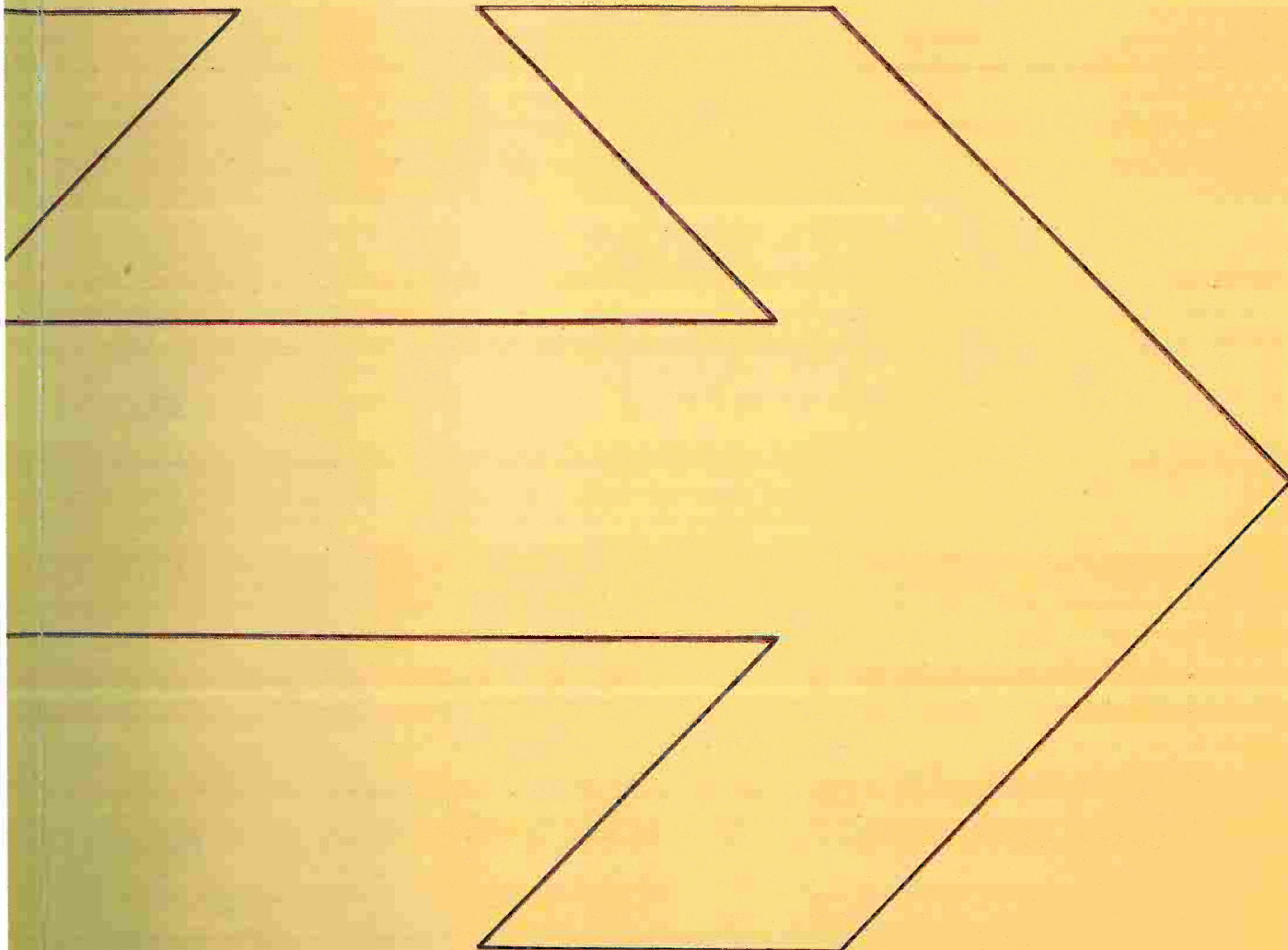


Cyprus Telecommunications Authority

26th Annual Report 1981



CYPRUS TELECOMMUNICATIONS AUTHORITY

**TWENTY - SIXTH ANNUAL REPORT
AND ACCOUNTS**

FOR THE YEAR ENDED

31st December, 1981.

[PRICE 50 mils]

ΕΠΙΤΕΥΓΜΑΤΑ ΤΗΣ ΑΡΧΗΣ ΤΗΛΕΠΙΚΟΙΝΩΝΙΩΝ ΚΥΠΡΟΥ ΜΕΣΑ ΣΤΟ 1981



1. Εγκαταστάθηκαν 10,469 νέα τηλέφωνα και έτσι ο ολικός αριθμός τηλεφώνων που λειτουργούν έφθασε τις 86,144.
2. Εγκαταστάθηκε σε διάφορα τηλεφωνικά κέντρα εξοπλισμός και έτσι αυξήθηκε η ολική χωρητικότητα του δικτύου κατά 14,000 γραμμές περίπου.
3. Κτίστηκαν νέα Τηλεφωνικά Κέντρα στα Λατσία, την Αμαθούντα, την Κακοπετριά, την Ορμήδεια, τη Μοσφιλωτή, τον Αγρό και νέο κτίριο στα Πέρα για να στεγαστεί ο Παράκτιος Σταθμός Εκπομπής (Transmitting Station).
4. Ποντίστηκε νέο υποβρύχιο καλώδιο μεταξύ Κύπρου και Ελλάδας χωρητικότητας 1,380 καναλιών, με την ονομασία «ΑΠΟΛΛΩΝ» αξίας 40 εκατομμυρίων δολλαρίων Αμερικής, δαπάνη που θα επωμισθούν από μισά η Αρχή και ο Οργανισμός Τηλεπικοινωνιών Ελλάδας.
5. Επεκτάθηκε το δίκτυο με την κατασκευή 374 φρεατίων, την εκσκαφή αυλακιών μήκους 290 χιλιομέτρων, την τοποθέτηση υπόγειων καλωδίων μήκους 387 χιλιομέτρων και την εγκατάσταση πασσάλων σε απόσταση 88 χιλιομέτρων.
6. Εγκαταστάθηκαν τηλεφωνικοί θάλαμοι σε 37 Προσφυγικούς Συνοικισμούς και Συνοικισμούς Αυτοστέγασης.
7. Εγκαταστάθηκαν 155 νέες συσκευές τέλεξ και έτσι ο ολικός αριθμός τους έφθασε τις 1,889 και εισάχθηκαν συσκευές νεώτατου τύπου με μνήμη.
8. Η τηλεφωνική κίνηση εσωτερικού αυξήθηκε κατά 22%, και η διεθνής κατά 15%.
9. Η εσωτερική κίνηση του τέλεξ αυξήθηκε κατά 28% και η διεθνής κατά 2%.
10. Εγκαταστάθηκε νέος σύγχρονος εξοπλισμός για τη λήψη πληροφοριών από τη Μετεωρολογική Υπηρεσία.
11. Εγκαταστάθηκε νέος σύγχρονος εξοπλισμός που βελτίωσε την υπηρεσία επικοινωνίας με πλοία στην ανοικτή θάλασσα.
12. Κυκλοφόρησε νέος ενημερωμένος Τηλεφωνικός Κατάλογος.
13. Εισάχθηκε η υπηρεσία facsimile που παρέχει την ευχέρεια για αποστολή και λήψη φωτοαντιγράφων εγγράφων, φωτογραφιών κ.τ.λ. μέσω του τηλεφωνικού δικτύου.
14. (α) Τα έσοδα της Αρχής έφθασαν τα £17,805,472 και τα έξοδα τα £16,153,156. Παρουσιάζεται πλεόνασμα £1,652,316, που είναι μειωμένο σε σύγκριση με το 1980 γιατί τα έξοδα της αυξήθηκαν κατά £1,700,000 λόγω του αυξημένου ελλείμματος στο Ταμείο Συντάξεως που πρόκυψε από την πρόσφατη αναλογιστική εκτίμηση.
(β) Το πάγιο ενεργητικό της Αρχής αυξήθηκε κατά £15,232,961 (£4,377,854 το 1980). Σ' αυτό το ποσό περιλαμβάνεται το μερίδιο της δαπάνης της Αρχής για το υποβρύχιο καλώδιο «ΑΠΟΛΛΩΝ», που ανέρχεται σε £7,853,196.
15. Διατηρήθηκαν οι άριστες σχέσεις μεταξύ Αρχής και Προσωπικού, με αποτέλεσμα η Αρχή να είναι ο πρώτος Οργανισμός στον οποίο υπογράφηκε νέα συλλογική σύμβαση διάρκειας 2 ετών (1982-1983).
16. Η Αρχή συμμετέσχε ενεργά σε συνέδρια Διεθνών Τηλεπικοινωνιακών Οργανισμών (Διεθνής Ένωση Τηλεπικοινωνιών, Κοινοπολιτειακός Οργανισμός Τηλεπικοινωνιών, κ.τ.λ.) και διατήρησε στενές επαφές και άριστες σχέσεις με τηλεπικοινωνιακές αρχές άλλων χωρών.

ADMINISTRATION

General Manager: A.N. Stylianides, B.Sc., M.-A.S.M.E.

Secretary	Chief Engineer	Personnel Officer	Chief Accountant	Telecommunications Officer
S.A. Kokkinides, ACIS, AMBIM, Soc. Science & Admin. Cert. L.S.E. (University of London)	G.C. Papaioannou, B.Sc. (Eng.) C. Eng. F.I.E.E.	N. Markides.	S. Modestou, F.A.I.A.	A.Ch. Kritiotis, (Assist. Telecom- munications Officer) Physics and Electronics degree, Athens University,

Head Office : Prodromos Avenue 121, Nicosia, P.O. Box 4929.

Telephone : 60271

Telex : 2288, 3288

Branches:

NICOSIA	— Egypt Avenue	Tel. 021-60333
LIMASSOL	— 4, Marcos Botzaris Street	Tel. 051-62500
*FAMAGUSTA	— Edison Street	Tel. 031-62500
LARNACA	— 7, Lord Byron Street	Tel. 041-52279
PAPHOS	— 36, Adonis Street	Tel. 061-32148
*KYRENIA	— 5A, 28th October Avenue	Tel. 081-52438
*MORPHOU	— 18, 25th March Street	Tel. 071-42055
*LEFKA	— Lefka	Tel. 078-17-459

* The telephones are out of operation due to the occupation of the area by the Turkish Army.



NICOS ROUSSOS - Late Chairman of CY.T.A.

It is with the deepest regret that the Authority announces the death of Nicos Roussos, Chairman of the Authority, which happened on 30th June, 1982.

Nicos Roussos was born at Lania village Limassol district in 1906 and obtained his degree with distinction from Metsovion Polytechnic of Athens in Civil Engineering, after graduating from the Limassol Gymnasium. He rendered long and valuable service to the Municipality of Limassol and he initiated and supervised the execution of various civil engineering projects in the above municipality.

His relationship with the Authority started in 1960, when he was appointed as member of its Board. Later on he served as Vice Chairman and from this position he was appointed as Minister of Communications and Works from 1970-1972. From 1972 until the day of his death he served as Chairman of the Authority and during this period telecommunications in Cyprus were developed to a level which ranks Cyprus amongst the telecommunicationswise highly developed countries of the world.

Apart from his interest in CY.T.A. and the management of his own civil engineering office at Limassol, Nicos Roussos served as Chairman and Vice Chairman of various other organizations and was one of the founders of the United Nations Association in Cyprus. In addition he was the representative of the Government of Cyprus to the Commonwealth Telecommunications Board where he served as Vice Chairman.

Nicos Roussos will long be remembered for his great charm and patience, his incorruptible nature and for his long and unselfish service to the public and in particular to telecommunications.

CONTENTS

1. INTRODUCTION — SUMMARY	..	..	..	..	..	13
2. TECHNICAL SERVICES	..	..	..	..	..	20
A. General	..	..	..	..	..	20
B. Planning and Development	..	..	..	..	..	20
C. Construction	..	..	..	..	..	25
D. Maintenance	..	..	..	..	..	36
E. General Telecommunications Facilities	..	..	..	..	..	37
3. INTERNATIONAL NETWORK AND SERVICES OPERATION	..	..	..	..	..	42
4. ADMINISTRATION AND STAFF	..	..	..	..	..	50
5. COMMONWEALTH TELECOMMUNICATIONS ORGANIZATION (C.T.O.)	..	..	..	..	..	57
6. FINANCIAL REPORT	..	..	..	..	..	58
7. ACCOUNTS	..	..	..	..	..	65

1. INTRODUCTION - SUMMARY

1. The Cyprus Telecommunications Authority is a Public Corporation, established by Law 1954 (Cap 302), as amended by Laws 20/60, 34/62, 25/63 and 54/77 and is answerable to the Council of Ministers, through the Minister of Communications and Works, whose power over its activities is regulated by the Amended Service Law No. 25 of 1963, Section 3. The Authority's main responsibility is, by virtue of the aforesaid Law, the provision, maintenance and development of a comprehensive telecommunications service, both local and overseas.

2. The Authority's Board had 21 meetings in 1981 for the study and approval of policies and plans appertaining to the current operations and to the further development and modernization of all services provided by the Authority.

3. The Telephone, Telex and Telegraph services are, admittedly, the most important services of the Authority in respect of quantity and revenue. The full range of the services provided by the Authority are detailed hereunder:-

3.1 *Telephone Service*

The Authority provides fully automatic service, both national and international for twenty-four hours every day.

Cyprus telephone service ranks among the most developed and modern in the world and 68 countries are connected on its International Subscribers Dialling System (ISD).

A record number of 10,469 new subscribers direct telephone lines were installed, bringing the total number of direct lines to 86,144 (22,939 applications are on the Waiting List).

Work in various exchanges increased the lines available by 14,155 and plans were made and orders were placed to increase the system capacity by 26,000 additional lines in 1982.

The traffic volume increased by 22% for the inland traffic and 15% for the international traffic.

3.2 *Telex Service*

The Authority provides automatic 24 hour seven days a week telex service directly with 148 countries and through the operator with the rest of the countries which maintain such service. International traffic increased by 2% and national by 28% in minutes over that of the previous year.

Plans were finalized for the extension of the international telex exchange.

New fully electronic telex units with memory storage capability were introduced. 155 new telex units were installed bringing the total number to 1,889.

3.3 Telegraph Service

Satisfactory automatic service at all times was available to all parts of the world through the Nicosia Automatic Message Switching Centre.

Outgoing traffic was decreased by 3% (words) and inland traffic increased by 7% (words). The volume of telegraph traffic is adversely affected by the telex service.

3.4 Broadcasts (local)

The Authority provides services to the Cyprus Broadcasting Corporation for effecting outside local broadcasts (live programmes) from any point in the island.

During 1981, 90 such outside broadcasts were effected by using the Authority's network against 95 in 1980.

3.5 Voicecasts

The demand for this facility which is used by foreign correspondents to cover news reports to their newspapers, showed a decline in numbers in 1981, i.e. 68 against 113 in 1980 but increased in minutes i.e. 10,419 against 9,032 in 1980.

4. Telecast Service

This recently established service is still of limited usage and is provided to television broadcasts and video news agents for the transmission and/or reception of colour or black and white video programmes and the transmission of messages through the telephone network to foreign studios.

5. Facsimile

This service enables the exchange of copies of documents through the telephone network (telefax). It also transmits and receives radio pictures. 30 pictures were received against 4 in 1980 and 79 were transmitted against 65 in 1980.

6. Datel Exchange

Data is exchanged between computer systems and remote terminals via the telephone network. This is a new service and is expanding very rapidly.

7. Communication with Ships at Sea (Maritime Mobile Services)

With the installation of new, modern high frequency transceivers and the improvement of the quality of service, the traffic handled by the "Cyprus Radio" coast station evidenced a considerable increase.

To further improve this service, tenders were invited for the supply of

additional HF/VHF radio and ancillary equipment, to supplement the existing ones.

The following table shows the comparative figures of traffic handled over 1980, 1981:-

Telephony	1980	1981
Calls	147,038	168,741
Minutes	593,623	714,916
Telegraphy	1980	1981
Telegrams	19,043	13,354
Words	414,456	308,211

In addition, the following emergency traffic was handled during the year:-

19 Navigational Warnings, 28 Distress/SOS Signals and 31 Medico Signals (Request for medical help or advice).

8. Civil Aviation Signals

The Authority continued to provide technical and operational services to the Department of Civil Aviation for the running of all telecommunication facilities both at the Larnaca International Airport and the Nicosia Communication Centre. These facilities conform to the standard and Recommended Practices laid down by the International Civil Aviation Organization (I.C.A.O.).

9. Meteorological Service

A reliable and continuous Mufax (reception of weather charts) service and four teleprinter circuits for the reception of meteorological bulletins from abroad were provided by the Authority for the Ministry of Agriculture and Natural Resources.

10. Urban, Rural and International Telecommunications Development

An overall effort was made for a balanced development of all three branches of the service i.e. the urban, the rural and the international, with emphasis on the rural.

In order to meet this responsibility, the Authority, during the year 1981, extended the main exchanges, constructed new ones, expanded the overseas network and established additional lines for overseas communications, expanded the underground and overhead network and constructed new rural exchanges and new repeater stations within the framework of the 4 year development plan, which aims at the provision of modern and

adequate telecommunications services for all rural areas of the island. In addition the Authority continued its efforts to improve services at housing projects for the large number of people displaced by the occupation of their homes by the Turkish Armed Forces in 1974.

To give effect to the above, the following construction work was, inter alia, realized:-

- 10.1 Completion of expansion work at Pallouriotissa Exchange for the installation of 2,600 lines.
- 10.2 Commencement of work on the Latsia Exchange for installation of 3,000 lines to be completed in 1982.
- 10.3 Extension of Limassol Exchange bringing line availability to 25,000.
- 10.4 Commencement of work at Amathus exchange for 3,000 lines.
- 10.5 Installation of 3,000 lines at Larnaca Main Exchange.
- 10.6 Work for additional trunk and switching equipment at International Telephone Exchange.
- 10.7 Dheftera and Peristerona Ruraxes completed.
- 10.8 Work commenced on Ormidhia Rurax.
- 10.9 Work commenced at Polis and Peyia Ruraxes for installation of 600 lines exchanges.
- 10.10 75% of work on Dhali Rurax completed for increase from 600 to 1,000 lines.
- 10.11 Work for installation of 600 lines exchange to Kakopetria Rurax.
- 10.12 The capacity of mobile exchange increased by 400 lines rising to 1,100 lines.
- 10.13 138 PABXs were installed all over the island.
- 10.14 New radio and multiplex equipment installed.
- 10.15 The Submarine Cable Apollo of 1,380 channels between Greece and Cyprus was put into operation in October 1981. This is a major project jointly and equally financed by the Authority and the O.T.E.(Greek Telecommunications Organization) at a total cost of about US\$40,000,000. With its completion the Authority's number of international telephone and telex channels via cables are considerably increased.
- 10.16 The construction of the new Indian Ocean region satellite oriented antenna of the Makarios Earth Station started. On completion in 1982 it will greatly facilitate overseas communications to the Middle East and Far East countries.

10.17 374 manholes constructed.

290.7 km duct lines laid.

387.4 km cable laid.

160,491 km of above in single wire.

88.5 km pole route installed.

125.5 km single wire installed.

10.18 Thirty seven new communal call offices were installed at:-

10.18.1 *Government refugee housing communities*

Ayios Georgios, Pano Kokkines, Ayia Napa, Ayios Ioannis, Ayii Anargiri II and Kapsalos.

10.18.2 *Refugee Self-housing communities*

Latsia, Dhali, Pera Chorio, Yeri A and B, Peristerona A, Peristerona C, Ergates, Kokkinotrimithia A and B, Paleometochos, Akaki, Ayii Trimithias, Paralimni, Dherinia, Sotira, Liopetri, Phrenaros, Athienou, Kalò Chorio, Kophinou, Oroklini and Trachoni.

10.18.3 Additional coin payphones were installed in rural and urban areas.

10.19 The following buildings were completed in 1981:-

Latsia Exchange, Amathus Exchange, Kakopetria Rural Exchange, Ormidhia Rural Exchange, Mosphiloti Rural Exchange and Pera Transmitting Station.

10.20 The construction of the following buildings commenced in 1981 and will be completed in 1982 except for the Head Office building which will be completed in 1984.

Acropolis Exchange Extension, Lakatamia Exchange, Pallouriotissa Exchange, Kokkinotrimithia Rural Exchange, Pedhoulas Rural Exchange, Palechori Rural Exchange, Kiti Rural Exchange, Central Stores Extension, Pera Transmitting Station, Lara Repeater Station and Paralimni Exchange.

11. Maintenance

A high standard of maintenance of the service was ensured through the strict application of internationally approved maintenance procedures for all categories of equipment.

12. Staff Relations

Management/Staff relations were satisfactory. The various Joint Committees served well the welfare, safety and training of staff. The Unions submitted claims for the revision of conditions of employment and salary

scales on the expiration of the relative collective agreement on 31st December, 1981.

13. Commonwealth Telecommunications Organization (C.T.O.)

The Chairman of the Authority continued to represent Cyprus on the Commonwealth Telecommunications Council (C.T.C.) and the Authority's Chief Engineer, Chief Accountant and Telecommunications Officer served on Specialists Groups of their competence.

14. Finance

14.1 *The main sources of revenue of the Authority* are the Telephone and Telex Services and any surpluses together with Suppliers Credit Facilities provided the finance for the development of the Authority.

14.2 *The net surplus* for the year was £1,652,316 compared to £3,659,628 of the previous year.

14.3 *The Operating Revenue* was £17,328,662.

14.4 *Operating Expenses* were £12,766,660 against £9,946,396 in 1980. The Operating Expenses rose by £2,820,264 (28.4%) over the previous year's figure, mainly due to additional operating staff costs and extraordinarily heavy expenditure on the maintenance of the Authority's buildings.

14.5 *The additions to the fixed assets* during the year amounted to £15,232,961 (1980 £4,377,854) after deducting £310,222 (1980 £242,381) contribution from subscribers by way of installation fees. These include £7,853,196 for the new Cyprus/Greece Submarine Cable which was put into service in November, 1981.

The development was financed from internal sources by 23% and from external sources (suppliers' and other credit) by 77%.

15. GENERAL

The Authority promoted a balanced growth of the various telecommunications services in accordance, as far as practicable, with recognized international standard practice and public demand, with emphasis on the development of the system in the rural areas and at the same time ensured a high level of maintenance of the service and planned for future development.

In addition to the above, the Authority continued to provide efficient services to the Government, the National Guard, the United Nations Force in Cyprus and the British Sovereign Base Areas.

The degree of success in the Authority's efforts was epitomized by the undermentioned comment made recently by an international firm of

management and financial consultants:-

"CYTA has been rapidly developing and the Telecommunication system in Cyprus is not a hindering force preventing speedy development on the contrary, it is a strong impelling force providing the necessary infrastructural back-up for the planned restructuring of the Cyprus Economy."

2. TECHNICAL SERVICES

A. GENERAL

The prime responsibility of the Authority is the maintenance of the telecommunications system to a high level of efficiency and the system's development and modernization so as to cope, to the greatest possible extent, with an overall and ever increasing demand, particularly in connection with the telephone service.

In order to meet the responsibility mentioned above, the Authority's technical services paid special attention to the following:-

1. The extension of the main exchanges, the construction of new ones and the expansion of the underground and overhead network, with a view to meeting the pressing demand for additional telephone service in the urban areas.
2. The construction of new rural exchanges and the establishment and expansion of the rural network, within the framework of the programme for the implementation of the 4-year plan, aiming at the provision of up to date telecommunications service for all rural areas of the island.
3. The establishment of new radio links between the rural exchanges and the zone centres (through the main radio repeater stations), which greatly increased the capacity of the inland network.
4. The establishment of new radio repeater stations for the full coverage of the rural areas of the island.
5. The expansion of the overseas network and the establishment of additional links for the maximum diversification of the overseas communications.
6. The new Indian Ocean region satellite oriented antenna of the MAKARIOS Earth Station, the construction of which started in 1981. This project will greatly facilitate overseas communications to the Middle East and Far East countries.

B. PLANNING AND DEVELOPMENT

To further develop and improve the service, a number of new studies and plans were made, specifications prepared, tenders invited and equipment placed on order.

The main projects which were planned in 1981 are detailed below:-

1. Local Telephone Exchanges

1.1 Zone Main and Satellite Exchanges

Feasibility studies and planning of a number of new projects

continued in 1981 as in previous years and with the completion of these studies, orders were placed for the supply of all necessary equipment for the establishment of a new exchange of 3,000 lines at Lakatamia area and for the expansion of the Acropolis and the Limassol exchanges. Detailed information was also prepared for the installation of the equipment at the new Latsia, Amathus and Paralimni Exchanges and for the further expansion of the Limassol Exchange.

The table below shows the planned increase in line capacity of the main telephone exchanges:-

Exchange Area	Existing Lines in 1981	Under Installation	Additional lines on order or in stock	Planned total lines in 1982
Nicosia	57,000	3,000	8,000	68,000
*Famagusta	10,000	1,000	—	11,000
Larnaca	6,000	3,000	—	9,000
Limassol	25,000	2,000	8,000	35,000
Paphos	4,000	—	—	4,000
*Morphou	1,400	—	—	1,400
*Kyrenia	1,400	—	—	1,400
Total	104,800	9,000	16,000	129,800

1.2 Rural Exchanges

Plans were prepared for the further implementation of the four-year rural development plan.

These plans include the establishment of seven new ruraxes at Evdhimou, Erimi, Agros, Ayia Napa, Kiti, Kokkinotrimithia and Lefkara, the replacement of the old type equipment with new crossbar type at Athienou and Pedhoulas and the further expansion of the existing ruraxes of Peristerona, Dheftera, Skarinou and Timi.

Orders were also placed for the supply of two new 1,000 lines and two 600 lines crossbar type rural exchanges as well as 800 additional lines for the expansion of two existing ruraxes.

The table below shows the planned increase of the rural exchanges including mobile exchanges:-

Zone	Number of Ruraxes	Existing lines in 1981	Under Installation	Additional lines on order or in stock	Planned total number of lines in 1982
Nicosia	11	3,000	1,200	3,050	7,250
*Famagusta	7	500	—	1,100	1,600
Larnaca	6	700	600	1,600	2,900
Limassol	7	1,250	—	2,800	4,050
Paphos	6	850	700	—	1,550
*Morphou	3	400	—	—	400
*Kyrenia	2	350	—	1,200	1,550
Total	42	7,050	2,500	9,750	19,300

1.3 International Telephone Exchange

The international telephone traffic maintained the upward trend of the previous years showing an increase in minutes of 14.8% compared to 1980.

Additional common control and terminal equipment for this exchange was placed on order to accommodate the projected international traffic.

1.4 International/National Telex Exchange

Plans and studies were completed for the further expansion of the Telex Exchange.

2. Subscribers Terminal Equipment

2.1 Telephone Terminal Equipment and E.P.A.B.Xs.

The demand for the new type of telephone terminal apparatus and Electronic Private Automatic Branch Exchanges (E.P.A.B.X.s) continued to be high in 1981.

2.2 Telex Terminal Equipment

New fully electronic, with memory storage capabilities and text editing facilities, telex terminals were introduced and supplied to subscribers during 1981.

2.3 Facsimile Terminal Equipment

Facsimile terminals were also introduced and offered to subscribers in 1981.

3. National Communications Network

3.1 Equipment on Order

Further studies and plans were prepared for the expansion of the national and international network to satisfy the increased demand for voice and non-voice channels.

For the implementation of these plans, the following equipment was placed on order:-

- 3.1.1 Seven radio systems with the associated multiplex equipment for the Agros-Madhari, Peristerona-Madhari, Athienou-Kionia, Evdhimou-Pissouri, Limassol-Erimi, Larnaca-Kiti and Kokkinotrimithia-Kionia links.
- 3.1.2 One additional radio link between Kionia and Zyghi to provide music channels for the British East Mediterranean Relay Station and the new Indian Ocean region satellite oriented antenna of the MAKARIOS Earth Station.
- 3.1.3 Additional Frequency Division Multiplexing Equipment to be installed at Nicosia, Larnaca and the Satellite Earth Station.
- 3.1.4 Nine Time Division Multiplex (T.D.M.) systems for the national and international telex and telegraph communication.

4. International Communications Network

The feasibility studies and plans for the establishment of a standard B satellite antenna at MAKARIOS Earth Station to operate with the Indian Ocean Satellite were completed during 1981. After an invitation for international tenders, a turn-key contract was awarded in October 1981 and is scheduled for completion by the middle of 1982.

5. Maritime Mobile Services

Further studies were made for the improvement of the maritime mobile services. Relevant specifications were prepared and tenders were invited for the supply of additional HF/VHF radio and ancillary equipment to supplement the existing services.

6. Line Plant Development

6.1 Urban Development

Detailed plans were prepared for the development and extension of the underground and overhead network of the towns of Nicosia, Limassol, Larnaca and Paphos.

6.2 Rural Development

Further plans and estimates were prepared for the establishment or expansion of the telephone network in rural areas in accordance with the four year rural development plan.

These plans involved the following villages:-

6.2.1 Nicosia Zone

Askas, Phterykoudhi, Alona, Platanistasa, Kambos and Kokkinotrimithia.

6.2.2 Limassol Zone

Trachoni, Ayios Tychonas, Moutayiaka, Prastio, Pakhna and Anoyira.

6.2.3 Larnaca Zone

Kiti, Pervolia, Tersephanou, Meneou, Dromolaxia, Lefkara, Khirokitia, Skarinou and Kophinou.

6.2.4 Paphos Zone

Anarita, Nata, Ayios Nicolaos, Polemi.

6.2.5 Famagusta Zone

Ayia Napa, Paralimni.

6.2.6 Morphou Zone

Orounda, Meniko.

7. Industrial Estates

Plans were completed for the extension of telecommunication services to the industrial areas of Ayios Athanasios at Limassol Zone.

8. Government and Self-housing Communities for Persons Displaced as a result of the 1974 Turkish invasion.

8.1 Plans and estimates were prepared for the cabling and/or provision of public telephone service at the following Government Communities:-

8.1.1 Nicosia Zone

Ayios Pavlos (second phase), Aspres, Yerani, Chrysospiliotissa, Ayios Nicolaos, Kokkines, Latsia, Plati and Athalassa.

8.1.2 Limassol Zone

Tsiflikoudhia, Ayios Ioannis, Ayios Athanasios, Kapsalos.

8.1.3 Larnaca Zone

Kokkines, Tsiakkilero, Ayii Anargiri I and II, Ayios Ioannis, Kophinou.

8.1.4 Paphos Zone

Mouttalos.

9. Power Plant

Plans were completed for the provision of standby generating sets and battery floating equipment at all new exchanges under construction. Orders were also placed for the provision of power inverters at four major transmission centres of the Authority.

C. CONSTRUCTION

Apart from certain types of projects, like construction of buildings, digging of holes for the erection of poles, the excavation of trenches, the laying of ducts and the construction of manholes which are contracted to local firms for execution, the Authority undertakes through its permanent working force, the construction of most engineering projects.

During 1981, the following major projects were undertaken and executed by the Authority's personnel:-

1. Telephone Exchanges

1.1 Local Exchanges

1.1.1 Nicosia Exchanges

1.1.1.1 Pallouriotissa Exchange (*Step-by-step*)

The work for the installation of 2,600 lines at this exchange was completed bringing the total number of lines to 10,000.

1.1.1.2 Latsia Exchange (*Crossbar type*)

The work for the installation of 3,000 lines commenced in 1981 and 30% of the project was completed by the end of the year. The remainder is scheduled for completion in 1982.

1.1.2 Limassol Exchanges

1.1.2.1 Limassol Main Exchange (*Crossbar type*)

The work for the extension of this exchange, which started in 1980 was completed, bringing the total number of lines to 25,000.

1.1.2.2 Amathus Exchange (*Crossbar type*)

15% of the work for the installation of 3,000 lines was completed in 1981. The installation is scheduled to be completed and the exchange put into operation in 1982.

1.1.3 Larnaca Main Exchange

The installation of 3,000 lines and additional common control equipment which commenced during the previous year was completed in 1981.

1.2 *International Telephone Exchange*

The installation of additional trunk and switching equipment started in 1981 and 10% of the work was completed. This phase of work is scheduled for completion in 1982.

1.3 *National Zone Centre Exchange*

The installation work for the further expansion of this exchange as well as for the increase of the interworking equipment with the International Exchange continued throughout 1981.

1.4 *Rural Exchanges*

1.4.1 *Dheftera and Peristerona Ruraxes*

The installation of these two new crossbar type exchanges was completed and the equipment given to service in 1981.

1.4.2 *Ormidhia Rurax*

Work commenced for the installation of a new crossbar type exchange of 600 lines capacity at Ormidhia. This exchange is expected to be operational in the first quarter of 1982.

1.4.3 *Polis and Peyia Ruraxes*

Work started for the installation of new crossbar type, 600 lines exchanges at Polis and Peyia. The installation at Polis was completed and the exchange was given to service, whereas the completion of installation of the Peyia exchange is scheduled for the first quarter of 1982.

1.4.4 *Dhali Rurax*

75% of the work for the expansion of the Dhali rurax was completed in 1981. With the completion of the installation in the first quarter of 1982, the capacity of the exchange will be increased from 600 to 1,000.

1.4.5 *Kakopetria Rurax*

The installation of this new 600 lines exchange, which started in 1981, is scheduled for completion during the first quarter of 1982.

1.5 *Mobile Exchanges*

The capacity of the mobile exchange was increased by 400 lines thus bringing the total to 1,100 lines.

1.6 *Subscribers Private Exchanges*

The demand for Private Automatic Branch Exchanges (P.A.B.Xs) continued in 1981 at a higher rate than in previous years.

138 PABXs were installed in various private business establishments all over Cyprus.

Comparative figures of the capacity of lines of the various main, rural and private exchanges for 1980 and 1981 are shown in the following table:-

Type	1980		1981	
	No.	Capacity	No.	Capacity
Zone Automatic				
Telephone Exchanges	9	96,200	9	103,800
Rural Exchanges	31	4,970	30	6,950
Mobile Exchanges	2	700	2	1,100
	42	101,870	41	111,850
Private Automatic				
Branch Exchanges	439	15,915	577	19,432
Private Manual				
Branch Exchanges	2,066	27,803	2,380	28,461

2. Radio and Multiplex Equipment

The following Radio and Multiplex Equipment was installed during 1981:-

- 2.1 A new U.H.F. radio link with its associated multiplex equipment between Peristerona Rural Exchange and Kionia Repeater Station.
- 2.2 Additional multiplex equipment at Nicosia, Limassol and Larnaca transmission centres, as follows:-
 - 2.2.1 At the Nicosia transmission centre the capacity in channels was increased by 204, thus bringing the total to 1,909.
 - 2.2.2 At Limassol transmission centre 156 additional channels were installed, bringing the total number to 768.
 - 2.2.3 At Larnaca transmission centre the number of channels was increased by 120, bringing the total to 552.
- 2.3 A new open-wire carrier system was installed between Paphos transmission centre and Kato Pyrgos rural exchange.
- 2.4 Additional VFT systems were installed at Limassol and Paphos transmission centres to provide additional telex channels for the inland telex services. The available channels were thus increased by 168, bringing the total to 3,009.

3. Submarine Cable - APOLLO

The installation and commissioning of the APOLLO submarine cable between Greece and Cyprus was completed in 1981. This cable, which has a capacity of 1,380 channels, was put into operation in November 1981.

4. Maritime Mobile Radio Equipment

For the improvement of the maritime mobile voice and telegraph service, one additional H.F. transmitter of 10 KW output power was installed and given to service in 1981.

5. Line Plant

During 1981 the underground cable network was further expanded thus necessitating the construction of additional manholes and the laying of additional ducts.

For the expansion of the overhead line network, new pole routes were also constructed.

The comparative tables below give an indication of the work done in 1981:-

Table 1

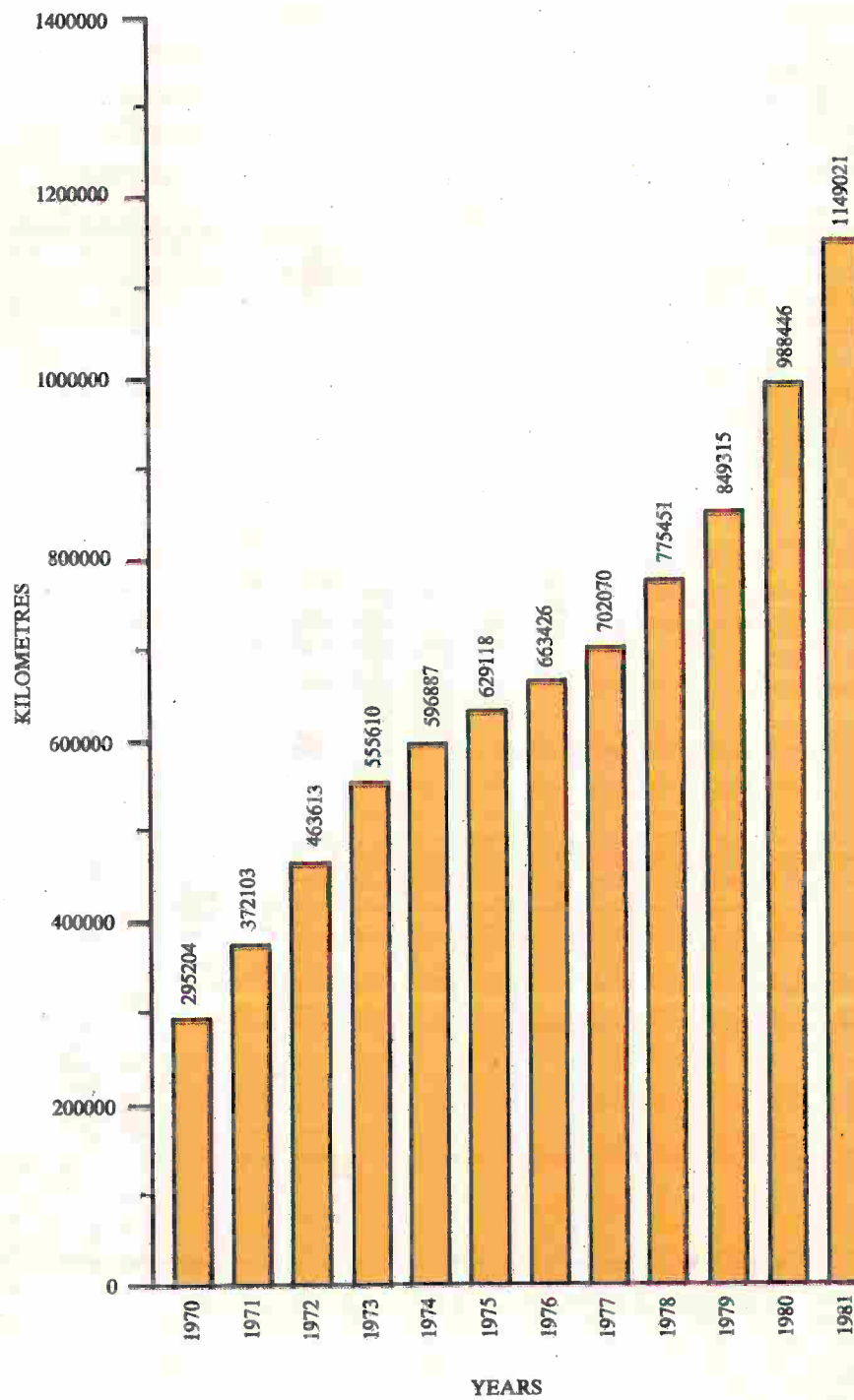
	Unit	1978	1979	1980	1981
Manholes Constructed	No.	135	228	389	374
Duct lines laid	Km	112.2	165.3	252.9	290.7
Cable Laid	Km	146	203.5	357.9	387.4
Above cable in single wire	Km	73,366	76,958	138,923	160,491

Table 2

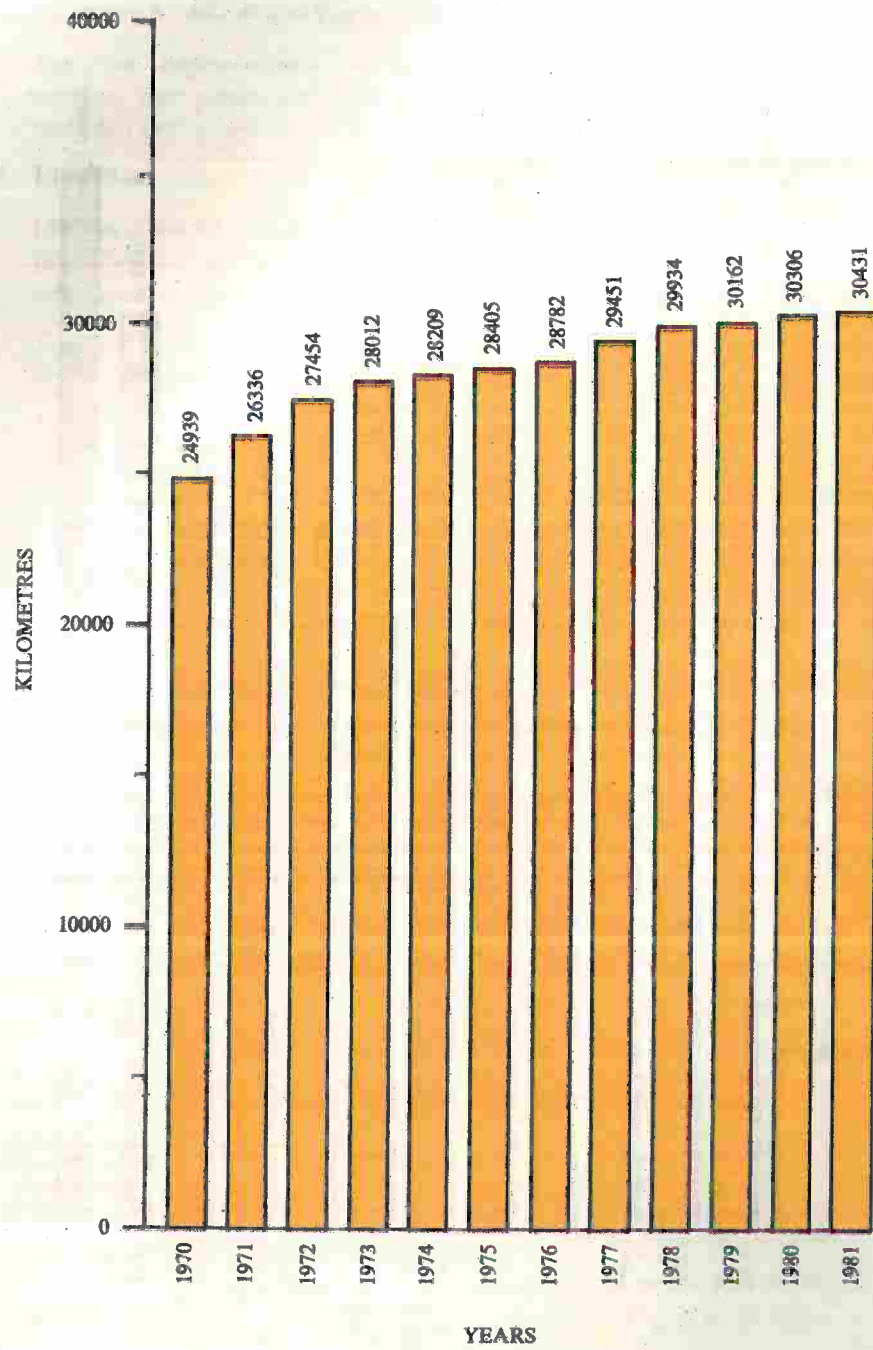
	Unit	1978	1979	1980	1981
Pole route installed	Km	67.5	48	87	88.5
Single wire installed	Km	483	228	143	125.5
Pole route overhauled	Km	216	185	39	35.4
Single wire overhauled	Km	1,512	4,658	338	235

The growth of the underground and overhead wires run since 1955 is shown in Graphs A and B.

GRAPH "A"
UNDERGROUND CABLES SINGLE WIRE LAID



GRAPH "B"
OVERHEAD SINGLE WIRE INSTALLED



6. Communal Installations

Thirty-seven new communal call offices were installed during 1981 at the following government refugee housing communities and refugee self-housing communities.

6.1 Government Housing Communities

Ayios Georgios, Pano Kokkines, Ayia Napa, Ayios Ioannis, Ayii Anargyri II and Kapsalos.

6.2 Self-Housing Communities

Latsia, Dhali, Pera Chorio, Yeri A and B, Peristerona A, Peristerona C, Ergates, Kokkinotrimithia A and B, Paleometochi, Akaki, Ayii Trimithias, Paralimni, Dherinia, Sotira, Liopetri, Phrenaros, Athienou, Kalo Chorio, Kophinou, Oroklini and Trachoni.

6.3 Coin Payphones

Additional coin payphones were installed in urban and rural areas, including the villages of Ayia Napa, Kato Pyrgos and Yeroskipou.

7. Subscribers Telephone Installations

The Authority's primary aim is to satisfy all applications received; however, in certain cases this is not possible immediately for technical reasons, and the applications have to be put on the Waiting List.

An indication of the applications received and installations effected is given below:-

	1978	1979	1980	1981
Applications in hand as at 1st January	4,271	8,035	11,919	17,839
New applications received during the year	11,712	13,758	15,896	21,011
Applications for new direct exchange lines, released during the year	7,126	8,683	8,404	12,999
Applications cancelled during the year	822	1,191	1,572	2,912
Applications on the waiting list as at the end of the year	8,035	11,919	17,839	22,939
Installation removals	2,238	2,974	3,563	3,626
Installation withdrawals	894	1,007	1,382	1,616
New Installations	5,649	7,121	6,266	10,469

Note: Figures for the areas under Turkish occupation are not included in the above table.

The growth in the direct exchange lines is shown in Graph 'C'.

The table below shows the number of Works Orders executed at the various zones for telephone installations and associated works:-

	1977	1978	1979	1980	1981
Nicosia (including Kyrenia and Morphou)	8,138	8,616	10,307	16,138	13,406
Limassol (including Paphos and Platres)	4,547	5,368	6,278	14,150	8,996
Larnaca (including Famagusta)	1,626	2,115	2,452	3,206	3,975

8. Subscribers Telex Terminal Installations

In 1981, the demand for telex terminals continued at the same rate as in the previous years. A total of 155 new terminals were installed, bringing the total number of telex subscribers connected on the telex exchange to 1,889 (77 in the Turkish occupied areas) (Graph "D").

The table below gives an indication of the movement of the applications received and applicants on the Waiting List:-

	1978	1979	1980	1981
Applications in hand as at 1st January	3	27	39	38
New applications received during the year	297	328	370	444
Applications cancelled	26	35	49	69
Applications released during the year	263	281	322	351
Removals	84	106	140	143
Withdrawals	26	38	54	62
New installations	204	253	240	155
Applications on the Waiting List	27	39	38	62

9. Civil Engineering Works and Buildings

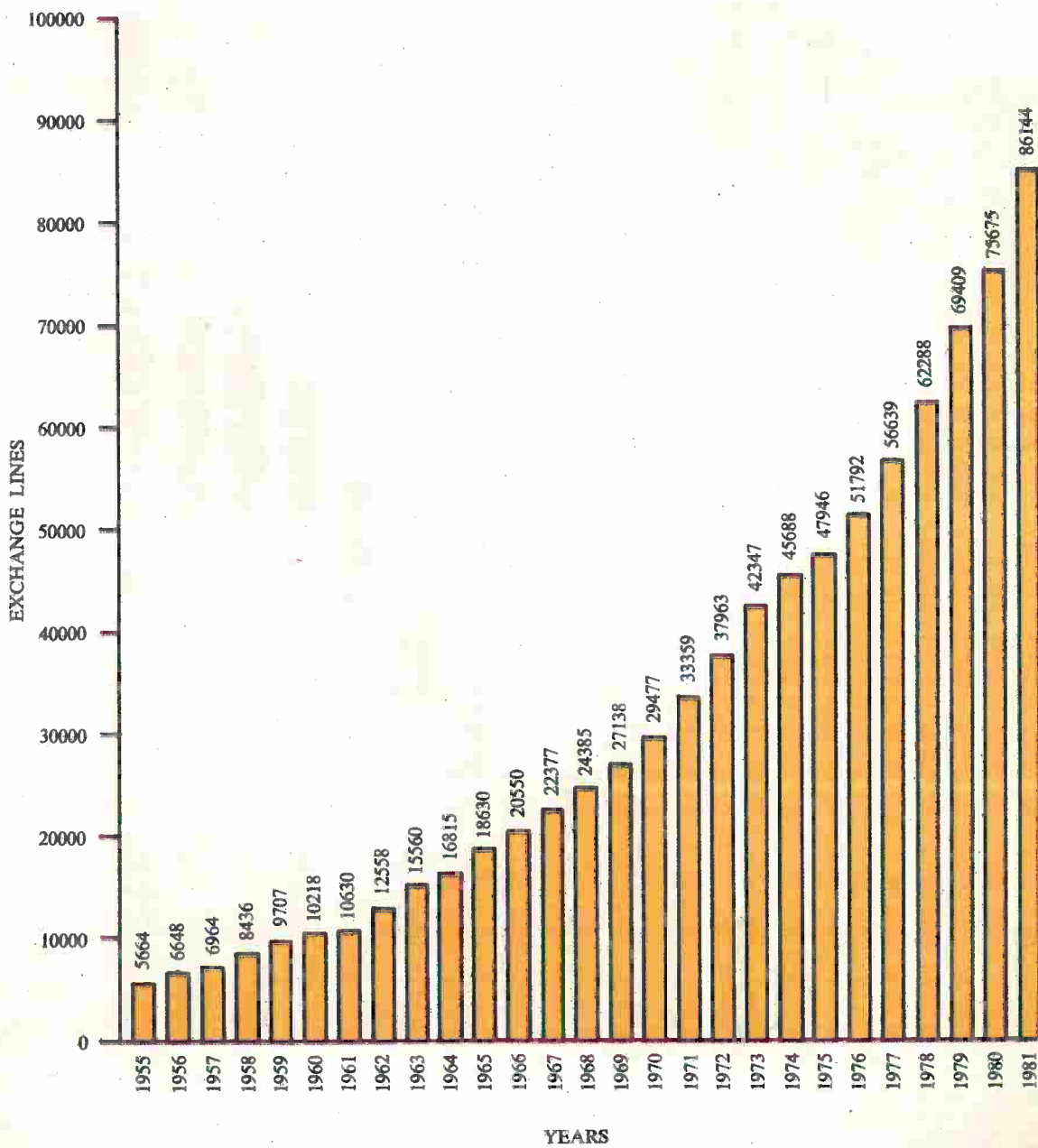
9.1 The following buildings, the construction of which started during the previous year, were completed in 1981:-

- 9.1.1 Latsia Exchange
- 9.1.2 Amathus Exchange
- 9.1.3 Kakopetria Rural Exchange
- 9.1.4 Agros Rural Exchange

GRAPH "C"
GROWTH OF DIRECT EXCHANGE LINES

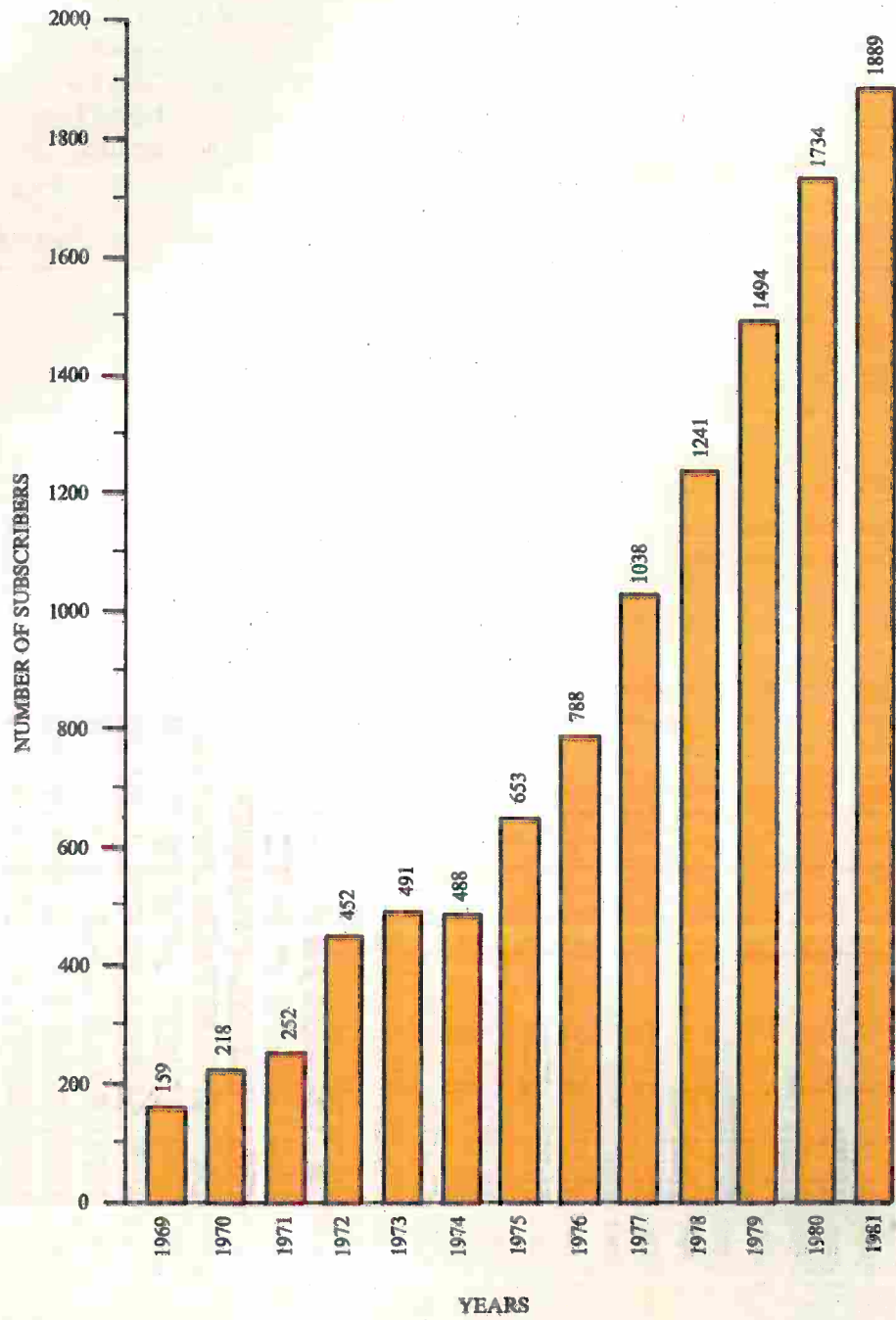
NOTE:

TURKISH OCCUPIED AREAS INCLUDED



GRAPH "D"
GROWTH OF TELEX SUBSCRIBERS

NOTE:- 77 IN TURKISH OCCUPIED AREAS (INCLUDED)



- 9.1.5 Ormidhia Rural Exchange
 9.1.6 Mosphiloti Rural Exchange
 9.1.7 Pera Transmitting Station
- 9.2 The construction of the following buildings commenced in 1981 and with the exception of the Head Office Building complex the rest are scheduled for completion in 1982:-
- 9.2.1 *Head Office Building*
 Work for this project started in the last quarter of 1981 and it is estimated that the complex will be completed in the first quarter of 1984.
- 9.2.2 Acropolis Exchange Extension
 9.2.3 Lakatamia Exchange
 9.2.4 Pallouriotissa Exchange
 9.2.5 Kokkinotrimithia Rural Exchange
 9.2.6 Pedhoulas Rural Exchange
 9.2.7 Palechori Rural Exchange
 9.2.8 Kiti Rural Exchange
 9.2.9 Central Stores Extension
 9.2.10 Pera Transmitting Station
 9.2.11 Lara Repeater Station
 9.2.12 Paralimni Exchange

COMPARATIVE CHART SHOWING TELEPHONES
 OF CYPRUS AND NEIGHBOURING COUNTRIES

As at 1.1.1981

				No. of Telephones	Telephones per 100 Population	Per Cent Automatic
CYPRUS	..	..	..	113,437	17.9	99.1
Israel	..	..	..	1,230,000	31.3	100.0
Iran	..	..	..	1,227,293	3.2	100.0
Iraq	..	..	..	n.r.	n.r.	n.r.
Kuwait	..	..	..	214,763	15.3	96.0
Greece	..	..	..	1,796,435	28.9	99.5
Turkey	..	..	..	1,902,081	4.2	84.5
Spain	..	..	..	11,844,623	31.0	96.8
Bulgaria	..	..	..	1,255,792	14.1	93.9
Italy	..	..	..	19,269,340	33.7	100.0
Algeria	..	..	..	484,973	2.5	58.9
Czechoslovakia	..	..	..	3,150,477	20.6	98.0
Hungary	..	..	..	1,261,295	11.8	83.9
Yugoslavia	..	..	..	2,133,225	9.6	99.4

Total number of telephones in the world as at 1st January 1981 was 508,285,866.

TELEPHONES IN THE PRINCIPAL CITIES OF THE NEIGHBOURING COUNTRIES

	No. of Telephones	Population (thousands)	Telephones per 100 Population
NICOSIA (A)	51,600	140.0	36.9
Tel Aviv (A)	479,700	974.6	49.2
Kuwait(A)	214,763	1,400.0	15.3
Athens (A)	1,296,743	2,465.0	52.6
Ankara (B)	357,085	1,877.0	19.0
Beograd	294,662	1,455.0	20.3
Sofia (A)	381,420	1,087.0	35.1
Madrid (B)	1,896,903	3,350.0	56.6
Roma (A)	1,625,969	2,942.0	55.3
Alger	161,879	1,800.0	9.0
Praha (B)	627,119	1,198.0	52.4
Budapest (A)	672,500	2,064.0	32.6
Teheran	419,025	6,000.0	7.0
Baghdad	n.r.	3,036.0	—

Note: The above information was obtained from "The World's Telephones" which is compiled and circulated by the American Telephone and Telegraph Company. The number of telephones shown comprises also the extensions.

Note: A — The exchange serves the entire city, and also serves beyond the city.

B — The exchange serves the entire city but not beyond it.

n.r. Non-reporting.

D. MAINTENANCE

1. General Maintenance

Strict maintenance procedures for all categories of equipment were employed and as a result a high standard of efficiency and reliability of the service was ensured.

2. Preventive Maintenance

The recommendations of the B.P.O. and Japanese Post Office (N.T.T.P.C.) were respectively adopted. For the rest of the equipment the recommendations of the manufacturers were followed.

Routine maintenance was carried out systematically throughout 1981.

3. Workshops

The Authority continued to maintain its Engineering Workshops for general repair work and construction/assembly of various items. They are divided into three sections, namely the General Workshop, the Electronic/Subscribers Terminals Workshop and the Electromechanical Workshop.

The General Workshop is responsible for the repair of telephone sets and their accessories, switchboards, battery eliminators and other associated miscellaneous items, the repair and construction of various metallic and wooden items and the painting and renovation of the Authority's buildings.

The main line of activities of the Electronic/Subscribers Terminals Workshop is the testing and maintenance of the electronic coin payphones, the electronic subscribers terminals, the push button telephones as well as other complicated electronic equipment. Research and development, by utilizing modern techniques, is also being carried out for the construction and assembly of special types of equipment required by the Authority.

The Electromechanical Workshop is engaged in the maintenance of standby power equipment, air conditioning systems and other miscellaneous electromechanical equipment belonging to the Authority. Bench work of many electrical appliances, as rewiring of relay coils, transformers, etc. is also being carried out by the Workshop.

4. Transport

The Authority maintains its own fleet of all types of vehicles, essential for the mobility of its staff and equipment. A total of 212 vehicles were in use during 1981.

The table below gives comparative figures of miles run during the last four years :-

	1978	1979	1980	1981
Miles run	1,104,000	1,210,570	1,338,800	1,530,055

The Authority runs its own garage repair service.

E. GENERAL TELECOMMUNICATIONS FACILITIES

1. Broadcasts (local)

The Authority provides services to the Cyprus Broadcasting Corporation for effecting outside local broadcasts (live programmes) from any

point in the island. Such broadcasts include church services, theatrical performances, public speeches, voicecasts, football matches, etc.

During 1981, 90 such outside broadcasts were effected by using the Authority's network.

2. Voicecasts

Voicecast facility is another of the services offered by the Authority. The demand for this facility which is usually used by foreign correspondents to cover newsreports to their newspapers or football matches, showed a decline in number of Voicecasts but an increase in total time in 1981.

The following table gives comparative figures for the past four years:-

	1978	1979	1980	1981
Voicecasts	253	193	113	68
Minutes	11,919	10,533	9,032	10,419

3. Telecast Service

This new service is offered to television broadcasters and video news agents for the transmission and/or reception of colour or black and white video programmes via the Satellite Earth Station "MAKARIOS" to or from any country served by the Intelsat Atlantic Region Satellite.

The table below gives an indication of the use made of this service:-

	1980		1981	
	Transmission	Reception	Transmission	Reception
Bookings	26	38	23	27
Materialized videocasts	6	37	9	18
Minutes	265	5,811	226	2,481

4. Facsimile (Radio Pictures)

The demand for this service is relatively limited.

The table below gives comparative figures over the past four years:-

	1978	1979	1980	1981
Pictures received	6	1	4	30
Pictures transmitted	137	62	65	79

5. Communication with Ships at Sea (Maritime Mobile Services)

Radiotelephony and radiotelegraphy are facilities offered by the Authority as part of the Ship-Shore Services. With the installation of new, modern high frequency transceivers and the improvement of the quality of service, the traffic handled by the "Cyprus Radio" coast station evidenced a considerable increase.

The following table shows the comparative figures of traffic handled over the last four years:-

Telephony	1978	1979	1980	1981
Calls	86,878	103,631	147,038	168,741
Minutes	357,648	429,641	593,623	714,916

Telegraphy	1978	1979	1980	1981
Telegrams	11,481	12,834	19,043	13,354
Words	225,192	260,785	414,456	308,211

Graph "E" shows the Ship-Shore RT/WT traffic since 1970.

In addition the following emergency traffic was handled during the year:-

19 Navigational Warnings, 28 Distress/SOS Signals and 31 Medico Signals (Request for medical help or advice).

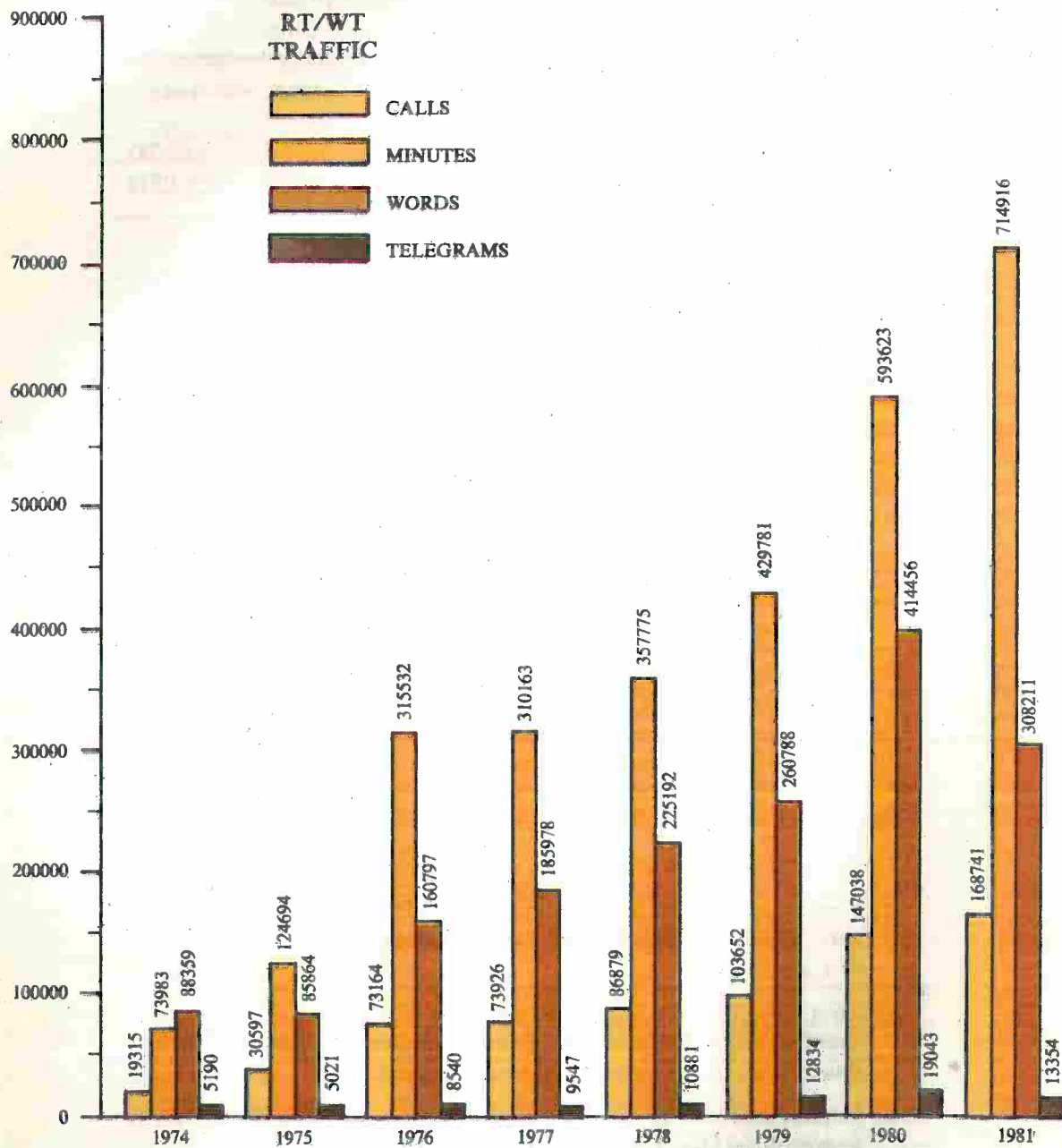
6. Civil Aviation Signals

The Authority continued to provide technical and operational services to the Department of Civil Aviation for the running of all telecommunication facilities both at the Larnaca International Airport and the Nicosia Communication Centre. These facilities conform to the standard and Recommended Practices laid down by the International Civil Aviation Organization (I.C.A.O.).

The services rendered, analytically, were the following:-

- 6.1 Radiotelephone communication over VHF and UHF frequencies with aircraft in flight within the Cyprus Flight Information Region (F.I.R.).
- 6.2 Telephone communication between the Nicosia Air Traffic Control Centre (A.T.C.C.) and the Control Centres of Larnaca, Athens, Beirut, Tel-Aviv, Cairo and Akrotiri Airports.
- 6.3 Communication between Larnaca Control Tower and aircraft for approach and landing and take-off purposes.

GRAPH "E"
SHIP/SHORE



6.4 Radio Air Navigational Aids for the use of civil aircraft in the form of a VHF Omni Range System (V.O.R.), Distance Measuring Equipment (D.M.E.) and two non-directional Radio Beacons located at Dhekelia and Pervolia village. In addition to the above, a VHF Direction Finder (D.F.) equipment available to provide bearings information to the Air Traffic Control personnel.

6.5 VOLMET service which transmits continuous weather reports from Nicosia for use by aircraft in flight within the Cyprus Flight Information Region.

6.6 Fully automatic and computerized telegraph communication within the Aeronautical Fixed Telecommunications Network (AFTN) to the airports of Athens (3 channels), Tel-Aviv (1 channel) and Beirut (2 channels).

Apart from the above overseas circuits, seven local telegraph circuits were also provided through the AMSC for communicating with:-

Nicosia Area Control Centre

Nicosia Civil Aviation Department Offices

Larnaca Airport Civil Operations

Larnaca Airport Control Tower

Larnaca Airport Meteorological Office

Akrotiri Airport.

The following table shows comparative figures for aggregate received and transmitted traffic over the last four years:-

	1978	1979	1980	1981
Number of Messages	2,119,642	2,272,605	2,227,302	2,388,087

7. Meteorological Service

A reliable and continuous Mufax (reception of weather charts) service and four teleprinter circuits for the reception of meteorological bulletins from abroad were provided by the Authority for the Ministry of Agriculture and Natural Resources.

3. INTERNATIONAL NETWORK AND SERVICES OPERATION

A. GENERAL

The International Network was further augmented during the year under review with the introduction of direct circuits with Syria, Spain, Saudi Arabia and the United Arab Emirates and with the establishment of additional circuits with existing relations. Furthermore, with the operation of the new Submarine Cable System "APOLLO" (Cyprus-Greece), congested routes were relieved and thus the quality of the International Telecommunications Services was highly improved.

B. INTERNATIONAL NETWORK

The new Submarine Cable System "APOLLO" between Larnaca (Cyprus) and Lagonissi (Greece), was brought into operation in October 1981. The capacity of this cable is 1380 channels. By the end of year 1981, 240 channels were already routed via the new cable, thus relieving the Tropospheric Scatter and the APHRODITE Cable Systems, which for the last couple of years were both operating at full capacity. Under the new arrangements the APHRODITE Cable has now been allocated with certain spare capacity. This is very important because the spare capacity can be used for restoration of a number of circuits of the APOLLO Cable System in case of interruption of the latter. It is worth mentioning that in case of interruption of the APHRODITE Cable System, the present spare capacity of APOLLO Cable System can restore all "APHRODITE" circuits.

The Tropospheric Scatter is now considered as a Standby facility.

The "MAKARIOS" Satellite Earth Station in the Atlantic Ocean Region continued its operation satisfactorily. It is expected that a new Antenna for the Indian Ocean Region will be commissioned by the end of 1982 to serve our traffic with the Indian Ocean Region countries and the B.B.C. broadcasting in Cyprus and the Middle East Area.

The broadband facilities of our International Network in operation during 1981 are summarized as follows:-

APOLLO Submarine Cable System	CYPRUS - GREECE (1380 circuits)
APHRODITE Submarine Cable System	CYPRUS - GREECE (480 ")
TROPOSPHERIC Scattering Radio System	CYPRUS - GREECE (120 ")
ADONIS Submarine Cable System	CYPRUS - LEBANON (240 ")
UHF Radio System	CYPRUS - ISRAEL (48 ")
MAKARIOS Earth Station	SATELLITE (120 ")

In order to satisfy the increasing demand of International traffic, direct circuits were introduced during the year with the following new relations:-

Cyprus - Syria	4 circuits
- Spain	2 "
- S. Arabia	5 "
- U.A.E.	7 "
- Belgium	1 VFT Bearer (for Telex and Telegraph traffic)

Also additional circuits were introduced with the following existing relations:-

Cyprus - Greece	18 circuits
- U.K.	7 "
- Libya	3 "
- Lebanon	6 "
- Sweden	3 "
- U.S.A.	2 "
- S. Africa	2 "

In all, the total number of circuits in operation during the year under review were:-

- 482** circuits serving the public traffic.
- 408** circuits serving the transit traffic via Cyprus
(used by foreign Administrations on either lease or IRU basis).
- 38** circuits serving private use.

A schematic analysis of the Cyprus International Network as well as a table showing the number of direct circuits per country are shown on pages overleaf.

C. TELEPHONE SERVICE

The upward trend experienced during the last years continued in 1981 also. The traffic volume showed an overall increase over the previous year's of 22% for the Inland traffic and 15% for the International traffic as shown in Table A.

During 1981 every effort was made to improve and expand the Telephone service. Direct telephone service was established with 4 more countries, namely Saudi Arabia, Spain, Syria and United Arab Emirates, bringing the total number of countries directly connected with Cyprus to 18 and the number of International Telephone circuits to 467 i.e an increase of 14% (see Table B).

During the year, 3 additional countries became available on ISD service bringing the total number of countries connected on ISD to 68. Service to all other countries of the world was available through the operator (see Table C).

DIRECT CIRCUITS PER COUNTRY

COUNTRY	TELEPHONE							V.F.T. BEAR.	TELEX			TELEGRAPH	
	AUTO			SEMI		M	LEASE		AUTO			M	LEASE
	O/G	I/C	B/W	O/G	I/C	B/W	PRIVATE		O/G	I/C	B/W	B/W	PRIVATE
AUSTRALIA			9										
AUSTRIA	8	3						1			10		
BELGIUM								1	5	5			
CANADA			6									1	
EGYPT A.R.							1						
FRANCE	6	8	7				3	1	6	7		1	
GERMANY W.	8	7	8			1		1	7	8		1	1
GREECE	69	59		8	7	3	1	3	11	14		1	8
ISRAEL	6	6					1	1	4	4		1	2
ITALY	6	3				1		1	12	6		1	
KUWAIT													
LEBANON	17	14		3	3	3	1	1	4	3		1	2
LIBYA	2	2											
NETHERLANDS									4	6			
S. AFRICA			6										
S. ARABIA			5										
SPAIN			2										
SWEDEN	8	3									5	1	
SWITZERLAND								1	6	6			
SYRIA	2	2											
U.A.E.			7										
U.K.	37	64	34				2	3	30	31		1	3
U.S.A.			14					1			22		1
TOTALS	169	171	98	11	10	8	9	15	89	90	37	9	17

**CYPRUS INTERNATIONAL NETWORK
AS AT 31ST DECEMBER 1981**

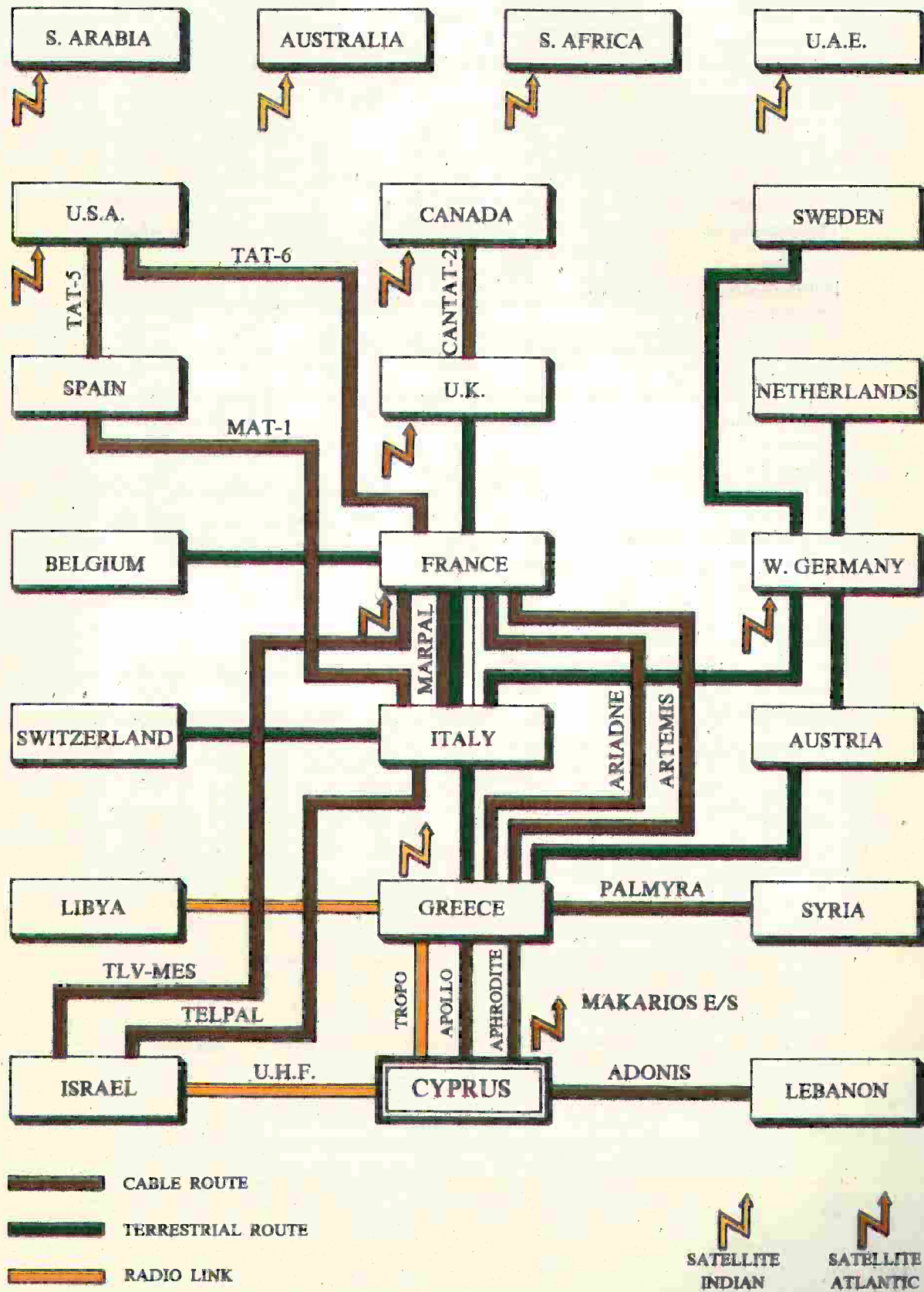


TABLE A

TRAFFIC

SERVICE	1979	1980	1981	1981/80 Growth %
INTERNATIONAL (Outgoing)				
ISD calls (Minutes)	9,915,682	11,196,885	12,829,032	14.58
Through operator (Minutes)	697,050	965,798	1,177,916	21.96
INLAND				
Dialled calls (Units)	282,672,548	323,877,735	393,823,898	21.60
Through operator (Calls)	25,912	26,398	16,266	-38.38

TABLE B

INTERNATIONAL TELEPHONE CIRCUITS

COUNTRY	1979	1980	1981
AUSTRALIA	7	9	9
AUSTRIA	11	11	11
CANADA	4	6	6
FRANCE	14	21	21
GERMANY F.R.	20	24	24
GREECE	114	128	146
ISRAEL	12	12	12
ITALY	10	10	10
LEBANON	28	34	40
LIBYA	1	1	4
SAUDI ARABIA	—	—	5
SOUTH AFRICA	4	4	6
SPAIN	—	—	2
SWEDEN	8	8	11
SYRIA	—	—	4
U.A.E.	—	—	7
U.K.	97	128	135
U.S.A.	9	12	14
TOTAL	339	408	467

TABLE C

CYPRUS ON THE GLOBAL TELEPHONE NETWORK

SERVICE	NUMBER OF COUNTRIES					
	OUTGOING			INCOMING		
	1979	1980	1981	1979	1980	1981
ISD	62	65	68	30	33	39
Semi-Automatic	10	13	16	23	26	30
Manual ..	70	64	62	59	83	77
TOTAL	142	142	146	142	142	146

D. TELEX SERVICE

The upward trend of the last few years continued for both traffic and circuits, but at a relatively lower rate in the international traffic where the increase (in minutes) was limited to 2% and in the national traffic 28%, over that of 1980 (See Table A).

The increase in the number of direct international circuits was higher in 1981 (6.9%) than in 1980 (3.6%). The countries with which direct Telex Service operated and the number of circuits with each one of them over the last 3 years are shown in Table B.

Automatic Telex service, during the year under review, was available with 148 countries compared with 145 in 1980.

TABLE A

TRAFFIC

SERVICE	1979	1980	1981	1981/80 Growth %
INTERNATIONAL				
(Outgoing)				
Calls	822,475	948,694	1,091,717	15.08
Minutes	2,422,807	2,591,763	2,641,394	1.91
INLAND				
Calls	274,586	333,306	413,216	23.97
Minutes	702,346	869,786	1,110,777	27.71

TABLE B

INTERNATIONAL TELEX CIRCUITS

COUNTRY	1979	1980	1981
AUSTRIA	10	10	10
BELGIUM	8	9	10
FRANCE	13	13	13
GERMANY F.R.	15	15	15
GREECE	25	25	25
ISRAEL	8	8	8
ITALY	17	17	18
LEBANON	7	7	7
NETHERLANDS	7	7	10
SWEDEN	4	4	5
SWITZERLAND	12	12	12
U.K.	50	54	61
U.S.A. (ITT)	6	7	8
U.S.A. (RCA)	6	7	7
U.S.A. (WUI)	7	7	7
TOTAL	195	202	216

E. TELEGRAPH SERVICE

The International telegraph service was available to all parts of the world.

The service continued to be provided through the Nicosia Automatic Message Switching Centre (AMSC) quite satisfactorily.

The following countries are directly connected with the AMSC:-

Canada	Israel
F. R. Germany	Lebanon
France	Sweden
Greece	U.K.
Italy	

The International and Inland traffic during the year under review is shown below:-

TELEGRAPH TRAFFIC

SERVICE	1979	1980	1981	1981/80 Growth %
INTERNATIONAL				
(Outgoing)				
Telegrams	67,292	68,280	63,529	-6.96
Words	1,703,325	1,776,949	1,721,050	-3.15
INLAND				
Telegrams	82,969	70,623	81,455	15.34
Words	1,456,998	1,428,380	1,527,427	6.93

4. ADMINISTRATION AND STAFF

A. TRADE UNIONS - STAFF RELATIONS AND JOINT COMMITTEES

The satisfactory labour relations established in the past continued in 1981, thus allowing the Authority to give full attention to the promotion of the service.

In view of the fact that the Collective Agreement on staff matters was expiring on 31st December 1981, the Unions submitted claims for the revision of the conditions of employment and the salary scales of the staff on 30th October 1981. It is expected that in the negotiations which will ensure a new agreement will be signed ensuring industrial peace and co-operation so that the Authority can attend uninterrupted to the general and ever increasing demand for the provision of telecommunication service to the public.

B. JOINT CONSULTATIONS

The close and prompt attention of the Authority to all staff matters and the staff's co-operation to this effect, resulted in the satisfactory working of the existing Joint Management/Staff Committees and other services as hereunder:-

1. Staff Safety and Welfare

1.1 Safety

The Authority is promoting the implementation of various measures to reduce accidents in the performance of duty, placing emphasis on inculcation of the safety first principle, promotion of safety education, through inspection of safety factors, wider use of safety tools and investigation of the causes of accidents, and review of measures to prevent recurrence of accidents.

To implement the above policy, the Joint Accidents and Safety Committee took action as detailed hereunder:-

- 1.1.1 The "Safety Notice Boards" were properly maintained by the exhibition of Safety Posters for the prevention of accidents.
- 1.1.2 The first aid boxes provided by the Authority were properly maintained with prescribed contents.
- 1.1.3 The Authority's offices and other places of work were regularly inspected and the fire precaution equipment installed on the Authority's premises was properly maintained.

- 1.1.4 All accidents reported during the year were promptly investigated and every effort was made for their reduction to the minimum.

Accidents reported during the year and comparison with the previous year:-

	<u>1980</u>	<u>1981</u>
Accidents not necessitating sick leave	4(1)*	3
Accidents necessitating 1 - 3 days sick leave	6(1)*	7(1)*
Accidents necessitating 4 - 30 days sick leave	16(2)*	10(3)*
Accidents necessitating over 30 days sick leave	8(2)*	3(1)*
Fatal accidents	—	—
	<u>34</u>	<u>23</u>

(*Figures in parenthesis = Traffic Accidents to employees proceeding from their residence to the place of work or vice versa).

1.2 Welfare

The Joint Management/Staff Welfare Committee continued its efforts during the year to promote staff welfare. All matters pertaining to the welfare of employees were duly studied. For the implementation of its Safety and Welfare policy, the Authority employs a full time Safety and Welfare Officer.

- 1.2.1 The postponed construction of the sizeable Holiday Centre at Pedhoulas will be considered in due course.

- 1.2.2 Christmas presents generously donated by OTE (Greek Telecommunications Organization) were distributed to the children of the employees.

- 1.2.3 Christmas Parties were organized for all employees of the Authority.

- 1.2.4 Government Savings Bonds were distributed to the children of the Authority's employees (upto 12 years of age) and the Fund rendered financial assistance to a number of deserving cases amongst the staff and to families of deceased employees.

- 1.2.5 A number of deserving cases were financially assisted.

All the expenses incurred during the year were paid by the Authority through a Welfare Fund, administered by the Welfare Committee.

2. Establishment - Promotions - Advancement of Staff

In order to give effect to its personnel policy, the Authority proceeded with the implementation of the existing agreement governing promotions, confirmation and advancement of staff and to this effect the adhoc committee, which was appointed in accordance with the provisions of the staff rules and regulations, completed its work satisfactorily.

The implementation of the agreement referred to above resulted in the following promotions, confirmations and transfers to other scales:-

Promotions	145
Various transfers to other scales	7
Transfer from W/P to Permanent Staff	1
Transfer from Temp. Monthly Paid to Permanent Staff	5

Comparison of Staff Strength for the Year 1980 - 1981

	1980	1981
Administration and Accounts	267	279
Engineering	1,207	1,226
Telegraph Operating	136	143
Telephone Operating	155	156
	<u>1,765</u>	<u>1,804</u>
Monthly Paid	1,645	1,667
Weekly Paid	120	137
	<u>1,765</u>	<u>1,804</u>
Less:		
Turkish employees not reporting for duty	255	255
	<u>1,510</u>	<u>1,549</u>

3. Pension and Provident Funds

The Authority's Pension and Provident Funds mentioned hereunder were satisfactorily administered by their respective joint committees:-

3.1 CYTA Permanent Monthly Paid Employees Superannuation Fund.

3.2 CYTA Permanent Monthly Paid Employees Provident Fund.

3.3 Weekly Paid Employees Provident Fund.

4. Training

Since the Authority introduces new technologies and provides new services, as a matter of course, it places great emphasis on staff training in

order to improve their capabilities. To this effect, the Authority provides training facilities for its personnel to ensure familiarization with new trends, modern equipment and methods. Training is carried out at the Authority's Training School in Nicosia or abroad, at institutions and supplier's establishments.

The Authority, furthermore, encourages all employees to attend external night courses relative to their work by refunding their tuition and examination fees when they succeed in passing the relevant examinations. In addition, the Authority assists its staff to purchase British Post-Office Correspondence Courses and refunds 50% of their cost to those who succeed in the relevant City and Guilds examinations.

The Authority's expenses for training during 1981 amounted to £115,514.- (£222,186.- were spent in 1980) and included the following:-

4.1 Training in CYTA's Training Centre

4.1.1	Training on Installation and Maintenance of Electronic PABXs	12 Employees
4.1.2	Training course on Introduction to Microprocessors	24 "
4.1.3	Training course on Maintenance of L.M. Ericsson PABXs	13 "
4.1.4	Training course on Civil Engineering work for UG Construction	10 "
4.1.5	Training on Telex Machines	2 "
4.1.6	Training course on Maintenance of Electronic PABX	17 "
4.1.7	Training course on the Installation of PABX Type L.M. Ericsson 3/16	1 Employee
4.1.8	Training for Radiotelegraphists	6 Employees
4.1.9	Training on Toshiba Facsimile Copix 4520 Equipment	10 "
4.1.10	Training course on Installation & Site-Maintenance of Telic Key System	19 "
4.1.11	Training course on Maintenance of Telic Key System	9 "
4.1.12	Training course on Installation of Telic Key System	7 "
4.1.13	Training course on Site-Mtce of Telic Key System	30 "
4.1.14	Training course on Introduction to Logic Circuits and Microprocessors	8 "
4.1.15	Training on Computer used in connection with the Submarine Cable	5 "
4.1.16	Training course on Maintenance of Olivetti Telex Machines Type TE 530	7 "
4.1.17	Training course on Maintenance of	

	TDM Equipment Series 1223	10	Employees
4.1.18	Training course on Basic Logic	13	"
4.1.19	Training course on operation & Site Maintenance of Telex Machines Type Olivetti TE 530	21	"
4.1.20	Preliminary course for Techn. Operators III, Telegraphists III, Tel. Operators III, and Telex Operators III	26	"
4.2 Training Abroad			
4.2.1	Course on C400 Exchanges, Magnetic Tape Systems and Digital Switching Systems HDX-10 in Japan	2	"
4.2.2	Course in U.K. on Submarine Cables Junction Instruments (APOLLO)	5	"
4.2.3	Course on C23 and HDX10 Crossbar Exchange in Japan	2	"
4.2.4	Course on Instrument Landing System in Paris	4	"
4.2.5	Training at Hitachi Air Conditioning Factory - Japan	1	Employee
4.2.6	Training on UHF Radio & Multiplex Equipment - Milano & Madrid	4	Employees

4.3 Scholarships

One member of the Authority's administrative Staff, to whom a scholarship was awarded by the Authority for acquiring the B.Sc. degree in Business Administration, completed his studies in the New York Institute of Technology, U.S.A. and returned to Cyprus.

4.4 Medical Funds - Medical Treatment - Sick Leave

4.4.1 Monthly Paid Personnel

All monthly paid employees of the Authority are members of the existing CYTA Medical Fund, which provides medical aid to members at approved rates, in accordance with the rules of the Fund.

The administration of the Fund is carried out by a committee and the Fund is financed jointly by its members and the Authority, the employees contributing 1% of their basic salary and COLA and the Authority 2%. In addition special financial assistance amounting to £10,000.- has been granted for this year to the Fund by the Authority through the Welfare Fund.

4.4.2 Weekly Paid Personnel

All regular weekly paid employees are members of the Government Social Security Scheme and enjoy sick leave and medical treatment in accordance with the rules of the scheme. Membership in the Fund provides a contribution of 1% of the wages of each member. An equal amount is also contributed by the Authority.

4.4.3 Sick Leave Granted to Monthly Paid Employees (in man-days)

	1980	1981
Clerical staff	988	1,067
Telephone operating staff	1,042	954
Telegraph operating staff	291	315
Technical operating staff	181	126
Technical staff	1,582	1,318
Skilled staff	3,213	2,829
Messengers & Watchmen	515	401
	<u>7,812</u>	<u>7,010</u>

4.4.4 Sick Leave Granted to Weekly Paid Employees

The man-days lost in respect of the sick leave granted to Weekly Paid Employees during the year 1981 were 383 (542 in 1980).

The cost of the man-days lost (except the first day of each period of sick leave granted to employees) is re-imbursed to the Authority by the Government Social Security Scheme, and the total amount re-imbursed was £1,859.-

5. Annual Leave All Staff

Table showing the leave entitlement:-

	No. of working days	
	1980	1981
Balance brought forward from previous year	10,015	11,922
Leave entitlement for the year	41,622	43,531
	<u>51,637</u>	<u>55,453</u>
Leave granted during the year	39,715	41,618
Balance due to employees	<u>11,922</u>	<u>13,835</u>

6. Retirements, Resignations, Dismissals etc.

- 6.1 25 Employees retired from the Authority's service.
- 6.2 6 Employees resigned from the Authority's service.
- 6.3 2 Employees were dismissed from the Authority's service.
(Termination of services)
- 6.4 3 Employees passed away.

7. Recruitments

75 Employees (8 Techn. Operators Grade III, 7 Telegraphists Grade III, 13 Teleph./Telex Operators Grade III, 17 Gen. Duties Clerks Grade III, 7 Messengers, 2 Watchmen, 13 Workmen W.P., 1 Techn. Cleaner W.P. and 7 Charwomen W.P.) were recruited during 1981.

8. Missing Employees

6 Employees are still missing since the invasion and occupation of the North part of Cyprus by the Turkish Armed Forces in July 1974.

5. COMMONWEALTH TELECOMMUNICATIONS ORGANIZATION (C.T.O.)

The Authority continued to represent Cyprus on the Commonwealth Telecommunications Organization, with its Chairman, Mr. N.S. Roussos, as the Government appointed Representative on the Commonwealth Telecommunications Council for Cyprus.

The activities of the C.T. Council during the year concentrated on the report of the Task Force which was entrusted with the development of a new financial scheme to replace, as from 1 April 1983, the Commonwealth Telecommunications Financial Arrangements (CTFA) that came into effect on 1 April 1973, and was the main agenda item of the 20th meeting held in Sydney, Australia from 29 June to 10 July 1981. This issue, together with the future collaborative arrangements of the C.T.O. which concentrate on exchange of telecommunication expertise and information as well as training to the developing countries, absorbed most of the C.T. Council's time and attention. However, these items were not concluded during the 1981 session and the 20th meeting was adjourned for a second session reconvened in Sydney from 3 to 9 February 1982, for further study and discussion, in view of the preparations for the next Commonwealth Telecommunications Conference, which will be held in Cyprus in November 1982. At the same meeting of the Council, a decision was taken on the method for computation of the transitional support for the 1975/76 changes in the C.T. Financial Arrangements from the old (Pool) to the new (Premium) rules; according to this new method Cyprus was found to be a creditor National Body for SDR 239,000 (approx. C£120,000), receivable by 14 August 1981. The Chairman of the Authority, Mr. N.S. Roussos accompanied by his adviser, Mr. A.C. Kritiotis participated in the 1981 session of the 20th Meeting of C.T. Council.

The Authority continued during the year 1981 to be represented on the Specialist Groups of the C.T. Council, with the Chief Engineer, Mr. G.C. Papaioannou as member of the Specialist Group on System Development and Network Operation, the Chief Accountant, Mr. S. Modestou as member of the Specialist Group on Accounting Arrangements and the Assistant Telecommunications Officer, Mr. A.C. Kritiotis as member of the Specialist Group on Marketing and Tariffs. However, the activities and role of all Specialist Groups were restricted during the year due to the continued transitional situation and outstanding issues of principle.

6. FINANCIAL REPORT

A. NET SURPLUS

The net surplus for the year was £1,652,316 compared to £3,659,628 of the previous year.

The main reason for the reduction was the increase in the financial expenses which resulted from the write off of one fifth of the deficiency of the Staff Superannuation Fund disclosed by the actuarial valuation of 1st January, 1981 and the interest on the relative liability.

Analytically the results were:

B. OPERATING REVENUE

The Operating Revenue by service was as follows:-

		1980 £	1981 £	Increase %
Telephone Services	.. ..	12,335,980	14,630,164	18.6
Telegraph Services	.. ..	403,486	416,856	3.3
Telex Services	.. ..	1,609,429	1,945,283	20.9
Other Services	.. ..	333,174	336,359	1.0
		<u>14,682,069</u>	<u>17,328,662</u>	18.0

The main sources of revenue were the Telephone and Telex Services as a result of a net addition to the system of 10,469 telephone and 155 telex subscribers.

The increase in the Telephone revenue is attributed mainly to the Overseas calls (1981 £7,562,685 vs 1980 £6,363,243) and the Inland calls (1981 £5,177,976 vs 1980 £4,279,302) and in the Telex revenue to the Overseas Calls (1981 £1,477,484 vs 1980 £1,196,049).

C. OPERATING EXPENSES

The Operating Expenses were:-

		1980 £	1981 £	Increase %
System Operational				
Telephone Services	.. ..	6,426,310	8,375,292	30.3
Telegraph Services	.. ..	777,047	919,017	18.3
Telex Services	.. ..	569,779	683,571	20.0
Other Services	.. ..	410,955	444,049	8.1
Establishment	.. ..	339,812	510,416	50.2
Administration	.. ..	1,422,493	1,834,315	29.0
		<u>9,946,396</u>	<u>12,766,660</u>	28.4

This year's expenses rose by £2,820,264 (28.4% over the previous year's figure).

Operating staff costs accounted for £1,220,816 of the increase (12.3%) mainly due to a 5% salary revision on 1.1.1981 and increases in the cost of living allowance (6% from 1.1.1981 and 6% from 1.7.1981) and Depreciation accounted for £783,861 of the increase (7.9%) due to extensive development during the year.

An extraordinary heavy expenditure on the maintenance of the Authority's buildings contributed mainly to the 50% increase of the establishment expenses.

D. FINANCIAL EXPENSES

These were £3,386,496 compared to £1,406,752 of the previous year.

As a result of an actuarial valuation of the Superannuation Fund made on 1st January, 1981, a deficiency of £7,542,534 was disclosed in addition to the £1,538,466 existing on the same date from the previous valuation. This deficiency which will be written off over five years, commencing with 1981, as well as the interest on the relative liability accounted for 71% of the increase in the financial expenses.

Interest payable on suppliers' and other credit accounted for another 12% and was due to the increased external financing obtained for the Authority's development.

E. DEVELOPMENT

The additions to the fixed assets during the year amounted to £15,232,961 (1980 £4,377,854) after deducting £310,222 (1980 £242,381) contribution from subscribers by way of installation fees. These include £7,853,196 for the new Cyprus/Greece Submarine Cable which was put into service in November, 1981.

The development was financed from internal sources by 23% and from external sources (suppliers' and other credit) by 77%.

F. CASH POSITION

This year's cash position does not reflect any material change from that of the previous year. It is anticipated, however, that the Authority's commitments to its suppliers for this year's as well as previous years' purchases for development and the annual instalment for the repayment of the Superannuation Fund liability will reduce cash balances substantially in the coming year.

G. LONG-TERM LIABILITIES

These consist of:-

1. £12,724,173 (1980 £4,854,460) being suppliers' and other credit for equipment and services and are repayable over a period between 2

and 17 years at rates of interest ranging between 3.5% and 8.25% per annum.

The increase over the 1980 figure is mainly due to the credit obtained for the new Cyprus/Greece Submarine Cable amounting to £6,266,000.

2. £8,922,948 (1980 £1,513,780) representing the Authority's liability to the Staff Superannuation Fund which will be repaid over 32 years by equal annual instalments at 7% interest per annum.

H. RESERVE FUND

The Reserve Fund as at 31st December, 1981 amounted to £17,199,912 as against £15,653,481 of 31st December, 1980.

I. CONTRACTUAL COMMITMENTS

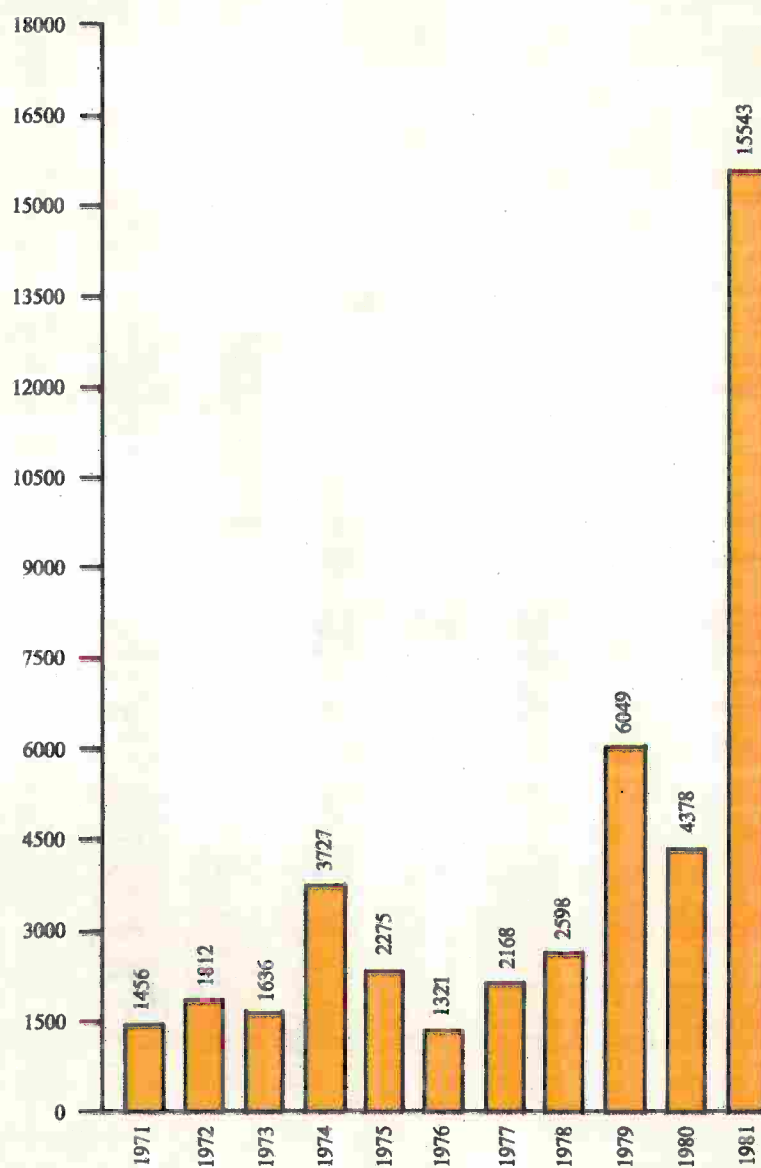
The contractual commitments as at 31st December, 1981, amounted to £10,184,000 (1980 £12,150,000). These include £1,626,000 for the New Administration Building and £349,000 for the Standard B Satellite Earth Station. The balance represents mainly outstanding orders of Exchanges and other plant and equipment for development.

N.S. ROUSSOS
Chairman

A.N. STYLIANIDES
General Manager

S. KOKKINIDES
Secretary

CYPRUS TELECOMMUNICATIONS AUTHORITY
TABLE SHOWING CAPITAL EXPENDITURE 1971 - 1981
(£ thousand)

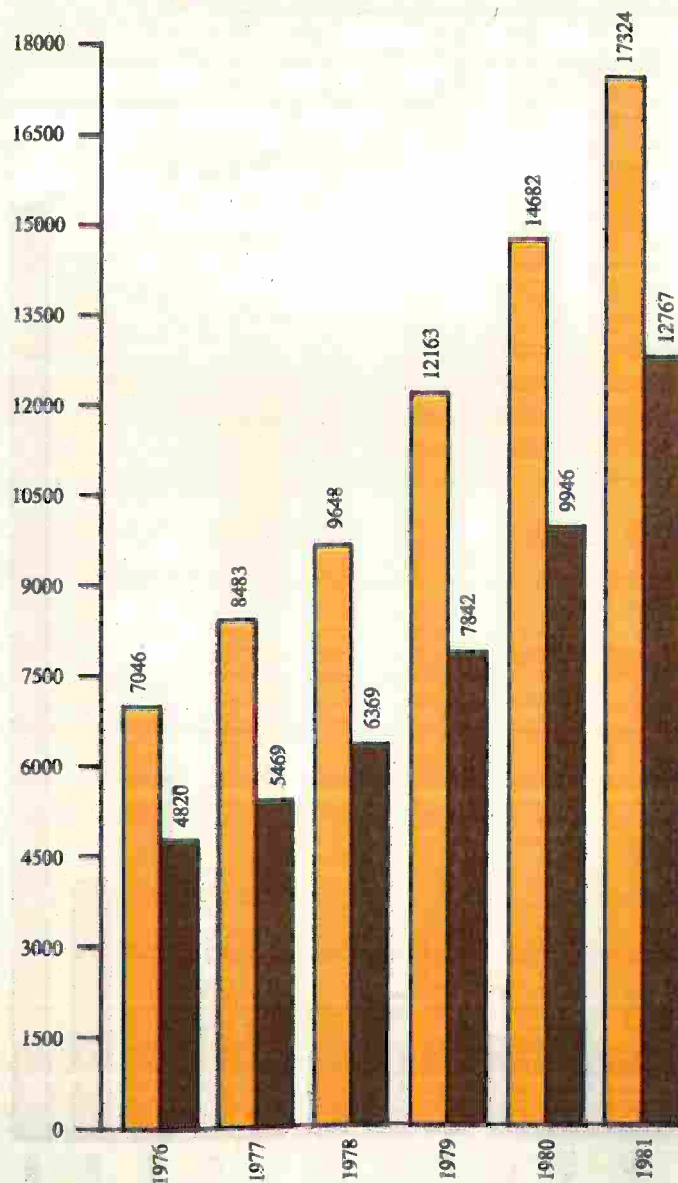


CYPRUS TELECOMMUNICATIONS AUTHORITY
TABLE SHOWING OPERATING REVENUE AND EXPENSES 1976 - 1981
 (£ thousand)

	I	II
1971	2713	2200
1972	3551	2512
1973	4574	2813
1974	4605	4224
1975	4736	4235

I OPERATING REVENUE

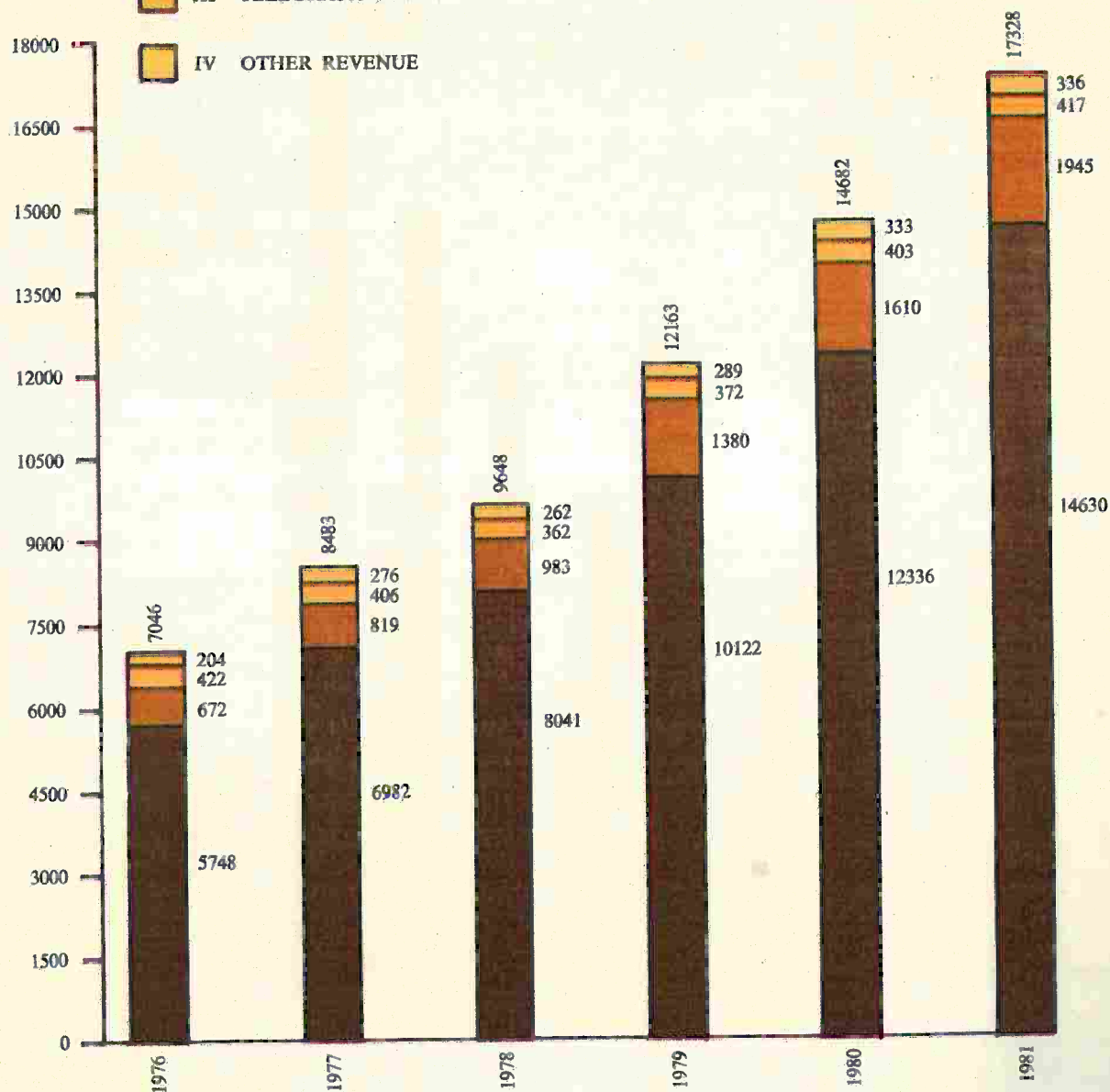
II OPERATING EXPENSES



CYPRUS TELECOMMUNICATIONS AUTHORITY
TABLE SHOWING OPERATING REVENUE 1976 - 1981
 (£ thousand)

- I TELEPHONE REVENUE
- II TELEX REVENUE
- III TELEGRAPH REVENUE
- IV OTHER REVENUE

	I	II	III	IV
1971	1890	234	410	179
1972	2665	302	413	181
1973	3447	470	471	186
1974	3411	521	537	136
1975	3710	472	451	103



CYPRUS TELECOMMUNICATIONS AUTHORITY

ACCOUNTS 1981

Contents

	<i>Page</i>
Report of the Auditors	67
Balance Sheet	68
Revenue Account	69
Notes on the Accounts	70
Statement of Source and Application of Funds	78
Return on Capital Employed	79

REPORT OF THE AUDITORS

We have audited the annexed Balance Sheet, Revenue Account and the Notes thereon of the Cyprus Telecommunications Authority and have obtained all the information and explanations we considered necessary. In our opinion the Authority has kept proper books of account and the Balance Sheet and Revenue Account are in agreement therewith.

As explained in Note 20, the Authority is not making provisions for liabilities to income tax and special contribution acting on the basis of the advice of its legal adviser. The Authority is currently involved in litigation with the Inland Revenue with regard to the income tax liability. The final outcome of these matters is not presently determinable.

In our opinion, subject to the effects of such adjustments, if any, as might have been required had the ultimate outcome of the matters discussed in the preceding paragraph been known, and subject to the reservation contained in Note 2, the said Accounts, which have been prepared under the historical cost convention, give a true and fair view of the state of affairs of the Authority at 31st December, 1981 and of the surplus for the year ended on that date.

Scottis & Polydorides
Chartered Accountants

6, Kilikis Street,
NICOSIA.

19th July, 1982.

CYPRUS TELECOMMUNICATIONS AUTHORITY

BALANCE SHEET 31st DECEMBER, 1981

	1981 £	1980 £
Assets		
Fixed Assets (Notes 1(b), 2, 3)	29,416,901	17,354,745
Investments (Note 4)	1,458,725	1,081,305
Long Term Debtors (Note 5)	72,075	114,890
Current Assets (Note 6)	13,797,953	11,439,285
Deferred Debits (Note 7)	6,271,289	118,092
	<u>£51,016,943</u>	<u>£30,108,317</u>
Liabilities and Reserve Fund		
Loans and other long term liabilities		
Government Loans (Note 8)	3,014,350	3,053,383
Debenture stocks (secured) (Note 9)	1,250,000	1,250,000
Other long term liabilities (Note 10)	21,647,121	6,368,240
	25,911,471	10,671,623
Current liabilities (Note 11)	7,159,329	3,302,096
Deferred Credits (Note 12)	746,231	481,117
Total liabilities	<u>33,817,031</u>	<u>14,454,836</u>
Reserve Fund (Note 13)	<u>17,199,912</u>	<u>15,653,481</u>
	<u>£51,016,943</u>	<u>£30,108,317</u>

The Notes on the Accounts form an integral part of these Accounts.

N. S. Roussos
Chairman

A. N. Stylianides
General Manager

S. Modestou
Chief Accountant

CYPRUS TELECOMMUNICATIONS AUTHORITY

REVENUE ACCOUNT FOR THE YEAR ENDED 31st DECEMBER, 1981

	1981 £	1980 £
Operating Revenue (Note 14)	17,328,662	14,682,069
Deduct:		
Operating Expenses (Note 15)	12,766,660	9,946,396
Net operating revenue	<u>4,562,002</u>	<u>4,735,673</u>
Add:		
Investment and other income	476,810	330,707
	<u>5,038,812</u>	<u>5,066,380</u>
Deduct:		
Financial and other expenses (Note 16)	<u>3,386,496</u>	<u>1,406,752</u>
Revenue surplus for the year carried to reserve fund	<u>£1,652,316</u>	<u>£3,659,628</u>

The Notes on the Accounts form an integral part of these Accounts.

CYPRUS TELECOMMUNICATIONS AUTHORITY

ACCOUNTS 1981

NOTES ON THE ACCOUNTS

1. Accounting Policies

(a) Basis of accounting

The accounts are prepared under the historical cost convention.

(b) Fixed assets

Amortisation of leasehold properties is provided so as to write off the cost of these properties by equal annual instalments over the period of the lease. Depreciation on other assets is calculated on a straight line basis at annual rates estimated to write off each asset within its normal useful life. Freehold land is not depreciated.

In respect of additions to fixed assets during a financial period, a full year's depreciation charge is applied and in the case of disposal of fixed assets during a financial period no depreciation charge is applied in that period.

Capital work projects undertaken by the Authority are valued individually at material cost plus an addition for direct labour and other appropriate expenses.

Interest payable on the suppliers' extended credit on the purchase of plant and equipment is not included in the capital cost of the respective asset but is written off to revenue as it arises.

(c) Debtors

Known bad debts are written off and specific provision is made for any considered to be doubtful of collection.

(d) Stores

Stores, which include plant and equipment for current development, are physically verified by continuous stock takings carried out throughout the year; they are valued at cost less provisions for obsolescence and for other possible losses referred to in Note 2.

(e) Repairs, renewals and excavations for the line plant

Expenditure on repairs, renewals and excavations for the line plant is written off in the year in which it is incurred.

(f) Balances and transactions in foreign currency

Foreign currency balances are translated into Cyprus pounds at the rates of exchange ruling at the end of the financial year. Exchange differences on such translation are dealt with through the reserve fund.

Exchange differences attributable to the purchase of fixed assets for specific projects are capitalised until the completion of the project. Otherwise, exchange differences are dealt with through the Revenue Account only in so far as they are realised.

(g) Interest payable and/or receivable attributable to subsequent years

Interest payable and/or receivable attributable to subsequent years is deducted from the respective liabilities or receivables.

2. Assets in occupied areas

Certain fixed assets and other equipment and materials in stores are situated in the territory occupied by the Turkish invasion forces or in areas to which the Authority, due to present conditions, has no access. Full provision has been made in these Accounts in respect of the equipment and materials in stores for any possible loss of or damage thereto, but no such provision has been made for the fixed assets the value of which cannot, in view of the particular circumstances, be reasonably ascertained; however, on the fixed assets a full year's depreciation is being provided.

The Authority is unable to express an opinion as to the present state of the aforesaid fixed assets which in the Balance Sheet are reflected at book values.

3. Fixed assets

	Cost Depreciation		Written down value	
	£	£	1981 £	1980 £
Freehold land and buildings	2,570,667	369,731	2,200,936	1,651,766
Leasehold buildings	279,010	47,577	231,433	223,606
Exchanges, telegraph, line plant and apparatus	23,392,521	13,058,216	10,334,305	8,431,740
Radio stations	1,615,849	1,121,322	494,527	514,682
Satellite earth station	1,899,882	371,329	1,528,553	1,632,071
Sub-marine cables	10,916,539	1,135,049	9,781,490	1,681,239
Vehicles, tools and equipment	772,269	588,882	183,387	163,542
Office furniture and equipment	351,167	197,100	154,067	120,959
	<u>41,797,894</u>	<u>16,889,206</u>	<u>24,908,698</u>	<u>14,419,609</u>
Assets under construction	4,508,213	—	4,508,213	2,935,136
	<u>46,306,107</u>	<u>16,889,206</u>	<u>29,416,901</u>	<u>17,354,745</u>
1980:	<u>£31,481,612</u>	<u>£14,126,867</u>	<u>£17,354,745</u>	

The depreciation of fixed assets for the year ended 31st December, 1981 amounted to £3,038,630 (1980: £2,254,769) and is reflected in the operating expenses.

4. Investments

At cost, unquoted:

Trade £336,922 (1980: £127,576). This represents the Authority's investment share in the International Telecommunications Satellite Organisation ('Intelsat'). Under the terms of allotment the Authority is required to make capital contributions, proportionate to its investment share, towards future development projects undertaken by Intelsat.

Other £1,121,803 (1980: £953,729). Under the terms of issue of the 7½% Guaranteed debenture stock 1980/82 and 1981/83 the Authority is required to set aside to a sinking fund amounts in order to provide for the redemption thereof. The management of the said sinking fund is vested in the Central Bank in Cyprus.

In the opinion of the Authority the value of the investments is not less than the amount at which they are stated in the Balance Sheet.

5. Long term debtors

These are repayable by equal annual instalments till 1987 with interest ranging between 6-8% per annum. They are stated after the deduction of £15,300 (1980: £17,550) representing interest attributable to subsequent years.

6. Current assets

	1981	1980
	£	£
Stores (Notes 1(d), 2)	4,886,442	3,997,129
Debtors and other accounts less provisions (Note 1(c))	4,834,746	3,213,051
Bank balances and cash in hand	4,106,768	4,229,105
	<u>£13,797,953</u>	<u>£11,439,285</u>

The debtors and other accounts, less provisions, are stated after the deduction of £5,175 (1980: £6,075) representing interest attributable to subsequent years.

7. Deferred debits

	1981	1980
	£	£
Superannuation Fund Declency less amounts written off (Note 17)	6,034,027	—
Other expenses	237,262	118,092
	<u>£6,271,289</u>	<u>£118,092</u>

8. Government loans

	1981	1980
	£	£
5½% Government loan 1969/83	35,309	51,527
5½% Government loan 1970/84	43,041	55,856
5% Government loan 1973/87	2,936,900	2,946,000
	<u>£3,014,350</u>	<u>£3,053,383</u>

9. Debenture stocks

	1981	1980
	£	£
7½% Guaranteed debenture stock 1980/82	600,000	600,000
7½% Guaranteed debenture stock 1981/83	650,000	650,000
	<u>£1,250,000</u>	<u>£1,250,000</u>

The 7½% Guaranteed debenture stock 1980/82 is repayable at par on 30th November, 1982 or at the option of the Authority at par at any time between 30th November, 1980 and 30th November, 1982.

The 7½% Guaranteed debenture stock 1981/83 is repayable at par on 31st March, 1983 or at the option of the Authority at par at any time between 31st March, 1981 and 31st March, 1983.

10. Other long term liabilities

	1981	1980
	£	£
Suppliers and other credits	12,724,173	4,854,460
Superannuation fund liability (Note 17)	8,922,943	1,513,780
	<u>£21,647,121</u>	<u>£6,368,240</u>

The suppliers and other credits are stated after the deduction of £476,743 (1980: £499,815) representing interest attributable to subsequent years.

11. Current liabilities

	1981	1980
	£	£
Creditors and other accounts	6,467,996	3,277,410
Superannuation fund liability, including interest	691,333	24,686
	<u>£7,159,329</u>	<u>£3,302,096</u>

The creditors and other accounts are stated after the deduction of £162,019 (1980: £165,993) representing interest attributable to subsequent years.

12. Deferred credits

	1981	1980
	£	£
Rentals and installation fees relating to subsequent years	413,553	170,694
Deposits for recoverable works	332,576	310,423
	<u>£746,231</u>	<u>£481,117</u>

13. Reserve fund

	1981	1980
	£	£
Balance 1st January, 1981	15,583,481	11,982,813
Profit on sale of fixed assets	11,947	5,208
Revenue surplus for year	1,582,316	3,659,628
	<u>17,317,744</u>	<u>15,647,649</u>
Net exchange differences on translation of foreign currency balances (Note 1(f))	(117,832)	5,832
	<u>£17,199,912</u>	<u>£15,653,481</u>

14. Operating revenue

	1981	1980
	£	£
Telephone services	14,630,164	12,335,980
Telegraph services	416,856	403,486
Telex services	1,945,283	1,609,429
Other services	336,359	333,174
	<u>£17,328,662</u>	<u>£14,682,069</u>

15. Operating expenses

	1981	1980
	£	£
System operational:		
Telephone services	8,375,292	6,426,310
Telegraph services	919,917	777,047
Telex services	682,871	569,779
Other services	444,049	410,955
	<hr/>	<hr/>
	10,421,929	8,184,091
Establishment	510,416	339,812
Administrative	1,834,315	1,422,493
	<hr/>	<hr/>
	£12,766,660	£9,946,396
	<hr/>	<hr/>

The staff costs for the year amounted to £7,963,427 (1980: £6,333,279) of which £936,040 (1980: £543,528) have been charged to capital expenditure and £62,196 (1980: £45,376) to recoverable works. The balance of £6,965,191 (1980: £5,744,375) is reflected in the operating expenses.

16. Financial and other expenses

	1981	1980
	£	£
Interest on Government loans and debenture stocks	246,716	248,822
Interest on suppliers' and other credit	532,295	303,454
Interest on provident and superannuation fund liabilities (Note 17)	636,310	81,407
Other interest	1,215	4,246
Authority's Members emoluments and expenses	6,450	6,110
Amount written off in respect of superannuation fund deficiency (Note 17)	1,507,282	657,754
Provision for deficiency of the provident fund safeguarding benefit (Note 17)	292,073	—
Other	164,165	104,989
	<hr/>	<hr/>
	£3,385,496	£1,406,752
	<hr/>	<hr/>

17. Retirement benefits

(i) Liabilities for the superannuation and provident funds are provided by payments to the respective funds which operate independently from the finances of the Authority.

(ii) Under the regulations of the superannuation fund the Authority is liable to make good deficiencies which may be revealed on periodic actuarial valuations of the fund. The actuarial valuation made in 1981 disclosed a deficiency of £9,081,000 of which £1,538,466 represents the balance of the previous valuation. The total liability of £9,081,000 will be paid in 33 years as from 1981 by equal annual instalments at 7% interest per annum.

The deficiency shall be charged against revenues over a period of five years.

The Authority is also liable to make annual lump sum payments, based on actuarial valuation, for the purpose of funding any pension increases after retirement. These payments will commence to be made as from 1982.

(iii) As a result of an improvement to the benefits provided by the provident funds, the Authority is liable to make good any deficiency that might arise between a minimum amount, as set down by the rules, and the amounts standing to the credit of the members of these funds on retirement. A provision has been made in these accounts for £292,073 in respect of deficiencies up to 31st December, 1981.

18. Contractual commitments

Contractual commitments in respect of capital expenditure as at 31st December, 1981 not provided for in these Accounts, amounted to approximately £10,184,000 (1980: £12,150,000) of which £6,892,000 is payable in foreign currency. Amounts in foreign currency have been converted into Cyprus pounds at the rates of exchange ruling at 31st December, 1981.

19. Contingent liabilities

Contingent liabilities in respect of claims against the Authority amounted to approximately £201,000 at 31st December, 1981 (1980: £111,000). No provisions have been made in these Accounts in respect thereof.

20. Taxation and special contribution

The Authority acting on the basis of the advice of its legal adviser that it has no liability to income tax and special contribution (see Note) has made no provisions for liabilities to income tax and special contribution on the surplus for the year and on the surplus of previous years. The Authority is currently involved in litigation with the Inland Revenue with regard to income tax liability.

Note: Special contribution

Under special legislation enacted after the Turkish invasion of Cyprus corporate bodies are liable to make quarterly contributions to the Special Fund for the Relief of Displaced Persons, computed by reference to the profit made in the respective quarter.

CYPRUS TELECOMMUNICATIONS AUTHORITY

STATEMENT OF SOURCE AND APPLICATION OF FUNDS

	1981 £	1980 £
SOURCE OF FUNDS		
Revenue surplus	1,652,316	3,659,628
Depreciation	3,038,630	2,254,769
Funds generated from operations	4,690,946	5,914,397
Proceeds from sale of fixed assets (net)	33,281	20,694
Increase in creditors	19,136,114	617,660
Decrease in bank balances and cash in hand	122,340	(1,070,203)
Funds from other sources	19,291,735	(431,849)
	£23,982,681	£5,482,548
APPLICATION OF FUNDS		
Additions to fixed assets	15,543,183	4,377,854
Deduct:		
Residual value of fixed assets displaced	110,841	71,538
Installation fees recovered	310,222	242,381
	421,063	313,919
	15,122,120	4,063,935
Repayments towards Government loans	39,033	37,455
Increase in investments	377,420	183,484
Increase in debtors	1,578,880	300,003
Deferred accounts and exchange differences	6,005,915	(671,785)
Increase in stores	859,313	1,569,456
	£23,982,681	£5,482,548

CYPRUS TELECOMMUNICATIONS AUTHORITY

RETURN ON CAPITAL EMPLOYED

	Financial years ended 31st December						
	1981	1980	1979	1978	1977	1976	1975
	£000	£000	£000	£000	£000	£000	£000
Capital employed:	40,563	27,990	23,317	20,004	18,584	17,377	15,930
Annual earnings/ (losses):	1,652	3,660	2,643	2,203	2,240	1,382	(158)
Percentage of annual earnings/(losses) on capital employed:	4.1%	13.1%	11.3%	11.0%	12.1%	7.9%	(1.0%)

Notes:

1. Capital employed represents the average of the opening and year-end reserve funds and liabilities.
2. Annual earnings/(losses) are stated after the deduction of interest and, for the years 1976/1978, after the deduction of the special contribution.
3. The annual earnings for 1981 have been materially affected by the amount written off in respect of the superannuation fund deficiency and of the provision for deficiency of the provident fund safeguarding benefit, reference to which is made in Note 16.

