for a certain lack of contributions from the various sub-groups of ISO Technical Committees working in the same areas but he proposed to remedy that within the ISO. He emphasized that definition of data terminal equipment would also need careful revision. Question 9/VIII was perhaps not intended to apply to a terminal which consisted of a vast computer system but that should be clarified in the next study period.

The report of Study Group VIII was *adopted*, and the *Chairman* thanked the Chairman of the Study Group, the Vice-Chairman and all its members for the excellent work achieved.

The *Chairman of Study Group VIII* took the opportunity, on retiring as Chairman after twelve years, of expressing his gratitude first to the delegates who had assisted in the Study Group's work, the Vice-Chairman and the CCITT officials for their advice and support. He also thanked his colleagues in the ISO who had made such a great contribution to the results obtained and the Plenary Assembly for the mandate conferred on him in 1964 which had afforded him interesting and valuable experience.

4. Report by Study Group IX (Documents AP VI-Nos. 6, 7, 8, 64 and 74)

The *Chairman of Study Group IX* (Mr. Brown, Australia) presented the report, noting that certain purely editorial corrections would be dealt with by the Secretariat.

He referred first to the three Questions which had been considered urgent: Question 2/IX, for which detailed proposals had been conveyed to Joint Working Party LTG which would coordinate with Study Groups XV and IV; Question 24/IX, for which a new draft Recommendation (R.101) had been drawn up; Question 31/IX, which had led to draft Recommendation R.111. All those Questions required further study. Three other draft Recommendations had been prepared (R.50 *bis*, R.58 *bis* and R.79 *bis*) and the nine already existing had been amended. It was proposed to delete six because they were obsolete.

Six Questions were to be deleted, the texts of the remaining eight had been amended and seven new Questions added, making a total of fifteen to constitute the work programme for the coming study period. The Study Group had had some discussions on the question of patents but did not consider there was any item which prevented acceptance of the R Series Recommendations as proposed. Finally, he mentioned the successful completion of the work on automatic telegraphy maintenance carried out by the Joint Working Party MAT and congratulated its members on their difficult and lengthy task. The Chairman of the Study Group, speaking on behalf of the Vice-Chairman and members as well as for himself, thanked the members of the CCITT Secretariat, ably led by Mr. Croze, for their assistance in the course of the study period.

The Report was *adopted*.

The *Chairman* congratulated the Chairman of the Study Group on his excellent presentation and asked him to forward the Assembly's thanks to the Vice-Chairman and all those who had participated in Study Group IX.

The *Chairman of Study Group XV* said that as the deletion of certain Recommendations in the R Series had been agreed with adoption of Study Group IX's report, he took it that Recommendation H.23 referred to in the report by the LTG Joint Working Party could also be deleted. It was so *agreed*.

The meeting rose at 1910 hrs.

THIRTEENTH PLENARY MEETING

(Minutes as amended in the sixteenth Plenary Meeting)

Wednesday, 6 October 1976, at 0905 hrs

Subjects discussed:

1. Report by Study Group X
2. Report by Study Group XII

1. Report by Study Group X (Document AP VI-No. 16)

The *Chairman* said that the report would be introduced by Mr. Daniels (United Kingdom), one of the Vice-Chairmen, owing to the illness of the Chairman, Mr. Jansen (Netherlands).

The *Acting Chairman of Study Group X* said that three meetings of the Plenary Study Group had been held during the past study period, as well as one combined meeting of the Working Parties and a joint meeting of the Signalling Working Party of Study Group X and the Sub-Group on Decentralized Signalling of Study Group VII.

Part II of the report gave replies to the Questions set by the Vth Plenary Assembly and to two Questions set for study in 1974 by the Circular letter procedure under No. 190 of the Montreux Convention.

It would be seen that the study of Question 8/X on Type C signalling and Question 11/X on automatic maintenance tests of telegraph circuits had been concluded and that Joint Working Party MAT had therefore been disbanded.

With regard to Part III of the report, the Recommendations relating to signalling standards — U.1, U.11 and U.12, relating to Types A, B and D signalling — had been reproduced in their entirety both to assist the Secretariat in the publication of the *Orange Book* and, primarily, to provide members of the Study Group with the final version of the texts on which ongoing studies would be based.

Part IV showed the status of the Questions and the amendments proposed to those on which studies were to be continued. The two Questions that had been completed were also included, as well as four new Questions.

The report by Study Group X was *approved*.

The *delegate of the Netherlands* said that his delegation wished to thank the Vice-Chairmen of the Study Group, Mr. Faugas (France) and Mr. Daniels (United Kingdom), for acting on Mr. Jansen's behalf during the period of his illness.

The *Acting Chairman of Study Group X* expressed the Study Group's great appreciation of Mr Jansen's valuable work and said that Mr. Jansen had wished to associate himself with the Group's best wishes to Mr. Faugas (France), who was about to take his retirement.

2. Report by Study Group XII (Documents AP VI-Nos. 23 and 63)

The *Chairman of Study Group XII* (Mr. Andrews, United States of America) introducing the report, said that Study Group XII had cooperated with Study Group XVI in modifying four Series G Recommendations. That work had already been described in the presentation of the report by Study Group XVI; it would be recalled that during that discussion the USSR delegation had suggested the addition of a note to Recommendation G.111, urging planners, especially those concerned with digital networks, to use the new reference equivalent in their planning. He fully endorsed that suggestion.

Study Group XII had also prepared four new Series P Recommendations, three of which were particularly significant, being designed to establish an objective method of assessing loudness ratings for telephones and telephone connections, in order to decrease dependence on the subjective tests of the CCITT Laboratory, which required teams of specialized operators.

The fact that the Study Group had completed none of its 18 Questions was due to the nature of work on transmission quality, for which no final answers could be obtained, in view of the constant evolution necessitated by the ever higher standards of performance expected by telephone subscribers. On the other hand, significant advances could be expected during the next study period, particularly in connection with Question 4/XII on the effect of circuit noise on transmission.

Of the three new Questions proposed, the one on recommended values for loudness ratings was the most significant: the Study Group intended to begin to examine the changes that would have to be made in many existing Recommendations which would be affected by new loudness ratings.

The report by Study Group XII was *approved*, and the *Chairman* asked for thanks to be conveyed to all concerned.

The *Chairman* announced that the Plenary Assembly had concluded the examination of the reports of Study Groups and Joint Working Parties.

The meeting rose at 0945 hours.

FOURTEENTH PLENARY MEETING

Thursday, 7 October 1976, at 0910 hrs

Subjects discussed:

1. Appointment of Chairmen and Vice-Chairmen of Study Groups
 2. Report of Committee A
 3. CCITT patent policy
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1. **Appointment of Chairmen and Vice-Chairmen of Study Groups** [Temporary Documents Nos. 26(Rev.1), 38 and 39]

The *delegate of France* said that, in agreement with the Chairman of Study Group XVIII and the Australian delegation, his delegation withdrew its candidate for the office of Vice-Chairman of Study Group XVIII in favour of Australia.

The *delegate of Australia* confirmed that his Administration wished to propose Mr. H. S. Wragge as a Vice-Chairman of Study Group XVIII.

It was so *decided*.

The *delegate of Denmark*, speaking as Chairman of Study Group IV, said that after consultation with a number of delegations, he was happy to propose Mr. H. Mulder (Netherlands) for the office of Vice-Chairman of Joint Working Party LTG.

The *delegate of Spain* said that, following consultations with the delegations of Denmark and the Netherlands, his delegation supported the candidacy of Mr. Mulder and would not press the proposal made by several delegations at an earlier stage of the Assembly that Mr. Ferrer (Spain) should be appointed Vice-Chairman of LTG.

The proposal by the Chairman of Study Group IV was *adopted*.

The *delegate of Lebanon* proposed the candidacy of Mr. Abdelnader (Lebanon) for the office of fourth Vice-Chairman of GAS 6.

It was so *agreed*.

The *delegate of Kenya* said that the African Group had agreed, by a majority but without taking a vote, to support the candidacy of Mr. A. D. Aithnard (Togo) for the office of Chairman of the TAF Group (Temporary Document No. 39).

The *delegate of Mali* confirmed that the African Group had not taken its decision unanimously but by a majority. At the IVth Plenary Assembly in 1968 Mali had been asked to take on the Chairmanship of the TAF Group and Mr. Sidibe had been appointed to that office. In 1972, the Vth Plenary Assembly had adopted the Recommendations submitted to it by the TAF Group and Mr. Sidibe had been congratulated on the able way in which he had conducted the Group's work. Mr. Sidibe had also contributed actively to the PANAFTEL meeting held at Kinshasa in 1975. Under those circumstances, his Administration had perhaps not been entirely unjustified in considering that it might continue to provide the Chairman for the TAF Group. The fact that his Government had entrusted other duties to Mr. Sidibe and proposed the candidacy of Mr. Komou instead was irrelevant, since a question of principle rather than of individuals was involved. His delegation did not oppose the candidacy of Mr. Aithnard (Togo), whose ability to conduct the work of the TAF Group was not in question, and should the Plenary Assembly decide to accept the proposal by the African Group, his Administration would agree to take notice of that decision.

The *Director of the CCITT* said that given the size of the African continent it would not be inappropriate for the TAF Group to have two Vice-Chairmen. He therefore proposed that Togo, Kenya and Mali should provide, respectively, the Chairman and two Vice-Chairmen of the Group.

The *delegate of Mali* observed that his delegation had not proposed a candidate for the office of Vice-Chairman. However, he would consult his Government on the question of Vice-Chairmanship of the TAF Group and inform the Assembly of its decision.

The *Director of the CCITT* drew attention to errors in the spelling of some of the names in the list of Chairmen and Vice-Chairmen. He requested delegations to bring any other errors to the attention of the Secretariat and also to provide the initials of candidates where they were missing from the list.

The *Chairman* said that if he heard no objection he would take it that the Plenary Assembly agreed to adopt the list of Chairmen and Vice-Chairmen (Temporary Document No. 26), taking into account the modifications which had been discussed.

It was so agreed.

The *delegate of Japan* thanked the Assembly for the honour shown to his Administration in appointing Mr. Kojima to the office of Chairman of Study Group III.

The *delegate of Italy* thanked the Assembly for entrusting a number of Chairmanships and Vice-Chairmanships to Italy. He considered that the meeting of Chairmen and Vice-Chairmen scheduled for Monday 11 October next should be held on Saturday 9 October instead and limited to a preliminary exchange of views. A further meeting, to be attended only by the Chairmen and Vice-Chairmen of Study Groups whose work was interconnected, might then be held during the course of the coming months.

The *Director of the CCITT* said he did not believe that it would be possible to bring forward the meeting scheduled for Monday 11 October without causing considerable inconvenience to delegations. One of the main objects of that meeting was to draw up a precise schedule of Study Group meetings for the next year. In view of the limited credits available, it seemed unlikely that the further meeting suggested by the Italian delegate could be organized.

2. Report of Committee A (Temporary Documents Nos. 7/COM A and 33)

The *Chairman of Committee A* introduced the Committee's report (Temporary Document No. 7/COM A), drawing attention to the two Annexes, the first of which (Temporary Document No. 33) contained the report of the Working Party on Resolutions and Opinions and the second of which consisted of the minutes of the Committee's meetings (Temporary Documents Nos. 1, 2, 4, 5, 6 and 8 in the COM/A series).

The *Chairman* invited the Assembly to consider the report section by section.

Introductory section (page 1)

Approved.

Section 1

The *Chairman of Committee A* said that a new point concerning supplements should be inserted after point 1.3 and that points 1.4 to 1.7 should be renumbered accordingly. Subject to any editorial changes which the Secretariat might wish to make, the text of the new point would read: "Supplements of a purely documentary nature which already appear in the *Green Book* will not be reprinted in the *Orange Book*; however, the *Orange Book* will contain references to the places where these texts may be found in the *Green Book*."

Section 1, as amended, was *approved*.

Section 2

Approved.

Section 3

Approved.

Section 4

The *delegate of Canada*, speaking as Chairman of Study Group VII, considered that the text of point 4.1 should be altered in order to take into account the fact that Study Group VII had always followed the practice of providing the information to which reference was made.

The *Chairman of Committee A* suggested that, in order to meet the wishes of the Chairman of Study Group VII, the words "Study Groups I, II and VII" should be replaced by "Study Groups I and II", and that a new sentence along the following lines should be added at the end of the point: "This procedure has already been followed in the past by Study Group VII".

It was so agreed.

The *Director of the CCITT* said that SGO should be added to the Joint Working Parties mentioned in point 4.5.

The *Chairman of Committee A*, referring to point 4.8, said it was his understanding that Joint Working Party CNC had now been disbanded.

The *delegate of Italy*, referring to the list of Study Groups under point 4.11, suggested that the words "and accounting" should be added after "Tariffs" in the title of Study Group III.

The *Chairman of Committee A* suggested that the question raised by the Italian delegate should be deferred until the Assembly considered the report of Committee B.

It was so agreed.

The *Chairman of Committee A* said that the references in brackets after the titles of Study Groups XVII and XVIII should both be to "4.6" and not to "4.7". The reference after the title of CMBD in the list of Joint CCITT/CCIR Study Groups should be to "4.7" and not to "4.8". GM CNC should be deleted from the list of Joint Working Parties.

The *delegate of France*, referring to the list of Joint Working Parties, said that it would be useful to indicate in some way which Study Group controlled each Joint Working Party. Furthermore, he suggested that the reference in brackets after the title of SMM in the list of Joint Working Parties should be altered to read "(SG I, II and III)".

It was so agreed.

The *Director of the CCITT*, referring to point 4.13, suggested that the reference to Temporary Document No. 15 should be deleted, since temporary documents were neither published nor distributed subsequent to the meeting for which they had been produced.

It was so agreed.

Section 4, as amended, was approved.

Section 5

Approved.

Section 6

Approved, subject to further discussion of the patent policy question in the Plenary.

Section 7

Approved, subject to the insertion of the words "from the General Secretariat" after "15 September 1976" in the heading and after "Circular-letter No. 129" at the end of the text.

Annex 1 (Temporary Document No. 33)

The *delegate of France* proposed that the whole document should be referred to the Editorial Committee in order to remove the discrepancies between the English, French and Spanish texts. Referring to Section III, he said that the text of paragraph 1.d) did not accurately reflect the decision which had been taken by the Working Party.

The *delegate of Canada*, speaking as Chairman of the Working Party, said that the paragraph to which the French delegate had referred should be redrafted to read: "A Joint Working Party set up with the approval of the Plenary Assembly shall submit draft Recommendations to the Study Group which will be designated by the Plenary Assembly establishing it." He also drew attention to minor corrections to be made in the preceding paragraph 1.c) and in paragraph 8.h).

Annex 1, as amended, was approved subject to editorial changes.

Annex 2 (Minutes of the Committee's meetings)

The *delegate of the United States of America* said he believed that it would be a departure from previous practice to annex the minutes of the Committee's meetings to the report. He asked whether the CCITT Secretariat was prepared to reproduce the documents in question as annexes.

The *Director of the CCITT* said that the Secretariat would have no objection to doing so, should that be the wish of Committee A.

The *Chairman of Committee A* said it would be very useful for officials in Administrations who had not attended the Assembly to have at their disposal fuller information about the Committee's discussions than it had been possible to include in the body of the report. It was for that reason that he considered that the minutes should be annexed to the report.

The report of Committee A as a whole, as amended, was *approved*.

3. **CCITT patent policy** (Documents AP VI-Nos. 8, 60 and 68 and Temporary Documents Nos. 4, 10, 17, 30, 32 and 41/PLEN.)

The *Chairman of Committee A* drew attention to point 6 of his Committee's report and added that a number of delegations had expressed the view that the complex issues involved not only fell outside the competence of Committee A, but might indeed be impossible for a meeting of telecommunication experts to solve. The Committee had decided to submit the problem to the Plenary Assembly.

The *delegate of the United Kingdom* said that the proposal appearing in Temporary Document 30/PLEN. superseded his delegation's proposal in Document AP VI-No. 68. The Indian proposal (Temporary Document 41/PLEN.), with some small changes, might be incorporated in that proposal to provide a generally acceptable solution.

The *delegate of the United States of America* endorsed those views, adding that his delegation's proposal in Document AP VI-No. 60 was superseded by Temporary Document 30/PLEN.

The *delegate of Italy* agreed that the Indian proposal contained a compromise solution which made Temporary Document 30/PLEN. more acceptable.

The *delegate of Yugoslavia* said that the flexibility of the proposal in Temporary Document 30/PLEN. made it unacceptable to his delegation. The expression "on fair and reasonable terms" at the end of the first "resolves" paragraph could be interpreted in a manner which would conflict with the first part of that paragraph. To avoid such excessive flexibility, the best plan might be to delete that phrase and to set up a committee to decide on terms which would be fair and reasonable for both parties.

The *delegate of the U.S.S.R.* said that, since ITU Recommendations proposed the use of equipments with certain specifications by Member Administrations, it would be quite contrary to the functions and purposes of the Union to recommend Administrations to obtain licences for patented items. The expression "fair and reasonable terms" provided no guarantee whatsoever of the absence of commercial interests or advantages on the part of patent-holders; interpretations of the expression by purchasers and vendors usually differed and might even conflict. If the principle was adopted, patent holders would begin to strive to bring about the adoption of Recommendations proposing the use of patented equipment, and CCI meetings would become the scene of contention between competing patent-holders; moreover, since CCI decisions were usually taken by consensus, the adoption of Recommendations would be delayed, rather than promoted, and meetings would culminate in compromise decisions based on the commercial interests of patent-holders.

It had been argued that matters relating to the remuneration of patent-holders were governed by patent law; while that was incontestable, his delegation did not believe that ITU Recommendations should become the subject of commercial transactions or should bring any commercial advantage to individual firms. It seemed to be self-evident that if a patent-holder refused to waive his right to financial remuneration the object of the patent could not be referred to in an international Recommendation. That was the only basis for the productive international cooperation which was the primary purpose of the ITU.

It had also been asserted that a certain amount of valuable information would be lost to the CCITT if that principle was adhered to strictly. That might be so, although he was sure that patent-holders could find channels other than the ITU through which to inform prospective clients of their achievements; but the main point was that ITU Recommendations should objectively reflect the technical progress that had been or could be achieved by all countries, not the commercial interests of equipment manufacturers. The ITU had been in existence for over a century, and so had patent law; his delegation therefore considered that the current policy should be continued and had submitted the proposal in Temporary Document 32/PLEN. to that end. It further

proposed that, in view of the complexity of the problem — which had never before been discussed in depth and required legal studies — Member Administrations should be requested to study questions of patent law and to submit proposals to the VIIth Plenary Assembly.

The *delegate of the Federal Republic of Germany* agreed that the problem was not one which could be easily solved by a technical body and proposed that the text in Temporary Document 30/PLEN., amended by the Indian proposal, should be accepted on a trial basis and that the question should be discussed again at the next Plenary Assembly in the light of the experience gained.

The *delegate of Japan* supported the draft Resolution in Temporary Document No. 30, since the text could be considered as constituting a general patent policy. Implementation of the draft Resolution would enhance CCITT activities, promote technological development and also meet the points raised by the Director of the CCITT in Document AP VI-No. 60. Proposals had been made which, in his view, should enable some of the differences of opinion concerning the draft Resolution to be resolved. It was the hope of his delegation that the Plenary Assembly would be able to reach an acceptable conclusion; however, if that were to prove impossible, the proposal by the Federal Republic of Germany should be accepted.

The *delegate of Uganda* said that his delegation was concerned by two points. In the first place, the ITU had so far carefully avoided commercialism in its deliberations, but as soon as Recommendations in any way entailed remuneration of patent-holders, the door would be open to other commercial interests, and the principle of objectivity upheld in the past would be jeopardized. Secondly, the CCI Study Groups would become a kind of battleground for patent-holders, who would find it very difficult to resist the temptation of trying to ensure that their patented items were recommended for use by all Administrations. Moreover, the interplay of those conflicting interests could only hinder the progress of Study Group work. His delegation therefore could not support the proposal in Temporary Document 30/PLEN., even with the Indian amendment.

The *delegate of Canada* said that his Administration had had some difficulty with a patent in connection with a CCITT Recommendation and therefore believed that the time had come to settle the problem. Although it considered that the expression "on fair and reasonable terms" was operable in practice, it could agree to the incorporation of the Indian amendment in Temporary Document 30/PLEN. Canada supported the proposal of the Federal Republic of Germany.

The *delegate of India* said that, although ITU Recommendations were not mandatory, the fact that they were used as standard specifications for placing equipment orders made it clear that they should not involve any patent rights which had to be bought. On the other hand, experts had of late been obliged to base their techniques on patented items. Exception had been taken to the expression "on fair and reasonable terms", on the ground that it was open to different interpretations; yet the same applied to the expression "on a non-discriminatory basis" in the USSR proposal. The point was that the Study Groups needed guidance on how to proceed when there was no alternative to adopting a Recommendation based on patented equipment; his delegation proposed that the final decision should rest with Administrations and that no such proposal should become a Recommendation until Administrations which had studied the matter in detail agreed on it at a Plenary Assembly.

He could support the trial period proposed by the Federal Republic of Germany.

The *delegate of the Byelorussian S.S.R.* said that his delegation could not accept the proposal in Temporary Document 30/PLEN., which might involve the ITU in a struggle for patent rights. CCITT Recommendations must be absolutely independent of patents and Administrations must be absolutely free to accept those Recommendations. The U.S.S.R. proposal provided the best solution.

The *delegate of Roumania* said his delegation supported the principle that CCITT Recommendations should not refer to patented equipment. Nevertheless, in view of the divergent opinions and the many implications of the problem, the best course would be to discuss the matter again at the next Plenary Assembly.

The *delegate of France* suggested that the reluctance of some delegations to accept the proposal of the Federal Republic of Germany might be overcome by adding a proviso that Recommendations involving patent rights must be adopted unanimously.

The *representative of the International Organization for Standardization (ISO)* said that his organization's experience in the matter of patent policy had led it to the conclusion that patent problems had to be dealt with at three levels, first, where no rights were granted and only the owner of the patent could operate the item, secondly, where rights were granted on some kind of terms and, thirdly, where no patent royalties were claimed from the entity acquiring the equipment. It would be noted that the first case had not been mentioned

during the discussion. The ISO had adopted no Recommendation or Standard with that constraint, but had experienced no difficulties with a rather loosely-worded policy, which it had adopted in order not to deter the installation of patented apparatus.

The *delegates of Czechoslovakia, Hungary and Bulgaria* supported the U.S.S.R. proposal.

The *delegate of the United Kingdom*, referring to the USSR proposal, said that its apparently simple wording concealed a certain complexity. In the first place, it was not clear whether the term "the Members of the ITU" covered recognized private operating agencies and customers of Administrations; future patents would be those developed outside the knowledge and practice of the telecommunication industry and of Administrations, and it might be against the interests of the ITU to have licences made available at no cost. Secondly, the issue had in fact been forced by the extraordinary advances of the computer industry and of the application of computer techniques in all telecommunications; in view of that great interdependence, customers would want Recommendations involving computer equipment which would probably be patented, and the restriction in the U.S.S.R. proposal would operate to the general disadvantage.

The *Chairman* observed that the wide divergence of opinions made agreement practically impossible at the current Assembly. He therefore proposed that all Administrations should be notified of the problem and asked to submit proposals to the VIIth Plenary Assembly and that the General Secretariat and the CCITT and CCIR Secretariats should pursue the study of the question, in consultation with other interested international organizations, with a view to reaching conclusions. The question should perhaps be dealt with definitively by the Plenipotentiary Conference, not by the VIIth Plenary Assembly, since the CCIR was also involved.

The *delegate of Lebanon* supported that proposal, but considered that the best procedure would be to instruct the Secretary-General and the Coordination Committee – which included the Directors of the CCIs – to submit the problem to all Members and to report on it to the next session of the Administrative Council, which would include a passage on the subject in its report to the Plenipotentiary Conference.

The *delegate of Mexico* supported that view, adding that the opinions expressed at the Plenary Assemblies of the CCITT and the CCIR should also be included in the Council's report to the Plenipotentiary Conference.

It was so *decided*.

The meeting rose at 1230 hours.

FIFTEENTH PLENARY MEETING

Thursday, 7 October 1976, at 1450 hrs

Subjects discussed:

1. Report of the Working Group on the terms of reference of the CCITT
 2. Approval of the minutes of the inaugural and 1st to 11th plenary meetings
 3. Allocation of telex destination codes
 4. Work of the SMM Joint Working Party
 5. IEC proposal to establish standards for LF cables
 6. Telegram and telex instructions
 7. URSI-ITU Liaison Committee
-
1. Report of the Working Group on the terms of reference of the CCITT (Temporary Document No. 37/PLEN.(Rev.1))

The *Chairman of the Working Group on the terms of reference of the CCITT* (Mr. Thué, France) introduced the report of the Working Group contained in Temporary Document No. 37/PLEN.(Rev.1). The Working Group had proceeded on the basis of the document prepared by the Director of the CCITT (Document AP VI-No. 86) and of Resolution No. 44 of the Plenipotentiary Conference of

Malaga-Torremolinos, 1973. After prolonged discussion the Working Group had come to the conclusion that the terms of reference of the CCITT should use the expression "telecommunication services" instead of the terms "telegraphy" and "telephony", and that a definition of the expression "telecommunication services" should be included in Annex 2 to the Convention. A draft Opinion to that effect was attached to the report. The Working Group had refrained from preparing a definition of the term "telegraphy" because it considered that the appropriate body to carry out that task was Study Group I in cooperation with other CCITT and CCIR study groups.

The *representative of the CCIR* drew attention to a typing error at the end of paragraph a) of the draft Opinion, where the word "CCITT" should be replaced by "CCIR".

The *delegate of Mexico* wondered whether the proposed definition was not somewhat too restrictive in stating that telecommunication services were "telecommunications which are ... intended mainly as a public correspondence service".

The *Chairman* of the Working Group said that the question had been discussed at length and all other definitions had given rise to objections. It did not appear possible to improve on the proposed wording, at least for the present. Replying to a point raised by the *delegate of the Netherlands*, he said that the Working Group had also given a great deal of thought to the question whether the proposed definition should refer to private operating agencies or, more restrictively, to recognized private operating agencies and had come to the conclusion that such a restriction was not necessary.

The *Director of the CCIR* remarked that any attempt to give the term "telecommunication services" a definition other than the ordinary dictionary meaning of those words might give rise to difficulties in the future. Instead of inserting the new definition in Annex 2 of the Convention, it might be sufficient to include it in the terms of reference of the CCITT.

The *Deputy Secretary-General* also felt that the utmost care should be taken to indicate that the sole purpose of the definition was to explain the use of the term "telecommunication services" in No. 71(Rev.) of Article 11 of the 1973 Convention. Furthermore, the definition itself should be capable of flexible interpretation so as not to restrict the range of future studies by the CCITT.

The *delegate of the Federal Republic of Germany* suggested the insertion of the word "generally" between the words "which are" and "subject" in the third line of the proposed definition.

The *delegate of Spain* supported that proposal.

The *delegate of Cyprus* wondered whether the word "subject" should not be replaced by "subjected".

The *delegate of the United Kingdom* said that the word "subject" was satisfactory. As for the suggestion made by the delegate of the Federal Republic of Germany, he was prepared to accept it but thought that the word "appropriate" before "remuneration" should be omitted in consequence.

The *delegate of the United States* insisted on retaining the word "appropriate".

The *delegate of Mexico*, referring to the comments made by the Deputy Secretary-General and the Director of the CCIR, stressed the importance of clearly indicating that the proposed definition related exclusively to the terms of reference of the CCITT and was not universally applicable like the definitions of other services included in Annex 2 of the Convention. A footnote to that effect might perhaps be added.

The *delegate of Australia* remarked that if the revised terms of reference of the CCITT spoke of "questions relating to telecommunications" instead of "questions relating to telecommunication services", the whole new definition would become redundant and could be dropped.

The *Chairman of the Working Group* explained that the Working Group had considered that possibility and had agreed that the term "telecommunications" was too broad for the purposes of the terms of reference of the CCITT. The expression "telecommunication services" represented a compromise solution which, as he had already stated, it did not appear possible to improve upon at the present stage.

The *delegate of Saudi Arabia*, remarking that the question under consideration was highly complex and delicate, suggested that it might be referred to the CMV group for further study pending the next Plenary Assembly.

The *Director of the CCIR* said that as the question concerned only the CCITT, it was not suitable for the CMV group which was a Joint Working Party of the CCITT and the CCIR.

After further discussion in which the *delegates of Saudi Arabia, the United States, Mexico, Lebanon and Canada*, the *Chairman of the Working Group* and the *Director of the CCITT* took part, the meeting was suspended at 1615 hours and resumed at 1640 hours.

The *Chairman of the Working Group* proposed a new version of the draft opinion in which paragraphs a) and b) were merged into a single paragraph, as follows:

“71(Rev.) The duties of the International Telegraph and Telephone Consultative Committee (CCITT) shall be to study, and issue Recommendations on technical, operating and tariff questions relating to telecommunication services, other than technical or operating questions relating specifically to radiocommunications which according to No. 70 come within the purview of the CCIR.

For the purpose of this Article, telecommunication services are considered to be telecommunications which are provided by an Administration or private operating agency and intended mainly as a public correspondence service, and which are generally subject to appropriate remuneration. These services include several branches such as telephone, telegraph, data transmission and leased circuits, etc.”

The proposal obviated the need to include a new definition in Annex 2 of the Convention. It would be noted that, to reflect the general desire for greater flexibility, the word “etc.” had been added at the end of the definition.

The *delegate of Spain* supported the proposal.

The new text of the draft Opinion was *adopted*.

2. Approval of the minutes of the inaugural and 1st to 11th Plenary Meetings

The *Director of the CCITT* assured delegates that any editorial amendments already submitted or to be handed in to the Secretariat would be incorporated in the final version of the minutes; he asked them therefore to restrict themselves to raising points of substance.

Minutes of the Inaugural Meeting (Temporary Document No. 13 + Corr.)

Approved, as amended.

Minutes of the First Plenary Meeting (Temporary Document No. 14)

Approved.

Minutes of the Second Plenary Meeting (Temporary Document No. 19)

Approved.

Minutes of the Third Plenary Meeting (Temporary Document No. 21 + Corrs. 1 and 2)

Approved, as amended.

Minutes of the Fourth Plenary Meeting (Temporary Document No. 22 + Corr.)

Approved, as amended.

Minutes of the Fifth Plenary Meeting (Temporary Document No. 23)

Approved.

Minutes of the Sixth Plenary Meeting (Temporary Document No. 28)

Approved.

Minutes of the Seventh Plenary Meeting (Temporary Document No. 29)

Approved.

Minutes of the Eighth Plenary Meeting (Temporary Document No. 34)

The *Chairman of Study Group III* said that his intervention towards the bottom of page 2 should be corrected to read: "... within the purview of Committee A" in place of "Study Group I".

Approved, as amended.

Minutes of the Ninth Plenary Meeting (Temporary Document No. 35)

The *Chairman of Special Study Group C* said that in his introduction of the Study Group's report, the words "would be included" should read: "should be resubmitted".

Approved, as amended.

Minutes of the Tenth Plenary Meeting (Temporary Document No. 36)

Approved.

Minutes of the Eleventh Plenary Meeting (Temporary Document No. 40)

The *Chairman of GAS 3* said he would submit to the Secretariat a few editorial amendments to his introduction of the report.

Approved, as amended.

3. Allocation of telex destination codes

The *Director of the CCITT* explained the background of the current competitive situation in which both Study Group I and the Plan Committee had some claim to the right of allocating the above codes.

The *Vice-Chairman of Study Group I* said that when the Study Group had discussed the rewording of Recommendation F.69 it had noted in the list of telex destination codes that there were very few spare codes and that their distribution did not correspond to the new network situation. Study Group I had therefore proposed a complete review of the list so as to share resources equally.

The *delegate of Lebanon* said that there was nothing to prohibit Study Group I from carrying out any studies necessary, provided that telex codes continued to be allocated uniquely by the Plan Committee, as was the case for telephone codes. The *delegate of Saudi Arabia* thanked Study Group I for its excellent work but pointed out that unfortunately few developing countries (from which the requests came) participated; he saw no reason for abandoning the *status quo*, that the World Plan Committee have the final word on allocations. If the Director met with any difficulty in applying the procedure in the coming study period, he could report to the next Plenary Assembly. In the meantime, Study Group I should be informed regularly of any action taken by the Plan Committee. Those views were supported by the *delegate of Mexico*.

The *delegate of the United States of America* noted that such a procedure would apply in only the few cases which were difficult to satisfy; he thought that guidance on the technical issues should first be sought from Study Group I, whose members had the necessary specialized knowledge and experience to apply the various criteria for assignment of codes and the actual allocation would then be decided by the World Plan Committee.

The *Director of the CCITT* favoured that compromise solution; Study Group I could be informed through its Vice-Chairman responsible for the subject of telex destination codes and advice on the technical aspects would then be forwarded to the World Plan Committee through the latter's Coordination Committee.

The *delegates of Saudi Arabia and Lebanon* found that procedure acceptable provided it did not involve undue delay, such as being subject to the holding of a Plenary Assembly.

It was so *decided*.

4. Work of the SMM Joint Working Party

The *Deputy Secretary-General* referred to the approval of the minutes of the fourth and sixth Plenary Meetings in which the Plenary had decided the outcome of the work of the SMM Joint Working Party. He drew

attention to the fact that Resolutions Mar2-22 and Mar2-23 called for the CCITT Plenary Assembly to approve the SMM report so that the results of the studies could be transmitted to Members of the Union before 1 January 1977 to enable them to prepare proposals for the 1979 Radio Conference (in particular the provisions to be retained in the *Radio Regulations*). The two issues were for the Plenary Assembly to authorize the SMM Joint Working Party to prepare the necessary report on completion of its studies and to determine a date by which those studies should be terminated. He suggested a deadline of 30 November 1977 so that the report could be distributed early in 1978 for submission of proposals at the end of 1978/beginning of 1979.

It was so agreed.

5 IEC proposal to establish standards for LF cables (Temporary Document No. 11/PLEN. and Document AP VI-No. 108)

The *Director of the CCITT* introduced Temporary Document No. 11/PLEN. which described the background of the proposed IEC study and the progress made to date.

The *delegate of Sweden* presented Document AP VI-No. 108 which gave the outcome of the meeting of IEC Technical Committee No. 46 in Stockholm on 1 October. The only changes proposed to the earlier proposal was the addition of a note which would entail a minor amendment to Resolution No. 8.

The *representative of Technical Committee No. 46 of the International Electrotechnical Commission* said that a working group had been formed to draft standards in question and it was assumed that the first draft would be available in about two years' time. In order for a start to be made on the work a new scope for TC 46 had been drafted. He had been asked at Stockholm to present the matter to the Plenary Assembly and seek its approval. For information he read out the IEC Questionnaire sent to the national committees:

"Are you in favour of SC 46 C preparing IEC standards on LF cable with polyolefin sheath and conductor insulation for use as local network telephone cable?"

Note 1.—Any resulting IEC standards shall not conflict with CCITT Recommendations on transmission characteristics of telephone cables used in local networks.

Note 2.—It is expected that a national committee will only reply in the affirmative if CCITT Member Administrations or RPOAs agree with the principle of the IEC preparing such standards.

Note 3.—If the required majority of national committees is in favour of this work, the normal approach would be made by IEC to the CCITT so that the scope of TC 46 and CCITT Resolution No. 8 could be amended accordingly."

All national committees had agreed with the terms of Note 2.

The *delegate of Canada* was in favour of inviting the IEC to undertake the study, and suggested that the Annex to Resolution No. 8 be amended as follows: add to the second sentence "and also polyolefin insulated LF cable for outdoor use proposed in the new scope of IEC TC 46 adopted at its Stockholm meeting in October 1976."

The *delegate of the United Kingdom* pointed out that the Study Groups dealing with protection aspects were also involved and that assurance should be sought from the IEC that there would be no conflict with *any* CCITT Recommendation, an appropriate wording being inserted in the proposed scope of the new study.

The *Director of the CCITT* said that the text of the Resolution itself would need some amendment and suggested that the delegates of the United Kingdom, Canada and France discuss a suitable wording with the representative of the IEC.

It was so agreed.

6. Telegram and telex instructions (Temporary Document No. 27)

The *Chairman of the Instructions Working Party* said that the Working Party had found that in many countries specialists and Administrations, as well as operators, made use of the Instructions for the public telegram and telex services and that they should therefore consist of the same texts as the relevant Recommendations. The Working Party proposed the adoption of two small Recommendations (annexed to

Temporary Document No. 27) stating that the Recommendations in the F Series (or part of them) would form the Instructions.

The relevant Recommendations would continue to form an integral part of the *Orange Book* and the Secretary-General was asked to carry out a survey as to whether they should also be published in another form. Finally, the Instructions would come into force on the same date as the Recommendations concerned, i.e. 1 October 1977.

The *delegate of the U.S.S.R.* considered it essential for the Instructions to be issued so that operations could be carried out more accurately.

The *delegate of Switzerland*, while not contesting the usefulness of the Instructions as such, queried the value of the two draft Recommendations F."X" and F."Y".

The *Chairman of the Working Party* said that the Plenary Assembly had been requested by Resolutions 1 and 3 of the Telegraph and Telephone Conference to produce an answer for submission to the following conference and the two Recommendations constituted a statement that some work had been done on the Instructions.

The substance of Temporary Document No. 27 was *adopted*, subject to revision by the Editorial Committee.

7. URSI – ITU Liaison Committee

The *Director of the CCITT* outlined briefly the conditions in which the URSI had proposed to set up a Liaison Committee. A Resolution had been adopted by URSI in August 1975 on consulting the ITU with a view to creating a Liaison Committee with participation by the appropriate CCIR and CCITT Study Groups. For the moment the CCITT participation had not been indicated, as its interests related neither to scientific nor to radio matters.

The *Director of the CCIR* said that relations with organizations such as URSI were established in accordance with the Convention and subject to approval by the Administrative Council. For some time, CCIR questions had been brought to URSI's attention and several participants in CCIR Study Groups had agreed to act informally in the proposed Committee, though no official decision had been taken.

The *delegate of France* informed the meeting that URSI had modified its mandate at its 1975 Assembly and was now concerned with wave propagation and telecommunication networks and systems.

The *delegate of the United Kingdom* confirmed that statement and thought it would be appropriate for the CCITT to accept the invitation to be represented; perhaps the Chairman of Study Group XV could maintain contact.

The *delegate of the United States of America* said that in view of the broader terms of reference just described, he would not object to CCITT participation as long as it was kept within reason and not at the expense of more important demands on the Secretariat; in any event, the CCIR could keep the CCITT informed of the Committee's work.

The *delegate of Spain* asked if there was any legal basis for an agreement between the ITU and URSI and doubted whether the Plenary Assembly was competent to take a decision; he also reminded the meeting that there might be financial implications.

The *delegate of Lebanon* was inclined to consider CCITT participation unnecessary but shared the views expressed by the United States delegate and said the matter might be put to the Administrative Council.

The *delegate of the People's Republic of China* made the following statement:

"Mr. Chairman,

The Telecommunication Delegation of the People's Republic of China has noted that up to now the Chiang Kai-shik clique is still a member of URSI. Therefore we will bear no obligations to any decisions or resolutions made by the CCITT-URSI Liaison Committee until URSI expels the Chiang Kai-shik clique. We hope that URSI and other international organizations in which the Chiang Kai-shik clique is still a member will act according to the historical tide and take effective measures to expel the Chiang Kai-shik clique as quickly as possible. It is also our hope that the ITU will make efforts in this respect."

The above statement was endorsed by the *delegate of Roumania*.

The *Deputy Secretary-General* confirmed that relations between international organizations and the ITU were governed by the Convention; however, URSI was not on a level comparable to the ITU and there was no question of an agreement in that sense. The Director of the CCITT had agreed with him that it was an internal matter in which the Plenary Assembly might allow the Director to exercise his own judgement as to whether or not the CCITT should participate and what form that participation should take.

That suggestion was supported by the *delegates of Australia and Saudi Arabia*.

The *Director-elect of the CCITT* referred to a remark made earlier that in certain cases it might be convenient to call upon the services of a Study Group Chairman, for example, especially if budgetary problems arose.

The *Chairman* noted that the decision on participation would rest with the Director of the CCITT; if he decided against it, the CCIR would forward information on the Committee's activities.

The meeting rose at 1830 hours.

SIXTEENTH AND LAST PLENARY MEETING

Friday, 8 October 1976, at 0910 hrs

Subjects discussed:

1. Report of Committee B
 2. Report of Committee D
 3. Report of Committee C
 4. Minutes of the 12th Plenary Meeting
 5. Minutes of the 13th Plenary Meeting
 6. Date and place of the VIIth Plenary Assembly
 7. Venues of Plan Committee meetings
 8. Work of the Editorial Committee
 9. Taking of oath by the new Director of the CCITT
 10. Closure of the VIth Plenary Assembly
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1. **Report of Committee B (Temporary Documents Nos. 6 and 7/COM B)**

The *Chairman of Committee B* observed that the Committee had not had the opportunity to consider and approve the report (Temporary Documents Nos. 6 and 7/COM B), which should therefore be considered as emanating from himself rather than from the Committee. The documents which had formed the basis for discussion were the various Study Group reports with their lists of Questions. In considering them, the Committee had endeavoured to take into account the results of Committee A's deliberations but as the latter's report had not been available at that stage, some points in the two documents under consideration might require amendment. Since the Committee's work had consisted in a very detailed examination of the Study Group reports, it had been considered impractical to provide formal minutes of the three meetings held. Due to the difficulty of sorting out all the cross-references and changes in titles, there might well be certain omissions in the report; if those concerned only points of detail they might perhaps be brought directly to the notice of the Secretariat.

The Committee had taken as its starting point the report of Committee B to the Vth Plenary Assembly (*Green Book*, Volume I, pages 174-178). It had first considered the list of general points at the beginning of that report, and had decided to retain a good many of them (Temporary Document No. 6/COM B, pages 1 and 2). Point 3 was perhaps particularly important; it had been difficult for the Committee to appreciate the full implications of the interaction between Study Group XVIII and other Study Groups. In view of the subject-matter involved, it might be rather difficult to avoid any overlapping of work, and he suggested that the Director of the CCITT should give due consideration to the need for the type of coordination mentioned in the

last sentence of point 3. Point 5 also contained an important comment. The first sentence of point 6 should be deleted since GAS 4 no longer existed. He drew particular attention to the problem dealt with in point 7, which had caused the Committee some difficulty.

The new titles of Study Groups I and II and the new lists of Questions for those groups were given on pages 2, 3 and 4 of the first part of the report. With regard to Study Group III, he said that footnote 1, which appeared towards the top of page 4 should be attributed to the United States of America and altered to read: "There is a continuing discussion in the United States of America of issues ... circuits, and we are pleased that this will ... coming Plenary period." Furthermore, the last sentence relating to Study Group III which appeared towards the bottom of page 6 should be altered to read: "It was decided to shorten the title of Study Group III to read 'General tariff principles'." The sections concerning Study Groups IV to X did not call for any particular comments.

Turning to the second part of the report (Temporary Document No. 7/COM B), he drew particular attention to the proposal concerning the transfer of Questions to Study Groups XV and XVIII respectively (page 2). There was a great deal of cross-referencing in the list of Questions for Study Group XVIII (pages 6-12) in view of the large number of bodies interested in its work. In order to reflect its broader interests, that Study Group's title had been changed to "Digital networks".

Turning to Annex 1, he pointed out that Joint Working Party SMM would be the only exception to the general rule that identical Questions should not be drafted for more than one Study Group.

Committee B had had considerable difficulty in dealing with Questions which were not part of a numerical series in the Study Group reports concerned or which had mixed letters and numbers; it would be appreciated if steps could be taken to arrange Questions in strict numerical order in the future.

Finally, Committee B had decided that it would be premature to include in the programme for the coming study period the new Question proposed to it by the new Chairman of Study Group II (Temporary Document No. 5/COM B); it had felt that Study Group II itself should consider what action should be taken on that matter.

In conclusion, he expressed appreciation for the assistance rendered to Committee B by the Secretariat and for the support he himself had received from the Vice-Chairman. He also paid a tribute to the Study Group Chairmen, upon whom the Committee had relied very heavily for the successful conclusion of its work.

The *Chairman* invited the meeting to consider the report of Committee B section by section.

General

Approved.

Study Group I

The *delegate of France* said that the French title of Study Group I should be amended to read "Exploitation et qualité de service télégraphiques".

It was so agreed.

Study Group II

The *delegate of Zaire* said that the new title chosen for Study Group II had not been the subject of unanimous agreement. In his view, "Telephone operation" would be perfectly adequate.

The *delegates of Canada and France* said that they would prefer to retain the title proposed in Committee B's report.

The *delegate of the Netherlands* said that the proposals of Committee B for Study Group II were fully acceptable and accurately reflected the Study Group's field of activity. That comment also held good for the proposals made in respect of Study Groups I and III.

The *Chairman of Committee B* said that care should be taken to avoid equating the Study Groups' short titles with their terms of reference or attempting to devise titles that were too comprehensive. Committee B's final

conclusion had been that Study Group II was reasonably well described by the title "Telephone operation and quality of service" which, he suggested, should be retained.

The *delegate of Australia* supported the comments by the delegate of the Netherlands and the Chairman of Committee B.

The suggestion by the Chairman of Committee B was *accepted*.

The *delegate of France* said that the French title of Study Group II should be amended to read "Exploitation et qualité de service téléphoniques".

It was so *agreed*.

The *delegate of France*, referring to Question R/II (formerly Question G/XIII), drew attention to the Note at the bottom of page 35 of Document AP VI-No. 34 which stated that the Question could be of interest to GAS 1. It might be appropriate to insert, at the end of that Note, a reference to new GAS 6, the terms of reference of which were to be approved shortly by the Plenary Assembly.

Study Group III

The *delegate of Italy* suggested that the title of Study Group III should be changed to read "Tariffs and accounting".

The *delegate of the United Kingdom* considered that the title "General tariff principles" proposed by the Chairman of Committee B was quite suitable.

Study Groups IV-XIV

Approved.

Study Group XV

The *delegate of France*, speaking as the outgoing Chairman of Study Group XV, said that he had not yet had an opportunity to determine whether the information given in the report of Committee B corresponded exactly to the decisions taken concerning the distribution of Questions between Study Groups XV and XVIII. Should there be any errors in the text, he would consult with the Chairman of Study Group XVIII and, if necessary, submit amendments to the Secretariat.

The *delegate of Italy*, referring to Question N/XV, said that a reference should be added to the effect that the Question was of interest also to Study Group XVII.

Study Groups XVI-XVIII

Approved.

Joint CCITT/CCIR Study Group CMBD

Replying to a comment by the *delegate of the Netherlands*, the *Chairman of Committee B* agreed that the title for CMBD should read "Circuit noise and availability".

Annex 1

The *delegate of the United Kingdom*, referring to Joint Working Party SMM, said that the Committee's report had been drafted before the Plenary Assembly had accepted the Deputy Secretary-General's proposal that SMM should be authorized to prepare its report by 30 November 1977. The Secretariat might usefully be requested to clearly establish the Joint Working Party's responsibilities in that respect, since the text which appeared in the Committee's report (Temporary Document No. 7/COM B, page 12) might lead to some confusion. It would be rather cumbersome if the SMM report had to be approved by Study Groups I, II and III before it was submitted as a contribution to the WARC.

The *Secretary of Committee B* (Mr. Hummel, Senior Counsellor) suggested that the paragraph relating to Joint Working Party SMM might be deleted and replaced by the Plenary Assembly's decision to authorize the Joint Working Party to submit its report directly to members.

It was so *agreed*.

*Annex 2**Approved.*

The report of Committee B, as amended, was *approved*.

The *Chairman* expressed warm thanks to the Chairman and Vice-Chairman of Committee B as well as to all those who had participated in its difficult work. He also wished to take the opportunity of wishing the Chairman, Mr. Williams, a long and happy retirement.

2. Report of Committee D (Temporary Documents Nos. 3/COM D(Rev.) and 4/COM D)

The *Chairman of Committee D* drew attention to the Committee's terms of reference, which were to be found on page 1 of Document AP VI-No. 69. He observed that the Committee, which had held two meetings, had not had an opportunity to consider and adopt the report before its submission to the Plenary Assembly.

The Committee's first task had been to examine the policy to be adopted by the CCITT for dealing with questions relating to the planning, establishment and management of national telecommunication networks. It had soon become evident that a consensus of opinion existed on the need for the CCITT to continue to devote the required attention to such questions, and it had also been generally agreed that the work involved could most appropriately be carried out through the Special Autonomous Groups (GAS). The Committee's view was that questions relating to matters such as technical standards should be considered in the appropriate Study Groups, and that the GAS should concentrate on more general matters such as the drawing up of guidelines for national networks and the preparation of handbooks of a tutorial nature. The Committee had then turned its attention to the work of the existing GAS and had also considered the desirability of establishing any new groups. In that connection, it had considered both the proposal by the Lebanese delegation concerning the establishment of a new GAS (GAS 6) to prepare a handbook on the economic and technical aspects of the choice of electronic switching systems (Temporary Document No. 15/PLEN.) and the draft Resolution prepared by an *ad hoc* working group set up by the Plenary Assembly under the Chairmanship of Mr. Ghazal (Lebanon) to consider that proposal. The draft Resolution, as amended by the Committee, was reproduced in Annex 1 to the report (Temporary Document No. 4/COM D). Thus, the Committee was recommending the establishment of a new group, to be called GAS 6.

In considering the work of the existing GAS, the Committee's task had been facilitated by the fact that the reports by the Chairmen of GAS 3 and GAS 5 had already been considered by the Plenary Assembly. The Committee had decided that there was no need to devote any further attention to those two groups since their reports, which contained an outline of their future work, had already been adopted.

The Committee had noted that the chapter of the GAS 1 handbook relating to transmission had already been covered in Study Group XVI, which had just produced a new handbook on transmission planning. In addition, Study Group XI had produced a new Part D for the GAS 1 handbook. Finally, some of the work currently being dealt with by GAS 3 concerned the original terms of reference of GAS 1. For those reasons, the Committee had concluded that GAS 1 could remain suspended during the next study period. Similarly, the Committee had agreed that GAS 2 should also remain dormant, since some of the work under way in GAS 3 supplemented the work originally assigned to it. With regard to GAS 4, it had been noted that work relating to power supplies in rural areas was under way in GAS 3 and also that the new GAS 6 would deal with the question of power supplies for switching centres in the context of its work on switching systems. Consequently, it had been agreed that GAS 4 too should remain dormant for the time being.

The question of publication of handbooks and, more particularly, their price had given rise to a lively discussion in the Committee. Many delegates had considered that the time and effort devoted by the GAS and the Study Groups concerned to the preparation of handbooks was being squandered because of their limited distribution, which was due entirely to their high sales price. Since that price was directly related to the number of copies sold, a vicious circle was created. Several constructive suggestions had been made during the discussion, and the Director of the CCITT and the Deputy Secretary-General had made statements on the problems encountered in producing the handbooks at a reasonable cost and the studies being conducted by the General Secretariat on ways and means of reducing the attendant expenditure. The text of a draft Opinion, which had been prepared by a small working group under the chairmanship of the Vice-Chairman of Committee D, was reproduced in Temporary Document No. 3/COM D(Rev.) as Annex 2 to the report.

In considering the question of seminars, the Committee had noted that the CCITT had no funds at its disposal to organize seminars in its own right, but that existing arrangements were proving satisfactory due to the excellent cooperation between the Technical Cooperation Department, the CCITT and the CCIR. The

Committee had stressed the need for continuing close cooperation between all entities of ITU that were involved in the organization of seminars. The Deputy Secretary-General had provided the Committee with information concerning the seminars planned for the remainder of 1976 and for 1977.

In conclusion, the Chairman of Committee B thanked the Vice-Chairman of the Committee for his invaluable support, acknowledged the assistance received from the Secretariat, and expressed his appreciation to all the delegates who had participated in the Committee's work. It had been both an honour and a privilege for him to serve as its Chairman.

The *Chairman* invited the Assembly to consider the report of Committee D section by section (Temporary Document No. 4/COM D).

Sections 1-5

Approved.

Annex 1

The *delegate of Sweden* said that the following two corrections should be made to the text of the draft Resolution in order to bring it fully into line with Committee D's wishes: the phrase "as expressed ... numerous Administrations" should be deleted from *considering* 1., and the phrase "interworking with different systems" should be added as a new point, to be numbered 3.4, under *decides* 3.

The *Chairman of Committee D* confirmed that the corrections proposed by the Swedish delegate corresponded to the agreement reached by the Committee.

The draft Resolution in Annex 1, as amended, was *adopted*.

Annex 2 (Temporary Document No. 3/COM D(Rev.))

The draft Opinion in Annex 2 was *adopted*.

The report of Committee D, as a whole, was *approved*.

The *delegate of the U.S.S.R.* paid a tribute to the work of Committee D and fully endorsed all the proposals contained in its report.

The *Chairman* thanked the Chairman, Vice-Chairman and members of Committee D for their excellent work.

3. Report of Committee C (Temporary Document No. 4/COM C(Rev.1))

The *Chairman of Committee C* said that under its terms of reference the Committee had been required to approve the accounts for expenditure incurred for the VIth Plenary Assembly, review the facilities made available to participants, and consider the estimate of the financial needs of the CCITT for the next study period. In that connection, he said that the first sentence of the second paragraph of the report should be altered to read "Under paragraphs 4 and 8g) of Resolution No. 1 ...".

The budget approved by the Administrative Council for the VIth Plenary Assembly was given in Section 2 of the report, while Section 3 showed the estimated total expenditure and also listed the reasons given to explain why expenditure exceeded the credits allocated. In that connection, he said that the second paragraph of Section 4.1 on page 2 should be moved up the page and inserted before the paragraph beginning "The Budget Control Committee took note ...".

While increased participation by Administrations in the activities of the CCITT was a positive factor and should be welcomed, it did entail increases in the cost of holding meetings, particularly interpretation costs. In addition it contributed to increasing the cost of document production, although higher costs in that field were also due to the fact that the contributions submitted by Administrations tended to be more lengthy than in the past. In that connection, it had been suggested that documents might be presented in a more succinct form. The increase in postage costs was due to both higher postal tariffs and individual as opposed to bulk mailing to Administrations. The Committee had concluded that consideration should be given to the possibility of requesting Administrations to accept bulk mailing whenever possible, although some delegates had indicated that factors such as the internal structure of their Administrations would be an obstacle to that method.

With regard to the organization of the Plenary Assembly and the facilities made available to participants, the Committee had unanimously agreed that the difficulties encountered during the Vth Plenary Assembly had been overcome to the general satisfaction of all.

Turning to Section 4 of the report, he said that the Committee had concentrated its attention on reviewing requirements for the period 1977-1980. He expressed appreciation for the valuable assistance received from ITU officials during the Committee's consideration of that very delicate matter, and particularly thanked the Director of the CCITT for the proposals he had made. The most important table in the report was the one in Section 4.2.2. Hypothesis B was clearly the most attractive from the financial standpoint, but it might not prove to be quite as acceptable from the standpoint of efficiency. After drawing attention to the considerable difference between the Hypothesis B figures and the new limits of expenditure given at the end of Section 4.2.3, he said that despite its efforts the Committee had been unable to produce figures any lower than those given in Section 4.2.2. During the discussion it had been suggested that Study Group Chairmen and Vice-Chairmen should be kept informed of the daily cost of meetings. In that connection, it might be of interest to note that the daily cost of the current Plenary Assembly was 100 000 Swiss francs.

The *delegate of Spain* said that there was clearly a very close relationship between costs and methods of work. The fact that practically all the credits approved for the VIth Plenary Assembly had been spent by the day the Assembly had opened bore witness to the importance and gravity of the financial aspect. It was true that the Vth Plenary Assembly had been held in material conditions that had not been found acceptable by all; however, everything had a price and the question arose whether the improved conditions in which the current Assembly was taking place had not been obtained at an excessively high cost.

With regard to the staffing arrangements made for the Assembly, he noted that Committee C had regretted that so few General Secretariat staff members had been placed at the disposal of the CCITT.

He said that his comments were not intended as a criticism of either the work being performed in the CCITT and its Secretariat or the support given to CCITT activities by the General Secretariat. However, given the current economic situation and the repercussions which costs incurred in the ITU must necessarily have for Administrations, there could be no doubt that stringent discipline was needed with regard to costs and methods of work. Both those aspects must be taken into account so as to ensure that inflation had the fewest possible adverse effects on the Union's activities.

The *Director of the CCITT* observed that the last sentence of Section 4.2.1 was contradicted by the opening paragraph of Section 4.2.2. Furthermore, the heading of the fourth column of the table in Section 4.2.2 should be changed to read "Hypothesis B II".

The *delegate of France* suggested that the words "Hypothesis B above" in the last sentence of Section 4.2.1 should be replaced by the words "in the above table" in order to remove the contradiction to which the Director of the CCITT had referred.

The *Deputy Secretary-General* said that the last sentence of the second paragraph on page 2 needed some clarification. The staff of the Department of Common Services had in fact worked thousands of man hours for the Plenary Assembly; perhaps the sentence should be deleted, as it was misleading in its existing form.

The *delegates of France, the Federal Republic of Germany and Lebanon* said that they could not agree to that course. The text in question had been unanimously adopted by Committee C and should remain in the document which the Director of the CCITT would submit to the 32nd Session of the Administrative Council.

The *Chairman of Committee C* endorsed those views. The sentence had been inserted in the report as a result of a specific statement by the responsible ITU officials and must therefore be retained. Any further explanations that the Deputy Secretary-General might wish to make would appear in the minutes of the current meeting and would also be forwarded to the Administrative Council.

The *Deputy Secretary-General* said that if the sentence were to be retained, the total man hours worked by ITU staff for the Plenary Assembly should be calculated, in order to correct the misleading impression that only seven staff members had been seconded.

The *delegate of the Federal Republic of Germany* said that the Deputy Secretary-General's remarks should indeed be taken into account, but that for the purposes of approving Committee C's report the facts must be stated as they had been in the Committee itself.

The *delegate of Morocco* agreed that the sentence accurately reflected the Committee's deliberations. A question on the subject had been asked at the first meeting of Committee C and had been answered at the second meeting.

The *Secretary-General* observed that anyone who did not know the background of the problem would believe, on reading the sentence, that the Plenary Assembly had been staffed by 96 supernumeraries, 7 people

seconded from the General Secretariat and members of the CCITT Secretariat, whereas in fact a large number of Common Service staff had been involved in the work. It was a pity that that had not been stated clearly in the Committee; nevertheless, the report must reflect the real situation.

The *Chairman of Committee C* reiterated that the report could not be changed because it had been approved by the Committee. It would, however, be forwarded to the Administrative Council with the comments of the Plenary Assembly.

The *Secretary-General* said he could agree to that course, provided the report to the Administrative Council was accompanied by an evaluation of the number of ITU staff members who had participated in the work of the Assembly.

The *delegate of the Federal Republic of Germany* suggested that a new third sentence might be inserted in paragraph 4.2.2 to specify the fact, mentioned on page 22 of Document AP VI-No. 61, that a team and a half of interpreters would have to be used.

The *Chairman of Committee C* said that the paragraph could be thus reworded.

The *Secretary-General* observed that the report should either remain unchanged or that appropriate changes should be made in all the paragraphs requiring clarification.

The *Director of the CCITT* pointed out that the report had not been approved in its entirety by Committee C, but had been drafted after that Committee's last meeting. The amendment proposed by the delegate of the Federal Republic of Germany was merely formal, but the changes and explanations suggested by the Deputy Secretary-General and the Secretary-General were substantive and should therefore be reflected in the minutes. Moreover, he failed to see how a breakdown could be made of the staff outside the CCITT Secretariat who had helped with the Assembly's work.

The *Chairman of Committee C* confirmed that the Committee had not had time to approve the report as a whole, but said that it had been decided to submit it to the Plenary Assembly and to have comments recorded in the minutes. To follow a unified method, that should apply to all comments.

The *delegates of the United States of America and Ireland* supported the last statement.

The *delegates of Belgium, India and Australia* considered that No. 445 of the Convention should be interpreted to mean that the Assembly could make editorial changes in Committee C's report, particularly since some formal corrections had been made to the reports of Committees A, B and D.

The *Chairman of Committee C* said that that would certainly apply to the change proposed by the delegate of the Federal Republic of Germany, but not the substantive point raised by the Deputy Secretary-General. The sentence at issue had been inserted at the express request of a number of delegations who had asked questions on the subject at the first meeting and, moreover, had been formally approved by the Committee.

The *Secretary-General* suggested that, if editorial changes could be made, that the words "Apart from the staff of the CCITT Secretariat and of the General Secretariat" should be inserted at the beginning of the sentence in question.

The *delegate of France* said that that amendment was quite unacceptable, as no such statement had been made to the Committee. The difference of opinion between the Secretary-General and the Plenary Assembly should be recorded in the minutes.

The *Director of the CCITT* said that the Secretary-General's suggestion clarified the distinction that should be made between the two categories of staff involved.

The *Chairman of Committee C* agreed that the clarification should be accepted. There was no need to dwell any further on a question which would be discussed in detail at the next session of the Administrative Council.

The *delegate of Saudi Arabia* endorsed those remarks.

The report of Committee C, as amended, was *approved*.

The *Chairman of Committee C* thanked all concerned for their cooperation.

The *Director-elect of the CCITT* said that the reports of Committees B, C and D gave rise to considerable anxiety. The new Questions assigned to CCITT Study Groups by Committee B would necessitate a very large number of meetings; Committee D's report indicated that the CCITT would have to undertake a considerable amount of additional work to assist the developing countries; and the financial estimates already exceeded the ceiling for 1978 and 1979, with an excess expenditure of 50 per cent. The Spanish delegate had

rightly pointed out that the CCITT could not afford to continue using the same working methods as before. He hoped that the meeting of Study Group Chairmen and Vice-Chairmen would consider those questions and see whether it might not be possible for some preliminary work to be done by volunteers among Study Group members.

4. Minutes of the 12th Plenary Meeting (Document AP VI-Temp. No. 42/PLEN.)

In reply to the *delegate of India*, the *Chairman of Special Study Group A* said that the discussion on draft Recommendation V.29 need not be reopened, since the blanket statement concerning all Recommendations in the last paragraph on page 2 had been rendered inoperative by the fact that no final decision had been reached on a patent policy.

Approved as amended.

5. Minutes of the 13th Plenary Meeting (Document AP VI-Temp. No. 43/PLEN.)

Approved.

6. Date and place of the VIIth Plenary Assembly

The *Director of the CCITT* said that the Administrative Council at its 31st Session had adopted a programme of main ITU conferences in which the CCITT Plenary Assembly was scheduled for April 1980, so that the final Study Group meetings could be held in the 4th quarter of 1979. No invitation had so far been received to hold the Assembly outside Geneva.

7. Venues of Plan Committee meetings

The *delegate of Spain* thanked the Plenary Assembly for appointing his compatriot Mr. Terol Miller Chairman of the Plan Committee for Europe and the Mediterranean Basin and his Administration announced that the "Compañía Telefónica Nacional de España" (CTNE) wished to invite that Committee to hold its next meeting in Spain.

The *delegate of Ivory Coast* pointed out that his Administration had invited the Plan Committee for Africa to hold its next meeting in Abidjan.

The *delegate of Mexico* said that, in view of the deferment of the meeting of the Plan Committee for Latin America scheduled for 1977, the Chairman of that Committee had made representations to the Peruvian Administration to see whether the meeting could be held in Peru in 1978. If Peru could not endorse that suggestion, the Vice-Chairman of the Committee would sound out the possibilities of holding the meeting elsewhere in Latin America.

8. Work of the Editorial Committee

The *Chairman of the Editorial Committee*, reporting on his Committee's work, said he wished to draw special attention to Temporary Document 31/PLEN. concerning the Plan Committees, which was a combination of Temporary Document 16/PLEN. and Annex 4 of Document AP VI-No. 33. The Committee had also inserted all the necessary modifications into existing Recommendations and Opinions, had prepared a Resolution setting up the new GAS 6 and had modified Resolution No. 8 and two Opinions, one on the publication of handbooks and the other on the terms of reference of the CCITT. He thanked all the participants for their assistance.

9. Taking of oath by the new Director of the CCITT

The *Chairman* said he had pleasure in confirming the appointment of the new Director and wishing him every success in his new post.

Mr. Burtz solemnly took the oath as newly-elected Director of the CCITT before the Plenary Assembly.

10. Closure of the VIth Plenary Assembly

The new *Director of the CCITT* said that at that moving moment he wished to assure the Plenary Assembly that he and his future collaborators in the CCITT would do everything in their power to give all Administrations full satisfaction. Everyone was aware of the extent of the task: not only was the work of the Study Groups expanding, but new and very important functions were being laid on the CCITT in connection with assistance to the developing countries. The financial considerations that had been referred to would make it difficult to carry out those essential tasks effectively, and the CCITT Secretariat would need all the help that could be given it by the Chairmen and Vice-Chairmen of Study Groups and perhaps by volunteer members of Study Groups. In conclusion, he thanked all the countries that had shown their confidence in him by voting for him and assured them that he would try to justify that confidence.

The *Chairman* made the statement reproduced in the Annex hereto.

The *delegate of Saudi Arabia* said that, now that the VIth Plenary Assembly was coming to an end, he wished to express on behalf of all the participants the Assembly's great appreciation to the Chairman for the successful manner in which he had brought his difficult task to a conclusion, as he had always done in the past. All the delegates had enjoyed the meetings presided over by the Chairman, and their stay in Geneva had been as pleasant as ever, thanks to kind Swiss hospitality.

All participants were sad to be taking leave of Mr. Croze who, as Director of the CCITT, had organized the Assembly most efficiently. They greatly appreciated the efforts of Mr. Croze and his staff and wished him all the best in his retirement. They were sure that the new Director, Mr. Burtz, would show the same zeal and assured him of their cooperation.

To interpret their appreciation of the services rendered to the CCITT by Mr. Croze, and to remind him of the VIth Plenary Assembly, the participants wished to present him with a humble gift as a souvenir of all his friends attending the Assembly.

The *delegate of Philippines* said that his delegation wished to extend to the Chairman its appreciation of the manner in which he had guided the deliberations. It also wished to felicitate Mr. Croze on his wise guidance and to express its deep regret at his untimely retirement; the Assembly's one consolation in that regard was that it had appointed a new Director of equal skill and competence and that the CCITT was in good hands for the next study period. The Philippine delegation assured Mr. Burtz of its full support and cooperation. In conclusion, he thanked all the Secretariat for their valuable assistance.

The *delegate of China* made the following statement:

"Mr. Chairman,

At the time when the CCITT VIth Plenary Assembly is coming to an end, I should like, on behalf of the Chinese Telecommunication Delegation, to extend our warm congratulations on the success of this Assembly.

Mr. Chairman,

It has been shown during the Assembly that the success of our meeting and the progress in the past study period are results of the development of the world revolutionary situation and of the participation and efforts of all Administrations and delegates present, especially the participation and efforts of more and more developing countries. However, at the beginning of our Assembly, a certain delegate claimed that all these results are due to the so-called 'European Security Conference', and tried hard to preach the so-called 'spirit of the Security Conference', with the aim of deceiving the people in various countries and covering up their aggressive and expansionist ambitions. All of us should heighten our vigilance.

Mr. Chairman,

The CCITT 1973-1976 study period has come to an end and the new study period will begin. I should like to take this opportunity to express our thanks to Mr. Croze for the work he has done and wish him good health in his retirement. At the same time, I should like to extend our warm congratulations to Mr. Burtz on his nomination as Director of the CCITT and wish him every success in his work.

I should like also to express my sincere thanks to Mr. Locher who has successfully conducted our meeting.

Finally, my thanks go to all the staff members of the Conference Secretariat and the interpreters who have contributed to the work of the Assembly and wish all the delegates a pleasant journey home."

Mr. Croze made the following statement:

"The kind words that have just been addressed to me are far too flattering. I have done what I could, in the face of difficulties of which you are aware and which are essentially financial. I have tried to use my very long — too long — administrative experience for the benefit of the CCITT. But no work effectively done is ever the work of one man alone. It is always the work of a team, and the tasks of the CCITT could not have been successfully carried out if I had not had around me an outstanding team of faithful and dedicated collaborators. You cannot imagine all the tasks that they perform during the years which constitute a study period. But it is not only this small Secretariat team that forms the basis of our work, it is the large team of all the Study Groups and their Chairmen and Vice-Chairmen. It is they who should really be thanked and congratulated. In any case, I ascribe to them the greater part of the laudatory remarks that you have so kindly addressed to me. I am extremely grateful to you for these words and at the same time I am deeply moved by the presents you have so kindly given me. They will remind me of the closure of this Assembly, they will remind me of all of you individually, since I shall find your signatures on this document, and they will remind me that a man must not live his life alone. And these goblets that you have just presented to me will be for me a symbol of friendship.

Mr. Chairman, allow me to say no more, for I am very deeply moved."

The *Chairman* again thanked all the participants, wished them a safe journey home and declared closed the Vith Plenary Assembly of the CCITT.

The meeting rose at 1400 hours.

ANNEX

Concluding statement by Mr. F. Locher (Switzerland), Chairman of the Vith Plenary Assembly of the CCITT

"Ladies and Gentlemen,

The Vith Plenary Assembly is coming to an end and we can be satisfied with the results achieved during these two weeks of effort. It was not without some misgivings that I accepted the Chairmanship which you entrusted to me. I then asked you for your assistance and cooperation, knowing that you were prepared to render them to me; you have indeed supported me throughout our debates, and I am very sincerely grateful to you.

This Assembly has enabled us to realize what an enormous amount of work has been accomplished during the past study period. The scientific knowledge contained in the documents we have had before us demonstrates the will for collaboration between our experts and our Administrations. These documents are the tangible expression of the state of mind, the understanding and the industry which prevail within the ITU and the CCITT. They also reflect the vitality and dynamism of world telecommunications.

Personally, I have been impressed by the quality of the work which was submitted to our Assembly for approval, and I should like to congratulate and thank all the Chairmen and Vice-Chairmen of Study Groups and Working Parties and the delegates to meetings for the outstanding enthusiasm which they brought to their tasks.

Another point which struck me was the excellent coordination between the studies of the various Study Groups, since at no time did I receive the impression of any duplication between different areas of activity. Similarly, I am most pleased to note the excellent cooperation that exists between the CCITT and CCIR.

The fact that we can today congratulate ourselves on the results of our work is above all due to you, the Delegates.

But this cannot suffice to bring a Plenary Assembly to a successful conclusion. I must also thank the Chairmen and Vice-Chairmen of the Committees, the members of the Editorial Committee and the Chairmen of the working groups. I also wish to express my gratitude to the senior officials of the ITU — Mr. Mili, Mr. Croze, Mr. Kirby and Mr. Gromov.

My thanks also go to all the staff of the Specialized Secretariat, to the minute writers, the interpreters, the translators, the typists, the operators, the staff of the document reproduction and distribution services, the messengers and the staff of the telecommunication service. Thanks to the good will of all concerned, we have succeeded in carrying out the difficult task with which we were confronted.

Several Study Group Chairmen and Vice-Chairmen are remaining in office; they have already provided able guidance for their Groups, and we are sure that they will continue to do so in future. Many of our colleagues have been newly elected as Chairmen or Vice-Chairmen; we congratulate them once again and thank them for kindly taking on additional tasks. Our best wishes go to them; we are certain of their success, for their profound knowledge and their experience should enable them to overcome the many difficulties of Study Group work.

A Plenary Assembly gives us the opportunity of reviewing past work and getting off to a fresh start. It is an occasion for seeing old friends and making new ones.

But alas, sometimes it also entails the obligation of parting from friends. It is difficult for me to mention by name every one of the Chairmen and Vice-Chairmen who will no longer preside over the meetings of their Study Group, either because their professional functions have changed or because they have reached retirement age. To the former, I wish success and satisfaction in their new jobs and to the latter a long, peaceful and happy retirement. Their indefatigable activity has earned all of them our heartiest congratulations and thanks.

Yet there is one in our midst to whom our most particular gratitude should be addressed. You must all be thinking of him. This is, of course, the outgoing Director of the CCITT, Mr. Croze.

Dear Mr. Croze,

You have decided to leave the conduct of the CCITT in other hands, for reasons which we understand and respect. You have guided the CCITT in an exemplary manner for these past four years, and we are extremely grateful to you for this. We thank you for your efforts and are sure that the work performed will bear fruit in the future. You have steered the CCITT expertly and firmly. No area of telecommunications is unknown to you, and thanks to you the reputation of the CCITT has been greatly enhanced. All of us will cherish the memory of your term at the head of this organization. Everyone who has had the privilege of working with you will remember you as the affable, honest and loyal man that you are. And so, permit me as Chairman of this Assembly, but also as a friend, to present you with a souvenir of your work in Geneva, a tangible token of our sincere appreciation.

You have elected a new Director, and I am sure that your choice of Mr. Burtz has been wise. The CCITT continues to be in good hands. This is most important, since many new and increasingly difficult and complex tasks will have to be accomplished in the forthcoming years. We expect much of the CCITT in matters concerning operation, tariffs and technical development. We wish Mr. Burtz every success in his work. May he have the health and strength he needs for the performance of his task; we hope that he will find in it all the satisfaction he expects. We are thus on the threshold of a new study period. Telecommunications are playing an increasingly important part in the world, and it is our duty to improve them and to make them more accessible to an ever wider public. The rapid and reliable transmission of information has become indispensable for a large number of human activities. Trade, the press, transport, meteorology and tourism, to mention only some of the economic sectors, depend on the services that we make available to them. We are on the right path: the introduction of more and more sophisticated equipment, the opening of new services and the extension of international networks are the most tangible proofs of this. But we cannot stop there; we want always to do better. Moreover, we must subject our actions to self-criticism, since our clients are our judges and assess our work without any indulgence. Accordingly, the more efficient our work is, the more willing citizens and governments will be to support our efforts by placing the necessary resources at our disposal.

In order to give us full satisfaction, however, our work must go beyond the limits of mere utility. We shall be happy if our telecommunication networks, by making it possible for people to see and hear each other - in a word, to communicate - from afar, will enable them to come closer together, to understand each other better and to improve their relations. We wholeheartedly hope that our efforts will be crowned with success and that we will thus contribute together to making our world more and more human."

E.1 – REPORTS

E.1 – REPORT BY THE DIRECTOR ON THE ACTIVITY OF THE CCITT BETWEEN THE Vth AND VIth PLENARY ASSEMBLIES

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1. Introduction

1.1 This report has been prepared pursuant to No. 414 of the International Telecommunication Convention of Malaga-Torremolinos (1973).

1.2 The study period 1973-1976 was a period of intensive activity for the CCITT and substantial results were obtained in the various technical branches of telecommunications, as indicated in the report below.

2. General statistical information concerning the activity of Study Groups

2.1 *List of meetings held*

2.1.1 Annex 1 gives a complete list of the meetings (including final meetings) held by the various Study Groups (and their Working Parties), the Joint Working Parties, the Special Autonomous Working Parties and the Plan Committees. The meetings are listed in chronological order for each Study Group.

2.1.2 The following Table 1 has been prepared on the basis of the list, giving a synoptic view of the number and duration of meetings.

An overall breakdown by year will be found in Table 1, on page 61, of Document AP VI-No. 16 (Report on the Estimate of the Financial Needs of the CCITT).

The table shows that some Study Groups (in plenary meetings and in normal or informal working parties) have held a large number of meetings, while others have complied much more strictly with the CCITT Rules of Procedure (Resolution No. 1 of the Vth Plenary Assembly, Geneva, 1972, page 207, paragraph 5.a)).

2.1.3 Particularly noteworthy is the increasing number of what are called "informal", "private" or "restricted" meetings held in certain Study Groups, consisting of small teams of specialists working without interpretation and often without even the participation of a Secretariat engineer (because the credits for meetings would not cover their travel costs). Such informal meetings have certain advantages and, in particular, they are often useful in clearing the ground for the study of difficult questions in clearly defined fields. But they also have drawbacks; the participants are confined to a few specialists from only a small number of countries with the result that their personal views tend to be reflected in technical developments or in Study Groups' decisions in the preparation of Recommendations; they restrict, or even prevent, the participation of delegates who do not have a sufficient knowledge of English to take an active part in the discussions.

The VIth Plenary Assembly will certainly wish to take a decision on this problem and state whether or not it regards the proliferation of such meetings as in accordance with the spirit of an organization for international cooperation like the CCITT and to give the necessary instructions to the Chairmen of Study Groups.

2.2 *Participation in meetings*

Column 8 in Table 1 gives the number of delegates who participated in the work of each Study Group. This figure has been obtained by adding together the numbers of participants in each of the meetings, irrespective of their nature.

Annex 2 gives a list of the Member countries, represented by an Administration or a recognized private operating agency, which participated in Study Group meetings. It will be seen that the number of countries represented has never been more than about 40, except in the case of the World Plan Committee Meeting in September-October 1975 at which 70 countries were represented, which was a success. In all, however, 102 countries have participated in the meetings of at least one Study Group: this is the first time such a figure has been attained.

2.3 *Registered members of Study Groups*

2.3.1 Table No. 2 shows the numbers of registered members of Study Groups, i.e. the list of those who have registered for the receipt of contributions and other documents.

The meaning of the various columns is as follows:

- A: Administrations of Member countries;
- B: recognized private operating agencies authorized to participate in the work of the CCITT (No. 74 of the Convention);
- C: industrial or scientific organizations admitted to participate in an advisory capacity in meetings of Study Groups (No. 379 of the Convention);
- D: international and regional telecommunication organizations admitted to participate, in an advisory capacity, in the work of the CCITT (No. 377 of the Convention).

TABLE 1 — Meetings

Study Group or Working Party	Number of meetings	Number of working days of meeting				Total	Number of participants
		With interpretation		Without interpretation			
		In Geneva	Outside Geneva	In Geneva	Outside Geneva		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
I	10	41	—	—	3	44	446
II	6	31	—	—	—	31	314
III	5	27	—	—	—	27	410
IV	23	74	—	28	22	124	543
V	2	13	—	—	—	13	125
VI	4	18	—	—	—	18	164
VII	8	46	—	11	—	57	752
VIII	2	6	—	—	—	6	76
IX	5	14	—	3	4	21	289
X	3	14	—	—	—	14	132
XI	22	68	—	29	40	137	780
XII	7	23	5	5	—	33	203
XIII	9	44	—	—	3	47	619
XIV	6	8	—	13	6	27	183
XV	5	6	39	—	—	45	743
XVI	2	4	5	—	—	9	127
Sp. A	4	40	—	—	—	40	497
Sp. C	4	5	7	—	—	12	132
Sp. D	5	18	14	2	—	34	602
GM CDF	3	9	—	—	—	9	117
GM CNC	3	6	5	—	—	11	202
GM LTG	2	9	—	—	—	9	65
GM MAT	1	2	—	—	—	2	31
GM SGO	1	—	2	—	—	2	74
GM SMM	6	14	—	4	3	21	221
GM TAF	1	—	3	—	—	3	60
GM TAL	2	—	6	—	—	6	55
GM TAS	2	2	6	—	—	8	48
GM TEUREM	3	15	—	2	—	17	102
GM UMI	1	3	—	—	—	3	—
GAS 3	7	10	—	26	—	36	89
GAS 5	5	10	5	10	—	25	144
World Plan	3	12	—	—	—	12	398
Plan AF	3	4	7	—	—	11	144
Plan AL	2	—	9	—	—	9	103
Plan AS	2	3	6	—	—	9	150
Plan EU	3	5	6	—	—	11	108
Total	182	604	125	133	81	943	9248
			729		214		

The total of registrations is given as 9833, but this figure covers both entities registered for a single copy of documents in a given language and organizations registered for several dozen copies, sometimes in a number of different languages, each of which counts as one unit. The figure, therefore, is not particularly informative.

2.3.2 The large participation of industrial organizations, usually manufactures of telecommunication equipment will be noted; they are showing a growing interest in the work of the CCITT and especially of certain Study Groups (VII, XI, XIII, XV, Special A), in which they are coming to play a preponderant role.

2.3.3 During the study period 1973-1976, a fairly large number of admissions were authorized by the Administrations of Member countries.

At 15 April 1976, the following were participating in the work of the CCITT:

46 recognized private operating agencies,
118 scientific or industrial organizations, and
24 international organizations concerned with telecommunications (not including the specialized agencies of the United Nations).

2.4 *Contributions – Recommendations and Questions*

Table No. 3 gives statistical data on the results of the Study Groups' work.

2.4.1 *Contributions received*

The number of contributions received and published was particularly high: 4335, or 65 per cent more than the number of contributions (2625) during the preceding period.

This is the best criterion of the ever-increasing interest shown by Administrations and other participating organizations in the work of the CCITT and the extent to which they cooperate in that work.

This substantial number of contributions also provides a measure of the amount of work that had to be done by the CCITT Secretariat and the Common Services of the General Secretariat in having the documents translated, typed, reproduced and circulated. But it is, above all, a measure of the amount of work done by the Study Groups in examining them and drawing conclusions from them for the preparation of Recommendations.

Unfortunately, all too many of these contributions reach the CCITT Secretariat too late for normal publication as White Documents, distributed before the meetings; such delayed contributions constituted 29 per cent of the total.

At the request of the Administrative Council, this serious problem has been the subject of a special report by the Director of the CCITT to the VIth Plenary Assembly, entitled "Delayed Contributions" (Document AP VI-No. 41, dated April 1976).

2.4.2 *Recommendations and Questions*

The full significance of the figures given in columns 6 and 7 of Table No. 3 on Recommendations is appreciated only if they are compared with those of the previous study period 1968-1972, shown on page 120 of Volume I of the *Green Book*:

127 new Recommendations as against 67, and
225 Recommendations substantially amended as against 199.

These figures show that the Study Groups have taken the maximum advantage of the contributions submitted to them and of the meetings organized and have been able to reach agreement on a large number of points.

The number of Questions to be studied in the forthcoming period 1977-1980 shows a small increase (7 per cent) over that of the period which is coming to an end. But this figure in itself is an indication that the number of contributions to be examined will increase still further and that the workload of the Study Groups and of the CCITT will augment accordingly during the next four years.

TABLE 2 - Numbers of registered members of Study Groups

	A	B	C	D	Total
I	131	66	45	12	254
II	183	76	51	14	324
III	186	75	48	28	337
IV	165	68	85	17	335
V	145	41	81	19	286
VI	148	39	67	16	270
VII	189	73	149	30	441
VIII	144	48	75	11	278
IX	143	48	83	14	288
X	156	50	78	9	293
XI	101	66	124	10	301
XII	162	56	99	9	326
XIII	201	70	100	11	382
XIV	144	53	91	10	298
XV	202	58	136	14	410
XVI	156	51	90	13	310
Sp. A	192	72	159	34	457
Sp. C	134	47	74	18	273
Sp. D	193	69	57	9	328
GM CDF	110	30	63	5	208
GM CNC	103	36	76	5	220
GM LTG	125	45	66	8	244
GM MAT	118	30	39	4	191
GM SGO	92	40	62	4	198
GM SMM	49	35	2	6	92
GM TAF	89	31	34	5	159
GM TAL	100	40	34	6	180
GM TAS	79	30	37	5	151
GM TEUREM	115	41	34	12	202
GM UMI	37	24	1	2	64
GAS 3	133	43	76	7	259
GAS 5	159	47	75	11	292
World Plan	179	63	64	15	321
Plan AF	98	41	58	12	209
Plan AL	99	44	57	13	213
Plan AS	92	38	57	14	201
Plan EU	127	41	56	14	238
Total	4979	1825	2583	446	9833

TABLE 3 — Contributions — Recommendations — Questions

Study Group or Working Party (1)	Number of contributions received			Recommendation Series (5)	Number of new Recommendations (6)	Number of Recs. substantially amended (7)	Number of Questions	
	Normal (2)	Delayed (3)	Total (4)				Studied 1973-1976 (8)	To be studied 1977-1980 (9)
I	169	63	232	F	5 (a)	15	15 (b)	13
II	107	57	164	E	6	8	11	10
III	73	12	85	D	6	6	11	8
IV	148	17	165	M, N, O	26 (c)	63	21	21
V	41	1	42	K	1 (d)		17	18
VI	63	—	63	L	3 (e)		19	14
VII	281	229	510	X	11	6	25	33
VIII	32	9	41	S, X.30		4	1	10
IX	116	39	155	R	5 (f)	1	14	14
X	56	27	83	U		1	9 (g)	11
XI	276	230	506	Q, Z	11	39	11	12
XII	149	14	163	G, P	4	5	18	22
XIII	191	71	262	Q	19	19	15	15
XIV	36	10	46	T	3	4	6	9
XV	249	55	304	G, H, J	1	20	33	34
XVI	85	15	100	G		1	10	13
Sp. A	227	144	371	V	9 (h)	7	22	20
Sp. C	72	20	92	G	1	4	10	7
Sp. D	329	84	413	G	9	12	13	19
GM CDF (i)	18	—	18				1 (j)	
GM CNC (i)	106	22	128	G	3	2		
GM LTG (i)	42	6	48	H		8		
GM MAT (i)	7	—	7	R.79	1		1	
GM SGO (i)	15	7	22	G	1			
GM SMM (i)	25	30	55	E	2		2	2
GM TAF (i)	1	—	1					
GM TAL (i)	7	—	7					
GM TAS (i)	4	—	4					
GM TEUREM (i)	10	2	12					
GM UMI (i)	9	—	9					
GAS 3 (l)	22	24	46					
GAS 5 (l)	25	1	26					
World Plan (m)	17	10	27					
Plan AF (m)	23	18	41					
Plan AL (m)	22	22	44					
Plan AS (m)	22	7	29					
Plan EU (m)	12	2	14					
Total	3087	1248	4335		127	225	285	305

Notes

- (a) including 2 Recommendations prepared by JWP SMM and 2 Instructions.
(b) including 2 Questions submitted during the period and 2 raised by the World Administrative Maritime Radio Conference.
(c) including 18 Recommendations prepared jointly with Study Group XIII.
(d) preparation of "Handbook on Earthing" completed.
(e) preparation of "Handbook on Splicing" completed.
(f) including 1 Recommendation prepared by JWP MAT.
(g) including 2 Questions submitted during the period.
(h) including 2 Recommendations approved by the provisional approval procedure.
(i) the Joint Working Parties, except JWP SMM and JWP UMI, have no questions of their own.
(j) preparation of "Handbook on Protection against Lightning" (Chapters 6, 7 and 8) completed.
(l) the GAS prepare Handbooks, not Recommendations; they are assigned subjects for study, not Questions.
(m) the Plan Committees do not issue Recommendations nor study Questions; they prepare the "Plan Books".

2.5 Overall view of the activities of the CCITT since its inception

Using only the headings on page 122 of Volume I of the *Green Book*, the two tables below give a synoptic, if somewhat over-simplified, view of the growth in the activities of the CCITT since its inception:

a) Volume of work (excluding meetings of the Plenary Assembly)

	1st period (1956-1960)	2nd period (1960-1964)	3rd period (1964-1968)	4th period (1968-1972)	5th period (1973-1976)
Meetings days	628	808	1107	810	943
Contributions published	1000	1500	2015	2625	4335
Circulars issued	120	140	160	200	211

b) Participation

Registered members of Study Groups	2615	4496	8000 approx.	9946	9833
Private operating agencies taking part	20	25	39	43	46
Industrial organizations taking part	22	61	83	97	119

3. Results of the work of Study Groups and Working Parties

3.1. Study Groups dealing with telegraph and telex services and data transmission

3.1.1 Telegraph operation and tariffs

Study Group I undertook a systematic review of all Recommendations in its purview and formed to this end two Working Parties on the telegraph and the telex service respectively. In pursuance of Resolutions Nos. 1 and 3 of the World Administrative Telegraph and Telephone Conference (Geneva, 1973), *Instructions for the International Public Telegram Service* and *Instructions for the International Telex Service* were drafted.

Study of simplification of the public telegram service has led to a number of modifications of the operational provisions for this service, the most important one being the introduction of new word count rules which are proposed to enter into force on 1 October 1977. The same operative date is proposed for all the provisions concerned with operation, charging and accounting for the telegraph and telex services, the texts of which are now to be found in four consolidated Recommendations.

3.1.2 Alphabetic telegraph and data apparatus

Study Group VIII worked in close cooperation with Study Group VII to keep its texts aligned with the requirements of public data networks. Thus the new rate of 300 bit/s is now included in the relevant data terminal Recommendations as well as in the user classes of service of data networks.

Work on standardizing a graphic symbol for indication of an error was continued and led to a number of agreed principles. New teleprinter keyboard facilities to facilitate operation were discussed and appropriate amendments put to the relevant Recommendations. Finally, a review and rationalization of the Recommendations in the purview of Study Group VIII was undertaken and a new study programme set up which concentrates on a new generation of teleprinters including, *inter alia*, visual display and editing facilities.

3.1.3 *Telegraph transmission*

The main achievements of Study Group IX are to be found in the domain of time division multiplex transmission equipment. Two new Recommendations were drafted, one on a code and speed independent multiplexer for main use over 64 kbit/s bearers and another Recommendation on two code and speed dependent multiplexers which utilize a 2.4 kbit/s bearer. With these new multiplexers a broad range of applications can be provided, e.g. switched and leased telegraph channels, channels for data transmission in the start-stop mode, bearer rates for submultiplexers. It is to be noted that the two code-dependent multiplexers use a different technical concept so that interworking between them is not provided.

Finally Study Group IX drafted Recommendations on the transmission quality of circuits at rates above 50 bit/s and on automatic tests of regenerated 50-baud circuits.

A number of new Questions were drafted, dealing among other subjects with reliability, maintenance and maritime transmission standards.

3.1.4 *Telegraph switching*

The major issue of Study Group X's activities was the improvement and expansion of the telex service and to this end the various telex signalling systems were reviewed. Texts were elaborated to permit limited transit working with terminal signalling systems and the new telex signalling system type D was aligned as far as possible to the decentralized data signalling systems to permit common call control equipment to serve both telex and data networks if required.

Study Group X also set up a number of new Questions to cope with the rapid progress of technique.

3.1.5 *Facsimile telegraphy*

Study Group XIV's main activities were devoted to standardization of document facsimile apparatus with transmission times below 6 minutes and the Study Group was able to draft a new Recommendation on a 3 minutes-machine. The groundwork was laid for a 1 minute-machine with redundancy reduction technique so that during the course of the next study period also a Recommendation on this machine class is to be expected.

Furthermore, the Recommendation on control procedures for document facsimile transmission over the public telephone network was considerably expanded to cater for all practical cases.

Finally, a number of new Questions was set up in view of the increasing interest in this branch of telecommunications.

3.1.6 *Public data network*

Study Group VII continued work on standardization of the various elements of public data networks such as services, facilities and network parameters, interfaces, inter-exchange signalling and transmission. There

are two new V-series compatible interfaces which provide connection of such DTE's to the public data network which have originally been designed for interfacing to V.21 or V.24 specifications. Thus such equipment will be capable of being connected either to the telephone network or to the public data network.

In the field of inter-exchange signalling, the signalling system for start-stop services between anisochronous data networks has been completed and aligned as far as possible with the new telex signalling system and the new synchronous data network signalling system. Thus, Administrations will be able to operate all services independently, to operate telex and start-stop data services over one combined network and provide a separate network for the synchronous data user classes, to operate telex independently and to merge the start-stop and synchronous user classes into one network or finally to merge telex and data into one network. The degree of commonality between the various signalling systems is such that either of these policies will be possible.

A new decentralized signalling system between synchronous data networks has been drafted so that the case of decentralized signalling systems is now completely covered.

There is also a new Recommendation concerning Common Channel Signalling for Synchronous Data Applications which specifies the data user part of a general purpose signalling system which will be capable of providing for a number of services (telephone, data, telex).

The complete signalling system consists of a message transfer part common to all services which is still to be drafted by Study Group XI and user parts specific for each service. With this concept it is possible to centralize to a great extent call control functions for the various services into one central processing unit with multiprogramme operation for those parts of the signalling protocol which are not common. This concept therefore permits for each service to retain its specific needs and requirements and still to economize hardware and software.

In the field of packet switching, a Recommendation has been drafted to provide characteristics and procedures for packet-mode data terminals to be connected to packet-switched data networks.

It is to be noted that the above listing of new Recommendations is not exhaustive.

Study Group VII also drafted the new study programme with emphasis on the interworking between different types of data networks and between public data networks and other public networks.

3.1.7 *Data transmission over analogue circuits*

Among other subjects, Special Study Group A undertook an extensive study of the techniques required to obtain higher data signalling rates over circuits of given characteristics. A number of important new Recommendations could be drafted such as a whole family of modems at 4800 bit/s for operation over leased telephone-type circuits or over the switched telephone network, a modem at 9600 bit/s over leased telephone-type circuits and a multi-purpose group band modem at 48, 56, 64 and 72 kbit/s. To provide interfaces in integrated circuit technology, two new Recommendations on the electrical characteristics for unbalanced and for balanced interchange circuits were elaborated. For medical applications, a modem was standardized which is capable of transmission over the switched telephone network of electrocardiogram records and interpretation results. There is also a new modem which uses the signalling frequencies of push-button telephone sets to allow simple data transmission at rates up to about 10 character/s.

To facilitate locating of faults by local and remote measurements and determining of responsibilities in maintenance questions, a Recommendation on loop test devices for modems was set up.

Finally, Special Study Group A drafted a comprehensive study programme for the next study period.

3.2 *Study Groups dealing with telephone transmission*

3.2.1 *Telephone transmission performance*

During the period 1973-1976, Study Group XII again devoted most of its efforts to endeavouring to define objective methods of measuring transmission performance that would be capable of replacing, at international level, the method of reference equivalents. One of the Study Group's Working Parties drew up programmes of general tests, which were carried out in the CCITT Laboratory, for comparing the results of various objective measurements with the values of reference equivalent and loudness ratings given by subjective tests. On the basis of these tests, Study Group XII proposes to issue a number of general Recommendations and to continue its study of this problem.

The reference equivalents method remains in force; Study Groups XII and XVI have supplemented the Recommendations giving reference equivalent limits by indicating desirable mean values; they have also studied the effects of crosstalk and attenuation distortion and the rules for the use of echo suppressors.

Apart from the general tests, the Laboratory has carried out special tests, against payment, at the request of Administrations, recognized private operating agencies or industrial organizations to determine the reference equivalents of telephone sets supplied by them.

3.2.2 *Circuit noise and reliability*

Study Groups XII and XVI and Special Study Group C (Joint CCITT-CCIR Study Group) have studied the exact definition of objectives for circuit noise and its specification, in particular for radio-relay systems. In addition, Joint Special Study Group C has coordinated the studies of reliability and availability at present being carried out in the CCITT and the CCIR.

3.2.3 *Analogue transmission systems*

Study Group XV has supplemented the Recommendation on 60 MHz systems and proposes to consider the advisability of recommending coaxial pair systems using even greater bandwidths. It has studied a large number of Questions relating to analogue transmission systems and their equipments, such as regulators, echo suppressors and modulating equipments and methods of obtaining circuits for sound-programme transmissions. Study Group XV has directed its study of the visual telephone service with a view to defining a system conforming to television broadcasting standards.

Joint Working Party LTG, in conjunction with all the Study Groups concerned, has prepared Recommendations on bearer circuits for voice-frequency telegraphy, leased telephone-type circuits and group links for the transmission of broad spectrum signals.

3.2.4 *Transmission media*

Study Group XV and Special Study Group D have agreed to regroup the Recommendations on physical transmission media in the same section of Volume III of the next CCITT Book (1977 edition).

Recommendations have already been prepared by:

- Study Group XV on symmetric pairs and coaxial cable pairs used for analogue transmission;
- Joint Working Party CNC on the use of such pairs for digital transmission;
- Study Group XV on submarine cables; and
- Joint Working Party SGO on EHF waveguide systems.

The latter Working Party has also begun the study of optical fibres.

3.2.5 *Digital techniques*

Special Study Group D has prepared draft Recommendations on hypothetical reference connections and hypothetical reference digital paths, on interfaces, on the synchronization of networks and on various multiplex equipments and their hierarchies. It has approved a Recommendation on a system over cable proposed by Joint Working Party CNC.

It has studied various Questions relating to digital transmission systems, such as:

- quality objectives (in particular, permissible error rates),
- maintenance principles,
- digital transmission systems over radio-relay and satellite paths, and
- digital coding of wideband signals.

In addition to its studies focussed on transmission, Special Study Group D has begun the coordination of more general studies on subjects such as:

- the integration of digital transmission and time-division switching, and
- the possibility of integrating different services in a single digital network.

A plan for the distribution of work, particularly among Study Groups VII, X and XI and Special D will be proposed to the Plenary Assembly.

3.2.6 *Economic and technical comparison of transmission systems*

GAS 3 has prepared texts for amplifying and bring up to date the Handbook *Economic and Technical Aspects of the Choice of Transmission Systems*. The new or amended texts refer principally to PCM systems and to national or regional telecommunication satellite systems.

After consulting Administrations in accordance with No. 308 of the Convention, GAS 3's terms of reference have been extended to cover two new tasks:

- updating of the *Handbook on Local Networks* and, in particular, the Chapters dealing with network planning; and
- preparation of a handbook on rural telecommunications.

GAS 3 has set up two editorial groups, giving them instructions so that this work can go ahead without delay.

3.3 *Study Groups dealing with telephone tariffs, operation and switching*

3.3.1 *General tariff principles*

As usual, Study Group III has devoted much of its time to continuing the study of tariff principles and the provisions on the use of private leased circuits and networks. These studies have dealt mainly with:

- private use networks,
- the use of public networks in relation to private use international circuits, and
- the use of leased circuits in relation to computers,

and have led Study Group III to make a number of amendments to Recommendations D.1 and D.2.

A draft Recommendation has been prepared laying down the principles to be applied in fixing rates for the data transmission services provided by public data networks. This Recommendation is of some importance in view of the steady increase in the number of networks of this type.

Study Group III replied in the negative to the Question concerning the introduction of reduced rates during light traffic periods in the international telex service (which is the opposite conclusion to that adopted during the previous study period for the international telephone service).

The four Regional Tariff Groups (for Africa, Latin America, Asia and Oceania, and Europe and the Mediterranean Basin) placed under the auspices of Study Group III have continued the studies begun during the previous study period or undertaken new studies, as required.

The TEUREM Group made a complete re-examination of the tariff standards for the telephone and telex services adopted by the Vth Plenary Assembly and prepared new standards for the public telegram service and for sound and television programme transmissions.

The TAL Group, using a highly pragmatic rate-fixing method known as the "synthetic method", has prepared two draft Recommendations on rate-fixing standards to be applied in the telephone and telex services.

3.3.2 *Problem of the "International Monetary Unit" (UMI)*

At its 30th Session (June 1975), the Administrative Council entrusted the CCITT with the study of a new Question on the possible adoption of a new monetary unit in international telecommunication relations. For the study of this Question, which is of interest to Study Groups I, II and III, a Joint Ad Hoc Working Party was set up, entitled the Joint Working Party UMI, under the authority of Study Group III. In order to allow Administrations and recognized private operating agencies sufficient time to make a thorough study of the Question, the first meeting of Joint Working Party UMI was fixed for July 1976; since the final meeting of Study Group III, a dozen or so contributions have been submitted.

3.3.3 *Telephone operation and tariffs*

The work of Study Group II has led to the following results:

a) *Revision of existing Recommendations*

Particular mention should be made of the proposed amendments to the provisions relating:

- to the *Instructions for the International Telephone Service*,
- to the transmission between Administrations of the information necessary for the recovery of charges and for the accounting of collect and credit card calls, and
- to the establishment and exchange of international accounts.

b) *New Recommendations*

The studies conducted by Study Group II have led to new draft Recommendations on:

- Mode of application of the flat-rate price procedure (set forth in Recommendation E.250) for facilities made available to Administrations in other countries.
- Transfer, in encoded form, of telephone reversed charge billing and accounting information.
- Subscriber control procedures for supplementary telephone services (mainly in view of the steady increase in the numbers of SPC exchanges).
- Instructions for the users of the worldwide telephone service.
- Pictograms and symbols to assist telephone users, for example in public telephone booths.

It should be noted that the last three points listed above were examined as part of Study Group II's study of human factors.

c) *Maritime service*

The World Administrative Maritime Radio Conference (Geneva, 1974) instructed the CCITT in its Resolutions Mar2-22 and Mar2-23 to study two new Questions, for which task it was thought necessary to set up a Joint Working Party of Study Groups I and II, entitled Joint Working Party SMM (Maritime Mobile Service).

The main results of the work of Joint Working Party SMM were:

- the abolition of ship charges,
- the designation in each country of a single (in principle) authority responsible for maritime accounting, and
- the preparation of two draft Recommendations, one on charging and accounting procedures and the other on operation in the maritime mobile service.

3.3.4 "Telecommunications – Economic studies"

Special Autonomous Working Party GAS 5 has prepared a new series of economic studies which will constitute the six chapters of a 1976 edition of the Handbook *Telecommunications – Economic studies*. Two chapters deal with planning and the influence of telecommunications on a national economy; two deal with accounting – particularly analytic accounting – in a telecommunication undertaking; one deals with staff policy in such an enterprise. The last chapter describes the relations and interaction of telecommunications as a branch of national activity and the national economy as a whole on the economic, industrial and technological levels.

In particular, it describes the conditions necessary for the creation of a local telecommunication equipment manufacturing industry.

GAS 5 welcomed the publication in 1974 of the first edition of the *Yearbook of Common Carrier Telecommunication Statistics* (recommended by CCITT Recommendation C.1) and expressed satisfaction at the fact that in future it will have at its disposal a book of economic statistics for use as a working tool and as a reference document. Cooperation between GAS 5 and Study Groups I and II, responsible for the *General Telegraph Statistics* and the *General Telephone Statistics* respectively, has made it possible to combine these data in the *Yearbook of Common Carrier Telecommunication Statistics* by making a few minor changes to the headings in the Yearbook.

3.3.5 Telephone signalling and switching

a) Some might consider the amount of work done in the current study period by Study Group XI as almost excessive; it corresponds, however, to the impact on the CCITT of current technical developments which have made switching a factor of ever-increasing importance.

b) In *international signalling*, Study Group XI has:

- specified a digital version of system No. 6 operating at 4.0 and 56.0 kbit/s;
- completely revised the specifications of system R2;
- solved certain specific problems of the interworking of standardized signalling systems and outlined a clear and concise method of describing such interworking;
- made significant progress (greater than could originally have been hoped for) in defining a new signalling system for entirely digital networks. The system is in two parts: one common to all user services (telephony, data, etc.) and the other specific to each service; Study Group XI is responsible for the common part;
- taken an active part in the studies for the introduction of automatic international operation in the radiomaritime mobile service.

c) In *switching*, Study Group XI:

- has drafted the text of Part D "Stored Programme Controlled (SPC) Exchanges", which will follow Parts A, B and C (on conventional, i.e., electromechanical, systems) of the Handbook on national automatic networks;
- has defined the methods of presentation of functional specification and of description of internal logic processes in SPC exchanges;
- has made substantial progress (preparation of a draft Handbook for the users of HLL) in defining an evolved programming language ("High-Level Language" = HLL) for SPC exchanges;
- has defined the essential parts of a man/machine language for SPC exchanges by submitting a number of Recommendations.

3.3.6 Telephone service quality and maintenance of switching equipments

Study Group XIII, which is responsible for automatic (and semi-automatic) international telephone operation – which now covers more than 80 per cent of international traffic – acts as an intermediary between Study Groups II (Manual operation and human factors), IV (Maintenance) and XI (Switching). In addition to the Questions specifically assigned to it by the Plenary Assembly, it was frequently consulted on the Questions assigned to the three above-mentioned Study Groups.

Study Group XIII's own work is concentrated on two groups of subjects:

- a) those relating to the *maintenance* of switching equipments and to *service quality*, involving:
- the total recasting of the common M/Q Recommendations in Volumes IV (Maintenance — Transmission) and VI (Switching). A new maintenance organization structure has been worked out and the functions of a number of maintenance units have been defined, leaving Administrations free to combine them in the way which suits them best;
 - continuance of the international network automatic management tests and definition regarding the thresholds at which automatic intervention takes place;
 - centralized processing of service quality observation results. Further progress was made in the systematic establishment of such an "observatory", involving an increasing number of participants. One conclusion from the analysis of the results should be mentioned, although it was already quoted in the report to the 1972 Plenary Assembly: on certain traffic relations, quality is still far from satisfactory in the international automatic service, where the caller often has to dial the number three or more times before getting through;
- b) those relating to *traffic engineering* and to network planning:
- the effects of the phenomenon of repeated call attempts;
 - re-examination of methods of calculating circuit groups in the case of alternate routing;
 - determination of standard traffic profiles for defining the effects of the non-coincidence of busy hours (time zone differences);
 - characteristics of internal blocking in digital exchanges; and
 - exchange of information and general policy to be followed by the CCITT in the use of computers for network planning, in particular in the case of the international network.

Study Group XIII has informed Study Group XI of its wishes concerning the specification of a standardized man/machine language. It has also defined the system for the International Numbering Plan for the automatic maritime mobile service.

3.4 *Study Groups treating maintenance, protection and means of expression*

3.4.1 *Transmission maintenance of international lines, circuits and chains of circuits*

3.4.1.1 During the 1973-1976 study period, Study Group IV, which is responsible for the transmission aspects of lines, circuits and chains of circuits, pursued its studies, assisted by its five Working Parties, and an *ad hoc* group set up to effect the necessary collaboration between Study Group IV and Study Group XIII.

3.4.1.2 Its diverse studies covered such general aspects as the transmission stability of the lines making up the international network, the maintenance of the circuits, groups, supergroups, etc., cut-up over those lines and the development of basic specification clauses for measurement equipment necessary to carry out that maintenance with the greatest possible economy in manpower. In the detailed application of these principles, the Study Group gave particular attention to methods for testing echo-suppressors, to access requirements and measurement requirements for circuits routed over PCM systems, telecommunication satellite systems, circuits for digital networks data transmission, demand assignment circuits, stereophonic music circuits, and television circuits. It studied the basic specification clauses for measurement equipment for all of these, and also methods for the rapid restoration of service in the event of faults arising. This latter aspect may involve the use of wideband switching, automatic measurement equipment, automatic circuit busying, etc. Confirmation that the transmission quality of the international network is being maintained was obtained by means of an annual statistical analysis of fault reports effected by an expert in both maintenance and statistics.

3.4.1.3 The Study Group also collaborated, through a special rapporteur, in the general study of reliability being carried out in the CCITT.

The Study Group maintains close relations with the European Broadcasting Union.

3.4.2 Protection

3.4.2.1 Two Study Groups are responsible for studies concerning the protection of telecommunication lines. Study Group V is responsible for protection against all aspects of electromagnetic disturbance, while Study Group VI is responsible for recommendations about the protection of underground cables and for the preservation of poles for telecommunication lines.

3.4.2.2 Apart from the detailed Questions set for its study, the work of Study Group V during the present study period has resulted in up-dating and completion of some of the publications for which the Study Group is responsible, namely:

- *Directives concerning the protection of telecommunication lines against harmful effects from electricity lines;*
- *The protection of telecommunication lines and equipment against lightning discharges;*
- *Earthing of telecommunication installations;*

3.4.2.3 The protection aspects studied by Study Group VI concern largely protection against electrolytic and electrochemical corrosion. Its mandate now also covers the construction and installation of cables.

The work of the Study Group has mainly been concentrated on:

a) *Draft of a handbook on the jointing of plastic sheathed cables*

The increasing use of cables having a sheath of plastic material instead of metal gives rise to special problems in respect of the jointing of such cables to ensure watertightness. There is also the problem of introducing such cables into an existing network consisting for the most part of cables having a metal sheath. New jointing processes are continually being developed, and the Study Group has not seen fit to recommend a particular process at this stage but has preferred to give short descriptions of processes having similar characteristics as used in various countries. Interested Administrations are left free to approach the countries concerned for a more detailed description of individual processes.

b) *Modifications of the Handbook on the pressurization of cables*

The Handbook was first published in 1969. Since that date, a number of minor errors have come to light. In particular, a text giving a more comprehensive description of the flow of gas in cables has been drawn up.

c) *New and amended pages for the Recommendations*

The *Recommendations concerning the construction, installation and protection of telecommunication cables in public networks* are under continuous review, in order to keep them up to date. Apart from minor modifications, a new text has been drawn up to replace the existing Annex to Chapter VII which will become Chapter VII bis.

d) *Continued study of aluminium used for cable sheaths and conductors and the jointing of such cables*

e) *Continued study of cathodic protection, and the voltage criterion for the application of such protection*

Cathodic protection may be applied in joint protection schemes involving the pipes and conduits of authorities other than those for telecommunications. The development of such schemes is to the advantage of all concerned, but the expense of installation must be justified by a knowledge of the risk of corrosion danger involved. A criterion based on the voltage difference between the various structures has been under study for many years, and the provisional value adopted remains under continuous review.

f) *Termination of study of alternating current corrosion and establishment of draft Recommendations*

The Study Group has now concluded that corrosion can be caused by alternating current alone. (This excludes any DC component resulting from some degree of rectification of AC). The effect, however, is slight, and the text of a Recommendation has been drawn up to bring the study of the Question to a conclusion.

g) *New understanding of Q.18/IV concerning armouring*

Conventional armouring is expensive, The Study Group now tends to the view that the object of the Question is to describe cheaper forms of armouring and to indicate what may be the results of using such cheaper forms instead of conventional armouring.

3.4.2.4 Study Groups V and VI have close relations with CIGRE, UNIPEDE, IEC, UIG and UITP.

3.4.3 *Means of expression*

This part of the CCITT Secretariat's activities concerns work on terminology and graphical symbols for telecommunications. In these fields, the work of the CCITT is now largely carried out in the specialist study groups, the joint CCI/IEC Working Group on graphical symbols for telecommunications and latterly the Joint Vocabulary Committee managed by the CCIR. One of the Departments retains responsibility in the CCITT Secretariat for liaison functions and for sending an observer to the Vocabulary and Symbols groups when possible. However, activities in these fields have been limited by staffing considerations.

3.5 *Joint Study Groups: cooperation with the CCIR*

3.5.1 Close liaison has been maintained between the CMTT (Joint Study Group on Television Transmission, administered by the CCIR) and

- Study Group XV for sound and television programme transmissions on analogue cable systems; and
- Special Study Group D for digital coding of sound and television programme signals.

3.5.2 In addition, Study Groups XII and XVI have participated in the study of the transmission characteristics examined by CCIR Study Group 8 for a telecommunication-satellite system for the maritime service.

3.5.3 Since most CCITT Study Groups have to define new terms or clarify the meanings of the terms used in rapidly developing technical fields, they have kept in contact with the Joint Study Group on Vocabulary (CMV), administered by the CCIR.

3.5.4 Under the direction of the CCITT, Special Study Group C and GAS 3 are joint groups working both with the CCITT and the CCIR; their work is summarized above.

3.6 *CCITT activities relating to seminars and technical cooperation*

3.6.1 In 1974 and 1975, the CCITT Secretariat sent lecturers to seminars organized by the Technical Cooperation Department as part of the activities undertaken in connection with the Pan-African Telecommunication Network (PANAFTEL). The purpose of these seminars was to familiarize African personnel with the problems posed by the communication equipments used in international exchanges, and by international rate-fixing and signalling. The CCITT Secretariat was represented at the Kinshasa Conference, 1975, at which it was decided to set up an African Telecommunication Union. The participants at that Conference heard a report on the work of the CCITT on rural networks.

3.6.2 As part of the technical cooperation activities carried out in 1974, an official of the CCITT Secretariat went on mission to Sri Lanka to study the methods which might be applied in modernizing the international telegram service in that country. In 1975, a mission was effected to finalize a project for a message switching centre in Mongolia.

4. **Publication of CCITT Books**

4.1 *"Green Book"*

4.1.1 The first three quarters of the year were devoted to the preparation and publication of the CCITT *Green Book* resulting from the work of the Vth Plenary Assembly.

In accordance with the Resolution adopted at that Plenary Assembly, the *Green Book* was published in nine Volumes, some of which (III, IV and VI) were divided into Parts owing to the large number of pages.

In all, the nine Volumes contain 4430 pages of text, tables and figures in each of the three languages. The three versions – English, French and Spanish – have the same pagination, which greatly facilitates reference during discussions.

4.1.2 All the Volumes were made available to Administrations within periods varying from 9 to 17 months, depending on the Volume and the language concerned.

This result was only rendered possible by the active help of the following countries:

Canada,
Spain (CTNE),
the United States of America (ATT),
France,
the United Kingdom (Post Office).

These countries undertook the revision of the Volumes entrusted to them with a view to establishing the best possible concordance, employing correct terminology, between the three language versions on the basis of the master text drafted in French or English by the CCITT Secretariat and translated into the two other languages by the General Secretariat's Language Division. The CTNE (Spain) revised all the Volumes (except Volume I, which was wholly prepared in the three languages at Union Headquarters).

The English and French versions of Volume IV were checked by the editorial groups of Study Group IV.

4.1.3 The setting-up by the Administrative Council at its 29th Session (1974) of a Technical Editing Division in the CCITT Secretariat will make it possible in future to avoid such a complicated procedure as that briefly described above which, while it has many advantages, also has serious drawbacks.

4.2 *Handbooks*

A complete list of the Handbooks published by the CCITT is given in another report (Document AP VI-No. 69).

4.3 *General plans for the development of the international network*

Particulars about the Plan Books and their Supplements are given in Document AP VI-No. 39 (pages 7 and 8).

4.4 *Activities of the Technical Editing Division*

4.4.1 Since it was set up in June 1975, the Division has had, first of all, to decide on its working methods and orientation, taking advantage of the experience acquired by the CCIR in this field since 1969.

New functional relationships had to be established both with the technical departments of the CCITT and with the Common Services (translation, typing, reproduction) of the General Secretariat.

4.4.2 On 1 June 1976, it had already dealt with the technical revision of more than 1000 pages of the final reports of Study Groups and with the technical development of four Handbooks.

4.4.3 The experience gained during its twelve months' work and the working methods introduced will have a favourable effect on the publication of the 1977 edition of the CCITT Book.

5. *Collaboration with international organizations*

During the Study Period 1973-1976, the CCITT collaborated with the following United Nations specialized agencies and international organizations:

– the Universal Post Union (UPU);

- the World Meteorological Organization (WMO);
- the European Conference of Postal and Telecommunications Administrations (CEPT);
- the Organization for Economic Cooperation and Development (OECD);
- the European Computer Manufacturers Association (ECMA);
- the International Air Transport Association (IATA);
- the International Chamber of Shipping (ICS);
- the International Chamber of Commerce (ICC);
- the International Radio-Maritime Committee (CIRM);
- the International Press Telecommunication Council (CITP);
- the International Electrotechnical Commission (IEC);
- the International Conference on Large High Tension Electric Systems (CIGRE);
- the International Teletraffic Congress (CIT);
- the International Federation for Information Processing (IFIP);
- the Federation of European Acoustics Societies (FASE);
- the International Organization for Standardization (ISO);
- the European Organization for Nuclear Research (CERN);
- the International Telecommunications Satellite Consortium (INTELSAT);
- the European Broadcasting Union (EBU);
- the International Union of Railways (UIC);
- the International Gas Union (IGU);
- the International Union of Producers and Distributors of Electrical Energy (UNIPED);
- the International Union of Public Transport (UITP);
- the International Scientific Radio Union (URSI); and
- the Association of State Telecommunication Undertakings of the Andean Sub-Regional Agreement.

ANNEX 1

**List of the meetings of CCITT Study Groups and Working Parties
held during the 1973-1976 study period**

When the venue is not given, it means that the meeting was held in Geneva.

* The meetings marked with a single asterisk were held in Geneva with no interpretation: restricted working parties, teams of specialists, drafting groups, etc.

** The restricted meetings marked with a double asterisk were held outside Geneva, at the invitation of the Chairman of the Working Party or Sub-Group or Group of Experts, without interpretation and with the participation, in some cases, of an engineer from the CCITT Secretariat.

Note.— Meetings attended by representatives from several Study Groups are only listed once, under the controlling Study Group.

1. — *Study Groups*

Study Group I — Telegraph operation and tariffs

25-29 March 1974	Plenary Meeting
23-27 September 1974	Working Party I/TLX (telex)
30 September-4 October 1974	Working Party I/TGM (telegrams)
11-13 March 1975	Working Party I/TGM
17-21 March 1975	Plenary Meeting
8-10 July 1975	Joint Working Party ITU/UPU, on money order telegrams
** 8-10 October 1975	Rapporteurs' Group: transferred accounts service, in London

13-17 October 1975	Working Party I/TLX
20-24 October 1975	Working Party I/TGM
8-14 April 1976	Final Meeting

Study Group II — Telephone operation and tariffs

14-18 January 1974	Plenary Meeting
21-25 January 1974	Working Party II/5 (human factors)
4-7 June 1974	Working Party II/1 (international accounts)
20-24 January 1975	Working Party II/1
26-30 May 1975	Working Party II/5
7-15 April 1976	Final meeting

Study Group III — General tariff principles: lease of telecommunications circuits

7-11 January 1974	Plenary meeting
10-14 June 1974	Working Party III/1 (private leased circuits)
10-14 March 1975	Working Party III/2 (tariff principles for data transmission on public networks dedicated to this type of transmission)
30 June-8 July 1975	Working Party III/1 and Ad Hoc Group for the study of Question 4/III
29 March-2 April 1976	Final meeting

Study Group IV — Transmission maintenance of international lines, circuits and chains of circuits.

26 November-5 December 1973	Working Party IV/1 (maintenance of telephone-type circuits) and IV/2 (measuring equipment)
** 4-6 March 1974	<i>Ad Hoc</i> Group of Study Groups IV and XIII on general maintenance organization (revision of M/Q Recommendations), in Copenhagen
1-5 April 1974	Working Party IV/5 (maintenance of groups, supergroups and new systems)
8-11 April 1974	Working Party IV/4 (quality of the international network)
20-24 May 1974	Working Party IV/1
27-31 May 1974	Working Party IV/2
** 10-13 June 1974	<i>Ad Hoc</i> Group IV/XIII, in Stockholm
* 23-25 September 1974	<i>Ad Hoc</i> Group IV/XIII, in Geneva
28 October-1 November 1974	Working Party IV/3 (sound- programme and television circuits).
4-15 November 1974	Plenary meeting
** 14-17 January 1975	<i>Ad Hoc</i> Group IV/XIII, in Munich
10-14 February 1975	Working Party IV/2
* 10-21 March 1975	Editing Group for Volume IV of the CCITT Book
** 12-16 May 1975	<i>Ad Hoc</i> Group IV/XIII, in London
26-30 May 1975	Working Party IV/4
2-6 June 1975	Working Party IV/3
** 2-4 July 1975	<i>Ad Hoc</i> Group IV/XIII, in Brussels
** 16-18 September 1975	Chairman and Vice-Chairmen of Study Group IV and its Working Parties, in Copenhagen
13-17 October 1975	Working Party IV/5
20-24 October 1975	Working Party IV/1
* 10-21 November 1975	Editing Group for Volume IV
18-26 March 1976	Final meeting
* 7-11 June 1976	Editing Group for Volume IV

Study Group V — Protection against dangers and disturbances of electromagnetic origin

1-10 April 1975	Plenary meeting
9-13 February 1976	Final meeting

Study Group VI — Protection and specifications of cable sheaths and poles

28 January-1 February 1974	Plenary meeting
25-29 November 1974	Drafting Group
16-18 April 1975	Plenary meeting
17-23 February 1976	Final meeting

Study Group VII – New networks for data transmission

- 17-25 January 1974 Plenary meeting and three Working Parties (in two sets of simultaneous meetings)
- 18-19 November 1974 Joint Working Party of Study Groups VII and X (Recommendations U.12 and X.70)
- 20-29 November 1974 Working Parties VII/1 (transmission, multiplex and signalling), VII/2 (interfaces) and VII/3 (user facilities) in two sets of simultaneous meetings
- 28 May-6 June 1975 Plenary meeting and Working Parties VII/1, VII/2 and VII/3
- * 4-5 September 1975 Experts in "definitions" of Study Groups VII and XI
- * 16-19 September 1975 Rapporteurs' Group for the study of Question 1/VII, point C
- * 22-26 September 1975 Sub-Group VII/A for the study of Question 1/VII, point V
- 26 February-4 March 1976 Final meeting

Study Group VIII – Telegraph and data terminal equipment, local connecting lines

- 29 April-1 May 1975 Plenary meeting
- 5 March-9 March 1976 Final meeting

Study Group IX – Telegraph transmission quality; specification of equipment and rules for the maintenance of telegraph channels

- 29 April-3 May 1974 Plenary meeting and Working Parties IX/1 and IX/2
- 22-25 April 1975 Working Parties IX/1, IX/2 and IX/3
- ** 16-19 June 1975 Rapporteurs' Group of Working Party IX/1 (Question 24/IX) in Hauppauge (USA)
- * 14-16 January 1976 Rapporteurs' Group of Working Party IX/1 (Question 24/IX)
- 19-23 January 1976 Final meeting

Study Group X – Telegraph switching

- 6-10 May 1974 Plenary meeting
- 16-21 April 1975 Working Parties X/1 and X/2
- 2-6 February 1976 Final meeting

Study Group XI – Telephone switching and signalling

- 29 October-7 November 1973 Study Group XI and its Working Parties
- 9-15 May 1974 Working Party XI/3 (programming languages)
- ** 10-18 June 1974 Experts of Working Party XI/6 (signalling system No. 6), in Copenhagen
- 16-24 September 1974 Working Party XI/2 (digital signalling systems)
- 18-25 September 1974 Working Party XI/3
- ** 14-18 October 1974 Experts of Working Party XI/6, in Ottawa
- ** 15-17 January 1975 Sub-Group XI/3-2 (encoded programming language), in Berne
- 3-7 February 1975 Working Party XI/1 (interworking of signalling systems)
- 10-19 February 1975 Plenary meeting
- * 28 April-9 May 1975 Specialists' Group on high-level programming language for SPC exchanges
- 12-16 May 1975 Working Party XI/3
- * 25 August-5 September 1975 Specialists' Group on high-level programming language for SPC exchanges
- 1-10 September 1975 Working Party XI/2
- 4-12 September 1975 Working Party XI/3
- 11-12 September 1975 Experts in common channel signalling of Study Groups XI, VII, Special D
- * 15-19 September 1975 Working Party XI/1
- ** 28-30 October 1975 Drafting Group of Working Party XI/2, in Bruges
- ** 24-25 November 1975 Drafting Group of Working Party XI/1, in Darmstadt
- * 1-4 December 1975 Experts of Sub-Group XI/3-3 (man/machine language)

- ** 8-19 December 1975 Specialists' Group on high level programming language, in Berne
 ** 26 January-5 February 1976 Specialists' Group on high level language, in Berne
 6-16 February 1976 Final meeting
- Study Group XII* – Telephone transmission performance and local telephone networks
- * 9-13 July 1973 Laboratory Working Party
 27-31 May 1974 Laboratory Working Party
 2-8 and 11 October 1974 Plenary meeting in Munich
 2-6 June 1975 Laboratory Working Party
 27-31 October 1975 Ad Hoc Working Party (composed of the Special Rapporteurs of Study Group XII)
 24-27 February 1976 Laboratory Working Party
 1-4 March 1976 Final meeting
- Study Group XIII* – Automatic and semi-automatic telephone networks
- 9-15 November 1973 Working Party XIII/1 (switching maintenance and service quality)
 12-16 November 1973 Working Party XIII/2 (traffic engineering)
 26 September-3 October 1974 Working Party XIII/1
 27 September-4 October 1974 Working Party XIII/2
 20-26 February 1975 Plenary meeting
 ** 17-19 June 1975 Restricted Working Party for the study of repeated call attempts, in Stockholm
 29 September-7 October 1975 Working Party XIII/2
 2-10 October 1975 Working Party XIII/1
 17-25 February 1976 Final meeting
- Study Group XIV* – Facsimile telegraph transmission and equipment
- 24-26 April 1974 Plenary meeting
 ** 13-15 November 1974 Special Rapporteurs' Groups on group 2 apparatus and Recommendation T.4, in London
 * 28 April-7 May 1975 Special Rapporteurs' Groups on group 2 and 3 apparatus and Recommendation T.4
 * 17-21 November 1975 Special Rapporteurs' Groups on group 2 apparatus and Recommendation T.4
 ** 25-27 November 1975 Special Rapporteurs' Group on group 3 apparatus, in Paris
 26-30 January 1976 Final meeting
- Study Group XV* – Transmission systems
- 21 January-8 February 1974 Plenary meeting and Working Parties, in Paris
 14 April-15 May 1975 Plenary meeting and Working Parties, in Kyoto
 19-20 and 22-27 January 1976 Final meeting
- Study Group XVI* – Telephone circuits
- 9-10 and 14-16 October 1974 Plenary meeting in Munich
 3-6 November 1975 Final meeting
- Special Study Group A* – Data transmission
- 7-16 January 1974 Sp. SG.A and its Working Parties (in two sets of simultaneous meetings)
 4-11 December 1974 Working Parties of Sp. SG.A (in two sets of simultaneous meetings)
 20-27 May 1975 Plenary meeting
 10-17 March 1976 Final meeting
- Joint Special Study Group C* – Circuit noise and reliability (CCITT, CCIR)
- 14-16 October 1974 Meeting of Rapporteurs on reliability, in Munich
 17-22 October 1974 Plenary meeting in Munich

4-5 November 1975	Meeting of Rapporteurs on reliability
7-11 November 1975	Final meeting
<i>Special Study Group D</i> – Pulse code modulation	
1-11 April 1974	Plenary meeting and Working Parties
28 April-14 May and 16 May 1975	Plenary meeting and Working Parties, in Kyoto
15-16 September 1975	Chairmen and Vice-Chairmen of SG Sp.D, VII, X, XI and Sp.A (Coordination)
* 17-18 September 1975	Chairman and Vice-Chairmen of SG Sp.D and Joint Working Party CNC
28 January-5 February 1976	Final meeting

2. – *Joint Working Parties (GM)*

GM CDF – Protection against lightning

8-12 July 1974	Plenary meeting
11-15 April 1975	Plenary meeting
16 February 1976	Final meeting

GM CNC – Digital paths over cable

25-29 March 1974	Plenary meeting
17-23 April 1975	Plenary meeting in Kyoto
21 January 1976	Final meeting

GM LTG – Use of telephone-type lines for purposes other than telephony

6-10 May 1974	Plenary meeting
13-16 January 1976	Final meeting

GM MAT – Automatic telegraph maintenance

14-15 April 1975	Plenary meeting
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GM SGO – Waveguide systems

24-25 April 1975	Plenary meeting in Kyoto
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GM SMM – Maritime Mobile Service

* 29-30 May 1974	Preparatory meeting (accounts and operation of radiomaritime services)
* 26-27 August 1974	Restricted meeting
27 January-4 February 1975	Plenary meeting
** 24-26 February 1975	Drafting Group, in the Hague
27-31 October 1975	Plenary meeting
5-6 April 1976	Final meeting

GM TAF – Tariff Group for Africa

18-20 February 1975	Plenary meeting in Kinshasa
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GM TAL - Tariff Group for Latin America

25-27 June 1973	Plenary meeting in Brasilia
7-9 April 1975	Plenary meeting in Rio de Janeiro

GM TAS – Tariff Group for Asia

23-30 October 1974	Plenary meeting in Tokyo
9-10 July 1975	Plenary meeting

GM TEUR – Tariff Group for Europe

1-5 April 1974	Plenary meeting
* 16-17 May 1974	Restricted Working Party (questionnaire on costing)
28 April-9 May 1975	Plenary meeting

GM UMI – International monetary unit

7-9 July 1975	First meeting
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3. — *Special Autonomous Working Parties*

<i>GAS 3</i> — Economic and technical comparison of transmission systems	
* 17-19 September 1973	Drafting Group on the GAS 3 Handbook
* 10-14 June 1974	Drafting Group
30 June-11 July 1975	Final meeting
* 14-18 July 1975	Drafting Group on the Handbook
* 18-20 November 1975	Restricted Working Party on rural telecommunications
* 7-11 June 1976	Drafting Group on Local Networks
* 14-18 June 1976	Drafting Group on Rural telecommunications
<i>GAS 5</i> — Economic conditions and telecommunication development	
10-14 September 1973	Plenary meeting
* 22-26 April 1974	Restricted Working Party
18-22 November 1974	Plenary meeting in Paris
* 2-6 June 1975	Restricted Working Party
24-28 November 1975	Final meeting

4. — *Plan Committees**World Plan Committee*

29 October-1 November 1973	World Plan Working Party
23-24 September 1974	World Plan Working Party
25 September-2 October 1975	Plenary meeting

Regional Plan Committee for Africa

30 January-1 February 1974	Africa Plan Coordination Committee
12-20 February 1975	Plenary meeting in Kinshasa
19 September 1975	Coordination Committee

Regional Plan Committee for Latin America

28 June-5 July 1973	Plenary meeting in Brasilia
30 June-2 July 1975	Latin America Plan Working Party in Rio de Janeiro

Regional Plan Committee for Asia and Oceania

5-7 November 1973	Asia-Oceania Plan Coordination Committee
23-30 October 1974	Plenary meeting in Tokyo

Regional Plan Committee for Europe and the Mediterranean Basin

10-13 December 1973	Europe Plan Coordination Committee
3-10 September 1974	Plenary meeting in León (Spain)
22 September 1975	Coordination Committee

E.2 – REPORT BY COMMITTEE A

WORKING METHODS OF THE CCITT

(as amended and approved by the fourteenth Plenary Meeting)

In conformity with paragraph 440 of the International Telecommunication Convention (Malaga-Torremolinos, 1973) the Plenary Assembly set up Committee A with the following terms of reference:

“Consideration of organization and working methods of the CCITT Study Groups.”

The following documents were considered in the course of the Committee’s work:

- AP VI-No. 8 Patents
- AP VI-No. 15 Report by the Director on the activity of the CCITT between the Vth and VIth Plenary Assemblies
- AP VI-No. 41 Delayed contributions
- AP VI-No. 42 Publication of the 1977 edition of the CCITT Book
- AP VI-No. 59 Suggestions concerning the Resolutions and Opinions adopted by the Vth Plenary Assembly
- AP VI-No. 60 Patent policy
- AP VI-No. 68 Patent policy within the various CCITT Study Groups
- AP VI-No. 77 Publication of the 1977 edition of the CCITT Book
- AP VI-No. 78 Study Groups and Joint Working Parties
- AP VI-No. 91 Report of the Joint Study Group for Vocabulary (CMV)
- AP VI-No. 97 Comments by U.K. Administration on AP VI-No. 42
- AP VI-No. 101 Study Groups and Joint Working Parties
- AP VI-No. 103 Organization and collaboration on definitions
- AP VI-No. 104 Restructuring of CCITT Study Groups

CONTENTS

- Part I* – Proposals made by Committee A
- Part II* – Annexes to the Committee’s report
- Annex 1* – Report by Working Party on Resolutions and Opinions
- Annex 2* – Minutes of the Committee’s meeting

PART I

PROPOSALS MADE BY COMMITTEE A

1. **Publication of the 1977 edition of the CCITT Book** (Documents AP VI-Nos. 42, 77 and 97)
 - 1.1 All existing Recommendations would be reprinted in the *Orange Book*.
 - 1.2 The *Orange Book* would contain the texts of all Questions without annexes.

1.3 All Questions with annexes will be published as the Contribution No. 1 of each Study Group. Contribution No. 1 will be issued with a plastic cover and will be distributed among the Members of corresponding Study Groups; there will be also copies for sale to other users.

1.4 Supplements of a documentary nature published in the *Green Book* will not be reproduced in the *Orange Book*; if necessary the *Orange Book* will contain the references to Supplements of the *Green Book*.

1.5 The *Orange Book* will be published with parallel page numbering in the three official languages of the Union.

1.6 In such instances when the text of a Recommendation concerns several parts of the *Orange Book*, it will appear only in the first part. In all other parts will be references to the first Volume in which the text is to be found.

1.7 It was proposed to leave to the CCITT Secretariat the task of splitting the contents of the *Orange Book* into several parts, grouping subject-matters logically and avoiding duplication.

1.8 The ITU and Administrations are requested to take necessary steps at the national and international level to publicize CCITT Books.

2. Delayed contributions (Documents AP VI-Nos. 15 and 41)

It was reported that a high percentage of contributions reached the CCITT Secretariat very late. In order to shorten the time-limits in which those contributions should reach the Secretariat, it was proposed to make the following amendments to the *Resolution No. 1*:

2.1 In Part III of the Resolution, paragraph 4.c), replace the words "less than four months" by "less than three months".

2.2 Amend the existing text of the paragraph 4.d), Part III of the Resolution according to the suggestion contained in AP VI-No. 41, 5.3, replacing in the first sub-paragraph the word "must" by "should".

2.3 Amend the existing text of the paragraph 4.g), Part III of the Resolution according to the suggestion contained in AP VI-No. 41, 5.4, adding to the second sub-paragraph of 5.4 the words "unless the meeting decides otherwise".

2.4 Replace in the paragraph 4.h), Part III of the Resolution the words "temporary documents" by "delayed contributions".

3. Review of Resolutions and Opinions

The Committee has established a Working Party under the Chairmanship of the Vice-Chairman of the Committee to deal with the revision of Recommendations and Opinions contained in Volume I of the CCITT *Green Book*.

The results of the work of this Working Party are attached to this report as Annex 1.

4. Organization of Study Groups, Joint Study Groups, Joint Working Parties, Regional Working Parties and Special Autonomous Working Parties (Documents AP VI-Nos. 78, 101 and 104).

Having considered proposals submitted by the Director of the CCITT and by several countries, a majority was in favour of changing the present structure to the following:

4.1 In the new study period Study Group III would be entrusted with the study of all tariff Questions, it being understood that Study Groups I and II would be required to provide information on the aspects which had been within their competence up to the present. This procedure has already been followed in the past by Study Group VII.

4.2 To combine all operational telephone Questions including manual, semi-automatic and automatic operations in Study Group II.

4.3 To combine all Questions concerning the maintenance of international lines, circuits, chains of circuits and maintenance of switching equipment in Study Group IV.

4.4 To disband Study Group XIII, transferring operational Questions to Study Group II and maintenance Questions to Study Group IV.

4.5 To disband Joint Working Parties CDF, MAT and SGO.

- 4.6 To give the Special Study Groups A and D status of normal CCITT Study Groups and to give them numbers XVII and XVIII respectively.
- 4.7 To rename Special Study Group C as Joint CCITT/CCIR Study Group on noise and availability (abbreviation CMBD).
- 4.8 To maintain Joint Working Parties LTG, CNC, SMM and UMI, subject to the recommendation of Committee B for CNC.
- 4.9 To maintain Regional Tariff Groups TAF, TAL, TAS and TEUREM, it being understood that these Tariff Groups shall report to Study Group III and should be referred to as Regional Working Parties (GR) instead of the former designation of GM.
- 4.10 Setting up of Special Autonomous Working Parties will be done by Committee D.
- 4.11 List of Study Groups, Joint Working Parties and Regional Working Parties proposed for study period 1976-1980:

Study Groups

- | | |
|-------------------|---|
| Study Group I | Telegraph operation (including telex) (see 4.1 above); |
| Study Group II | Telephone operation (see 4.1 and 4.2 above); |
| Study Group III | Tariffs; lease of telecommunication circuits (see 4.1 above); |
| Study Group IV | Maintenance of international lines, circuits, chains of circuits and switching equipment (see 4.3 above); |
| Study Group V | Protection against dangers and disturbances of electromagnetic origin (unchanged); |
| Study Group VI | Protection and specifications of cable sheaths and poles (unchanged); |
| Study Group VII | New networks for data transmission (see 4.1 above); |
| Study Group VIII | Telegraph and data terminal equipment and local connecting lines (unchanged); |
| Study Group IX | Telegraph transmission quality; specification of equipment and rules for the maintenance of telegraph channels (unchanged); |
| Study Group X | Telegraph switching (unchanged); |
| Study Group XI | Telephone switching and signalling (unchanged); |
| Study Group XII | Telephone transmission performance and local telephone networks (unchanged); |
| Study Group XIV | Facsimile telegraph transmission and equipment (unchanged); |
| Study Group XV | Transmission systems (unchanged); |
| Study Group XVI | Telephone circuits (unchanged); |
| Study Group XVII | Data transmission (see 4.6 above); |
| Study Group XVIII | Pulse code modulation (see 4.6 above). |

Joint CCITT/CCIR Study Groups

- | | |
|------|---|
| CMBD | – Joint CCITT/CCIR Study Group on noise and availability administered by the CCITT (see 4.7 above); |
| CMTT | – Joint CCIR/CCITT Study Group on television and sound transmission administered by the CCIR; |
| CMV | – Joint CCIR/CCITT Study Group on definitions and symbols administered by the CCIR. |

Joint Working Parties

- GM LTG – Use of telephone-type lines for purposes other than telephony (Study Groups IX, XIV, XV, XVII, CMBD);
- GM SMM – Maritime mobile service (Study Groups I, II and III);
- GM UMI – International monetary unit (Study Groups I, II and III).

Regional Working Parties of Study Group III

- GR TAF – Tariffs (Africa);
- GR TAL – Tariffs (Latin America);
- GR TAS – Tariffs (Asia);
- GR TEUREM – Tariffs (Europe and Mediterranean Basin).

Committee B is requested to consider the titles of Study Groups and to amplify and clarify them where necessary, thus giving an indication of the Group's terms of reference.

4.12 The Committee approved in principle the proposal on the setting up of an autonomous group to study switching systems for national use and the economic and technical comparison of such systems. The Committee requested Committee B to assign to Study Group XI the study of switching systems for national use and Committee D to set up an Autonomous Working Party for economic and technical comparison of switching systems for national use.

5. Organization of work on vocabulary (Documents AP VI-Nos. 91 and 103)

Several delegations expressed their strong views that work on vocabulary should be organized through the normal Study Groups with a necessary coordination being done by the Secretariat. As a consequence, the withdrawal of CCITT support of Joint CCIR/CCITT Study Group CMV was proposed. However, the Committee could not reach an agreement on this proposal and decided to request the Director of CCITT in collaboration with CCIR to seek the most economic and efficient method of organizing work on vocabulary. Proposals to this effect are requested to be sent to the next Plenary Meeting of CCIR.

6. Patent policy (Documents AP VI-Nos. 8, 60 and 68)

After hearing the views of several delegations on the above documents the Committee decided that this matter does not fall directly in the terms of reference of Committee A and should be discussed at the Plenary session.

7. Measures approved by the Administrative Council with a view to economizing on the production of documents (Circular-letter No. 129 of the General Secretariat, dated 15 September 1976).

The Committee had with satisfaction taken note of the measures aimed at achieving savings adopted by the Administrative Council and outlined in Circular-letter No. 129 of the General Secretariat.

PART II

ANNEXES TO THE REPORT OF COMMITTEE A

ANNEX 1

Report of the Working Party on "Resolutions and Opinions"

*(as amended by the Editorial Committee and approved
by the fourteenth Plenary Meeting)*

The Working Party established by Committee A of the VIth Plenary Assembly has reviewed the Resolutions and Opinions contained in Volume I of the *Green Book* and recommends the following changes, additions and deletions:

A – RESOLUTIONS

I. Resolution No. 1 – Additional Rules of Procedure of the CCITT (*Green Book*, Volume I, pages 201-210)

1. Preamble

The references to the Montreux Convention should be replaced by references to the Malaga-Torremolinos Convention, 1973:

"In view of Article 11, including particularly paragraph 5 (No. 79), Articles 58, 68-76 and Chapter XI of the International Telecommunication Convention, Malaga-Torremolinos, 1973".

I. Plenary Assembly

1.b) Delete "and Associate Members".

Delete the 3rd sentence: "if a scientific or industrial organization ... preparatory meetings of these Study Groups" and add a reference ¹⁾ at the end of this sub-paragraph, with the following footnote:

¹⁾ It should be remembered that in accordance with Nos. 73, 74 and 379 of the Convention, scientific or industrial organizations admitted to participate in an advisory capacity in meetings of the Study Groups (including their final meetings, see III.10 below) are not invited to the meeting of the Plenary Assembly".

1.c) Delete the end of the first sentence, "as well as the names of experts of the scientific and industrial organizations who will attend meetings of the preparatory Study Groups only".

2.a) vi) Add: "and in particular an Editorial Committee".

3.b) Where a Recommendation has been adopted by the Plenary Assembly as a result of a vote that was not unanimous, the Recommendation will refer to the result of the vote in the form: "The CCITT issues Recommendation ... by a majority (by ... votes to ..., with ... abstentions)".

4. Replace: "No. 674 of the ITU Convention (Montreux 1965)" by "No. 442 of the International Telecommunication Convention, (Malaga-Torremolinos, 1973)" and replace "(No. 781)" by "(No. 388)".

6. Replace: "Autonomous Specialized Working Parties (GAS)" by "Special Autonomous Study Groups (GAS)".

8.g) Replace: "No. 781" by "No. 388".

II. *The Director*

6. Add the following sub-paragraph: "Administrations and other participating organizations are urgently requested to supply these particulars after each Plenary Assembly, not later than two months after they have received the circular of the Director of the CCITT, and to update them regularly."

III. *Study Groups and Working Parties*

1. *Classification of Study Groups*

- 1.a) Delete the last three words "Special Study Groups" and insert "Special Autonomous Study Groups".
- 1.b) Delete.
- 1.c) Concerns the French text only.
- 1.c) Renumber as 1.b), delete the footnote and the reference ¹⁾ at the end of the paragraph; insert the following:
- "1.c) Special Autonomous Study Groups are Study Groups established by, and reporting directly to Plenary Assemblies which are concerned with those studies carried out by the CCITT in regard to the developing countries in accordance with Nos. 12, 13, 16, 18, 19, 21, 54 and 309 of the Convention (Malaga-Torremolinos, 1973).
- 1.d) A Joint Working Party, set up with the approval of the Plenary Assembly shall submit draft Recommendations to the controlling Study Group which will be designated by the Plenary Assembly establishing it.
- 1.e) A Regional Group can be established for the purposes of dealing with Questions and studies of particular interest to a group of countries and Administrations in an ITU region (e.g. TAF)".
- 1.c) page 205:
Concerns the French text only.
- 3.c) i) page 205:
Concerns the French text only.
- 3.c) i)
- In the three languages, the words "the reply to a Question" at the end of the first sentence should be replaced by the words "the study of a Question" in the interests of clarity.

4. *Processing of contributions*

- a) Change "four" months to "three" and "two" months to "one".
- c) Change "four" months to "three".
- d) Replace existing text by:
- "d) Exceptionally, when an Administration has failed to observe this time limit, it should advise the CCITT Secretariat about the forthcoming late contribution and its contents and should, where practicable, prepare a translation into another of the Union's three working languages and send it to the CCITT Secretariat at the same time as the copies in the original language. The CCITT Secretariat will take all possible steps, with due regard to the work of the Common Services of the ITU General Secretariat, to ensure that contributions received at the latest between two and three months before the beginning of a meeting, are reproduced in offset in the languages received (without further translation) and distributed in good time to all the delegates registered for the Study Group concerned."

- e) Replace existing text by:
- “e) Contributions received less than two months before a meeting shall be published as ‘delayed contributions’, in the form in which they are received, in their original language only and (where applicable) in the second language into which they have been translated by the submitter; they shall be distributed at the beginning of the meeting solely to the delegates present. As far as possible an Administration should advise the CCITT Secretariat about any forthcoming ‘delayed contribution’ and its content not less than two months before the meeting and the Secretariat will issue a list of delayed contributions and contents not later than six weeks before the meeting. It should be for the Study Group as a whole to accept or reject discussion of such delayed contributions.”
- g) Replace existing text by:
- “g) The CCITT Secretariat shall not reissue these delayed contributions as White Documents, unless otherwise decided by the Chairman of the Study Group after consultation, where appropriate, with his Group (or Working Party), and then only in exceptional cases of special interest and importance.”
- h) The words “temporary documents” should be replaced by “delayed contributions”.
Add the following point:
- “i) Any contribution should, as far as possible, be submitted to a single Study Group. If, however, an Administration submits a contribution which it believes is of interest to several Study Groups, it should identify the Study Group of primary importance and other interested Study Groups. The contribution will be issued in full to the Study Group of primary interest, and a single sheet giving the title of the contribution, its source and the summary of its contents (see paragraph 3.c)) to the other Study Groups. This single sheet will be numbered in the series of contributions of each Study Group to which it is issued.”
- 5.a) page 207:
Concerns the English text only: instead of “represented on” in the second sentence, read “registered with”.
- 5.d) Concerns the French text only.

8. *Conduct of meetings*

- 8.b) page 208:
Concerns the English text only: replace “are received” by “have been received”.
- 8.e) page 208:
In the three languages it would be useful to add “Ad Hoc” to the words “Working Party” (1st line) and “Joint Working Party” (four times in the text).
- 8.h) Add: “(see Annex 2, page 135 of the Convention)”.

9. *Preparation of reports*

Add to paragraph a) the following:

“Any meeting, even if informal, of a Working Party or small group operating in the CCITT shall give rise to a report, drawn up, in the absence of a representative of the CCITT Secretariat, under the responsibility of the Chairman of the group. Such report shall be sent to the CCITT Secretariat, which shall circulate it, in the form of a White Document, to all registered members of the Study Group in question.”

- 9.c) Replace existing text by:
- “9.c) The accelerated procedure for provisional adoption of Recommendations might be used more frequently (see Resolution No. 2)”.

Annex 1 (to Resolution No. 1)

The title of this Annex should be "Special Rapporteurs".

II. Resolution No. 2 — Provisional Recommendations

The title of the Resolution should be replaced by:

"Accelerated Procedure for the Provisional Approval of Recommendations".

In "decides" 2 insert after the first sentence the following:

"The Secretariat shall also advise RPOAs that Administrations are being asked to indicate their approval of this provisional adoption."

Amend the last sentence to read:

" ... vote shall be in accordance with No. 396 of the Convention of Malaga-Torremolinos, 1973."

III. Resolution No. 4 — Publication of CCITT books

As in Annex 4 of Document AP VI-No. 42 (pages 14 to 16) with the following changes:

1. *Page 14* — Under Volume I, change last line by the following: "List of Study Groups and short title of Questions under study."

2. *Page 15* — Point 2, change the third line by the following: "... the full texts of Questions under study, excluding annexes ¹⁾."

3. *Page 15* — Add the following footnote: "¹⁾ The full texts of Questions under study, including annexes, will be published as Contribution No. 1 of the particular Study Group."

4. *Page 15* — Point 4, second line to read: "the manuals of the Special Autonomous Study Groups".

5. *Page 16* — Does not concern the English text.

III. bis Resolution No. 5 — Numbering and lay-out of CCITT Recommendations

Add:

C: general telecommunication statistics I

Z: programming languages for SPC exchanges VI

IV. Resolution No. 6 — Multiple Vice-Chairmanships

It is proposed to delete this Resolution.

V. Resolution No. 9 — Work of the ITU in the field of space communications (page 214)

The last paragraph (after "*decides*") might be made more specific:

"to request the Director of the CCITT, in cooperation with the Director of the CCIR and in accordance with the duties of their offices as defined in Article 11, Nos. 70, 71 and Article 74 of the Convention, to advise ..." (the remainder without change).

B — OPINIONS**I. Opinion No. 1 — Location of CCITT meetings (page 217)**

1st line — Read:

"The Special Assembly of the CCITT (Geneva, 1958) and the VIth Plenary Assembly (Geneva, 1976)".

4th line — Read:

“ ... within the possibilities of the CCITT budget (cf. Resolution No. 26 of the Convention)”.

6th line — Read:

“ ... of the CCITT (Geneva, 1972) and the Vith Plenary Assembly (Geneva, 1976)”.

II. **Opinion No. 2 — Exchange of views on new techniques at CCITT meetings (pages 217, 218)**

No change.

III. **Opinion No. 3 — Preliminary examination of new draft Questions (pages 218, 219)**

No change.

IV. **Opinion No. 4 — (pages 219, 220)**

The establishment, by the Administrative Council at its 29th Session, of a Technical Editing Division in the CCITT Secretariat has removed the need for this Opinion.

V. **Opinion No. 5 — Examination at regional Plan meetings of certain Questions outside the Plan Committees' terms of reference (pages 220, 221)**

No change.

VI. **Opinion No. 6 — Resources of the CCITT (page 221)**

Reword the last part of the text after the “considering” as follows:

“*Expresses the wish that:* the competent organs of the ITU, as designated by Nos. 22, 23 and 24 of the 1973 Convention:

- a) take into due consideration (remainder of the text unchanged),
- b) ensure that (remainder of the text unchanged).”

ANNEX 2

Minutes of the meetings of Committee A

Chairman: Mr. D. van den Berg (Netherlands)

Vice-Chairman: Mr. D. V. Doran-Veevers (Canada)

FIRST MEETING

Tuesday, 28 September 1976, at 1440 hrs

1. Programme of work of the Committee
2. Publication of the 1977 edition of the CCITT Book
3. Informal meetings and use of interpretation
4. Delayed contributions

1. Programme of work of the Committee

The *Chairman* opened the first meeting of Committee A by expressing his appreciation of the honour represented by his election as Chairman of the Committee on organization and working methods for the second time. He indicated that he would propose the setting-up of a working group, under the Chairmanship of the Vice-Chairman of the Committee, to finalize the texts of the Resolutions and Opinions which would be adopted by the Committee.

The Chairman referred to the numerous constructive proposals adopted by successive Plenary Assemblies for the improvement of working methods within the CCITT, proposals which unfortunately had not always been put into practice. He proposed to make a start with the Committee's work by considering the existing texts with a view to modifying and completing them with the sole purpose of ensuring that the work of the forthcoming study period would be effective and successful.

2. Publication of the 1977 edition of the CCITT Book (Documents AP VI-Nos. 42 and 77)

The *Director of the CCITT* introduced Document AP VI-No. 42, drawing attention to specific points which required a decision by the Committee.

a) Retention of old Recommendations

The *Director of the CCITT* noted the savings which would be obtained if out-of-date Recommendations were not reprinted in the new Book but were indicated by a reference to the *Green Book* (sales of which would probably be increased thereby). That option was supported by a few delegations but the majority preferred the alternative of reprinting all existing Recommendations.

With regard to the omission of the Recommendations concerning Signalling Systems Nos. 4 and 5 bis which had been recommended by Study Group XI, the *Director of the CCITT* reassured the delegations concerned, particularly those from developing countries, that a reference to the *Green Book* would be inserted.

The *delegate of the United Kingdom* thought that the recommendation by Study Group XI to discontinue the publication of certain Recommendations was an example to be followed by other Study Groups; as certain Study Groups were not due to meet for some time, perhaps a small editing group meeting immediately after the Plenary Assembly could be set up to see which texts need not be reprinted.

The *Director of the CCITT* explained that the Technical Editing Division was currently working on the preparation of the *Orange Book* and could not afford to wait for the results of such a meeting.

The *delegate of Italy* said that the question of examining which Resolutions could usefully be omitted should be put to all Study Groups and the Special Autonomous Working Parties.

The *delegate of Belgium* pointed out that if the proposal to group associated Recommendations in separate small booklets were accepted, the question of retaining or not all current Recommendations would be solved automatically.

It was *agreed* that all existing Recommendations would be reprinted in the *Orange Book*.

b) Reprinting of Supplements

There was general agreement with the suggestion in paragraph 3.1.3.2 that supplements of a purely documentary nature which already appeared in the *Green Book*, and would therefore remain available for reference, need not be reprinted in the *Orange Book*.

c) Treatment of Annexes

The *Director of the CCITT* reminded the Committee that the Annexes to Questions were of two kinds: those of an explanatory nature giving the present status of the studies prepared by the Study Group concerned, and those contributed by various countries which were often published also as documents and which represented far the greater volume. The suggestion to remove both categories of Annex from the *Orange Book* was *accepted*.

It was generally *agreed* that there was a need for a publication giving the status of all Questions at the beginning of a study period, and the *Director of the CCITT* described his suggestion for Questions plus Annexes to be published as Contribution No. 1 of each Study Group. He referred to Document AP VI-No. 97 submitted by the United Kingdom which mentioned *inter alia* the need for a document of a cheap but durable nature, which

would be met by issuing Contribution No. 1 with a plastic cover, to be distributed to members of the Study Group in question with copies printed for sale to other users. The Director's proposal met with wide approval. In reply to a suggestion that the texts of the Questions themselves need not be printed in their entirety in the *Orange Book*, the *Director of the CCITT* explained that the saving in number of pages would be small and was offset by the convenience of having Questions and Recommendations in the same publication.

d) *Parallel page numbering*

The *Director of the CCITT* pointed out that experience of the use of paragraph numbering rather than parallel page numbering would be gained from the Study Group contributions, but that there was no difficulty in maintaining parallel page numbering for the three language versions of the *Orange Book*.

It was widely held that parallel page numbering could be abandoned if paragraph numbering were adopted in the interests of economy.

e) *Duplication of Recommendations resulting from studies by two Study Groups*

It was *agreed* that in such instances the text of the Recommendation need not be duplicated; in the second volume there would be a simple reference to the first volume in which the text was to be found.

f) *Division of volumes into parts (or fascicles)*

The *Director of the CCITT* pointed out the advantage of fascicles which could be sold separately. In reply to the *delegate of Italy*, who stressed the necessity for technical homogeneity so that the purchaser of one booklet had at hand all the pertinent Recommendations including those elaborated by more than one Study Group, he said that the fusion of certain Study Groups, which would be examined by the Assembly, would probably lead to some simplification in that regard. Also, the method to be used for composition of the texts would permit sections to be transferred from one fascicle to another without difficulty.

The *Chairman* expressed his confidence in the CCITT Secretariat's ability to split the contents of the volumes into several parts, avoiding duplication wherever possible and grouping subject matter logically.

He then put to the Committee Resolution No. 4 (pages 14 to 16 of Document AP VI-No. 42), the text of which would be adapted, according to the decisions taken, by the Editing Group to be set up at the following meeting.

In reply to a query as to the necessity of including the minutes of the Plenary Assembly in Volume I of the CCITT Book, the *Chairman* said he would check the requirements set forth in the Rules of Procedure and reply at the following meeting.

g) *Publicity for CCITT Books*

The suggestion for steps to be taken at the national and international level to publicize the CCITT Books was *approved*.

3. Informal meetings and use of interpretation (Document AP VI-No. 15)

The *Chairman* referred the Committee to Table 1 and paragraph 2.1.3 left in abeyance in the discussion in Plenary of the Director's Report on the activity of the CCITT.

There was some concern on the part of the CCITT regarding the proliferation of small "unofficial" meetings, generally without interpretation, and which sometimes did not even provide the CCITT with a report of their dealings.

The *delegate of the United Kingdom* thought that such restricted meetings fell under the normal procedures which allowed a special rapporteur to convene meetings of specialists, as required, to deal with a particular subject; in his view that was an efficient method of working.

The *delegate of the United States of America* agreed with those views, providing that no delegation or groups were excluded from collaborating and that customary approval procedures were not circumvented.

The *delegate of Denmark*, speaking as Chairman of Study Group IV, explained that of the 50 unofficial meeting days listed under that Study Group, 42 concerned meetings of the Editing Group, which did not need interpretation and which was set up in agreement with the CCITT Secretariat, the other 5 being meetings of Study Group and Working Party Chairmen and Vice-Chairmen.

The *delegate of U.S.S.R.*, while agreeing that small groups were sometimes necessary, considered that generally speaking, meetings without interpretation were inefficient and that whenever possible, small groups should meet during the course of Study Group meetings.

The *delegate of Australia* pointed out that the proliferation of small *ad hoc* groups meeting for only a few days raised a real problem with respect to attendance. For that reason, his delegation had always argued against a largenumber of such meetings.

The *Director of the CCITT* said he had merely wished to draw attention to the increasing number of such meetings; if members found them justifiable and efficient, he had no further comments to make.

4. Delayed contributions (Document AP VI-No. 41)

The *Director of the CCITT* having introduced the document, adding that the category of delayed contributions represented 29 per cent of contributions received, the *Chairman* asked the Committee to consider the various proposals put forward.

Paragraph 5.1

The *delegate of the United States of America* had strong reservations about the distribution of documents in the language in which they were first received. Furthermore, he doubted whether any national translation service could produce translations up to the standard of those provided by the ITU Translation Sections and the rigid requirement for a second language would merely extend the delay. He asked for the words "if possible" to be inserted as appropriate.

The *Director of the CCITT* said that it was evident that the ITU was in a position to provide the best translations but the language services simply could not cope with the extra workload represented by numerous delayed contributions. However, the Editorial Committee could adapt the wording of the paragraph to meet the above views.

Paragraph 5.2

The suggestion to replace "less than four months" by "less than three" was *accepted*.

The meeting rose at 1730 hours.

SECOND MEETING

Wednesday, 29 September 1976, at 0930 hrs

1. Delayed contributions (*continued*)
2. Suggestions concerning the Resolutions and Opinions adopted by the Vth Plenary Assembly
3. Measures approved by the Administrative Council with a view to economizing on the production of documents
4. Study Groups and Joint Working Parties

1. Delayed contributions (continued) (Document AP VI-No. 41)

Paragraph 5.3

The *delegate of the United States of America* suggested that the stipulation to the effect that Administrations which failed to observe the new 3-month limit "must ... prepare a translation into another of

the Union's three working languages" should be made more flexible. The difficulties of the Secretariat were recognized by all, but the Union's facilities for translating technical documents were far superior to those of many Administrations, including his own.

The *delegate of Saudi Arabia* supported that suggestion. Members should not be discouraged from sending contributions, even with a certain delay.

The *Director of the CCITT* said that he agreed to the replacement of the word "must" in the sentence concerned by the word "should".

It was so *decided*.

Paragraph 5.4

The *delegate of Canada* expressed the view that the wording of the second sub-paragraph was rather too mandatory.

The *Director of the CCITT* suggested the addition of the words "unless the meeting decides otherwise".

That suggestion was *accepted*.

Paragraph 5.5

The paragraph was *accepted*.

2. Suggestions concerning the Resolutions and Opinions adopted by the Vth Plenary Assembly (Document AP VI-No. 59)

The *Chairman* recalled that at the Vth Plenary Assembly a small Working Party under the Chairmanship of the Vice-Chairman of Committee A had been set up to deal with the equivalent item and suggested that the same procedure should be adopted on the present occasion.

It was so *decided*.

The *Vice-Chairman* said that the Working Party should be constituted of delegations representing the three working languages of the Plenary Assembly, and requested those wishing to participate to contact him with the view to holding a meeting that afternoon.

3. Measures approved by the Administrative Council with a view to economizing on the production of documents (Circular-letter No. 129)

The *Deputy Secretary-General* introduced Circular-letter No. 129 which reflected one of the elements of action to be taken with a view to achieving savings. Referring to the first of the proposed measures he said that, as already stated at the previous meeting, the traditional method of presentation would still be used in the *Orange Book* but the practice of parallel pages could be abandoned thereafter. The third proposed measure was in the nature of an appeal to Administrations and other organizations to provide single addresses wherever possible. The figure of 5 million pages quoted in paragraph 1 of the Circular-letter represented a modest estimate; there were months when production requirements reached 7 million pages. The need for savings was therefore self-evident.

The *Director of the CCITT* pointed out that the request in paragraph 5 (third measure) was addressed to each organization (Administration, recognized private operating agency, scientific or industrial organization, international organizations, etc.) which had dealings with the CCIs at the national level. Replying to a point raised by the Chairman, he said that the 2,500 word limit imposed in point 3 of CCITT Resolution No. 1 was probably observed in approximately 50 per cent of cases.

The *delegate of the United Kingdom* said that of the proposed measures only the third was likely to give rise to some difficulties.

The *delegate of Saudi Arabia* pointed out that the wording of paragraph 5 was very flexible. If any organization did not find it possible to provide a single address, the present procedure could continue to be applied.

The *delegate of Togo* said that he agreed in principle with the fourth measure (paragraph 6) but feared that certain small delegations might not find it possible to bring their own copies of documents to meetings.

The *Director of the CCITT* said that the fourth measure, like all the others listed in the Circular-letter, would be applied in a flexible manner. A small number of additional copies would continue to be provided.

The *delegate of India*, also referring to the fourth measure, wondered whether an exception could not be made in the case of documents sent out less than 3 months prior to a meeting.

The *Director of the CCITT* said that such an exception would affect 80 per cent of the total distribution. Documents were dispatched by airmail whenever necessary. He did not think it was unreasonable to request delegations to bring their own sets.

The *Deputy Secretary-General*, replying to a point raised by the *delegate of Mexico*, said that paragraph numbers were treated as part of the text and should therefore be included in the space referred in paragraph 4.2. Replying to the *delegate of Egypt*, he said that the Committee was not called upon to take any decision with regard to the Circular-letter but only to take note of its contents, which were being brought to the attention of delegations with a view to enlisting their collaboration. Lastly, in reply to a point raised by the *delegate of Australia*, he said that Document AP VI-No. 51 had been produced by means of the new automatic system and could serve as an example of what was envisaged.

The *Chairman* thanked the Deputy Secretary-General and the Director of the CCITT for their explanations and said that the Committee had taken note with satisfaction of the measures aimed at achieving savings adopted by the Administrative Council and outlined in Circular-letter No. 129.

4. Study Groups and Joint Working Parties (Documents AP VI-Nos. 59, 78, 101 and 104 and Temporary Document No. 15)

The *Chairman* said that when discussing the item delegations should draw a clear distinction between the question of the continuing usefulness or otherwise of various Study Groups and that of Joint Working Parties, which were set up when the topic to be studied went beyond the field of competence of any one Study Group. Two lines of action were possible in such cases: either the topic could be accepted in the wording in which it was presented and a JWP established to deal with it, or the wording could be modified in such a way that it fell clearly within the competence of a particular Study Group.

The *Director of the CCITT*, introducing Document AP VI-No. 78, said that it would be seen from paragraph 2.3 that two Joint Working Parties (CDF and MAT) were to be disbanded. It was also proposed that JWP SGO should be divested of its joint character (paragraph 2.4) and that the Regional Tariff Groups should be attached directly to Study Group III (paragraph 2.8). Paragraphs 2.5, 2.6 and 2.7 referred to Joint Working Parties which should, in his opinion, be maintained as such. The proposed principles to be applied with regard to Study Groups were set out in paragraph 3.2 of the Document.

In response to a request for clarification by the *delegate of the United Kingdom* concerning paragraph 2.5 of Document AP VI-No. 78, the *Chairman of Special Study Group D* said his Group considered that it should continue to control Joint Working Party CNC, the *Director of the CCITT* expressed the view that CNC should continue to exist as a Joint Working Party under the control of a single Group, and the *Chairman of Study Group XV* said his Group considered that control of JWP CNC should be transferred to it as a first step in the process of transferring the study of problems relating to systems from Special Study Group D to Study Group XV.

The *delegate of the United States of America* suggested that the possibility should be considered of disbanding Joint Working Party CNC altogether.

After some further discussion, it was *agreed* to defer the question of Joint Working Party CNC until a later stage.

The *Chairman* invited general comments on the structure and organization of work of the Study Groups.

The *delegate of Italy* said that in general he supported the suggestions set out in Document AP VI-No. 78. Joint Working Parties should continue to exist in cases where their establishment was justified by practical considerations and by the nature of the subject matter involved.

The *delegate of the United States of America* said that streamlining and rationalization of work was desirable and might well enable a number of Groups to be eliminated. In particular, he supported the position adopted by the United Kingdom Administration in Document AP VI-No. 101 concerning the merging of Study

Groups II and XIII (paragraph 4) and transfer of all Questions relating to telephone maintenance to Study Group IV (paragraph 5). With regard to the study of tariff problems (Document AP VI-No. 78, Section 3.3), his delegation's main concern was that certain tariff Questions arising from the study of data networks in Study Group VII should be explicitly included in the terms of reference of Study Group III. Tariff Questions which arose in Study Groups I and II would require some discussion in conjunction with the proposal to merge all tariff problems. The possibility of eliminating Study Group VIII might usefully be considered, since the Question referred to it was very similar to one being dealt with in Study Group I.

The *delegate of the U.S.S.R.* welcomed the opportunity to review the structure of Study Groups and Joint Working Parties and said that the object of the exercise should be to achieve optimal concentration of the Questions under study. In general, his delegation shared the views expressed by the United Kingdom Administration in Document AP VI-No. 101. It supported the proposals to transfer Questions concerning switching maintenance to Study Group IV and those concerning quality of service to Study Group XVI. It considered that telecommunication traffic Questions, presently dealt with in Study Group XIII, should be transferred to the Plan Committee. It further endorsed the principles underlying the proposal to assign all tariff Questions to Study Group III. On the other hand, it did not agree with the proposals by the Canadian Administration concerning the merging of terms of reference of Study Groups (Document AP VI-No. 104), in view of the difficulties that would arise if too broad a range of issues was assigned to each Group. While it could support the United Kingdom proposal concerning telegraphy (Document AP VI-No. 101, paragraph 7), it did not consider that the Study Groups dealing with data transmission and telegraphy should be reorganized. Neither would it be appropriate, for a number of reasons, to merge Study Groups V and VI as was proposed by the Canadian Administration.

The *delegate of Italy*, speaking as Vice-Chairman of Study Group V, fully endorsed the previous speaker's comments regarding the Canadian proposal to merge Study Groups V and VI. Those two Groups dealt with very different subjects and their meetings were not attended by the same specialists.

The *delegate of Japan* considered that, with the possible exception of the Joint Working Parties, which had completed their tasks, all the Study Groups should be retained as far as that was practicable. His delegation attached particular importance to the restructuring of the Groups concerned with tariff and operation Questions.

The *delegate of the German Democratic Republic* supported the United Kingdom proposals set out in Document AP VI-No. 101, but opposed the Canadian proposal to merge Study Groups V and VI.

The *delegate of Italy* said that efforts should be made to decrease the number of Study Groups, but only on condition that efficiency did not suffer as a result. His delegation could accept the proposals of the Director of the CCITT and the United Kingdom Administration concerning the merging of Study Groups II and XIII and the allocation to Study Group IV of the maintenance Questions presently dealt with by Study Group XIII. It was doubtful whether the issues raised by the Canadian Administration in Document AP VI-No. 104 could be settled at the current Assembly, but they should be studied during the coming period and discussed in detail at the VIIth Plenary Assembly.

The *delegate of Belgium*, speaking both as Vice-Chairman of Study Group XIII and on behalf of his Administration, read out the text of a document which had not yet been distributed, in which the Belgian Administration set forth its views on Document AP VI-No. 78 and, in particular, on the merging of Study Groups II and XIII. He went on to add, in respect of paragraph 3.4.6 of the latter document, that very few contributions were circulated between those two Study Groups. In the view of his Administration, maintenance did not concern transmission specialists exclusively. It was also worth noting that the number of joint Recommendations in the M and Q Series was small. His Administration did not consider that Study Group XIII duplicated the work of other Groups but, on the contrary, that it had a very specific role to play.

His delegation was in favour of decreasing the number of Groups, but only if that exercise did not result in the creation of "super-Groups" which would immediately have to be split up into Working Parties whose meetings would need to be attended by a large number of experts from each Administration and would affect their efficiency.

The *delegate of Australia* said that efforts should be concentrated on determining the correct number of Study Groups required to perform the work at hand, erring preferably on the low side if the correct number could not be clearly identified. There were probably too many Groups at present; in attempting to decrease their

number, however, care should be taken to avoid assigning dissimilar work to any one Group. In order to improve the situation with regard to Study Group XIII, which could almost be considered as two Groups in one, the approach suggested by the United Kingdom in Document AP VI-No. 101 might be adopted. Regarding the suggestion to merge Study Groups V and VI, his delegation shared the view that nothing would be achieved by such a move. Document AP VI-No. 101, which his delegation supported in principle, might usefully be taken as the basis for the Committee's discussions. In particular, he endorsed the suggestion in paragraph 7 of that Document.

The *delegate of Canada* said that the global, academic approach adopted in Document AP VI-No. 104 should not distract attention from the essential point, namely the need to give serious consideration to the possibility of reducing the existing number of Study Groups. The Australian delegate had made some very pertinent comments; in particular, the Committee might indeed do well to focus its attention on the United Kingdom document, which had much to commend it.

The meeting rose at 1235 hours.

THIRD MEETING

Thursday, 30 September 1976, at 1540 hrs

1. Study Groups and Joint Working Parties (*continued*)
 2. Tasks relating to tariffs
 3. Tasks relating to telephone operation
 4. Responsibilities in connection with telephone maintenance
 5. Responsibilities connected with telegraph services
1. Study Groups and Joint Working Parties (*continued*) (Documents AP VI-Nos. 59, 78, 101 and 104 and Temporary Document No. 15)

The *Chairman*, summing up the discussion at the second meeting, said that a large majority of delegations appeared to be in favour of the proposals by the United Kingdom as outlined in Document AP VI-No. 101. He invited the Committee to focus its attention on that document together with the corresponding paragraphs of the document prepared by the Director of the CCITT (Document AP VI-No. 78).

2. Tasks relating to tariffs (Documents AP VI-No. 101, paragraph 3 and No. 78, paragraph 3.3)

The *delegate of Japan* remarked that tariff and operational matters were closely interrelated, especially where new services were concerned. The Questions for the next study period had already been drawn up and it would be unwise to make any substantial changes in the terms of reference of the various Study Groups. If all tariff matters were entrusted to one Study Group, a number of Joint Working Parties would have to be set up in order to achieve satisfactory results. Such a solution would not be acceptable in view of the limited budgetary resources of the CCITT and of the high cost of sending experts to Geneva from distant parts of the world. Moreover, the tariff Questions which arose in the case of telephone and telegraph services respectively were different in nature and would have to be handled by different experts. While it was, of course, desirable to reduce the number of Study Groups as far as possible, he was of the opinion that the present structure should be maintained for the next study period as being the most economical and efficient.

The *delegate of Sweden* said that he was in favour of the United Kingdom proposal, which corresponded to the ideas put forward by the Director of the CCITT. Cooperation and coordination between the new Study Group III and the Study Groups dealing with operational matters would, of course, be required, but the principle of concentrating responsibility for all tariff matters in one Study Group was a good one and he proposed its adoption. He also supported the other proposals contained in Document No. 101.

The *delegate of the U.S.S.R.* said that in his Administration all tariff matters, whether relating to telegraph, telephone or data transmission services, were the responsibility of one department. It would be very much more convenient from a practical point of view if those matters were also entrusted to a single Study Group within the structure of the CCITT.

The *delegates of the Federal Republic of Germany, Italy, Denmark, Hungary, Mali, Senegal, and Czechoslovakia* also spoke in support of the proposal.

The *delegate of the United States of America* said that while supporting the proposal in principle, he felt that it required some elaboration. Certain Questions at present under study by Study Groups I and II appeared only superficially to be tariff principles but were in reality matters of settlement. That was true, for example, of the permanent Question on accounting procedures. Furthermore, the importance of including tariff principles relating to the work being done by Study Group VII should not be overlooked when the new terms of reference of Study Group III were drawn up.

The *delegate of Canada*, speaking as the Chairman of Study Group VII, recalled that at the Vth Plenary Assembly it had already been decided to place Study Group III in charge of the tariff aspects of work being done on data transmission networks by Study Group VII. It would be convenient for Study Group VII and especially for the regional tariff groups if all tariff principles were in future studied by one Study Group.

The *delegate of France*, speaking as the Chairman of Study Group III, said that the proposal by the Director of the CCITT and the UK delegation coincide with the views of Study Group III itself. He welcomed the fact that the Chairman of Study Group VII was also in favour of the proposed division of responsibilities.

The *delegate of Argentina* said that he shared the Director's concern for greater efficiency and found the United Kingdom proposal most interesting. However, it might be difficult to carry out the proposed changes for all services during the next study period. The incorporation of new techniques in Latin America was taking place very gradually; in many cases, responsibilities were still scattered among a number of bodies. The decision to place Study Group III in charge of all tariff matters should not be too hastily applied.

The *delegate of the United Kingdom* acknowledged the arguments of the delegates of Japan and the United States of America and that there would remain some application aspects of tariffs within Study Groups I and II inasmuch as they dealt with detailed implementation. But that did not bar Study Group III from assuming greater responsibility for tariffs than it had had up to present. The delegate of Japan had queried the merger between the telephone and public telegraph services; he suggested for his part that there was a real need for alignment on telex and international telephone services (currently dealt with by different Study Groups). The delegate of the U.S.A. had emphasized that Study Group III was concerned with tariff principles; in his view there was now a need to go beyond the "principles" stage in the new mandate of Study Group III. He agreed that telephone instructions must remain with Study Group II but did not agree that settlement questions need necessarily be kept in that same Group. In many Administrations those matters were dealt with by the same department following the same procedures and alignment was needed between the various services, which was in principle an area for Study Group III. Coordination would be required, particularly in the coming study period, if the proposals were adopted, but with discussions between Chairmen that should not prove a real difficulty.

The *delegate of the German Democratic Republic* supported the United Kingdom proposal.

The *delegate of Ukraine* also supported the proposal but said that serious thought should be given to perfecting the structure of the Study Groups. He could not agree, for instance, to merging the Study Groups on Protection, which had only the name in common.

The *Chairman* noted that there was majority agreement to the proposals in Documents AP VI-Nos. 101 and 78 and concluded therefore that Study Group III would be entrusted with all tariff Questions, it being understood that Study Groups I, II and VII would be required to provide information on the aspects which had been within their competence up to present.

It was so *decided* unanimously.

3. Tasks relating to telephone operation

The *Chairman* recalled that the existence of Study Group XIII had long been a subject of controversy; it was generally agreed that its activities must continue but there seemed to be obvious advantages in combining them with those of Study Group II.

The *delegate of Belgium*, Vice-Chairman of Study Group XIII, referred to Temporary Document No. 18, which he had presented orally at an earlier meeting; he felt the moment had come to take a decision

and the Questions strictly related to maintenance aspects could be transferred to Study Group IV if Study Group XIII became a telephone operations Study Group.

The proposal to merge Study Groups II and XIII was *accepted*.

4. Responsibilities in connection with telephone maintenance

The *Chairman* said that it was proposed, for reasons of efficiency, to combine all maintenance aspects in Study Group IV.

In response to the *delegate of Mali*, who referred to the fact that Study Group IV was "already a very large and rather unwieldy Study Group", the *Chairman of Study Group IV* said that it would no doubt have to set up a fifth Working Party but that that would be offset by no longer having to carry out coordination with Study Group XIII as in the past.

The proposal was *accepted*.

5. Responsibilities connected with telegraph services

The *Chairman* noted that the proposals in Documents AP VI-Nos. 101 and 78 were similar in nature but differed in their date of application.

The *delegate of the Federal Republic of Germany* said that the interest in the work of Study Group VIII had increased considerably towards the end of the current study period; there were now ten Questions proposed to the Plenary which would provide sufficient material for Study Group VIII and therefore the Study Group should not be disbanded. That view was supported by the *delegate of the Netherlands* and the *delegate of Switzerland*, Chairman of Study Group VIII, who endorsed the United Kingdom proposal to re-examine the situation in the course of the forthcoming study period.

The proposal in Document AP VI-No. 101 was *accepted*.

The *Chairman* then summarized the status of the Study Groups:

- Study Groups I, II and VII unchanged except for transfer of tariff aspects to Study Group III;
- Study Groups V, VI, VIII, IX, X, XI, XII, XIV, XV and XVI entirely unchanged;
- The Study Group resulting from the merger of Study Groups II and XIII to take over the activities relating to operation of the telephone network;
- Study Group III to cover all tariff aspects;
- Study Group IV to cover all telephone maintenance aspects;
- Study Group XIII (see above, merged with Study Group II);

As for the so-called "Special" Study Groups, A and D were in fact normal Study Groups in the CCITT series and could be numbered XVII and XVIII. Special Study Group C could more logically be renamed and the title CMBD was *agreed upon* (Commission mixte sur le bruit et la disponibilité).

The *Chairman* announced some amendments to the list of Joint Working Parties. CDF and MAT had proposed their own disbandment; CNC would probably be maintained, and maybe SGO also, the decisions depending on the reports of Study Group XVIII (formerly Special Study Group D) and Study Group XV respectively. JWP LTG was extremely important and would be maintained; SMM and UMI, which had been created during the current study period, had to be added to the list.

The Tariff Groups — TAF, TAL, TAS and TEUREM — were regional in character. In reply to the *delegate of France*, the *Director of the CCITT* said that they indeed fell within the purview of Study Group III only and should therefore be referred to as Regional Working Parties (GR).

The *Chairman of the TEUREM Working Party* confirmed that that tariff Working Parties had never been "Joint" and should not be listed as such in Volume I of the CCITT Book. He drew attention to the

suggestion in Document AP VI-No. 78 that "MAT, TAF, TAL and TAS could be disbanded". He thought it would be regrettable to abolish those three regional Working Parties which had done very useful work.

The *Deputy Secretary-General* confirmed that the TAF Working Party and to a lesser extent the TAS Party, had been most useful in connection with feasibility studies and in getting the results accepted through the CCITT.

The *delegates of Mali, Brazil and Senegal* stressed the great value of the regional Tariff Working Groups in their regions.

The *delegate of the United Kingdom* said that the passage in question was extracted from a letter and was not an official contribution; it had been included owing to a misunderstanding and in no way represented the United Kingdom's views on the subject. The sentence should be deleted.

The *Chairmen of Study Group III* and *TEUREM* drew attention to editorial changes to be made with respect to their Groups.

The *Chairman* said that the list could be forwarded to the Editorial Committee and invited Committee A to consider the Specialized Autonomous Working Parties.

The *delegate of Lebanon*, introducing the proposal in Document AP VI-Temp. 15, said that it was based on Nos. 12, 13, 16, 18, 19, 21, 54 and 309 of the Convention, which defined the objectives of the Union vis-à-vis the developing countries. There were currently a very great number of switching systems in the world, as the industrialized countries developed their own systems; that lack of homogeneity had greatly hampered the assistance that the industrialized countries could render to the developing countries, as the very slow development of telephone networks showed. Standardization of switching systems should help to overcome many difficulties with regard to maintenance, planning, operation, procurement of spare parts and so forth. It was the duty of the industrial countries to help the developing countries by facilitating their task of expanding the number and density of telephone lines. A Special Autonomous Working Party should be set up to consider such standardization and, in addition, the industrialized countries should help to create switching equipment industries in the developing countries.

The *delegates of Saudi Arabia, Kenya and Nigeria* expressed their full support for the Lebanese proposal.

The *delegate of the United States of America* said that although he understood the reasons for the proposal he did not believe that an Autonomous Working Party was the most appropriate body to deal with the problem. In the past, those bodies had limited themselves to collecting documentary background material on specific aspects of telecommunications and were hardly competent to carry out the standardization work to which the Lebanese delegate had referred. The best solution might be to include in the programme of Study Group XI a Question entitled "Standardization of switching systems for national use". Indeed, there was reason to believe that Study Group XI was already concerned with related problems.

The meeting rose at 1805 hours.

FOURTH MEETING

Friday, 1 October 1976, at 1455 hrs

1. Special Autonomous Working Parties (*continued*)
 2. Matters brought before the Committee by the Working Party on Resolutions and Opinions
1. Special Autonomous Working Parties (*continued*) (Document AP VI-Temp. 15/PLEN.)

The *delegate of France* said that his Administration supported the Lebanese proposals in Document AP VI-Temp. 15/PLEN., since the standardization of switching systems would help to eliminate many difficulties caused by the coexistence of several such systems in a single Administration and would also benefit industry, by obviating the need to adapt equipment to different national requirements. The work should be entrusted to a GAS, since the Autonomous Working Parties, rather than the Study Groups, were concerned with national studies such as those proposed in the Lebanese document.

The *delegate of Mauritius, Venezuela and Greece* endorsed the Lebanese proposals, stressing the advantages that standardization of switching equipment held for the developing countries.

The *delegates of Morocco, India and Italy* also supported the proposals, but thought that a GAS might not be the appropriate body to deal with the question of standardization, which involved new types of equipment and must therefore be studied on a long-term basis. On the other hand, the short- and medium-term study involved by economic and technical comparisons between such systems might well be carried out by a GAS. Perhaps a new Question relating to standardization could be included in the programme of Study Group XI.

The *Chairman of Study Group XI* said that, although his Study Group had been concerned with international systems in the past, its work during the last two study periods had increasingly extended to national networks also, particularly where signalling systems and programming languages were concerned.

The *delegate of Roumania* supported the Lebanese proposals and suggested that they should be extended to cover rural telephony in areas of low telephone density. The relevant studies could be conducted either in a new GAS or in an existing Study Group.

The *delegate of Argentina* pointed out that GAS 3 was already dealing with that subject with respect to transmission. Experience had shown that it was very difficult to introduce any standardization of equipments for rural areas at the CCITT level, in view of different national and regional requirements.

The *Chairman of GAS 3* said it would be seen from his Working Party's report that its activities comprised work on a handbook on small systems in low-density areas, including switching equipments, which was being prepared in response to specific demand from the developing countries.

The *Chairman* proposed that the question of the standardization of national switching systems should be forwarded to Committee B with the request that it include a new Question in the programme of Study Group XI or expand a relevant existing Question to accommodate the subject. The questions of an economic and technical comparison of switching systems and of promoting local switching equipment industries should be forwarded to Committee D, which was competent to take the necessary decisions.

The *delegate of the United Kingdom* endorsed those suggestions and proposed that a small group, consisting of the delegates of Lebanon and France, the Chairmen of Study Group XI and GAS 3 and any other interested delegates, should be set up to prepare coordinated draft Questions and programmes to serve as a basis for the work of Committees B and D.

Those proposals were *approved*.

The *delegate of Australia* said that, although his delegation would not oppose the study, it believed that there were serious dangers in seeking to establish a single world standard telephone switching system.

2. Matters brought before the Committee by the Working Party on Resolutions and Opinions (Document AP VI-No. 59)

The *Chairman* said that the Committee's Working Party wanted guidance from the Plenary Committee on certain points and invited the Chairman of that body to take the Chair.

The *Chairman of the Working Party* said that the first controversial point concerned paragraph 8.h) of Resolution No. 1 (pages 6 and 7 of Document AP VI-No. 59).

The *Director of the CCITT* said that he had suggested a new Opinion to solve the problem raised by a delegation which had contended that the provision in question was contrary to the Convention. On the other hand, as it was stated in the penultimate paragraph on page 7, such an Opinion failed to cover the position of certain organizations which might be held to represent broad categories of users.

The *delegate of the United States of America* reiterated the view expressed by his delegation at the Final Meetings of Study Group III that there was a discrepancy between paragraph 8.h) of Resolution No. 1 and the definition of "Delegation" in Annex 2 to the Convention. He was sure that there was no intention to infringe the legal right of Administrations to appoint whom they wished to their delegations; there seemed to be no need for an Opinion on the matter and a consensus that no such infringement was intended would suffice.

The *Chairman of the TEUREM Group* said that the problem had originated in his Group, where certain Questions were considered *in camera* and on an anonymous basis, since many delegations were reluctant to discuss their problems in the presence of observers from organizations representing clients. While any Administration was of course entitled to appoint the necessary experts to its delegation, certain questions that arose in Tariff Groups could be discussed only with Administrations.

It was *agreed* that the problem could now be solved in the Working Party.

The *Chairman of the Working Party* said that the next question was that of the terms of reference of the Study Groups. The Working Party considered that it had neither the time nor the competence to prepare detailed terms of reference for each Study Group and asked for guidance on three alternatives — not to draft a Resolution on terms of reference, to draft a Resolution asking the Study Groups to consider their own terms of reference and to report to the VIIth Plenary Assembly or, if the Plenary Assembly decided to set up a small Committee on telegraph Study Groups and their restructuring, to ask that body also to review the terms of reference of all the Study Groups.

The *Director of the CCITT* observed that the CCIR Study Groups' terms of reference were set out in a few words. Although that would be more difficult in the case of the CCITT Study Groups, an attempt to do so could be made by the Study Groups themselves during the forthcoming study period.

The *Chairman of Committee A* suggested that Committee B might be asked to consider the titles of Study Groups on pages 225 and 226 of Volume I of the *Green Book* and to amplify and clarify them where necessary, thus giving an indication of the Groups' terms of reference.

That suggestion was supported by the *delegates of the Netherlands and the United States of America* and was *approved*.

The *Chairman of the Working Party* said that his group considered Opinion No. 7 in Section VII of Document AP VI-No. 59 to be substantive and wished to seek Committee A's guidance in the matter.

The *Director of the CCITT* said that there would be no need for an Opinion if there was a consensus in the Committee that the criteria for the appointment of Study Group Chairmen and Vice-Chairmen must be efficiency and competence and that those posts should not become national prerequisites.

It was so *agreed*.

The *delegate of the United States of America* said he wished to raise a further point, relating to paragraph 9.d) of Resolution No. 1. The United States found it difficult to accede to the treatment of certain documents as confidential. From the practical point of view, the provision would prevent governments from seeking the expert advice they deemed essential for the understanding of certain problems; it was certainly not in the best interests of the United States' participation in the work of the CCITT to have incomplete information or to withhold information from any ITU organ. From the legal point of view, moreover, his country's domestic legal structure precluded it from accepting such restriction of documentation. The provision might therefore be deleted.

The *Director of the CCITT* pointed out that every Administration was master of its own contributions and could submit them anonymously if it chose to do so. Unless that faculty was retained with respect to certain groups, a number of valuable contributions would not be forthcoming.

The *Chairman of the TEUREM Group* said that the problem was analogous to the one raised in connection with the composition of delegations to closed meetings of the Tariff Groups. Some of the documents of those Groups had to be treated confidentially and were submitted by Administrations only on condition that they would be circulated exclusively to participants in certain meetings.

It was *agreed* that the problem could now be solved in the Working Party.

The meeting rose at 1615 hours.

FIFTH MEETING

Monday, 4 October 1976, at 1120 hrs

1. Report of Working Party on Resolutions and Opinions
2. Approval of minutes of the first and second meetings

1. Report of Working Party on Resolutions and Opinions (Temporary Document No. 3/COM A)

The *Vice-Chairman*, speaking as Chairman of the Working Party, introduced the report contained in Temporary Document No. 3/COM A. The form of the report was the same as that of the report by the Working Party established for the same purpose during the Vth Plenary Assembly. The Working Party's recommendations were largely drawn from the suggestions put forward by the Director of the CCITT in Document AP VI-No. 59. A number of recommendations which the Working Party had agreed upon too late for inclusion in Temporary Document No. 3/COM A would be published in an addendum to that document.

Replying to a point raised by the *delegate of Belgium* concerning paragraph 1(c) of the section entitled "Plenary Assembly" of Resolution No. 1 (*Green Book*, page 201), he explained that that paragraph concerns the existing text which should be deleted.

In the proposed new text of paragraph 4(e) of the section "Study Groups and Working Parties" (page 2 of Temporary Document No. 3/COM A) the word "late" in the last line should be replaced by the word "delayed".

The beginning of the proposed addition to paragraph 4(i) (top of page 3 of Temporary Document No. 3/COM A) should be worded as follows:

"Any contribution should, as far as possible, be submitted to a single Study Group. If, however, an Administration submits a contribution which it believes is of interest to several Study Groups, it should identify..." etc.

With regard to paragraph 9.d) of the same section of Resolution No. 1 (*Green Book*, page 209) (paragraph 9.e) in the French text), one member of the Working Party had suggested that the paragraph should end with the word "consult", the remainder of the sentence being deleted. However, that suggestion had not been supported, and in view of the lack of time for further discussions he proposed that paragraph 9.d) should remain unchanged.

The Working Party was not making any recommendation on the subject of Resolution No. 8, which was still to be discussed by the Plenary Assembly. As for the question of the terms of reference of Study Groups, the Working Party had discussed the points raised at the fourth meeting of Committee A and recommended the following two courses of action: (i) Committee A might request Committee B to re-examine the titles of Study Groups, Joint Working Parties and Special Autonomous Working Parties listed on pages 225-230 of Volume I of the *Green Book*; (ii) in the course of the next study period, the Chairmen and Vice-Chairmen of the various Study Groups might consider whether it appeared necessary to prepare brief terms of reference and, if so, draft such terms of reference and present them to the VIIth Plenary Assembly.

Lastly, the Working Party had considered whether any change in the Resolutions or Opinions were required in the light of Circular-letter No. 129 and had come to the conclusion that that was not the case.

He thanked the members of the Working Party for their work.

The *delegate of the United States*, referring to paragraph 9.d) of the section "Study Groups and Working Parties" of Resolution No. 1, suggested that the text after the word "consult" should be replaced by the following:

"however, they should take into account the advice of an Administration or RPOA that distribution of its contribution should preferably be limited to Administrations and RPOAs".

The *delegate of Switzerland*, speaking as the Chairman of the TEURUM group, emphasized the importance of keeping the proceedings confidential to a certain degree in Study Groups dealing with tariff matters.

The *delegate of the United Kingdom*, agreeing with the previous speaker, proposed that the text of paragraph 9.d) should remain unchanged. He was not convinced that the text proposed by the delegate of the United States would assure the necessary protection.

The *delegate of Japan* was also in favour of retaining the existing text without change.

The *Chairman*, noting the absence of a consensus on the point raised by the delegate of the United States, said that Committee A would not recommend any change in paragraph 9.d) but would suggest that the Plenary Assembly should invite delegations to consider the matter during the next study period.

The *delegate of the United States of America* wished it to be put on record that if the text of paragraph 9.d) remained as it stood, the United States would not be in a position to guarantee compliance because it regarded the provision as an infringement of its rights.

The *delegate of the United Kingdom*, referring to paragraph 4.e), as revised, of the same section of Resolution No. 1, proposed the insertion of the following text at the end of the first sentence:

“As far as possible, an Administration should advise the CCITT Secretariat about any forthcoming ‘delayed contributions’ and their contents not less than two months before the meeting and the Secretariat will issue a list of delayed contributions and contents not later than six weeks before the meeting”.

Replying to a point raised by the *delegate of the Federal Republic of Germany* he explained that the stipulation he was proposing was not mandatory. Contributions received too late to be included in the proposed list could still appear if the Study Group in question so decided.

The proposal by the delegate of the United Kingdom was *adopted*.

The *Chairman* said that the recommendations of the Working Party should be considered *adopted* with the changes introduced in the course of the discussion. The Working Party’s report would be annexed to the report by Committee A to the Plenary Assembly.

It was so *agreed*.

2. Approval of minutes of the first and second meetings (Temporary Documents Nos. 1 and 2/COM A)

The minutes of the first meeting of Committee A (Temporary Document No. 1/COM A) were *approved*.

The minutes of the second meeting of Committee A (Temporary Document No. 2/COM A) were *approved*.

The meeting rose at 1230 hours.

SIXTH MEETING

Monday, 4 October 1976, at 1915 hrs

1. Approval of the minutes of the third meeting
2. Joint Study Group for Vocabulary (CMV)
3. Questions relating to patents
4. Completion of the Committee’s work

1. Approval of the minutes of the third meeting (Temporary Document No. 4)

Page 4

The *delegate of the United Kingdom* suggested the insertion of the word “unanimously” after the word “*decided*” in the action line towards the top of the page.

The *delegate of Japan* said he could accept that suggestion.

The suggestion was *approved*.

The *delegate of Belgium* requested the insertion of the word “strictly” before the words “maintenance aspects” in the third line of the Belgian statement.

It was so *agreed*.

The *Chairman* suggested the insertion of the word “telephone” before the word “maintenance” in the second sub-heading.

The *delegate of the United States of America* considered that it would be more appropriate to amend the sub-heading to read: “Responsibilities in connection with all maintenance except telegraph”.

Following a discussion on the terms of reference of Study Group IV, in which the *delegates of Switzerland, the United States of America, the Netherlands, Belgium, the Director of the CCITT and the Chairman* took part, the Chairman's suggestion was *accepted*.

The *Chairman* announced that the delegation of the Federal Republic of Germany had submitted a written correction to its statement on page 4 which would be incorporated in the final version of the minutes.

Page 5

The *delegate of Belgium*, referring to the Chairman's summary of the status of the Study Groups at the top of the page, proposed that the text concerning Study Group II should be amended to read: "the Study Group resulting from the merger of Study Groups II and XIII to take over the activities relating to operation of the telephone network".

It was so *agreed*.

The *Chairman* suggested the insertion of the word "telephone" before the words "maintenance aspects" in the part of his summary which concerned Study Group IV.

It was so *agreed*.

Page 6

The *delegate of Switzerland* drew attention to an erroneous reference to the Chairmen of Study Group VIII on page 4 of the French text.

The *Chairman* said that the French text would be brought into line with the English, which referred correctly to the Chairman of Study Group VII.

The minutes of the third meeting (Temporary Document No. 4), as amended, were *approved*.

2. Joint Study Group for Vocabulary (CMV) (Documents AP VI-Nos. 91 and 103)

The *Chairman* recalled that the Plenary Meeting had requested Committee A to consider the question of the Joint Study Group for Vocabulary and, in particular, the suggestion that it might be disbanded.

The *delegate of the United States of America* said that Document AP VI-No. 91 highlighted the importance of cooperation between the CCITT and the CCIR on questions of vocabulary. However, his delegation considered that the basic work on terms and definitions should be performed by the Study Groups themselves. The technical editing staff of both CCIs would no doubt be able to assume responsibility for reviewing the results of that work and bringing any discrepancies or duplication to the attention of the Study Groups concerned. With regard to the question of coordination with the International Electrotechnical Commission (IEC), it should be possible for the related work to be carried out by correspondence between the Secretariats concerned rather than through attendance at meetings. His delegation therefore wished to propose that the CCITT should take appropriate steps to withdraw its support from the CMV.

The *delegate of Canada* said that the viability of the United States proposal, which deserved serious consideration, would depend very much on the capability of the CCITT Secretariat to coordinate the work on definitions performed in the various Study Groups. He believed that only minor alterations would be required to the Canadian proposal in Document AP VI-No. 103 in order to accommodate the United States approach.

The *Director of the CCITT* said that he had already issued instructions to the CCITT technical editing staff with a view to ensuring that the *List of Definitions* was published as soon as possible after the *Orange Book*. However, he stressed the need for close collaboration between CCITT and CCIR Study Group Chairmen on questions of terminology.

The *delegate of France* observed that the CMV had already rendered useful services to both the CCIs. Although a great deal of its work could probably be carried out by correspondence, it should continue to exist as a body.

The *Director of the CCIR* said that while the CCI Study Groups carried full responsibility for initiating technical vocabulary, there was a very real need to consolidate and rationalize the terms developed. Furthermore, some form of systematic machinery was needed in order to ensure that the point of view of both the CCIs was fully reflected in the revised international electrotechnical vocabulary that was being prepared by IEC. The CMV, which had only existed for a little over three years, was certainly not the only means of ensuring

coordination with IEC but, in his view, a very clear-cut alternative would have to be worked out if it were to be abolished. Perhaps the present structure might be maintained for the time being and the situation reviewed at the next Plenary Assembly.

The *delegate of the United Kingdom* said that he could see no real need for an intermediary body such as the CMV. Since several delegations had, in no uncertain terms, expressed the view that the present situation was unsatisfactory, he had some difficulty in accepting the suggestion that the *status quo* should be maintained. He considered that the Director of the CCITT should be requested to study ways and means of setting on foot a more economical organization to deal with terms and definitions in the next study period.

The *delegate of Italy* said that if no changes were made to Recommendation A.10, the CMV might be maintained; however, if the Recommendation was amended along the lines proposed by the Canadian Administration in Document AP VI-No. 103, the possibility of abolishing the CMV should be given serious consideration.

The *delegate of Switzerland* stressed the need for a body to ensure coordination with IEC and expressed the view that it would be most unwise to disband the CMV out of hand.

The *delegate of the United States of America* endorsed the comments by the United Kingdom delegate. The CCITT Secretariat should be invited to study any economical alternatives that might exist, bearing in mind that one of the reasons for the CMV's existence would disappear when the IEC vocabulary was published. The next Plenary Assembly of the CCIR should be requested to consider the suitability of maintaining the CMV, having regard to the serious doubts which had been expressed on the subject by several delegations.

The *Chairman* said that if the comments by the United States delegate reflected the general view of Committee A, he would see to it that they were incorporated in the Committee's report to the Plenary Meeting and also transmitted to the CCIR.

It was so agreed.

3. Questions relating to patents (Documents AP VI-Nos. 8, 60 and 68; Temporary Documents Nos. 4, 10 and 17)

The *delegate of the U.S.S.R.* said that in his Administration's opinion CCITT Recommendations should not include equipment protected by patents unless the patent-holder expressed his willingness to make the licence available to Member countries for an unlimited period and free of charge. Although the proposal by the United States contained in Temporary Document No. 10 was based on acceptable principles, it did not give any clear idea of the costs which might be involved in the use of licences.

The *delegate of the United States of America* remarked that at the present point in history it was no longer possible to ignore the issue of patents or to be sure of possessing full knowledge of all the patents that might be involved in a recommendation. Abiding by the past policy of never adopting recommendations which involved patents, could only act as a brake on technological progress. In the course of intensive discussions which had taken place over the past few days, a new draft resolution had been prepared which was essentially based on the United Kingdom proposal contained in Document No. 68 and the United States proposal in Temporary Document No. 10, with two additions. First, the new text provided that if the patent-holder withdrew his consent to grant a licence on reasonable terms, the recommendation could be withdrawn. Secondly, any knowledge of a relevant patent should be disclosed at the earliest possible time during the discussion of the proposed recommendation. The text of the draft resolution would be distributed shortly.

Referring to the statement by the delegate of the U.S.S.R., he said that it was difficult to accept the view that licences should be made available free of charge. The mechanism of patents had been devised to protect the interests of inventors; the CCITT was not empowered to go against such worldwide practice. However, the patent system should not be misused and it was for that reason that the proposed draft resolution placed emphasis on the granting of licences on fair and reasonable terms.

The *delegate of India* wondered who would decide what constituted fair and reasonable terms.

The *delegate of the U.S.S.R.* said that the policy he had outlined was motivated by a concern for greater clarity and precision. He urged that it be taken into consideration.

The *Chairman* said that as the question of patents went beyond the terms of reference of Committee A and as, moreover, the draft resolution referred to by the delegate of the United States was not yet available in writing, the matter would be referred for consideration to the Plenary Assembly.

It was so *decided*.

The *delegate of Japan* expressed the hope that a decision on the subject of patents would be reached at the present Plenary Assembly and would not have to be deferred for a further four years.

4. Completion of the Committee's work

The *Chairman* invited delegations to submit directly to the Secretariat any corrections they might have to minutes of Committee A which had not yet been distributed. He expressed his appreciation to the Vice-Chairman and Secretary of the Committee, the minute-writers and interpreters and all those in the CCITT Secretariat who had made it possible to bring the Committee's work to a successful conclusion. He then declared the work of Committee A *completed*.

The meeting rose at 2030 hours.

E.3 – REPORT BY COMMITTEE B

(as amended and approved by the sixteenth Plenary Meeting)

Terms of reference

The terms of reference assigned to Committee B by the Plenary Assembly (Temporary Document No. 7/PLEN.) were as follows:

“Detailed allocation of Questions submitted to the Plenary Assembly by the various Study Groups, Joint Study Groups, Special Study Groups, Special Autonomous Working Parties and Joint Working Parties.”

I. General

1. A Question is considered urgent if special steps have to be taken to enable its study to be completed before the next Plenary Assembly. These Questions are marked with an asterisk(*).
2. The Committee did not consider it necessary to mention the internal Working Parties of the Study Groups.
3. It was felt to be impracticable to mention all the Study Groups concerned in the work on each of the Questions of Study Group XVIII (Digital networks). It would be desirable for the Chairman appointed to head Study Group XVIII to agree with the other Chairmen on establishing liaison with the Study Groups concerned as work progresses (in particular, the work on the integration of services in digital networks must be coordinated in this fashion under Question 1/XVIII). The Committee appreciated the value of the meeting of Chairmen and Vice-Chairmen held in September 1975.
4. Committee B proposes in Annex 1 to entrust the study of various Questions to Joint Working Parties existing. It proposes disbanding the Joint Working Parties CDF, CNC, MAT and SGO.
5. It must be well understood that, when no Joint Working Party is set up, the main purpose of indicating the various Study Groups interested in the examination of the Questions is to inform the members of the Study Group to which the Question is assigned so that they may ensure the necessary coordination within the framework of their national Administrations.
6. The subjects assigned to GAS 3 and GAS 5 for study are those contained in their reports, with any additions approved by the Plenary Assembly. The subjects assigned to the new GAS 6 will be those contained in the report by Committee D as amended and approved by the Plenary Assembly. All subjects assigned to GAS 3, 5 and 6 will be listed in Volume I of the *Orange Book*.
7. Committee B expressed the view that in the next study period the Study Groups should prepare their Questions such that there is no overlap with other Study Groups. If, exceptionally, it cannot be avoided to draft identical Questions for several Study Groups, there should be a clear indication which part of the Question is to be dealt with by the various Study Groups and which Recommendations are concerned.
8. Committee B had had considerable difficulty in dealing with Questions which were not part of a numerical series in the Study Group reports concerned or which had mixed letters and numbers; in the next study period the Study Groups should arrange Questions in strict numerical order.
9. Committee B noted that “availability rapporteurs” had been appointed by several Study Groups and were taking part in the work of CMBD. This group will continue to act as general coordinator of availability studies.
10. It was felt impracticable to mention all the Study Groups concerned in the work of Study Group III on tariffs. It is understood that the Study Groups studying new services and facilities or reviewing the existing services will keep Study Group III informed of their work.

II. Questions to Study Groups ³⁾

1. Study Group I

Pursuant to the decision by the Plenary Assembly to concentrate all Questions on charging and accounting for all services in Study Group III, a number of Study Group I's Questions had to be reworded or allocated to Study Group III. The resulting new list of Questions is as follows:

Question 4/I – Revision of the Series F Recommendations relating to the telegram service except the provisions on charging and accounting

Study of possible amendments to the Recommendations concerning the telegram service including the possibility of abolishing reduced rate telegrams taking into account the cost considerations by Study Group III (see Question 9/III)

Question 7/I – Interconnection of maritime satellite communication services and other mobile services with the international telex network (to be studied in conjunction with Study Group X – see Question 4/X)

Considering

a) Recommendation Mar2-19 of the World Maritime Administrative Radio Conference (Geneva, 1974);

b) that several international organizations are considering maritime satellite communication systems for application on a worldwide basis and capable of carrying, *inter alia*, a telex service;

c) that such a service would be required to inter-work with the international telex service and be co-related with, for example, the numbering and routing plan, facilities, and quality of service criteria of the international telex service;

what new operational Recommendations are required and what additions and/or modifications to existing Recommendations are needed to provide for inter-connection of the international maritime satellite telex service and other mobile services with the international telex service?

Question 8/I

As in Document AP VI-No. 49.

Question 11/I

As in Document AP VI-No. 49 with point 3 deleted.

Question 12/I – New services and facilities for telex and other 50-baud telegraph services (to be studied in conjunction with Study Group X – Question 5/X)

What operational provisions are necessary for proposed new services and facilities for telex and other 50-baud telegraph services?

Question 13/I

As in Document AP VI-No. 49.

Question 14/I – Revision of the Series F Recommendations relating to the telex service except the provisions on charging and accounting

Question 15/I

As in Document AP VI-No. 49 with the addition “of interest to the World Plan Committee”.

³⁾ For Study Groups I, II and III all Questions are listed up, for all other Study Groups only those which have been amended by Committee B.

Question 16/I

As in Document AP VI-No. 49.

Question 17/I

As in Document AP VI-No. 49.

Question 18/I — Revision of the Series F Recommendations relating to phototelegraph services except the provisions on charging and accounting

Study of possible amendments to the F.80 Series Recommendations concerning the phototelegraph services.

Question 30/I

As in Document AP VI-No. 49.

Note 1. — The tariff parts of Questions 2/I, 4/I, 7/I, 11/I, 12/I, 14/I and 18/I are carried over to Questions 9/III, 13/III, 10/III, 11/III, 12/III, 14/III and 18/III respectively. The operational part of Question 2/I has been transferred to Question 4/I.

Note 2. — It was decided to amend the title of Study Group I to read: Telegraph operation and quality of service.

2. Study Group II

The new list of Study Group II's Questions, after extraction of the tariff aspects and inclusion of the Questions on quality of service, traffic engineering, routing and numbering plan and human factors from Study Group XIII, is as follows:

Question A/II

As in Document AP VI-No. 53.

Question D/II

As in Document AP VI-No. 53.

Question E/II

As in Document AP VI-No. 53 with addition: "in collaboration with Study Group III".

Question F/II

As in Document AP VI-No. 53.

Question G/II

As in Document AP VI-No. 53.

Question H/II

As in Document AP VI-No. 53.

Question I/II

As in Document AP VI-No. 53.

Question J/II

As in Document AP VI-No. 53.

Question K/II

As in Document AP VI-No. 53 with addition: "to be studied by JWP SMM".

Question L/II

Same addition as for Question K/II.

Question M/II

Former Question 4/XIII (see Document AP VI-No. 34).

Question N/II

Former Question 5/XIII.

Question O/II

Former Question 15/XIII.

Question P/II

Former Question D.

Question Q/II

Former Question E.

Question R/II

Former Question G. Add: "of interest to GAS 6".

Question S/II

Former Question H.

Question T/II

Former Question I.

Question U/II

Former Question J.

Question V/II

Former Question K.

Note 1. — The final numbering of Study Group II's Questions will be in numerical order.

Note 2. — Questions B/II and C/II will be new Questions 19/III and 20/III respectively.

It was decided to amend the title of Study Group II to read: "Telephone operation and quality of service".

3. Study Group III

With the inclusion of new Questions from Study Groups II and III the new list of Questions is as follows:

Questions 1/III, 2/III and 3/III

As in AP VI-No. 62 with the addition of the following footnote requested by the USA:

"There is a continuing discussion in the USA of issues related to the dedicated use of customer private leased circuits, and the USA delegation was satisfied that this will be the subject of further study in Study Group III during the coming study period."

Questions 4-8/III

As in AP VI-No. 62.

Question 9/III — Tariffs in the public telegram service

Study of tariff systems for telegrams including:

1. binary tariffs where there is:
 - a) a fixed component for acceptance and delivery operations;
 - b) a second component in proportion to the length of telegrams;
2. charging and accounting according to the number of printed characters;
3. cost considerations of reduced rate telegrams and the place of such telegrams in the general tariff structure of the public telegram service;
4. the introduction of a charging and accounting system by zones.

Note. — Study of point 1 should be undertaken for the intercontinental system. Study of points 2, 3 and 4 should be undertaken for both international and intercontinental relations.

Question 10/III — Interconnection of maritime satellite communication services and other mobile services with the international telex network (to be studied in conjunction with Study Group X — see Question 4/X)*Considering*

- a) Recommendation Mar2-19 of the World Maritime Administrative Radio Conference (Geneva, 1974);
 - b) that several international organizations are considering maritime satellite communication systems for application on a worldwide basis and capable of carrying, *inter alia*, a telex service;
 - c) that such a service would be required to inter-work with the international telex service and be co-related with, for example, the tariff and accounting system of the international telex service;
- what new tariff and accounting Recommendations are required and what additions and/or modifications to existing Recommendations are needed to provide for inter-connection of the international maritime satellite telex service and other mobile services with the international telex service?

Question 11/III — Introduction of facsimile services (see also Question 11/I)

Facsimile techniques have developed to the extent that high speed/volume transmissions of graphics and alphanumerics are now practical. This has meant that the following services can be provided:

- a) document facsimile subscriber service;
- b) public document facsimile service.

Study needs to be undertaken of the following aspects of the above services:

1. tariff structures;
2. preparation of Recommendations as necessary.

Annex

(to Question 11/III)

Preliminary definitions of the services mentioned in a) and b) above are as follows:

Document facsimile subscriber service.— This service provides for the exchange of documents containing all forms of graphics (alphanumerics, cyrillics, ideographs) directly between subscribers.

Public document facsimile service.— This service provides for the exchange of documents containing all forms of graphics (alphanumerics, cyrillics, ideographs) between public offices or between a public office and a subscriber.

Question 12/III — New services and facilities for telex and other 50-baud telegraph services (to be studied in conjunction with Study Group I — Question 12/I and Study Group X — Question 5/X)

What tariff provisions are necessary for proposed new services and facilities for telex and other 50-baud telegraph services?

Question 13/III — Revision of the Series F Recommendations relating to the telegram service — provisions on charging and accounting

Question 14/III — Revision of the Series F Recommendations relating to the telex service — provisions on charging and accounting

Question 16/III — Future developments in the maritime services (= Question 16/I = Question K/II, to be studied by Joint Working Party SMM)

Considering Resolution Mar2-22 and Resolution Mar2-23 of the WMARC (Geneva, 1974), the effects of future developments on maritime telecommunications services should be studied, including the following specific points:

1. single-operator working —
 - a) effects on operating procedures,
 - b) effects on accounting and charging methods;
2. automatic operation —
 - a) effects on operating procedures,
 - b) effects on accounting and charging methods;
3. development of specific operating, accounting and charging principles and procedures that are not yet covered by existing texts and that may be required with the maritime mobile satellite service.

Annex

(to Question 16/I, K/II)

See full text in Part IV of JWP SMM's Final Report.

Question 17/III — Revision of draft Recommendations F.110/E.190 and F.111/E.260 (= Question 17/I = Question L/II, to be studied by Joint Working Party SMM)

1. Improvements or refinements specific to the needs of the maritime services.
2. Monitoring the activities of Study Groups I and II (and any other Study Groups that may be concerned) in order to incorporate new concepts and to avoid conflicts between Recommendations pertaining to the same service.

Question 18/III — Revision of the Series F Recommendations relating to phototelegraph services — provisions on charging and accounting

Question 19/III — Review and amendment as necessary of the accounting and associated procedures set forth in Recommendations for international telephone traffic accounting, their mode of application and processing

Question 20/III — Review of operational and charging provisions for sound- and television-programme transmissions set forth in Recommendation E.330

The continuing evolution and growth of sound- and television-programme transmissions between countries and continents make it necessary to keep the provisions of this Recommendation under review.

It was decided to shorten the title of Study Group III to read: "General tariff principles".

4. Study Group IV

Pursuant to the decision by the Plenary to allocate those Questions of former Study Group XIII to Study Group IV which are dealing with maintenance, the new list of Questions is as follows:

Question 1/IV

As in AP VI-No. 26.

Question 2/IV

As in AP VI-No. 26, add: "of interest to Study Groups VII and XIV".

Question 3/IV

As in AP VI-No. 26, add: "of interest to Study Groups VII, IX, XIV and XVII".

Question 5/IV

Add in point 4 the word "maintenance" between "the" and "limits".

Add the following text to the Note after the word "LTG": "... and should take account of the revision of Recommendation H.14 which is currently in progress".

Question 8/IV

In the title read: "... Question 8 of Study Group XVII".

Question 18/IV

Item b) to read: "b) those used for telegraphy".

Question 21/IV

Add to the title: "as requested by Study Group XVI".

Question 22/IV

Add: "of interest to CMBD".

Questions A and B/IV

Add: "of interest to CMTT".

Question C/IV

The following new wording is proposed:

"Question C/IV – Analogue circuit impairments and their effect on data transmission.

(New Question, in conjunction with Study Group IX, Question 28/IX and Study Group XVII, Question 8/XVII)

How should the various impairments such as phase hits, phase jitter, impulsive noise, white noise, group-delay distortion, gain hits, short interruptions, etc., be measured? What is their magnitude and how often do they occur?

What measures can be taken to reduce their incidence?"

Note 1. – It is envisaged that the study of this Question will proceed by collecting background information from individual Administrations or private operating agencies members of Study Group IV, detailing the knowledge and experience they have gained from studies in their own national networks.

Note 2. – Study Groups IX and XVII should be informed of the results obtained under this Question.

Questions which are transferred from former Study Group XIII:

Question 6/IV

See former Question C/XIII.

Question 23/IV

See former Question F/XIII.

Question 24/IV

See former Question 3/XIII.

Note 1. — All Questions will be renumbered in numerical order.

Note 2. — Committee B proposes the following new title for Study Group IV:

“Transmission maintenance of international lines, circuits and chains of circuits; maintenance of automatic and semi-automatic networks”.

5. Study Group V

Question 4/V

Add: “see also Question 3/VI”.

Question 13/V

Add: “see also Question 4/XVI”.

Question 21/V

Add: “see also Question 12/XV”.

Question Y/V

Add: “to be coordinated with Question Z/VI”.

New Question from Study Group XII: Z/V

See Document AP VI-No. 23, page 249.

Study Group XII to be informed of results of study.

6. Study Group VI

Question 3/VI

Add: “see also Question 4/V”.

Question Z/VI

Add: “to be coordinated with Question Y/V”.

7. Study Group VII

Question 11/VII

Add: “of interest to Study Group XVII”.

Question 18/VII

Add to Note 3: “the Study Groups I and II as being responsible for the telex and telephone service”.

Add new Question 34/VII

“Subscribers’ Service in Public Data Networks”.

The following items, *inter alia*, are to be studied:

- operational procedures for data transmission services and facilities in public data networks;
- directories;
- directives for subscribers;
- status information provided by the network.

8. Study Group VIII*Question 5/VIII*

Add: “to be studied in collaboration with Study Group I – Question 13/I”.

Question 8/VIII

Add: “to be studied in collaboration with Study Group I – Question 8/I”.

Add new Question 10/VIII:*

“Automatic originating and answering of calls in the telex network”.

Apart from the case standardized in the existing Recommendation V.11 (Automatic calling and/or answering on the telex network using dial selection), the following additional cases should be examined:

- a) keyboard selection;
- b) a simpler interface;
- c) action to be taken on the receipt of each type of service signal.

Note. — Study Group X is to be consulted on any implications on telex switching.

9. Study Group IX*Question 2/IX*

Add: “Joint Working Party LTG to be kept informed”.

Question 22/IX

Add note: “Study Group X is to be consulted on any switching aspects”.

Question 28/IX

Committee B proposes the following new wording to better delineate the responsibilities of Study Groups IX and IV:

“*Question 28/IX* — Sudden phase changes (interests Study Group IV — see Question C/IV)

1. What magnitude of phase change could have a noticeable influence on telegraph distortion?
2. What is the interrelation between sudden phase changes and the resulting error rate?”

Note. — Study Group IV is studying the magnitude of phase changes that occur, Study Group IX will be informed of the results of the study.

Question 8/IX

Add: "to be studied in collaboration with Study Group X — see Question 9/X — Study Group IX coordinating".

Question 9/IX

Add: "see also Questions 7/I and 4/X".

Question 10/IX

Add: "to be studied in collaboration with Study Group X — see Question 12/X — Study Group IX coordinating".

10. Study Group X*Question 1/X*

Add: "in collaboration with Study Group VIII — see Question 10/VIII — Study Group X coordinating".

Question 4/X

Add: "see Questions 7/I and 9/IX".

Committee B proposes the following wording of Question 7/X which is incomplete in Document AP VI-No. 16:

"Question 7/X — Revision of Recommendations — Study of possible amendments within the purview of Study Group X

There is a need for an overall review of the U Series Recommendations to take proper account of modern transmission and switching developments and to reappraise the presently recommended tolerances for the various signalling systems (both individually and in combination).

Any minor refinements to type C signalling and automatic maintenance might also be considered under this Question."

Question 9/X

Add: "study to be coordinated by Study Group IX".

Question 12/IX

Add: "study to be coordinated by Study Group IX".

11. Study Group XI*Question A/XI*

References to Study Group XIII need to be reviewed after the redistribution of Study Group XIII's Questions among Study Groups IV and II.

Question D/XI

Add: "interests Study Group II and CCIR Study Group 8".

Questions 7/XI, 8/XI and 9/XI

Add a common note:

"Other Study Groups should take into account the results of the study of this Question since they may be applied on a general basis".

Question 11/XI

Add: "interests Study Group XVI and CCIR Study Group 4".

Question H/XI

Add: "interests Study Group IV".

Committee B proposes a new Question I/XI as follows:

"Question I/XI — Automatic switching equipment for use in national networks

Because of the fact that newly developed switching systems are being introduced, this presents to the Administrations, an ever increasing number of engineering, staff training, maintenance and other operational considerations, and also

considering

1. the continuous rapid development of new switching techniques,
2. that a large amount of switching equipment will be installed in the next few years, especially in areas of low telephone density,
3. that some degree of compatibility in the installed switching equipment is required in the worldwide automatic telephone network,
4. that some degree of compatibility in the installed switching equipment is also desirable to facilitate the training of staff involved in operation and maintenance of the automatic telephone networks,

and also considering

5. the need to relate the study of this Question to the studies being conducted under Questions A, B, C, E, F, 7, 8, 9, 11 and H/XI,
6. the parallel studies on the subject performed by GAS 6 and other Study Groups,
7. that present and forthcoming differences in national networks e.g. numbering plan, routing plan, transmission plan, charging arrangements, etc., must be taken into account,
8. that further design and development of switching technique is expected to continue, what recommendations can be made to assist Administrations in the choice and standardization of automatic switching equipment for use in national networks?"

All Questions of Study Group XI will be renumbered in numerical order.

12. Study Group XII*General*

Committee B recognizes the close interrelation between the work of Study Groups XII and XVI and therefore proposes the following note to Study Group XII's list of Questions:

"There is a strong interest of Study Group XVI in Study Group XII's work; Study Group XII is therefore requested to keep Study Group XVI continuously informed of the progress made."

Question 11/XII

Add a Note B: "See also Question H/XV."

Question 18/XII

Add: "see also Questions J/XVIII and K/XVIII".

Question A/XII

Add: "Study Group XII coordinating".

13. Study Group XIII

Merged with Study Groups II and IV.

14. Study Group XIV

No observations.

15. Study Group XV*Question 27/XV*

JWP LTG will continue to coordinate study of this Question, Study Group XV controlling.

Question C/XV

Add: "of interest to Study Group XVIII".

Question F/XV

Add: "of interest to Study Groups IV and XI".

Question G/XV

Add: "of interest to Study Group XVI".

Allocation of work from other Study Groups or Joint Working Parties to Study Group XV:

Committee B considers that it is possible to share Questions L/D, M/D, N/D and O/D among Study Groups XV and XVIII in a coordinated and efficient manner.

It is proposed that Study Group XV should study the transmission media – characteristics for cables, waveguides and optical fibres and that Study Group XVIII should study the characteristics for associated transmission equipments. In making this proposal it recognizes that Study Group XVIII needs to make further studies of the general requirements of transmission systems before it would be appropriate to transfer the study of equipments to Study Group XV. If such division of work is accepted it seems no longer necessary to constitute Joint Working Groups (the former JWG CNC and JWP SGO). This will also meet the widely recognized need for reducing the number of CCITT working entities

The detailed implementation of this proposal is as follows:

1. Add the following text to the end of the preamble to Study Group XVIII Questions:

"In the case of transmission systems the study of the media (cables, waveguides, optical fibres) has been assigned to Study Group XV but the study of the associated transmission equipments has been assigned to Study Group XVIII for the time being until the study of the general requirements to be met by transmission systems has made further progress."

2. Question L/D is assigned to Study Group XV as new Question M/XV (of interest to Study Group XVIII).

3. Question M/D has been split into two parts, the part on digital line sections on cables to form a new Question M/XVIII to be studied by Study Group XVIII (text see there) and the part on digital line sections on FDM links to form a new Question N/XV, the text of which is given hereafter.

4. Question N/D has also been split into a "medium"-part and a "system"-part, the former allocated to Study Group XV as new Question O/XV (text hereafter) and the latter allocated to Study Group XVIII as new Question N/XVIII (text see there).

5. Finally, Question O/D has also been subdivided into medium and system part, the former now constituting new Question P/XV (text hereafter) and the latter the new Question O/XVIII (text see there).

With this new allocation of tasks to Study Groups XV and XVIII, Joint Working Parties CNC and SGO are no longer necessary and can consequently be disbanded.

Question N/XV – Digital line sections on FDM links (of interest to Study Groups XVII and XVIII)

What Recommendations should be made regarding systems for transmitting digital signals at a low and medium bit-rate on FDM links (in groups, supergroups, etc.) or using part of or a complete existing analogue line for digital signal transmission?

The following specific points require study:

Point a)

What characteristics should be recommended for each system (e.g., bit rate, line code, modulation technique, line interface, etc.)?

Point b)

What group (groups, supergroups, etc.) are to be preferred for these systems, in view of the risk of adjacent group interference?

Annex

(to Question N/XV)

Will consist of the reply to points N and O of Question 13/XVIII (see Contribution GN CNC-No. 105, report of the final meeting of Joint Working Party CNC).

Question O/XV – Physical characteristics of millimetric waveguides (of interest to Study Group XVIII)
(new Question)

What characteristics of circular waveguides using the TE_{01} mode operating in the frequency band between about 20 and 110 GHz, should be recommended for digital transmission?

The following specific points require study:

1. Waveguide design, manufacture, transmission characteristics.
2. Methods of route selection, installation and joints.
3. Parameters to be measured on the laid waveguide and methods of measurement.

Annex

(to Question O/XV)

Administrations are invited to submit contributions on the following matters:

1. *Waveguide – mechanical aspects*

- 1.1 Type and physical construction (e.g. helix and/or dielectric lined, steel jacket v. reinforced plastic).
- 1.2 Internal diameter. Choice of diameter; tolerances on diameter and ellipticity.
- 1.3 Straightness. Specification; use of r.m.s. value of reciprocal of radius of curvature or “curve figure”. Methods of measurement at factories and “as laid”.
- 1.4 Sharp bends and corners. Possible constructions and their effects on attenuation, dispersion and mode conversion.
- 1.5 Route planning.
- 1.6 Ducts and duct installation.
- 1.7 Waveguide jointing and installation.

1.8 Protection and pressurization.

1.9 Long-term stability and ageing. Earth movement or settlement, sagging of waveguide between supports, effects of temperature cycling.

1.10 Quality control in manufacture and laying.

2. *Waveguide – electrical characteristics*

2.1 Attenuation/frequency and delay/frequency characteristics. General trend and fine structure. Methods of measurement and presentation of results.

2.2 Other electrical measurements necessary to get essential information on signal distortion.

3. *Correlation of mechanical tolerances and electrical properties*

4. *Miscellaneous*

4.1 Maintenance and repair problems.

Question P/XV – Physical characteristics of optical fibre cables (of interest to Study Group XVIII)
(new Question)

What characteristics of optical fibres operating in the infrared or in the visible frequency regions should be recommended for digital transmission?

The following specific points require study:

1. Physical and mechanical characteristics of the fibres, transmission characteristics (e.g. attenuation, pulse dispersion, etc.).
2. Make-up of cables; methods of jointing; methods of installation.
3. Method of measurement on factory lengths and already installed sections of optical fibre cables.
4. Characteristics of light sources and receivers.
5. Optical coupling methods at terminal and intermediate repeater points.

Annex

(to Question P/XV)

Items to be studied for optical fibre cables

Point 1. Vocabulary

- 1.1 Definitions concerning optical fibres, cables and cable accessories (connectors, splices, etc.).
- 1.2 Definitions concerning optical components (such as optical light sources, detectors, etc.).
- 1.3 Definitions concerning optical measurements.

Point 2. Optical fibres – physical and mechanical characteristics ⁴⁾

- 2.1 Nature of material.
- 2.2 Optical fibre diameter (external and/or core or acceptance area).

⁴⁾ Same characteristics as those of points listed above in the case of multifibres conductors.

- 2.3 Optical fibre refractive index distribution profile and accuracy and/or average acceptance angle.
- 2.4 Protective material parameters.
- 2.5 Mechanical strength, resistance to weathering, water, acids and alkalies, and fibre life-time.
- 2.6 Optical fibre cutting and splicing.
- 2.7 Crosstalk reduction by precoating or protecting jacket on optical fibres.

Point 3. Optical fibres – transmission characteristics ⁴⁾

- 3.1 Attenuation characteristics specifications.
- 3.2 Evaluation of attenuation due to fibre bends and twists.
- 3.3 Dispersion characteristics specifications.
- 3.4 Optical fibre transmission characteristics to be standardized.

Point 4. Optical fibre cables

- 4.1 General specification of cables, including transmission characteristics.
- 4.2 Optical fibre cable structure, lay ratio.
- 4.3 Mechanical strength and resistance to weathering, water, acids and alkalies.
- 4.4 Allowance for cable bends and twists.
- 4.5 Optical fibre cable connections and their characteristics including cladding.
- 4.6 Metallic pairs for power feeding, supervision and control.
- 4.7 Cable factory length and fibre factory length.
- 4.8 Cable regularity.
- 4.9 Other parameters.

Point 5. Fundamental tests and measurements

- 5.1 Fibre and cable attenuation measurements. (Taking into account dependence on fibre length and launching conditions.)
- 5.2 Fibre and cable dispersion measurements. (Taking into account dependence on launching condition, mode distribution, fibre length, bends and twists.)
- 5.3 Methods of locating and measuring cable faults.

All Questions of Study Group XV will be renumbered in numerical order.

16. Study Group XVI

Question 2/XVI

Add: "of interest to JWP LTG".

Question 3/XVI

Add: "of interest to Study Group II".

Question 4/XVI

Add: "of interest to Study Group V – see Question 13/V":

Question 8/XVI

Add: "to be studied jointly with Study Group XII".

Question B/XVI

Add: "of interest to Study Group II".

17. Study Group XVII (former Special Study Group A)*Question 6/Sp.A*

Add: "of interest to Study Group II – see Question I/II".

Question 11/Sp.A

Add: "of interest to Study Groups VII and XVIII".

Question 15/Sp.A

Add: "of interest to Study Groups XI and XVI".

18. Study Group XVIII (former Special Study Group D)*Question A/D*

Add: "of interest to CCIR Study Groups 4 and 9".

Question D/D

Add: "of interest to CCIR Study Groups 4 and 9".

Question E/D

Add: "to be studied in collaboration with CMBD (coordinating)".

Question F/D

Add: "of interest to Study Group IV, to CCIR Study Groups 4 and 9 and to CMTT."

Question H/D

Add: "of interest to CCIR Study Groups 4 and 9 and to CMTT".

Question I/D

Add: "of interest to CCIR Study Groups 4 and 9 and to CMTT".

Question J/D

Add: "of interest to Study Group XII and CMTT".

Question K/D

Add: "of interest to Study Group XII".

Question L/D

Transferred to Study Group XV.

Questions M/D, N/D and O/D have been reworded to cover only the system aspects of digital transmission over metallic cables, waveguides and optical fibre cables, leaving the transmission media aspects to Study Group XV. The new Questions are given hereafter.

Question M/XVIII — System characteristics for digital line sections on cable (continuation of Question 13/D, studied in 1973-1976)

What Recommendations should be made regarding systems for digital transmission on standardized cables?

The following specific points require study:

Point a) Digital line sections on cables

- a.1) What characteristics should be recommended for each type of digital line section on cable (e.g., bit rate, modulation rate, line code, hybrid or fully regenerative techniques, line interface, etc.)?
- a.2) What objectives should be recommended for the performance characteristics for each type of digital line section on the basis of the hypothetical digital paths in Recommendation G.721 and the performance characteristics studied under Question A/D?

Point b) General characteristics of digital line sections on cables

When drafting Recommendations for digital line sections on cable, can some aspects be considered in common to be applicable to all types of line sections? In particular can common methods be used in ensuring that general requirements, studied and recommended under other Questions of Special Study Group D and applicable to transmission systems on all types of transmission media, will be met?

The following specific points require study:

- b.1) The specification and allocation of digital errors and jitter.

Note. — The overall allocation to digital paths will be studied under Question A/D.

- b.2) The effect on the characteristics of digital line sections of any restriction which may be placed on the input signal to digital paths.

Note. — The study of the need for, and the nature of, any restrictions will be studied under Question A/D.

- b.3) Recommendations, appropriate to digital line sections to restrict the effects of interference from sources external to the system.

Note. — General aspects of this subject are studied under Question 9/D.

- b.4) The achievement of reliability and availability objectives.

Note. — General aspects of this subject are studied under Question E/D.

- b.5) Alarms and supervision.

Note 1. — General aspects covering the whole digital network are covered under Question D/D.

Note 2. — Information on existing system or systems under study relevant to these points should be supplied as contributions to the study of the more general Question as indicated against the specific points listed.

Annex
(to Question M/XVIII)

Will consist of the reply to points B, C, G, H (without Annexes 1 and 2), L₃, of Question 13/D (see Contribution GM CNC-No. 105, report of the final meeting of Joint Working Party CNC).

Question N/XVIII — System characteristics of digital line sections on millimetric waveguides

Point a)

What are the characteristics to be recommended for each type of digital line section on millimetric waveguides (e.g.: bit rate, modulation technique, repeater spacing, line interface, etc.)?

The following specific points require study:

- a.1) Band utilization, band and channel filters.
- a.2) Modulation, demodulation and IF aspects.
- a.3) Specific methods for power feeding and supervision of the digital line section.
- a.4) Methods of measurement.

Note 1. — Account must be taken of the recommended digital system interfaces.

Note 2. — It would be useful in these studies to indicate which points are considered suitable for future Recommendations.

Point b) General characteristics of digital line sections on millimetric waveguides

When drafting Recommendations for digital line sections on millimetric waveguides can some aspects be considered in common to be applicable to all types of line sections? In particular can common methods be used in ensuring that general requirements, studied and recommended under other Questions of Special Study Group D and applicable to transmission systems on all types of transmission media, will be met?

The following specific points require study:

- b.1) The specification and allocation of digital errors and jitter.

Note. — The overall allocation to digital paths will be studied under Question A/D.

- b.2) The effect on the characteristics of digital line sections of any restriction which may be placed on the input signal to digital paths.

Note. — The study of the need for and the nature of any restrictions will be studied under Question A/D.

- b.3) Recommendations, appropriate to digital line sections, to restrict the effects of interference from sources external to the system.

Note. — General aspects of this subject are studied under Question 9/D.

- b.4) The achievement of reliability and availability objectives.

Note. — General aspects of this subject are studied under Question E/D.

- b.5) Alarms and supervision.

Note 1. — General aspects covering the whole digital network are covered under Question D/D.

Note 2. — Information on existing system or systems under study relevant to these points should be supplied as contributions to the study of the more general Question as indicated against the specific points listed.

Annex
(to Question N/XVIII)

Administrations are invited to submit contributions on the following matters:

1. *Baseband characteristics*
 - 1.1 Digit rates. Use by waveguide systems of signals agreed for other digital transmission systems.
 - 1.2 Overall performance requirements. Error rate and jitter; methods of measurement and monitoring.
 - 1.3 Scrambling; coding.

2. *Band utilization and terminal/repeater equipment*
 - 2.1 Frequency limits.
 - 2.2 Choice of channel bandwidths.
 - 2.3 Frequency plans.
 - 2.4 Modulation and demodulation methods.
 - 2.5 Frequency stability requirements. Oscillators and filters.
 - 2.6 Type, performance and spacing of repeaters.

3. *Miscellaneous*
 - 3.1 Supervisory and control requirements.
 - 3.2 Accommodation and power supplies for repeaters.
 - 3.3 Reliability of repeaters and of complete systems.
 - 3.4 Maintenance and repair problems.
 - 3.5 Economic aspects of waveguide systems (see GAS/3 Manual, Part D in particular, Section II.4).

Question O/XVIII — Characteristics for digital line sections on optical fibre cables

Point a)

What are the characteristics to be recommended for each type of digital line section on optical fibres (e.g. bit rate, line code, modulation technique, repetition technique, repeater spacing, line interface, etc.)?

The following specific points require study:

- a.1) Specific methods for power feeding and supervision of the digital line section.
- a.2) Methods of measurements.

Note 1. — Account must be taken of the recommended digital interfaces.

Note 2. — It would be useful in these studies to include which points are considered suitable for future Recommendations.

Point b) General characteristics of digital line sections on optical fibres cables

When drafting Recommendations for digital line sections on optical fibres cables can some aspects be considered in common to be applicable to all types of line sections? In particular can common methods be used in ensuring that general requirements, studied and recommended under other Questions of Special Study Group D and applicable to transmission systems on all types of transmission media, will be met?

The following specific points require study:

- b.1) The specification and allocation of digital errors and jitter.

Note. — The overall allocation to digital paths will be studied under Question A/D.

- b.2) The effect on the characteristics of digital line sections of any restriction which may be placed on the input signal to digital paths.

Note. — The study of the need for, and the nature of, any restrictions will be studied under Question A/D.

- b.3) Recommendations, appropriate to digital line sections to restrict the effects of interference from sources external to the system.

Note. — General aspects of this subject are studied under Question 9/D.

- b.4) The achievement of reliability and availability objectives.

Note. — General aspects of this subject are studied under Question E/D.

- b.5) Alarms and supervision.

Note 1. — General aspects covering the whole digital network are covered under Question D/D.

Note 2. — Information on existing system or systems under study relevant to these points should be supplied as contributions to the study of the more general Question as indicated against the specific points listed.

Annex

(to Question O/XVIII)

Items to be studied for optical fibres transmission system

Point 1. Vocabulary

Definitions concerning optical fibre transmission systems.

Point 2. Transmission systems

- 2.1 Hypothetical reference circuits and subscriber lines.
- 2.2 Optical line interface including line code.
- 2.3 Equalization.
- 2.4 Digit rate for digital transmission and baseband frequency allocation for analogue transmission.
- 2.5 Modulation and demodulation.
- 2.6 Repeater spacing.
- 2.7 Overall performances of transmission lines (such as digit error rate, jitter, signal-to-noise ratio and linearity).
- 2.8 Optical wavelength and spectral width.
- 2.9 Potentialities for multiple wavelengths transmission.

Point 3. Miscellaneous

- 3.1 Repeater reliability.
- 3.2 Safety/health hazards.

Question P/D

Add: "of interest to Study Group XVI and CCIR Study Group 4".

Question Q/D

Add: "of interest to Study Groups XV and V".

Question R/D

Add Note 3: "Of interest to Study Group XV and CCIR Study Groups 4 and 9".

Question S/D

Add: "of interest to Study Groups XV and XVI".

Committee B recommends, in view of the work programme of Study Group XVIII, to amend its title to read: Digital networks.

Note 1. — Committee B proposes to retain as a Note to the list of Questions of Study Group XVIII in Volume 1 the text of an agreement between the Chairmen of the Study Groups involved in the study of Question A/XVIII (see Document AP VI-No. 67, paragraph IV.1).

Note 2. — All Questions of Study Group XVIII will be renumbered in numerical order.

19. **Joint CCITT/CCIR Study Group CMBD (former Special Study Group C)**

Question 1/C

Add: "to be studied in conjunction with Question 27/V — GM LTG".

Question 2/C

Note 3, paragraphs 1, 3, 4 and 5, will be reproduced in Volume I of the *Orange Book* as a Note to Question 2/C.

Question 10/C

Add: "of interest to Study Groups VII, IX, XII, XV, XVI, XVII and the CCIR".

New Question 11/C (see Document AP VI-No. 3, page 65)

Committee B approved this Question and requests to add: "of interest to Study Groups XV, XVII and the CCIR".

Committee B adopted the following title for CMBD: Circuit noise and availability.

III. Questions to Joint Working Parties

The only Joint Working Parties which have been retained are the following:

JWP	Questions	Study Groups concerned
GM LTG	Questions 25, 26, 27, 28 and 29 of Study Group XV	IX, XIV, <u>XV</u> , XVII, CMBD
GM SMM	Questions 16/I, 17/I, K/II, L/II, 16/III, 17/III	I, II, III

The controlling Study Group is underlined.

The VIth Plenary Assembly instructed GM SMM to review the two draft Recommendations contained in Document AP VI-No. 46, to submit them for letter-ballot without further processing by Study Groups I, II and III and send them after approval to all Administrations by 30 November 1977. Any completion of the texts on single-operator service and fully automatic service may be carried out in 1978 and 1979 with the usual coordination by Study Groups I, II and III.

Study Group I will be the controlling Study Group for telegraph operation and Study Group II for telephone operation. For all tariff provisions, Study Group III will be responsible.

As to Group UMI, Committee B felt that it had become a Working Party of Study Group III after the decision to concentrate all tariff Questions in Study Group III.

**E.4 – REPORT OF COMMITTEE C
BUDGET CONTROL AND FINANCIAL NEEDS FOR THE CCITT**

(as amended and approved by the sixteenth Plenary Meeting)

The Budget Control Committee was set up by the Plenary Assembly under No. 442 of the International Telecommunication Convention (Malaga-Torremolinos, 1973) with the following terms of reference:

- to determine the organization and the facilities available to the participants in the Plenary Assembly;
- to examine and approve the accounts for expenditure incurred for the VIth Plenary Assembly;
- to present a report to the Plenary Assembly showing as accurately as possible the estimated total expenditure of the Assembly.

Under paragraphs I.4 and 8.g) of Resolution No. 1 (Additional Rules of Procedure of the CCITT) of the CCITT Vth Plenary Assembly, Geneva, 1972, the Budget Control Committee was also required to consider the estimate of the financial needs of the CCITT for the study period 1977-1980 submitted to the Plenary Assembly by the Director in accordance with No. 416 of the Convention.

The Budget Control Committee held two meetings during the VIth Plenary Assembly and considered the various items in its terms of reference. This report on its proceedings is submitted to the Plenary Assembly for its consideration.

1. Organization of the Plenary Assembly

Committee C considered that the facilities available to participants and the organization of the VIth Plenary Assembly were satisfactory.

2. Budget for CCITT meetings in 1976

Committee C took note of the budget for Study Group meetings in 1976 and for the VIth Plenary Assembly as approved by the Administrative Council at its 30th session, in 1975, and as adjusted in accordance with Administrative Council Resolution No. 647. The budget amounts to 2 508 800 Swiss francs, of which 1 766 000 Swiss francs is for the Study Groups and 742 800 Swiss francs for the Plenary Assembly.

3. Expenditure accounts

The accounts of the VIth Plenary Assembly as approved by the Budget Control Committee will be found in Annex 1. They give a breakdown of budget credits and expenditure actually made up to 27 September 1976. There is also an indication of expenditure committed up to that date and estimated expenditure still to be incurred for the VIth Plenary Assembly.

These accounts show that total expenditure is estimated at 997 000 Swiss francs as against 742 800 Swiss francs in the budget approved by the Administrative Council. Excess expenditure thus amounts to 254 200 Swiss francs.

The Budget Control Committee was informed that this excess was due to the following reasons:

- the credit for "Meetings staff", intended mainly to pay interpreters' salaries, was exceeded by 18 000 Swiss francs because it was considered essential to strengthen the teams of interpreters so that meetings could last a little longer;
- the credit for payment of supernumerary Common Services staff had been fixed at 157 100 Swiss francs and expenditure was now estimated at 350 000 Swiss francs, an excess of 192 900 Swiss francs. This considerable excess was due to the fact that it was necessary to recruit a

large number of supernumerary personnel for the translation, typing and document reproduction services in order to produce all the CCITT documentation in time. In this respect, the Committee noted that it was found possible to make available to the Plenary Assembly only seven ITU staff other than CCITT personnel and staff of the Common Services of the General Secretariat, in order to reduce the need for outside recruitment;

- the cost of document production is estimated at 196 000 Swiss francs whereas the credit allocated was 100 000 Swiss francs. The excess is thus 96 000 Swiss francs.

Finally, the Committee noted the very substantial increase in postage costs for the dispatch of documents to participants in CCITT activities and concluded that consideration should be given to the possibility of grouping the documentation sent to Administrations in line with the decisions of the Administrative Council (see Circular-letter No. 129 of the Secretary-General).

The Budget Control Committee took note of the fact that the total excess expenditure over the credits allocated for the Plenary Assembly, amounting to 254 200 Swiss francs, was partly offset by savings of about 100 000 Swiss francs on the credits for the Study Groups. Despite expenditure on document production of 355 113 Swiss francs (or 237 113 Swiss francs more than in the budget) and postage costs of 298 032 Swiss francs (+163 032), the credit of 1 716 000 Swiss francs does in fact leave a margin of 102 013 Swiss francs.

The total excess expenditure for CCITT meetings in 1976 is thus now estimated at 152 187 Swiss francs.

4. Expenditure incurred since the last Plenary Assembly and financial needs of the CCITT up to the next Plenary Assembly

4.1 Expenditure incurred since the last Plenary Assembly

Committee C took note of the information provided by the Director concerning the operating costs of the Secretariat from 1973 to 1975 and on the expenditure relating to Study Group meetings in those years. It also noted that the expenditure of Union headquarters could not be broken down and charged to the various organs, since the Administrative Council had decided that the budget items should be centralized. It then found that it was very difficult to distinguish accurately the cost of the Plenary Assembly from that of the Study Group meetings.

4.2 Financial requirements of the CCITT up to the next Plenary Assembly

4.2.1 Requirements expressed in number of weeks of meetings

Committee C has considered the two hypotheses given below in addition to the information contained in the two reports by the Director of the CCITT for the duration of CCITT Study Group meetings to be held in the study period 1977-1980. The first hypothesis reflects the requirements suggested by the experience of the period 1973-1976, while the second assumes the same number of weeks of meetings as in the period 1973-1976.

Year	Hypothesis A	Hypothesis B	Remarks
1977	20	20	Budget approved by the Administrative Council a) including final meetings (25 weeks).
1978	67	60	
1979	68 a)	66 a)	
	155	146	
1980	VIIth PA	VIIth PA	

For the purpose of estimating cost, Committee C has assumed that the number of meetings will be as set out as hypotheses above.

4.2.2 *Estimated expenditure*

The expenditure entailed by these two cases has been estimated on the basis of two hypotheses. Hypothesis I assumes an improved provision for interpretation, involving an expenditure of 90 000 Swiss francs per week. Hypothesis II assumes the same provision for interpretation as in the period 1973-1976 (only one team of interpreters for each Study Group irrespective of the number of Working Party meetings held simultaneously). The estimates are summed up in the following table.

Year	Hypothesis A I	Hypothesis A II	Hypothesis B	Remarks
1977	1 500 000	1 500 000	1 500 000	Budget approved by the AC
1978	6 030 000	5 025 000	4 500 000	
1979	6 120 000	5 100 000	4 950 000	
1980 (VII PA)	800 000	800 000	800 000	
	14 450 000	12 425 000	11 750 000	

The estimates are submitted for consideration by the Plenary Assembly. (The amounts shown above are based on the 1976 conditions of employment.)

4.2.3 *Limit of expenditure for CCITT meetings*

In examining the above estimates of expenditure, the Budget Control Committee was aware that the sums used by the Plenipotentiary Conference at Malaga-Torremolinos, 1973, in fixing the limits on expenditure for conferences and meetings were:

2 450 000 Swiss francs for 1978,
2 750 000 Swiss francs for 1979

for CCITT meetings and that, as a result of the increases in salary scales, which may be considered as falling outside the limit, the relevant figures are now:

3 000 000 Swiss francs for 1978,
3 300 000 Swiss francs for 1979.

4.2.4 *Committee C remarks*

The estimated expenditure shown in 4.2.2 above does exceed considerably the expenditure limits.

The excess cost is mainly due to wider and more active participation in the work of Study Groups involving a much greater volume of documentation and also to additional interpretation expenses.

Under these circumstances, Committee C thought that it might be advisable for Chairmen and Vice-Chairmen of Study Groups to be informed of the daily cost of meetings.

Under No. 445 of the Malaga-Torremolinos Convention, 1973, this report will be conveyed to the Secretary-General together with the Plenary Assembly's comments so that he can refer it to the Administrative Council at its next annual session.

The Plenary Assembly is requested to approve the present report.

ANNEX 1

Accounts of VIth Plenary Assembly

Budget	Expenditure at 27 September 1976				Difference	
	Actual	Committed	Estimated	Total		
<i>Salaries and related expenditure</i>						
Meetings staff	122 000	—	140 000	—	140 000	+ 18 000
Common Services staff	157 100	162 970	176 030	11 000	350 000	+ 192 900
Travel (recruitment)	58 000	5 351	1 645	50 004	57 000	— 1 000
Insurance	5 700	916	2 182	2 902	6 000	+ 300
	342 800	169 237	319 857	63 906	553 000	+ 210 200
<i>Premises and equipment</i>						
Premises, furniture, machines	90 000	39 150	43 400	7 450	90 000	—
Document production	100 000	45 462	15 000	135 538	196 000	+ 96 000
Office supplies and overheads	50 000	5 152	4 240	10 608	20 000	— 30 000
Postage	150 000	40 288	46 000	43 712	130 000	— 20 000
Sundry and unforeseen	10 000	—	—	8 000	8 000	— 2 000
	400 000	130 052	108 640	205 308	444 000	+ 44 000
	742 800	299 289	428 497	269 214	997 000	+ 254 200

Total, including Study Group expenses:

2 508 800

2 660 987

ANNEX 2

Facilities available to the Plenary Assembly

1. *Premises*1.1 *Premises of the International Conference Centre of Geneva (CICG)*

The main conference room of the CICG has been hired for the duration of the Plenary Assembly and is intended to be used continuously either for plenary meetings or for the meetings of one of the committees of the

Plenary Assembly. The cost of hiring this room and its interpretation installations amounts to 6400 Swiss francs per day, i.e a total of 76 800 Swiss francs over a period of 12 days. The cost of hiring the main room includes:

- 25 CIG offices, fully equipped,
- the document distribution desk, the telecommunication centre and other related premises,
- lighting, air conditioning and upkeep of the premises,
- 135 parking places in the underground car park next to the ITU.

1.2 ITU premises

The ITU premises to be used for the Plenary Assembly include:

- the large conference room B in the 2nd basement of the tower,
- 4 rooms for working parties or drafting groups, together with 2 offices on the 1st floor of the tower,
- room CD on the 5th floor of the Varembe building.

In accordance with the provisions of Resolution No. 754 of the Administrative Council, no rent is charged for the conferences and meetings of the Union.

Finally, the officials of the Permanent Secretariat of the CCITT will work in their usual offices except when they are attending meetings.

2. Staff (excluding staff of the CCITT Permanent Secretariat and of Common Services of the General Secretariat) for the VIth Plenary Assembly

Serial number	Post	Number	Origin		Duration of employment
			ITU	Outside	
1	Interpreters F-E-S-R-C	30		30	27 Sept. - 8 Oct.
2	Operators*	2*		2*	27 Sept. - 8 Oct.
3	Précis writers	4		2	27 Sept. - 12 Oct.
				2	29 Sept. - 8 Oct.
4	PW shorthand typist	1		1	27 Sept. - 12 Oct.
5	Documents control assistant	1		1	20 Sept. - 15 Oct.
6	Documents distribution	6	2	2	24 Sept. - 8 Oct.
				2	27 Sept. - 8 Oct.
7	Telephonist	1		1	27 Sept. - 8 Oct.
8	Meeting room messengers	2		2	27 Sept. - 8 Oct.
9	Reception service messengers	4		2	25 Sept. - 8 Oct.
				2	27 Sept. - 8 Oct.
10	Document distribution messengers	4		4	27 Sept. - 8 Oct.
11	Offset operators	3		3	27 Sept. - 8 Oct.
12	Document assemblers	14		14	27 Sept. - 8 Oct.
13	Shorthand typing F-E-S	23	5	18	27 Sept. - 8 Oct.
14	Translators and revisers F-E-S	6		5	13 Sept. - 8 Oct.
				1	20 Sept. - 15 Oct.
15	Language Division shorthand typists	2		1	13 Sept. - 8 Oct.
				1	20 Sept. - 15 Oct.
		103	7	96	

* One operator engaged by the ITU, the post of the second operator being provided and entered in the CIG account for meetings held in the conference building.

ANNEX 3

**Report of the Director of the CCITT on the financial needs of
the CCITT until the VIIIth Plenary Assembly****1. Introduction**

1.1 Increases of staff will probably not be necessary during the first two years (1977-1978) of the next study period because of the creation of the Technical Editing Division and the greater efficiency expected to result from the reorganization of the CCITT Secretariat approved by the Administrative Council.

The problem will, however, have to be reviewed in 1978 before the preparation of the 1979 budget estimates, and this review will have to cover the last two years of the study period, i.e., 1979 and 1980. Three new posts of engineer in grade P.4 will then probably be found necessary (one for each Technical Department in the restructured CCITT Secretariat). When preparing the programme for the next period of activity, the Plenary Assembly will be best able to estimate the future workload and submit an opinion to the Administrative Council on this provisional estimate of the CCITT Secretariat's future staff requirements.

1.2 In addition, a "classification expert" recruited in the General Secretariat (Personnel Department) under an Administrative Council Decision, is at present examining the problem of the grading of posts in the ITU. There is, accordingly, no need to present any proposals on the subject in this report.

The need to find a solution to the career problems facing the engineers of the CCITT Secretariat should, however, be emphasized. The quality and efficiency of their work are, I am sure, recognized by all Study Group Chairmen and Vice-Chairmen and by the delegates, and are one of the essential conditions for the smooth working of the CCITT and the results obtained. If these engineers do not find in the CCITT the career satisfaction which they are entitled to expect after several years of service, they will tend to look for it in other ITU organs or outside the Union, to the great detriment of the CCITT which would be deprived of their specialized knowledge (3 of these engineers in grade P.4 have been employed nearly 15 years in the CCITT). Once a new P.4 engineer post has been created in each technical department (see above point 1.1, second paragraph), a rearrangement of their duties should enable some of the engineers to be upgraded from P.4 to P.5 (P.4 is regarded as the normal grade for the other engineers). It would certainly be of great value for the discussions in the Administrative Council to have the views of the Plenary Assembly on this question.

2. Expenditure on future Study Group meetings and the VIIth Plenary Assembly

It is essential to try to determine the financial requirements for meetings of Study Groups and Plan Committees (and also of Joint Working Parties and Special Autonomous Working Parties).

2.1 It is clear that the cost of meetings in the new period can be estimated with some accuracy only when the Plenary Assembly has fixed the programme of activity for that period.

The determination of the CCITT's financial needs for the organization of meetings, however, gives rise to other major difficulties owing to several factors:

- a) the steady increase — which is, however, difficult to estimate in advance — in the number of contributions sent by Administrations and participating organizations, and hence the increase in the cost of document production and postage for despatch;
- b) the difficulty of predicting changes in the economic situation (variations in salaries and costs; postal rates, etc.);
- c) the fact that the Directors of the International Consultative Committees cannot directly control or check the expenses charged to the CCIs for common services (translation, typing, reprography, despatch); this applies to both established and supernumerary staff, to overtime and to the

particularly costly work done under contract outside the Union because of the excessive workload of the services, which quite often are unable to cope with all the work required of them at certain times when meetings of several organs are held simultaneously.

To help overcome the difficulties described in c), the draft budget for 1977 submitted to the 31st Session of the Administrative Council presents an innovation: all expenditure for supernumerary staff in the General Secretariat Common Services for work relating to conferences and meetings as well as other common expenditures are combined in a new section and are no longer shown in the sections detailing the credits for International Consultative Committee meetings.

Extrapolation on the basis of the expenses of previous years thus becomes more difficult and tentative and remains possible only in respect of expense items.

Before any attempt is made to calculate future requirements, it is therefore essential to define a policy and draw up a programme of meetings to be held. On this point lessons of vital importance may be learned from what happened during the present 1973-1976 study period.

2.2 Meetings in 1973-1976

2.2.1 Annex 1 to the report on the activities presented by the Director of the CCITT, gives a complete list of the meetings held, classified by Study Group. The analysis of that list can be summarized in Table I produced below:

TABLE I

Year	Number of working days of meetings held (in Geneva, or away from Geneva)		
	Official meetings with interpretation	Informal or restricted meetings without interpretation	Total
1973	52	8	60
1974	276	41	317
1975	292 a)	137	429
1976	109 b)	28 c)	137
Total	729	214	943
Weeks	146	43	189

Notes to Table I

- a) including 24 days of final meetings of 2 Study Groups and 2 Special Autonomous Working Parties.
- b) final meetings of Study Groups, not including the VIth Plenary Assembly itself.
- c) small teams of specialist rapporteurs on particular problems or of editing groups.

2.2.2 Chairmen of Study Groups and Working Parties and also delegates have expressed regret or even advanced criticism in connection with these meetings:

- a) Too few meetings were held in 1973, so that the first year of the 1973-1976 period was one of relatively little activity; the first nine months of 1973 were, in fact, devoted to the preparation of the *Green Book*. It is of course very regrettable that in the case of most Study Groups there was a delay of almost a year before work started but the credits for meetings allowed by the Administrative Council at its 27th Session (June 1972), were such that no more could be done.
- b) The interval between the final meetings of certain Study Groups (particularly Study Groups XVI, Special C, GAS 3 and GAS 5, held in 1975, and Study Groups IX, XIV and XV, held in

January 1976) and the VIth Plenary Assembly was too long. This situation is due to the change of venue and date initially scheduled for the VIth Plenary Assembly, and the fact that no major change could be made in the dates planned for the final meetings in view of the arrangements adopted for the occupation of conference rooms at ITU headquarters.

- c) Some Study Groups found that their meetings were too short for their tasks to be successfully completed. This situation was one of the reasons for the large number (particularly in 1975) of small informal meetings of special rapporteurs or specialists, held without interpretation and frequently in the absence of the CCITT Secretariat, to study certain specific questions.
- d) Lastly, there were difficulties regarding interpretation that led to some complaints, which were presented in a very cooperative spirit: the credits for CCITT meetings were always calculated on the basis of one team of interpreters per Study Group, even if the Study Group had to split up into several Working Parties, meeting simultaneously. As a result, certain Working Parties in the most important Study Groups had to work without interpretation, in one language only, which was of course English. Some objections were made on grounds of principle, while some delegates experienced difficulty because their knowledge of English was not sufficient for them to participate in the discussions as actively as they had intended. On this point, the increasing participation of delegates using Chinese or Russian should also be noted. This is very fortunate for the work of the CCITT but has involved the need at some meetings for interpretation in the five official languages of the Union.

2.3 Programme of meetings for the period 1977-1980

2.3.1 It is important to take all these lessons into account in preparing the programme of meetings for the next study period.

At its 30th Session (June 1976) the Administrative Council provisionally drew up the timetable of large conferences from 1977 to 1981 in broad outline.

It was agreed that a Plenipotentiary Conference should be held towards the end of 1980 (September-October). Since the Administrative Council generally meets in June, the VIIth Plenary Assembly might be held in April 1980 and, in accordance with the CCITT Rules of Procedure (Resolution No. 1, *Green Book*, Volume I, page 207, paragraph 5.d), the final meetings of the CCITT Study Groups should therefore take place in the last three months of 1979 (perhaps even beginning in September).

It is therefore in this time frame that the meetings will have to be organized, bearing in mind two important material conditions.

- a) The first concerns premises: meetings held outside Union Headquarters (for example, in the Geneva International Conference Centre, CIGC) are very costly. In the circumstances all CCITT meetings (other than the Plenary Assembly) should be held in the conference rooms of the Union (Tower and 5th floor of the Varembe building), which raises serious problems of coordination with the other ITU organs.
- b) The second relates to the production of documents and particularly of temporary documents during the meetings. Experience has shown that when several important meetings are held at the same time (for example, CCITT and CCIR, or CCITT and a World Administrative Radio Conference), serious difficulties arise and documents are produced very late because of the excessive workload on the General Secretariat Common Services.

These two considerations leave only one choice: to arrange CCITT meetings at dates left free by the other conferences to which the Convention has assigned a higher hierarchical level (Article 5).

2.3.2 Meetings in 1977

A programme of meetings has already been submitted to the Administrative Council by the Director of the CCITT for the preparation of the 1977 budget during the 31st Session (June 1976).

The programme is based on the considerations set forth below.

- a) The creation of a Technical Editing Division in the CCITT Secretariat (referred to in Section 1.1 above) will mean that the CCITT Book based on the work of the VIth Plenary Assembly can be issued more rapidly. The engineers of the technical departments will be relieved of some of the duties they discharged in that connection in 1973 and will thus be able to give more time to the preparation of the Study Group meetings and to the work at those meetings.
- b) Consequently, for the Study Groups and their Working Parties, the Joint Working Parties and the Special Autonomous Working Parties, credits have been requested for *22 weeks of meetings* in Geneva, averaging 5 working days per Study Group, in 1977.

These meetings in 1977 will enable the Study Groups:

- to organize their work, setting up the necessary Working Parties, assigning Questions for study to them and appointing special rapporteurs as required;
- to have an initial discussion to determine the direction of the studies and give general directives to the Working Parties for new Questions;
- to continue consideration of Questions not disposed of during the previous study period, particularly urgent Questions such as those concerning the international monetary unit for balances of accounts and the maritime mobile radio service, the aim being to arrive as soon as possible at the adoption of Recommendations by the accelerated provisional approval procedure.

The meetings of Study Groups with common interests or dealing with related problems will as usual be arranged so as to reduce travel by delegates and at the same time expenses of Union Headquarters.

The meetings are all to be held in ITU premises (hence without any rental charges). Interpretation will be provided, if necessary, in the Union's five working languages, but on the basis of a single team of interpreters per Study Group (13 interpreters).

It has not been possible to ask for a larger number of meeting weeks, since the above request already means a total expenditure of about 1 900 000 Swiss francs, an amount far more than would result from the data used to fix the expenditure limits in Additional Protocol I annexed to the Malaga-Torremolinos Convention, 1973.

Having regard to the other Conferences in 1977, the CCITT meetings should in principle be held during the periods April-May-early June 1977, before the Administrative Council, and 15 November-17 December, after the final meetings of the CCIR, in two series of simultaneous meetings (as for the final meetings of 1976) during each of the two periods.

2.3.3 Meetings in 1978 and 1979

In view of the need to hold, during the period 1977-1980, meetings *with interpretation* covering a larger number of working days than those of the period 1973-1976 (see point 2.2.1), which should involve a reduction in the number of "informal" meetings without interpretation, the following programme is proposed for examination and approval by the VIth Plenary Assembly:

Year	Weeks of meetings		
	Study Groups	Plan Committees	Total
1977	22	2	24
1978	65	2	67
1979	40	3	43
	25 final		25
Total	152	7	159

It should be noted that some meetings in the period 1980-1983 might be held at the end of 1980. This possibility has not been taken into account.

2.3.4 *Estimated credits*

a) On the basis of the draft budget for 1977 submitted to the Administrative Council, and under the new rules on presentation of expenditure referred to in paragraph 2.1 c), a week of meetings held in Geneva represents an average expenditure of 80 000 Swiss francs, charged to the credits for CCITT meetings, at 1976 salaries and prices.

b) For the coming years, it should be remembered, first, that the number of contributions submitted by Administrations and other participating organizations is on the increase, while the proportion of delayed contributions, it is hoped, will decline; more documents will therefore have to be circulated. The cost of production and postage for documents will rise accordingly.

In the second place, a single team of interpreters will no longer suffice for certain large meetings of Study Groups with several Working Parties and a team and a half (20 interpreters) should be provided.

One week of meetings would accordingly cost a minimum of 90 000 Swiss francs, again at 1976 prices.

For the VIIth Plenary Assembly, the estimate can be made only by extrapolation from the estimates for the VIth Plenary Assembly (i.e. about 729 000 Swiss francs according to the old budget presentation and the estimates made in June 1975).

c) On the basis of the above, the necessary budget allocations would come to the following totals in Swiss francs, a breakdown among different items being neither possible nor useful:

1977 :	1 889 000	(draft budget)
1978 :	6 030 000	(estimate)
1979 :	6 120 000	(estimate)
1980 :	800 000	(VIIth PA; estimate)
Total:	14 839 000	Swiss francs

All these figures would of course have to be revised during the preparation of successive annual budgets, taking into account changes in salaries and prices.

d) It is assumed that all meetings will be held in Geneva; for meetings away from Geneva, the inviting country would have to bear *all additional costs* (travel, subsistence allowance, transport of machines and documents, etc.).

2.3.5 To enable the VIth Plenary Assembly to submit its recommendations on credits for CCITT meetings to the Administrative Council in full knowledge of the facts, I would draw the Assembly's attention specifically to the following:

a) The estimated expenditure referred to above (paragraph 2.3.4 a)) for 1978 and 1979 considerably exceeds the limits laid down by the Plenipotentiary Conference of Malaga-Torremolinos, 1973, for the CCITT, i.e. 2 450 000 and 2 750 000 Swiss francs respectively, including the cost of common services (see Document No. 405(Rev.) of 23 October 1973, Annex 2, page 11, of that Conference). Even allowing for the fact that my figures are based on 1976 economic conditions and prices and that the limits are based on those in 1973, a substantial difference remains, the reasons for which are explained in point 2.

b) In the circumstances the Administrative Council may wish to consult the Members of the Union regarding a possible increase in the limits of expenditure for conferences and meetings in 1978 and 1979.

3. *Complementary report*

Consequent to the meeting of the Administrative Council, the following modifications or addition are to be made to the above report.

3.1 *Study Group meetings in 1977*

3.1.1 Owing to the Union's financial situation, which will be particularly difficult in 1977, the Administrative Council of the ITU was unable to authorize, for the 1977 budget, all the credits requested by the Director of the CCITT for Study Group meetings in that year.

3.1.2 The following decisions were taken by the Council:

3.1.2.1 No Plan meetings will be held in 1977, either of the World or Regional Plan Committees or of their Coordination Committees (or Working Parties).

3.1.2.2 With respect to the Study Groups, the number of weeks of meetings was reduced from 22 to 20, by the following measures:

- a) GAS 5, whose usefulness was strongly queried by some delegations and whose very continuation was called into question, will not meet in 1977,
- b) the duration of the meetings of certain Study Groups will not exceed 4 working days, so as to save a total of one week of meetings.

3.1.2.3 In addition, some savings will have to be made on certain items (interpretation, document production, postage) compared with the amounts originally requested.

The global credit authorized has been reduced to 1 493 000 Swiss francs (from 1 889 000), representing expenditure amounting to roughly 75 000 Swiss francs per week of meeting (see annex).

3.2 *Meetings in 1978 and 1979*

3.2.1 The Table in point 2.3.3 should therefore be replaced by the following:

Year	Weeks of meetings		Total
	Study Groups	Plan Committees	
1977	20	—	20
1978	65	2	67
1979	40	3	43
	25 final		25 } 68
Total	150	5	155

3.2.2 The Administrative Council, however, is intent on making every possible saving and will doubtless demand that the budgets for 1978 and 1979 should remain within the limits set by the Plenipotentiary Conference. In these circumstances, it is highly unlikely (as I suggested in point 2.3.5, above) that the Council will accept the above-mentioned programmes for 1978 and 1979, involving expenditure estimates (see point 2.3.4.c)):

of 6 030 000 Swiss francs in 1978,
and 6 120 000 Swiss francs in 1979.

3.2.3 The Plenary Assembly will thus have to seek ways of reducing the above estimates by one of the two following methods (or probably by both methods simultaneously).

3.2.3.1 *Reduction in the number of weeks of meetings scheduled for 1978 and 1979 (excluding final meetings)*

The application of this method might lead to a proliferation of informal meetings without interpretation.

It should also be noted that Councillors recalled the rule laid down in No. 403 of the International Telecommunication Convention:

“As a general rule, Study Groups shall hold no more than two meetings between sessions of the Plenary Assembly, including the final meetings held before that Assembly.”

This rule also appears in the Additional Rules of Procedure of the CCITT, (Resolution No. 1 of the Vth Plenary Assembly, *Green Book*, paragraph III.5.a), page 207) in the following terms:

“5. *Frequency of meetings*

- a) Study Groups and Working Parties shall meet in principle once in the period of time between the end of a P.A. and the meetings mentioned in paragraph 5d) below. Exceptionally, extra meetings may be held, with the approval of the Director and the agreement of a majority of Administrations represented on the Study Group or Working Party concerned.”

It must be admitted that this rule has only been applied by a very small number of Study Groups, as will be seen in Annex I of Document AP VI-No. 15 containing the list of meetings held during the 1973-1976 study period: there has even been an opposite trend in certain Study Groups, which have increased the number of their meetings to what might be regarded as an undue extent.

3.2.3.2 *Reduction of interpretation costs*

The adoption of this method would in fact amount to continuing the current CCITT practice of having a single team of interpreters per Study Group, however many Working Parties it may split into and in spite of the drawbacks indicated in paragraph 2.2.2.d).

The expenditure should thus be estimated, as in the case of the 1977 budget, on the basis of a cost of 75 000 Swiss francs per week of meeting under economic and price conditions in 1976, instead of 90 000 Swiss francs, which was the above figure chosen for the estimates in paragraph 2.3.4. b).

R. CROZE
Director of the CCITT

Appendix
(to ANNEX 3)

Section 13 <i>CCITT</i> Items	<i>Budget 1977</i> (Swiss francs)
<i>Recapitulation of credits for CCITT meetings</i>	
This Table includes the expenses of meetings staff, except for supernumerary staff in the common services of the General Secretariat see Section 17).	
<i>Salaries and related expenses</i>	
13.101.1 Meetings staff	630 000
13.101.2 Common services staff	(see Sect. 17)
13.102 Travel (recruitment)	216 000
13.103 Insurance	14 000
	860 000
13.104 <i>Travel outside Geneva</i>	
13.104.1 Subsistence allowance	
13.104.2 Travel	
13.104.3 Transport and despatch	
<i>Premises and equipment</i>	
13.105 Premises, furniture, machines	—
13.106 Document production	360 000
13.107 Supplies and overheads	40 000
13.108 Postage	225 000
13.109 Sundry and unforeseen	8 000
	633 000
Total, Section 13	1 493 000

**E.5 – REPORT OF COMMITTEE D
HANDBOOKS AND CCITT ACTIVITIES IN CONNECTION WITH SEMINARS**

(as amended and approved by the sixteenth Plenary Meeting)

CONTENTS

1. Introduction
2. General
3. Special Autonomous Working Parties
4. Publication of handbooks
5. Seminars

Annex 1 Draft Resolution on the terms of reference of GAS 6: "Handbook on economic and technical aspects of the choice of switching systems"

Annex 2 Draft Opinion on the Publication of Handbooks

1. Introduction

Committee D (Handbooks and CCITT Activities in connection with Seminars) held two meetings during the VIth Plenary Assembly of the CCITT, on Friday afternoon, 1 October, and Wednesday afternoon, 6 October 1976. These meetings were chaired by Mr. Alan Gravell (Australia), assisted by Mr. Ali Bel Hadj (Algeria).

2. General

2.1 At its first meeting, Committee D began by confirming, if confirmation were needed, the importance attached by the CCITT to the study of questions relating to national networks and to the activities of the Special Autonomous Study Groups (GAS). The countries Members of the ITU, and particularly the developing countries, would like to see the CCITT develop its activities on questions of national interest.

2.2 It was stressed once again that the work of the Special Autonomous Working Parties was extremely useful, that it was of importance not only to the so-called developing countries but in fact to all countries and that the results of the studies made by the GAS should not be considered merely as a particular aspect of technical cooperation. The exchanges of views and comparisons of different countries' experience that take place in the GAS are highly fruitful, not least for those involved in the work of the GAS.

2.3 Document AP VI-No. 69 (Director of the CCITT) gave a list of the Handbooks published by the CCITT and explained the various methods used in preparing them.

It was recognized that the method of entrusting a Handbook to a single rapporteur to draft by himself had certain drawbacks:

- difficulty of finding a volunteer to undertake such a heavy task;
- hazards likely to be encountered before it is completed;
- difficulty of getting an exhaustive and balanced account of trends on technical practices which may, in some fields, differ from country to country.

With the exception of some Handbooks (*Recommendations ... against corrosion, Directives, etc.*) which represent the normal conclusion of work traditionally done by Study Groups V and VI, the preparation of a Handbook should as a general rule be entrusted to a GAS.

3. Special Autonomous Groups

3.1 The Plenary Assembly entrusted Committee D with the task of considering what action should be taken on a proposal by Lebanon for the preparation of a Handbook on the economic and technical aspects of the choice of switching systems for a country's exchanges.

An Ad Hoc Group chaired by Mr. Ghazal (Lebanon) met on 1 and 4 October and drafted:

- i) the text of a new Question I/XI to be examined by Study Group XI, a Question which should lead to Recommendations establishing standards for national exchanges;
- ii) a draft Resolution for the Handbook on economic and technical aspects of the choice of switching systems.

The text of the new Question I/XI was transmitted to Committee B, Committee D considered the text of the draft Resolution mentioned in ii). It concluded that, as proposed in the draft Resolution, a new GAS should be set up to be known as GAS 6. It nevertheless thought it preferable to remove the study of the conditions required for the establishment of a local industry for the manufacture of switching equipment from the terms of reference of GAS 6 and to request GAS 5 to continue during 1977-1980 the study it had already made in this field during the period 1973-1976, leading to the drafting of Section 3 of Chapter 2 of the Handbook *Telecommunications. Economic Studies*, 1976 edition, which had just appeared.

The text of the draft Resolution on the terms of reference of GAS 6 approved by Committee D is contained in Annex 1.

3.2 Committee D considered that by approving the Reports of GAS 3 and GAS 5 and the list of subjects for study submitted by them for the period 1977-1980, the Plenary Assembly had thus confirmed the mandates of these GAS for the new study period.

3.3 Committee D considered whether there were grounds for bringing back into operation, GAS 1 (National Automatic Networks), GAS 2 (Local Networks) and GAS 4 (Primary Sources of Energy), which had been dormant since the IVth Plenary Assembly (Mar del Plata, 1968).

3.3.1 With regard to the Handbook on national automatic networks, it noted that:

- i) Chapter V of the Handbook had led to the preparation of a new *Manual on Transmission Planning* in two fascicles (301 pages), drafted by a Rapporteur under the direction of Study Group XVI, which had just been published;
- ii) a new Part D "Stored programme controlled switching systems" (Document AP VI-No. 24) had been drawn up by a Rapporteur under the direction of Study Group XI. (This work, which includes a sizeable bibliography of more than 60 pages, should be published as soon as possible.)

In view of the establishment of the new GAS 6, Committee D decided not to bring GAS 1 back into operation.

3.3.2 Sub-paragraph i) of 3.3.1 also applies to Chapter V ("Transmission signalling aspects of local networks") of the Handbook *Local telephone networks*.

Committee D did not receive any proposal that GAS 2 should be brought back into operation and it therefore does not propose any change from from the period 1973-1976 for GAS 2.

3.3.3 Some delegations stressed the importance they attached to problems relating to primary sources of energy.

The Chairman of GAS 3, Mr. Wallenstein, said that in its current study of rural telecommunications GAS 3 would cover the question of energy supplies to areas that were not well provided. Although some delegations considered it more convenient to have a single Handbook containing all the texts on power installations for telecommunication equipment (exchanges, repeater stations, radio-relay stations, etc.), the Committee had decided that in the light of the studies already made (see GAS 1 Handbook, Part C, Chapter II, and GAS 4 Handbook) or in progress (GAS 3 — Rural Telecommunications), GAS 4 should not be brought back into operation for the new period 1977-1980.

4. Publication of Handbooks

At the two meetings of Committee D there was a wide-ranging exchange of views on the publication of the Handbooks, their selling price and their limited circulation, due precisely to the fact that their price was considered too high. The Committee felt that the question raised a major problem with regard to the effectiveness of the CCITT's work in that field.

It was pointed out that the selling price of the Handbooks depended solely on the cost of printing, binding and distribution. All other expenses, and in particular:

- the cost of GAS meetings,
- the cost of distributing GAS contributions informing members of the different stages in the preparation of the texts,
- the cost of preparing the very large number of drawings and graphs illustrating the Handbooks,
- the costs incurred by the Technical Editing Division of the CCITT (to which the CCITT draughtsmen's service belongs), which is responsible for the linguistic aspects and the editing of the Handbook texts,

are borne by the regular budget of the ITU.

The Chairman of GAS 3, Mr. Wallenstein, speaking on behalf of the authors in his Working Party, said that since they devoted a great deal of time and energy to work undertaken solely in a spirit of wholehearted technical cooperation, it might be rather discouraging for them to find that the results of their work were not well known because they were not widely disseminated. That remark applied equally to Administrations and recognized private operating agencies, and perhaps still more so to scientific and industrial organizations, which were willing to incur considerable expense in order to make some of their best experts available to the GAS.

Many delegations from developing countries pointed out that the price of the Handbooks was for them a major obstacle to acquiring works which would be very useful, and even essential, for their technical departments and for training their senior staff.

Committee D considered that the question of the price of the Handbooks and the obstacles to wider dissemination of the technical information they contained deserved to be the subject of an Opinion by the VIth Plenary Assembly. The task of drafting this Opinion was entrusted to a group of four persons chaired by Mr. Ali Bel Hadj (Algeria), Vice-Chairman of Committee D.

The draft Opinion is to be found in Annex 2.

5. Seminars

The Director of the CCITT stated that the CCITT budget did not include any credit for the organization of seminars. In the ITU, seminars were organized by the General Secretariat, generally with UNDP funds or grants made for the purpose by Member states.

The essential point was that seminars or training sessions should be organized by the ITU, regardless of the organ responsible.

It was, however, necessary that in the fields for which the CCITT was responsible, i.e. "Telecommunication services", the CCITT should participate in the preparation, organization and proceedings of seminars or training sessions.

Document AP VI-No. 69 stressed, for example, the excellent cooperation between the CCITT and the Technical Cooperation Department of the General Secretariat of the ITU, which had resulted in the complete success of two seminars organized in Africa as part of the PANAFTEL programme during the period 1973-1976:

- seminar in Lusaka (Zambia), 4-15 November 1974: Switching and signalling techniques;
- seminar in Yaoundé (Cameroon), 26 May-6 June 1975:
 1. International tariff structure in Africa,
 2. Signalling system R2 in Africa.

Committee D considers it important to emphasize the need for full cooperation by all concerned in the organization of seminars and training sessions and hopes that the CCITT will be able to play an ever more active part in this field.

ANNEX 1

Draft Resolution of the terms of reference of GAS 6

“Handbook on economic and technical aspects of the choice of switching systems”.

ANNEX 2

Draft text for an Opinion on publication of Handbooks

See Opinion No. 8, in Part II:

“Publication of Handbooks”.

PART II

**RESOLUTIONS ADOPTED AND OPINIONS EXPRESSED
BY THE PLENARY ASSEMBLIES**

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RESOLUTIONS

RESOLUTION No. 1

Additional rules of procedure of the CCITT

(Geneva, 1956; Geneva, 1958; New Delhi, 1960; Geneva, 1964;
Mar del Plata, 1968; Geneva, 1972 and Geneva, 1976)

The International Telegraph and Telephone Consultative Committee,

in view of Article 11, including particularly paragraph 5 (No. 79), Articles 58, 68-76 and Chapter XI of the International Telecommunication Convention, Malaga-Torremolinos, 1973;

decides

that as far as the International Telegraph and Telephone Consultative Committee is concerned, the General Regulations annexed to the Convention of Malaga-Torremolinos, 1973, shall be amplified as follows:

I. Plenary Assembly (PA)

1.a) If the PA meets at the seat of the Union, the precise date of its meeting shall be decided by the Director of the Committee in agreement with the Secretary-General of the Union. If the PA does not meet at the seat of the Union, the exact date of the meeting shall be decided by the inviting government in agreement with the Director of the Committee.

b) The Director of the Committee shall send an invitation to participate in the meeting of the PA to all Members of the Union. If a recognized private operating agency is already a member of the CCITT, the invitation will also be addressed to this recognized private operating agency¹⁾. If the PA does not meet at the seat of the Union, the Director shall send the above-mentioned invitation in the name of the inviting government.

c) Members of the CCITT which wish to participate in the meeting are required to advise the Director of the Committee, by letter or telegram, at least a month before the meeting, of the names of the delegates of Administrations and representatives of recognized private operating agencies who will attend meetings of the PA (and especially of the names of the Heads of their delegations). The Director of the CCITT shall forward this information to the Administration of the inviting government, if any.

d) The Director of the CCITT shall invite the Director of the CCIR, the United Nations, the Specialized Agencies of the United Nations which reciprocally allow representatives of the Union to attend their conferences, and the other international organizations whose work the Administrative Council considers should be coordinated with the work of the Union and whose activities are similar, to attend the PA in an advisory capacity. The United Nations, the Specialized Operating Agencies and other international organizations are required to notify the names of their observers in the same way as specified in paragraph (c) for members of the CCITT.

2.a) Before the opening meeting of the PA, the Heads of Delegations shall meet:

- i) to prepare the programme of work for the PA, based on proposals by the Director of the CCITT. This shall be submitted to the PA at its first meeting. (This programme may contain proposals for the setting-up of committees for the duration of the PA);
- ii) to designate the persons who will be proposed as Vice-Chairmen and if necessary (meeting of the PA at the seat of the Union) as Chairman of the meeting of the PA;

¹⁾ It should be remembered that in accordance with Nos. 73, 74 and 379 of the Convention, scientific or industrial organizations admitted to participate in an advisory capacity in meetings of the Study Groups (including their final meetings, see III.10 below) are not invited to the meeting of the Plenary Assembly.

- iii) to make proposals to the PA for the constitution of the Budget Control Committee called upon to examine the "Report on the financial needs of the Committee until the next PA and the expenses incurred by the current PA";
 - iv) to make proposals for the constitution of an Organization Committee (paragraph 4 below) and a Work Programme Committee (paragraph 5 below);
 - v) to propose to the Plenary Assembly the Constitution of a Committee on handbooks and CCITT activities in connection with seminars (paragraph 6 below);
 - vi) to propose to the Plenary Assembly any other Plenary Assembly Committee which the Heads of Delegations might deem it advisable to set up and in particular an Editorial Committee.
- b) As soon as possible after the opening of the PA, the Heads of Delegations shall meet:
- i) to consider the proposals of the Organization Committee concerning the constitution of Study Groups and Working Parties;
 - ii) to draw up proposals concerning the designation of Chairmen and Vice-Chairmen for Study Groups and such Working Parties as it is required to set up.

3.a) Recommendations submitted to a vote in the course of a PA shall be considered as adopted if they obtain a majority of votes; the minutes of the PA shall indicate the results of the vote without mentioning the delegations which voted for or against, unless a delegation expressly asks that its vote should be mentioned.

b) Where a Recommendation has been adopted by the Plenary Assembly as a result of a vote that was not unanimous, the Recommendation will refer to the result of the vote in the form: "The CCITT issues Recommendation ... by a majority (by ... votes to ... , with ... abstentions)."

c) When a country is not represented by an Administration, the representatives of the recognized private operating agencies of that country shall, as a whole, regardless of their number, be entitled to a single vote.

4. The Plenary Assembly shall set up an Organization Committee to examine the organization and working methods of the CCITT, a Budget Control Committee, in accordance with No. 442 of the ITU Convention (Malaga-Torremolinos, 1973), to draw up the financial requirement of the CCITT up to the next Plenary Assembly (No. 388), and such other Committees as the Heads of Delegations may consider to be necessary.

On the basis of the proposals of the Organization Committee and the judgement on those proposals by the Heads of Delegations, the Plenary Assembly shall set up Study Groups and, where appropriate, Working Parties. It shall designate Study Group Chairmen and Vice-Chairmen and, if it so desires, Chairmen and Vice-Chairmen of Working Parties.

5. The Plenary Assembly shall set up a Work Programme Committee composed of:
- the Chairmen of the Study Groups and of the Working Parties set up by the PA;
 - representatives of the delegations.

This Committee shall consider the Questions proposed for study by the Study Groups (or proposed for further study). It shall decide whether they are suitable for study, check that there is no duplication of Questions referred to different Study Groups, assemble associated Questions, and submit a report to the PA setting forth the Questions which it proposes for study and making suggestions for their apportionment among the Study Groups and Working Parties.

The Work Programme Committee shall submit for approval by the PA a draft programme of Study Group and Working Party meetings for the period up to the following PA.

6. The Plenary Assembly shall set up a Committee on handbooks and CCITT activities in connection with seminars.

This Committee shall define the policy to be adopted by the Plenary Assembly for dealing with subjects concerning planning, the establishment and management of *national* telecommunication networks which are of general interest for all countries Members of the ITU.

It shall make a preliminary examination of the reports on the work of the Special Autonomous Study Groups (GAS). It shall study the guidance to be given to these GAS for the next study period with a view to the publication of new Handbooks or of new sections to existing Handbooks. It shall consider the advisability of establishing new GAS.

It shall also propose to the Plenary Assembly any useful provisions concerning the manner of organizing seminars or symposia to be held in conjunction with external meetings of the CCITT (particularly meetings of

the Regional Plan Committees) or within the framework of the United Nations Development Programme (UNDP) or the programme of other international organizations.

7. On the proposal of the Work Programme Committee, the PA shall:

- a) prepare the list and text of Questions requiring study or further study up to the following PA;
- b) allocate these Questions to Study Groups and Working Parties;
- c) decide, when a Question is of interest to several Study Groups, whether:
 - to set up a Joint Working Party composed of members of the Study Groups concerned, or
 - to entrust the study to a single Study Group, the necessary coordination being effected within the framework of national organizations;
- d) set up coordination groups for each family of Study Groups; these groups shall be composed of the Chairmen and Vice-Chairmen of the Study Groups in the family concerned and shall carry out the necessary coordination for studies that are common to the Study Groups in the family;
- e) shall draw up, in general outline at least, a programme for the meetings to be held by Study Groups and Working Parties set up by the Assembly until such time as the Plenary Assembly meets again.

8. The Plenary Assembly should be organized so as to enable it to devote adequate time to the important administrative and organizational aspects of the CCITT for the ensuing Plenary period. As a general rule, the following sequence is recommended:

a) The Plenary Assembly should examine reports from Study Groups and the Director of the CCITT, on activities in the previous Plenary period, deal with the approval of Recommendations and note the lists of Questions appearing in these reports.

While the PA is in session, Study Group Chairmen shall hold themselves at the disposal of the PA, to supply information on matters which concern their Study Groups.

Simultaneously, the Budget Control Committee should meet to approve the budget of the current Plenary Assembly.

- b) The Organization Committee should meet and prepare organizational proposals (see I.4).
- c) The Committee on handbooks and CCITT activities in connection with seminars should meet simultaneously.
- d) Heads of Delegations should meet [see I.2 b) of the Resolution].
- e) The Plenary Assembly should elect Chairmen and Vice-Chairmen for the new Plenary period.
- f) The Work Programme Committee should meet and develop a draft programme of work (see I.5 of the Resolution).
- g) The Budget Control Committee should meet and prepare a report proposing that the Plenary Assembly approve an estimate of the financial needs of the CCITT until the next Plenary Assembly, to be submitted later on to the Administrative Council of the ITU, as provided for in No. 388 of the International Telecommunication Convention.
- h) The Plenary Assembly should receive and consider the reports of the Plenary Committees, and make final decisions on the recommendations submitted to it.

II. *The Director*

1. The Director of the CCITT is empowered to enter into direct contact with the Chairmen and Rapporteurs of the Study Groups and Working Parties.

2. In order that the Director and his assistants may keep up to date on technical progress, Administrations and private operating agencies (as far as circumstances permit) may authorize him to visit their installations and to obtain all necessary information; the expenses incurred in this connection are chargeable to the CCITT.

3. The Director shall take all the necessary preparatory measures for meetings of the PA, Study Groups and Working Parties, the work of which he should coordinate in such a way that the meetings will produce the best results in the shortest possible time. To this end he may decide, with the agreement of the

Chairmen of Study Groups or Working Parties, in the same way as the Plenary Assembly, to set up Working Parties attached to one Study Group or Joint Working Parties concerning several Study Groups for the purpose of studying a Question or group of Questions. He shall fix, by agreement with the Chairmen, the dates and programmes of Study Group and Working Party meetings; he groups these meetings in time according to the nature of the work and the availability of the CCITT Secretariat.

4.a) In his "Report on the financial needs of the Committee until the next PA", the Director shall communicate to the PA (for information) a summary of the accounts for the years which have elapsed since the preceding PA and the "Estimated Expenses of the CCITT" to cover the financial requirements of the Committee until the next PA.

b) These "Estimated Expenses of the CCITT" shall first be submitted to a preliminary examination by the Budget Control Committee; the Chairman of this Committee shall prepare a report on this subject for the PA. After approval, these "Estimated Expenses of the CCITT" shall be sent by the Director of the CCITT to the Secretary-General of the Union, for submission to the Administrative Council.

c) After the PA, the Director shall supply the Secretary-General of the Union (for the information of the ITU Administrative Council) with a list of Study Group meetings scheduled up to the time of the next Plenary Assembly, and with an estimate of the probable costs of those Study Group meetings.

d) The Director of the CCITT shall submit, for a preliminary examination by the Budget Control Committee and thereafter for approval by the PA, the accounts for expenditure incurred for the current PA.

5. Within the limitations of the Regulations of the Union, the Director may submit to the PA any report or proposal which he considers would help to improve the work of the CCITT, so that the PA may decide what action to take.

In particular, the Director shall submit to the Plenary Assembly such proposals concerning the organization and terms of reference of the Study Groups, for the succeeding Plenary period, as he may consider necessary.

6. After a meeting of the PA, the Director shall supply a list of the Study Groups and Working Parties set up by the Plenary Assembly to the Administrations of Members of the Union, recognized private operating agencies and scientific or industrial organizations taking part in the Consultative Committee's activities, with an indication of the Questions referred to Study Groups and Working Parties for study. He shall ask them to say what Study Groups and Working Parties they wish to take part in, and to supply the names of rapporteurs (delegates, representatives and experts) appointed to represent them.

Furthermore, he shall supply a list of Study Groups and Working Parties, as drawn up by the Plenary Assembly, to the international organizations, and ask them which Study Groups and Working Parties they wish to be represented in by observers.

Administrations and other participating organizations are urgently requested to supply these particulars after each Plenary Assembly, not later than two months after they have received the circular of the Director of the CCITT, and to update them regularly.

7. In the interval between Plenary Assemblies, when circumstances demand it, the Director is authorized to take exceptional measures to maintain the efficiency of work of the CCITT within his financial authority.

III. *Study Groups and Working Parties*

1. *Classification of Study Groups*

a) Study Groups shall be classified as normal Study Groups, Joint CCITT-CCIR Study Groups, and Special Autonomous Study Groups.

b) A Joint Study Group, set up with the approval of the Plenary Assemblies of both CCIs, shall submit draft Recommendations to the first PA to meet after the draft Recommendation has been drawn up; the draft Recommendation in question would then be provisionally approved by this Plenary Assembly, pending approval by the Plenary Assembly of the other CCI.

One of the CCIs shall be responsible for the management of a Joint Study Group. The CCI concerned will appoint the Chairman, while the other CCI will appoint the Vice-Chairman.

c) Special Autonomous Study Groups are Study Groups established by, and reporting directly to, Plenary Assemblies which are concerned with those studies carried out by the CCITT in regard to the developing countries in accordance with Nos. 12, 13, 16, 18, 19, 21, 54 and 309 of the Convention (Malaga-Torremolinos, 1973).

d) A Joint Working Party, set up with the approval of the Plenary Assembly shall submit draft Recommendations to the controlling Study Group which will be designated by the Plenary Assembly establishing it.

e) A Regional Group can be established for the purpose of dealing with Questions and studies of particular interest to a group of countries and Administrations in an ITU region (e.g. TAF).

2. *Registration of participants*

a) The Administrations, recognized private operating agencies and scientific or industrial organizations shall be represented, in the Study Groups and Working Parties in whose work they wish to take part, by rapporteurs, appointed by name and chosen by them as experts qualified to collaborate in the search for technically and economically satisfactory solutions to the Questions under study. However, exceptionally, registration with a Study Group, or Working Party, may be made without specifying the name of the rapporteurs concerned. International organizations shall give the names of their prospective observers.

b) To study Questions of common interest to the CCITT and the CCIR, Administrations, recognized private operating agencies and scientific or industrial organizations may also appoint rapporteurs from the CCIR to a Study Group of the CCITT; such an appointment does not carry with it the obligation to share in the expenses of the CCITT.

3. *Form of submission of contributions*

a) The Administrations, the recognized private operating agencies, the scientific or industrial organizations registered with a Study Group or Working Party, Chairmen and rapporteurs shall send their contributions, relating to the studies being made, to the Director of the CCITT.

b) These contributions shall contain comments, results of experiments or proposals designed to further the studies to which they relate.

c) Contributions should be presented in accordance with the following general directives:

i) Contributions should be concisely drafted, avoiding any unnecessary details, tables or statistics that make no direct contribution to the study of a Question. They should be clearly written with a view to being universally understood, that is, as codified as possible, using international terminology and avoiding the technical jargon peculiar to the author's country. When a contribution deals with several Questions, the Questions should be separated so that the text of each Question begins on a fresh sheet of paper (not on the back of a page).

ii) A reply to any one Question should not as a general rule exceed 2500 words (five pages), nor include more than three pages of figures (making eight pages in all). The reply should be accompanied by a summary and should be followed by conclusions whenever possible, in the form of a draft Recommendation.

iii) Documents of purely theoretical interest which are not directly related to the Questions under study should not be submitted in their entirety. Short abstracts only of such articles could be sent to the CCITT for translation and publication.

iv) Articles which have been or will be published in the technical press should not be submitted to the CCITT. Short abstracts only of such articles could, however, be sent to the CCITT for translation and publication.

v) Passages of an unduly commercial nature included in a contribution may be deleted by the Director of the CCITT in agreement with the Chairman; the author of the contribution will be advised of any such deletions.

d) Contributions should be drafted in one of the working languages of the Union and sent in four copies to the CCITT Secretariat; one of these copies will be sent immediately to the Chairman by the CCITT Secretariat.

It is recommended that a translation of contributions in another working language be sent to the CCITT Secretariat.

Contributions should be submitted on very white paper of A4 format, in clear black type. If the paper is not of A4 format, the text on each page should not exceed that format.

The top half of the first page should be left blank.

e) Documents which are to be studied by a Study Group or a Working Party meeting should reach the Director at least three months before the date fixed for the opening of the meeting concerned.

4. *Processing of contributions*

a) Contributions received at least three months before a meeting should be published in the normal way. That is, as far as possible, the Director shall group the documents received Question by Question, shall have the necessary translations made and shall send them to the members of Study Groups concerned, in the working language they desire, one month before the date laid down for the opening of the Study Group or Working Party meeting having the Question concerned on its agenda.

b) If a Chairman, in agreement with the rapporteurs of his Study Group or his Working Party, states that his Study Group (or Working Party) is willing to use documents in the original working language, the Director shall send on the documents regrouped as specified in paragraph 4.a) above, without having them translated. This procedure cannot be changed during the period between two Plenary Assemblies.

c) Contributions received by the Director less than three months before the date fixed for the opening of a meeting cannot as a general rule be dealt with in accordance with the procedure outlined under 4.a) and 7.a).

d) Exceptionally, when an Administration has failed to observe this time limit, it should advise the CCITT Secretariat about the forthcoming late contribution and its contents and should, where practicable, prepare a translation into another of the Union's three working languages and send it to the CCITT Secretariat at the same time as the copies in the original language. The CCITT Secretariat will take all possible steps, with due regard to the work of the Common Services of the ITU General Secretariat, to ensure that contributions received at the latest between two and three months before the beginning of a meeting, are reproduced in offset in the languages received (without further translation) and distributed in good time to all the delegates registered for the Study Group concerned.

e) Contributions received less than two months before a meeting shall be published as "delayed contributions", in the form in which they are received, in their original language only and (where applicable) in the second language into which they have been translated by the submitter; they shall be distributed at the beginning of the meeting solely to the delegates present. As far as possible an Administration should advise the CCITT Secretariat about any forthcoming "delayed contribution" and its content not less than two months before the meeting and the Secretariat will issue a list of delayed contributions and contents not later than six weeks before the meeting. It should be for the Study Group as a whole to accept or reject discussion of such delayed contributions.

f) The Director of the CCITT should endeavour to persuade Administrations to follow the rules already established for the presentation, form, and timing of documents as laid down in section III.3. A reminder circular from the Director should be issued whenever appropriate.

g) The CCITT Secretariat shall not reissue these delayed contributions as White Documents, unless otherwise decided by the Chairman of the Study Group after consultation, where appropriate, with his Group (or Working Party), and then only in exceptional cases of special interest and importance.

h) Some contributions of general (and not merely incidental) interest which may, for example, be of some scientific importance (measurement results), although received too late to be distributed before a meeting and accordingly issued as delayed contributions, might exceptionally be distributed later as contributions.

i) Any contribution should, as far as possible, be submitted to a single Study Group. If, however, an Administration submits a contribution which it believes is of interest to several Study Groups, it should identify the Study Group of primary importance and other interested Study Groups. The contribution will be issued in full to the Study Group of primary interest, and a single sheet giving the title of the contribution, its source and the summary of its contents (see paragraph 3.c)) to the other Study Groups. This single sheet will be numbered in the series of contributions of each Study Group to which it is issued.

5. *Frequency of meetings*

a) Study Groups and Working Parties shall meet in principle once in the period of time between the end of a PA and the meetings mentioned in paragraph 5.d) below. Exceptionally, extra meetings may be held, with the approval of the Director and the agreement of a majority of the Administrations registered with the Study Group or Working Party concerned.

b) Meetings of Study Groups with common interests or dealing with problems possessing certain affinities should, if possible, be arranged so as to enable Administrations to send one delegate or representative to cover several meetings. As far as possible, the arrangement chosen should enable the Study Groups meeting during the period to communicate any information they may need to one another without delay. Furthermore, it should enable specialists from all over the world in the same disciplines or related or complementary disciplines to have direct contacts with each other to the benefit of the participants themselves and of their Administrations. At the same time it should not entail repeated absences of those specialists from their countries.

c) The timetable of meetings will be prepared and brought to the knowledge of Administrations well in advance (one year) to give the latter time to study problems and submit contributions within the prescribed time-limits and to give the CCITT Secretariat the time to distribute those contributions. In this way the Chairmen of Study Groups and the delegates can so organize their work as to consider the contributions in advance, which will help to enhance the efficiency of meetings and cut down their length.

d) The final meetings of Study Groups towards the close of each study period shall end not later than three months before the beginning of the Plenary Assembly to enable the preparation of full and homogeneous final reports and to give the delegates to the Plenary Assembly an opportunity to study them fully.

e) The schedule of final meetings of Study Groups to meet the object stated in section 10 below shall be adjusted in the light of circumstances by the Director of the CCITT in cooperation with the Chairman of the Study Group in question.

f) The Director will advise all Administrations and RPOAs as to the dates of the final meetings of Study Groups by Circular-letter at least three months beforehand, in order that, among other things, the Administrations and RPOAs may submit draft Questions proposed for study in the following Plenary period in accordance with Opinion No. 3.

6. *Invitations*

a) In accordance with Opinion No. 1, Study Groups and Working Parties may meet outside Geneva if invited to do so by Administrations or recognized private operating agencies of countries Members of the Union. Such invitations must be submitted to the Plenary Assembly and accepted by it, and shall be taken up only if they are compatible with the credits allocated to the CCITT by the Administrative Council.

b) The only invitations which the Director is authorized to accept without such action by the Plenary Assembly are those extended to small Working Parties by countries close to Switzerland. They may be accepted only if the Chairmen concerned are in agreement and if the budgetary resources of the CCITT permit.

c) Invitations mentioned in a) and b) above shall be issued and accepted, and meetings outside Geneva subsequently arranged only if conditions provided for in ITU Administrative Council Decision No. 304, of April 1963, can be met.

d) Should an invitation be cancelled for any reason between Plenary Assemblies, a proposal shall be made to Administrations that the meeting be convened in Geneva, in principle on the date originally planned.

7. *Preparation of meetings*

a) Before each meeting, a draft working plan listing the Questions to be examined and the subject of each of them should be prepared by the Chairman, with the help of the Secretariat. This working plan should indicate the point reached in the study of each Question and the documents relating to it.

The working plan should indicate which Questions are to be studied on each day, but it must be regarded as subject to change in the light of the rate at which work proceeds. Chairmen shall try to follow it as far as possible.

The working plan will be sent out at least one month before the beginning of each meeting.

- b) If there are insufficient contributions, no meeting at all should be scheduled. The decision whether to cancel a meeting or not will be taken by the Director of the CCITT.
- c) If, from the contributions received, it appears that there is agreement among Administrations on the lines of the reply to a Question (or part of a Question) the Chairman, with the assistance of the Secretariat, may submit a draft reply, possibly accompanied by a draft Recommendation.
- d) If the contributions received reveal a variety of proposals or points of view, the Secretariat should, if possible, prepare a table summing up the different positions of Administrations on the Question and the point reached in the study. The table should be sent to members of the Study Group, if possible in advance of the meeting.

8. *Conduct of meetings*

- a) The Chairman shall direct the debates during the meeting, with the assistance of the Secretariat.
- b) The Chairman is authorized to decide that there shall be no discussion on Questions on which an insufficient number of contributions are received.
- c) Questions which have not elicited any contribution should not be placed on the agenda of meetings and at the end of the study period should be deleted from the list of Questions.
- d) Study Groups and Working Parties may set up *working teams* (which should be as small as possible) during their meetings, to study Questions allocated to those particular Study Groups and Working Parties.
- e) A Study Group may entrust a Question or group of Questions to an *ad hoc* Working Party for preliminary study. It may, by agreement with another Study Group (or, if necessary, with other Study Groups) entrust an *ad hoc* Joint Working Party with the study of a Question or group of Questions which may be of common interest to the Study Groups concerned. One of these Study Groups, known as the Controlling Study Group, shall have the final responsibility for the study. The contributions used as a basis for discussions by the *ad hoc* Joint Working Party will be sent solely to the rapporteurs registered in the *ad hoc* Joint Working Party; final reports only of these *ad hoc* Joint Working Parties shall be sent to all the members of the Study Groups concerned.
- f) Working Parties or sub-Working Parties should be set up by Study Groups only after thorough consideration of the Questions and only if a Question or group of Questions with points in common cannot be settled otherwise than by specialists. Proliferation of Working Parties and sub-groups must be avoided as far as possible.
- g) The study of Questions by correspondence should be encouraged as far as practicable at least during the early stages of their study. For this purpose, a Study Group or Working Party may instruct a special rapporteur, appointed in person by the Study Group or Working Party, to work alone or in collaboration with others, to make a preliminary analysis of the more complex Questions and/or to draft a reply to a Question for submission to the Study Group or Working Party.

When the special rapporteur works with a group of collaborators, he shall choose whatever method of work is considered most appropriate: correspondence or private meetings of the group.

The special rapporteur would then submit a report to the Study Group or Working Party for examination at the next meeting. (For further details of the working methods for special rapporteurs, see Annex 1 to this Resolution.)

- h) A Study Group or a Working Party may decide that a meeting is limited to rapporteurs of Administrations and recognized private operating agencies [see Annex 2, page 135 of the Convention (Malaga-Torremolinos, 1973)].

9. *Preparation of reports, Recommendations and new Questions*

- a) A report on the work done during a meeting shall be prepared by the Secretariat.

To assist the CCITT Secretariat in this task, the Study Group may arrange for some delegates to draft certain elements of the report. The Secretariat should coordinate this drafting work sufficiently to dispense with the need for Editing Groups (as distinct from Drafting Groups) during the meetings. To this end, and as a

general rule, Drafting Groups might be established at each meeting which would be responsible for drafting a summary of the reasons that lead to the decisions by the Study Group or Working Party.

This report shall be submitted, if possible, for approval before the end of the meeting; otherwise it shall be submitted for approval by the Chairman of the meeting, unless the meeting declares itself satisfied by approval of the texts in accordance with 9.b) below.

Any meeting, even if informal, of a Working Party or small group operating in the CCITT shall give rise to a report, drawn up, in the absence of a representative of the CCITT Secretariat, under the responsibility of the Chairman of the Group. Such report shall be sent to the CCITT Secretariat, which shall circulate it, in the form of a White Document, to all registered members of the Study Group in question.

b) The drafts of Recommendations and Resolutions shall be prepared by the Chairman, whenever possible with the assistance of the specialized Secretariat or temporary working teams. These texts must be approved in their final form before the meeting disbands.

c) The accelerated procedure for provisional adoption of Recommendations might be used more frequently (see Resolution No. 2).

d) Administrations and private operating agencies are authorized to communicate Study Group or Working Party reports and documents to any experts they consider it expedient to consult, except where the Study Group or the Working Party concerned has specifically decided that its report, or a document, is to be treated as confidential.

e) The Chairmen are requested to apply more stringently the criteria of CCITT Opinion No. 3 on the preliminary examination of new draft Questions. Towards the close of each study period the attention of Study Groups should be drawn to this Opinion so that they may apply the criteria it contains when preparing proposed new Questions.

10. *Final meetings of Study Groups*

a) All Study Groups shall meet sufficiently in advance of the Plenary Assembly to allow the final report of each Study Group to reach Administrations at least one month before the Plenary Assembly (see also paragraphs 5.d) to 5.f)).

b) On conclusion of the study of each Question the Study Groups could appoint one or two members to prepare a text summing up the final results of the work. This document would be designed to aid the Chairman and the CCITT Secretariat in establishing the final report.

c) The final report shall be the document forwarded to the Plenary Assembly.

d) The final report of each Study Group is the responsibility of the Study Group Chairman, and shall include:

- the final text of draft Recommendations;
- the text of provisional Recommendations to be adopted by the Plenary Assembly (these will have had approval by correspondence during the study period under Resolution No. 2);
- a summary report on the status of Questions, the study of which has not concluded, and new Questions the reasons for which are given as required in Opinion 3;
- the list of Questions proposed to the Plenary Assembly for the following Plenary period.

ANNEX 1

(to CCITT Resolution No. 1)

Special Rapporteurs

In Resolution No. 1, Section 8.g) it is stated that some studies may be entrusted to a special rapporteur.

According to the second paragraph of Section 8.g) full discretion is given to a group of collaborateurs chaired by a rapporteur whenever such a method of working is adopted.

However, the following indications may give a clearer idea of this method of working.

In one method, a single special rapporteur may be designated to analyze the contents of normally distributed contributions and to draw up a report, which is itself presented as a contribution, giving the results of his analysis.

In another method, a special rapporteur is appointed for the study of a single Question requiring detailed consideration before decisions can be taken on it. The special rapporteur works primarily by correspondence with any other collaborators interested in the preliminary study of the Question. Any Administration submitting contributions on the matter in question does so directly to the special rapporteur (with a copy, if so desired, to the CCITT Secretariat). The CCITT Secretariat and, through it, the ITU Common Services are at the disposal of the special rapporteur for the translation and distribution of any document. However, the distribution of this preliminary documentation is limited to the members of the group collaborating with the special rapporteur. There often comes a time when the study cannot progress further by correspondence alone; in that case the special rapporteur may call a private meeting of his collaborators whenever he wishes.

When his work and that of the group is completed or cannot progress any further, the special rapporteur prepares a document for submission to the Study Group responsible for study of the Question. This document which constitutes the report of the special rapporteur, may include a draft Recommendation, if it is possible to formulate one or, when the views expressed are too numerous and too divergent, a summary of the observations made, in which case responsibility for further study of the Question reverts to the Study Group.

RESOLUTION No. 2

Accelerated procedure for the provisional approval of Recommendations

(Mar del Plata, 1968; Geneva, 1972; Geneva, 1976)

The International Telegraph and Telephone Consultative Committee

decides that

1. A Study Group meeting may decide that the following procedure for provisional approval be applied to a draft Recommendation. Such a decision shall be taken by unanimous agreement between the Administrations and recognized private operating agencies represented at the meeting of the Study Group.
2. As soon as possible after the relevant meeting, the CCITT Secretariat shall request the Administrations of countries Members of the ITU to inform it within three months whether they approve the provisional adoption of the draft Recommendation concerned. The Secretariat shall also advise RPOAs that Administrations are being asked to indicate their approval of this provisional adoption. The Recommendation shall be provisionally adopted if, within this time-limit, a simple majority is in favour, provided that more than half of the ITU Members represented at the meeting of the Study Group which proposed the application of Resolution No. 2 had, in fact, replied. Where the RPOAs of an ITU Member were the Members at the Study Group meeting, the vote shall be in accordance with No. 396 of the ITU Convention of Malaga-Torremolinos, 1973.
3. Definitive adoption of the Recommendation will be a matter for the following Plenary Assembly.

RESOLUTION No. 3

Participation in CCITT activities Communications submitted to Plan Committees and seminars

*(Geneva, 1964; Mar del Plata, 1968; Geneva, 1972;
Geneva, 1976)*

The International Telegraph and Telephone Consultative Committee

emphasizes the advantage

for countries Members of the ITU of participating in CCITT activities by sending suitable delegations for continuing participation in Study Groups, Working Parties and Plan Committees;

decides

that certain technical papers submitted to the Plan Committees and to ITU seminars should be widely disseminated. The CCITT may also organize seminars periodically which might give a general view of the CCITT organization and examine in detail selected subjects of general or special interest to the countries of a region.

RESOLUTION No. 4

Publication of CCITT Books

*(Geneva, 1958; New Delhi, 1960; Geneva 1964;
Mar del Plata, 1968; Geneva, 1972; Geneva, 1976)*

The International Telegraph and Telephone Consultative Committee,

decides that

1. The CCITT Book shall be published in separate volumes according to the following plan:

- Volume I – Minutes and reports of the Plenary Assembly.
Opinions and Resolutions.
Recommendations on:
- the organization and working procedures of the CCITT (Series A);
 - means of expression (Series B);
 - general telecommunication statistics (Series C).
- List of Study Groups and short title of Questions under study.
- Volume II – Operation and tariffs: in four fascicles sold separately.
- II.1 – General tariff principles – Costing – Lease of circuits for private service – Recommendations for regional application (Series D Recommendations).
 - II.2 – Telephone operation and tariffs (Series E Recommendations excluding those contained in Fascicle II.4, which will only be referred to).
 - II.3 – Telegraph operation and tariffs (Series F Recommendations excluding those contained in Fascicle II.4, which will only be referred to).
 - II.4 – Operation, accounting and tariffs in the Maritime Mobile Service (Common Series E and F Recommendations concerning this Service).
- Volume III – Line transmission (Series G, H, J Recommendations) in three fascicles, not sold separately.
- Volume IV – Line maintenance and measurements, in two fascicles, sold separately.
- IV.1 – Maintenance (Series M and N Recommendations).
 - IV.2 – Specification of measuring equipment (Series O Recommendations).
- Volume V – Telephone transmission quality and telephone sets (Series P Recommendations).
- Volume VI – Telephone signalling and switching, in four fascicles, sold separately.
- VI.1 – General switching and signalling Recommendations (Series Q Recommendations).
 - VI.2 – Signalling System No. 6.
 - VI.3 – Signalling Systems R1 and R2.
 - VI.4 – Programming languages for stored-programme control exchanges (Series Z Recommendations).
- Volume VII – Telegraph technique (Series R, S, T, U Recommendations).
- Volume VIII – Data transmission (Series V, X Recommendations).
- Volume IX – Protection (Series K and L Recommendations).

2. Except for Volume I, each volume or part of a volume sold separately will contain on its subject:
- the full texts of Questions under study, excluding annexes ²⁾;
 - the texts of the Recommendations (in principle of a worldwide nature or in certain particular cases of a regional nature);
 - the text of the Supplements of a documentary nature, adopted by the Study Groups which cannot be published as ordinary contributions. There should only be a few of these Supplements and no text of this kind which is already included without any changes in the *Green Book* will be published.

Each volume may also contain definitions of the technical terms used in the Recommendations.

3. Each volume or part of a volume will be published in an A4 format, bound with an orange cover.
4. Other publications, not contained in the Books, such as:
- the Manuals of the Special Autonomous Study Groups;
 - the general Plans for the development of the international network;
 - the *Directives concerning the protection of telecommunication lines against harmful effects from electricity lines*;
 - *Recommendations concerning the construction, installation and protection of telecommunication cables in public networks*;
 - *List of definitions of essential telecommunication terms (Part I)*;
 - *Instructions for the international telephone service*;
 - *Instructions for the operation of the international public telegram service*;
 - Instructions for the telex service;
 - the various booklets whose publication is requested by a Plenary Assembly.

will be published and re-edited, when necessary, independently of the volumes of the Book.

5. Publications issued in loose-leaf form and which require updating from time to time should, in principle, be amended by issuing new pages.

RESOLUTION No. 5

Numbering and lay-out of CCITT Recommendations (Geneva, 1958; New Delhi, 1960; Geneva, 1964; Geneva, 1972; Geneva, 1976)

The International Telegraph and Telephone Consultative Committee,
decides that

1. All CCITT Recommendations shall be numbered; the number of each Recommendation shall have a letter prefix referring to the series, as well as a reference number.

²⁾ The full texts of Questions under study, including annexes, will be published as Contribution No. 1 of the particular Study Group.

2. The series of Recommendations shall be as follows:

Reference letter of the series	Scope of the series	Volume in which the Recommendation will be published
A	Organization of the work of the CCITT	I
B	Means of expression (definitions, vocabulary, symbols, classification)	I
C	General telecommunication statistics	I
D	Lease of international telecommunication circuits	II.1
E	Telephone operation and tariffs	II.2
F	Telegraph operation and tariffs	II.3
G	Transmission: lines, radio-relay systems, radiotelephone circuits	III
H	Utilization of lines for telegraphy and phototelegraphy	III
J	Radio and television programme transmissions	III
K	Protection against interference	IX
L	Protection against corrosion	IX
M	Maintenance of telephone circuits and carrier systems	IV.1
N	Maintenance for sound-programme and television transmissions	IV.1
O	Specification of measuring equipment	IV.2
P	Telephone transmission quality. Telephone installations and local line networks	V
Q	Telephone switching and signalling	VI
R	Telegraph channels	VII
S	Alphabetical telegraph apparatus	VII
T	Facsimile telegraph apparatus	VII
U	Telegraph switching	VII
V	Data transmission	VIII
X	New data networks	VIII
Z	Programming languages for SPC exchanges	VI.4

3. Recommendations in one series shall be classified in sections according to subject.

4. The operative part of a Recommendation shall be preceded by a statement of the reasons that have led to the issue of the Recommendation. This will be worded, as far as possible, in an informative way, omitting the formula "considering".

RESOLUTION No. 8

**Cooperation with the IEC on the standardization of cables,
wires and waveguides**

(New Delhi, 1960; Geneva, 1964; Mar del Plata, 1968;
Geneva, 1976)

The International Telegraph and Telephone Consultative Committee,
considering

that the International Electrotechnical Commission has set up a Technical Committee (TC 46) to prepare international standards on cables, wires, waveguides and accessories intended for use in telecommunication equipment and in devices employing similar techniques;

that the cables and waveguides intended for use in public telecommunication networks are not included in the scope of this Committee, with the exception of polyolefin insulated LF cables for outdoor use covered by the revised scope for IEC TC 46 proposed at its meeting in October 1976;

that other points of the scope of this Committee have not been narrowly defined and that its work in this respect should be coordinated with that of the CCITT;

that telephone and telegraph Administrations reserve the right to establish some of the specifications for wires and cables whenever they consider it advisable;

instructs the Director of the CCITT to take any useful measures to ensure efficient liaison between the CCITT and IEC TC 46, in accordance with the principles given in the Annex below;

recommends to Member Administrations of the CCITT whose countries participate in the work of the IEC to take an active part — each within the National Committee of the IEC — in work connected with the activities of IEC TC 46, so that the views of telegraph and telephone Administrations may be duly taken into account.

ANNEX

(to Resolution No. 8)

Principles of cooperation between the CCITT and IEC Technical Committee 46

1. The aim of the standardization envisaged by the IEC is to cut down the number of types of cables to be made, so that the price may be lowered and so that the cables made by different manufacturers will be interchangeable. This policy is analogous to that followed by the CCITT as regards those types of cables for which it alone is competent. The IEC can study the standardization of internal cabling for use for various purposes in electronics, including telecommunications, and also polyolefin insulated low frequency cables for outdoor use covered by the revised scope for IEC TC 46 proposed at its meeting in October 1976. Nevertheless, if cables or wires standardized by the IEC can be used in telecommunications installations, they must not conflict with CCITT Recommendations concerning those installations. In particular it is important that the electrical characteristics of the cables are compatible with CCITT Recommendations on transmission, drawn up by Study Groups XV and XVI and on screening and protection drawn up by Study Groups V and VI.

2. It therefore seems very desirable for the draft standards studied by TC 46 to be forwarded to the CCITT for examination. To simplify cooperation, the result of this examination should preferably be expressed in one of the following forms:

- a) the CCITT has no comment to make on this draft, or
- b) draft standard... should be brought into line with CCITT Recommendation..., or
- c) the CCITT is at present studying the point dealt with in draft standard..., which it considers as being within its terms of reference.

As a general rule, this examination should be carried out by the appropriate CCITT Study Group but, since IEC procedure involves time-limits that may not be exceeded (and which are sometimes rather short), the Plenary Assembly leaves it to the Director to take any appropriate practical measures.

3. The Director of the CCITT will continue to supply the IEC with any useful documentation regarding CCITT work.

RESOLUTION No. 9

Work of the ITU in the field of space communications

(*Mar del Plata, 1968; Geneva, 1972; Geneva, 1976*)

The International Telegraph and Telephone Consultative Committee,

aware of the important and urgent problems raised by the integration of space communications within existing systems, which will continue to develop;

considering

that the ITU and its organs are the sole bodies within the United Nations system qualified to issue recommendations relating to such integration;

that the Administrative Council of the ITU has adopted Resolutions Nos. 636 and 637 concerning the role and the activities of the ITU in the field of space communications;

decides

to request the Director of the CCITT, in cooperation with the Director of the CCIR and in accordance with the duties of their office as defined in Article 11, Nos. 70, 71 and Article 74 of the Convention, to advise the Secretary-General in his task of determining the basic direction of future work of the permanent organs of the ITU in the field of space communication to ensure wider cooperation with all the Administrations and recognized private operating agencies concerned with space communications.

RESOLUTION No. 10

**Problems encountered by developing countries
when implementing the Plan**

(Geneva, 1972; Geneva, 1976)

The International Telegraph and Telephone Consultative Committee,

considering

the complexity of the Plans prepared by the World Plan Committee and the Regional Plan Committees and their importance for worldwide telecommunications;

recognizing

that in implementing these Plans developing countries may encounter difficulties urgently requiring solution;

considering

the need for the problems of concern to developing countries to be clearly formulated by the Plan Committees;

resolves

that the importance of such problems should be given due recognition and that the requisite priority should be accorded for their solution.

RESOLUTION No. 11

**Handbook on economic and technical aspects of the choice
of switching systems**

(Geneva, 1976)

The VIth Plenary Assembly of the CCITT (Geneva, 1976),

considering

1. the needs, particularly of developing countries, for coordinated information on the economic and technical aspects of switching systems;

2. the established CCITT experience in the preparation of tutorial handbooks of similar coverage with respect to other aspects of telecommunication systems and installations;

3. the adoption of Questions for standardizing Recommendations, to be considered by the appropriate Study Groups;

decides

to entrust a new GAS group with the following task:

Writing of a Handbook with the title "Economic and Technical Aspects of the Choice of Switching Systems". This Handbook's contents shall be closely related to the work of the Study Groups as it progresses

towards the formulation of standardized Recommendations. They shall also be closely related to the economic study principles and to similar technical texts dealt with in other CCITT Handbooks, particularly those produced by the other GAS Groups.

This Handbook's particular objectives are:

1. to form the basis for an economic comparison of various switching systems;
2. to consider the general trends in development of switching systems and associated operational matters;
3. to formulate the general, and in particular the developing countries', requirements for the introduction of standardized switching systems, with regard to:
 - 3.1 fundamental switching plans,
 - 3.2 service facilities,
 - 3.3 maintenance and other operational services,
 - 3.4 interworking with different systems,
 - 3.5 traffic conditions (including definition of a series of traffic models);
4. to draw up Technical Sheets (see the models provided in the GAS 3 Handbook), for national switching systems capable of being applied worldwide.

Note. — GAS 5 is instructed to continue its study of the conditions required for the establishment of a local industry for the manufacture of switching equipment.

RESOLUTION No. 12

Plan Committees

(Geneva, 1976)

The VIth Plenary Assembly of the CCITT (Geneva, 1976),

considering

a) the report of the Director of the CCITT on the activities of the Plan Committees in the period 1973-1976 (Documents AP VI-No. 33 and No. 75),

b) the adoption, by the Vth Plenary Assembly of the CCITT, of the report of the World Plan Ad Hoc Group,

and also

c) the report of the World Plan Committee, Geneva, 1975 (Document Plan No. 17),

d) the views expressed in paragraph 5 of the report of the Director of the CCITT (Document AP VI-No. 33),

resolves

1. to adopt the views expressed by the World Plan Committee (Geneva, 1975), which are contained in Annex 4 to Document AP VI-No. 33 (paragraphs 1 to 8, 11 and 12), namely that:

1.1 the existing terms of reference of the Plan Committee as laid down in No. 78 of the Convention (Malaga-Torremolinos, 1973) and amplified in Resolution No. 448 of the Administrative Council continue to be relevant;

1.2 the Regional Plan Committees and the World Plan Committee have a valuable function to perform and should be retained;

1.3 the development, establishment or implementation of specific network plans either regional or global in nature is solely within the competence of the countries themselves acting together in bilateral or multilateral negotiations in a variety of ways and hence is outside the terms of reference of the Plan Committees as defined in accordance with point 1.1 above;

1.4 in relation to the development of a plan in accordance with their terms of reference, the function or role of the Plan Committees is to assist Administrations and RPOAs in reaching their own sovereign decisions on their plans;

1.5 with respect to point 1.4 above there are two ways in which this role can be carried out:

1.5.1 by the collection and publication of valid and relevant planning data which is regularly updated. (This work is now proceeding in a satisfactory manner as a result of the adoption of the modified Plan Guide and Questionnaire and of the efforts of the Secretariat of the CCITT and the General Secretariat in compiling and publishing the data with the aid of the ITU computer.);

1.5.2 by the exchange of information in written contributions and through meetings of the Plan Committees and their Coordination Committee and/or Working Party, on such questions as adoption of signalling systems and other aspects of the developing telecommunication networks which depend on international cooperation for their technical feasibility. (This significant aspect of the work of the Plan Committees could be improved.);

1.6 in addition to the work described in 1.5.2 above, which relates to paragraph 2.1 of Administrative Council Resolution No. 448, the Plan Committees have the responsibility for performing the functions prescribed in paragraph 2.2 of that Resolution;

1.7 these functions (i.e. those referred to in paragraphs 1.5.2 and 1.6 above) were dealt with in specific contributions from Brazil (Contribution PLAN-No. 15), Belgium (Contribution PLAN-No. 14) and the United Kingdom (Contribution PLAN-No. 9) and have also been considered by both the Plan Committee for Europe and the Mediterranean Basin (Contribution PLAN EU-No. 9, pages 10-15) and the Ad Hoc Group on the future of the World Plan Committee (PLAN Document AP V-No. 12) and that all have reached similar conclusions, which are that the Plan Committees should:

1.7.1 consider questions to be submitted to the CCIs on international routing, switching, numbering, service quality, etc.;

1.7.2 consider questions on technical assistance to be submitted to the CCIs in accordance with their terms of reference;

1.7.3 organize the exchange of information concerning developments in the field of telecommunications, in order to assist countries to update general planning techniques and to introduce services and facilities;

1.8 meetings of the World Plan Committee and the Regional Plan Committees should be held only when the agenda is established and when substantial contributions to the work of the Committee have been received.

1.9 It is important that the Regional Plan Committees meet in their own regions in order to encourage greater participation on the part of countries within the regions. This view virtually represents a retention of the *status quo* as far as location of the meetings is concerned.

1.10 As regards the duration of Regional Plan Committee meetings, it should be only sufficient to enable the Committees to complete their work irrespective of where the meetings are held.

2. to propose that the *status quo* be maintained in respect of the terms of reference and locations of the World and the Regional Plan Committee meetings till the next Plenipotentiary Conference;

expresses the hope

that the Administrative Council will be able to allocate the necessary budgetary resources in accordance with No. 244 of the Convention;

requests the Director of the CCITT

to submit this Resolution to the Administrative Council together with all relevant administrative proposals;

to consider, subject to financial provision, the organization of a symposium of a few days duration in conjunction with the World Plan Committee meetings which, on the lines indicated in paragraph 10 of Annex 4 to Document AP VI-No. 33, could be organized with speakers provided by Administrations or recognized private operating agencies and designed generally to assist the Plan Committees to carry out their functions as described in paragraph 1.7 above; and which, whenever it is thought useful, might call upon the Chairman or Vice-Chairman of the relevant CCI Study Groups;

to invite the Administrations to submit their proposals on the future structure and terms of reference of the Plan Committees for consideration of the VIIth Plenary Assembly to enable it to frame proposals for consideration by the next Plenipotentiary Conference;

further requests all Administrations and especially the developing countries

to participate fully in the deliberations of the Plan Committees through useful contributions and active participation in the meetings of the World and the Regional Plan Committees;

to send contributions on network management, new services, new techniques intended to replace or supplement existing conventional techniques, application of signalling systems, etc. in addition to the data presently submitted to the CCITT Secretariat; this will contribute to the development of a forum on future development and establish better contact among the different Administrations as well as between them and the CCITT/CCIR specialists.

OPINIONS

OPINION No. 1

Location of CCITT meetings

The Special Assembly of the CCITT (Geneva, 1958) and the VIth Plenary Assembly (Geneva, 1976)

express the opinion

that the holding of meetings of the CCITT outside Geneva is desirable in certain circumstances, in so far as these meetings remain within the possibilities of the CCITT budget (cf. Resolution No. 26 of the Plenipotentiary Conference of Malaga-Torremolinos, 1973).

The IIIrd Plenary Assembly of the CCITT (Geneva, 1964) the Vth Plenary Assembly of the CCITT (Geneva, 1972) and the VIth Plenary Assembly of the CCITT (Geneva, 1970).

express the opinion

that the invitations of the meetings would be submitted to the Plenary Assembly of the CCITT and provisionally be accepted by it, subject to the credits allocated to the CCITT which allow of honouring them;

that the inviting Administrations conform to Decision No. 304 of the 1963 session of the Administrative Council of the ITU.

Remark.— Text of Council Decision No. 304:

“The Council decided that, in view of the provisions of the Convention that all Members shall be entitled to participate in conferences and meetings of the Union, the Secretary-General, when drawing up an agreement with an inviting government on the arrangements to be made concerning a conference or meeting of the Union, shall include therein a clause to the effect that the inviting Administration shall apply without reservation the provisions of the Convention and shall permit the persons attending on behalf of Members of the Union and other bodies invited, and officials of the Union, as well as their families, to enter the country concerned and to sojourn therein throughout the duration of their function or mission in connection with the conference or meeting.”

OPINION No. 2

Exchange of views on new techniques
at CCITT meetings

The Special Assembly of the CCITT (Geneva, 1958)

expresses the opinion

that the Director of the CCITT in agreement with the Chairman of the Study Group or sub-Group concerned and with the consent of the inviting Administration, if there is one, should organize an exchange of views and opinions on new techniques in the telegraph and telephone field on the occasion of CCITT meetings;

that, in principle, the time spent on this exchange of views should not prolong the meeting by more than one day.

OPINION No. 3

Preliminary examination of new draft Questions

The Vth Plenary Assembly of the CCITT (Geneva, 1972),

considering

that, when new draft Questions are handed in just before the meetings of a Plenary Assembly, the Study Groups concerned are not always able to make a thorough study of their real object and to submit them in a clear and precise form;

that the study of these Questions is often rendered difficult thereby;

expresses the opinion

that the Administrations or recognized private operating agencies which want the Plenary Assembly to set a new Question for study should hand in the text of such Question to the CCITT Secretariat at least two months before the opening date of the last meeting of the Study Group concerned preceding the Plenary Assembly;

that proposed Questions should be accompanied by reasons justifying the interest of the Questions, with an indication of their degree of urgency;

that Administrations should for this purpose use a form for handing in new Questions based on the form annexed hereto;

that the forms received by the CCITT Secretariat should be circulated to the members of the Study Group (or groups) concerned so as to be received at least one month before the opening of the Study Group meeting;

that the same procedure should be used for the studies proposed by the Director of the CCCITT;

that each Study Group should consider these new Questions at its final meeting and determine that the study of the Question serves a real purpose. A ranking of urgency should be assigned to the Questions.

Some suggested guidelines are:

- a) The Question should specify all information needed. Where possible, and if considered useful in clarifying the Question, the draft of the new Recommendation or an outline of the contents of the new Recommendation should be included.
- b) The purpose of the Questions should be clear, with indication of the kind of new Recommendation desired, or of specific additions or changes in existing Recommendations contemplated.
- c) A Question calling for changes in existing Recommendations should make clear why the existing Recommendations need change with indications as to how new proposals will improve matters.
- d) A Question should avoid asking individual members to make extensive tests or provide extensive statistical or other data unless this is clearly essential and likely to lead to some useful results within the Plenary Assembly study interval.
- e) A Question should not be so comprehensive in scope as to discourage responses and therefore remain on the agenda for a long period of years.

ANNEX
(to Opinion No. 3)

CCITT

Study Group No. . . .

FORM FOR HANDING IN A NEW QUESTION

Administration¹ of origin:

Date of handing in:

Text of question:

Type of question²:

Reasons or experience motivating the proposed new question:

Date by which the Recommendation should be issued, and
order of urgency³:

Draft of the Recommendation or outline of the contents of
the draft Recommendation:

OPINION No. 5

**Examination at regional Plan meetings of certain Questions
outside the Plan Committee's terms of reference**

The Vth CCITT Plenary Assembly (Geneva, 1972),

considering

that, at meetings of the Regional Plan Committees, participating countries have often submitted Resolutions or Opinions or have requested studies on Questions which do not come within the competence of the Plan Committees, as defined in Administrative Resolution No. 448, of the CCITT or CCIR as laid down in the Convention (Montreux, 1965, Article 14, paragraph 5);

that these Resolutions, Opinions and studies generally fall within the field of the IFRB or of the Department of Technical Cooperation of the General Secretariat;

that it is quite understandable that countries which cannot send delegates to all meetings held outside their continents should take the opportunity, when the Plan Committee meets in their continents, of submitting all requests within the province of the ITU without considering whether or not they are the responsibility of a Plan Committee;

that it is important to do everything possible to satisfy these countries' desires within the limits of the statutory duties of the Consultative Committees;

¹ Or CCITT.

² Background question, question designed to lead to a Recommendation, etc.

³ The urgency will be: short term, leading to the issue of a Recommendation by the next Plenary Assembly, or long term.

requests the Administrative Council to recommend

that, when Plan meetings are held, separate meetings may be arranged, either before or after, but outside the Plan meetings, in the same place and under the aegis of the competent organs of the Union for the purpose of examining Questions pertaining to the IFRB or the Technical Cooperation Department of the General Secretariat;

that the expenses incurred for the common services provided at such series of meetings should be borne by the ITU budget sections in a manner to be agreed by the heads of the organs concerned.

OPINION No. 6

Resources of the CCITT

The Vth Plenary Assembly of the CCITT (Geneva, 1972) and the VIth Plenary Assembly (Geneva, 1976),

considering

- (i) the worldwide need for improved communication among peoples;
- (ii) the development, often described as explosive, of public telecommunications ³⁾ and the fact that investment in the telecommunication equipment required is bound to increase at the same rate;
- (iii) the large economic interest of the CCITT Recommendations, through the standardization they provide for the telecommunication undertakings (Administrations or private operating agencies) of the countries Members of the ITU;
- (iv) the desirability of framing CCITT Recommendations applicable on a world scale in advance of, rather than subsequent to, agreement on regional standards;
- (v) the need for CCITT Recommendations approved by the Plenary Assembly to be made available promptly to Administrations;

express the wish that

the competent organs of the ITU, as designated by Nos. 22, 23 and 24 of the 1973 Convention;

- (a) take into due consideration:
 - the ever-increasing importance of public telecommunications ³⁾ and their sustained growth;
 - the essential role to be played by the CCITT in the establishment at international level of standards for telecommunication networks, which can now be developed harmoniously only within the framework of a universal, worldwide plan;
- (b) ensure that all the necessary facilities are accorded to the CCITT and its Secretariat to carry out its work.

OPINION No. 7

Appointment of Study Group Chairmen and Vice-Chairmen

The Vth Plenary Assembly of the CCITT (Geneva, 1972),

recognizing

that the efficient working of Study Groups depends critically on the quality of their Chairmen and Vice-Chairmen and upon the time they are able to devote to adequate preparation for meetings;

noticing

that the appointment of Chairmen and Vice-Chairmen is covered by the specific and detailed provisions of No. 792 (Chapter 15) of the General Regulations annexed to the Montreux Convention, 1965;

³⁾ Public telecommunications = telephone, telegraph, telex, data transmission.

that paragraphs 2.b) ii), 4 and 8 of CCITT Resolution No. 1 stipulate the procedure for the designation of Study Group Chairmen and Vice-Chairmen;

suggests

that Heads of Delegations should bear the spirit of the following points in mind when implementing the above-mentioned provisions:

1. Appointments should be made primarily on the basis of individual competence (in the technology of the Study Group concerned as well as in chairing meetings).
2. Chairmen who are not in direct touch with the technology of their Study Group through change of duty in their own Administration or other cause, or who find they cannot devote adequate time to the work, should not be expected to continue in office indefinitely.
3. Chairmen need not automatically be re-elected; it may sometimes be useful to limit the term of office of a Chairman, but there should be no hard-and-fast rule on this point.
4. New Vice-Chairmen of Study Groups (and, in some cases, Chairmen) may be expected to be drawn from among the existing Chairmen of Working Parties who have proved their competence.
5. Within the limits of these principles, nationals of as many countries as possible should be included in the list of office-holders showing, if possible, a reasonable geographical balance.

OPINION No. 8

Publication of Handbooks

The VIth CCITT Plenary Assembly (Geneva, 1976),

considering

- the importance it attaches to the activities of the CCITT Special Autonomous Study Groups (GAS);
- the interest of the GAS Handbooks to Administrations, particularly in developing countries, and to recognized private operating agencies;
- the considerable workload involved in the drafting of the GAS Handbooks;

noting with concern

the high selling price of the Handbooks despite the fact that it reflects only printing and distribution costs;

recognizing

the necessity for extensive distribution of the technical information in the GAS Handbooks, which can be achieved only if the price is reasonable;

expresses the opinion

1. that the Secretary-General should study ways and means of bringing down the selling price of the GAS Handbooks to a level comparable to that of other technical publications of the same standard, and report to the 1977 Administrative Council;
2. that Administrations and recognized private operating agencies should help to promote the sale of GAS Handbooks in their countries
 - by recommending them to the various technical institutions, and
 - by giving them appropriate publicity.

OPINION No. 9

Terms of reference of the CCITT

The VIth CCITT Plenary Assembly (Geneva, 1976),

bearing in mind

1. Resolution No. 44 of the Plenipotentiary Conference of Malaga-Torremolinos (1973);
2. the study made by the Study Groups concerned, which concluded that it did not seem possible to make "amendments or additions ... to the definitions of the terms 'telegraphy' and 'telephony' ... to make unambiguous provision for new telecommunication services";

is of the opinion that

the next Plenipotentiary Conference:

should consider the following revision for the terms of reference of the CCITT at present set forth in Article 11, No. 71 of the 1973 Convention:

"71(Rev.) The duties of the International Telegraph and Telephone Consultative Committee (CCITT) shall be to study, and issue Recommendations on, technical, operating and tariff questions relating to telecommunication services, other than technical or operating questions relating specifically to radiocommunications which according to No. 70 come within the purview of the CCIR.

For this purpose, telecommunication services are considered as telecommunications which are provided by an Administration or private operating agency and intended mainly as a public correspondence service, and which are generally subject to appropriate remuneration. These services include several branches such as telephone, telegraph, data transmission, leased circuit, etc."

PART III

**LIST OF STUDY GROUPS, PLAN COMMITTEES
AND WORKING PARTIES**

LIST OF QUESTIONS AND ASSIGNMENT OF THESE QUESTIONS

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STUDY GROUPS

Designation		Title	Chairman	Vice-Chairmen
COM I	Study Group I	Telegraph operation and quality of service	Mr. K. FREIBURGHaus (Switzerland)	Mrs. B. BENTON (United Kingdom) Mr. M. ISRAEL (Canada)
COM II	Study Group II	Telephone operation and quality of service	Mr. J. BIOT (Belgium)	Mr. R.W. HUBBELL (United States of America) Mr. G. GOSZTONYI (Hungary) Mr. J.M. LAROCLETTE (France)
COM III	Study Group III	General tariff principles	Mr. M. KOJIMA (Japan)	Mr. A. PELLA (Italy) Mr. A.E. SCHWAMBERGER (United States of America)
COM IV	Study Group IV	Transmission maintenance of international lines, circuits and chains of circuits; maintenance of automatic and semi-automatic networks	Mr. J. KIIL (Denmark)	Mr. H. ANDERSSON (Sweden) Mr. J.P. CAIRE (France) Mr. H.L. MARCHESE (United States of America) Mr. G. SARACO (Italy)
COM V	Study Group V	Protection against dangers and disturbances of electromagnetic origin	Mr. G. GRATTA (Italy)	Mr. H. LORKE (Germany, Fed. Rep. of) Mr. P.O. PERSSON (Sweden)
COM VI	Study Group VI	Protection and specifications of cable sheaths and poles	Mr. J. PRITCHETT (United Kingdom)	Mr. K. NIKOLSKY (U.S.S.R.) Mr. I.O. LÉDIJU (Nigeria)
COM VII	Study Group VII	New networks for data transmission	Mr. V.C. MACDONALD (Canada)	Mr. J. CHAPMAN (United Kingdom) Mr. N.R. CRANE (Australia) Mr. M. KATO (Japan) Mr. A. TEXIER (France)

Designation		Title	Chairman	Vice-Chairmen
COM VIII	Study Group VIII	Telegraph and terminal equipment, local connecting lines	Mr. W. STAUDINGER (Germany, Fed. Rep. of)	Mr. A. DUPONT (France)
COM IX	Study Group IX	Telegraph transmission quality ; specification of equipment and rules for the maintenance of telegraph channels	Mr. R. BROWN (Australia)	Mr. B. KUBIN (Czechoslovakia)
COM X	Study Group X	Telegraph switching	Mr. E.E. DANIELS (United Kingdom)	Mr. P. DAUDE (France) Mr. M. MATSUBARA (Japan)
COM XI	Study Group XI	Telephone switching and signalling	Mr. J. RYAN (United States of America)	Mr. C.A. ADEOYE (Nigeria) Mr. P. PLEHIERS (Belgium) Mr. P. STERNENDORFF (Denmark)
COM XII	Study Group XII	Telephone transmission performance and local telephone networks	Mr. F.T. ANDREWS (United States of America)	Mr. P. LORAND (France) Mr. H. SHIMADA (Japan)
COM XIV	Study Group XIV	Facsimile telegraph transmission and equipment	Mr. M. BLANC (France)	Mr. W. WINOGRADOV (Poland)
COM XV	Study Group XV	Transmission systems	Mr. D. GAGLIARDI (Italy)	Mr. Y.L. AGARWAL (India) Mr. W. MAJEWSKI (Poland) Mr. H. SOULIER (France)
COM XVI	Study Group XVI	Telephone circuits	Mr. S. MUNDAY (United Kingdom)	Mr. R.G. KITCHENN (Australia) Mr. G. LAJTHA (Hungary) Mr. N. NACHFOLGER (Canada)
COM XVII	Study Group XVII (former Special A)	Data transmission	Mr. V.N. VAUGHAN (United States of America)	Mr. V. D'ANDREA (Italy) Mr. D.O. HUNT (United Kingdom) Mr. K. KERN (Germany, Fed. Rep. of)

Designation		Title	Chairman	Vice-Chairmen
COM XVIII	Study Group XVIII (former Special D)	Digital networks	Mr. T. IRMER (Germany, Fed. Rep. of)	Mr. M. DECINA (Italy) Mr. H.K. PFYFFER (Switzerland) Mr. H. RAAG (United States of America) Mr. H.S. WRAGGE (Australia)
CMBD	CCITT/CCIR Joint Study Group (formerly Special C)	Circuit noise and availability	Mr. A.P. BOLLE (Netherlands)	Mr. N. OHYAMA (Japan)*
CMTT	CCIR/CCITT Joint Study Group	Television and sound transmission	Mr. Y. ANGEL (France) CCIR	Mr. W.G. SIMPSON (United Kingdom) CCITT
CMV	CCIR/CCITT Joint Study Group for Vocabulary	Definitions and symbols	Mr. R. VILLENEUVE (France) CCIR	Mr. M. DUCOMMUN (Switzerland) CCITT Mr. B.A. DURAN (Spain) CCIR

* Provisional appointment pending the XIVth CCIR Plenary Assembly.

PLAN COMMITTEES
(CCITT/CCIR Joint Committees administered by the CCITT)

Designation		Title	Chairman	Vice-Chairmen
WORLD PLAN	World Plan Committee	Worldwide telecommunication Plan	Mr. M. GHAZAL (Lebanon)	Mr. Ch. MOREIRA (Brazil) Mr. A. MISINO (Italy) Mr. S. NOVIKOV (USSR)
PLAN AFRICA	Plan Committee for Africa	Telecommunication Plan for Africa	Mr. L. DIA (Senegal)	Mr. KAMDEM-KAMGA (Cameroon) Mr. P. OKUNDI (Uganda)
PLAN LATIN AMERICA	Plan Committee for Latin America	Telecommunication Plan for Latin America	Mr. A.C. NUÑEZ-A (Mexico)	Mr. R.G.P. SEVERINI (Argentina)
PLAN ASIA	Plan Committee for Asia and Oceania	Telecommunication Plan for Asia	Mr. A. ZAIDAN (Saudi Arabia)	Mr. M. HERISCHI (Iran) Mr. N. MORISHIMA (Japan)
PLAN EUROPE	Plan Committee for Europe and the Mediterranean Basin	Telecommunication Plan for Europe and the Mediterranean Basin	Mr. L. TEROL MILLER (Spain)	Mr. M. LACOUT (France) Mr. L. NADOR (Hungary)

JOINT WORKING PARTIES

Designation	Title	Study Groups concerned*	Chairman	Vice-Chairmen
GM LTG	Use of telephone-type lines for purposes other than telephony	<u>IX</u> , XIV, <u>XV</u> , XVII, CMBD	Mr. L. GUILLET (France)	Mr. M. MULDER (Netherlands)
GM SMM	Maritime mobile service	<u>I</u> , II, III	Mr. K.J.M. JASPERS (Netherlands)	Mr. S. BUTLER (Liberia) Mr. G. WEGENER (Germany, Fed. Rep. of)
GM UMI	International Monetary Unit	<u>III</u>	Mr. D. TUDGE (United Kingdom)	Mr. R. MORDINI (Italy)

* The controlling Study Group is underlined.

SPECIAL AUTONOMOUS WORKING PARTIES

Designation	Title	Chairman	Vice-Chairmen
GAS 3	Economic and technical aspects of the choice of transmission systems	Mr. G. WALLENSTEIN (United States of America)	Mr. J.J. HERNANDEZ-G. (Mexico) Mr. T. SAKASHITA (Japan) Mr. M. WAKRIM (Morocco)
GAS 5	Economic conditions and telecommunication development	Mr. H. LONGQUEUE (France)	Mr. N.K. BECH (Denmark) Mr. F. M'GAYA (Tanzania)
GAS 6	Economic and technical aspects of the choice of switching systems	Mr. L. ACKZELL (Sweden)	Miss B.H. SHANTA PAI (India) Mr. ABDELNADER (Lebanon) Mr. A. LAZARO (Venezuela) Mr. S. M'BAYE (Senegal)

REGIONAL TARIFF GROUPS OF COMMITTEE III

Designation	Title	Chairman	Vice-Chairmen
GR TAF	Tariffs (Africa)	Mr. A.D. AITHNARD (Togo)	Mr. T. KILILI (Kenya) Mr. M. KOMOU (Mali)
GR TAL	Tariffs (Latin America)	Mr. A.C.G. RIBAS (Brazil)	Mr. V. ZAPATTINI (Paraguay)
GR TAS	Tariffs (Asia and Oceania)	Mr. F. MAGALLON (Philippines)	Mr. S.K. ROY (India)
GR TEUREM	Tariffs (Europe and the Mediterranean Basin)	Mr. W. JOST (Switzerland)	Mr. J. DUNIN (Poland)

**LIST OF QUESTIONS TO BE STUDIED
DURING THE STUDY PERIOD 1977-1980
AND THEIR ALLOCATION TO STUDY GROUPS
AND JOINT WORKING PARTIES**

General ⁴⁾

A Question is considered urgent if special steps have to be taken to enable its study to be completed before the next Plenary Assembly. These Questions are marked with an asterisk (*).

STUDY GROUP I

Question	Short title
4/I	Revision of the Series F Recommendations relating to the telegram service except the provisions on charging and accounting
7/I	Interconnection of maritime satellite communication services and other mobile services with the international telex network
8/I	Text communication service
11/I	Introduction of facsimile services
12/I	New services and facilities for telex and other 50-baud telegraph services
13/I	Standardization of keyboard facilities
14/I	Revision of the Series F Recommendations relating to the telex service except the provisions on charging and accounting
15/I	Review of the telex destination code plan
16/I	Future developments in the maritime services
17/I	Revision of draft Recommendations F.110 and F.111
18/I	Revision of the Series F Recommendations relating to phototelegraph services except the provisions on charging and accounting
30/I	Joint use of the public telegram and telex services

⁴⁾ See paragraph I, General (points 1 to 10) of the Report E.3 by Committee B.

STUDY GROUP II

Question	Short title
1/II	Application of the <i>Instructions for the international telephone service</i> and any amendments required
2/II	Use of computers to supply information requested on foreign numbers of telephone subscribers
3/II	Credit card usage in the telephone service
4/II	Customer performance in fully automatic working in the worldwide telephone network
5/II	Standardization of symbols and other aspects of subscriber equipment to meet human factor needs
6/II	Instructions for users of the worldwide telephone network
7/II	Standardization of subscriber control procedures for supplementary telephone services
8/II	Revision of Recommendation E.402 relating to the <i>List of international telephone routes</i>
9/II	Future developments in the maritime service (Question to be studied by Joint Working Party SMM)
10/II	Revision of draft Recommendations E.190/F.110 and E.260/F.111 relating to the maritime mobile service (Question to be studied by Joint Working Party SMM)
11/II	Interconnection of the different international mobile telephone services – mainly of the maritime mobile service – and the international telephone network
12/II	The international telephone numbering plan
13/II	Review of the World Routing Plan
14/II	Standardization of tones
15/II	Observations on the quality of the international service
16/II	Procedures for traffic measurement and computation
17/II	Grade of service objective in case of failure in an international trunk group
18/II	Criteria for the application of network management actions
19/II	Rejection rate in originating international switching centres
20/II	Grades of service in analogue/digital international telephone exchanges

QUESTIONS

STUDY GROUP III

Question	Short title
1/III	Amendments and additions to Recommendation D.1
2/III	Amendments and additions to Recommendation D.2
3/III	Amendments and additions to Recommendation D.3
4/III	Leased sound- and television-programme circuits
5/III	Establishment of tariff principles for leased circuit data transmission services
6/III	Establishment of tariff principles for data transmission on public networks dedicated to this type of transmission
7/III	Tariffs in the public telegram service. Study of tariff systems for telegrams
8/III	Review and amendment as necessary of the accounting and associated procedures for international telephone traffic accounting, their mode of application and processing.
9/III	Revision of the Series F Recommendations relating to the telex service – provisions on charging and accounting
10/III	Revision of the Series F Recommendations relating to the telegram service – provisions on charging and accounting
11/III	Revision of the Series F Recommendations relating to the phototelegraph services – provisions on charging and accounting
12/III	Tariff structures to be applied to the facsimile services
13/III	Tariff provisions applicable to new services and facilities for telex and other 50-baud telegraph services
14/III	Charging and accounting for the interconnection of maritime satellite communication services with the international telex network
15/III	Review of operational and charging provisions for sound- and television-programme transmissions set forth in Recommendation E.330
16/III	Future developments in the maritime services (Question to be studied by Joint Working Party SMM)
17/III	Revision of draft Recommendations E.190/F.110 and E.260/F.111 relating to the maritime mobile service (Question to be studied by Joint Working Party SMM)
18/III	Fixing of basic components of tariffs for the telephone, telex and telegraph services (study to be conducted on a regional basis by the Regional Tariff Groups)
19/III	Cost study for determining the basic tariff components for: – sound- and television-programme transmissions – leased sound- and television-programme circuits (study to be conducted on a regional basis by the Regional Tariff Groups)

STUDY GROUP IV

Question	Short title
1/IV	Stability of the international network
2/IV	Short breaks in transmission
3/IV	Phase jitter
4/IV	Analogue circuit impairments and their effect on data transmission
5/IV	Maintenance of groups, supergroups, etc.
6/IV	Maintenance methods for common channel signalling systems
7/IV	Keeping Volume IV of the CCITT Book up to date
8/IV	Limits of impulsive noise for the sections of an international leased circuit
9/IV	Re-establishing service with the help of wideband switching
10/IV	Measuring instrument specifications
11/IV	Automatic transmission measuring equipment
12/IV	Maintenance methods and maintenance equipment for sound-programme circuits
13/IV	Maintenance and test equipment for television transmission
14/IV	General maintenance organization
15/IV	Facilities for maintenance
16/IV	Maintenance instructions for new systems specified by the CCITT
17/IV	Effect on maintenance of the introduction of new components and of modern equipment design
18/IV	Maintenance of telephone-type circuits
19/IV	Maintenance of sound-programme circuits
20/IV	Maintenance of television circuits
21/IV	Measurements on switched connections
22/IV	Availability of international circuits
23/IV	Automatic test calls for assessing the performance of the network
24/IV	Network maintenance information

STUDY GROUP V

Question	Short title
1/V	Protective devices
2/V	Devices reducing the voltage of wires with respect to earth
3/V	Problems posed by the arrangement of protective devices on telecommunication circuits subject to high induced voltages
4/V	Screening effect of metallic-sheathed cables with a plastic covering
5/V	Protection of telecommunication equipment against overvoltage due to lightning or induction from electricity lines
6/V	Coordinated protection schemes for telecommunication cables
8/V	High-reliability power-line fault statistics
9/V	Joint use of trenches, pipes, etc. by telecommunication lines and electricity lines
10/V	Booster transformers and auto transformers
12/V	Electric shocks affecting telephone sets
13/V	Unbalance of telephone installations
15/V	Reduction of harmonics in special cases
17/V	D.C. power lines at high voltage
19/V	Effect of radio station emissions on telecommunication circuits
21/V	Tests to be carried out on power-fed transistorized repeaters to check the efficiency of the protection from external interference
22/V	Protection of telecommunication lines and equipment against lightning discharges
24/V	Problems of earthing in telecommunication systems
25/V	Examination of the existing permissible induced voltage limits and possible amendments to the Directives
26/V	Revision of the Directives

STUDY GROUP VI

Question	Short title
1/VI	Aluminium cable sheaths. Protective coverings for these sheaths
2/VI	Protection against corrosion of aluminium conductors and joints
3/VI	Use of plastic materials as protective coverings for metal cable sheaths
4/VI	Cable sheaths made of plastics
5/VI	Attacks on plastic or metal cable sheaths by insects, rodents or micro-organisms. Protection against these attacks
6/VI	Cables with plastic-insulated conductors
7/VI	Methods for making conductor joints
8/VI	Corrosion and corrosion protection of waveguide communication lines
9/VI	Coordinated protection schemes for telecommunication cables
10/VI	Termination of cable conductors
11/VI	Amendments and additions to the <i>Recommendations concerning the construction, installation and protection of telecommunication cables in public networks</i>
12/VI	Amendments and additions to the booklet <i>The protection of telecommunication cables by pressurization</i>
13/VI	Corrosion due to direct-current exchange with nearby electrode systems
14/VI	Requirements when conventional armouring is not used

QUESTIONS

STUDY GROUP VII

Question	Short title
1/VII	Standardization of user classes of service for public data networks
2/VII	Standardization of user facilities
3/VII	Call set-up and clear-down time
4/VII	What numbering plan should be adopted for public data networks?
5/VII	Grade of service
6/VII	Use of data networks in the international telex service
7/VII	Standardization of signalling for international connections between anisochronous public data networks
8/VII	Standardization of decentralized control signalling for international connections between synchronous public data networks
9/VII	Standardization of the data user part of the common channel signalling system
10/VII	The provision of features in the DTE-DCE interface for fault identification and isolation
11/VII	The connection to public data networks of DTEs which are designed for interfacing existing V series modems
12/VII	Specification of common channel signalling requirement for telex and genrex
13/VII	DTE-DCE basic interface in public data networks
14/VII	Further study of current recommendations for DTE-DCE interfaces in public data networks
15/VII	Definition of terms arising during the study of public data networks
16/VII	Quality of service in public data networks
17/VII	Maintenance of public data networks
18/VII	Standardization of signalling for interworking for data service between different types of public data networks and between public data networks and other public networks
19/VII	Digital switching for data (user signalling rates of 48 kbit/s and below)
20/VII	For DTEs connected to public data networks the methods of responding to incoming calls
21/VII	Standardization of the inter-network interface for interworking between a DTE on a public data network and a DTE on another public network
22/VII	Network parameters
23/VII	Call progress signals
24/VII	Interworking of networks offering packet switched data transmission service
25/VII	Further study of packet mode operation on public data networks
26/VII	Multiplex structure for international links between synchronous networks
27/VII	Timing and synchronization
28/VII	Provision of user classes of service 1 and 2 in public data networks
29/VII	Use of 64 kbit/s time slots to carry single lower-speed network-synchronous data channels
30/VII	Representation of information at the DTE-DCE interface for call control purposes
31/VII	Interchange circuits
32/VII	Bit sequence independence of 64 kbit/s digital paths
33/VII	Mutual influence and alignment of Series X Recommendations
34/VII	Subscribers' service in public data networks

STUDY GROUP VIII

Question	Short title
1/VIII	Sequences of combinations
2/VIII	Telex terminals with both printing and visual display facilities
3/VIII	The "not-ready" condition in telex terminal equipment
4/VIII	Automated calling and clearing for teleprinters
5/VIII	Standardization of keyboard facilities for telex terminals
6/VIII	Formatting of telex messages
7/VIII	Speed and code conversion
8/VIII	Text communication service
9/VIII	Standardization of data terminal equipment
10/VIII*	Automatic originating and answering of calls in the telex network

STUDY GROUP IX

Question	Short title
2/IX	Reduction of transmission levels in frequency-modulated voice-frequency telegraph systems
3/IX	Reliability of telegraph transmission
4/IX	Routing of FMVFT systems on PCM telephone-type circuits
6/IX	Transmission plans
7/IX	Revision of Recommendations
8/IX	Revision of the maintenance organization for international telegraph circuits and networks
9/IX	Maritime telegraph transmission standards
10/IX	Automatic identification and removal of faulty telegraph-type international circuits from service
11/IX	Definitions concerning telegraph transmission quality
13/IX	A new short test message
15/IX	Low-level telegraph transmission on subscriber lines
22/IX	Automatic maintenance tests of telegraph circuits
24/IX*	Code and speed dependent TDM systems
28/IX	Sudden phase changes
31/IX*	Code and speed independent TDM systems

QUESTIONS

STUDY GROUP X

Question	Short title
1/X*	Automatic originating and answering of calls in the telex network
2/X	Further standardization of telex and gentex signalling in accordance with Recommendation U.1 (type A and type B) and Recommendation U.20
3/X*	Terminal and transit control signalling system for telex and similar services in accordance with Recommendation U.12 (type D)
4/X	Interconnection of maritime satellite communication services and other mobile services with the international telex network
5/X*	New services and facilities for telex
6/X	Use of data networks in the international telex service
7/X	Revision of Recommendations
9/X	Revision of the maintenance organization for international telegraph circuits and networks
10/X	Signal transfer delay in the telex network
12/X	Automatic identification and removal of faulty telegraph-type international circuits from service
13/X	Integration of the telex and gentex networks with other networks that use common channel signalling

STUDY GROUP XI

Question	Short title
1/XI	Digital switching for telephony (64 kbit/s)
2/XI	Common channel signalling system for integrated digital networks. Message Transfer Part
3/XI	Common channel signalling system for digital telephony application
4/XI	Interworking with mobile telephone systems
5/XI	Interworking of signalling systems
6/XI	Satellite signalling systems
7/XI	Specification and description language for SPC telephone exchanges
8/XI	High-level programming language for SPC telephone exchanges
9/XI	Man/machine language for SPC telephone exchanges
10/XI	Automatic switching equipment for use in national networks
11/XI	Maintenance methods for common channel signalling systems
12/XI	Definitions for switching and signalling in telephony
13/XI	Updating of Series Q Recommendations

STUDY GROUP XII

Question	Short title
1/XII	Reference equivalents of national systems in the international transmission plan
2/XII	Assessment of service transmission quality
3/XII	Loudness ratings of operators' telephone systems and headsets
4/XII	Effect of circuit noise on transmission
5/XII	Noise clauses for telephony
6/XII	Subscribers' tolerance of echo and propagation time
7/XII	Models for predicting transmission qualities from objective measurements
8/XII	Measuring the efficiency of a microphone or a receiver
9/XII	Sidetone
10/XII	Increase in the sensitivity of local systems
11/XII	Limits of intelligible crosstalk
12/XII	Artificial voices, mouths and ears
13/XII	Non-linear distortion of telephone apparatus
14/XII	Effect of attenuation distortion on transmission performance
15/XII	Measurements of loudness ratings
16/XII	Return loss variations in subscriber lines and telephone sets
17/XII	Loudspeaker telephones
18/XII	Transmission performance of digital systems
19/XII	Recommended values of loudness ratings
20/XII	Devices for protection against acoustic shocks
21/XII	Efficiency of telephone kiosks and booths

Note. – There is a strong interest of Study Group XVI in Study Group XII's work ; Study Group XII is therefore requested to keep Study Group XVI continuously informed of the progress made.

QUESTIONS

STUDY GROUP XIV

Question	Short title
1/XIV	Definitions for facsimile telegraphy
2/XIV	Digital facsimile equipment
3/XIV	Analogue facsimile equipment
4/XIV	Standardized test chart(s) for facsimile transmissions
5/XIV	Permissible power levels in facsimile transmission over telephone-type circuits
6/XIV	Studies concerning reliability objectives for facsimile telegraphy
7/XIV	Use of the public networks for facsimile telegraphy
8/XIV	Revision of the existing T Series Recommendations
9/XIV	Technical implications of new facsimile services under study by Study Group I

STUDY GROUP XV

Question	Short title
1/XV	Characteristics of equipment and lines providing 15 kHz-type circuits for monophonic and stereophonic sound-programme transmission
2/XV	Limiting values for group-delay distortion of group and supergroup modulating equipment and through-group and supergroup filters
3/XV	Setting-up of 5 kHz-type sound-programme circuits
4/XV	Visual telephone service
5/XV	Automatic identification and removal from service of faulty circuit in the international network
6/XV	Intelligible crosstalk on international circuits
7/XV	Battery power supply
8/XV	Interconnection of sound-programme circuits in the basic group
9/XV	Crosstalk from a sound-programme circuit into a telephone circuit
10/XV	Echo suppressor improvements, new methods of controlling echoes and new methods of testing
11/XV	Unwanted modulation and jitter of signals
12/XV	Interfering frequencies on telephone channels and wideband group, supergroup, etc. circuits
13/XV	Target design values for noise in terminal equipments
14/XV	Limiting values for the group delay distortion for a pair of channel transmitting and receiving equipments of one terminal equipment
15/XV	Line regulators, group regulators, etc.
16/XV	10 800 channels on 2.6/9.5 mm coaxial pairs
17/XV	New 2.6/9.5 mm coaxial pair designs
18/XV	Cables for systems with more than 10 800 channels
19/XV	Analogue systems with more than 10 800 channels
20/XV	Television transmission on 60 MHz systems
21/XV	Use of quinary group
22/XV	Analogue systems with more than 10 800 channels on 2.6/9.5 mm coaxial pairs
23/XV	Analogue systems with more than 2700 channels on recommended coaxial pairs
24/XV	Return loss of analogue transmission equipment
25/XV	Unification of the characteristics of telephone-type circuits used for transmission (telegraphy, facsimile, data, etc.)
26/XV	Unification of certain characteristics of signals transmitted over telephone-type circuits
27/XV	Signal power over the band of a telephone-type circuit
28/XV	Characteristics of group or supergroup lines for the transmission of wide-spectrum signals
29/XV	Characteristics of wide-spectrum signals to be transmitted over group or supergroup circuits
30/XV	Equipment of high-capacity submarine cable systems
31/XV	Submarine cables and systems
32/XV	Definition of the reliability of a transmission system and objectives

QUESTIONS

STUDY GROUP XV (continued)

Question	Short title
33/XV	Reliability of transmission systems
34/XV	Return loss at the input and output of modulators
35/XV	Cable characteristics for digital transmission
36/XV	Digital line sections on FDM links
37/XV	Physical characteristics of millimetric waveguides
38/XV	Physical characteristics of optical fibres cables

STUDY GROUP XVI

Question	Short title
1/XVI	Transmission characteristics of circuits and connections in the switched telephone network
2/XVI	Characteristics of leased circuits
3/XVI	Statistical evaluation of the transmission performance of the switched telephone network from the point of view of customers' opinions
4/XVI	Transmission aspects of unbalance about earth
5/XVI	Impairment clauses for networks and circuits
6/XVI	Transmission aspects of telephone conference calls
7/XVI	Revision of the <i>Manual of Switched Telephone Networks</i>
8/XVI	Noise clauses for telephony
9/XVI	Return loss of PCM channel equipment
10/XVI	Incorporation of digital encoding processes in the worldwide telephone network
11/XVI	Recommended values of loudness ratings
12/XVI	Transmission aspects of the mobile maritime satellite service
13/XVI	Echo, propagation time and stability in telephone connections

STUDY GROUP XVII

Question	Short title
1/XVII	Supplement to the vocabulary for data transmission
2/XVII	Measurements on telephone-type circuits used for data transmission systems between subscribers
3/XVII*	Modems for data signalling rates at and above 2400 bit/s on the general switched telephone network
4/XVII*	Modems for data signalling rates at and above 2400 bit/s on telephone-type leased circuits
5/XVII	Further study of parallel data transmission for universal use on telephone circuits
6/XVII	Study of parallel data transmission systems using the push-button telephone signalling frequencies
7/XVII	Error control methods
8/XVII	Specification of characteristics of circuits leased for data transmission; measuring techniques to check these characteristics
9/XVII	Maintenance methods
10/XVII	Data transmission over 48 kHz, 240 kHz and wider bandwidth circuits
11/XVII	Use of digital transmission facilities
12/XVII	Comparative tests of modems for use over telephone-type circuits
13/XVII*	Interchange circuits
14/XVII	Further study of modems for transmission of medical and biological analogue data
15/XVII	Transmission of data over intercontinental telephone-type circuits
16/XVII*	Duplex modems
17/XVII	Tests for modems on wideband circuits
18/XVII	Revision of the existing V Series Recommendations
19/XVII*	Power levels for data transmission over telephone-type circuits
20/XVII	Data network interworking requirements
21/XVII	Data communication equipment for local subscriber lines

QUESTIONS

STUDY GROUP XVIII

Question	Short title
1/XVIII	Overall aspects of integrated digital networks and integration of services
2/XVIII	Switching and signalling in the ISDN
3/XVIII	Synchronization of digital networks
4/XVIII	Maintenance and operation of the digital networks
5/XVIII	Reliability and availability of digital networks
6/XVIII	Interfaces in digital networks
7/XVIII	Definitions for digital networks
8/XVIII	PCM and digital multiplexing for telephony and other signals
9/XVIII	Analogue-to-digital conversion for telephony and other signals
10/XVIII	Other methods of encoding than PCM
11/XVIII	System characteristics for digital line sections on cable
12/XVIII	System characteristics of digital line sections on millimetric waveguides
13/XVIII	Characteristics for digital line sections on optical fibres cables
14/XVIII	Interworking between PCM multiplexes based on different standards
15/XVIII	Interference to digital system
16/XVIII	Transmultiplexer equipment
17/XVIII	Performance requirement for digital echo suppressors
18/XVIII	Bit sequence independence of 64 kbit/s digital paths

Note. – Study Group XVIII (Digital networks) is responsible, *inter alia*, for coordination of the studies of a number of Study Groups concerned with specialized aspects of digital networks, including integrated digital networks dedicated to particular services. This coordination is necessary to ensure that the approaches of all Study Groups, in particular Study Groups IV, VII, XI, XVII and GAS 6, to the digital network are compatible.

A number of the Questions hereafter assigned to Study Group XVIII unavoidably, at this time, include issues, the detailed study of which will best be undertaken by the specialist groups. A part of the Study Group XVIII coordinating role in respect of such Questions is the identification and definition of the derived Questions needing urgent study by other groups.

For as long as Questions are of joint interest to two or more Study Groups, it is for each Administration to ensure coordination at the national level between experts in the various fields concerned, so that its contributions to the Questions examined by Study Group XVIII will reflect the opinion of the Administration as a whole.

JOINT CCITT/CCIR STUDY GROUP CMBD

Question	Short title
1/CMBD	Loading of carrier systems
2/CMBD ¹	General studies concerning reliability and availability
3/CMBD	Measurement of the usable power margin of wideband amplifiers and transmission systems
4/CMBD	Noise clauses
5/CMBD	Characteristics of an impulsive-noise measuring instrument for wideband data transmission
6/CMBD	Availability and reliability of local networks
7/CMBD	Hypothetical reference circuits and associated noise objectives

¹ In order to facilitate the broad study, which is the subject of this Question, Joint Study Group CMBD will act as a central agency and coordinate with other groups to gather the information necessary to establish the above objectives.

Reliability rapporteurs will be appointed, each of whom must be familiar with the work of one of the concerned Study Groups:

- CCITT Study Groups I, II, IV, VII, IX, X, XI, XIV, XV, XVII and XVIII,
- CCIR Study Groups 4 and 9, and the CMTT.

These rapporteurs should work mainly by correspondence and take part (as far as reliability problems are concerned) in the work of Joint Study Group CMBD. They should be appointed on the proposal of the Chairman of the Study Groups concerned at the beginning of the 1977-1980 period.

The rapporteurs for reliability should attend the meetings of the Working Party on Questions 2/CMBD and 6/CMBD. It would also be desirable if they attended that portion of the meetings of Joint Study Group CMBD that covers Questions 2/CMBD and 6/CMBD.

JOINT WORKING PARTY LTG

Question	Short title
25/XV	Unification of the characteristics of telephone-type circuits and for transmission (telegraphy, facsimile, data, etc.)
26/XV	Unification of certain characteristics of signals transmitted over telephone-type circuits
27/XV	Signal power over the band on a telephone-type circuit
28/XV	Characteristics of group or supergroup links for the transmission of wide-spectrum signals
29/XV	Characteristics of wide-spectrum signals to be transmitted over group or supergroup circuits

JOINT WORKING PARTY SMM

Question	Short title
16/I - 9/II - 16/III	Future developments in the maritime services
17/I - 10/II - 17/III	Revision of draft Recommendations F.110/E.190 and F.111/E.260

JOINT WORKING PARTY UMI

Monetary unit to be applied in international telecommunication relations.

SPECIAL AUTONOMOUS STUDY GROUP 3 (GAS 3)

Preparation of Handbooks on rural telecommunications and network planning, revision of Handbook on transmission systems.

SPECIAL AUTONOMOUS STUDY GROUP 5 (GAS 5)

Subject No.	Short title
1	Special aspects of telecommunication development in isolated and underprivileged areas of countries
2	Methods used in long-term forecasting of domestic telecommunication demand and required resources (overall and by main sector)
3	Market factors affecting telecommunication demand
4	Procedure for establishing a budget model for a telecommunication undertaking based on the classification plan for accounts described in Chapter 4 of the second volume of the GAS 5 handbook
5	Review and possible improvement of the data contained in the <i>Yearbook of Common Carrier Telecommunication Statistics</i>
6	Conditions required for the establishment of a national industry for the manufacture of switching equipment

SPECIAL AUTONOMOUS STUDY GROUP 6 (GAS 6)

Preparation of a Handbook on economic and technical aspects of the choice of switching systems.

PART IV

SERIES A RECOMMENDATIONS

Organization of the work of the CCITT

SERIES B RECOMMENDATIONS

Means of expression

SERIES C RECOMMENDATIONS

General telecommunication statistics

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SERIES A RECOMMENDATIONS

Organization of the work of the CCITT

(See also Resolutions)

<i>Recommendation No.</i>	<i>Title</i>
A.10	Collaboration on definitions for telecommunications between CCITT Study Groups and cooperation with the CMV
A.12	Collaboration with the International Electrotechnical Commission on the subject of definitions for telecommunications
A.13	Preparation of a list of graphical symbols for diagrams and rules for the preparation of diagrams, charts and tables and for item designation, in telecommunications
A.14	Publication of definitions
A.20	Collaboration with other international organizations over data transmission

Recommendation A.10

COLLABORATION ON DEFINITIONS FOR TELECOMMUNICATIONS BETWEEN CCITT STUDY GROUPS AND COOPERATION WITH THE CMV

(New Delhi, 1960, and Geneva, 1964; amended at Geneva, 1972)

The CCITT,

considering that

if a Study Group of the CCITT should become aware of the necessity for a new definition, the form of the definition and the associated terms in various languages should be standardized as soon as possible, and in conjunction with other CCITT Study Groups in order that it can be ensured that there is no conflict with existing terms and definitions,

considering also

the decision of the Vth Plenary Assembly of the CCITT to cooperate in a Joint CCIR/CCITT Vocabulary Committee (CMV) to be managed by the CCIR and having the following mandate:

- to study, in collaboration with the Study Groups of CCIR and CCITT, technical terminology and related subjects (graphical and letter symbols and other means of expression, systematic classification, units of measurement, etc.) in order to meet the needs of these Study Groups and to make the best possible use of the joint cooperation groups established between the CCIs and the corresponding technical committees of the International Electrotechnical Commission (e.g. Technical Committee No. 1 for terminology and Technical Committee No. 3 for graphical symbols) (see Recommendations A.12 and A.13);

unanimously recommends

that "vocabulary" Working Parties of the Study Groups of the CCITT should be formed as necessary, the results of their work being communicated directly to other CCITT Study Groups concerned, and to the Joint CCIR/CCITT Vocabulary Committee (CMV);

that the rapporteurs of the CCITT Vocabulary Working Parties should represent the CCITT at the Joint Study Group CMV.

Recommendation A.12

COLLABORATION WITH THE INTERNATIONAL ELECTROTECHNICAL COMMISSION ON THE SUBJECT OF DEFINITIONS FOR TELECOMMUNICATIONS

(Geneva, 1964; amended at Mar del Plata, 1968, and Geneva, 1972)

The CCITT

unanimously recommends

that in order to provide an internationally agreed vocabulary of telecommunications, the CCITT should cooperate with the CCIR and the International Electrotechnical Commission for the purpose of preparing those sections concerned with telecommunications in a new edition of the International Electrotechnical Vocabulary.

It is understood that for this purpose there shall be established:

- a joint coordination group composed of members of the IEC and of the ITU;
- a number of groups of technical experts to be set up by the joint coordination group to prepare the drafts of the various sections of the *Telecommunications vocabulary*.

It is furthermore understood that the joint coordination group will be composed of twelve members and that the ITU (itself represented by equal numbers of members of the CCIR and CCITT) will be represented on an equal footing with the IEC. In the joint coordination group:

- the Chairman will be chosen from among members of the ITU (CCITT and CCIR);
- the Secretary will be chosen from among members of the IEC which will also provide the Secretariat.

Recommendation A.13

PREPARATION OF A LIST OF GRAPHICAL SYMBOLS FOR DIAGRAMS AND RULES FOR THE PREPARATION OF DIAGRAMS, CHARTS AND TABLES AND FOR ITEM DESIGNATION, IN TELECOMMUNICATIONS

*(New Delhi, 1960; amended at Geneva, 1964, Mar del Plata, 1968
and Geneva, 1972)*

The CCITT

unanimously recommends

that the CCITT should continue to cooperate in the work of the CCITT/CCIR/IEC Joint Working Group which has been set up to prepare, for international telecommunications:

- an approved list of graphical symbols for diagrams;
- approved rules for the preparation of diagrams, charts and tables and for item designation;

it being understood that

within the Joint Working Group, the ITU (itself represented by equal numbers of members from the CCIR and CCITT) is represented on an equal footing with the IEC;

the Joint Working Group, while being fully representative, is as small as possible to be able to work effectively and quickly;

CCITT members of the Joint Working Group are empowered to take decisions on questions relating to symbols and the rules referred to above (referring to the CCITT Study Groups in cases of extreme difficulty), so that the publication of an approved list does not have to await formal approval by the following Plenary Assembly of the CCITT.

Recommendation A.14

PUBLICATION OF DEFINITIONS

(Mar del Plata, 1968; amended at Geneva, 1972)

The CCITT,

considering

that revision and re-edition of a complete list of definitions cannot be done very frequently, in view of the volume of work involved;

that rapid developments in telecommunications lead to constant change in the terms used and that it is desirable to publish approved terms and definitions with the minimum possible delay, even though these terms and definitions have not been examined to see how they fit into the complete system of terms and definitions for telecommunications;

unanimously recommends

that after each Plenary Assembly the CCITT Secretariat should assemble all the terms and definitions, proposed by each Study Group and approved by the Plenary Assembly, and should publish these in the appropriate Volume(s) of the CCITT.

The terms and definitions shall be given only in the languages of the CCITT Book.

Recommendation A.20

COLLABORATION WITH OTHER INTERNATIONAL ORGANIZATIONS OVER DATA TRANSMISSION

(Geneva, 1964; revised at Mar del Plata, 1968, and at Geneva, 1972)

The CCITT,

considering

that, according to Article 1 of the agreement between the United Nations and the International Telecommunication Union, the United Nations recognizes the International Telecommunication Union as the specialized agency responsible for taking such action as may be appropriate under its basic instrument for the accomplishment of the purposes set forth therein;

that Article 4 of the International Telecommunication Convention (Montreux, 1965) states that the purposes of the Union are:

- a) to maintain and extend international cooperation for the improvement and rational use of telecommunication of all kinds;
- b) to promote the development of technical facilities and their most efficient operation with a view to improving the efficiency of telecommunication services, increasing their usefulness and making them, as far as possible, generally available to the public;

that Article 30 of the Convention states that, in furtherance of complete international cooperation on matters affecting telecommunication, the Union shall cooperate with international organizations having related interests and activities;

that in the study of data transmission the CCITT has to collaborate with the organization dealing with data processing and particularly the International Organization for Standardization (ISO) and the International Electrotechnical Commission (IEC);

that this collaboration has to be organized in a manner which will avoid duplication of work and decisions that would be contrary to the principles set out above,

unanimously declares the view

that international standards for data transmission should be established with the following considerations in mind:

1. Clearly, it will be the responsibility of the CCITT to lay down standards for *transmission channels*, i.e. aspects of data transmission which require a knowledge of telecommunication networks or affect performance of these networks.

2. The standardization of signal conversion terminal equipment (modems) is the province of the CCITT, the standardization of the junction (interface) between modem and the data terminal equipment is a matter for agreement between the CCITT and the ISO or the IEC.

3. Devices designed to detect and/or correct errors must take account of:

- the error rate tolerable to the user;
- the line transmission conditions;
- the code, which has to meet the exigencies of the data alphabet and the requirements of error-control (this must be such as to give an output satisfactory to the user) together with the requisite signalling (synchronism, repetition, signals, etc.).

Standardization here may not come wholly within the CCITT's province, but the CCITT has very considerable interests at stake.

4. The alphabet (definition 52.02 in the *List of definitions*) is a "table of correspondence between an agreed set of characters and the signals which represent them".

The CCITT and the ISO reached agreement on an alphabet for general (but not exclusive) use for data and message transmission and have standardized a common alphabet which is known as International Alphabet No. 5 (CCITT Recommendation V.3) (ISO/646-1972: seven-bit coded character sets for information processing interchange).

Complementary study of some control characters of the alphabet should be effected in cooperation with each other.

5. Coding (definition 52.05 in the *List of definitions*) is "a system of rules and conventions according to which the telegraph signals forming a message or the data signals forming a block should be formed, transmitted, received and processed." Hence, it consists of a transformation of the format of the signals in the alphabet for taking account of synchronous methods, and introduction of redundancy in accordance with the error-control system. This is not a field in which the CCITT alone may be able to decide; however, no decision should be taken without reference to the Committee because of the possible restrictions which transmission and switching peculiarities may impose on coding.

When the general switched network is used (telephone or telex) and when the error-control devices are subject to restrictions (switching signals — reserved sequences), it is the CCITT which is in fact responsible for any necessary standardization in conjunction with other bodies.

6. The limits to be observed for transmission performance on the transmission path (modem included) fall within the competence of the CCITT; the limits for the transmission performance of the sending equipment and the margin of terminal data equipment (depending on the terminal apparatus and the transmission path limits) should be fixed by agreement between the ISO and the CCITT.

7. In all instances, the CCITT alone can lay down manual and automatic operating procedures for the setting-up, holding and clearing of calls for data communications when the general switched network is used, including type and form of signals to be interchanged at the interface between data-terminal equipment and data circuit-terminating equipment.

SERIES B RECOMMENDATIONS

Means of expression

<i>Recommendation No.</i>	<i>Short title</i>
B.1	Letter symbols for telecommunications
B.3	Use of the international system of units
B.4	Transmission units
B.10	Lists of graphical symbols for diagrams and rules for the preparation of diagrams, charts and tables for telecommunications

Recommendation B.1

LETTER SYMBOLS FOR TELECOMMUNICATIONS

(former Recommendations B.1 and B.2 of the CCITT; Geneva, 1964, and Mar del Plata, 1968)

In order to simplify the reading of documents dealing with telecommunication technique, it is essential to use simple notations in a homogeneous system and having a well-defined meaning. Moreover, it is an advantage, whenever possible, to have notations that have been universally adopted.

Irrespective of the language used, use should be made of the letter symbols for quantities and units recommended by the International Electrotechnical Commission.

In particular:

- the symbol Hz representing hertz should be used as the unit of frequency;
- the symbol dB should be used to represent decibel;
- the symbol N should be used to represent newton;
- the symbol Np should be used to represent neper.

Abbreviations representing measurement conditions are not covered by this Recommendation (for example, "r" for "relative value", "p" for "psophometric", etc.). These abbreviations are under study.

Recommendation B.3

USE OF THE INTERNATIONAL SYSTEM OF UNITS

(former Recommendation 6 of the CCIF; amended at New Delhi, 1960, and at Geneva, 1964)

In their mutual relations it is desirable that the ITU and its permanent organs and Administrations and private operating agencies should:

1. use the units of the system adopted by the International Committee for Weights and Measures and endorsed by the ISO and known as the "international system of units (SI)" based on the following fundamental units: metre, kilogramme, second, ampere, Kelvin and candela;
2. in principle, use electrotechnical relationships in their rationalized form.

Recommendation B.4**TRANSMISSION UNITS***(Mar del Plata, 1968)*

The CCITT,

considering

that for the purposes of transmission measurements and the expression of the results of such measurements, two transmission units, namely, the neper and the bel, together with their submultiples were provisionally recommended on an equal footing by the 1926 Plenary Assembly of the Comité consultatif international des communications téléphoniques à grande distance, and that until now, the CCITT has continued to use these two units on an equal footing;

that now, as then, it would be convenient for international specification limits and for the exchange of information at international level concerning the results of transmission measurements to use only one transmission unit;

that although national Administrations still differ in the transmission unit that they use within their own country, both the neper and the decibel are in common use, and sometimes both within one country;

that for radiocommunications, the decibel is the only unit used for expressing measurement results in transmission units,

unanimously recommends

that countries can continue to use either the neper or the decibel for measurement purposes within their own territory;

that for the international exchange of information concerning line transmission measurement and related values and for the international specification of limits for such values the only transmission unit to be used should be the decibel;

that to avoid unnecessary conversion of values, countries which prefer to do so can continue to use the neper between themselves by bilateral agreement;

that for theoretical, scientific calculations, where ratios are expressed in terms of logarithms to the base "e", the neper will always be used, implicitly or explicitly.

Recommendation B.10

**LIST OF GRAPHICAL SYMBOLS FOR DIAGRAMS AND RULES FOR
THE PREPARATION OF DIAGRAMS, CHARTS AND TABLES
AND FOR ITEM DESIGNATION RELATING TO TELECOMMUNICATIONS
AND PUBLISHED BY THE IEC**

(Mar del Plata, 1968; amended at Geneva, 1972)

The CCITT, which cooperates in the work of the CCI/IEC Joint Working Group set up for the purpose of establishing, for international telecommunications, an approved list of graphical symbols for diagrams and approved rules for the preparation of diagrams, charts and tables and for item designation (see Recommendation A.13), recommends that, on diagrams for international use concerning telecommunications, the Administrations and private operating agencies of the CCITT and CCITT Secretariat should use the graphical symbols for diagrams given in IEC Series 117 publications and should observe the rules for the preparation of diagrams, charts and tables and for item designation laid down in IEC Series 113 publications.

SERIES C RECOMMENDATIONS

General telecommunication statistics

Recommendation C.1

YEARBOOK OF COMMON CARRIER TELECOMMUNICATION STATISTICS

(Geneva, 1972, Geneva, 1976)

1. The CCITT recommends that a *Yearbook of Common Carrier Telecommunication Statistics* be published annually by the General Secretariat of the ITU.

2. This *statistical Yearbook* is to be a collection of data on the various branches of common carrier telecommunications (see also Recommendation F.91), namely:

- telephone service,
- telegram service,
- telex service,
- the data transmission service.

(Radio services *other than broadcasting* (sound or television) are regarded as common carriers to the extent to which they are used for the transmission of paid messages between subscribers of the telecommunications undertaking.)

3. The data gathered by the ITU General Secretariat from Administrations should reach it by 1 September of the year following that covered by the *Yearbook*.

4. The statistical data to be collected by the ITU General Secretariat and published by it are those covered by the items listed in Annex 1 to this Recommendation. Any explanations required for uniform and unambiguous interpretation of the items are given in Annex 2.

5. The data assembled will be published in *chronological series* recapitulating the figures for the past ten years.

Important note. — Those countries not in a position to communicate all the data listed in the Recommendation should provide the data they do have and mark with a dash (“—”) those items not evaluated.

XVI	XVII
Maintenance and repair costs for the telephone service (in national currency, at current prices)	Exchange rate at end of year (equivalent in local currency of US dollar)

ANNEX 2

Yearbook of common carrier telecommunication statistics*Instructions and explanatory notes on how the tables should be filled in*

General remark. — When items of statistics are presented in a different manner from that specified in this Annex, they should be accompanied by an explanation to enable them to be interpreted correctly.

III Telephone call

The effective use made of a connection set up between the calling and the called stations. If an estimate of calls is not available, then total measured pulses or other appropriate statistics may be given, suitably annotated.

IV Paid telegrams

- (1) Number of *full rate* international telegrams originated, including urgent telegrams.

V Telex traffic

Expressed in thousands of chargeable minutes.

VI Phototelegrams

Phototelegrams handed in at a public phototelegraph office, either directly or through a private phototelegraph station.

VIII Number of telephone stations of all kinds

Main and additional telephone stations which have access to the public switched network.

XI Waiting list

These are applications for subscription, completion of which must be delayed beyond a specific period because of lack of resources (equipment, lines, etc.).

The specific period should be defined for each country and indicated in a note.

XII Telex subscriber lines

Number of lines on which calls are paid (i.e., excluding service and gentex connections) and which have access to the international telex network, whether by direct connection or through a translation equipment.

XIII Modems

- (1) include those on telex and telephone switched networks.
- (2) include modems on all classes of circuits leased for private service.

XIV and XV Common carrier telecommunications

By "common carrier telecommunications" is understood the traditional field of telecommunications: telephony, telegram, telex, data transmission. As telecommunication undertakings in some countries are responsible for providing and maintaining sound and television broadcasting facilities, and sometimes also for the collection of the charged fees for these services, it is stipulated that *neither* these fees *nor* the investments for the services in question should be taken into account in these items.

(Point 2 of the Recommendation gives a brief indication of the field covered by the *statistical Yearbook*.)

XIV (4) Other revenue of the telephone service

State the nature of the revenue entered under this heading.



XIV (8) *Other revenue of the telecommunication services*

Give the revenue that did not fall under the headings (5), (6) or (7), and state its nature, e.g. in particular revenue other than operating revenue.

Note. — As stated above, fees relating to sound and television broadcasting should be excluded.

XV *Annual gross investments*

Gross annual capital expenditure without deduction of amortization. The precise definition is given in the 1972 edition of the GAS 5 Handbook (*Telecommunications—Economic Studies*, Chapter VII, point 1.1.2).

“1.1.2 The term “investments” generally means the expenditures associated with acquiring and owning property and plant. These include expenditure on initial installations and on additions to existing installations where the usage is expected to be over an extended period of time.

Investments comprise the following:

- the cost of material and equipment, including freight, storage, purchase taxes and handling costs;
- installation costs, including the cost of labour, supervision and contract services (as well as the cost of staff of the operating Administration taking part in installation);
- project planning costs;
- purchase of land and buildings.

A distinction must be made between gross investment and net investment (after deduction of amortization). It proved impossible to apply the concept of net investment, because of the considerable differences in the interpretation of the concept of amortization in the telecommunication sector.”

XV (4) Under this heading give the evaluation of the Gross Domestic Product (GDP) at factor cost for the country concerned. If the GDP is not available, the Gross National Product (GNP) at market prices may be used, with an appropriate note. These data should be taken from the statistics on the country's national economy.

From these data can be calculated the ratio for item (5):

$$\frac{\text{total investment for telecommunications}}{\text{GDP}}$$

i.e. $\frac{\text{item (3)}}{\text{item (4)}}$

XV (6) Under this heading, give the evaluation of the Gross Fixed Capital Formation (GFCF) for the country concerned. This should be taken from the statistics on the country's national economy.

From these data can be calculated the ratio for item (7):

$$\frac{\text{total investment for telecommunications}}{\text{GFCF}}$$

i.e. $\frac{\text{item (3)}}{\text{item (6)}}$

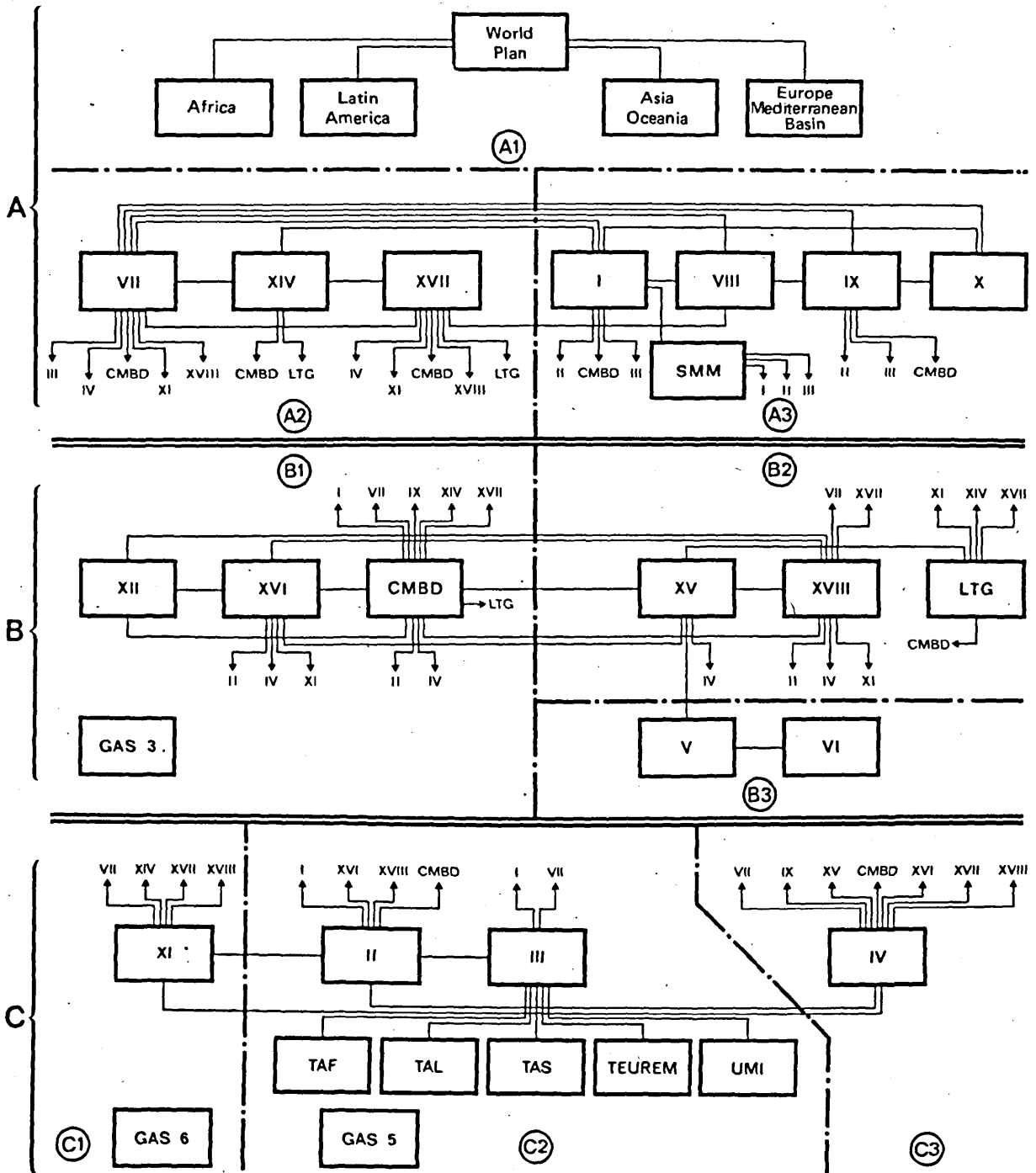
XVI *Maintenance and repair costs for the telephone service*

This comprises the cost of material used and the salaries of maintenance staff.

XVII *Exchange rate*

The exchange rate given should be that prevailing at the end of the year. To standardize the information supplied, this rate should be shown as the equivalent in national currency of 1 United States dollar. The date of any major currency revaluations occurring in the course of the year should be given in a footnote.

ORGANIZATION CHART OF THE CCITT STUDY GROUPS



Allocation of Study Groups to the Technical Departments of the CCITT

CCITT-20202

- A1 Plan Committees (Joint CCITT/CCIR Committees, administered by the CCITT)
- A2 Facsimile telegraphy and data transmission (Study Groups VII, XIV, XVII)
- A3 Alphabetical telegraphy (Study Groups I, VIII, IX, X and JWP SMM)
- B1 Transmission performance (Study Groups XII, XVI, CMBD and GAS 3)
- B2 Transmission systems (Study Groups XV, XVIII and JWP LTG)
- B3 Protection (Study Groups V, VI)
- C1 Telephone switching (Study Group XI and GAS 6)
- C2 Telephone operation and tariffication (Study Groups II, III, TAF, TAL, TAS, TEUREM, UMI and GAS 5)
- C3 Maintenance (Study Group IV)

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