

042



COMMONWEALTH  
TELECOMMUNICATIONS BOARD

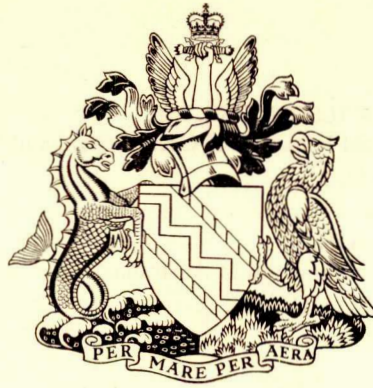
Eighteenth General Report

and

STATEMENTS OF ACCOUNT

1st April 1968 to 31st March 1969

28 PALL MALL, LONDON, S.W.1.



COMMONWEALTH  
TELECOMMUNICATIONS BOARD

Eighteenth General Report

and

STATEMENTS OF ACCOUNT

1st April 1968 to 31st March 1969

COMMONWEALTH TELECOMMUNICATIONS BOARD

28, Pall Mall,  
London, S.W.1

- To the Right Honourable HAROLD WILSON, OBE, MP,  
Prime Minister of the United Kingdom of Great Britain and Northern Ireland.
- To the Right Honourable P. TRUDEAU,  
Prime Minister of Canada.
- To the Right Honourable J. G. GORTON,  
Prime Minister of the Commonwealth of Australia.
- To the Right Honourable K. J. HOLYOAKE, CH,  
Prime Minister of New Zealand.
- To Mrs. INDIRA GANDHI,  
Prime Minister of India.
- To General A. M. YAHYA KHAN, HPk, H.J. SPk,  
Chief Martial Law Administrator, Pakistan.
- To the Honourable D. S. SENANAYAKE,  
Prime Minister of Ceylon.
- To Lieutenant-General J. A. ANKRAH, OOV, MC,  
Chairman of the National Liberation Council, Ghana.
- To the Honourable Y. T. M. TUNKU ABDUL RAHMAN PUTRA AL-HAJ, KOM, CH.  
Prime Minister of Malaysia.
- To His Excellency Major-General YAKUBU GOWON,  
Head of Federal Military Government and Supreme Commander of the Armed Forces, Nigeria.
- To His Beatitude Archbishop MAKARIOS,  
President of the Republic of Cyprus.
- To the Honourable SIAKA P. STEVENS,  
Prime Minister of Sierra Leone.
- To Mwalimu Dr. JULIUS K. NYERERE,  
President of the United Republic of Tanzania.
- To the Honourable H. L. SHEARER,  
Prime Minister of Jamaica.
- To Dr. the Right Honourable ERIC WILLIAMS,  
Prime Minister of Trinidad and Tobago.
- To His Excellency Honourable A. MILTON OBOTE,  
President of Uganda.
- To His Excellency Honourable MZEE JOMO KENYATTA,  
President of Kenya.
- To Dr. Ngwazi the Honourable HASTINGS BANDA,  
President of the Republic of Malawi.
- To His Excellency Dr. KENNETH KAUNDA,  
President of the Republic of Zambia.
- To the Honourable Sir DAWDA JAWARA,  
Prime Minister of The Gambia.
- To Mr. LEE KUAN YEW,  
Prime Minister of Singapore.
- To the Honourable L. F. S. BURNHAM, QC,  
Prime Minister of Guyana.
- To His Excellency Honourable Dr. Sir SERETSE KHAMA, KBE,  
President of the Republic of Botswana.
- To the Honourable E. W. BARROW,  
Prime Minister of Barbados.
- To the Right Honourable MICHAEL STEWART, CH, MP,  
Secretary of State for Foreign and Commonwealth Affairs.

The Members of the Commonwealth Telecommunications Board have the honour to submit their report to 31st March 1969 and Statements of Account for the year ended 31st March 1969.

DAWSON DONALDSON, *Chairman*  
C. J. GILL, *United Kingdom*  
S. T. GRANT, *Canada*  
G. T. HUGHES, *Australia*  
T. N. MORRISON, *New Zealand*  
G. D. GOKARN, *India*  
(Vacant) *Pakistan (Observer)*  
A. PATHMARAJAH, *Ceylon*

T. A. NARAYANAN MENON, *Malaysia*  
M. S. ADEWALE, *Nigeria*  
J. C. CHRISTOPHIDES, *Cyprus*  
E. S. S. PALMER, *Sierra Leone*  
V. A. PANTON, *Jamaica*  
W. ANDREW ROSE, *Trinidad and Tobago*  
TAN SENG CHYE, *Singapore*  
A. H. SHEFFIELD, *Other Commonwealth Territories*

C. A. G. COLERIDGE, *Secretary General*  
27th March, 1969

## CONSTITUTION OF THE BOARD

### Partner Governments

By the Commonwealth Telegraphs Agreement of 11th May 1948, the Governments of the United Kingdom, Canada, Australia, New Zealand, South Africa, India and Southern Rhodesia (the Partner Governments) agreed to establish the Commonwealth Telecommunications Board 'for the purpose of promoting the efficiency and development of the external telecommunications services of the British Commonwealth and Empire'. This Agreement was modified by a supplemental Agreement, the Commonwealth Telegraphs Agreement, 1963, of 25th July 1963, which made certain amendments to the original Agreement and replaced the Third Schedule to the 1948 Commonwealth Telegraphs Agreement by a new Form of Agreement between Partner Governments, the Board and National Bodies.

Since 1948 the following Commonwealth countries have adhered to the Commonwealth Telegraphs Agreement and have been admitted as Partner Governments:

Ceylon	..	..	..	..	..	1st June 1951
Cyprus	..	..	..	..	..	1st April 1961
Nigeria	..	..	..	..	..	12th March 1962
Ghana	..	..	..	..	..	3rd April 1962
Malaya (now Malaysia)	..	..	..	..	..	1st September 1962
Tanganyika (now Tanzania)	..	..	..	..	..	30th January 1964
Jamaica	..	..	..	..	..	2nd July 1964
Kenya	..	..	..	..	..	7th August 1964
Sierra Leone	..	..	..	..	..	16th September 1964
Uganda	..	..	..	..	..	18th June 1965
Singapore	..	..	..	..	..	26th February 1966
The Gambia	..	..	..	..	..	31st August 1966
Guyana	..	..	..	..	..	13th October 1966
Botswana	..	..	..	..	..	8th February 1967
Barbados	..	..	..	..	..	15th April 1967
Trinidad and Tobago	..	..	..	..	..	17th April 1967

In 1954 the Federal Government of Rhodesia and Nyasaland assumed control over the external telecommunications of Southern Rhodesia, and other Partner Governments agreed that the Federation should take the place of Southern Rhodesia. On 31st December 1963, however, the Federation was dissolved and ceased to be a Partner Government. Since then the former members of the Federation have been admitted as Partner Governments, as follows:

Southern Rhodesia	..	..	..	..	..	6th October 1964
Zambia	..	..	..	..	..	9th March 1965
Malawi	..	..	..	..	..	29th June 1965

The Commonwealth Telegraphs Agreement, 1948, provided by Clause 10(1) that 'If any Partner Government ceases to be a member of the British Commonwealth and Empire that Government shall forthwith cease to be a Partner Government for the purposes of this Agreement . . .'. South Africa ceased to be a member of the Commonwealth on 31st May 1961 and in accordance with Clause 10(1) ceased to be a Partner Government on that date.

### National Bodies

In accordance with the Commonwealth Telegraphs Agreement the following Partner Governments nationalised the cable and radio systems in their respective territories and either established public corporations, or nominated government departments to own and operate them as below:

<i>Partner Government</i>	<i>National Body</i>
Britain	Post Office.
Canada	Canadian Overseas Telecommunication Corporation.
Australia	Overseas Telecommunications Commission (Australia).
New Zealand	Post Office.
India	Overseas Communications Service, Government of India.
Ceylon	Posts and Telecommunications Department.
Ghana	Department of Posts and Telecommunications.
Malaysia	Telecommunications Department.

<i>Partner Government</i>	<i>National Body</i>
Nigeria .. ..	Nigerian External Telecommunications Limited.
Cyprus .. ..	Cyprus Telecommunications Authority.
Sierra Leone .. ..	Sierra Leone External Telecommunications Company Limited.
Tanzania .. ..	} East African External Telecommunications Company Limited.
Kenya .. ..	
Uganda .. ..	
Malawi .. ..	Department of Posts and Telecommunications.
Zambia .. ..	General Post Office.
Singapore .. ..	Telecommunications Department.
Botswana .. ..	Department of Posts and Telegraphs.
Southern Rhodesia .. ..	Ministry of Posts.

In accordance with new conditions for the admission of Partner Governments agreed upon in 1961 the following countries did not nationalise their external telecommunications; they appointed as their National Body the Company shown below:

Jamaica .. ..	Cable and Wireless (West Indies) Limited.
The Gambia .. ..	Cable and Wireless Limited.
Guyana .. ..	Cable and Wireless (West Indies) Limited.
Barbados .. ..	Cable and Wireless (West Indies) Limited.
Trinidad and Tobago .. ..	Cable and Wireless (West Indies) Limited.

#### **The Commonwealth Telecommunications Board (CTB) and its functions**

The Board was incorporated in the United Kingdom by the Commonwealth Telegraphs Act, 1949. It is composed of representatives of the Partner Governments with an independent Chairman.

The principal functions of the Board are:

To make recommendations to the Partner Governments and to National Bodies on the following matters relating to their external telecommunications systems:

The formulation and execution of the joint telecommunication policy of the Partner Governments, including the fixing of rates (terminal, transit and parcours proportions).

Co-ordination of the development of the cable and wireless systems of the Commonwealth.

Extensions and alterations to the telecommunication systems of National Bodies which do or might form part of the Commonwealth network.

Co-ordination with the appropriate authorities on telecommunication matters affecting the defence of the Commonwealth or any part thereof.

Co-ordination of research in telecommunication matters conducted by National Bodies.

Any other telecommunication matter which may be referred to the Board by any of the Partner Governments or by any National Body.

At the request of the Partner Governments or National Bodies to conduct negotiations with foreign telecommunication interests on their behalf.

To promote and conduct research in telecommunication matters.

## COMPOSITION OF THE BOARD

The constitution provides that the Board shall consist of members to be appointed as follows:

- (a) As to one (who shall be Chairman of the Board) jointly by the Partner Governments;
- (b) As to one, by each of the Partner Governments separately;
- (c) As to one, by Her Majesty's Government in the United Kingdom to represent British Commonwealth and Empire territories not directly represented by other Members.

The term of appointment is for such period, not exceeding five years, as may be fixed at the time of appointment. A retiring member is eligible for reappointment.

The following was the composition of the Board as at the date of this Report.

### **Chairman**

Sir DAWSON DONALDSON, KCMG

### **Britain**

C. J. GILL

### **Canada**

S. T. GRANT

### **Australia**

G. T. HUGHES

(*Chairman, Traffic Study Group*)

### **New Zealand**

T. N. MORRISON

(*Chairman, Finance and Rates Study Group*)

### **India**

G. D. GOKARN

(*Vice-Chairman*)

### **Ceylon**

A. PATHMARAJAH

### **Malaysia**

T. A. NARAYANAN MENON

### **Nigeria**

M. S. ADEWALE

### **Cyprus**

J. C. CHRISTOPHIDES

### **Sierra Leone**

E. S. S. PALMER

### **Jamaica**

V. A. PANTON

### **Trinidad and Tobago**

His Excellency W. ANDREW ROSE

### **Singapore**

TAN SENG CHYE

### **Other Commonwealth Territories**

A. H. SHEFFIELD, CBE

(*Chairman, Technical Study Group*)

### **Secretary-General**

C. A. G. COLERIDGE, OBE

## MEMBERSHIP NOTES

**Vice-Chairman:** Under the annual rotation of this Office Mr. C. A. R. Anketell, Member for Ceylon, succeeded Mr. A. H. Sheffield, CBE, on 1st April 1968, and on Mr. Anketell's retirement on 8th October 1968 (*see below*) he was in turn succeeded by Mr. G. D. Gokarn, Member for India.

**Canada:** Mr. J. R. Baxter was succeeded by Mr. S. T. Grant with effect from 23rd May 1968.

**Ceylon:** Mr. C. A. R. Anketell ceased to be Member for Ceylon with effect from 8th October 1968, and was succeeded by Mr. A. Pathmarajah with effect from 1 January 1969.

**Singapore:** Mr. Chia Cheong Fook was succeeded by Mr. Tan Seng Chye with effect from 1st January 1969.

**Other Commonwealth Territories:** Mr. A. H. Sheffield, CBE, in addition to representing the British Overseas Territories and Associated States, also represented the interests of the following Governments: Ghana, Zambia, Malawi, The Gambia, Guyana, Botswana and Barbados.

The Board continued, as in previous years, to remit questions requiring detailed examination to its Study Groups, for their consideration and advice. The composition of these Study Groups at the date of this Report was as follows:

### **Finance and Rates Study Group**

#### *Chairman*

T. N. MORRISON, Member for New Zealand

#### *Members*

G. T. HUGHES .. .. . Member for Australia  
G. D. GOKARN .. .. . Member for India  
T. A. NARAYANAN MENON .. Member for Malaysia  
M. S. ADEWALE .. .. . Member for Nigeria  
A. H. SHEFFIELD, CBE .. .. Member for Other Commonwealth Territories  
E. SHARPE, MBE .. .. . Deputy Director, External Telecommunications Executive,  
British Post Office  
G. P. OLVER .. .. . Deputy Financial Adviser, The Telecommunications Finance Department, General Post Office  
R. W. HARRISSON .. .. . Assistant Chief Accountant, Cable and Wireless Limited

#### *Secretary*

W. W. DIMON

### **Technical Study Group**

#### *Chairman*

A. H. SHEFFIELD, CBE, Member for Other Commonwealth Territories

#### *Members*

G. T. HUGHES .. .. . Member for Australia  
G. D. GOKARN .. .. . Member for India  
T. A. NARAYANAN MENON .. Member for Malaysia  
C. W. SOWTON, OBE .. .. Staff Engineer, External Telecommunications Executive,  
British Post Office  
A. S. PUDNER, MBE .. .. Engineer-in-Chief, Cable and Wireless Limited  
H. STANESBY .. .. . Deputy Director of Engineering, British Post Office

#### *Acting Secretary*

F. C. BLACKMAN

### **Traffic Study Group**

#### *Chairman*

G. T. HUGHES, Member for Australia

#### *Members*

T. N. MORRISON .. .. . Member for New Zealand  
G. D. GOKARN .. .. . Member for India  
T. A. NARAYANAN MENON .. Member for Malaysia  
M. S. ADEWALE .. .. . Member for Nigeria  
A. H. SHEFFIELD, CBE .. .. Member for Other Commonwealth Territories  
J. V. R. BIRCHALL .. .. . Deputy Director, External Telecommunications Executive,  
British Post Office  
P. A. McCUNN .. .. . Traffic Manager, Cable and Wireless Limited

#### *Secretary*

F. C. BLACKMAN

# COMMONWEALTH TELECOMMUNICATIONS BOARD



457th (FINAL) MEETING, ON THURSDAY, 27th MARCH, 1969

28, Pall Mall, London, S.W.1

**Names** (left to right): A. H. Sheffield, CBE (*Member for Other Commonwealth Territories*), G. T. Hughes (*Australian Member*), C. J. Gill (*Member for Britain*), S. T. Grant (*Canadian Member*), A. Pathmarajah (*Member for Ceylon*), D. Papisavvas (*Alternate Member for Cyprus*), F. C. Blackman (*Traffic Officer*), T. A. Narayanan Menon (*Malaysian Member*), C. A. G. Coleridge, OBE (*Secretary General*), Sir Dawson Donaldson, KCMG (*Chairman*), G. D. Gokarn (*Vice-Chairman and Indian Member*), W. W. Dimon (*Finance Officer*), T. N. Morrison (*New Zealand Member*), M. S. Adewale (*Nigerian Member*), E. S. S. Palmer (*Member for Sierra Leone*), Tan Seng Chye (*Member for Singapore*), H. E. W. Andrew Rose (*Member for Trinidad and Tobago*).



## CONTENTS

<i>Section</i>		<i>Page</i>
I.	INTRODUCTION .. .. .	9
II.	HISTORICAL SURVEY .. .. .	9
III.	GENERAL SURVEY .. .. .	12
IV.	STUDY GROUPS .. .. .	15
V.	TRAFFIC .. .. .	16
VI.	RATES .. .. .	21
VII.	THE BOARD'S ACCOUNTS .. .. .	28
VIII.	UNCOMPLETED BUSINESS .. .. .	28
IX.	ACKNOWLEDGMENTS .. .. .	28

---

### STATEMENTS OF ACCOUNT

---

#### *Annex*

1. LIST OF BOARD MEMBERS PAST AND PRESENT
2. LIST OF CABLES AND RADIO CIRCUITS IN THE COMMON-USER SYSTEM

# COMMONWEALTH TELECOMMUNICATIONS BOARD

## Eighteenth General Report

1st April 1968 to 31st March 1969

### I. INTRODUCTION

1. The 1966 Commonwealth Telecommunications Conference, in continuation of the 1965 Conference, considered, among other things, the question of the future of Commonwealth co-operation in telecommunications. As a result a recommendation was made to Governments that a new Organisation should be set up, and this was subsequently accepted by all Governments. An outline of the new Organisation was contained in the General Survey Section of the Board's Sixteenth and Seventeenth General Reports. The new arrangements, which are also referred to below (see Section III), involve the termination of the Commonwealth Telecommunications Board, and the necessary legal and formal steps have been completed for the Board to cease operations on 31st March 1969.

2. This Report will, therefore, be the last General Report issued by the Board and the Board has decided in the circumstances to make some departures from the normal make-up of the Report. Section II outlines the history and general operations of the Board; and the General Survey (Section III) has been extended to include some of the principal developments in the telecommunications of National Bodies during the year, thereby enabling a section dealing with activities of individual National Bodies to be omitted.

3. The period covered by this Report is from 1st April 1968 to 31st March 1969, but in view of the need to prepare it before the final date of the Board's life, it relates mainly to the period ending 31st December 1968; and audited Accounts of the Board have been submitted up to that date only. (See also Section VII below.) A Statement of Accounts for the whole year, however, compiled partly on an estimated basis, is also included; and arrangements have been made for the audit of the accounts of the final period January-March 1969, in due course.

### II. HISTORICAL SURVEY

#### Period Preceding Formation of Board

4. In 1902 a jointly owned Government telegraph cable linking Canada, Fiji, New Zealand and Australia via Fanning Island was laid across the Pacific Ocean and a management group, the Pacific Cable Board, was set up consisting of representatives of the joint owners, viz. Britain, Australia and New Zealand.

5. Since that time there has continued some form of Commonwealth co-operation in telecommunications and there has always been an associated Commonwealth committee.

6. The need for some positive overall co-ordinative action in Commonwealth long-distance telecommunications became increasingly apparent in the 1920s, during which period rapid developments were occurring in the radio sphere. The British long-distance cable systems were operated partly by private companies, partly by the British Post Office and partly by the Pacific Cable Board. The beam radiotelegraph services were operated partly by the British Post Office and partly by the Marconi Company. With such a complex set-up forming the background it was clear that unrestricted competition between the radio and cable systems could seriously prejudice the continuation in service of the latter and at that time this possibility had serious implications.

7. This led, in 1928, to the calling of an Imperial Wireless and Cable Conference by the Governments of Britain, Canada, Australia, New Zealand, South Africa, Irish Free State and India. The outcome was the creation of the *Imperial Communications Advisory Committee* (ICAC) with a membership representative of the above-mentioned countries and also of the Colonies and Protectorates. This Committee continued until 1944, exercising its authority in the direction of resisting the indiscriminate opening of new direct radio circuits and maintaining close interest in rating and other important aspects of the telecommunication services.

8. The War made a substantial impact on telecommunication operations, and a Commonwealth Conference in 1942 recommended that the ICAC should be reconstituted and renamed the *Commonwealth Communications Council* (CCC). This was effected in 1944 and the CCC, along with its normal duties, devoted much effort towards devising ways and means of improving the central co-ordination which was regarded by the Governments as essential to the consolidation and strengthening of the telecommunication systems of the Commonwealth. This work, together with a Commonwealth study tour by Lord Reith, prepared the way for a Conference in 1945, which led to the formation of a stronger organ than the CCC, viz. the *Commonwealth Telecommunications Board* (CTB).

### **The Commonwealth Telecommunications Board**

9. By the Commonwealth Telegraphs Agreement of 11th May 1948, the Governments of the United Kingdom of Great Britain and Northern Ireland, Canada, Australia, New Zealand, the Union of South Africa, India and Southern Rhodesia (the Partner Governments) agreed to establish the Commonwealth Telecommunications Board 'for the purpose of promoting the efficiency and development of the external telecommunications services of the British Commonwealth and Empire'. This Agreement was later modified by a Supplemental Agreement, dated 25th July 1963.

10. A basic objective of the Partner Governments was that policies and financial interests should be so unified as would enable the telecommunications system of the Commonwealth to be developed as a whole, both cables and wireless being used to best advantage. To this end the Governments agreed to acquire and operate the external telecommunication services in their respective territories and to establish the Commonwealth Telecommunications Board.

11. The Board was incorporated in the United Kingdom on 31st May 1949, by the Commonwealth Telegraphs Act 1949, its constitution, functions and organisation being as in the First Schedule to that Act.

12. Subsequent accessions to the Commonwealth Telegraphs Agreements occurred as follows:

1951	Ceylon
1961	Cyprus
1962	Nigeria Ghana Malaya (now Malaysia)
1964	Tanganyika (now Tanzania) Jamaica Kenya Sierra Leone
1965	Uganda Zambia Malawi
1966	Singapore The Gambia Guyana
1967	Botswana Barbados Trinidad and Tobago

South Africa ceased to be a Partner Government in 1961 on leaving the Commonwealth.

13. The constitution of the Board provided for an independent Chairman appointed jointly by the Partner Governments, each of which was entitled to appoint a Member to the Board. A list of Members who have served is given in Annex 1 to this Report.

14. The functions as originally specified in the Agreement covered a very wide field, but in practice the Board's efforts over the years have been directed in the main to the consultative, co-ordinative and advisory sectors in relation to the efficient development and use of the Commonwealth telecommunications network. An important associated task has been the prescription and administration of the joint financial arrangements of the Partnership known as the 'Wayleave Scheme'.

15. The Board has met regularly in London, normally at fortnightly intervals. It has been supported by various sub-committees and working parties, but the three main standing committees, viz. the Finance and Rates, Traffic and Technical Study Groups, have been the channels through which most of the Board's detailed work has been processed.

16. Three formal Board Meetings were held outside London, one each at Ottawa and Montreal in 1961, and one at New Delhi in 1964 during visits to Canada and India.

# COMMONWEALTH TELECOMMUNICATIONS BOARD



TECHNICAL AND TRAFFIC MEETING (1950)

28, Pall Mall, London, S.W.1.

**Back Row** (left to right): H. Everett (*Assistant Secretary, CTB and Secretary of the Meeting*), E. G. L. Howitt (*United Kingdom*), G. H. Webster (*Colonies Member, CTB*), D. C. Balaam (*United Kingdom*), J. H. Tudhope (*Canadian Member, CTB*), Lieut.-Colonel H. Myers (*South African Member, CTB*), D. F. Bowie (*Canada*), D. G. Peck (*Singapore and Malaya*), J. C. Dallow (*Singapore and Malaya*), J. Briggs (*Nigeria*), A. H. Mumford (*United Kingdom*), A. M. Humby (*United Kingdom*). **Middle Row** (left to right): P. A. Courtney (*Nigeria*), N. S. Wickremasinghe (*Ceylon*), Colonel A. H. Read (*United Kingdom Member, CTB*), N. C. Chapling (*United Kingdom*), J. G. Young (*New Zealand Member and Vice-Chairman, CTB*), F. A. Binden (*United Kingdom*), Dr. R. L. Smith-Rose (*United Kingdom*), H. J. Hutchinson (*Australia*), S. R. Kantebet (*India*), C. F. Brimblecombe (*Southern Rhodesian Member, CTB*), J. L. Creighton (*Colonies*), V. H. Winson (*Colonies*), H. Faulkner (*United Kingdom*), J. A. Smale (*United Kingdom*), K. W. Hargrove (*Trinidad*), A. F. E. Evans (*Engineer Officer, CTB*), D. J. Robinson (*Gold Coast*). **Front Row** (left to right): A. E. Gagan (*British Guiana*), G. Apperley (*Australia*), L. S. Payne (*Canada*), E. H. R. Green (*New Zealand*), Rt. Hon. Lord Reith (*Chairman, CTB*), Colonel Sir A. Stanley Angwin (*Chairman of the Meeting*), R. V. McKay (*Australian Member, CTB*), M. N. Mirza (*Pakistan*), A. S. McDonald (*Australia*), Colonel W. W. Shaw-Zambra (*Secretary General, CTB*).

17. Four Technical and Traffic Meetings were convened in London by the Board as follows:

1950	15 Administrations participated
1955	19 Administrations participated
1960	21 Administrations participated
1964	19 Administrations participated

These Meetings, which were open to representatives from all the Commonwealth countries and territories, whether of full partnership status or not, dealt with a wide range of items involving traffic and technical aspects of the operation and development of the Commonwealth system. They submitted recommendations to the Board regarding further studies and action. Full reports of the proceedings were published and given wide circulation.

18. Reviews of the Partnership's Financial Arrangements took place in 1952, 1958, 1964 and 1966, the second and fourth being held in conjunction with Commonwealth Telecommunications Conferences. The first and third were held under the aegis of the Board in London and New Delhi respectively.

19. From the beginning the Board has maintained contact with the Partner Governments and National Bodies through the Members representing them on the Board. The flow of information between Partners and the Board has been effected by the submission of proposals, notifications and enquiries for consideration by the Board and in the reverse direction by the circulation of CTB papers and minutes. These have covered all aspects of the Board's work, including development of the Commonwealth network, provision of new services, financial and technical matters.

### **The Commonwealth Network**

20. At the time the Board was set up the Commonwealth network consisted of the long established and comprehensive intercontinental telegraph cable system, together with a number of cables between Britain and Europe and divers radio links throughout the world provided by the various Partners. During the succeeding decade the fast growing needs of the various services were met mainly by expansion of the radio sector where, in addition to increased facilities, operating efficiencies were considerably advanced.

21. However, by 1956 it became apparent to the Board that the growing demands for Commonwealth communications could not be met adequately either in quantity or quality by following a line of development dependent on such radio techniques as were likely to be available in the then foreseeable future. The Board, therefore, recommended to Partners that in future the trunk routes of the network should employ the newly developed coaxial cable technique, which would be capable of meeting the requirements of all services (telephone, telegraph and telex).

22. Following this recommendation the 1958 Commonwealth Telecommunications Conference laid plans for the progressive installation of such a cable system, embracing the already projected Britain to Canada link (CANTAT) and connecting ultimately with most of the other Commonwealth countries. It was decided that financial arrangements separate from the existing 'Wayleave Scheme' should be applied. This, together with the practical tasks of arranging for the installation work and the subsequent exploitation of the new cable system, led to the formation of a management committee representative of the financing Partners. The membership has progressively increased as the system has been extended. The body is now known as the Commonwealth Cable Management Committee. Close liaison has been regularly maintained between the Board and this Committee.

23. More recently, other broadband media, notably tropospheric scatter and VHF radio systems, have been developed and put into use on some of the shorter Commonwealth routes.

24. The development of satellites in recent years as a telecommunications medium has made a heavy impact in the field of international telecommunications and several Partners are already making use of the new facilities. However, the long term relationship, both physical and financial, of such services to the existing Commonwealth network has yet to be decided.

### **Financial**

25. One of the Board's early tasks was to devise suitable accounting arrangements covering the operation of the Commonwealth network. The system adopted provided that each National Body should have access to the network for the disposal of its traffic on the basis of sharing the overall network expenses in proportion to the use it made of the network, net revenues being taken as the measure of use. This system (known as 'The Wayleave Scheme') has, with some adjustment and modifications over the years, including a separate wayleave scheme to cover the Commonwealth telephone cables mentioned under paragraph 22 above, satisfactorily met the Partnership needs for nearly 20 years.

26. However, the use of satellites has introduced new considerations which will call for careful study in the context of the existing financial arrangements.

## **Traffic Growth**

27. Phenomenal growth has taken place in the telephone and telex services and also in respect of leased circuits. Even despite the resulting diversions to these facilities of certain traffic previously carried as public telegraph, the latter has maintained a steady increase, the growth over the past decade being 28 per cent. In the same period Commonwealth originated telex traffic has leapt from 7 to 44 units (millions of paid minutes) and telephone traffic from 19 to 83 units.

28. The Board's experience has confirmed that, in the field of telecommunications, increases in the efficiency and capacity of the facilities invariably produce a strong stimulus to traffic demands, even to the extent of rapidly overtaking the facilities provided.

## **Rates**

29. The Commonwealth collaborative arrangements in respect of the network and the associated financial scheme have led to a high level of operating efficiency, have afforded effective safeguards against foreign competition, and have sustained an overall viability of the system. The most significant outcome of this has been the ability to keep service rates at a relatively low level, which has meant considerable advantage to the customer public.

30. Some details of the current rating structure are tabulated in Section VI of this Report.

## **Termination of the Commonwealth Telecommunications Board**

31. It will be apparent from the above that there have been a number of very significant developments since the Board was launched in 1949. The number of Partners has increased from 7 to 25, the Commonwealth network has mushroomed in size and complexity, and there have been spectacular and far-reaching advances in technology.

32. Considerations such as these led the Commonwealth Telecommunications Conferences of 1965 and 1966 to recommend to Governments the setting up of a new Organisation in the field of co-operation in Commonwealth telecommunications which would be equipped to enable it do deal effectively with the fast changing modern scene. With the establishment of the new Organisation, the need for the Board would no longer exist.

33. The new Organisation would comprise the following organs:

- (1) Commonwealth Conferences on Telecommunications (meeting at three-yearly intervals);
- (2) A Commonwealth Telecommunications Council, a continuing body meeting at least once a year;
- (3) The Commonwealth Telecommunications Bureau, serving as a Secretariat for the whole Organisation and located in London.

34. Following the acceptance by Governments of the above recommendation, the necessary action was taken to establish the new Organisation and to have all the associated legal formalities finalised. The latter included the repeal of appropriate sections of the Commonwealth Telegraphs Act 1949, the signing of a Terminating Agreement to terminate the Commonwealth Telegraphs Agreements, 1948 and 1963, thereby dissolving the Board, and the signing of a new Financial Agreement. The way was thus cleared for the complete change-over in Organisation to take place on 31st March 1969; and the Board has directed its efforts accordingly.

## **III. GENERAL SURVEY**

### **New Telecommunications Organisation**

35. The new Commonwealth Telecommunications Council held its Third Meeting in Montreal in August 1968, under the Chairmanship of the Australian Representative. It completed arrangements for establishing the Bureau, which had come into being on 1st May 1968, with the appointment of the General Secretary. It also considered such matters as procedures for the Council and the Bureau, the Budget for 1968/69, the effects of Sterling devaluation and technical assistance.

36. The Board and the Council have continued to maintain close liaison during the period of overlap. The Chairman of the Board attended the Third Council Meeting and has been kept fully informed of Council business. The Board for its part has advised the Council of its progress in carrying out the various tasks involved in the process of winding up its affairs. The General Secretary of the Bureau has regularly attended Board Meetings.

37. Accommodation has been made available in the Board premises for the General Secretary and other members of the Bureau staff as they have been appointed. This has facilitated close collaboration

between the Chairman and Secretariat of the Board and the Bureau. After 31st March 1969, the Bureau will continue to occupy the Board premises at 28 Pall Mall and arrangements are being made to hand over to the Bureau much of the Board's furniture and office equipment.

38. The majority of the Board's staff, other than those on secondment or due to retire, have been offered employment in the Bureau and most of them have accepted. The Board service of those eligible for pension will be aggregated with their subsequent service in the Bureau.

### **New Financial Agreement**

39. The Commonwealth Telecommunications Organisation Financial Agreement 1969, which will come into effect on 1st April 1969, was signed by representatives of the Partner Governments in London on 27th January 1969. It will replace those parts of the Commonwealth Telegraphs Agreements 1948 and 1963, which relate to financial matters.

### **Terminating Agreement**

40. The Terminating Agreement, which will formally terminate the Commonwealth Telegraphs Agreements 1948 and 1963, on 1st April 1969, was signed in London at the same time as the new Financial Agreement.

### **Continuing Developments in Telecommunications**

41. *Telephone Cables.* These now provide the links on the heavy traffic Commonwealth routes, i.e. from Britain to Canada, New Zealand, Australia and on to Hong Kong, Singapore and Malaysia, as well as between Britain and Europe and from Britain, Australia, New Zealand and South-East Asia to the USA. Work proceeded on the Canada-Bermuda cable (CANBER), and two new 480-circuit cables from Britain to the Continent were brought into use in 1968: one to Norway, the other to the Netherlands. The Portugal-South Africa 360-circuit cable was completed in November 1968, and access from Britain has been obtained via landlines across the Continent pending the laying of a Britain-Portugal cable (to be ready in 1969).

42. *Satellite Communications.* Regular commercial use of satellite circuits to supplement the telephone cables is now established between Australia and the USA/Canada, between Britain and the USA/Canada and between Canada and Europe, whilst the Ascension and Carnarvon (Australia) earth stations have been in use for the Apollo programme.

43. In Britain the second Goonhilly aerial was completed in November 1968, and brought into service in January 1969. Work proceeded on earth stations in India, Hong Kong and Bahrain, and plans were advanced for new stations in Australia (third and fourth stations), New Zealand, Malaysia, Nigeria, East Africa and Jamaica.

44. *Other Broadband Systems.* For shorter haul routes VHF, tropospheric scatter and microwave radio systems are now operating in several parts of the Commonwealth.

45. A new tropospheric scatter system between Cyprus and Crete, providing a broadband link to Greece, was opened in 1968, and a similar link between Trinidad and Guyana was due to be ready for service in February 1969.

46. The Antigua-Guadeloupe VHF link became operational in May 1968.

47. In the Arabian Gulf area Fujairah (Trucial States) was connected to the international network by a VHF link with Dubai, whilst progress was made with the construction of a tropospheric scatter system between Bahrain and Dubai.

48. *Telegraph Cables.* Two more telegraph cables (Larnaca-Haifa and St. Helena-Capetown) were abandoned during the period, as other media became available on these routes; and a large number of cables, though not formally abandoned, are no longer used.

49. *HF Radio.* This is still used extensively on many of the long-distance Commonwealth routes, i.e. those not served by telephone cables. New transmitting and receiving stations were opened in Malaysia and new aerial systems in Ceylon and India. Work proceeded on the construction of the new international receiving and transmitting stations in Zambia. A number of new direct HF radio circuits were established during 1968.

### **Development and Modernisation of Systems of National Bodies**

50. Many National Bodies pressed ahead with extension and modernisation of their systems, and in addition to the items mentioned in paragraphs 41-47 and 49 above the following developments are recorded.

51. *Australia*

- (1) A computer-controlled telegraph message relay system for the international service was brought into operation in February 1969.
- (2) Subscriber dialling telex service to Britain was established.
- (3) New leased circuit facilities were provided for high speed data transmission to special aircraft participating in the Apollo programme.

52. *Britain*

- (1) International subscriber dialling was introduced on telephone service with Norway in August 1968, and its extension to Italy by the end of March 1969, was planned.
- (2) The international Datel test centre was opened in London in December 1968, and extensions to the international Datel system were made as follows:
  - Datel 600 service was opened between Britain and Sweden and is now available to six European countries and to the USA;
  - Datel 100 service was introduced to nine European countries;
  - Datel 200 service will be opened to the USA and nine European countries on completion of engineering tests.

53. *Canada*. The automatic telegraph message switching centre in Montreal was placed in service in April 1968.

54. *Cyprus*

- (1) Telex service was introduced in Cyprus in January 1969, and direct circuits were opened with Britain, Greece and Italy.
- (2) Installation of the first phase of the automatic telegraph message switching system for use by the Department of Civil Aviation was completed. Phase 2 (public message system) will follow later.

5. *East Africa*. The East African External Telecommunications Company Limited took over from Cable and Wireless Limited on 1st June 1968, the operation of the overseas telegraph and radio stations in Zanzibar.

56. *Malawi*. An automatic telex exchange was opened in April 1968.

57. *Malaysia*. The new radio transmitting station near Kuala Lumpur, which was completed during the year (see paragraph 49 above), makes use of high-gain directional rhombic aerials. There are also six log-periodic antennae arranged in a circle to propagate in any azimuth direction.

58. *New Zealand*

- (1) Automatic subscriber dialling to Australia, Britain, Canada, Fiji, Hawaii, Japan, USA and via Britain to a number of European countries was introduced on the international telex service in July 1968.
- (2) An international automatic telephone exchange was due to be commissioned early in 1969, which will handle 60 international circuits with CCITT No. 5 Signalling, and an extension is planned for 1970 to increase the capacity to 100 circuits.

59. *Trinidad and Tobago*. In June 1968, the 12-channel 4 kHz tropospheric scatter system between Trinidad and Barbados was converted to a 16-channel 3 kHz group in order to provide additional capacity out of Trinidad and Tobago.

60. *Zambia*. A new automatic telex exchange was brought into use at Lusaka in October 1968.

61. *Lincompex*. The Board followed with interest the widening application of Lincompex (LINKed COMPressor and EXpander) terminal equipment to HF radiotelephone circuits as a means of improving their quality and traffic handling capacity. Following the successful trials of this equipment and its entry into operational use on certain selected long-distance routes mentioned in the last Report, commercial production of sets took place in 1968 and by the end of the year they were in use on a large number of routes.

62. In Britain some 30 Lincompex terminals have been installed and this is expected to increase to 50 in 1969. The equipment has been applied to radio telephone services operating to certain ships at sea as well as to Commonwealth and foreign circuits.

63. Other National Bodies introduced Lincompex on their HF radiotelephone services, or planned its introduction as follows:

- Australia . . . eleven units to be installed during 1969.
- Ceylon . . . one Colombo-London channel equipped; second channel planned.



- Cyprus .. planned to equip the Nicosia–London route by the end of 1969.
- East Africa .. introduced on Nairobi–London and Nairobi–Bahrain circuits.
- Jamaica .. equipment ordered for services to Barbados, British Honduras and Turks Island.
- Malawi .. Limbe–Nairobi link equipped in December 1968.
- The Gambia .. installation on the London circuit planned.
- Zambia .. equipment ordered for the London, Nairobi and Dar es Salaam circuits for installation in 1969.

### **Financial Matters**

64. *Devaluation of Sterling and certain other Currencies.* The Board's study of the effects of devaluation on the First Wayleave Scheme, which was begun in the previous year, was continued, and an evaluation was completed and circulated to Partners. Following on this evaluation, the Board has more recently had under discussion the particular effect of devaluation on terminal charges.

65. *First Wayleave Scheme Accounts.* The Board has made special efforts to bring up to date the consolidation of annual accounts of the First Wayleave Scheme which for a variety of reasons have been heavily delayed. Unfortunately the continued late submission of audited Statements by National Bodies has prevented the achievement of the Board's target; and it is a matter of regret that, though two years' accounts have recently been completed and it is hoped that those of another may yet be consolidated, accounts for the years 1965/66 onwards will still be outstanding at 31st March 1969.

66. It is, therefore, unavoidable that the First Wayleave Scheme accounts which thus remain uncompleted at 31st March 1969, will require to be finalised in due course by the Bureau.

### **Telephone Services**

67. Telephone traffic continued to grow at a high rate. As may be seen from the statistics in Section V, telephone traffic rose in 1968/69 by an estimated 15 per cent and is expected to reach a total of some 181,000,000 paid minutes. Provision for this growth is reflected in the improved and expanded facilities mentioned in paragraphs 41–47 and 49 and this provision in itself is expected to further stimulate traffic. Many new services were opened during the year, mostly switched services making use of existing circuits.

68. Station-to-station telephone service at reduced rates was extended during the year to the following relations: Australia–Canada and the USA; Canada–Bermuda, Hong Kong, Ireland, Israel and Jamaica.

### **Telex Services**

69. International telex was introduced during the year in British Honduras, Cyprus and The Gambia. Throughout the Commonwealth many new services were opened, both direct and switched, and traffic continued to grow at a very high rate. Total estimated traffic for 1968/69, amounting to over 94,000,000 paid minutes, is expected, as may be seen from the statistics in Section V, to show an increase of approximately 17 per cent over 1967/68; but many National Bodies have reported increases of over 40 per cent.

70. A problem related to this rapid growth has been the development of congestion in the London International Telex Exchange which has adversely affected most services and particularly those involving manual transit switching in London. The difficulty has resulted from delays in the implementation of Britain's planned development of the switching system because of supplying contractors' failure to meet scheduled dates. The position is now well in hand and full relief is expected during the forthcoming year.

### **Telegraph Services**

71. In spite of the high level of growth of telex and telephone traffic and the continuing growth of leased circuits, the public telegraph service has maintained an upward trend. An increase of 1.1 per cent, compared with the previous year, has been estimated for 1968/69.

## **IV. STUDY GROUPS**

### **Technical Study Group**

72. The Technical Study Group, which held five meetings during the year, considered the technical aspects of development of National Bodies' systems and other technical matters referred to it by the Board. Items of particular interest were the success of the Lincompex System, development of communications in Cyprus, proposed Tropospheric Scatter Systems and Satellite Earth Stations. In addition to its normal oversight of the World Map associated with the General Report, arrangements were made for an additional larger scale map of the telecommunications services in the Bermuda, Bahamas and Caribbean area to be prepared and circulated.

### **Traffic Study Group**

73. The Traffic Study Group continued its consideration of the traffic operational aspects of the Commonwealth telecommunications services and held fifteen meetings during the year.

74. The principal subjects that came under consideration, other than routine matters (e.g. Quarterly Traffic Reports from National Bodies), were:

- (1) Review of the CTB procedure for new services—
  - (a) procedure for Leased Circuits to foreign destinations; and
  - (b) re-routing of services, particularly where, in such re-routing, a foreign switching point replaced a Commonwealth switching point.
- (2) Report on the need to reduce errors in the telegraph service under fully automatic message relay conditions.
- (3) Traffic aspects of the Cyprus National Body's Telegraph Transit Scheme.

### **Finance and Rates Study Group**

75. The Study Group held fifteen meetings during the nine months to 31st December 1968, the same number as in the whole of the previous year. This reflects the continuous work undertaken in connection with financial studies arising from devaluation of Sterling and certain other Commonwealth currencies in November 1967.

76. The evaluation referred to in last year's General Report (paragraph 26) of the effects of devaluation on Partners' finances under the First Wayleave Scheme was carried out, and the results were reported to the Board. Apart from the First Wayleave arrangements, devaluation has also given rise to problems in other financial areas (e.g. the preparation and settlement of traffic accounts), to which solutions are being sought.

77. The study of revised Commonwealth press terminal charges and terminal operating allowances also referred to in last year's Report (paragraph 27) was completed, and recommendations made to the Board were adopted and have subsequently been accepted by most Partner Governments.

78. It is the normal function of the Study Group to examine the First Wayleave Scheme accounts submitted annually by each National Body to the Board, and to consolidate them when all are available. Endeavours have been made to reduce the backlog of these accounts and the position has been considerably advanced.

79. The Study Group has also been concerned with specific problems remitted to it by the Board in regard to rate fixing in the international accounting field, and to the interpretation of certain common-user cost definitions.

### **Joint Study Group Meetings**

80. In the early part of 1968 Cyprus submitted to the Board detailed proposals for the development of Cyprus as a Commonwealth transit centre for telegraph services and sought the Board's views on these proposals. The Board considered that since they involved traffic and technical aspects as well as financial considerations, the matter would be most appropriately dealt with by the three Study Groups meeting jointly, under the chairmanship of the Chairman of the Finance and Rates Study Group.

81. Six Joint Meetings were held, as a result of which the Board was enabled to proffer the advice sought by Cyprus.

## **V. TRAFFIC**

### **Traffic Statistics**

82. The Board prepares annual statistics of Telegraph, Telephone, Telex and Phototelegraph traffic carried on the Commonwealth telecommunications system. These detailed statistics are published in a separate printed document, and those for 1968/69 will be published as soon as they become available. For the purposes of this Report, however, it has been necessary to estimate traffic data for the second half of 1968/69, in order to complete the Report during the life of the Board.

83. The statistics cover only those services available for public traffic. Leased telegraph and telephone circuits carry considerable traffic (and produce substantial revenue), but it is not possible to obtain statistics of the traffic carried on them.

84. Quarterly Traffic Reports giving details of the operational working of the various services are received from the National Bodies and are considered by the Board.

85. In the following paragraphs Tables A, B and C give a summary of the estimated 1968/69 traffic, together with a similar summary of actual 1967/68 traffic for comparison.

## Telegraph Paid Words

86. Distribution of telegraph traffic among the National Bodies is shown below. Total telegraph traffic originated by National Bodies and received (terminal and transit) from foreign countries and Commonwealth countries not Partners to the Commonwealth Telegraphs Agreements for the year ended 31st March 1969, is estimated at 961,930,000 paid words, an increase of 1.1 per cent on the previous year.

TABLE A

National Body	Paid Words (thousands)		% Increase (+) Decrease (-) (See Note b)
	1967/68 (actual)	1968/69 (estimated)	
Australia .. .. .	80,474	86,480	+ 7.6
Barbados .. .. .	10,631	3,130	<sup>c</sup>
Botswana .. .. .	37	40	+ 8.0
Britain .. .. .	620,421	622,290	+ 0.3
Canada .. .. .	41,399 <sup>a</sup>	46,470	+ 12.2
Ceylon .. .. .	10,452	10,780	+ 3.1
Cyprus .. .. .	5,350	5,300	- 1.0
East Africa { Kenya .. .. .	9,031 <sup>a</sup>	9,180	+ 1.6
{ Uganda .. .. .	2,008 <sup>a</sup>	1,970	- 1.9
{ Tanzania .. .. .	3,606 <sup>a</sup>	3,620	+ 0.4
Ghana .. .. .	4,175	4,570	+ 9.5
Guyana .. .. .	2,735	2,910	+ 6.4
India .. .. .	71,646	71,770	+ 0.2
Jamaica .. .. .	12,332	13,200	+ 7.1
Malawi .. .. .	1,386	1,450	+ 4.7
Malaysia .. .. .	10,223	11,220	+ 9.8
New Zealand .. .. .	20,792	21,520	+ 3.5
Nigeria .. .. .	8,435	8,100	- 4.0
Sierra Leone .. .. .	1,775	1,980	+ 11.5
Singapore .. .. .	25,086 <sup>a</sup>	26,600	+ 6.0
The Gambia .. .. .	303	300	- 1.0
Trinidad and Tobago .. .. .	4,904	4,400	- 10.3
Zambia .. .. .	4,442 <sup>a</sup>	4,650	+ 4.7
<b>Total .. .. .</b>	<b>951,643 <sup>a</sup></b>	<b>961,930</b>	<b>+ 1.1</b>

### Notes

<sup>a</sup> Corrected totals for 1967/68.

<sup>b</sup> Estimated traffic 1968/69 compared with actual traffic 1967/68.

<sup>c</sup> Percentage change not representative due to major changes in the routing of traffic.

## Telephone Paid Minutes

87. Distribution of telephone traffic among the National Bodies is shown below. Total telephone traffic originated by National Bodies and received (terminal and transit) from foreign countries and Commonwealth countries not Partners to the Commonwealth Telegraphs Agreements, for the year ended 31st March 1969, is estimated at 181,103,000 paid minutes, an increase of 14·8 per cent on the previous year.

**TABLE B**

National Body	Paid Minutes (thousands)		% Increase (+) Decrease (-) (See Note <i>b</i> )	
	1967/68 (actual)	1968/69 (estimated)		
Australia .. .. .	3,615	4,754	+ 31·5	
Barbados .. .. .	638	723	+ 13·3	
Botswana .. .. .	1	1	—	
Britain .. .. .	142,037	161,590	+ 13·8	
Canada .. .. .	4,520 <i>a</i>	5,792	+ 28·1	
Ceylon .. .. .	46	54	+ 17·4	
Cyprus .. .. .	404	512	+ 26·7	
East Africa {	Kenya .. .. .	141	244	+ 73·0
	Uganda .. .. .	42	75	+ 78·6
	Tanzania .. .. .	41	68	+ 65·9
Ghana .. .. .	110	125	+ 13·6	
Guyana .. .. .	68	75	+ 10·3	
India .. .. .	305	324	+ 6·2	
Jamaica .. .. .	2,186	2,549	+ 16·6	
Malawi .. .. .	34	60	+ 76·4	
Malaysia .. .. .	440	477	+ 8·4	
New Zealand .. .. .	1,496	1,676	+ 12·0	
Nigeria .. .. .	131	156	+ 19·1	
Sierra Leone .. .. .	16	18	+ 12·5	
Singapore .. .. .	805	1,089	+ 35·3	
The Gambia .. .. .	5	6	+ 20·0	
Trinidad and Tobago .. .. .	575	679	+ 18·1	
Zambia .. .. .	53	56	+ 5·7	
<b>Total .. .. .</b>	<b>157,709 <i>a</i></b>	<b>181,103</b>	<b>+ 14·8</b>	

*Notes*

*a* Corrected total for 1967/68.

*b* Estimated traffic 1968/69 compared with actual traffic 1967/68.

## Telex Paid Minutes

88. Distribution of telex traffic among the National Bodies is shown below. Total telex traffic originated by National Bodies and received (terminal and transit) from foreign countries and Commonwealth countries not Partners to the Commonwealth Telegraphs Agreements, for the year ended 31st March 1969, is estimated at 94,534,000 paid minutes, an increase of 17.5 per cent on the previous year.

TABLE C

National Body	Paid Minutes (thousands)		% Increase (+) Decrease (-) (See Note b)
	1967/68 (actual)	1968/69 (estimated)	
Australia .. .. .	1,918	2,555	+33.2
Barbados .. .. .	39	56	+43.6
Botswana .. .. .	—	—	<sup>e</sup>
Britain .. .. .	74,645	86,613	+16.0
Canada .. .. .	1,532 <sup>a</sup>	2,194	+43.2
Ceylon .. .. .	126	187	+48.4
Cyprus .. .. .	—	27 <sup>c</sup>	
East Africa { Kenya .. .. .	129	220	+70.6
{ Uganda .. .. .	17	25	+47.1
{ Tanzania .. .. .	26	41	+57.7
Ghana .. .. .	104	127	+22.1
Guyana .. .. .	17	31	+82.4
India .. .. .	614	792	+29.0
Jamaica .. .. .	60	97	+61.6
Malawi .. .. .	6	7	+16.7
Malaysia .. .. .	108	123	+13.9
New Zealand .. .. .	383	521	+36.0
Nigeria .. .. .	227	287	+26.4
Sierra Leone .. .. .	56	54	- 3.6
Singapore .. .. .	363	420	+15.7
The Gambia .. .. .	—	3 <sup>d</sup>	
Trinidad and Tobago .. .. .	32	37	+15.6
Zambia .. .. .	60 <sup>a</sup>	117	+95.0
<b>Total .. .. .</b>	<b>80,462</b>	<b>94,534</b>	<b>+ 17.5</b>

### Notes

<sup>a</sup> Corrected total for 1967/68.

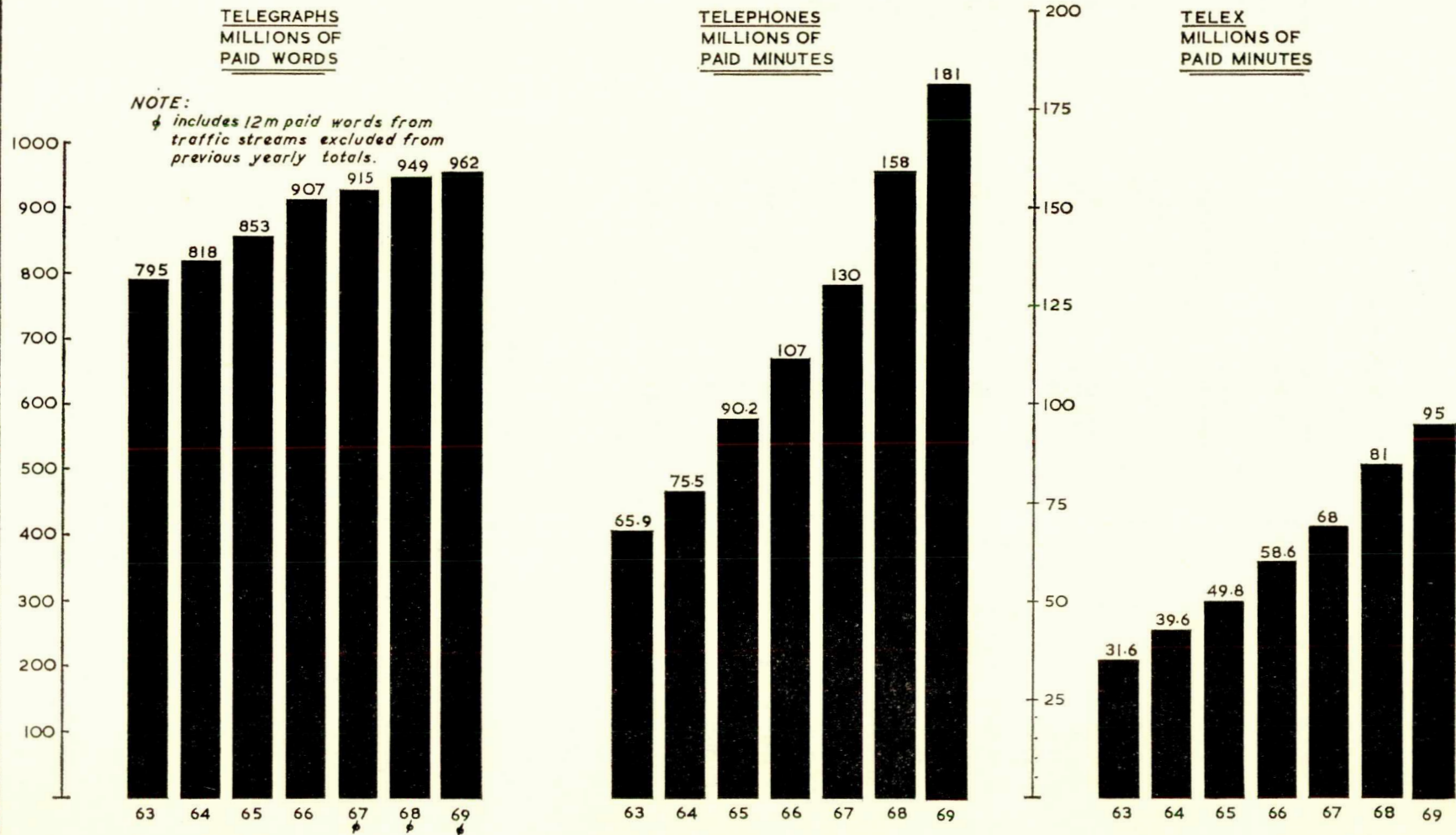
<sup>b</sup> Estimated traffic 1968/69 compared with actual traffic 1967/68.

<sup>c</sup> Cyprus: Telex service introduced in January 1969.

<sup>d</sup> The Gambia: Telex service introduced in February 1968; negligible traffic in 1967/68.

<sup>e</sup> Botswana: Only four subscribers; no figures available.

**YEARLY TRAFFIC TRENDS ENDING 31st. MARCH 1963/1969.**  
**TRAFFIC ORIGINATED BY NATIONAL BODIES AND TRAFFIC RECEIVED OVER DIRECT FOREIGN CIRCUITS.**



## VI. RATES

89. The customary Tables showing, in terms of Sterling, the telegraph, telephone and telex collection rates of the Partner National Bodies in relations with each other and with certain representative foreign countries as at 31st December 1968, follow this Section. Tables 1 and 2 set out telegraph rates per ordinary word; Tables 3 and 4 show telephone rates per unit call of three minutes; and Tables 5 and 6 list telex rates on the same basis.

90. There were no changes of any significance in the collection rates of the National Bodies during the period covered by this Report.

TABLE 1

## Inter-National Body Telegraph Rates per Ordinary Word in Terms of Sterling as at 31st December 1968

From	To																					
	Australia	Barbados	Botswana	Britain	Canada	Ceylon	Cyprus	East Africa	Ghana	Guyana	India	Jamaica	Malawi	Malaysia	New Zealand	Nigeria	Rhodesia	Sierra Leone	Singapore	The Gambia	Trinidad and Tobago	Zambia
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
Australia ..	—	1 7	1 7	1 7	1 10·4	1 7	1 7	1 7	1 7	1 7	1 7	1 7	1 7	1 7	5·6	1 7	1 7	1 7	1 7	1 7	1 7	1 7
Barbados ..	1 10	—	1 10	1 5	1 8	1 10	1 10	1 10	1 10	1 3	1 10	1 3	1 10	1 10	1 10	1 10	1 10	1 10	1 10	1 10	6	1 10
Botswana ..	1 7·6	1 7·6	—	1 7·6	1 7·6	1 7·6	1 7·6	1 2	1 7·6	1 7·6	1 7·6	1 7·6	5·6	1 7·6	1 7·6	1 7·6	4·2	1 7·6	1 7·6	1 7·6	1 7·6	5·6
Britain ..	1 10	1 5	1 10	—	1 5	1 10	1 6	1 10	1 10	1 5	1 10	1 5	1 10	1 10	1 10	1 10	1 10	1 10	1 10	1 10	1 5	1 10
Canada ..	2 3·2	1 7·7	2 3·2	1 5·8	—	2 3·2	2 3·2	2 3·2	2 3·2	1 7·7	2 3·2	1 7·7	2 3·2	2 3·2	2 3·2	2 3·2	2 3·2	2 3·2	2 3·2	2 3·2	1 7·7	2 3·2
Ceylon ..	1 8·2	1 8·2	1 8·2	1 8·2	1 8·2	—	1 8·2	1 8·2	1 8·2	1 8·2	1 8·2	1 8·2	1 8·2	1 8·2	1 8·2	1 8·2	1 8·2	1 8·2	1 8·2	1 8·2	1 8·2	1 8·2
Cyprus ..	1 10·3	1 10·3	1 10	1 7·2	1 10·3	1 10·3	—	1 10·3	1 10·3	1 10·3	1 10·3	1 10·3	1 10·3	1 10·3	1 10·3	1 10·3	1 10·3	1 10·3	1 10·3	1 10·3	1 10·3	1 10·3
East Africa ..	2 1·9	2 1·9	8·4	2 1·9	2 1·9	2 1·9	2 1·9	—	2 1·9	2 1·9	2 1·9	2 1·9	8·4	2 1·9	2 1·9	2 1·9	— <sup>1</sup>	2 1·9	2 1·9	2 1·9	2 1·9	8·4
Ghana ..	1 10	1 10	1 10	1 10	1 10	1 10	1 10	1 10	—	1 10	1 10	1 10	1 10	1 10	1 10	1 4	1 10	1 6 <sup>2</sup> 1 8 <sup>3</sup>	1 10	1 10	1 10	1 10
Guyana ..	1 10	1 3	1 10	1 5	1 8	1 10	1 10	1 10	1 10	—	1 10	1 6	1 10	1 10	1 10	1 10	1 10	1 10	1 10	1 10	— <sup>4</sup>	1 10
India ..	1 1·3	1 1·3	1 1·3	1 1·3	1 1·3	1 1·3	1 1·3	1 1·3	1 1·3	1 1·3	—	1 1·3	1 1·3	1 1·3	1 1·3	1 1·3	1 1·3	1 1·3	1 1·3	1 1·3	1 1·3	1 1·3
Jamaica ..	1 10	1 3	1 10	1 5	1 8	1 10	1 10	1 10	1 10	1 3	1 10	—	1 10	1 10	1 10	1 10	1 10	1 10	1 10	1 10	1 3	1 10
Malawi ..	1 10	1 10	3·5	1 10	1 10	1 10	1 10	7	1 10	1 10	1 10	1 10	—	1 10	1 10	1 10	3·5	1 10	1 10	1 10	1 10	3·5
Malaysia ..	2 2·3	2 2·3	2 2·3	2 2·3	2 2·3	2 2·3	2 2·3	2 2·3	2 2·3	2 2·3	2 2·3	2 2·3	2 2·3	—	2 2·3	2 2·3	2 2·3	2 2·3	2 2·3	Local service	2 2·3	2 2·3
New Zealand ..	5·6	1 8·2	1 8·2	1 8·2	1 8·2	1 8·2	1 8·2	1 8·2	1 8·2	1 8·2	1 8·2	1 8·2	1 8·2	1 8·2	—	1 8·2	1 8·2	1 8·2	1 8·2	1 8·2	1 8·2	1 8·2
Nigeria ..	2 1·7	2 1·7	2 1·7	2 1·7	2 1·7	2 1·7	2 1·7	2 1·7	1 4·3 <sup>5</sup> 1 6·7 <sup>6</sup>	2 1·7	2 1·7	2 1·7	2 1·7	2 1·7	2 1·7	—	2 1·7	2 1·7	2 1·7	2 1·7	2 1·7	2 1·7
Rhodesia ..	1 6·7	1 6·7	4·1	1 6·7	1 6·7	1 6·7	1 6·7	— <sup>1</sup>	1 6·7	1 6·7	1 6·7	1 6·7	4·1	1 6·7	1 6·7	1 6·7	—	1 6·7	1 6·7	1 6·7	1 6·7	4·1
Sierra Leone ..	1 9·6	1 9·6	1 9·6	1 9·6	1 9·6	1 9·6	1 9·6	1 9·6	1 7·2 <sup>5</sup> 1 8·4 <sup>6</sup>	1 9·6	1 9·6	1 9·6	1 9·6	1 9·6	1 9·6	1 9·6	1 9·6	—	1 9·6	1 7·2	1 9·6	1 9·6
Singapore ..	2 2	2 2	2 2	2 2	2 2	2 2	2 2	2 2	2 2	2 2	2 2	2 2	2 2	7	2 2	2 2	2 2	2 2	—	2 2	2 2	2 2
The Gambia ..	1 10	1 10	1 10	1 10	1 10	1 10	1 10	1 10	1 10	1 10	1 10	1 10	1 10	1 10	1 10	1 10	1 10	1 6 <sup>2</sup> 1 8 <sup>3</sup>	1 10	—	1 10	1 10
Trinidad and Tobago	1 10	6	1 10	1 5	1 8	1 10	1 10	1 10	1 10	1 3	1 10	1 3	1 10	1 10	1 10	1 10	1 10	1 10	1 10	1 10	—	1 10
Zambia ..	1 10·4	1 10·4	—	1 10·4	1 10·4	1 10·4	1 10·4	8·4	1 10·4	1 10·4	1 10·4	1 10·4	— <sup>1</sup>	1 10·4	1 10·4	1 10·4	— <sup>1</sup>	1 10·4	1 10·4	1 10·4	1 10·4	—

Notes:—

<sup>1</sup> Excluded Service.<sup>2</sup> Sierra Leone—Freetown.<sup>3</sup> Sierra Leone—Other Offices.<sup>4</sup> Trinidad—Port of Spain 1s. 3d. Other Offices 1s. 5d. Tobago 1s. 6d.<sup>5</sup> Ghana—Accra.<sup>6</sup> Ghana—Other Offices.<sup>7</sup> To Sabah 1s. 4·3d. To Penang 3·3d. To Other Offices 11·4d.



TABLE 2

## Examples of Commonwealth-Foreign Telegraph Rates per Ordinary Word in Terms of Sterling as at 31st December 1968

	Persian Gulf (Bahrain)		Argentina		Brazil		China		France		Germany		Japan		Norway		United Arab Republic		Republic of South Africa		USA	
	To	From	To	From	To	From	To	From	To	From	To	From	To	From	To	From	To	From	To	From	To	From <sup>5</sup>
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
Australia ..	2 9·5	6 8·5	3 8·7	9 2·5	3 8·7	12 3·9	2 9·5	7 9·1	2 4	5 2·5	2 4	5 3·9	3 3·1	3 6·3	2 4	5 6·2	2 9·5	6 9·8	1 7	1 10·4	1 10·4	2 4 <sup>2</sup>
Barbados ..	6 0	6 8·5	2 4	4 3·8	2 4	8 0·3	6 1	11 0	3 9	5 2·1	3 11	7 0·6	6 8	7 0·4	3 11	7 1·2	4 11	8 6·1	2 2	1 10·4	1 8	1 11
Botswana ..	4 2·8	4 11·6	4 11·8	10 9·9	4 11·8	13 4·9	4 2·8	11 1	1 10·8	3 3·9	1 10·8	4 3·6	4 2·8	5 10·8	1 10·8	4 4	4 11·8	6 1	4·2	4	1 11·3	2 4
Britain ..	2 3	2 7·4	2 4	5 3·9	2 8	6 5	3 5	4 4·3	7	11·1	8	9·1	3 5	4 6·1	8	9·2	1 4	2 5·6	1 10	1 10·4	1 5	1 11
Canada ..	3 10·9	4 0	3 4·4	5 1·6	3 5·3	5 0·4	5 0·1	4 4·3	1 9·6	2 6·4	1 11·5	2 9·7	2 8·9	2 6·5	1 11·5	2 9·1	2 11·7	4 2·9	2 2·3	1 10·4	1	3
Ceylon ..	1 7·4	2 3·2	5 0·6	10 7·9	4 6·5	13 1·1	2 4	4 8·5	1 9·2	3 6·9	1 9·9	3 8·3	3 2·0	3 4·6	1 10·9	3 10·5	2 6·7	5 3·4	1 8·2	1 10·4	1 11·4	2 4
Cyprus ..	3 10·3	4 7·4	5 1·2	8 11·5	4 6	11 8	5 8·4	10 4·5	1 8·4	3 1·6	1 9·6	3 4·8	5 6	5 8·8	1 10	3 7	1 3·6	2 6·1	2 2·4	1 10·4	2 1·9	2 5
East Africa ..	6 0·7	6 0·1	7 6·9	11 4·4	6 10·5	13 10·3	8 1	6 6·4	3 11·5	6 1	4 0·9	6 4·1	8 4·6	6 9·2	4 2·3	6 7·6	4 10·9	7 7·3	1 3·4	1 4·8	2 6·8	2 4
Ghana (Accra)	5 9	6 8·5	5 8	10 4·3	5 1	12 3·5	7 7	13 9·5	4 1	7 4·8	4 3	7 8	7 5	7 9·1	4 4	8 0·5	4 9	8 9·8	2 2	1 10·4	2 2	2 4
Guyana (Georgetown)	6 8	7 5·9	2 4	4 3·8 <sup>2</sup>	2 4	5 9·1	6 9	6 5·6	4 6	5 10·3	4 7	8 3·3	7 5	7 10·6	4 7	8 4	5 8	9 8·9	2 2	1 10·4	1 8	2 4
India ..	1 1·3	2 0·4	1 9·3	10 6·2	1 9·3	13 2·4	1 5·3	2 5·4	1 5·3	3 7·5	1 5·3	3 9	1 5·3	3 1·2	1 5·3	3 9·2	1 5·3	5 1·1	1 5·3	1 10·4	1 9·3	2 4
Jamaica ..	6 0	6 8·5	2 4	4 3·8	2 4	8 0·3	6 1	11 0	3 9	5 2·1	3 11	7 0·6	6 8	6 10·9	4 0	7 1·2	5 0	8 6·1	2 2	1 10·4	1 8	1 11
Malawi ..	4 0	4 10·5	4 6	10 8·2	4 6	12 8·7	4 0	10 10·8	2 2	3 10·6	2 4	4 1·7	4 0	5 6	2 4	4 2	3 0	5 10·9	4·5	5·6	2 2	2 4
Malaysia ..	3 10	3 9·9	8 0·9	12 4·9	7 4·7	15 0·3	3 3·4	4 11·3	3 10	5 11·3	3 10	5 11·1	3 6·7	2 9·3	3 11·6	6 0·6	4 11·1	7 8	2 7·2	1 10·4	2 7·2	2 4
New Zealand ..	3 4·3	6 8·5	3 8·8	9 2·5	3 8·8	12 3·9	3 4·3	8 6·7	2 2·9	5 2·5	2 2·9	5 3·9	3 4·3	4 1·1	2 7·4	5 6·2	2 11·8	7 7·4	2 2·9	1 10·4	1 10·4	2 4
Nigeria (Lagos)	6 8·5	6 8·5	6 7·3	10 4·3	5 11·2	12 3·5	6 6·2	6 6·4	3 7·2	5 6·7	3 9·5	5 9·9	8 7·8	7 9·1	3 11·8	6 3·4	4 1	4 2·3	2 6·3	1 10·4	2 6·3	2 4
Rhodesia ..	4 1	4 10·5	4 8	10 8·2	4 8	12 8·7	4 1	10 10·8	1 9	3 10·6	1 9	4 1·7	4 1	5 6	1 9	4 2	2 11	5 10·9	4·1 <sup>4</sup>	4·2	1 11·3	2 4
Sierra Leone (Freetown)	5 1·2	5 11·1	5 0	9 1·5	4 4·8	10 6·9	5 7·2	6 6·4	2 6	4 7	2 8·4	4 10·2	6 8·4	7 2·3	2 10·8	5 3·4	4 1·2	7 6·3	2 2·4	1 10·4	2 2·4	2 4
Singapore ..	3 9·5	3 9·9	7 11·9	12 4·9	7 3·8	15 0·3	3 3	4 11·3	3 9·5	5 11·3	3 9·5	5 11·1	3 6·3	2 9·3	3 11·1	6 0·6	4 10·5	7 8	2 6·9	1 10·4	2 6·9	2 4
The Gambia (Bathurst)	5 1	5 11·1	5 0	9 1·5	4 4	10 6·9	6 6	6 6·4	2 6	4 7	2 8	4 10·2	6 8	7 2·3	2 11	5 3·4	4 2	7 6·3	2 2	1 10·4	2 2	2 4
Trinidad and Tobago (Port of Spain)	6 8	7 5·9	2 4	4 3·8	2 4	8 0·3	6 9	12 3	4 6	5 10·3	4 7	8 3·3	7 5	7 7·4	4 7	8 4	5 8	9 9	2 2	1 10·4	1 8	1 11
Zambia ..	4 2·4	4 10·5	4 8	10 8·2	4 8	12 8·7	4 2·4	10 10·8	2 4	3 10·6	2 4	4 1·7	4 2·4	5 6	2 4	4 2	2 9·6	5 10·9	4·1	1 4·8	2 4	2 4

<sup>1</sup> Montreal-New York Rate for 10 words or less is Can\$1·20 (9s. 4·6d): Each additional word 8½ cents (8d).<sup>2</sup> Via Barbados.<sup>3</sup> Various.<sup>4</sup> Minimum as for 10 words per Telegram.<sup>5</sup> Plus 10% Tax.

TABLE 3

## Inter-National Body Telephone Rates per Unit Call of 3 Minutes in Terms of Sterling as at 31st December 1968

From	To																					
	Australia	Barbados	Britain	Canada	Ceylon	Cyprus	East <sup>1</sup> Africa	Ghana	Guyana	India	Jamaica	Malawi	Malaysia	New Zealand	Nigeria	Rhodesia	Sierra Leone	Singapore	The Gambia	Trinidad and Tobago	Zambia	
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	
Australia .. ..	—	4 7 3	3 9 11	5 0 8	3 9 11	4 7 3	4 7 3	4 7 3	4 7 3	3 9 11	4 7 3	4 7 3	3 9 11	1 14 11	3 9 11	3 9 11	4 7 3	3 9 11	4 7 3	4 7 3	3 9 11	
Barbados .. ..	3 15 0	—	3 0 0	3 0 0	3 15 0	3 15 0	3 15 0	3 15 0	1 2 6	3 15 0	1 2 6	3 15 0	3 15 0	3 15 0	3 15 0	3 15 0	3 15 0	3 15 0	3 15 0	1 2 6	3 15 0	
Britain .. ..	3 0 0	3 0 0	—	From 2 10 0 To 4 0 0	3 0 0	2 5 0	3 0 0	3 0 0	3 0 0	3 0 0	3 0 0	3 0 0	3 15 0	3 0 0	3 0 0	3 0 0	3 0 0	3 15 0	3 0 0	3 0 0	3 0 0	
Canada .. ..	4 13 0	From 2 12 4 To 4 13 0	From 2 12 6 To 3 10 3	—	5 17 3	5 17 3	5 17 3	5 17 3	From 3 10 3 To 4 13 0	5 17 3	From 3 10 3 To 4 13 0	4 13 0	4 13 0	4 13 0	5 17 3	4 13 0	5 17 3	4 13 0	5 17 3	From 3 10 3 To 4 13 0	4 13 0	
Ceylon .. ..	2 13 9	3 10 0	2 13 9	3 7 3	—	3 10 0	3 7 3	3 7 3	3 7 3	Local service 3 15 0	3 7 3	N/S	2 13 9	2 13 9	3 7 3	3 7 3	N/S	2 13 9	N/S	3 7 3	N/S	
Cyprus .. ..	3 15 0	3 15 0	2 5 0	3 15 0	3 15 0	—	3 15 0	3 15 0	3 15 0	3 15 0	3 15 0	3 15 0	3 15 0	3 15 0	3 15 0	3 15 0	3 15 0	3 15 0	3 15 0	3 15 0	3 15 0	
East Africa .. ..	4 7 6	4 7 6	3 10 0	4 7 6	4 7 6	4 7 6	—	2 12 6	4 7 6	3 10 0	4 7 6	1 15 0	3 10 0	4 7 6	2 12 6	1 15 0 <sup>2</sup>	4 7 6	3 10 0	N/S	4 7 6	1 15 0	
Ghana .. ..	3 1 3	3 1 3	3 0 0	3 1 3	3 1 3	3 1 3	3 1 3	—	3 1 3	3 1 3	3 1 3	3 1 3	3 1 3	3 1 3	18 3	3 1 3	1 4 6	3 1 3	1 10 9	3 1 3	3 1 3	
Guyana .. ..	3 15 0	1 2 6	3 0 0	3 0 0	3 15 0	3 15 0	3 15 0	3 15 0	—	3 15 0	1 2 6	3 15 0	3 15 0	3 15 0	3 15 0	3 15 0	3 15 0	3 15 0	3 15 0	3 15 0	1 2 6	3 15 0
India .. ..	3 0 0	3 10 0	3 0 0	3 10 0	Local service 3 15 0	3 10 0	3 0 0	3 10 0	3 10 0	—	3 10 0	3 10 0	3 0 0	3 10 0	3 10 0	3 10 0	3 10 0	3 0 0	N/S	3 10 0 <sup>3</sup>	3 10 0	
Jamaica .. ..	3 15 0	1 2 6	3 0 0	3 0 0	3 15 0	3 15 0	3 15 0	3 15 0	1 2 6	3 15 0	—	3 15 0	3 15 0	3 15 0	3 15 0	3 15 0	3 15 0	3 15 0	3 15 0	3 15 0	1 2 6	3 15 0
Malawi .. ..	3 15 0	3 15 0	3 0 0	4 5 6	3 15 0	3 15 0	1 10 0	3 15 0	3 15 0	3 15 0	3 15 0	—	3 15 0	3 15 0	3 15 0	N/S	3 15 0	3 15 0	3 15 0	3 15 0	N/S	
Malaysia .. ..	3 10 0	4 10 3	4 10 3	5 6 6	3 10 0	4 10 3	3 10 0	4 10 3	4 10 3	3 10 0	4 10 3	4 10 3	—	3 10 0	4 10 3	4 10 3	N/S	Local service N/S	N/S	4 10 3	4 10 3	
New Zealand .. ..	1 15 0	3 10 0	2 16 0	3 10 0	2 16 0	3 10 0	3 10 0	3 10 0	3 10 0	3 10 0	3 10 0	3 10 0	3 3 0	—	3 10 0	3 3 0	3 10 0	3 3 0	3 10 0	3 10 0	3 3 0	
Nigeria .. ..	4 7 6	4 7 6	3 10 0	4 7 6	4 7 6	4 7 6	2 12 6	1 6 3	4 7 6	4 7 6	4 7 6	4 7 6	4 7 6	4 7 6	—	4 7 6	2 3 9	4 7 6	2 3 9	4 7 6	4 7 6	
Rhodesia .. ..	3 10 0	4 7 6	3 10 0	4 19 9	4 7 6	4 7 6	1 15 0	4 7 6	4 7 6	4 7 6	4 7 6	N/S	4 7 6	3 18 9	4 7 6	—	4 7 6	4 7 6	4 7 6	4 7 6	N/S	
Sierra Leone .. ..	3 15 0	3 15 0	3 0 0	3 15 0	N/S	3 15 0	3 15 0	1 10 0	3 15 0	3 15 0	3 15 0	3 15 0	N/S	3 15 0	1 17 6	3 15 0	—	N/S	1 2 6	3 15 0	3 15 0	
Singapore .. ..	3 10 0	4 10 3	4 10 3	5 6 6	3 10 0	4 10 3	3 10 0	4 10 3	4 10 3	3 10 0	4 10 3	4 10 3	Local service N/S	3 10 0	4 10 3	4 10 3	4 10 3	—	4 10 3	4 10 3	4 10 3	
The Gambia .. ..	3 15 0	3 15 0	3 0 0	3 15 0	N/S	3 15 0	N/S	1 17 6	3 15 0	N/S	3 15 0	3 15 0	N/S	3 15 0	1 17 6	3 15 0	1 2 6	3 15 0	—	3 15 0	3 15 0	
Trinidad and Tobago ..	3 15 0	1 2 6	3 0 0	3 0 0	3 15 0	3 15 0	3 15 0	3 15 0	1 2 6	3 15 0	1 2 6	3 15 0	3 15 0	3 15 0	3 15 0	3 15 0	3 15 0	3 15 0	3 15 0	—	3 15 0	
Zambia .. ..	3 10 0	4 7 6	3 10 0	4 19 9	4 7 6	4 7 6	1 15 0	4 7 6	4 7 6	4 7 6	4 7 6	N/S	4 7 6	3 18 9	4 7 6	N/S	4 7 6	4 7 6	4 7 6	4 7 6	—	

<sup>1</sup>Tanzania Uganda Kenya.<sup>2</sup>Suspended.<sup>3</sup>No Service with Tobago.

N/S No Service.

TABLE 4

## Examples of Commonwealth-Foreign Telephone Rates per Unit Call of 3 Minutes in Terms of Sterling as at 31st December 1968

	Bahrain		France		Germany		Japan		South Africa		USA		Argentina		Brazil	
	To	From	To	From	To	From	To	From	To	From	To	From	To	From	To	From
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Australia .. ..	4 7 2	4 7 7	5 0 7	5 3 0	5 0 7	5 6 6	4 12 3	4 12 2	3 9 10	3 10 0	5 0 7	5 0 0	6 5 9	6 2 8	6 5 9	10 2 10
Barbados .. ..	3 15 0	4 7 7	4 14 0	5 3 0	5 7 6	5 6 6	5 7 6	6 6 2	3 15 0	4 7 6	2 13 9	3 15 6	5 7 6	6 4 9	5 7 6	7 2 0
Botswana .. ..	N/S	N/S	3 14 11	3 15 0	3 17 8	3 14 4	N/S	N/S	Various	Various	4 19 9	5 0 0	N/S	N/S	N/S	N/S
Britain .. ..	3 0 0	3 10 0	7 0	8 2	10 0	12 7	3 15 0	5 0 11	3 0 0	3 10 0	4 0 0	5 0 0	3 0 0	4 18 2	3 0 0	6 15 3
Canada .. ..	5 17 0	4 7 7	4 13 7	4 19 9	4 13 7	5 0 9	4 13 7	5 0 11	4 13 7	4 19 9	Various	Various	4 13 7	4 19 9	4 13 7	5 13 7
Ceylon .. ..	N/S	N/S	3 1 8	3 15 0	3 7 3	3 17 9	2 13 9	3 11 6	3 10 0	4 7 6	4 4 0	6 5 0	N/S	N/S	N/S	N/S
Cyprus .. ..	3 15 0	4 7 7	2 11 0	2 17 6	2 17 0	3 0 6	3 15 0	6 6 2	3 15 0	4 7 6	3 15 0	6 5 0	3 15 0	6 2 8	3 15 0	10 2 10
East Africa ..	2 12 5	2 12 6	3 16 10	3 15 0	4 3 10	3 17 9	4 7 4	6 6 2	2 3 8	2 3 9	4 7 4	6 5 0	4 7 4	6 2 8	4 7 4	10 2 10
Ghana .. ..	3 1 3	4 7 7	2 13 9	3 15 0	2 18 9	3 17 9	3 1 3	6 6 2	3 1 3	4 7 6	3 1 3	6 5 0	3 1 3	6 2 8	3 1 3	10 2 10
Guyana .. ..	3 15 0	4 7 7	3 3 0	5 3 0	3 12 0	5 6 6	5 7 6	6 6 2	3 15 0	4 7 6	3 4 6	3 15 0	5 7 6	6 4 9	5 7 6	7 2 0
India .. ..	2 3 3	2 12 6	2 19 9	3 15 0	2 19 9	3 15 3	2 19 9	3 11 2	3 9 10	4 7 6	3 9 10	6 5 0	3 9 10	6 2 8	3 9 10	10 2 10
Jamaica .. ..	3 15 0	4 7 7	3 6 0	5 3 0	3 12 0	5 6 6	5 7 6	6 6 2	3 15 0	4 7 6	2 3 0	2 14 0	5 7 6	6 4 9	5 7 6	7 2 0
Malawi .. ..	3 15 0	4 7 7	3 6 0	3 15 0	3 12 0	3 17 9	3 15 0	6 6 2	Various	Various	4 5 6	5 0 0	3 0 0	4 18 2	3 0 0	10 2 10
Malaysia .. ..	4 11 2	4 7 7	4 19 5	5 3 0	5 5 7	5 6 6	3 11 3	3 10 5	N/S	N/S	5 7 9	5 0 0	6 14 7	6 4 9	6 14 7	7 2 0
New Zealand ..	3 19 10	4 7 7	3 19 10	5 3 0	3 19 10	5 6 6	3 19 10	4 18 10	3 19 10	3 18 9	3 19 10	5 0 0	4 18 0	6 4 9	4 18 0	7 2 0
Nigeria .. ..	4 7 6	4 7 7	3 17 0	3 15 0	4 4 0	3 17 9	4 7 6	6 6 2	4 7 6	4 7 6	4 7 6	6 5 0	4 7 6	6 2 8	4 7 6	10 2 10
Rhodesia .. ..	4 7 6	4 7 7	3 17 0	3 15 0	4 4 0	3 17 9	4 7 6	6 6 2	Various	Various	4 19 9	5 0 0	3 10 0	4 18 2	3 10 0	10 2 10
Sierra Leone ..	N/S	N/S	3 6 0	3 15 0	3 12 0	3 17 9	N/S	N/S	3 15 0	4 7 6	3 15 0	6 5 0	N/S	N/S	N/S	N/S
Singapore .. ..	4 11 2	4 7 7	4 19 5	5 3 0	5 5 7	5 6 6	3 11 3	3 10 5	N/S	N/S	5 7 9	5 0 0	6 14 7	6 4 9	6 14 7	7 2 0
The Gambia ..	N/S	N/S	3 6 0	3 15 0	3 12 0	3 17 9	N/S	N/S	3 15 0	4 7 6	3 15 0	6 5 0	N/S	N/S	N/S	N/S
Trinidad and Tobago	3 15 0 <sup>1</sup>	4 7 7 <sup>1</sup>	4 14 0	5 3 0	5 7 6	5 6 6	5 7 6	6 6 2	3 15 0 <sup>1</sup>	4 7 6 <sup>1</sup>	2 13 9	3 15 6	5 7 6	6 4 9	5 7 6	7 2 0
Zambia .. ..	4 7 6	4 7 7	3 17 0	3 15 0	4 4 0	3 17 9	4 7 6	6 6 2	Various	Various	4 19 9	5 0 0	3 10 0	4 18 2	3 10 0	10 2 10

N/S—No service.

<sup>1</sup> No service with Tobago.

TABLE 5

## Inter-National Body Telex Rates per Unit Call of 3 Minutes in Terms of Sterling as at 31st December 1968

From	To																				
	Australia	Bar- bados	Britain	Canada	Ceylon	East Africa	Ghana	Guyana	India	Jamaica	Malawi	Malaysia	New Zealand	Nigeria	Rhodesia	Sierra Leone	Singa- pore	The Gambia	Trinidad and Tobago <sup>1</sup>	Zambia	
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Australia	—	5 0 8	3 9 9	3 15 6	3 9 9	5 0 8	5 0 8	5 0 8	3 9 9	5 0 8	N/S	3 9 9	1 14 9	5 0 8	5 0 8	N/S	3 9 9	N/S	5 0 8	5 0 8	
Barbados	4 6 0	—	3 0 0	3 4 6	N/S	N/S	N/S	1 2 6	4 6 0	1 10 0	N/S	5 7 6	4 6 0	N/S	N/S	4 6 0	5 7 6	4 6 0	15 0	N/S	
Britain	3 0 0	3 0 0	—	3 0 0	3 0 0	3 0 0	3 0 0	3 0 0	3 0 0	3 0 0	3 0 0	3 15 0	3 0 0	3 0 0	3 0 0	3 0 0	3 15 0	3 0 0	3 0 0	3 0 0	3 0 0
Canada	3 10 3	3 10 3	3 10 3	—	4 13 0	4 13 0	4 13 0	3 10 3	4 13 0	2 18 2	3 10 3	4 13 0	3 10 3	4 13 0	3 10 3	4 13 0	4 13 0	4 13 0	4 13 0	3 10 3	3 10 3
Ceylon	2 16 0	N/S	2 16 0	3 1 4	—	2 16 0	3 1 4	N/S	1 17 9	N/S	N/S	3 3 0	3 10 0	3 10 0	N/S	N/S	3 3 0	N/S	N/S	N/S	3 3 0
East Africa	4 7 6	N/S	3 10 0	4 7 6	4 7 6	—	4 7 6	N/S	3 10 0	4 7 6	1 15 0	4 7 6	4 7 6	4 7 6	4 7 6	4 7 6	4 7 6	4 7 6	4 7 6	N/S	1 15 0
Ghana	4 5 9	N/S	3 0 0	3 15 0	3 15 0	3 15 0	—	N/S	3 15 0	3 15 0	N/S	N/S	4 5 9	2 5 0	N/S	4 5 9	3 15 0	3 15 0	N/S	N/S	
Guyana	4 6 0	1 2 6	3 0 0	3 4 6	N/S	N/S	N/S	—	4 6 0	1 10 0	N/S	N/S	4 6 0	N/S	N/S	4 6 0	N/S	4 6 0	1 2 6	N/S	
India	2 13 3	3 3 4	2 13 3	3 3 4	1 6 8	2 13 3	3 3 4	3 3 4	—	3 3 4	N/S	2 13 4	3 3 4	3 3 4	N/S	N/S	2 13 3	N/S	3 3 4	3 3 4	
Jamaica	4 6 0	1 10 0	3 0 0	2 13 6	N/S	4 6 0	4 6 0	1 10 0	4 6 0	—	4 6 0	5 7 0	4 6 0	N/S	4 6 0	4 6 0	5 7 0	4 6 0	1 10 0	4 6 0	
Malawi	4 5 6	N/S	3 0 0	3 4 6	N/S	1 10 0	N/S	N/S	N/S	4 5 6	—	5 7 6	4 5 6	4 5 6	Local service	N/S	5 7 6	N/S	N/S	Local service	
Malaysia	3 15 3	6 5 9	4 7 6	5 0 4	3 15 3	6 5 9	6 5 9	N/S	6 5 9	6 5 9	6 5 9	—	5 0 4	6 5 9	6 5 9	N/S	Local service	N/S	6 5 9	N/S	
New Zealand	1 15 0	3 19 10	3 0 2	3 0 2	3 19 10	3 19 10	3 19 10	3 19 10	3 19 10	3 19 10	3 19 10	3 19 10	—	3 19 10	3 19 10	3 19 10	3 19 10	3 19 10	3 19 10	3 19 10	
Nigeria	5 0 4	N/S	3 10 0	5 0 4	4 7 6	4 7 6	2 12 6	N/S	4 7 6	N/S	5 0 4	5 19 9	5 0 4	—	5 0 4	5 0 4	5 19 9	4 7 6	N/S	5 0 4	
Rhodesia	4 19 9	N/S	3 10 0	3 15 3	4 19 9	4 7 6	N/S	N/S	N/S	4 19 9	Local service	6 5 6	4 19 9	4 19 9	—	N/S	6 5 6	N/S	N/S	N/S	
Sierra Leone	N/S	4 5 9	3 0 0	4 5 9	N/S	1 8 7	4 5 9	4 5 9	N/S	4 5 9	N/S	N/S	5 7 0	4 5 9	N/S	—	N/S	1 2 6	N/S	N/S	
Singapore	3 15 3	6 5 9	4 7 6	5 0 4	3 15 3	6 5 9	6 5 9	N/S	6 5 9	6 5 9	6 5 9	Local service	5 0 4	6 5 9	6 5 9	N/S	—	N/S	6 5 9	6 5 9	
The Gambia	N/S	4 5 9	3 0 0	4 5 9	N/S	4 5 9	4 5 9	4 5 9	N/S	4 5 9	N/S	N/S	5 7 3	4 5 9	N/S	1 2 6	N/S	—	N/S	N/S	
Trinidad and Tobago <sup>1</sup>	4 6 0	15 0	3 0 0	3 4 6	N/S	N/S	N/S	1 2 6	4 6 0	1 10 0	N/S	5 7 6	4 6 0	N/S	N/S	N/S	5 7 6	N/S	—	N/S	
Zambia	4 19 9	N/S	3 10 0	3 15 3	3 15 3	1 15 0	N/S	N/S	4 19 9	4 19 9	Local service	N/S	4 19 9	4 19 9	N/S	N/S	6 5 5	N/S	N/S	—	

Note: Cyprus and Botswana had no telex service at 31st December, 1968.

N/S—No service.

<sup>1</sup>Trinidad only.

TABLE 6

Examples of Commonwealth-Foreign Telex Rates per Unit Call of 3 Minutes in Terms of Sterling as at 31st December 1968

	Bahrain		France		Germany		Japan		South Africa		USA		Argentina		Brazil	
	To	From	To	From	To	From	To	From	To	From	To	From	To	From	To	From
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Australia .. ..	5 0 8	5 0 0	5 0 8	5 0 3	5 0 8	4 19 9	3 15 6	3 15 0	3 15 6	3 15 0	3 15 6	3 15 0	5 0 8	5 0 0	5 0 8	5 0 0
Barbados .. ..	4 6 0	5 0 0	3 4 6	3 15 2	3 4 6	3 14 9	4 6 0	3 15 0	4 6 0	5 0 0	3 4 6	3 15 0	3 4 6	3 15 0	3 4 6	3 15 0
Britain .. ..	3 0 0	3 15 0	4 0	5 5	6 0	6 11	3 0 0	3 15 0	3 0 0	3 10 0	3 0 0	3 15 0	3 0 0	3 15 0	3 0 0	5 0 0
Canada .. ..	4 13 6	5 0 0	3 10 3	3 15 2	3 10 3	3 14 9	3 10 3	3 15 0	3 9 3	3 15 0	Local service	Local service	3 10 3	3 15 0	3 10 3	3 15 0
East Africa ..	5 0 0	5 0 0	3 15 0	3 15 2	3 15 0	3 14 9	5 0 0	3 15 0	4 7 4	4 8 9	5 0 0	5 0 0	5 0 0	5 0 0	5 0 0	5 0 0
Ghana .. ..	4 4 0	5 0 0	3 3 0	3 15 2	3 3 0	3 14 9	4 4 0	3 15 0	N/S	N/S	4 4 0	5 0 0	4 4 0	5 0 0	4 4 0	5 0 0
Guyana .. ..	N/S	N/S	3 4 6	3 15 2	N/S	N/S	4 6 0	3 15 0	N/S	N/S	3 4 6	3 15 0	3 4 6	3 15 0	3 4 6	3 15 0
India .. ..	2 0 0	5 0 0	2 13 3	3 15 2	2 13 3	4 19 9	2 13 3	3 15 0	N/S	N/S	3 3 3	5 0 0	3 3 3	5 0 0	3 3 3	5 0 0
Jamaica .. ..	4 6 0	5 0 0	3 4 6	3 15 2	3 4 6	3 14 9	4 6 0	3 15 0	4 6 0	5 0 0	2 13 6	3 2 6	3 4 6	3 15 0	3 4 6	3 15 0
Malawi .. ..	4 5 6	5 0 0	3 4 6	3 15 2	3 4 6	3 14 9	4 5 6	3 15 0	Local service	Local service	3 4 6	3 15 0	4 5 6	5 0 0	4 5 6	5 0 0
Malaysia .. ..	6 5 8	6 6 0	5 0 6	5 0 3	5 0 6	4 19 9	3 15 0	3 15 0	6 5 8	5 0 0	5 0 6	5 0 0	6 5 8	6 5 0	6 5 8	5 0 0
New Zealand ..	3 19 10	5 0 0	3 19 10	5 0 3	3 19 10	4 14 9	3 0 0	3 15 0	3 19 10	5 0 0	3 0 0	3 15 0	3 19 10	5 0 0	3 19 10	5 0 0
Nigeria .. ..	N/S	N/S	3 15 3	3 15 2	3 15 3	3 14 9	5 0 6	3 15 0	5 0 6	5 0 0	5 0 6	5 0 0	5 0 6	5 0 0	5 0 6	5 0 0
Rhodesia .. ..	4 19 9	5 0 0	3 15 3	3 15 2	3 15 3	3 14 9	4 19 9	3 15 0	Local service	Local service	3 15 3	3 15 0	4 19 9	5 0 0	4 19 9	5 0 0
Sierra Leone ..	4 5 9	5 0 0	3 4 3	3 15 2	3 4 3	3 14 9	4 5 9	3 15 0	N/S	N/S	4 5 9	5 0 0	4 5 9	5 0 0	4 5 9	5 0 0
Singapore ..	6 5 8	6 6 0	5 0 6	5 0 3	5 0 6	4 19 9	3 15 0	3 15 0	6 5 8	5 0 0	5 0 6	5 0 0	6 5 8	6 5 0	6 5 8	5 0 0
The Gambia ..	4 5 9	5 0 0	3 4 3	3 15 2	3 4 3	3 14 9	3 4 3	3 15 0	N/S	N/S	4 5 9	5 0 0	4 5 9	5 0 0	4 5 9	5 0 0
Trinidad and Tobago <sup>1</sup>	N/S	N/S	3 4 6	3 15 2	3 4 6	3 14 9	4 6 0	3 15 0	N/S	N/S	3 4 6	3 15 0	3 4 6	3 15 0	3 4 6	3 15 0
Zambia .. ..	4 19 9	5 0 0	3 15 3	3 15 2	3 15 3	3 14 9	4 19 9	3 15 0	Local service	Local service	3 15 3	3 15 0	4 19 9	5 0 0	4 19 9	5 0 0

Note: Cyprus and Botswana had no telex service at 31st December 1968.

N/S—No service.

<sup>1</sup>Trinidad only.

## VII. THE BOARD'S ACCOUNTS

91. The termination of the Board on 31st March 1969, prevents the attachment to this Report of the customary audited Statement of Accounts for the full financial year 1968/69. The Accounts, therefore, for the nine months to 31st December 1968, have been audited and certified by the Board's Auditors, Messrs. Thomson McLintock & Co., and are attached.

92. Also attached is a Statement incorporating the audited figures for the first nine months together with a forecast of expenses for the final three months. This totals £116,883 compared with the previous year's total of £100,503.

93. The increase is attributable partly to expenses arising in connection with the termination of the Board, namely, superannuation benefits payable to certain Board staff and the removal expenses of the Board's Chairman on return to New Zealand; partly to pay revisions during the year and the appointment of an additional Board Member; and partly to the increased utilisation of telecommunications facilities, stationery, postage, etc., resulting from the increased volume of work undertaken by the Board generally.

94. The balance of funds available at 31st March 1969, will be handed over to the Commonwealth Telecommunications Bureau, and will be used to meet the Board's liabilities outstanding at that date.

## VIII. UNCOMPLETED BUSINESS

95. At 31st March 1969, there will be some business which the Board, for reasons beyond its control, will have been unable to complete and which will need to be taken over by the new Organisation. The two major items come within the ambit of the First Wayleave Scheme; these are the outstanding Wayleave Accounts (referred to in paragraphs 65-66 of Section III) and the effects of devaluation of Sterling, with particular reference to terminal charges. In addition, the Board's uncompleted domestic affairs, including audit of the Accounts for the period January-March 1969, will be dealt with by the Bureau.

## IX. ACKNOWLEDGMENTS

96. In this, its Final General Report, the Board wishes to place on record its indebtedness to the Administrations and National Bodies of Partner Governments for their co-operation over the years in all aspects of the Board's work. It is particularly conscious of the role played by Britain over the years as the host Government and the great assistance and support to the Board's operations resulting therefrom. A very valuable contribution to the work of the Study Groups has been made by officers of the British Post Office and Cable and Wireless Limited.

97. In Section IV reference is made to the work of the three Study Groups during the current year. These Study Groups have, since very early in the Board's life, carried out the detailed examination of questions and proposals submitted for consideration. The Board acknowledges with gratitude the invaluable work done by the various Chairmen of the Study Groups in guiding their deliberations.

98. It also acknowledges the loyal and efficient services of the Secretariat over the past twenty years. The Board has been fortunate in its choice of Secretaries General, of which there have been three. All have shown a dedicated zeal, which has been reflected throughout the whole staff. Particular mention is made of Mr. W. W. Dimon, who has been with the Board as Finance Officer since its inception. It is gratifying to know that opportunity for continued employment within the new Organisation has been given to all longer term employees of the Board.

99. The Board is appreciative of all that the telecommunications industry has done in arranging visits of interest and also in providing hospitality on numerous occasions.

100. The Board is also grateful to the new Commonwealth Telecommunications Council and Bureau for agreeing to deal with certain of its affairs which cannot be brought to finality before the Board ceases operations on 31st March 1969.

---

# STATEMENTS OF ACCOUNT

---





Commonwealth Telecommunications Board

ESTIMATED STATEMENT OF ACCOUNTS FOR THE YEAR ENDING 31ST MARCH 1969

RECEIPTS		PAYMENTS					
		Actual Expenses 1967/68		Budget 1968/69	Actual Expenses 1.4.68 to 31.12.68	Estimated Expenses 1.1.69 to 31.3.69	Total 1968/69
£		£		£	£	£	£
Balance of Funds at 1st April 1968:							
Deposit account .. .. .	4,000		Remuneration of Chairman and Overseas Allowances ..	5,375	4,031	1,344	5,375
Current account .. .. .	651	5,375	Members' Remuneration and Subsistence Allowances ..	35,750	25,814	9,461	35,275
Cash in hand .. .. .	50	4,701	Salaries, Wages, S.E.T. and National Insurance .. ..	36,535	29,558	9,652	39,210
			Superannuation .. .. .	5,320	4,560	4,105	8,665
Contributions from Partner Governments:			Accommodation .. .. .	15,235	13,206	2,029	15,235
In respect of 1967/68:		31,306	Office Furniture and Equipment .. .. .	135	63	57	120
Nigeria .. .. .	2,400	32,265	Printing, Postage, Stationery and Publications .. ..	4,015	2,605	2,145	4,750
In respect of 1968/69:			Motor Transport and Travel in Britain .. .. .	375	257	118	375
Australia .. .. .	7,900	8,761	Telephones, Telegrams, Telex and Cables .. .. .	1,700	1,672	893	2,565
Barbados .. .. .	700	13,603	Official Hospitality .. .. .	450	37	413	450
Botswana .. .. .	100	168	Audit Fee .. .. .	135	—	236	236
Britain .. .. .	74,950	3,876	Chairman's Removal Expenses .. .. .	2,500	325	2,375	2,700
Canada .. .. .	2,750	168	Travel Abroad .. .. .	1,000	1,287	—	1,287
Ceylon .. .. .	1,700	381	Miscellaneous Expenses .. .. .	640	492	148	640
Cyprus .. .. .	500	1,722					
East Africa .. .. .	2,000	1,285					
Ghana .. .. .	1,050	131					
Guyana .. .. .	100	—					
India .. .. .	2,750	2,000					
Jamaica .. .. .	850	630					
Malaysia .. .. .	1,400	100,503					
New Zealand .. .. .	1,800						
Nigeria .. .. .	3,000						
Sierra Leone .. .. .	600						
Singapore .. .. .	1,550						
The Gambia .. .. .	50						
Trinidad and Tobago .. .. .	750						
Zambia .. .. .	700						
	105,200						
Amount recovered from C.T. Bureau .. .. .	2,570	100,503		109,165	83,907	32,976	116,883
Special advance by Britain .. .. .	6,000		Estimated Balance of Funds at 31st March, 1969:				
Interest on Deposit Account .. .. .	66		Deposit account .. .. .	—	—	—	Nil
			Current account and cash in hand .. .. .	—	—	—	4,054
	£120,937						£120,937

## LIST OF BOARD MEMBERS PAST AND PRESENT

**Chairmen**

- 1949–1950 The Right Honourable LORD REITH, PC, KT, GCVO, GBE, CB, TD  
 1951–1956 Colonel Sir STANLEY ANGWIN, KBE, DSO, MC, DSc.  
 1956–1962 Sir BEN L. BARNETT, KBE, CB, MC  
 1962–1969 Sir DAWSON DONALDSON, KCMG

**Britain**

- 1949 H. TOWNSHEND, CB  
 1949–1952 Colonel A. H. READ, OBE, TD, DL  
 1952–1955 W. A. WOLVERSON, CB  
 1955–1967 Colonel D. McMILLAN, CB, OBE \* ‡  
 1967–1969 C. J. GILL

**Canada**

- 1949–1957 J. H. TUDHOPE, MC \*  
 1957 G. COX  
 1957–1963 H. A. L. PATTISON, CBE \*  
 1963–1965 W. R. BUTLER  
 1966–1968 J. R. BAXTER  
 1968–1969 S. T. GRANT

**Australia**

- 1949–1950 F. R. BRADLEY  
 1950–1959 R. V. MCKAY \*  
 1959–1964 H. A. DE DASSEL, OBE \* †  
 1964–1967 A. H. KAYE, MVO †  
 1967–1969 G. T. HUGHES †

**New Zealand**

- 1949–1953 J. G. YOUNG, CBE \* §  
 1953–1959 H. W. CURTIS \* †  
 1959–1962 E. H. R. GREEN, CBE \* ‡  
 1962–1969 T. N. MORRISON \* §

**South Africa**

- 1949–1958 Lt. Colonel H. MYERS, OBE \* ‡  
 1958–1961 E. A. SHERLOCK, MBE †

**India**

- 1949–1955 M. A. J. VASNAIK \*  
 1955–1959 S. P. PATEL ‡  
 1959–1963 H. N. MUKERJEE \*  
 1963–1967 M. V. PAI ‡  
 1967–1969 G. D. GOKARN \*

**Ceylon**

- 1951–1955 A. I. PERERA, CBE  
 1955–1956 P. O. FERNANDO  
 1956 B. F. PERERA, CMG, OBE  
 1956–1957 Lt. Colonel V. A. NICHOLAS, MBE  
 1957–1961 A. PERERA \*  
 1961–1966 H. E. SENEVIRATNE \* †  
 1966–1968 C. A. R. ANKETELL \* †  
 1969 A. PATHMARAJAH

**Federation of Malaysia (formerly Malaya)**

1962–1964 J. H. WAGSTAFF ‡  
1964–1965 J. H. PINKERTON, OBE  
1968–1969 T. A. NARAYANAN MENON

**Nigeria**

1964–1969 M. S. ADEWALE \*

**Cyprus**

1963 G. CHARALAMBOUS  
1963–1966 N. M. MILTIADOU  
1966–1969 J. C. CHRISTOPHIDES

**Sierra Leone**

1966 F. E. KAREMO  
1966–1967 S. MATTURI  
1968–1969 E. S. S. PALMER

**Jamaica**

1965–1966 G. A. GAUNTLETT  
1966–1969 V. A. PANTON

**Trinidad and Tobago**

1967–1969 His Excellency W. ANDREW ROSE

**Singapore**

1966–1967 G. F. A. HIBBERD  
1967–1968 CHIA CHEONG FOOK  
1969 TAN SENG CHYE

**Southern Rhodesia**

1949–1952 C. F. BRIMBLECOMBE  
1952–1954 G. T. ANSTEY, CB §  
1964–1965 J. WIGGELL

**Federation of Rhodesia and  
Nyasaland**

1954–1963 G. T. ANSTEY, CB \* §

**Other Commonwealth Territories (formerly Colonies and Protectorates)**

1949–1955 G. H. WEBSTER, CMG, OBE \* †  
1955–1962 W. J. BIGG, CMG \*  
1962–1969 A. H. SHEFFIELD, CBE \* ‡

**List of Secretaries General**

1949–1961 W. W. SHAW-ZAMBRA, CVO, CBE, TD  
1961–1967 W. STUBBS, CBE, MC  
1967–1969 C. A. G. COLERIDGE, OBE

*Notes*

1. Members indicated by symbols served in the following offices for a period during their term:

† Vice-Chairman.

‡ Chairman of Traffic Study Group.

‡ Chairman of Technical Study Group.

§ Chairman of Finance and Rates Study Group.

2. Mr. A. H. Sheffield also represented the following Partners: Ghana, Malawi, Zambia, The Gambia, Guyana, Botswana and Barbados.

---

# LISTS OF CABLES AND RADIO CIRCUITS IN THE COMMON-USER SYSTEM AS AT 31st DECEMBER 1968

These Cables and Radio Circuits provide services between Commonwealth countries and with practically all countries of the World; they are given in the following lists:

- I. SUBMARINE TELEGRAPH CABLES (Cable and Wireless Limited)
  - IIA. SUBMARINE TELEPHONE CABLES (European)
  - IIB. SUBMARINE TELEPHONE CABLES (Extra-European)
  - III. CARRIER AND RADIO SYSTEMS (other than HF)
  - IV. HF RADIO STATIONS AND RADIO CIRCUITS
-

I. SUBMARINE TELEGRAPH CABLES (Cable and Wireless Ltd.)

1. Telegraph cables still in use. The first column gives the cable sections; in most cases these form links in long-distance cable chains but they may also be used for local circuits.

Cable Section	Length of Cable Section in Nautical Miles	Cable Station Operator	Cable Section	Length of Cable Section in Nautical Miles	Cable Station Operator
ADEN— BOMBAY III	1,861	CW (ME) OCS (I)	MADEIRA— SAO VICENTE I	1,170	CW CW
ADEN— BOMBAY IV	1,846	CW (ME) OCS (I)	MADEIRA— SAO VICENTE III	1,137	CW CW
ADEN— COLOMBO	2,266	CW (ME) P & T (C)	MADRAS— PENANG III	1,389	OCS (I) MAT
ADEN— SEYCHELLES	1,589	CW (ME) CW	MALDONADO— MONTEVIDEO I	66	WTC WTC
ASCENSION— BUENOS AIRES	3,149	CW WTC	MALDONADO— MONTEVIDEO II	73	WTC WTC
ASCENSION— RIO DE JANEIRO	2,103	CW WTC	MALDONADO— MONTEVIDEO IV	75	WTC WTC
BARBADOS— GEORGETOWN	432	CW (WI) CW (WI)	MALTA— PALERMO	245*	CW Italcable
BENGAZI— MALTA I	446	CW CW	MALTA— TRIPOLI	207	CW CW
BENGAZI— MALTA II	523	CW CW	MALTA— TRIPOLI II	208	CW CW
CARCAVELOS— GIBRALTAR I	338	CW CW	MALTA— ZANTE	398	CW OTE
CARCAVELOS— GIBRALTAR II	344	CW CW	MAURITIUS— RODRIGUEZ	422	CW CW
CARCAVELOS— GIBRALTAR IV	341	CW CW	NATAL— RECIFE	178	WTC WTC
CARCAVELOS— MADEIRA I	623	CW CW	PATRAS— ZANTE II	59	OTE OTE
CARCAVELOS— FAYAL	1,038	CW CW	PENANG— SINGAPORE III	396	MAT STD
CIENFUEGOS— BATABANO I	145	CW (WI) CW (WI)	PENANG— SINGAPORE V	391	MAT STD
CIENFUEGOS— BATABANO II	136	CW (WI) CW (WI)	PIRAEUS— KALAMAKI II	31	OTE OTE
COLOMBO— PENANG I	1,410	P & T (C) MAT	PORTHCURNO— ARRIGUNAGA I	501	ETC TE
COLOMBO— PENANG II	1,436	P & T (C) MAT	PORTHCURNO— ARRIGUNAGA II	484	ETC TE
COLONIA— PUNTA LARA I	23	WTC WTC	PORTHCURNO— CARCAVELOS I	826	ETC CW
COLONIA— PUNTA LARA II	23	WTC WTC	PORTHCURNO— FAYAL I	1,326	ETC CW
CORINTH— PATRAS II	73	OTE OTE	PORTHCURNO— FAYAL II	1,358	ETC CW
FAYAL— SAO VICENTE	1,465	CW CW	PORTHCURNO— GIBRALTAR III	1,219	ETC CW
FLORIANOPOLIS— RIO GRANDE I	395	WTC WTC	PORTHCURNO— GIBRALTAR IV	1,198	ETC CW
FLORIANOPOLIS— RIO GRANDE II	437	WTC WTC	PORTHCURNO— MADEIRA	1,375	ETC CW
FORTALEZA— BELEM	804	WTC WTC	PORT SUDAN— ADEN IV	712	ETC CW (ME)
FORTALEZA— NATAL	323	WTC WTC	PORT SUDAN— ADEN V	742	ETC CW (ME)
FORTALEZA— SAO LUIZ	399	WTC WTC	PUNTA YEGUAS— COLONIA I	90	WTC WTC
FREETOWN— ACCRA	1,059	SLET P & T (GA)	PUNTA YEGUAS— COLONIA II	87	WTC WTC
FREETOWN— CONAKRY	70	SLET CCSA	RECIFE— FORTALEZA	587	WTC WTC
GIBRALTAR— MALTA III	1,078	CW CW	RECIFE— MACEIO	176	WTC WTC
GIBRALTAR— MALTA IV	1,094	CW CW	RECIFE— RIO DE JANEIRO	1,376	WTC WTC
GIBRALTAR— MALTA V	1,137	CW CW	RECIFE— SAO LUIZ	976	WTC WTC
HONG KONG— MANILA I	671	CW EXT	RECIFE— SALVADOR I	465	WTC WTC
HONG KONG— MANILA II	780	CW EXT	RECIFE— SALVADOR II	468	WTC WTC
HONG KONG— MANILA III	718	CW EXT	RIO DE JANEIRO— RIO GRANDE	888	WTC WTC
KINGSTON— SANTIAGO I	200	CW (WI) CW (WI)	RIO DE JANEIRO— SANTOS I	230	WTC WTC
KINGSTON— SANTIAGO II	210	CW (WI) CW (WI)			

\* Length of cable in common-user system.

Cable Section	Length of Cable Section in Nautical Miles	Cable Station Operator	Cable Section	Length of Cable Section in Nautical Miles	Cable Station Operator
RIO DE JANEIRO— SANTOS II	208	WTC	SANTOS— FLORIANOPOLIS II	270	WTC
RIO DE JANEIRO— SANTOS III	205	WTC	SAO LUIZ— BARBADOS	1,510	WTC
RIO GRANDE— MALDONADO I	251	WTC	SAO LUIZ— BELEM	408	WTC
RIO GRANDE— MALDONADO II	261	WTC	SEYCHELLES— COLOMBO	1,769	CW
SAO VICENTE— ASCENSION I	1,809	CW	SEYCHELLES— MAURITIUS	1,062	P & T (C)
SAO VICENTE— ASCENSION II	1,854	CW	VIGO— CARCAVELOS	268	CW
SAO VICENTE— RECIFE II	1,913	CW	VITORIA— RIO DE JANEIRO I	366	ETC
SALVADOR— VITORIA I	651	WTC	VITORIA— RIO DE JANEIRO II	291	CW
SALVADOR— VITORIA II	492	WTC	ZANZIBAR— DAR-ES-SALAAM	60	WTC
SANTIAGO— CIENFUEGOS I	410	WTC	ZANZIBAR— MOMBASA II	160	EAETC
SANTIAGO— CIENFUEGOS II	360	CW (WI)	ZANZIBAR— SEYCHELLES	1,132	EAETC
SANTOS— FLORIANOPOLIS I	263	CW (WI)	HARBOUR AND BAY CABLES	77	EAETC
		WTC			CW

2. Telegraph cables not in use, but not yet withdrawn from service; not included in Section I.1.

Cable Section	Length of Cable Section in Nautical Miles	Cable Station Operator	Cable Section	Length of Cable Section in Nautical Miles	Cable Station Operator
ACCRA— LAGOS	249	P & T (GA)	KINGSTON— SAN JUAN	753	CW (WI)
ADEN— MOMBASA	1,857	NET	KINGSTON— TURKS ISLAND	457	CW (WI)
ALEXANDRIA— IRAKLION KRITIS	416	CW (ME)	LAGOS— COTONOU	70	CW (WI)
ALEXANDRIA— LARNACA	326	EAETC	LA SERENA— VALPARAISO	216	NET
ALEXANDRIA— PORT SAID I	154	MRT (E)	LIMA— MOLLENDO	475	CCSA
ALEXANDRIA— PORT SAID II	157	MRT (E)	MADEIRA— SAO VICENTE II	1,178	WC
ALEXANDRIA— PORT SAID III	161	CYTA	MALTA— ALEXANDRIA I	922	WC
ANTOFAGASTA— LA SERENA	416	MRT (E)	MALTA— ALEXANDRIA II	929	WC
AFRICA— ANTOFAGASTA	347	WC	MALTA— ALEXANDRIA IV	891	MRT (E)
ASCENSION— ST. HELENA	796	WC	MALTA— ALEXANDRIA V	908	CW
ASCENSION— SIERRA LEONE	1,132	CW	MALTA— POZZALLO I	55	MRT (E)
BARBADOS— PORT OF SPAIN	207	CW	MALTA— POZZALLO II	58	CW
BARBADOS— TURKS ISLAND	985	CW (WI)	MARSEILLES— BARCELONA	221	Italian Admin.
BERMUDA— TURKS ISLAND	827	CW (WI)	MOLLENDO— ARICA	146	CW
CARCAVELOS— MADEIRA II	620	CW (WI)	MUSCAT— KARACHI	534	ETC (F)
COCOS— COTTESLOE I	1,719	CW	PIRAEUS— SYRA II	82	TE
COCOS— COTTESLOE II	1,751	OTC (A)	PORTHURN— CARCAVELOS II	935	WC
COCOS— DJAKARTA	783	OTC (A)	PORTHURN— VIGO	574	WC
DURBAN— MAURITIUS	1,800	OTC (A)	PORT SUDAN— ADEN I	758	CW
FAYAL— HALIFAX	1,900	P & T (SA)	PORT SUDAN— ADEN II	749	ETC
GRENADA— PORT OF SPAIN	129	CW	PORT SUDAN— DJEDDAH	195†	CW (ME)
KINGSTON— PONCE	675	COTC			ETC
		CW (WI)			Saudi Arabian Admin.
		CW (WI)			

† Cable jointly owned by Saudi Arabian and Sudan Governments but maintained by the Eastern Telegraph Co. Ltd.: not in common-user system.

Cable Section	Length of Cable Section in Nautical Miles	Cable Station Operator	Cable Section	Length of Cable Section in Nautical Miles	Cable Station Operator
RODRIGUEZ— COCOS	2,156	CW OTC (A)	SINGAPORE— DJAKARTA I	558	STD Indonesian Admin.
ST. CROIX— PONCE	140	CW (WI) CW (WI)	SINGAPORE— DJAKARTA II	561	STD Indonesian Admin.
ST. CROIX— ST. THOMAS	49	CW (WI) CW (WI)	SUEZ— PORT SUDAN II	757	MRT (E) ETC
ST. LUCIA— GRENADA	168	CW (WI) CW (WI)	SUEZ— PORT SUDAN III	755	MRT (E) ETC
ST. LUCIA— ST. CROIX	345	CW (WI) CW (WI)	SUEZ— PORT SUDAN IV	814	MRT (E) ETC
ST. THOMAS— ST. KITTS	174	CW (WI) CW (WI)	SUEZ— PORT SUDAN V	800	MRT (E) ETC
SAO VICENTE— BATHURST	697	CW CW	SYRA— IRAKLION KRITIS	136	OTE OTE
SAO VICENTE— RECIFE I	1,798	CW WTC	VALPARAISO— CONCEPCION	267	WC WC
ST. VINCENTE (WI)— BARBADOS	112	CW (WI) CW (WI)	VIGO— GIBRALTAR	667	ETC CW
ST. VINCENTE (WI)— ST. LUCIA	91	CW (WI) CW (WI)	ZANZIBAR— DURBAN	1,856	EAETC P & T (SA)
SAN JUAN— ST. THOMAS	79	CW (WI) CW (WI)	ZANZIBAR— MOMBASA I	149	EAETC EAETC

## IIA. SUBMARINE TELEPHONE CABLES (European)

Cable Section	Length of Cable in the common-user system in Nautical Miles	Total Length of Cable in Nautical Miles	Cable Station Operator	Nominal Capacity (telephone channels)
ANGLO-BELGIAN CABLES:				
ST. MARGARETS— LA PANNE VI	24	47	BPO Belgian Admin.	420
DUMPTON GAP— MIDDLEKIRK No. 2 (CANTERBURY—OSTEND)	27	54	BPO Belgian Admin.	120
ANGLO-DANISH CABLE:				
WINTERTON— ESBJERG No. 1	145	291	BPO Danish Admin.	120
ANGLO-DUTCH CABLES:				
ALDEBURGH— DOMBURG IV	41	83	BPO Netherlands Admin.	60
ALDEBURGH— DOMBURG V	41	83	BPO Netherlands Admin.	60
ALDEBURGH— DOMBURG VI	41	81	BPO Netherlands Admin.	180
COVEHITHE— KATWIJK I	51	103	BPO Netherlands Admin.	120
COVEHITHE— KATWIJK II	54	109	BPO Netherlands Admin.	480
ANGLO-FRENCH CABLES:*				
DOVER— SANGATTE III	10	23	BPO French Admin.	60
DOVER— AUDRESSELLES	13	26	BPO French Admin.	60
ST. MARGARETS— SANGATTE IV	10	21	BPO French Admin.	144
ST. MARGARETS— SANGATTE V	10	20	BPO French Admin.	60
ST. MARGARETS— SANGATTE VI	10	21	BPO French Admin.	60
ANGLO-GERMAN CABLES:				
LOWESTOFT— BORKUM	98	197	BPO German Admin.	5
WINTERTON— LEER No. 1	126	251	BPO German Admin.	120
WINTERTON— LEER No. 2	125	250	BPO German Admin.	120
ANGLO-NORWEGIAN CABLE:				
SCARBOROUGH— KRISTIANSAND	197	394	BPO Norwegian Admin.	480
ANGLO-SWEDISH CABLE:				
MARSKE— SANDVIK	255	509	BPO Swedish Admin.	60
ANGLO-FAROES CABLE:				
GAIRLOCK— THORSHAVN No. 1†	142	285	BPO Danish Admin. and Gt. Northern Telegraph Co.	26

\* Also Tolsford Hill-Lille microwave system; capacity 1,200 circuits.

† SCOTICE—see Section IIB, Note (d) regarding ICECAN.



IIB. SUBMARINE TELEPHONE CABLES (Extra-European)

Cable Section	Length of Cable in the common-user system in Nautical Miles	Total Length of Cable in Nautical Miles	Cable Station Operator	Nominal Capacity (telephone channels)
TRANSATLANTIC CABLE (TAT 1): OBAN (SCOTLAND)— SYDNEY MINES (CANADA)	1,191	2,268	BPO (a) COTC	48
TRANSATLANTIC CABLE (TAT 3): WIDEMOUTH (ENGLAND)— TUCKERTON (USA)	1,759	3,518	BPO (b) ATT	128
CANTAT CABLE: OBAN (SCOTLAND)— HAMPDEN (CANADA)	2,014	2,014	CW (c) COTC	80
ICECAN CABLE: CORNER BROOK (CANADA)— FREDERICKSDAL (GREENLAND)	913	913	COTC (d)	24
BERMUDA—USA CABLE: BERMUDA— MANAHAWKIN (USA)	375	750	CW (WI) (e) ATT	80
BERMUDA—TORTOLA CABLE: BERMUDA— TORTOLA (BR. VIRGIN IS.)	902	902	CW (f) CW (WI)	80
JAMAICA—USA CABLE: KINGSTON (JAMAICA)— FLORIDA (USA)	219	875	CW (WI) (e) ATT	128
COMPAC CABLE SYSTEM: SYDNEY (AUSTRALIA)— AUCKLAND (NEW ZEALAND)	1,273	1,273	OTC (A) (g) NZPO	80
AUCKLAND— SUVA (FIJI)	1,260	1,260	NZPO (g) CW	80
SUVA— HAWAII	3,073	1,073	CW (g) COTC	80
HAWAII— PORT ALBERNI (CANADA)	2,545	2,545	COTC (g)	80
PORT ALBERNI— VANCOUVER (CANADA)	83	83	COTC (g)	80
SEACOM CABLE SYSTEM: SINGAPORE— JESSELTON (SABAH, MALAYSIA)	867	867	STD (h)	80
JESSELTON— HONG KONG	1,103	1,103	CW (h) CW	80
HONG KONG— GUAM	2,062	2,062	CW (h) OTC (A)	80
GUAM— MADANG (NEW GUINEA)	1,391	1,392	OTC (A) (h) OTC (A)	160
MADANG— CAIRNS (AUSTRALIA)	1,614	1,625	OTC (A) (h) OTC (A)	160

(a) Transatlantic cable (TAT 1) is jointly owned by British Post Office, Canadian Overseas Telecommunication Corporation and American Telephone and Telegraph Co. This system consists of two separate cables each of 2,268·042 nautical miles length.

(b) Transatlantic cable (TAT 3) is jointly owned by British Post Office and American Telephone and Telegraph Co.

\* (c) CANTAT cable is jointly owned by Canadian Overseas Telecommunication Corporation and Cable and Wireless Limited. (The Vancouver–Nova Scotia microwave cable system, owned by Canadian Overseas Telecommunication Corporation, provides the Commonwealth link between Atlantic and Pacific cable systems—see also Note (g)).

\* (d) ICECAN cable shown is jointly owned by Canadian Overseas Telecommunication Corporation, the Danish Administration and the Great Northern Telegraph Co. (The Greenland/Iceland portion of ICECAN and the Iceland/Faroes portion of SCOTICE is foreign owned—see Section IIA for Anglo/Faroes portion of SCOTICE).

(\*CANTAT cable is extended overland from Hampden to Corner Brook (63 n.m.—80 channels); CANTAT AND ICECAN systems are further extended by cable (400 n.m.—160 channels) from Corner Brook to Gross Roches.)

(e) The Bermuda/USA and Jamaica/USA cables are jointly owned by Cable and Wireless (West Indies) Limited, and American Telephone and Telegraph Co.

(f) The Bermuda–Tortola cable is owned by Cable and Wireless Limited.

(g) The complete COMPAC cable system is jointly owned by Canadian Overseas Telecommunication Corporation, Overseas Telecommunications Commission (Australia), New Zealand Post Office and Cable and Wireless Limited—see also Note (c) for link with CANTAT.

(h) The complete SEACOM system is jointly owned by Canadian Overseas Telecommunication Corporation, Overseas Telecommunications Commission (Australia), New Zealand Post Office, Malaysian Telecommunications Department, Singapore Telecommunications Department and Cable and Wireless Limited. (The Cairns–Sydney microwave system owned by the Overseas Telecommunications Commission (Australia), provides the link between the COMPAC and SEACOM cable systems—see also Note (g)).

(i) Additional circuit capacity provided by Time Assignment Speech Interpolation switching system (TASI): Britain/United States 74 additional TASI circuits; Australia/Canada 37 additional TASI circuits; Britain/Canada 54 additional TASI circuits (these circuits are divided between the North American and the Australasian continents. Due to the time differential between these continents it is unlikely that more than 37 of these circuits will be used at the same time).

## III. CARRIER AND RADIO SYSTEMS (other than HF)

**Atlantic Area\***

Terminals	Type of System	System Operator	Nominal Capacity (telephone channels)
Tortola— Antigua	TROPOSCATTER	CW (WI)	80
Antigua— St. Kitts	MICROWAVE	CW (WI)	24
St. Kitts— Montserrat	VHF	CW (WI)	6
Antigua— St. Lucia	TROPOSCATTER	CW (WI)	64
Antigua— Guadeloupe	VHF	CW (WI) FRENCH P.T.	24
St. Lucia— Dominica	VHF	CW (WI)	6
St. Lucia— Barbados	TROPOSCATTER	CW (WI)	80
Barbados— St. Vincent	VHF	CW (WI)	6
Barbados— Trinidad	TROPOSCATTER	CW (WI)	64
Trinidad— Grenada	VHF	CW (WI)	12
Trinidad— Guyana	TROPOSCATTER	CW (WI)	64
Caymans— Jamaica	TROPOSCATTER	CW (WI)	8
St. Thomas— Tortola	MICROWAVE	ITT (Virgin Is.) CW (WI)	300

\* Canada; for microwave system which provides the link between the Atlantic/Pacific cable systems see Section II.B, Note (c).

**Pacific and Far East Area†**

Terminals	Type of System	System Operator	Nominal Capacity (telephone channels)
Kuala Lumpur— Singapore	MICROWAVE	MAT STD	600
Hong Kong— Canton	VHF	CW CGRA	12
Hong Kong— Taiwan	TROPOSCATTER	CW CGRA	60
Hong Kong— Macao	VHF	CW MACAO P.T.	12

† Australia; for microwave system which provides the linking between the SEACOM and COMPAC cable systems see Section II.B, Note (h).

**Mediterranean and Middle East Area**

Terminals	Type of System	System Operator	Nominal Capacity (telephone channels)
Cyprus— Crete	TROPOSCATTER	CYTA OTE	60
Cyprus— Turkey	VHF	CYTA P & T (TY)	5
Cyprus— Lebanon	VHF	CYTA P & T (LE)	5
Cyprus— Israel	VHF	CYTA P & T (IS)	5
Bahrain— Qatar	TROPOSCATTER	CW	60
Bahrain— Dammam	VHF	CW P & T (S)	6
Dubai— Abu Dhabi	VHF	CW IAL	1
Qatar— Das Island	VHF	CW	6
Gibraltar— Tangier	VHF	CW MORROCO PTT	5

**African Area**

Terminals	Type of System	System Operator	Nominal Capacity (telephone channels)
Sierra Leone— Conakry	VHF	SLET	5
Rhodesia— Zambia	O/W LINE	MPR GPO (Z)	102
Rhodesia— Malawi	VHF	MPR P & T (MA)	11
Malawi— Zambia	O/W LINE	P & T (MA) GPO (Z)	12
Malawi— Nairobi (Kenya)	VHF	P & T (MA) EAETC	12
Malawi— Mozambique	VHF	P & T (MA)	12
Lagos (Nigeria)— Cotonou	MICROWAVE	‡	960‡
Lagos (Nigeria)— Lome (Togo)			
Lagos (Nigeria)— Accra (Ghana)			
Lagos (Nigeria)— Abidjan (I. Coast)			
Nairobi (Kenya)— Mombasa (Kenya)	VHF	EAETC	96
Nakuru (Kenya)— Jinja (Uganda)	VHF	EAETC	48
Mombasa (Kenya)— Tanga (Tanzania)	VHF	EAETC	96
Nairobi (Kenya)— Moshi (Tanzania)	VHF	EAETC	36

‡ (Lagos / Cotonou / Lome / Accra / Abidjan system)  
NET: P & T (DY): P & T (TO): P & T (GA): P & T (IC):

### Abbreviations Used in Sections I-III

ITT	International Telephone and Telegraph Co. (USA)
AT & T	American Telephone and Telegraph Co. (USA)
BPO	British Post Office
CCSA	Compagnie des Cables Sud Americains
CGRA	Chinese Government Radio Administration
COTC	Canadian Overseas Telecommunication Corporation
CW	Cable and Wireless Limited
CYTA	Cyprus Telecommunications Authority
EAETC	East African External Telecommunications Company Limited
GPO (Z)	General Post Office, Zambia
IAL	International Aeradio Limited
MAT	Telecommunications Department, Malaysia
MPR	Ministry of Posts Rhodesia
MRT (E)	Marconi Radio Telegraph Company (UAR), Cairo
NET	Nigerian External Telecommunications Ltd.
NZPO	New Zealand Post Office
OCS (I)	Overseas Communications Service (India)
OTC (A)	Overseas Telecommunications Commission (Australia)
OTE	Greek Telecommunications Authority
P & T (C)	Posts and Telecommunications Department, Ceylon
P & T (DY)	Posts and Telecommunications Department, Dahomey
P & T (GA)	Department of Posts and Telecommunications, Ghana
P & T (IC)	Posts and Telecommunications Department, Ivory Coast
P & T (IS)	Posts and Telecommunications Department, Israel
P & T (LE)	Posts Telegraph and Telephone Department, Lebanon
P & T (MA)	Department of Posts and Telegraphs, Malawi
P & T (S)	Posts and Telecommunications Department, Saudi Arabia
P & T (SA)	Department of Posts and Telegraphs, South Africa
P & T (TO)	Posts and Telecommunications Department, Togoland
P & T (TY)	Posts Telephone and Telegraph Department, Turkey
SLET	Sierra Leone Telecommunications Department
STD	Telecommunications Department, Singapore
TE	Transradio Espanola
T & T (PK)	Telegraph and Telephone Department, Pakistan
T & T (PT)	Genal Dos Correios Telegraphal et Telefonel, Portugal

#### Associated and Subsidiary Companies of Cable and Wireless Limited:

Bel. Co	Societe Anonyme Belge de Cables Telegraphiques
CW (ME)	Cable and Wireless (Mid-East) Limited
CW (WI)	Cable and Wireless (West Indies) Limited
ETC	Eastern Telegraph Company Ltd.
ETC (F)	Eastern Telegraph Company (France) Ltd.
EXT	Eastern Extension Australasia and China Telegraph Company Ltd.
WC	West Coast of America Telegraph Company Ltd.
WTC	Western Telegraph Company Ltd.

#### IV. HF RADIO STATIONS AND CIRCUITS

The following lists show the radio stations and regularly operated radio circuits either direct or via automatic relay.

**Aden**—see Southern Yemen

#### Antigua

*Radio Station:* Antigua Island. *Operator:* Cable and Wireless (West Indies) Limited.

Circuits:

<i>Distant Country</i>	<i>Telegraph</i>	<i>Phototelegraph</i>	<i>Telephone</i>	<i>Telex</i>
Barbuda	X			

#### Ascension Island

*Radio Station:* Ascension Island. *Operator:* Cable and Wireless Limited.

Circuits:

<i>Distant Country</i>	<i>Telegraph</i>	<i>Phototelegraph</i>	<i>Telephone</i>	<i>Telex</i>
Britain (London)			X	
St. Helena Island			X	
USA (New York)			X	

#### Australia

*Radio Stations:* Melbourne (Rockbank, Fiskville), Perth (Applecross, Bassendean, Gnangara), Sydney (Bringelly, Doonside).

*Operator:* Overseas Telecommunications Commission (Australia).

Circuits:

<i>Distant Country</i>	<i>Telegraph</i>	<i>Phototelegraph</i>	<i>Telephone</i>	<i>Telex</i>
<b>Melbourne Circuits:</b>				
Britain (London)	X	X		
Britain (London)	via Barbados†			
Hong Kong¶		X		
India (Calcutta)	X	X		
Japan (Tokyo)¶		X		
Nauru	X			
Singapore		X		
USA (San Francisco)		X		
<b>Perth Circuits:</b>				
Antarctica (Wilkes Base)	X			
Christmas Is. (Indian Ocean)			X	
South Africa (Pretoria)	X		X	X
<b>Sydney Circuits:</b>				
Britain (London)				via Singapore† and Nairobi†
Antarctica (Wilkes Base)	X		X	
Canada (Vancouver)			X	
Ceylon (Colombo)			X	X
China (Shanghai)	X			
Fiji Islands (Suva)	X		X	
Hong Kong¶	X		X	X
India (Calcutta)	X		X	X
India (Poona)			X	
Indonesia (Djakarta)	X		X	
Japan (Tokyo)¶			X	
Japan (Osaka)¶	X			X
Macquarie Island	X			
Malaysia (Kuala Lumpur)¶	X		X	X
Nauru			X	
New Caledonia (Noumea)	X		X	
New Hebrides (Port Vila)	X		X	

X Direct circuit.

|| Standby for COMPAC cable failure.

† Automatic relay.

¶ Standby for SEACOM cable failure.

**Australia (contd.)**

Circuits (contd.)

<i>Distant Country</i>	<i>Telegraph</i>	<i>Phototelegraph</i>	<i>Telephone</i>	<i>Telex</i>
Sydney Circuits (contd.)				
New Zealand (Wellington)				X*
New Zealand (Wellington)	X		X	X
Papua/New Guinea (Lae)¶	X		X	X
Papua/New Guinea (Port Moresby)	X		X	X
Papua/New Guinea (Rabaul)	X		X	
Philippine Islands (Manila)¶	X		X	X
Portuguese Timor (Dili)	X			
Singapore¶	X		X	X
West Irian (Soekarnopura)	X			
Solomon Islands (Honiara)	X		X	
Tarangua (Manus Island)	X		X	
USA (San Francisco)	X			X

**Bahrain***Radio Station:* Bahrain (Hamala and Sitra Road). *Operator:* Cable and Wireless Limited.

Circuits:

<i>Distant Country</i>	<i>Telegraph</i>	<i>Phototelegraph</i>	<i>Telephone</i>	<i>Telex</i>
Britain (London)	X	X	X	X
East Africa (Nairobi)			X	
India (Poona)			X	
Iraq (Baghdad)			X	
Jordan (Amman)			X	
Kuwait	X		X	
Lebanon (Beirut)	X		X	
Muscat and Oman (Muscat)	X		X	
Pakistan (Karachi)			X	
Southern Yemen	X		X	
Switzerland (Geneva)				X
Trucial States (Dubai)	X		X	X
Trucial States (Abu Dhabi)	X		X	
UAR (Cairo)			X	

**Barbados***Radio Station:* Boarded Hall, Carrington, Mt. Misery. *Operator:* Cable and Wireless (West Indies) Limited.

Circuits:

<i>Distant Country</i>	<i>Telegraph</i>	<i>Phototelegraph</i>	<i>Telephone</i>	<i>Telex</i>
Bermuda	X			
Britain (London)	X			
Britain (London)	X	X		X
Curacao	X		X	
Dominican Republic (Santo Domingo)	X			
Guyana (Georgetown)			X	X
Jamaica (Kingston)	X	X		X
Peru (Lima)	X	X		X
Surinam (Paramaribo)	X			

**Bermuda***Radio Station:* St. Georges, Flatts. *Operator:* Cable and Wireless (West Indies) Limited.

Circuits:

<i>Distant Country</i>	<i>Telegraph</i>	<i>Phototelegraph</i>	<i>Telephone</i>	<i>Telex</i>
Barbados	X			
USA (New York)		X		X

**Bolivia***Radio Station:* La Paz. *Operator:* West Coast of America Telegraph Co. Ltd.

Circuits:

<i>Distant Country</i>	<i>Telegraph</i>	<i>Phototelegraph</i>	<i>Telephone</i>	<i>Telex</i>
Peru (Lima)	X			X
USA (New York)	via Lima†			via Lima†

X Direct circuit. \* Temporary HF circuits.

¶ Standby for SEACOM cable failure.

|| Standby for COMPAC cable failure.

† Automatic relay.

## Britain

Radio Stations: Receiving: Baldock, Bearley, Somerton.

Transmitting: Bodmin, Criggion, Dorchester, Leafield, Ongar, Rugby.

Operator: Post Office.

Circuits:

<i>Distant Country</i>	<i>Telegraph</i>	<i>Phototelegraph</i>	<i>Telephone</i>	<i>Telex</i>
Afghanistan (Kabul)	X	X	X	
Argentina (Buenos Aires)	X	X	X (2 routes)	X
Ascension Island	X		X	
Australia (Melbourne)	X	X		
Australia (Melbourne)	via Barbados†			
Australia (Sydney)				via Singapore† and Nairobi†
Austria (Vienna)	X			
Bahrain	X	X	X	X
Barbados	X	X		
Bermuda (Hamilton)		X		
Brazil (Rio de Janeiro)	X	X		X
Bulgaria (Sofia)	X			
Burma (Rangoon)	X			
Ceylon (Colombo)	X	X	X	X
Chile (Santiago)	X			X
China (Taipeh, Taiwan)	X	X		
China (Shanghai)	X	X		
Congo (Kinshasa)	X	X		
Cyprus (Nicosia)	X	X	X	
Czechoslovakia (Prague)	X			
East Africa (Dar es Salaam)	X		X	
East Africa (Nairobi)	X	X	X	X
East Africa (Kampala)			X	
Ethiopia (Addis Ababa)	X	X	X	X
Ethiopia (Asmara)	X			
Falkland Islands (Port Stanley)	X		X	
Ghana (Accra)	X	X	X	X
Gibraltar				X
Greece (Athens)	X			X
Hong Kong	via Colombo† and Sydney		via Colombo† and Sydney	via Colombo† and Sydney
Hong Kong	via Nairobi†			via Nairobi†
Hungary (Budapest)	X			
India (Bombay)	X	X		X
India (Calcutta)	X	X	X	X
India (New Delhi)	X	X	X	X
India (Madras)	X	X	X	
India (Poona)			X	
Iran (Teheran)	X	X	X	X
Iraq (Baghdad)	X		X	
Israel (Tel Aviv)	X	X	X	X
Italy (Rome)	X			
Italy (Vatican City)	X			
Japan (Osaka)	X			X
Japan (Tokyo)		X		
Jordan (Amman)	X	X	X	
Kuwait	X		X	X
Lebanon (Beirut)	X	X	X	X
Liberia (Monrovia)			X	
Malta	X	X	X	X
New Zealand (Wellington)	via Montreal and Vancouver†	via Melbourne†		via Montreal and Vancouver†
New Zealand (Auckland)	via Montreal and Vancouver†		via Montreal and Vancouver†	
Nigeria (Lagos)	X	X	X	X
Pakistan (Karachi)	X	X	X	X
Pakistan (Rawalpindi)		X		
Pakistan (Dacca)	X	via Karachi†	X	
Peru (Lima)		X		via Barbados†
Poland (Warsaw)	X			
Portugal (Lisbon)	X	X		
Rhodesia (Salisbury)	X	X	X	
Roumania (Bucharest)	X			
Sierra Leone (Freetown)	X		X	X
Singapore	via Nairobi†		via Nairobi†	via Nairobi†
Singapore	via Sydney†	via Melbourne†	via Sydney†	via Sydney†

X Direct circuit.

† Automatic relay.

|| Standby for COMPAC cable failure.

**Britain (contd.)**

## Circuits (contd.)

<i>Distant Country</i>	<i>Telegraph</i>	<i>Phototelegraph</i>	<i>Telephone</i>	<i>Telex</i>
South Africa (Johannesburg)	X	X	X	
South Africa (Pretoria)				X
Southern Yemen	X	X*	X	X
Spain (Las Palmas, Canary Islands)	X			
Spain (Madrid)	X			
Sudan (Khartoum)	X		X	X
Switzerland (Berne)	X			
Syria (Damascus)	X			
Thailand (Bangkok)	X			
The Gambia			X	
Trucial States (Dubai)				X
Turkey (Istanbul)	X			X
UAR (Cairo)	X	X	X	
USA (New York)			X	
USSR (Moscow)	X			
Yugoslavia (Belgrade)	X			
Zanzibar	X			
Zambia (Ndola)	X		X	

**British Honduras**

*Radio Station:* Belize. *Operator:* Cable and Wireless Ltd.

## Circuits:

<i>Distant Country</i>	<i>Telegraph</i>	<i>Phototelegraph</i>	<i>Telephone</i>	<i>Telex</i>
Jamaica (Kingston)	X		X	
USA (Miami)	X		X	
Mexico	X			

**Canada**

*Radio Stations:* Montreal (Yamachiche, Drummondville), Vancouver (Cloverdale, Ladner).

*Operator:* Canadian Overseas Telecommunication Corporation.

## Circuits:

<i>Distant Country</i>	<i>Telegraph</i>	<i>Phototelegraph</i>	<i>Telephone</i>	<i>Telex</i>
<b>Montreal Circuits:</b>				
Argentina (Buenos Aires)	X	X	X	X
Brazil (Rio de Janeiro)	X	X	X	X
Peru (Lima)	X			X
St. Pierre and Miquelon Is.	X		X	
New Zealand (Wellington)	via Vancouver†			
USSR (Moscow)	X			X
<b>Vancouver Circuits:</b>				
Australia (Sydney)			X	
New Zealand (Wellington)			via Sydney†	
Japan (Tokyo)				X

**Cayman Islands**

*Radio Station:* Grand Cayman. *Operator:* Cable and Wireless (W.I.) Ltd.

## Circuits:

<i>Distant Country</i>	<i>Telegraph</i>	<i>Phototelegraph</i>	<i>Telephone</i>	<i>Telex</i>
Jamaica (Kingston)			X§	

**Ceylon**

*Radio Stations:* Colombo, Negombo (Pothode) and Ja-ela (Kotugoda).

*Operator:* Posts and Telecommunications Department, Ceylon.

## Circuits:

<i>Distant Country</i>	<i>Telegraph</i>	<i>Phototelegraph</i>	<i>Telephone</i>	<i>Telex</i>
Australia (Sydney)			X	X
Britain (London)	X	X	X	X
Burma (Rangoon)	X			
China (Shanghai)	X			

X Direct circuit.

† Automatic relay.

|| Standby for COMPAC cable failure.

\* One-way service only to London.

§ Temporary standby for tropospheric scatter system.



**Ceylon (contd.)**

## Circuits (contd.)

<i>Distant Country</i>	<i>Telegraph</i>	<i>Phototelegraph</i>	<i>Telephone</i>	<i>Telex</i>
East Africa (Nairobi)	X			X
Hong Kong			X	X
India (Bombay)				X
Japan (Osaka)	X			
Japan (Tokyo)		X	X	X
Pakistan (Karachi)	X		X	
Singapore			X	

**Cyprus**

*Radio Stations:* Nicosia (Saranta Spilia, Kolokosh). *Operator:* Cyprus Telecommunications Authority.

## Circuits:

<i>Distant Country</i>	<i>Telegraph</i>	<i>Phototelegraph</i>	<i>Telephone</i>	<i>Telex</i>
Britain (London)	X	X	X	
Jordan (Amman)			X	
Syria (Damascus)			X	
Turkey (Ankara)			X	
UAR (Cairo)			X	

**East Africa (Kenya/Uganda/Tanzania)**

*Kenya Radio Stations:* Nairobi (Kabete, Ngong), Mombasa. *Operator:* East African External Telecommunications Co. Ltd.

## Circuits:

<i>Distant Country</i>	<i>Telegraph</i>	<i>Phototelegraph</i>	<i>Telephone</i>	<i>Telex</i>
Algeria (Algiers)			X	
Bahrain			X	
Britain (London)	X	X	X	X
Burundi (Bujumbura)	X		X	
Ceylon (Colombo)	X			X
Congo (Kinshasa)	X		X	X
Ethiopia (Addis Ababa)	X		X	X
France (Paris)				X
Ghana (Accra)			X	
India (Poona)			X	
Malagasy (Tananarive)			X	X
Malawi (Limbe)	X		X	X
Mauritius (Port Louis)	X		X	
Nigeria (Lagos)	X		X	
Pakistan (Karachi)			X	
Rwanda (Kigali)	X		X	
Seychelles			X	
Singapore			X	
Somalia (Mogadiscio)			X	
South Africa (Johannesburg)	X	X	X	
Southern Yemen			X	X
Sudan (Khartoum)	X		X	
UAR (Cairo)			X	
Zambia (Ndola)	X		X	X

*Tanzania Radio Station:* Dar-es-Salaam (Ubongo, Mbweni), Zanzibar (Marhubi, Creek Road). *Operator:* East African External Telecommunications Co. Ltd.

## Circuits:

<i>Distant Country</i>	<i>Telegraph</i>	<i>Phototelegraph</i>	<i>Telephone</i>	<i>Telex</i>
<i>Dar-es-Salaam Circuits:</i>				
Britain (London)	X		X	
Zambia			X	X
<i>Zanzibar Circuits:</i>				
Britain (London)	X			
Pemba Island	X		X	
Somalia (Hargeisa)	X			
Somalia (Mogadiscio)	X			

*Uganda Radio Station:* Kampala. *Operator:* East African External Telecommunications Co. Ltd.

## Circuits:

<i>Distant Country</i>	<i>Telegraph</i>	<i>Phototelegraph</i>	<i>Telephone</i>	<i>Telex</i>
Britain (London)			X	
India (Poona)			X	

X Direct circuit.

### Fiji Islands

*Radio Stations:* Suva (Vatuwaga, Samabula). *Operator:* Cable and Wireless Limited.

Circuits:

<i>Distant Country</i>	<i>Telegraph</i>	<i>Phototelegraph</i>	<i>Telephone</i>	<i>Telex</i>
Australia (Sydney)	X		X	

### Ghana

*Radio Stations:* Accra (Bubuashie, Adentan). *Operator:* Telecommunications Department.

Circuits:

<i>Distant Country</i>	<i>Telegraph</i>	<i>Phototelegraph</i>	<i>Telephone</i>	<i>Telex</i>
Britain (London)	X	X	X	X
East Africa (Nairobi)			X	
Ethiopia (Addis Ababa)	X		X	
Ivory Coast (Abidjan)	X		X	X
Mali (Bamako)			X	
Nigeria (Lagos)	X	X	X	
Senegal (Dakar)			X	
Sierra Leone (Freetown)	X		X	X
The Gambia (Bathurst)			X	
Togo (Lome)	X		X	

### Gibraltar

*Radio Station:* Gibraltar. *Operator:* Cable and Wireless Ltd.

Circuits:

<i>Distant Country</i>	<i>Telegraph</i>	<i>Phototelegraph</i>	<i>Telephone</i>	<i>Telex</i>
Britain (London)				X
Tangier	X		X	X

### Grenada

*Radio Station:* Grenada. *Operator:* Cable and Wireless (West Indies) Ltd.

Circuits:

<i>Distant Country</i>	<i>Telegraph</i>	<i>Phototelegraph</i>	<i>Telephone</i>	<i>Telex</i>
Carriacou	X		X	

### Guyana

*Radio Station:* Georgetown (Thomas Lands). *Operator:* Cable and Wireless (West Indies) Ltd.

Circuits:

<i>Distant Country</i>	<i>Telegraph</i>	<i>Phototelegraph</i>	<i>Telephone</i>	<i>Telex</i>
Barbados			X	X
Surinam (Paramaribo)			X	
Trinidad (Port of Spain)			X	

### Hong Kong

*Radio Stations:* Cap d'Aguilar, Victoria Peak, Mount Butler. *Operator:* Cable and Wireless Ltd.

Circuits:

<i>Distant Country</i>	<i>Telegraph</i>	<i>Phototelegraph</i>	<i>Telephone</i>	<i>Telex</i>
Australia (Melbourne)¶		X		
Australia (Sydney)¶	X		X	X
Britain (London)	via Colombo† and Sydney		via Sydney†	via Colombo† and Sydney
Britain (London)	via Nairobi†		via Nairobi†	
Burma (Rangoon)	X			
Cambodia (Phnompenh)	X		X	
Ceylon (Colombo)			X	X
China (Canton)	X		X	
China (Shanghai)	X		X	
China (Taipeh, Taiwan)	X	X	X	X
India (Calcutta)				X
India (Poona)			X	
Indonesia (Djakarta)	X		X	X
Japan (Osaka)	X			X
Japan (Tokyo)	X	X	X	X
Korea (Seoul)	X	X	X	X
Laos (Vientiane)	X		X	
Macao	X			
Okinawa Island	X		X	
Pakistan (Karachi)			X	X
Philippine Is. (Cebu)	X			
Philippine Is. (Manila)	X		X	X
Singapore	X			
Singapore	X	X	X	X
Thailand (Bangkok)	X	X	X	X
Vietnam South (Saigon)	X		X	
Vietnam North (Hanoi)	X			

X Direct circuit. † Automatic relay. || Standby for COMPAC cable failure. ¶ Standby for SEACOM cable failure.

## India

*Radio Stations:* Delhi (Kalkaji, Chattarpur), Bombay (Dighi, Dhond), Calcutta (Halishahar, Hatikanda), Madras (Korattur, Padianallur).

*Operator:* Overseas Communications Service (India).

Circuits:

<i>Distant Country</i>	<i>Telegraph</i>	<i>Phototelegraph</i>	<i>Telephone</i>	<i>Telex</i>
<b>Bombay Circuits:</b>				
Britain (London)	X	X		X
Ceylon (Colombo)				X
France (Paris)	X	X		
Federal Republic of Germany (Hamburg and Frankfurt)	X	X		X
Indonesia (Djakarta)	X			
Iran (Teheran)	X			
Iraq (Baghdad)	X			
Italy (Rome)	X	X		
Japan (Osaka)	X			X
Japan (Tokyo)		X		
Kuwait	X			
Nigeria (Lagos)	X			
Singapore	X			
Switzerland (Berne)	X			
UAR (Cairo)	X			
USA (New York) (RCA)	via Tangier†			via Tangier†
USSR (Moscow)		X		
Vietnam North (Hanoi)	X			
<b>New Delhi Circuits:</b>				
Afghanistan (Kabul)	X		X	
Britain (London)	X	X	X	X
China (Peking)	X			
China (Shanghai)	X		X	
Czechoslovakia	X			
France (Paris)		X		
Federal Republic of Germany (Hamburg and Frankfurt)		X		
Italy (Rome)		X		
Japan (Tokyo)		X		
Poland (Warsaw)	X	X		
Roumania (Bucharest)	X			
USSR (Moscow)	X	X	X	
Yugoslavia (Belgrade)	X			
<b>Calcutta Circuits:</b>				
Australia (Melbourne)		X		
Australia (Sydney)	X		X	X
Britain (London)	X	X	X	X
Burma (Rangoon)			X	
France (Paris)		X		
Federal Republic of Germany (Hamburg and Frankfurt)		X	X	
Hong Kong				X
Italy (Rome)		X		
Japan (Tokyo)		X	X	
Philippines (Manila)	X			X
Thailand (Bangkok)	X		X	
USA (New York) (Mackay)	via Manila†			
USSR (Moscow)		X		
Vietnam South (Saigon)	X		X	
<b>Madras Circuits:</b>				
Britain (London)	X	X	X	
Federal Republic of Germany (Hamburg)		X		
France (Paris)		X		
Italy (Rome)		X		
Singapore			X	
USSR (Moscow)		X		
<b>Poona Circuits:</b>				
Australia (Sydney)			X	
Bahrain			X	
Britain (London)			X	
Burma (Rangoon)			X	
East Africa (Nairobi)			X	
East Africa (Kampala)			X	
Ethiopia (Addis Ababa)			X	
France (Paris)			X	
Hong Kong			X	
Indonesia (Bandung)			X	

X Direct circuit.

† Automatic relay.

**India (contd.)****Circuits (contd.)**

<i>Distant Country</i>	<i>Telegraph</i>	<i>Phototelegraph</i>	<i>Telephone</i>	<i>Telex</i>
Poona Circuits (contd.)				
Iran (Teheran)			X	
Iraq (Baghdad)			X	
Italy (Rome)			X	
Japan (Tokyo)			X	
Kuwait			X	
Nigeria (Lagos)			X	
Poland (Warsaw)			X	
Saudi Arabia (Djeddah)			X	
Southern Yemen			X	
Switzerland (Berne)			X	
UAR (Cairo)			X	

**Jamaica (Kingston)**

*Radio Stations:* Fairview, Port More. *Operator:* Cable and Wireless (West Indies) Limited.

**Circuits:**

<i>Distant Country</i>	<i>Telegraph</i>	<i>Phototelegraph</i>	<i>Telephone</i>	<i>Telex</i>
Barbados	X	X		
Bermuda (Hamilton)		X		
Cayman Island (Grand Cayman)			X	
Cuba (Havana)			X	
Honduras, British (Belize)	X		X	
Panama (Panama)	X			
Turks Island	X		X	

**Kenya**—see East Africa entry.

**Malawi**

*Radio Stations:* Hynde Dam, Kanjedza. *Operator:* Department of Posts and Telecommunications.

**Circuits:**

<i>Distant Country</i>	<i>Telegraph</i>	<i>Phototelegraph</i>	<i>Telephone</i>	<i>Telex</i>
East Africa (Nairobi)	X		X	X
Mozambique (Beira)	X		X	

**Malaysia**

*Radio Stations:* Kuala Lumpur, Klang, Kota Kinabalu.

*Operator:* Telecommunications Department, Malaysia.

**Circuits:**

<i>Distant Country</i>	<i>Telegraph</i>	<i>Phototelegraph</i>	<i>Telephone</i>	<i>Telex</i>
Kuala Lumpur Circuits:				
Australia (Sydney)			via Singapore†	
Brunei			X	
Indonesia (Djakarta)			via Singapore†	
Indonesia (Medan)			via Singapore†	
Thailand (Bangkok)			via Singapore†	X
Kota Kinabalu Circuits:				
Singapore ¶	X		X	X

**Malta**

*Radio Stations:* Malta (St. Georges and Tawied Rini). *Operator:* Cable and Wireless Ltd.

**Circuits:**

<i>Distant Country</i>	<i>Telegraph</i>	<i>Phototelegraph</i>	<i>Telephone</i>	<i>Telex</i>
Britain (London)	X	X	X	X
Libya (Tripoli)			X	

X Direct circuit.

† Automatic relay.

¶ Standby for SEACOM cable failure.

**Mauritius***Radio Station:* Port Louis (Cassis). *Operator:* Cable and Wireless Ltd.

Circuits:

<i>Distant Country</i>	<i>Telegraph</i>	<i>Phototelegraph</i>	<i>Telephone</i>	<i>Telex</i>
East Africa (Nairobi)	X	X	X	
Malagasy (Tananarive)	X		X	
Reunion	X		X	
Rodriguez			X	

**Muscat and Oman***Radio Station:* Muscat. *Operator:* Cable and Wireless Ltd.

Circuits:

<i>Distant Country</i>	<i>Telegraph</i>	<i>Phototelegraph</i>	<i>Telephone</i>	<i>Telex</i>
Bahrain	X		X	X

**New Zealand***Radio Stations:* Makara, Himatangi. *Operator:* Post Office.

Circuits:

<i>Distant Country</i>	<i>Telegraph</i>	<i>Phototelegraph</i>	<i>Telephone</i>	<i>Telex</i>
Australia (Sydney)	X		X	X
Australia (Sydney)				X*
Britain (London)			via Vancouver†	
Canada (Montreal)	via Vancouver†			
Canada (Vancouver)			via Sydney†	
Cook Is. (Rarotonga)	X		X	
Fiji (Suva)			X	
New Caledonia (Noumea)	X			
Niue Is.	X			
USA (San Francisco/Oakland)			X	
USA (San Francisco)		X		
Western Samoa (Apia)	X			

**Nigeria***Radio Stations:* Lagos (Ikoyi, Ikorodu).*Operator:* Nigerian External Telecommunications Ltd.

Circuits:

<i>Distant Country</i>	<i>Telegraph</i>	<i>Phototelegraph</i>	<i>Telephone</i>	<i>Telex</i>
Britain (London)	X	X	X	X
Cameroon (Douala)	X		X	X
Congo (Kinshasa)	X		X	
East Africa (Nairobi)	X		X	
Ethiopia (Addis Ababa)	X		X	
Ghana (Accra)	X	X	X	
Guinea (Conakry)			X	
India (Bombay)	X			
India (Poona)			X	
Ivory Coast (Abidjan)	X		X	X
Liberia (Monrovia)	X		X	
Senegal (Dakar)			X	
Sierra Leone (Freetown)	X		X	
Sudan (Khartoum)	X			
Switzerland (Berne)	X		X	X
The Gambia			X	
UAR (Cairo)	X		X	
USA (RCA New York)				X

**Peru***Radio Stations:* Lima (Monterrico, Chacarilla). *Operator:* West Coast of America Telegraph Co. Ltd.

Circuits:

<i>Distant Country</i>	<i>Telegraph</i>	<i>Phototelegraph</i>	<i>Telephone</i>	<i>Telex</i>
Argentina (Buenos Aires)	X	X		X
Barbados	X	X		X
Bolivia (La Paz)	X			X
Britain (London)				via Barbados†
Canada (Montreal)	X	X		X
Chile (Santiago)	X			X
Ecuador (Quito)	X			X
France (Paris)	X			X
Italy				X
USA (New York)	X	X		X

X Direct circuit.

† Automatic relay.

|| Standby for COMPAC cable failure.

\* Temporary HF circuits.

## Rhodesia

*Radio Stations:* Salisbury (Cleveland, Hatcliffe). *Operator:* Ministry of Posts.

Circuits:

<i>Distant Country</i>	<i>Telegraph</i>	<i>Phototelegraph</i>	<i>Telephone</i>	<i>Telex</i>
Britain (London)	X	X	X	

## Rodriguez

*Radio Station:* Rodriguez. *Operator:* Cable and Wireless Ltd.

Circuits:

<i>Distant Country</i>	<i>Telegraph</i>	<i>Phototelegraph</i>	<i>Telephone</i>	<i>Telex</i>
Mauritius (Port Louis)			X	

## Seychelles

*Radio Station:* Seychelles. *Operator:* Cable and Wireless Ltd.

Circuits:

<i>Distant Country</i>	<i>Telegraph</i>	<i>Phototelegraph</i>	<i>Telephone</i>	<i>Telex</i>
East Africa (Nairobi)			X	

## Sierra Leone

*Radio Station:* Freetown (Wilberforce). *Operator:* Sierra Leone External Telecommunications.

Circuits:

<i>Distant Country</i>	<i>Telegraph</i>	<i>Phototelegraph</i>	<i>Telephone</i>	<i>Telex</i>
Britain (London)	X		X	X
Ghana (Accra)	X		X	X
Guinea (Conakry)			X	
Liberia (Monrovia)	X			
Nigeria (Lagos)	X		X	
Senegal (Dakar)			X	
The Gambia (Bathurst)	X		X	X

## Singapore

*Radio Stations:* Jurong (CRTS)/Jurong (transmitting); Trafalgar/Yio Chu Kang (receiving).

*Operator:* Telecommunications Department, Singapore.

Circuits:

<i>Distant Country</i>	<i>Telegraph</i>	<i>Phototelegraph</i>	<i>Telephone</i>	<i>Telex</i>
Australia (Sydney) ¶	X	X	X	X
Britain (London)	via Nairobi†			via Nairobi†
Britain (London)	via Sydney†	via Melbourne†	via Sydney† via Nairobi†	via Sydney†
Brunei	X			
Burma (Rangoon)			X	
Ceylon (Colombo)			X	
Christmas Is.	X			
East Africa (Nairobi)			X	
Hong Kong	X			
Hong Kong	X	X	X	X
India (Bombay)	X			
India (Madras)			X	
Indonesia (Bandoeng)	X		X	
Japan (Osaka)	X			X
Japan (Tokyo)		X	X	
Malaysia (Kota Kinabalu) ¶	X		X	
Pakistan (Karachi)			X	
Philippines (Manila)	via Hong Kong†		X	
Thailand (Bangkok)	X		X	X
USA (Oakland)			X	
Viet-Nam, South (Saigon)	X		X	

X Direct circuit.

† Automatic relay.

|| Standby for COMPAC cable failure.

¶ Standby for SEACOM cable failure.

**Southern Yemen***Radio Station:* Aden (Hiswa and Ras Boradli). *Operator:* Cable and Wireless (Mid-East) Limited.

Circuits:

<i>Distant Country</i>	<i>Telegraph</i>	<i>Phototelegraph</i>	<i>Telephone</i>	<i>Telex</i>
Bahrain	X		X	
Britain (London)	X	X*	X	X
East Africa (Nairobi)	X		X	X
Ethiopia (Addis Ababa)			X	X
Hadramaut (Meifaah)	X			
Hadramaut (Mukalla)	X			
Hadramaut (Seiyun)	X			
India (Poona)			X	
Kamaran Island	X			
Somalia (Hargeisa)	X		X	
Somalia (Mogadiscio)			X	
Somaliland, French (Djibouti)	X		X	
UAR (Cairo)	X		X	
Yemen (Sanaa)	X		X	
Yemen (Taiz)	X			

**St. Helena Island***Radio Station:* St. Helena. *Operator:* Cable and Wireless Ltd.

Circuits:

<i>Distant Country</i>	<i>Telegraph</i>	<i>Phototelegraph</i>	<i>Telephone</i>	<i>Telex</i>
Ascension Island			X	

**Tanzania**—see East Africa entry.**The Gambia***Radio Station:* Bathurst. *Operator:* Cable and Wireless Ltd.

Circuits:

<i>Distant Country</i>	<i>Telegraph</i>	<i>Phototelegraph</i>	<i>Telephone</i>	<i>Telex</i>
Britain (London)			X	
Ghana (Accra)			X	
Nigeria (Lagos)			X	
Sierra Leone (Freetown)	X		X	X

**Trinidad and Tobago***Radio Stations:* Port of Spain (Caroni, Blanchisseuse Road). *Operator:* Cable and Wireless (West Indies) Ltd.

Circuits:

<i>Distant Country</i>	<i>Telegraph</i>	<i>Phototelegraph</i>	<i>Telephone</i>	<i>Telex</i>
Guyana (Georgetown)			X	
Surinam (Paramaribo)			X	
Venezuela (Caracas)			X	

**Trucial States***Radio Stations:* Dubai, Fujairah. *Operator:* Cable and Wireless Ltd.

Circuits:

<i>Distant Country</i>	<i>Telegraph</i>	<i>Phototelegraph</i>	<i>Telephone</i>	<i>Telex</i>
Dubai Circuits:				
Bahrain	X		X	X
Britain (London)				X
Iran (Bunder Abbas)			X	
Trucial States (Fujairah)	X		X	
Trucial States (Sharjah)	X			
Fujairah Circuits:				
Trucial States (Dubai)	X		X	

X Direct circuit.

\* One way service only.

**Turks Island**

*Radio Station:* Turks Island. *Operator:* Cable and Wireless (West Indies) Ltd.

Circuits:

<i>Distant Country</i>	<i>Telegraph</i>	<i>Phototelegraph</i>	<i>Telephone</i>	<i>Telex</i>
East Harbour			X	
Jamaica (Kingston)	X		X	
Salt Cay			X	

**Uganda**—see East Africa entry.

**Zambia**

*Radio Station:* Ndola. *Operator:* General Post Office.

Circuits:

<i>Distant Country</i>	<i>Telegraph</i>	<i>Phototelegraph</i>	<i>Telephone</i>	<i>Telex</i>
Britain (London)	X		X	X
East Africa (Nairobi)	X		X	X
East Africa (Dar es Salaam)			X	X

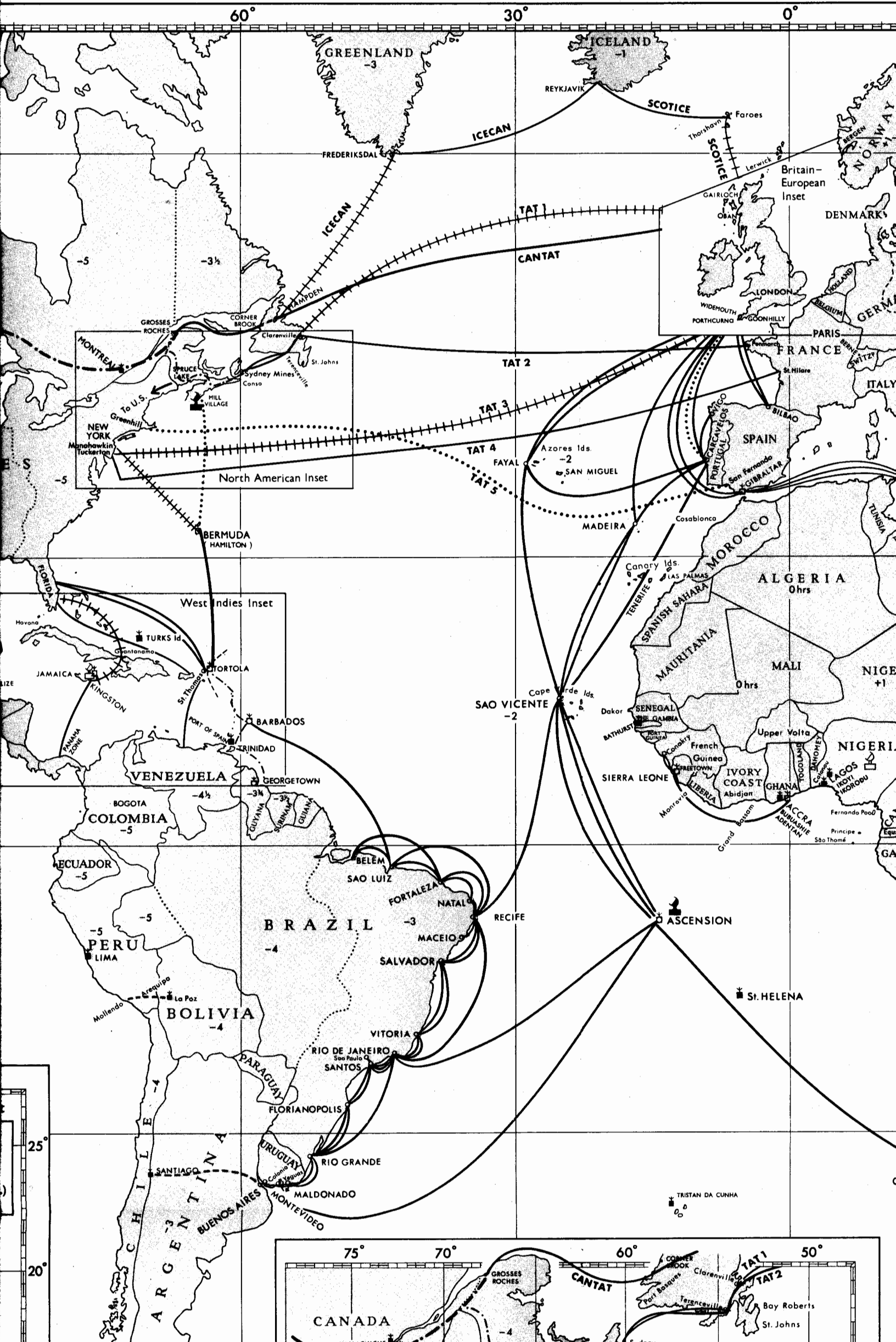
**Zanzibar** (Tanzania)—see East Africa entry.

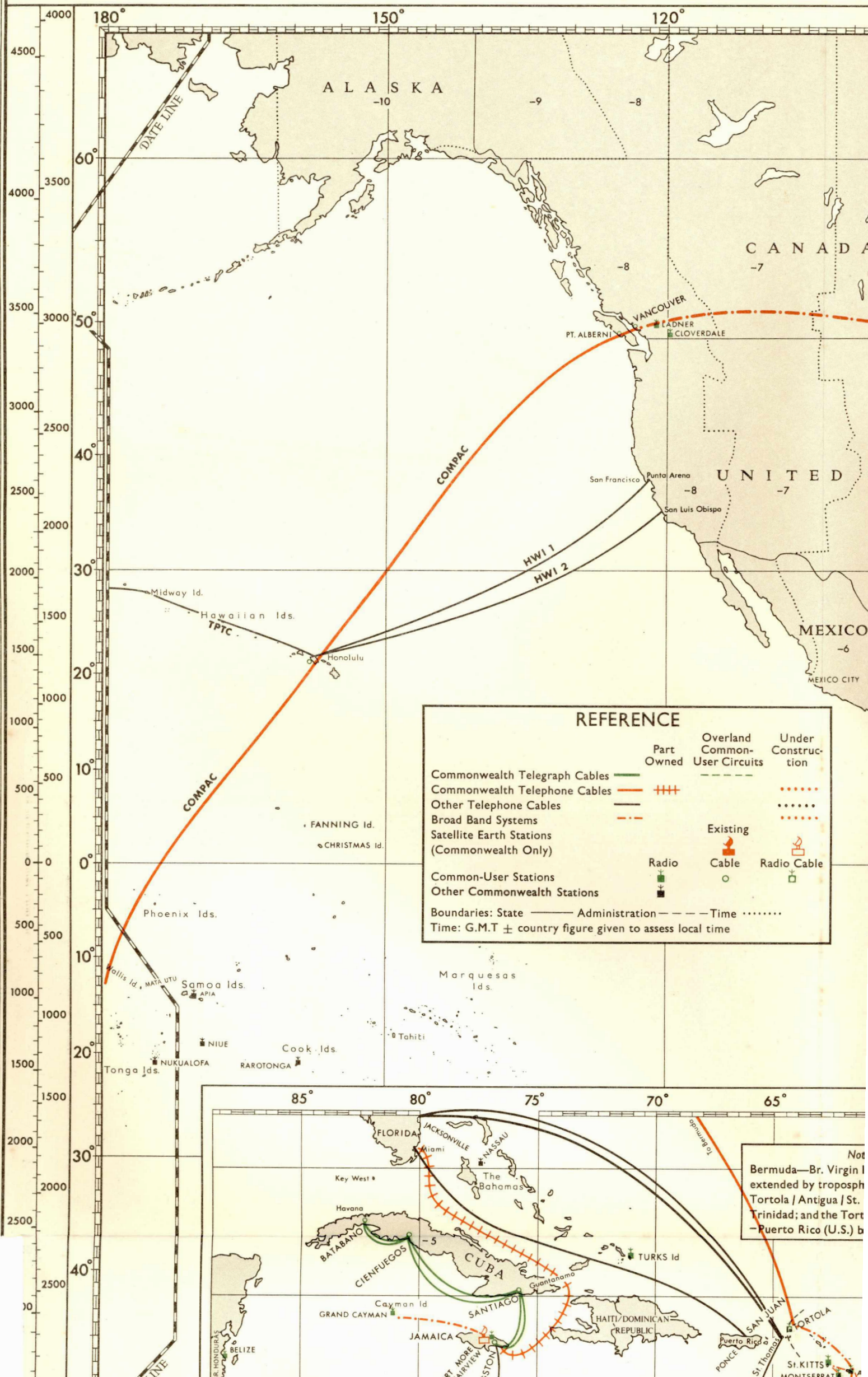
X Direct circuit.





# COMMONWEALTH TELECO





### REFERENCE

	Part Owned	Overland Common- User Circuits	Under Construction
Commonwealth Telegraph Cables	—	---	.....
Commonwealth Telephone Cables	—+—+—+—	---	.....
Other Telephone Cables	—	---	.....
Broad Band Systems	- - - -	---	.....
Satellite Earth Stations (Commonwealth Only)	■	Existing	■
Common-User Stations	■	Radio	Radio Cable
Other Commonwealth Stations	■	Cable	Radio Cable
Boundaries: State	—	Administration	- - - -
Time: G.M.T ± country figure given to assess local time	.....		

Not  
Bermuda—Br. Virgin I  
extended by troposph  
Tortola / Antigua / St.  
Trinidad; and the Tort  
—Puerto Rico (U.S.) b