# POSTAL AND TELECOMMUNICATIONS SERVICES

# New Commissions

Early in 1973, the Postmaster-General announced the establishment of a Commission of Inquiry to determine the true functions of the Post Office; how best those functions could be carried out; and the sort of organisation that was necessary to meet the postal and telecommunications needs of the future. The Commission of Inquiry consisted of three commissioners and presented its report to the Governor-General on 19 April 1974; most of its recommendations were accepted by the Commonwealth Government. The Report favoured the establishment of two statutory corporations to administer the postal and telecommunications services. The two corporations would be independent of the Public Service Board on matters of organisation, staff, pay, and conditions of service.

The Report contained more than one hundred principal recommendations and conclusions, and after the Commonwealth Government had considered the broad issues involved, an inter-departmental working group, comprising representatives from the Postmaster-General's Department, the Department of the Special Minister of State, the Treasury, the Public Service Board, and the Department of the Prime Minister and Cabinet, was set up to study the detailed recommendations, and to report their findings to the Postmaster-General and the Special Minister of State. Other government departments who were affected by the recommendations were also consulted.

The Report of the inter-departmental working group was considered by the Commonwealth Government in February 1975, and some of the more important suggestions subsequently endorsed by it included the following principles. The Commissions were to be financed by Treasury advances subject to interest payment, each to be responsible for financing at least 50 per cent of new capital investment from internal sources. The Commissions were to be free to set tariffs, subject to ministerial approval of tariffs, for basic services. Past postal losses were to be written off. The Commissions were to be independent of the Public Service Board and the arbitral authority between the Commissions and their staff was to be the Australian Conciliation and Arbitration Commission ; consultative facilities would also be established. Legislation was to be introduced to preserve the rights of existing staff, and to continue the sponsorship of the Australian Postal Institute.

A major factor contributing to the enormity of the legislative task was the sheer size of the department and its place within the Commonwealth Public Service in particular, and in the economy in general. Since the department provided employment for more than 120,000 persons, or about one half of the Commonwealth Public Service, any changes in staffing provisions were bound to have significant repercussions on the remainder of the Commonwealth Public Service, as well as on private employment. The task was further complicated by the need to preserve, for all staff, existing terms and conditions of employment under changed service conditions, and also to incorporate improved staffing provisions, some of which were likely to be implemented in the Commonwealth Public Service in the near future.

The legislation covering the establishment of the new Commissions comprised, initially, three Bills-the Postal Services Bill, the Telecommunications Bill, and the Postal and Telecommunications Commissions (Transitional Provisions) Bill. On 23 April 1975, these three Bills were introduced into the Senate by the Postmaster-General, and, following debate, were passed by the Senate in May 1975, though with some substantial amendments. The most important of the amendments introduced by the Opposition parties in the Senate was the deletion of the provision for the merging of the functions of the Overseas Telecommunications Commission with those of the new Australian Telecommunications Commission. The Commonwealth Government then introduced a further Bill, the Telecommunications Bill No. 2, on 29 May 1975. This Bill reinstated the provisions which had been deleted from the earlier Telecommunications Bill by the Opposition parties in the Senate, and which related to the incorporation of the Overseas Telecommunications Commission with the national service. Although this fourth Bill was passed in the House of Representatives, it was later defeated in the Senate, with the result that the Overseas Telecommunications Commission remains as a separate organisation.

The Governor-General gave Royal Assent to the Postal Services Act, the Telecommunications Act, and the Postal and Telecommunications (Transitional Provisions) Act on 12 June 1975, and, from midnight on Monday, 30 June 1975, all postal services, and most of the services provided by telecommunications, ceased to operate as the Postmaster-General's Department, but were embodied in two separate Commissions—the Australian Postal Commission and the Australian Telecommunications Commission. Radio licensing and monitoring activities remained as a part of the Postmaster-General's Department.

The Postmaster-General's Department was changed to the Department of Post and Telecommunications late in December 1975.

# POSTAL SERVICES IN VICTORIA

#### **Historical outline**

Postal services in Victoria were first placed under government control in April 1837. Seventeen years later, in March 1854, Australia's first commercial telegraph service was established between Melbourne and Williamstown, providing a new form of communication that was much more rapid than the pack-horse or mail coach. For fifteen years, until 1869, the electric telegraph was operated as a government department separate from the Post Office, but in that year they were amalgamated to become the Post and Telegraph Department. This amalgamation of postal and telecommunications services continued through Federation, in 1901, until the two services finally separated on 1 July 1975.

Since 1837, the Postmaster-General's Department in Victoria has progressed from a staff of one, and a crude bark hut, to a vast administration employing a staff of approximately 34,300 persons located in hundreds of buildings throughout the State. At 30 June 1975, there were 331 official and 1,174 non-official (including 4 in the Australian Antarctic Territory) post offices, 889 country and outer metropolitan automatic telephone exchanges, and 185 country manual exchanges, as well as 106 metropolitan automatic exchanges in Victoria. These offices and installations ensure that communications services are within the reach of all but the most isolated homes in the State.

#### **Present activities**

During the year from 1 July 1974 to 30 June 1975, new official post office buildings were opened at Mt Eliza, Cheltenham, Carnegie, and Eltham. Modern

and attractive in appearance, yet strictly functional and planned to meet future needs, they provide facilities for the most recent mail handling techniques as well as providing markedly improved amenities for staff.

# Philatelic centres

At 30 June 1975, there were fifteen philatelic centres operating at official post offices in Victoria. At these centres it is possible to purchase the commemorative issues of Australian stamps up to twelve months after their date of issue, and short-term definitive stamps up to eighteen months after their date of issue (subject to stocks not being exhausted before that time). Collectors can also obtain at these centres new postage stamp issues from the Australian Antarctic Territory, Norfolk Island, Cocos Island (Keeling), Fiji, Western Samoa, Nauru, Christmas Island, and Papua New Guinea.

The new Philatelic Sales Centre which opened at 175 Elizabeth Street, Melbourne, on 10 June 1974 was enlarged recently by the addition of an annexe, to be used for the staging of philatelic displays, and relevant historical material. This annexe was opened on 8 December 1975, the first display being provided by the Ballarat Historical Society. This display featured the Sovereign Hill Mining Settlement.

In addition to the philatelic centres, "first day of issue" postmarker facilities are available at 157 post offices in Victoria.

#### Post Office Museum

The general display of postal and telecommunications material was changed early in October 1974, and replaced by a specialised display of stamps and postmarks, timed to coincide with National Stamp Week.

A comprehensive article on the Post Office Museum can be found on page 693 of the Victorian Year Book 1975.

# Transport

At 30 June 1975, the postal fleet of vehicles numbered 924. Most of the drivers are employed on rostered shifts to transport mails, clear public telephone boxes and street letter boxes throughout the Melbourne metropolitan area, and to deliver telephone directories. A pool of sedan cars is also provided for authorised staff. Another duty is the movement of bulk equipment, stores, cables, and poles, by semi-trailer or truck, to specified locations.

In some areas, mails are conveyed by private contractors. At 30 June 1975, there were 979 of these services in Victoria, operating over a total of 16,981,860 kilometres, at a cost of \$2,124,130 per annum. Of the mail routes operated under private contract, the majority serve the more sparsely populated areas of the State.

At 30 June 1975, the combined fleet of postal and telecommunications vehicles numbered 5,011, of which 4,187 were allotted to the Engineering Division. These are stationed at various depots throughout the State. Many have been designed for specific duties, such as the conveyance of huge items of equipment, or for use as mobile cranes. Others are fitted out as mobile workshops.

In addition to the vehicles already listed, the Engineering Division also employed 680 major mechanical aids at 30 June 1975, which are used for earth moving activities and for the installation and maintenance of telecommunications lines and other equipment. Considerably in excess of 1,000 small mobile units are also used for a variety of purposes.

#### TELECOMMUNICATIONS SERVICES IN VICTORIA

#### **Previous structure**

Until 1 July 1975, telecommunications services continued to be the joint responsibility of the Engineering Division and the Telecommunications Division.

The Engineering Division provided and maintained the technical facilities for telephone and telegraph services and for the national radio and television networks. It allotted frequencies, monitored transmissions, and issued licences for privately operated radio services. The Telecommunications Division made telephone and telegraph facilities available to the public, ordered new services, provided customer advice, issued telephone directories, and dealt with a wide range of other telecommunications matters.

# **Present** activities

#### Automatic telephone network

Steady progress is being maintained towards providing a totally automatic telephone network throughout Victoria. During 1974–75, several new automatic telephone exchanges were brought into service, the largest ones being located at Cobram, Orbost, Mansfield, and Yarram. At 30 June 1975, there were almost 1,062,000 telephone services in Victoria, comprising 1,033,757 automatic telephone services, and 28,208 connected to manual exchanges.

#### Telephone directories

The 1975 alphabetical directory featured an attractive cover design depicting the celebrated old Victorian locomotive "Puffing Billy" hauling a train-load of sightseers in the Dandenong Ranges. The directory contained 1,632 pages, 48 more than the 1974 edition. A total of 1,250,000 copies was printed.

During 1974–75, the classified directory ceased to be produced in a single volume, and was issued in two, more specialised volumes. The larger of these two volumes is called the "Buying Guide", and is the directory normally issued to householders and business houses who are telephone subscribers. It lists products and services for home and business use, and contains 1,128 pages. One million copies of this directory were printed. The second volume is called the "Commercial/Industrial Directory", and lists manufacturers, wholesalers, distributors, fabricators, and business services. It contains 480 pages. Half a million copies of this directory were printed.

For convenience, Victoria's country regions are divided into telephone zones, and, during 1974–75, these zones were increased from nine to eleven in number—requiring the compilation of two additional zone telephone directories.

## Subscriber trunk dialling (S.T.D.)

Subscriber trunk dialling facilities, which enable a telephone subscriber to dial distant subscribers without the assistance of a telephone operator, have continued to expand rapidly. At 30 June 1975, 854 exchanges in Victoria provided 1,027,229 services with access to S.T.D. Additional centres to which national S.T.D. became available during 1974–75 included Cobram, Daylesford, Coleraine, Mansfield, Nathalia, Orbost, and Yarram.

#### Telegrams

The public telegraph service is part of the national TRESS network (Teleprinter Reperforator Electric Switching System), centred in Victoria at the Chief Telegraph Office. During 1974–75, 3,014,546 telegrams were handled.

#### Automatic telex

Automatic telex transmits a type-written message by teleprinter to another teleprinter in a fashion similar to making an S.T.D. telephone call. During the year ended 30 June 1975, an additional 384 telex services were connected, bringing the total services in operation to 3,541. Victorian telex subscribers then had access to 14,766 services in Australia, as well as to more than 100 countries overseas.

# "Datel " service

There is an increasing demand for facilities to transmit digital data over telephone and telegraph lines. Known originally as "Data Transmission", this service has since been re-named "Datel". Digital data information has to be converted to a form suitable for transmission over the lines provided by the Department. This conversion is performed by a modulator/demodulator unit, known as a "Modem". The data can be sent in three ways : over the telephone network, via private telephone or telegraph lines providing point to point circuits for the customer's exclusive use, or over the telex network. Lines suitable for high transmission speeds can be provided, except in the telex network. At 30 June 1975, there were 826 Modems in service in Victoria, and slightly more than 6,000 were operating in Australia.

# Radio communications systems

During 1974–75 a 24 channel micro-wave radio system was installed, linking Mansfield with Mt Bulla. It was brought into operation during June 1975. A broadband radiotelephone installation was provided in July 1974 to link the Melbourne radio relay terminal at Surrey Hills with Morwell. Two broadband bearers were installed during November 1974, linking Mt Alexander and Surrey Hills; while six broadband bearers were brought into operation in June 1975, linking the Surrey Hills radio relay terminal with Albury, in New South Wales.

In April 1975, two programme links between Australian Broadcasting Commission studios in Melbourne, and transmitters located at Sydenham, were provided by means of the radiotelephone system between the Surrey Hills radio relay terminal and Sydenham.

#### Television

A new colour television transmitter, manufactured by the Nippon Electric Company, was installed at the ABV Channel 2 transmitter building, on Mt Dandenong, during December 1974. Work on a new national television translator, located on Mt Elliott, was also completed in December 1974. It serves the Corryong area.

## Medium frequency broadcasting

During February 1975, a new aerial mast was erected for station 3WL, at Warrnambool. In May 1975, a stand-by broadcast transmitter at Sydenham was adapted for use by the new Melbourne A.B.C. access and ethnic radio station 3ZZ.

# Radio licensing and monitoring

Until 30 June 1975, all civil radio transmitting stations were licensed and controlled by the Radio Branch of the Engineering Division. From 1 July 1975, this Branch was separated from that section of the Engineering Branch that became part of the Australian Telecommunications Commission, and remained a part of the Postmaster-General's Department. It still carries out its duties in connection with the licensing and control of civil radio transmitting stations. Rigid technical standards for equipment design and performance are enforced by regular inspection, by monitoring, and by frequent transmission checks.

As a member of the International Telecommunications Union, the Postmaster-General's Department in Australia observes and checks all radio transmissions received in Australia. The results of these observations are forwarded to the International Frequency Registration Board in Geneva, Switzerland.

The Radio Branch investigates complaints from broadcast listeners and television viewers concerning interference to reception. On behalf of the Commonwealth Department of Transport, its staff also inspect the radio installations aboard vessels in the ports of Melbourne and Geelong.

The Radio Branch was changed to the Radio Frequency Management Group late in December 1975, forming a part of the new Department of Post and Telecommunications.

# COMMUNICATIONS STATISTICS

The following table shows the total number of post offices and employees in Victoria for each of the years 1970-71 to 1974-75:

Period	Number	Number Persons employed						
	of post offices (a)	Permanent	Temporary and exempt	Semi- and non-official postmasters and staffs	Mail contractors	Other (b)	Total	
1970–71 1971–72 1972–73 1973–74 1974–75	1,759 1,690 1,646 1,569 1,505	19,240 20,762 21,059 21,479 22,540	9,338 8,157 8,548 8,948 8,948 8,414	1,930 1,856 1,820 1,713 1,634	899 824 914 918 878	694 725 725 793 812	32,101 32,324 33,066 33,851 34,278	

VICTORIA--POST OFFICES: PERSONS EMPLOYED

(a) Includes 4 post offices at Australian bases in the Antarctic Territory.
 (b) Includes telephone office-keepers and part-time temporary and exempt employees.

Particulars concerning the revenue and expenditure of the Postmaster-General's Department in Victoria for each of the years 1970-71 to 1974-75 are shown in the following table:

# VICTORIA-POSTMASTER-GENERAL'S DEPARTMENT : **REVENUE AND EXPENDITURE**

(\$'000)									
Particulars	1970-71	1971-72	1972-73	1973-74	1974-75				
REVENUE Postal Telephone Telegraph Proceeds of sales Recoverable works International services	51,138 142,270 4,846 2,222 4,264 15	57,873 165,769 5,494 2,122 4,384 191	61,525 192,228 6,191 2,279 4,543 136	66,529 221,542 6,707 3,004 5,141 361	80,949 273,594 8,209 2,322 6,099 222				
Total	204,755	235,833	266,902	303,284	371,395				
EXPENDITURE Salaries and wages Material Carriage of mails by contractors Buildings and properties Accommodation services Other administrative	120,631 47,957 2,999 10,901 5,460 10,500	140,911 53,474 2,961 6,667 5,321 11,390	160,813 52,877 2,797 8,944 5,932 13,313	196,051 60,413 2,881 8,309 7,121 15,000	247,294 76,039 3,276 18,383 9,147 18,036				
Total	198,448	220,724	244,676	289,775	372,175				

The following table shows the total number and value of money orders and postal notes issued and paid in each of the years 1970-71 to 1974-75:

		Money	y orders		Postal orders				
Period	Issued		Paid		Issued		Paid		
	Number	Value	Number	Value	Number	Value	Number	Value	
	'000	\$'000	,000	\$'000	,000	\$'000	'000	\$'000	
1970–71 1971–72 1972–73 1973–74 1974–75	1,487 1,179 1,034 917 785	33,454 28,887 28,727 29,808 34,058	1,481 1,101 1,006 664 770	33,004 28,467 28,009 29,013 33,211	4,158 4,415 4,422 3,996 3,616	11,007 13,295 13,832 14,333 13,974	3,888 4,028 4,021 3,056 3,491	9,597 12,042 12,487 11,095 12,922	

# VICTORIA-MONEY ORDERS AND POSTAL ORDERS

Of the money orders issued during 1974–75, 693,128 for \$32,692,572 were payable in Australia and 92,152 for \$1,365,825 in other countries. The orders paid included 733,297 for \$32,106,409 issued in Australia, and 36,673 for \$1,105,196 in other countries.

Particulars	1971	1972	1973	1974	1975
Telephone exchanges Public telephones Services in operation Instruments connected Instruments per 1,000 of popu- lation	1,274 7,610 864,044 1,239,652 353.9	1,253 7,585 896,615 1,293,977 365.0	1,229 7,635 948,344 1,370,163 380.6	1,071 7,662 1,011,355 1,485,140 410.6	1,180 7,800 1,061,965 1,544,098 423.0

# VICTORIA-TELEPHONE SERVICES AT 30 JUNE

# VICTORIA—LETTERS, ETC., POSTED AND RECEIVED ('000)

Period	Letters, postcards, etc.	Registered articles (except parcels)	Newspapers and packets	Parcels (including those registered)					
	POSTED FOR	DELIVERY WITHIN	N AUSTRALIA						
1970–71	640,991	2,145	85,800	5,777					
1971-72	631,969	1,929	78,763	5,810					
1972–73	646,581	1,724	91,676	5,970					
197374	649,157	1,510	84,811	6,488					
197475	596,148	1,556	102,910	5,574					
	DISPATCHED TO AND RECEIVED FROM PLACES OVERSEAS								
<b>1970–7</b> 1	86.076	1,326	14,846	899					
1971–72	84,251	1,349	8,842	881					
1972–73	80,198	1,301	9,218	950					
1973–74	80,345	1,479	12,845	1,040					
1974-75	79,423	1,507	15,027	1,142					
т	OTAL POSTED IN VI	CTORIA AND RECE	EIVED FROM OVE	RSEAS					
<b>1970–7</b> 1	727,067	3,471	100,646	6,676					
1971-72	716,220	3,278	87,605	6,691					
1972-73	726,779	3,025	100,894	6,920					
1973-74	729,502	2,990	97.656	7,528					
1974-75	675,571	3,064	117,938	6,716					

VICTORIA-RADIO COMMUNICATION STATIONS AUTHORISED AT 30 JUNE

Class of station	1971	1972	1973	1974	1975
Transmitting and receiving-					
Fixed stations (a)—					
Aeronautical	4	••		••	••
Services with other countries				••	
Other	277	260	302	345	366
Land stations (b)—					
Aeronautical	52	75	69	70	72
Base stations—					
Land mobile services	2,351	2,565	3,032	3,280	3,535
Harbour mobile services	37	37	45	47	77
Coast (c)	27	-1	1	1	<b>'</b> í
Limited coast	_	32	37	44	44
	••			41	
Repeater	1.20	40	41		41
Special experimental	159	138	137	136	140

Class of station	1971	197 <b>2</b>	1973	1974	1975
Mobile stations (d)—					
Aeronautical	510	449	502	590	651
Land mobile services	27,447	29,592	33,015	34,843	39,534
Harbour mobile services	252	270	283	351	622
Radiodetermination		9	9	9	12
Radiotelephone subscribers'					
service		159	87	93	93
Ships	989	1,088	1,284	1,460	1,501
Space services (e)		1	1	1	-,2
Amateur stations	1,966	1,989	2,012	2,054	2,140
					,
Total transmitting and					
receiving	34,071	36,705	40,857	43,365	48,831
Receiving only—	100		15	10	10
Fixed stations (a)	198	34	15	13	13
Mobile stations (d)	••	••	21	21	24
Grand total	34,269	36,739	40,893	43,399	48,868

#### VICTORIA-RADIO COMMUNICATION STATIONS AUTHORISED AT 30 JUNE-continued

(a) Stations established at fixed locations for communication with other stations similarly established.
 (b) Stations established at fixed locations for communication with mobile stations.

Land stations for communication with ocean-going vessels. Equipment installed in motor vehicles and harbour vessels.

(e) A radio communication service between earth stations and/or space stations.

#### Broadcast and television licences in effect

The number of stations licensed for broadcasting and television, and the number of holders of broadcast listeners' and television viewers' licences in Victoria for the years 30 June 1971 to 1975, are shown in the following table :

> VICTORIA-NUMBER OF BROADCASTING AND TELEVISION LICENCES IN EFFECT AT 30 JUNE

Class of licence	1971	1972	1973	1974	1975
Broadcasting station (a)	20	20	20	20	20
Television station (b)	9	9	9	9	9
Broadcast receiver $(c)$	64,298	58,390	53,588	48,870	
Television receiver $(c)$	115,613	111,921	114,721	103,451	
Combined broadcast and tele-	,	,			
vision receiver (c)	690,464	699,652	722,583	732,832	
Amateur	1,966	1,989	2,012	2,054	2,140

(a) Excluding 6 broadcasting stations (including 3 shortwave) operated by the national broadcasting service.
 (b) Excluding 8 television stations operated by the national television service.
 (c) Licences abolished in September 1974.

Further reference, 1976; History of Post Office in Victoria, 1961; Melbourne-Sydney Co-axial Cable, 1964 ; Postage stamps of Victoria, 1974 ; Post Office Museum, 1975

#### OVERSEAS TELECOMMUNICATIONS SERVICES

#### **Overseas** services

The Overseas Telecommunications Commission (Australia) was established by the Overseas Telecommunications Act 1946. The Commission is the authority responsible for the establishment, maintenance, and operation of telecommunication services between Australia and other countries, with ships at sea, and to and between external Territories.

Public message telegram, telephone, telex, phototelegram, and leased circuit services are provided to most countries and places throughout the world and television to those with access to satellite communication facilities. A switched data service is also available to some countries. These services are provided by cables, communication satellites, and high frequency radio.

With most other Commonwealth countries, the Commission is a member of the Commonwealth Telecommunications Organisation, the purpose of which is to promote the efficient exploitation and development of the Commonwealth's external telecommunications system. It is a three tier structure comprising the Commonwealth Conference on Telecommunications, the Commonwealth Telecommunications Council, and the Commonwealth Telecommunications Bureau. The Commonwealth Telecommunications Council is the continuing management body of the Organisation, with the role of promoting the purposes of the Organisation and carrying out the policies agreed to by governments. The Commonwealth Telecommunications Bureau is the secretariat for the Organisation and functions under the control and direction of the Council. The 1972 Commonwealth Telecommunications Conference reviewed the working of the Organisation and recommended the implementation of new collaborative financial arrangements governing the use of the Commonwealth telecommunications systems.

In the 1960s, the Commission, in partnership with the overseas telecommunications authorities in Britain, Canada, New Zealand, Malaysia, and Singapore, installed a large capacity international telephone cable system comprising a trans-Pacific cable connecting Australia, New Zealand, and Canada via Suva and Hawaii (COMPAC), opened in 1963, and a cable from Australia to Singapore and Kuala Lumpur (via Madang), Guam, and Hong Kong (SEACOM), opened in 1967.

In order to supplement existing cables, the Commission is a joint partner with the New Zealand Post Office in the provision of a new large capacity telephone cable between Australia and New Zealand; it has acquired an interest in a new submarine cable jointly owned with the American and Japanese international carriers linking the mainland of the United States of America, Hawaii, Guam, and Japan; and following joint studies with the Papua New Guinea Posts and Telegraphs Department, a contract was placed for the establishment of a new submarine cable to be known as A-PNG between Cairns and Port Moresby.

The high frequency radio stations continue to operate at capacity, providing short haul connecting circuits, primarily to the Australian Territories, Nauru, Noumea, and the British Solomon Islands.

In August 1964, Australia became a foundation member of the International Telecommunications Satellite Organisation (INTELSAT), a partnership of nations which has established a global communications satellite system. Australia has an ownership share of 3.24 per cent, making it the fifth largest member among the 91 INTELSAT member countries. Through the Commission, Australia is represented on the INTELSAT Board of Governors, which is the management board of INTELSAT.

The Interim Agreements under which INTELSAT operated in the period since 1964 were superseded in February 1973 by permanent arrangements which are embodied in two inter-related agreements. The first, an inter-governmental agreement signed by the Commonwealth Government, outlines the principle and objectives of the organisation and defines the basic organisational arrangements. The second, the operating agreement, signed by the Commission as the designated Australian telecommunications entity, provides the basis for the operation and management of the INTELSAT system.

The INTELSAT system comprises satellites located over the Pacific, Atlantic, and Indian Oceans.

In March 1968, a satellite earth station at Moree in New South Wales, owned and operated by the Commission, commenced commercial communications, including a capability for television transmission reception. The completion of new earth stations at Carnarvon in Western Australia and Ceduna in South Australia in 1969, and a significant expansion of facilities at the earth station at Moree in New South Wales, have provided increased telecommunications services, via satellite.

The original smaller station in Carnarvon, opened in 1967, is now used solely for telemetry, tracking, and monitoring command (T.T.C. and M.) functions under contract with the INTELSAT organisation. The T.T.C. and M. function provides for four such stations to be spaced around the world so that any INTELSAT satellite can be viewed and controlled no matter where it may be. These stations keep a continuous check of the position of each satellite and its functioning by means of signals transmitted by the satellite. When required, signals are transmitted to a satellite to control the direction of its antenna and to change its orbital position.

# **Coastal radio service**

The Overseas Telecommunications Commission operates fourteen coastal radio stations at points around the Australian coast, and one at Norfolk Island. During the year ended 31 March 1975, the coastal radio service handled 6,740,000 paid words to ships and 4,262,000 words from ships. Ship calls over the radiotelephone service extended over 218,000 paid minutes.

# International telecommunications traffic

The following table shows particulars of overseas telecommunications traffic other than telegraphic services between Australia and overseas countries for the years ended 31 March 1973, 1974, and 1975:

# AUSTRALIA—INTERNATIONAL TELECOMMUNICATION SERVICES OTHER THAN TELEGRAPHIC SERVICES, YEARS ENDED 31 MARCH

(paid	minutes)

Service				Trar	smissions				
	From Australia			To Australia			Total		
	1973	1974	1975	1973	1974	1975	1973	1974	1975
Telephone Telex Television programmes	9,000 5,181 1,097	12,108 6,444 1,008	16,143 8,280 2,741	8,426 4,986 4,226	13,359 6,101 4,401	18,152 8,076 3,982	17,426 10,167 5,323	25,467 12,545 5,409	34,295 16,356 6,723

Particulars of the volume of international telegraphic services originating and terminating in Australia for the years ended 31 March 1973, 1974, and 1975 are shown in the following table:

# AUSTRALIA—INTERNATIONAL TELEGRAPH SERVICES, YEARS ENDED 31 MARCH ('000 words)

Words transmitted Class of traffic From Australia To Australia Total 1973 1974 1975 1973 1974 1975 1973 1974 1975 24,385 23,888 2,580 2,007 1,302 31,558 27,891 2,410 35,214 30,089 1,814 Letter Ordinary 36,494 28,484 27.737 64,978 62.951 28,988 1,854 2,000 32,741 1,944 26,861 1,062 51,779 4,990 61,729 56,950 Press Greetings 2,876 1 696 608 131 2,010 703 3,608 gent 1,862 1.648 3 164 Other 531 569 2,265 2,380 2,911 2.044 613 Total 65.935 56,427 75,640 71.431 65,354 61,079 122,362 140,994 132,510

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