Telex network

Particulars of the operations of the telex network, which are additional to the telegraph traffic shown above, are as follows:

TELEX NETWORK SERVICES AND INTERNAL CALLS, AUSTRALIA, 1967-68 TO 1971-72

Year				Services at end of year	Internal calls during year
1967-68	.	.	.	4,054	8,377,816
1968-69	.	.	.	5,067	9,977,018
1969-70	.	.	.	6,430	12,092,737
1970-71	.	.	.	7,988	14,246,157
1971-72	.	.	.	9,235	15,868,800

Development of telecommunications in Australia

Telegraphs

The electric telegraph was first introduced into Australia for use by the public in the year 1854, when a line from Melbourne to Williamstown was opened. The first line in South Australia, from Adelaide to Port Adelaide, was opened in 1856, while the first line in New South Wales was brought into operation in 1858, when the line from Sydney to South Head, 6 miles in length, was opened. In Tasmania the first telegraph line was completed in 1857, while in the following year communication was established between Sydney, Melbourne, and Adelaide. The first lines to be constructed in Queensland were those between Brisbane and Ipswich, and Brisbane and Lytton, distances of 24 and 12 miles respectively, and in 1861 Brisbane was connected to Sydney by telegraph. In Western Australia the first telegraph constructed was from Perth to Fremantle, a distance of 12 miles, and was brought into use in 1869. In the same year the cable joining Tasmania with the mainland of Australia was completed, and in 1877 the intercapital link, Perth to Adelaide was established.

On 22 August 1872 the construction of the Overland Telegraph Line was completed. This line was the first telegraphic link to span Australia from coast to coast, stretching from Port Augusta in South Australia to Port Darwin in the Northern Territory, a distance of approximately 1,800 miles. The route of the telegraph line followed closely the path of the expeditions of John McDouall Stuart (1859-62), who had shown that there was a practicable route for an overland telegraph. The line joined the overseas cable terminating in Darwin, which was completed in November 1871, and enabled Australia to communicate with Europe by submarine cable by way of Singapore and Madras. For the first time in history Australia was in direct contact with the outside world.

Eleven repeater stations were established between Port Augusta and Port Darwin. The original Overland Telegraph Line consisted of a single galvanised-iron wire which for over 25 years carried the overseas telegraphic business of Australia. Increasing traffic necessitated the erection of a second line on the same poles as the first line in 1899. This time copper wire was used and as a result a relatively high-speed duplex circuit was provided. The Overland Telegraph Line was operated by the South Australian Government until 1901 when federation of the Australian colonies vested the responsibility for posts and telegraphs in the Commonwealth Government.

An article about the Overland Telegraph Line is contained in the South Australian Year Book No. 7, 1972, pages 526-31.

During the period from 1871 to 1891 great progress was made in telegraphic construction throughout Australia, with over 27,500 pole miles of line, exclusive of railway telegraph lines, being opened for use, making the total length of the line open at the end of 1891, 39,506 pole miles. In 1902 a submarine cable, touching only British territory on its way from Australia to Canada, provided an 'All Red' route, for a cable system between England and Australia. Between 1902 and 1923, further construction increased the length of telegraph line to 66,648 pole miles and by 1929 a further 26,589 pole miles had been constructed giving a total of 93,237 pole miles by the end of 1929.

Under the *Wireless and Telegraphy Act* 1905 the Commonwealth Postmaster-General was given exclusive control over establishing, erecting, maintaining and using stations and appliances for the purpose of transmitting and receiving messages by wireless telegraphy. The Act also empowered him to issue licences, inflict penalties, confiscate appliances unlawfully used, and take proceedings in courts of summary jurisdiction for offences under the Act.

In 1912 Sydney Radio, the first coastal radio station, commenced operation. In the same year radio telegraph services were commenced. The use of radio also enabled the economic establishment of an inland radio-telegraph system linking isolated settlements and homesteads with the ordinary land surface telegraph system.

By 1872 Australia had established an internal telegraph system based on Morse code and operated manually. In 1923 Morse Code was converted to machine operation on main telegraph routes.

In 1929 the telegraph system was extended to include the first picturegram service between Sydney and Melbourne. Further growth in the telegraph system was forestalled by the Great Depression, the number of telegram messages sent falling from 16 million in 1929-30 to 13 million in 1930-31. Prior to the 1939-45 War, Australians were at one time averaging more telegrams per head of population than in any other country in the world. However, following the war there was a large drop in usage. From a peak of nearly 30 million telegrams annually during the later war years (1942-45) and immediately after, the number fell and stabilized at about 20 million despite improvements in services and rapid population and economic growth. This was associated with an increased use of telephones, changing demands by major users for telegram transmission facilities and the increased use of private wire teleprinter services (originally introduced in 1933) which enabled users to hire direct lines on a 'permanent' basis and use their own teleprinters to send and receive a constant flow of telegraph messages.

In 1959, the Postmaster-General's Department introduced TRESS (Teleprinter Reperforator Switching System) and within the next three years it took over entirely from the Morse telegraph system. Whilst teleprinters had gradually been taking over from morse key and sound equipment in the busier post office telegraph offices, TRESS made possible the automatic transmission of telegrams through intermediate transit points, without manual handling, which greatly reduced transmission times.

The TELEX (Teleprinter Exchange) service was introduced for the first time in Australia in 1954 with 80 subscribers in Sydney and Melbourne. The system rapidly developed in other states with typical subscribers being motel organisations, banks, manufacturing companies, hotels and the news media. In 1972, there were more than 9,000 telex subscribers all over Australia.

In 1966 the Australian telex network was converted to automatic operation permitting subscribers to exchange calls direct with all other subscribers in Australia and to be charged on an actual time used basis similar to the Subscriber Trunk Dialing (S.T.D.) system in operation for long distance telephone calls. At the same time, this facility was extended to 20 of the 100 countries overseas with which the telex service was linked.

In the 1950s and 1960s there was growing demand for facsimile transmissions of photographic and other data and by 1966 newspaper printing could also be transmitted between capital cities by this method.

In 1969 the Postmaster-General's Department introduced its DATEL (Data Transmission) service to cope with growing demands on its telegraphic networks. Compared with the Morse code system by which one or two characters could be transmitted per second, data could now be transmitted at rates up to 4,500 characters per second by the use of coaxial cable or microwave transmission.

On private line services, the DATEL system was extended in January 1971, so that about 300 characters per second could be transmitted. This is in the medium range speeds. In June 1972, through the use of microwave transmissions, a special private line service operating at 4,500 characters per second, was opened to link a customer's computers in Sydney and Melbourne.
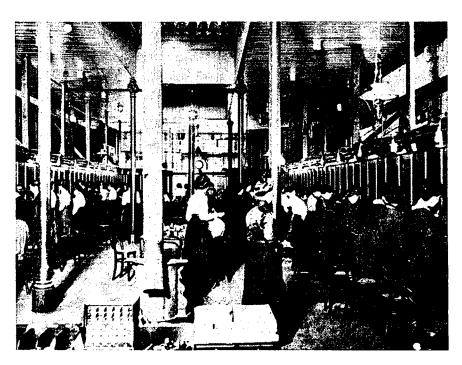
The growth and future potential of data transmission in Australia has been emphasized by the installation of 565 modems through the Commonwealth in the first 18 months of operation to June 1970. Modems (modulator/demodulator) translate signals, passed either by electric impulse or by radio waves, into a language that the receiving machine can reproduce. Thus a message sent from a telex with one language can be received by another telex with a different language through the use of modems. Any one modem can serve up to 200 transmission reception devices.

Telephones

In 1878 two years after Alexander Graham Bell demonstrated the telephone in U.S.A. the first long-distance telephone call in Australia was conducted over a distance of 240 miles between Semaphore and Port Augusta, in South Australia. By 1880 exchanges were established as private businesses in Brisbane, Sydney and Melbourne, and in 1882 a Government-owned exchange was established in Sydney. Private exchanges were opened in Adelaide and Hobart in 1883, and in Perth in 1888. All private exchanges were eventually taken over by the colonial governments and operated by their respective Post and Telegraphs departments.

Telegraph Operating Room, G.P.O., Sydney, about 1902

The Central Manual Telephone Exchange, Lonsdale St., Melbourne, about 1908

Photos by courtesy of the Postmaster-General's Department

PLATE 30

On 1 March 1901, the six separate State Post and Telegraph departments were amalgamated and formed into the Commonwealth Postmaster-General's Department.

In 1902 the first interstate telephone trunk line service was opened – between Mt Gambier, South Australia and Nelson, Victoria and in 1907 the Sydney-Melbourne telephone trunk line service was completed. In 1912 the first automatic telephone exchange in Australia and the second only in the British Empire was opened in Geelong, Victoria.

In 1924 trunk-telephone operators in Victoria were able, for the first time, to dial some other distant exchanges direct. In 1926, two-way mobile radio telephone services were introduced. By 1929, the number of telephones connected reached the half million mark – and Australia, with an average of 7.93 telephones per 100 population had the sixth highest telephone density in the world.

The depression in the 1930s had a marked effect in reducing demand for communication services. In 1930–31, for the first time, cancellation of telephone services exceeded new connections and the number of instruments in service fell by 22,000. The volume of calls also declined, local calls falling by nearly 23 million from the preceding 1929–30 turnover of 420,600,000 and trunk line calls by over 5 million from 35,400,000. Nevertheless, there were many developments in telephone services in the 1930s. In 1930, the overseas radio-telephone service commenced between Australia and England. In 1933, the first Australian made handset telephone was introduced, and in 1936 the Tasmania-Mainland telephone service was opened through a submarine cable under Bass Strait. At the time, it was the longest submarine telephone communications cable in the world. By 1939, telephone connections had again reached the half million mark of 1929.

During the 1939–45 War the Postmaster-General's Department accepted responsibility for a great deal of specialised work on behalf of the Defence Forces, and this involved the diversion of large numbers of highly skilled technicians and other officers from their normal duties.

In the post-war years there was a dramatic increase in the number of telephone subscriber service connections. From 577,777 services connected in 1945 the number almost doubled to reach 1,152,930 in 1955, and almost doubled again to reach 2,010,124 in 1965. With this growth in demand came the problem of 'deferred applications', the installations which could not be met quickly or, in cases, within years. Deferred applications reached a peak of 128,000 in 1951 but declined progressively to about 13,000 in 1972. During the same period all figure numbering increasingly replaced the alpha-numeral system commonly in use.

Since 1945 the percentage of telephone subscriber services connected to automatic operation has been increasing. In 1945, just under 60 per cent of the 580,000 services were connected to automatic exchanges. The automation of the national telephone service gained impetus with the introduction of the Community Service Telephone Plan in May 1960, whereby the areas for many local call facilities were rearranged and extended and telephone calls which would previously have been short distance trunk calls became local calls. By 1972, services connected to automatic exchanges had reached 92 per cent in a total of 3 million services.

In 1951 the external circulation system was modified and direct communication was established between an increasing number of centres which were formerly sent through intermediate repeating centres. In 1953, the first 34-channel carrier system on trunk cable was introduced.

In 1956 the Postmaster-General's Department introduced direct trunk calling by subscribers in Australia—between Dandenong and Melbourne and St Mary's and Sydney—known as Subscribers Trunk Dialling (S.T.D.). By 1972, nearly 83 per cent or 2,488,000, of Australia's telephone sub-scriber's services had some measure of S.T.D. service and more than 57 per cent of all trunk calls were being dialled directly by the subscriber compared with less than 10 per cent in 1965. An added advantage to the S.T.D. caller, apart from speed and ease of operation, is that S.T.D. calls are charged on a metered basis for the actual time of the call, instead of the minimum 3 minute charge for trunk calls.

Until 1967, S.T.D. development in Australia had been limited to point to point operation, for example, Melbourne to Sydney. In 1967, however, the first automatic trunk switching centres were brought into operation in Sydney, Canberra, Newcastle, Geelong and Launceston. This enabled long distance calls to be automatically switched through without need for a direct line; for example, a subscriber in Launceston could now dial Newcastle direct without the need to go through any intermediate switching stations.

Other centres were progressively added to the network and by 1972, most areas in Australia could be dialled direct by the subscriber. The popularity of S.T.D. can be gauged by the fact that where the facility was available approximately 85 per cent of calls made in 1972 were dialled direct by callers.

Other recent advances in the telephone service include recorded information service, early morn-ing and reminder call service, communication aids introduced to meet the needs of the partially

deaf, a highly sensitive transmitter to help telephone users with serious larynx problems, and an increase in the range of telephones available for customers' use. Also, private companies during the 1960s were licensed to install and operate, by financial agreement with the Post Office, public telephones in shops, banks and similar premises.

Broadcasting and television

In 1923 the first radio broadcasting stations were established in Australia under the call signs 2FC and 2BL. Rapid development in broadcasting followed. In 1925, the Inland Wireless System began operating. In the same year, on 2 May, a radio broadcast in London was transmitted to radio listeners in Australia. In April 1929, the National Broadcasting Service was established, with the Postmaster-General's Department responsible for buildings, transmitter equipment and provision of program relay lines for its emerging radio networks systems. In 1932, the Australian Broadcasting Commission was constituted to administer the programs of the National Service. Since 1929, nearly 200 national and commercial, medium-frequency radio stations have been established throughout Australia. In addition the National Service operates the external, or international short-wave service created in 1940 and known as 'Radio-Australia'.

In 1950, the mobile radio-telephone service was first introduced by the Post Office in Australia. Today there are just over 120,000 mobile services authorised covering taxi services, ambulances and many other organisations.

In 1956, television was introduced into Australia with the Postmaster-General's Department becoming responsible for the provision and operation of the National Television Service transmitting stations and technical equipment for the purpose of television programs, and the issue of television viewers' licences and the policing of the provisions of the *Broadcasting and Television Act* 1942–1956. A Federal Government plan laid down a gradual expansion of T.V. services, both national and commercial throughout Australia for the following 10 years. While the commercial services have been set up and operated on a local studio and transmission basis the National Television Service has been established and operated on a more centralised basis, with direct relays of capital city programs to provincial and country stations. By the end of 1972 a total of 100 National Service and commercial T.V. stations were providing programs to an area containing 97 per cent of the population.

In 1972 a complementary group of 97 translator stations were in operation with more than one third of these having been established for the National Television Service. The function of the translator stations is to 'repeat' or reflect transmissions from the nearest master transmitter station to more geographically remote populated locations.

Broadband systems

Broadband systems of either microwave radio or coaxial cable are operated on a broadband of radio frequencies and can provide thousands of trunk circuits for all manner of telecommunication transmissions including T.V. program relays. Compared with the first 34-channel carrier, some of the present broadband systems now have capacities of over 300 channels. In 1959 the first broadband trunk system was installed—a microwave radio system between Melbourne and Bendigo.

In 1962, a coaxial cable system was brought into operation between Melbourne and Sydney. Since then broadband systems have spread extensively over Australia so that by July 1972, inter-linked coaxial cable and microwave trunk systems had linked the major centres of population, and the route distance of the system was over 10,000 miles.

In 1972 new equipment was introduced on trunk routes to increase the capacity of a pair of coaxial cable tubes to 2,700 telephone circuits or 1,200 telephone circuits and a T.V. channel in each direction. The Postmaster-General's Department's broadband systems have also done much to make the spread of S.T.D. possible as they have the necessary large circuits capacity to cope with its peak demands. With S.T.D. the traffic demand cannot be regulated as it can by manual operation and the trunk system must be able to cater for hundreds of subscribers in Sydney and Melbourne, for example, making calls in either direction virtually at the same instant.

The broadband network is linked, in turn, with the COMPAC and SEACOM submarine cables which are the main trunk lines for all Australia's overseas telecommunications traffic. In 1967, a microwave link was established from Sydney to feed traffic through the Overseas Telecommunication Commission's earth station at Moree. This station handles incoming and outgoing traffic including television transmissions/receptions through the medium of the INTELSAT satellite system.

The use of INTELSAT III in 1969 to provide 24 circuits for trunk calling to and from Western Australia, pending completion of the East-West microwave link, was probably the first successful use by any country of satellites for domestic trans-continental trunk calling.

TELEGRAPH PLANT, AUSTRALIA, 1872 TO 1971-72

Year	Cable wire	Aerial wire	Total	Pole routes	Coaxial cable	Conduits	Broadband radio relay systems
	miles	miles	miles	miles	tube-miles	duct miles	miles
1872 . . .	n.a.	(a)17,102	n.a.	(a)11,000	. .	n.a.	. .
1882 . . .	n.a.	(a)41,750	n.a.	25,046	. .	n.a.	. .
1892 . . .	n.a.	(a)70,456	n.a.	40,017	. .	n.a.	. .
1902 . . .	(b)16,085	(a)114,822	130,907	41,992	. .	50	. .
1912 . . .	(a)258,795	(a)101,218	360,013	(a)52,000	. .	1,072	. .
1921-22 . .	682,544	386,165	1,068,709	62,489	. .	2,926	. .
1931-32 . .	1,784,388	811,733	2,596,121	100,507	. .	6,217	. .
1941-42 . .	2,584,014	861,611	3,445,625	97,585	. .	13,828	. .
1951-52 . .	4,421,204	1,112,392	5,533,596	108,797	. .	21,187	. .
1961-62 . .	10,330,679	1,381,925	11,712,604	122,308	3,095	(c)15,586	1,704
1971-72 . .	26,330,802	1,015,505	27,346,307	103,135	18,055	(c)40,389	50,187

(a) Partly estimated.   (b) Excludes details of submarine cable, morse cable and junction circuits.   (c) After 1953-54, "conduits" cover only ducts and conduits of 2 inches and over internal diameter—prior to that those of diameters under 2 inches were also included.

NOTE. Although there have been several minor changes in the definition of items covered under each column heading, comparability over the last fifty years is not seriously affected. Prior to 1914, the reliability of "comparable" items is doubtful and for this reason, the figures above are more restricted in coverage before 1914.

TELEPHONE PLANT, AUSTRALIA, 1872 TO 1971-72
(number)

Year	Exchanges in service			Services in operation			Instruments in service
	Automatic	Manual	Total	Automatic (a)	Manual (a)	Total (a)	
1872 . . .	. .	. .	.	. .	. .	. .	. .
1882 . . .	.	(b)10	(b)10	. .	n.a.	n.a.	n.a.
1892 . . .	. .	(b)40	(b)40	. .	(b)7,000	(b)7,000	n.a.
1902 . . .	. .	123	123	. .	27,713	27,713	35,863
1912 . . .	1	1,031	1,032	1,100	94,865	95,965	117,479
1921-22 . .	20	2,683	2,703	35,000	160,886	195,886	258,881
1931-32 . .	66	6,003	6,069	141,575	221,997	363,572	484,626
1941-42 . .	265	6,118	6,383	307,263	223,812	531,075	738,666
1951-52 . .	656	6,334	6,990	600,536	338,433	938,789	1,300,790
1961-62 . .	1,949	5,107	7,056	1,353,347	365,222	1,718,569	2,382,478
1971-72 . .	3,443	2,536	5,979	2,771,949	205,818	2,977,767	4,399,782

(a) Described as "lines in service" as distinct from "services in operation" though the terms appear to be interchangeable up to 1941-42. From then on, the term "services in operation" only has been used.   (b) Partly estimated.

INTERNAL TELEGRAM AND TELEX TRAFFIC, AUSTRALIA, 1872 TO 1971-72

Year	Telegrams		Telex	
	Number of offices(a)	Total	Services at end of year	Internal calls during year
		'000		'000
1872	(b)380	(b)1,200	. .	. .
1882	(b)1,140	(b)5,000	. .	. .
1892	(b)2,360	(b)18,000	. .	. .
1902	2,589	8,010	. .	. .
1912	4,180	13,343	. .	. .
1921-22	6,641	15,796	. .	. .
1931-32	9,225	12,680	. .	. .
1941-42	9,479	23,662	. .	. .
1951-52	9,830	27,080	. .	. .
1961-62	9,329	18,739	1,215	733
1971-72	(b)7,200	17,735	9,235	15,869

(a) Includes Railways Departments' telegraph offices.   (b) Partly estimated.

INTERNAL TELEPHONE TRAFFIC, AUSTRALIA, 1872 TO 1971-72

Year	Effective paid local calls		Trunk line calls		
	Total	Per service number	Total	Per service number	Total calls
	'000		'000		'000
1872	..	..	..	..	..
1882	n.a.	n.a.	n.a.	n.a.	n.a.
1892	n.a.	n.a.	n.a.	n.a.	7,500
1902	n.a.	n.a.	n.a.	n.a.	n.a.
1912	n.a.	n.a.	n.a.	n.a.	111,300
1921-22	220,600	1,126	14,000	71	234,600
1931-32	368,600	1,014	28,900	80	397,500
1941-42	619,000	1,166	45,300	85	664,300
1951-52	967,900	1,031	69,400	74	1,037,300
1961-62	1,650,000	960	76,500	45	1,726,500
1971-72	2,996,000	1,006	248,700	84	3,244,700

INTERNATIONAL TELEGRAM TRAFFIC, AUSTRALIA, 1872 TO 1971-72

Year	Telegrams			
	Outgoing	Outgoing	Incoming	Incoming
	'000	'000 paid words	'000	'000 paid words
1872	1	n.a.	1	n.a.
1882	19	n.a.	20	n.a.
1892	44	n.a.	44	n.a.
1902	161	n.a.	127	n.a.
1912	298	3,607	289	3,752
1921-22	500	8,163	499	8,200
1931-32	611	11,702	564	10,769
1941-42	1,329	35,408	1,146	34,213
1951-52	1,329	37,496	1,357	42,159
1961-62	1,435	35,502	1,416	41,394
1971-72(a)	2,489	64,862	2,353	58,113

(a) Year ended 31 March 1972.

INTERNATIONAL TELEPHONE AND TELEX TRAFFIC, AUSTRALIA, 1872 TO 1971-72

Year	Telephone				Telex			
	Outgoing calls		Incoming calls		Outgoing calls		Incoming calls	
	'000	'000 paid minutes	'000	'000 paid minutes	'000	'000 paid minutes	'000	'000 paid minutes
1872	..	..	..	..	..	..	..	..
1882	..	..	..	..	..	..	..	..
1892	..	..	..	..	..	..	..	..
1902	..	..	..	..	..	..	..	..
1912	..	..	..	..	..	..	..	..
1921-22	..	..	..	..	..	..	..	..
1931-32	1	n.a.	..	n.a.	..	..	..	..
1941-42	n.a.	n.a.	n.a.	n.a.	..	..	..	..
1951-52	21	124	19	114	..	..	..	..
1961-62	66	319	69	366	50	342	60	371
1971-72(a)	1,072	7,206	n.a.	7,090	1,491	4,238	1,352	4,108

(a) Year ended 31 March 1973.

Overseas telecommunication services

The Overseas Telecommunications Commission (Australia) (O.T.C.) 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 Australia's external Territories.

The Commission was established under the *Overseas Telecommunications Act* 1946. This Act implemented, in Australia, a recommendation of the 1945 Commonwealth Telecommunications Conference for national ownership of the external telecommunications services of the British Commonwealth countries concerned. (Details of overseas communication systems operating in Australia prior to 1946 and developments leading to the establishment of the Commission were published in Year Book No. 37, pages 220–4.)

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 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 purpose of the Organisation and carrying out the policies agreed 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 Commonwealth Telecommunications Organisation in the light of experience and recommended new collaborative financial arrangements governing the use of the Commonwealth telecommunications systems. With the adoption of the recommendations of the 1972 Conference by member Governments, the Commonwealth Telecommunications Organisation Financial Agreement 1969 was replaced on 1 April 1973 by the Commonwealth Telecommunications Organisation Financial Agreement 1973.

In association with the Post Office within Australia and with communication carriers in other Commonwealth and foreign countries the Commission provides public message telegram, telephone, telex, phototelegram, leased circuit and switched data services to most countries and places throughout the world. International television programs are provided by means of satellite communication facilities with countries operating earth stations, while the switched data service is available to a number of countries.

To meet Australia's increasing demand for overseas communication channels, and because of limitations to performance and capacity inherent in telegraph cables and high frequency radio systems, the Commission, in partnership with the overseas telecommunications authorities of Britain, Canada and New Zealand, installed a large capacity telephone cable across the Pacific Ocean, connecting Australia, New Zealand and Canada via Suva and Honolulu. The cable (COMPAC) was opened in December 1963 and forms part of a British Commonwealth large capacity cable scheme, in which a complementary cable between Britain and Canada (CANTAT) was officially opened in December 1961. The two cable connections are linked across Canada by a microwave system. The Commonwealth cable system feeds into the United States of America network at Hawaii and into the European network at London.

The South-East Asia cable project (SEACOM), extending the large capacity telephone cable system from Sydney to Singapore and Kuala Lumpur via Cairns, Madang, Guam, Hong Kong, and Kota Kinabalu, was opened for service on 30 March 1967.

The Commonwealth Cable Management Committee, comprising representatives of Britain, Canada, Australia, New Zealand, Malaysia and Singapore, administers COMPAC and SEACOM.

In August 1964, Australia became a foundation member of the International Satellite Organisation (INTELSAT), a partnership of nations concerned in establishing a global communications, satellite system. Australia has an ownership share of 2.7 per cent making it the ninth largest contributor among the 82 INTELSAT member countries, and through the O.T.C. Australia is represented on the INTELSAT board of governors, which is the management board of INTELSAT.

The Interim Agreements under which INTELSAT has 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 Australian Government, outlines the principles and objectives of the organisation and defines the basic organisational arrangements. The second, the Operating Agreement, signed by the O.T.C. 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 Atlantic, Pacific and Indian oceans. At the beginning of 1973 these satellites were providing the equivalent of 3,763 two-way telephone circuits and on demand television service between 81 earth stations located in 49 countries.

In March, 1968, a satellite earth station at Moree, New South Wales, owned and operated by the Commission, commenced commercial communications, including a capability for television transmission/reception. This station, which operates to the Pacific Ocean INTELSAT satellite positioned in a stationary orbit 22,300 miles above the equator, was the first in Australia constructed as a 'standard' station of the INTELSAT network, and carries direct circuits between Australia and other countries in the Pacific region. The link with Japan, the first by satellite from Australia to an Asian country, was established for commercial operation on 14 March, 1969.

The completion of the new standard earth stations at Carnarvon (Western Australia) and Ceduna (South Australia) in 1969 and a significant expansion of facilities at the earth station at Moree (N.S.W.) provided increased telecommunication services via satellite.

The original non-standard station in Carnarvon (opened in 1967) is now used solely for telemetry, tracking and command (T.T. & C.) functions under contract with the INTELSAT organisation. The T.T. & C. 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. During launches, these stations transmit the commands which fire the satellite motor to place it in final orbit. The Interim Communications Satellite Committee selected the Carnarvon station for this purpose after calling competitive tenders from earth station owners in the coverage zone of the Indian Ocean and Pacific Ocean satellites.

The second Carnarvon station, operating via the Pacific Ocean INTELSAT satellite, provides a link for the National Aeronautics and Space Administration (NASA) between its Carnarvon space tracking stations and the United States. The earth station at Ceduna, operated through the Indian Ocean INTELSAT satellite, offers services to earth stations in the United Kingdom, Indonesia, India and other countries in the coverage area of the Indian Ocean satellite.

International telecommunication traffic

Particulars of the volume of international telegraph services, originating and terminating in Australia, during the years ended 31 March 1971 and 1972 are shown in the following table.

**INTERNATIONAL TELEGRAPH SERVICES: AUSTRALIA, YEARS ENDED
31 MARCH 1971 AND 1972**

('000 words)

Class of traffic	Words transmitted					
	From Australia		To Australia		Total	
	1970–71	1971–72	1970–71	1971–72	1970–71	1971–72
Letter . . .	30,205	30,004	26,553	24,684	56,758	54,688
Ordinary . . .	28,841	27,528	26,851	25,344	55,692	52,872
Press . . .	3,786	3,004	4,315	2,687	8,102	5,691
Greetings . . .	1,607	1,689	1,731	1,919	3,338	3,607
Urgent . . .	1,891	1,907	1,540	1,485	3,431	3,392
Other . . .	574	731	1,697	1,995	2,271	2,726
Total . .	**66,905**	**64,862**	**62,687**	**58,113**	**129,592**	**122,976**

The following table shows particulars of overseas telecommunication traffic other than telegraphic between Australia and overseas countries for the years ended 31 March 1971 and 1972.

INTERNATIONAL TELECOMMUNICATION SERVICES OTHER THAN TELEGRAPHIC SERVICES: AUSTRALIA, YEARS ENDED 31 MARCH 1971 AND 1972

| | | Transmissions | | | | | |
| | | From Australia | | To Australia | | Total | |
Service		1970-71	1971-72	1970-71	1971-72	1970-71	1971-72
Telephone. . .	paid minutes	5,754,134	7,205,822	6,369,815	7,089,960	12,123,949	14,295,782
Telex . . .	paid minutes	3,608,420	4,238,247	3,301,077	4,108,174	6,909,497	8,346,421
Television programs .	paid minutes	1,952	2,058	2,580	1,809	4,532	3,867
Phototelegrams . .	pictures	1,759	1,020	2,760	1,816	4,519	2,836

Coastal stations

The Overseas Telecommunications Commission operates fourteen coastal radio stations at points around the Australian coast, three on the Papua New Guinea coast and one at Norfolk Island. During the year ended 31 March 1972 the coastal radio service handled 6,345,837 paid words to ships and 4,212,574 words from ships. Ship calls over the radiotelephone service extended over 143,687 paid minutes.

Radiocommunication stations authorised

At 30 June 1972 there were 165,063 civil radiocommunication stations authorised for operation in the Commonwealth and its Territories. Of these, 6,368 were stations established at fixed locations, 13,809 were land stations which were established at fixed locations for communication with mobile stations, 25 space and broadcasting stations, 138,339 were mobile stations and 6,522 amateur stations. Particulars of broadcasting stations and broadcast listeners' licences are shown on pages 388 and 390 respectively.

BROADCASTING AND TELEVISION

Broadcasting and television services in Australia operate under the *Broadcasting and Television Act* 1942-1972 and comprise the National Broadcasting Service, the National Television Service, the Commercial Broadcasting Service, and the Commercial Television Service. General control of these services is a function of the Australian Broadcasting Control Board. Licence fees for commercial broadcasting and television stations are payable under the *Broadcasting Stations Licence Fees Act* 1964-1966 and the *Television Stations Licence Fees Act* 1964-1966 respectively.

Particulars of the composition, functions and responsibilities of the Australian Broadcasting Control Board are shown in Year Book No. 51, pages 594-5. The functions of the Board as shown therein were subsequently amended by repealing the Board's power to regulate the establishment and operation of networks. Pursuant to the *Broadcasting and Television Act* 1942-1972, the Australian Broadcasting Commission now consists of nine members, one of whom shall be a woman.

Broadcasting services

The National Broadcasting Service

In sound broadcasting the programs of the National Broadcasting Service are provided by the Australian Broadcasting Commission through transmitters operated by the Postmaster-General's Department.

Technical facilities. At 30 June 1972 the National Broadcasting Service comprised eighty-one transmitting stations, of which seventy-five were medium frequency and six high frequency.

The medium-frequency transmitters operate in the broadcast band 530 to 1,590 kilohertz. The high-frequency stations, using frequencies within the band of three to thirty megahertz, provide services to listeners in sparsely populated parts of Australia such as the north-west of Western Australia, the Northern Territory, and northern and central Queensland.

Many of the programs provided by country stations are relayed from the capital cities, high-quality program transmission lines being used for the purpose. A number of program channels are utilised to link national broadcasting stations in the capital cities of Australia, and, when necessary, this system is extended to connect both the national and commercial broadcasting stations.

At 30 June 1972 sixty-three of the Australian medium-frequency stations were situated outside the six State capital cities.

Program facilities. The programs of the Australian Broadcasting Commission cover a wide range of activities. The proportion of broadcasting time allocated to the various types of program during 1971–72 was as follows: classical music, 24.6 per cent; entertainment, 31.4 per cent; news, 9.0 per cent; sporting, 5.5 per cent; light music, 1.7 per cent; spoken word, 6.9 per cent; drama and features, 4.3 per cent; education, 3.2 per cent; Parliament, 4.7 per cent; religious, 2.8 per cent; young people's programs, 1.4 per cent; rural, 2.0 per cent; and presentation, 1.8 per cent. Further particulars of the operations of the Australian Broadcasting Commission in respect of music, drama and features, youth education, talks, rural broadcasts, news, and other activities are shown in Year Book No. 51, pages 596–7.

The Commercial Broadcasting Service

Commercial broadcasting stations are operated under licences granted and renewed by the Postmaster-General after taking into consideration any recommendations which have been made by the Broadcasting Control Board. The initial period of a licence is five years and renewals are granted for a period of one year. The fee payable for a licence is $50 on the grant of the licence, and thereafter $50 a year plus an amount ascertained by applying the following rates to 'gross earnings', within the meaning of the *Broadcasting Stations Licence Fees Act* 1964–1966, during the preceding financial year—1 per cent up to $1,000,000; 2 per cent $1,000,001 to $2,000,000; 3 per cent $2,000,001 to $4,000,000; and 4 per cent over $4,000,000.

Overseas Broadcasting Service

There are seven high-frequency stations at Shepparton and two at Lyndhurst, Victoria, and three repeater stations at Darwin, Northern Territory, which provide the overseas service known as 'Radio Australia'. As in the case of the National Broadcasting Service, these stations are maintained and operated by the Postmaster-General's Department, and their programs are arranged by the A.B.C. The programs, which give news and information about Australia presented objectively, as well as entertainment, are directed mainly to South-East Asia and the Pacific. The overseas audience has grown very substantially in recent years, as evidenced by a large and increasing number of letters from listeners abroad.

Broadcasting stations

BROADCASTING STATIONS: STATES AND TERRITORIES, 30 JUNE 1972

Type of station	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
National—									
Medium frequency .	19	5	17	10	14	4	4	2	75
High frequency .	1	2	2	..	1	..	..	..	6
Overseas (high frequency) . .	..	9	..	..	..	..	3	..	12
Commercial (medium frequency) . .	39	20	26	8	14	8	2	1	118
Total . .	59	36	45	18	29	12	9	3	211

Tables showing the call sign, location, frequency, and aerial power of national and commercial broadcasting stations in operation at 30 June 1971 are shown in *Transport and Communication*, Bulletin No. 62.

Television services

The National Television Service

The National Television Service is provided by the Australian Broadcasting Commission through transmitters operated by the Postmaster-General's Department. The first national station (ABN Sydney) commenced regular transmission on 5 November 1956. At 30 June 1972 fifty-two stations were operating, excluding thirty-eight translator stations.

The television programs provided by the Australian Broadcasting Commission cover a wide range of activities. The proportion of television time allocated among the A.B.C.'s various departments to 30 June 1972 was as follows: drama, 23.7 per cent; public interest, 12.0 per cent; sporting 10.5 per cent; news, 5.9 per cent; variety and acts, 7.2 per cent; education, 27.4 per cent; musical performances 0.4 per cent; religious, 1.7 per cent; rural, 1.0 per cent; special arts and aesthetics, 0.5 per cent; presentation, 6.0 per cent. The average weekly transmission time for the fifty-two national television transmitters was eighty-five hours during the year ended 30 June 1972.

The Commercial Television Service

Commercial television stations are operated under licences granted and renewed by the Postmaster-General. The first commercial station (TCN Sydney) commenced regular transmission on 16 September 1956. At 30 June 1972 forty-eight television stations were operating.

The initial grant of a licence is for a period of five years and thereafter the licence is renewable annually. The fee payable is $200 for the first year and thereafter $200 a year plus an amount ascertained by applying the following rates to 'gross earnings', within the meaning of the *Television Stations Licence Fees Act* 1964–1966, during the preceding financial year—1 per cent up to $1,000,000; 2 per cent $1,000,001 to $2,000,000; 3 per cent $2,000,001 to $4,000,000; and 4 per cent over $4,000,000.

Colour television

The Government has announced that colour television will be introduced into Australia from 1 March 1975.

Television stations

During the year ended 30 June 1972, four new national television stations commenced regular transmissions, namely ABMQ Channel 9, Mary Kathleen in Queensland. ABCNW Channel 7, Carnarvon in Western Australia, ABKT Channel 11, King Island in Tasmania and ABD Channel 6, Darwin in Northern Territory. Two new commercial television stations commenced regular transmission, ITQ Channel 8, Mt Isa in Queensland and NTD Channel 8, Darwin in the Northern Territory. The following table shows the number of television stations in operation at 30 June 1972.

TELEVISION STATIONS: STATES AND TERRITORIES
30 JUNE 1972

Type of station and location	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Total
National—									
Metropolitan	1	1	1	1	1	1	1	1	8
Country	12	7	13	3	7	2	..	..	44
Total, National	*13*	*8*	*14*	*4*	*8*	*3*	*1*	*1*	*52*
Commercial—									
Metropolitan	3	3	3	3	2	1	1	1	17
Country	11	6	8	2	3	1	..	..	31
Total, Commercial	*14*	*9*	*11*	*5*	*5*	*2*	*1*	*1*	*48*
All stations	27	17	25	9	13	5	2	2	100

Tables showing the call sign, location, frequencies, polarisation, aerial power, and weekly hours of transmission of National and Commercial television stations in operation at 30 June 1971 are shown in *Transport and Communication* Bulletin. No. 62.

Broadcast listeners' and television viewers' licences

Broadcast listeners', television viewers', and combined receiving licences are issued at post offices in accordance with the provisions of the *Broadcasting and Television Act* 1942–1972, which stipulates that, except as prescribed, a person shall not use, maintain or have in his possession a broadcast or television receiver unless there is in force a licence which applies to that receiver. A broadcast listener's licence or a television viewer's licence, whichever is appropriate, authorises the operation of any broadcast receiver or any television receiver, which is: (*a*) in the possession of the holder of a licence, or of a member of his family, at the address specified in the licence and is ordinarily kept at that address; (*b*) installed in a vehicle which is ordinarily in the possession of that holder, or a member of his family, and is ordinarily kept at that address when not in use. A person who has both broadcast and television receivers at the one address may take out a combined receiving licence, provision for which was introduced by legislation effective from 1 April 1965.

A licence may be granted free of charge to a blind person over 16 years of age or to a person or authority conducting a school, and at a concession to certain classes of pensioners. Receivers provided for the use of inmates of an approved institution (including a hospital) are covered by an appropriate licence held by the institution. Persons residing in Zone 2 may also be granted a broadcast listener's licence at a reduced rate. Zone 1 is the area within 250 miles of specified broadcasting stations and Zone 2 is the remainder of Australia.

Each *broadcast or television receiver let out on hire* (except under a hire purchase agreement) must be covered by a hirer's licence held by the person or firm from whom the receiver is hired. The keeper of a lodging-house (which includes a hotel, motel, boarding-house, or any other premises where lodging or sleeping accommodation is provided for reward) must take out a lodging-house licence for each broadcast or television receiver provided by the proprietor in any room or part of the lodging-house occupied or available for occupation by lodgers.

The fees payable for the various classes of licence from 1 October 1972 are as follows.

BROADCAST LISTENERS' AND TELEVISION VIEWERS' LICENCES
RATES

Licence		Ordinary rate	Pensioner rate
		$	$
Broadcast listener's licence and hirer's licence for			
a broadcast receiver	Zone 1	8.00	1.00
	Zone 2	4.25	0.70
Lodging-house licence for a broadcast receiver .	Zone 1	8.00	..
	Zone 2	4.25	..
Television viewer's licence and hirer's licence for			
a television receiver		19.00	3.00
Lodging house licence for a television receiver . . .		19.00	..
Combined receiving licence		26.50	4.00

Numbers of broadcast listeners' and television viewers' licences

BROADCAST LISTENERS' LICENCES IN FORCE(*a*): STATES, 1968 TO 1972

30 June—			N.S.W.(*b*)	Vic.	Qld	S.A.(*c*)	W.A.	Tas.	Aust.
1968 .	.	.	934,877	724,711	371,637	290,051	181,356	77,228	2,579,860
1969 .	.	.	952,634	728,647	382,869	297,877	189,633	78,552	2,630,212
1970 .	.	.	960,223	747,508	384,951	302,519	196,679	78,513	2,670,393
1971 .	.	.	959,036	754,762	394,669	310,485	200,570	79,417	2,698,939
1972 .	.	.	996,822	758,042	405,181	315,612	205,230	77,096	2,757,983

(*a*) Includes short-term hirers' licences and combined broadcast listeners' and television viewers' licences.　(*b*) Includes Australian Capital Territory.　(*c*) Includes Northern Territory.

TELEVISION VIEWERS' LICENCES IN FORCE(a): STATES, 1968 TO 1972

30 June—	N.S.W.(b)	Vic.	Qld	S.A.(c)	W.A.	Tas.	Aust.
1968 .	948,153	726,518	335,913	268,595	165,632	74,581	2,519,392
1969 .	993,145	747,080	367,289	280,420	183,307	78,216	2,649,457
1970 .	1,031,739	782,819	372,609	292,359	197,692	80,756	2,757,974
1971 .	1,042,724	806,077	399,947	303,252	209,882	83,286	2,845,168
1972 .	1,088,648	811,573	418,688	318,357	218,783	82,609	2,938,658

(a) Includes short-term hirers' licences and combined broadcast listeners' and television viewers' licences. (b) Includes Australian Capital Territory. (c) Includes Northern Territory.

The numbers of combined receiving licences included in both of the foregoing tables as at 30 June 1972 are: New South Wales, 891,832; Victoria, 699,652; Queensland, 335,199; South Australia 248,820; Western Australia, 174,798; Tasmania, 69,613; Australia, 2,419,914.

Television hirers' licences (including short term) (included above) at 30 June 1972 were: New South Wales, 104,704; Victoria, 38,845; Queensland, 41,956; South Australia, 49,553; Western Australia, 29,655; Tasmania, 6,411; Australia, 271,124.

Revenue received from broadcast and television licence fees

The following table shows the revenue received from broadcast listeners' licence fees, television viewers' licence fees and from fees for combined licences during the years 1967-68 to 1971-72.

REVENUE RECEIVED FROM BROADCAST AND TELEVISION LICENCE FEES STATES, 1967-68 TO 1971-72
($'000)

Year	N.S.W.(a)	Vic.	Qld	S.A.(b)	W.A.	Tas.	Aust.
1967–68 . .	14,554	11,265	5,321	4,219	2,666	1,157	39,182
1968–69 . .	16,700	12,747	6,306	4,930	3,127	1,314	45,125
1969–70 . .	17,782	13,795	6,694	5,238	3,483	1,397	48,389
1970–71 . .	17,912	14,023	6,921	5,586	3,689	1,429	49,562
1971–72 . .	22,445	17,165	8,807	7,057	6,642	1,670	61,785

(a) Includes Australian Capital Territory. (b) Includes Northern Territory.

TRAVEL

An article outlining the history and growth of travel and the structure of tourist organisations in Australia, prepared by the Australian National Travel Association, appeared in Year Book No. 52, pages 1158–84. The following pages contain statistics of travel to and from Australia, together with some descriptive matter. Current statistics on overseas travel are published in monthly, quarterly and annual mimeographed statements *Overseas Arrivals and Departures.*

Overseas travel

Statistics about travellers to and from Australia are classified in the first instance by the actual or intended length of stay in Australia or in a country abroad; this classification distinguishes between permanent and temporary movement.

Statistics of permanent arrivals (immigrants) and permanent departures (emigrants) are shown in Chapter 7—Population.

Traveller statistics (overseas visitors and Australian residents)

Statistics of temporary arrivals and departures which are in the nature of travel statistics are included in this chapter. They comprise two main categories.

(i) *Short-term.* Those who intend to stay or have stayed in Australia (overseas visitors) or in a country overseas (Australian residents) for less than a year.

(ii) *Long-term.* Those who intend to stay or have stayed in Australia (overseas visitors) or in a country overseas (Australian residents) for a year or more, but not permanently.

Short-term movement includes Australian troops, regardless of their length of stay abroad, and Australian residents who may be away for more than a year but whose actual or intended stay in any one country is less than a year. It excludes persons who arrive in and depart from Australia on the same ship's voyage or on the same flight (variously called direct transit or 'through' passengers) or who change flights without leaving the airport's transit area, passengers on pleasure cruises commencing and finishing in Australia (*see* page 397), and all crew. However, it includes persons who pass through the Customs barrier and declare the purpose of their visit to Australia to be 'in transit'. Short-term visitors are more numerous than long-term visitors and have come to be regarded as 'tourists' by many users of the statistics.

During the period October 1967 to December 1971, 276,885 United States troops came to Australia on rest and recreation leave. The last of them completed their leave in January 1972. For statistical purposes they were classified as short-term visitors travelling by air for holiday purposes and their country of residence and country of embarkation or disembarkation were shown as 'Asia—other'.

TRAVELLER STATISTICS—SUMMARY, AUSTRALIA
1968 TO 1972

| | Overseas Visitors | | | | Australian Residents | | | |
| | Short-term | | Long-term | | Short-term | | Long-term | |
Year	Arriving in Australia	Departing from Australia	Arriving in Australia	Departing from Australia	Departing from Australia	Returning to Australia	Departing from Australia	Returning to Australia
1968 . . .	299,889	311,181	23,473	12,617	251,880	252,773	51,386	36,387
1969 . . .	361,277	372,747	26,867	15,602	288,805	288,990	59,027	38,308
1970 . . .	416,128	431,039	31,194	18,727	352,526	351,929	64,215	42,099
1971 . . .	432,393	450,022	30,500	21,433	413,917	412,598	67,699	47,782
1972 . . .	426,403	441,320	26,559	24,251	504,519	490,962	66,853	54,278

In addition to the basic classification of travellers shown above, certain other characteristics are ascertained. These characteristics are as follows.

(i) For all travellers: sex, age, marital status, nationality, country of birth, occupation, intended and actual length of stay, purpose of journey and mode of transport.

(ii) For arrivals: country of last residence, country of embarkation, State of intended residence and State of disembarkation.

(iii) For departures: country of intended residence, country of disembarkation, State of residence in Australia and State of embarkation.

The categories shown in the previous table are cross-classified by the characteristics listed above and the resulting statistics are shown in considerable detail in the quarterly and annual bulletins *Overseas Arrivals and Departures* (4.1 and 4.23) and in the annual bulletin *Demography* (4.9). Certain unpublished information is available on request. Selected traveller statistics are shown in the following tables.

OVERSEAS VISITORS ARRIVING AND AUSTRALIAN RESIDENTS DEPARTING TEMPORARILY
BY MARITAL STATUS, AGE AND SEX: AUSTRALIA, 1972

| Characteristics | Short-term | | | Long-term | | |
	Males	Females	Persons	Males	Females	Persons
	OVERSEAS VISITORS ARRIVING					
Marital status						
Never married . . .	73,679	58,647	132,326	9,507	6,778	16,285
Married	158,536	101,100	259,636	4,864	4,130	8,994
Widowed or divorced .	9,686	24,755	34,441	392	888	1,280
Age (years)						
0–14	19,625	18,987	38,612	2,045	2,000	4,045
15–24	28,792	26,881	55,673	6,488	4,932	11,420
25–44	100,333	53,036	153,369	4,943	3,082	8,025
45–64	73,221	61,561	134,782	969	1,196	2,165
65 and over. . . .	19,930	24,037	43,967	318	586	904
Total	**241,901**	**184,502**	**426,403**	**14,763**	**11,796**	**26,559**

OVERSEAS VISITORS ARRIVING AND AUSTRALIAN RESIDENTS DEPARTING TEMPORARILY, BY MARITAL STATUS, AGE AND SEX: AUSTRALIA, 1972—*continued*

Characteristics	Short-term			Long-term		
	Males	Females	Persons	Males	Females	Persons
AUSTRALIAN RESIDENTS DEPARTING TEMPORARILY						
Marital status—						
Never married	92,353	80,008	172,361	19,979	18,445	38,424
Married	172,978	127,794	300,772	12,980	13,591	26,571
Widowed or divorced	8,203	23,183	31,386	586	1,272	1,858
Age (years)—						
0–14	29,624	28,515	58,139	7,684	7,401	15,085
15–24	36,446	42,245	78,691	8,333	11,770	20,103
25–44	112,586	71,200	183,786	14,078	10,853	24,931
45–64	79,144	70,796	149,940	2,920	2,631	5,551
65 and over	15,734	18,229	33,963	530	653	1,183
Total	273,534	230,985	504,519	33,545	33,308	66,853

The following tables show country of residence of visitors arriving (i.e. in which they last stayed for one year or more); and country of disembarkation of Australian residents departing. No information is available as to the country in which Australian residents going abroad in the short-term classification intend to spend most time.

OVERSEAS VISITORS ARRIVING, BY COUNTRY OF RESIDENCE(a) AND MODE OF TRANSPORT: AUSTRALIA, 1972

Country of residence(a)	Short-term			Long-term		
	By sea	By air	Total	By sea	By air	Total
Africa—						
Commonwealth countries	315	2,250	2,565	37	189	226
South Africa	1,204	4,179	5,383	318	164	482
Other	24	863	887	10	120	130
America—						
Canada	987	13,750	14,737	374	1,081	1,455
Other Commonwealth countries	23	651	674	2	33	35
United States of America	1,459	76,368	77,827	142	4,031	4,173
Other	31	2,617	2,648	8	219	227
Asia—						
Bangladesh, India, Pakistan, Sri Lanka	24	3,053	3,077	5	395	400
Hong Kong	313	7,510	7,823	2	210	212
Malaysia and Singapore	654	13,062	13,716	41	1,190	1,231
Other Commonwealth countries	22	482	504	3	73	76
Japan	408	14,927	15,335	14	981	995
Other	84	17,025	17,109	21	1,575	1,596
Europe—						
United Kingdom and Ireland	5,933	51,515	57,448	1,300	2,955	4,255
Other Commonwealth countries	99	797	896	10	59	69
France	119	3,681	3,800	17	184	201
Germany	219	7,998	8,217	58	218	276
Greece	21	1,893	1,914	3	303	306
Italy	129	4,649	4,778	16	294	310
Netherlands	397	7,243	7,640	51	128	179
Other	322	10,851	11,173	66	1,103	1,169
Oceania—						
Fiji	299	5,374	5,673	13	141	154
New Zealand	3,523	107,645	111,168	1,387	6,301	7,688
Papua New Guinea	976	35,028	36,004	13	454	467
Other Commonwealth countries	541	2,918	3,459	11	119	130
Other	57	11,891	11,948	4	113	117
Total	18,183	408,220	426,403	3,926	22,633	26,559

(a) Country in which the visitor was last resident for a period of one year or more.

AUSTRALIAN RESIDENTS DEPARTING TEMPORARILY, BY COUNTRY OF DISEMBARKATION(a) AND MODE OF TRANSPORT: AUSTRALIA, 1972

Country of disembarkation(a)	Short-term			Long-term		
	By sea	By air	Total	By sea	By air	Total
Africa—						
Commonwealth countries . .	11	1,681	1,692	4	263	267
South Africa	699	5,069	5,768	777	657	1,434
Other	31	12	43	60	3	63
America—						
Canada	798	1,606	2,404	120	168	288
Other Commonwealth countries .	6	66	72	14	5	19
United States of America—ex-						
cluding Hawaii . . .	1,111	20,831	21,942	357	1,617	1,974
Hawaii	111	16,062	16,173	17	1,263	1,280
Other	345	1,083	1,428	366	81	447
Asia—						
Bangladesh, India, Pakistan, Sri						
Lanka	27	2,782	2,809	3	343	346
Hong Kong	946	43,199	44,145	38	3,862	3,900
Malaysia and Singapore .	8,910	58,789	67,699	2,682	11,471	14,153
Other Commonwealth countries .	..	379	379	..	63	63
Japan	4,621	2,695	7,316	92	154	246
Other	111	30,361	30,472	18	3,814	3,832
Europe—						
United Kingdom and Ireland .	9,042	34,870	43,912	5,599	3,925	9,524
Other Commonwealth countries .	156	1,320	1,476	153	102	255
Greece	235	14,398	14,633	356	4,227	4,583
Italy	4,176	18,452	22,628	3,069	2,214	5,283
Netherlands	576	6,467	7,043	603	512	1,115
Other	861	17,541	18,402	644	2,924	3,568
Oceania—						
Fiji	644	33,463	34,107	65	921	986
New Zealand	3,820	109,688	113,508	1,232	4,420	5,652
Papua New Guinea . . .	399	28,519	28,918	74	6,727	6,801
Other Commonwealth countries .	288	8,331	8,619	121	191	312
Other	459	8,472	8,931	6	456	462
Total	**38,383**	**466,136**	**504,519**	**16,470**	**50,383**	**66,853**

(a) Refers to the intended country of disembarkation from the particular ship or aircraft which takes the passenger from Australia.

OVERSEAS VISITORS ARRIVING AND AUSTRALIAN RESIDENTS DEPARTING TEMPORARILY BY STATED PURPOSE OF JOURNEY AND SEX: AUSTRALIA, 1972

Purpose of journey	Short-term			Long-term		
	Males	Females	Persons	Males	Females	Persons
OVERSEAS VISITORS ARRIVING						
In transit	47,712	29,880	77,592	..	..	..
Business	62,496	6,734	69,230	1,923	769	2,692
Holiday	109,632	135,368	245,000	3,253	3,546	6,799
Education	8,756	4,403	13,159	2,232	1,442	3,674
Other and not stated . . .	13,305	8,117	21,422	7,355	6,039	13,394
Total	**241,901**	**184,502**	**426,403**	**14,763**	**11,796**	**26,559**
AUSTRALIAN RESIDENTS DEPARTING TEMPORARILY						
Business	73,069	9,559	82,628	6,475	3,761	10,236
Holiday	176,335	209,472	385,807	17,446	18,620	36,066
Education	4,969	3,070	8,039	2,232	1,623	3,855
Other and not stated . . .	19,161	8,884	28,045	7,392	9,304	16,696
Total	**273,534**	**230,985**	**504,519**	**33,545**	**33,308**	**66,853**

Short-term travel

Information about the countries of residence of short-term visitors, the countries of disembarkation of Australian residents travelling overseas in the short-term, and intended lengths of stay, are of particular interest to the tourist industry.

OVERSEAS VISITORS ARRIVING BY COUNTRY OF RESIDENCE AND INTENDED LENGTH OF STAY AND AUSTRALIAN RESIDENTS DEPARTING BY COUNTRY OF DISEMBARKATION AND INTENDED LENGTH OF STAY: AUSTRALIA, 1972

Country of residence (visitors) and country of disembarkation (residents)	Overseas visitors arriving—intended length of stay						Australian residents departing—intended length of stay					
	Under 1 week	1 week and under 1 month	1 month and under 3 months	3 months and under 12 months	Indefinite, not stated etc.	Total	Under 1 week	1 week and under 1 month	1 month and under 3 months	3 months and under 12 months	Indefinite, not stated etc.	Total
Africa—												
Commonwealth countries	719	562	628	439	217	2,565	23	242	697	640	90	1,692
South Africa	1,666	1,471	1,133	756	357	5,383	25	840	2,434	2,052	417	5,768
Other	303	208	155	156	65	887	..	2	11	26	4	43
America—												
Canada	2,169	7,069	3,085	1,621	793	14,737	10	468	980	769	177	2,404
Other Commonwealth countries	132	280	164	68	30	674		19	33	14	6	72
United States of America—												
excluding Hawaii	} 24,628	39,566	7,943	3,685	2,005	77,827	{ 272	6,198	8,545	5,340	1,587	21,942
Hawaii							459	5,826	6,541	2,409	938	16,173
Other	628	978	438	410	194	2,648	8	270	559	428	163	1,428
Asia—												
Bangladesh, India, Pakistan, Sri Lanka	845	869	552	504	307	3,077	32	480	996	1,119	182	2,809
Hong Kong	2,135	2,627	1,714	772	575	7,823	1,713	7,569	17,702	14,535	2,626	44,145
Malaysia and Singapore	2,727	3,964	2,935	2,628	1,462	13,716	2,331	22,329	19,694	16,985	6,360	67,699
Other Commonwealth countries	116	98	197	47	46	504	..	8	44	266	61	379
Japan	6,064	5,944	1,529	841	957	15,335	97	1,369	4,978	515	357	7,316
Other	5,894	5,019	3,023	2,018	1,155	17,109	1,277	8,833	8,567	9,033	2,762	30,472
Europe—												
United Kingdom and Ireland	10,927	13,359	15,778	12,857	4,527	57,448	67	3,448	17,936	19,514	2,947	43,912
Other Commonwealth countries	95	108	219	418	56	896	..	4	59	1,320	93	1,476
Greece	246	212	215	1,018	223	1,914	17	453	2,268	9,964	1,931	14,633
Italy	914	869	1,034	1,555	406	4,778	29	859	4,543	14,269	2,928	22,628
Netherlands	1,539	1,165	1,939	2,078	919	7,640	8	507	3,336	2,801	391	7,043
Other	6,820	6,201	4,450	3,991	1,728	23,190	21	753	5,860	10,360	1,408	18,402
Oceania—												
Fiji	1,637	1,629	1,140	804	463	5,673	3,963	25,358	2,395	1,080	1,311	34,107
New Zealand	30,778	54,782	11,803	5,679	8,126	111,168	9,820	76,755	15,460	6,492	4,981	113,508
Papua New Guinea	5,967	7,995	12,876	8,137	1,029	36,004	4,535	11,380	6,977	2,398	3,628	28,918
Other Commonwealth countries	793	913	809	691	253	3,459	834	6,612	510	239	424	8,619
Other	2,719	3,409	3,745	1,016	1,059	11,948	824	5,090	1,665	953	399	8,931
Total	110,461	159,297	77,504	52,189	26,952	426,403	26,365	185,672	132,790	123,521	36,171	504,519

Short-term travel is subject to marked seasonal variation. December being the peak month for the arrival of visitors and the departure of Australian residents.

OVERSEAS VISITORS AND AUSTRALIAN RESIDENTS: ARRIVALS AND DEPARTURES BY MONTH OF ARRIVAL OR DEPARTURE AND MODE OF TRANSPORT AUSTRALIA, 1972

Month	Overseas visitors						Australian residents					
	Arriving			Departing			Departing			Returning		
	By sea	By air	Total	By sea	By air	Total	By sea	By air	Total	By sea	By air	Total
January	2,011	34,412	36,423	2,901	48,887	51,788	3,223	26,808	30,031	4,208	57,612	61,820
February	1,865	36,188	38,053	2,133	39,601	41,734	4,698	21,410	26,108	2,479	30,238	32,717
March	2,087	36,725	38,812	2,294	37,452	39,746	4,183	36,855	41,038	2,665	26,597	29,262
April	991	27,685	28,676	1,605	34,392	35,997	3,724	44,943	48,667	1,375	26,839	28,214
May	1,213	28,929	30,142	1,519	33,561	35,080	3,957	43,158	47,115	3,181	32,125	35,306
June	783	23,025	23,808	1,582	25,832	27,414	4,480	44,134	48,614	2,940	32,197	35,137
July	983	27,751	28,734	1,007	26,567	27,574	2,241	37,790	40,031	3,352	35,680	39,032
August	859	33,062	33,921	957	33,211	34,168	2,520	50,051	52,571	2,659	44,067	46,726
September	1,051	28,700	29,751	848	32,691	33,539	1,936	30,241	32,177	2,233	56,606	58,839
October	1,294	38,673	39,967	1,414	36,992	38,406	2,169	27,585	29,754	3,948	48,567	52,515
November	2,267	38,868	41,135	1,923	36,836	38,759	2,731	28,945	31,676	3,286	35,645	38,930
December	2,779	54,202	56,981	966	36,149	37,115	2,521	74,216	76,737	2,883	29,580	32,463
Total	18,183	408,220	426,403	19,149	422,171	441,320	38,383	466,136	504,519	35,209	455,753	490,962

Long-term travel

Many long-term travellers travel for business or education and intend to follow an occupation in the country visited during their stay in Australia or overseas. This is evident from the statistics shown in the table on page 394 which classify travellers according to the purpose of their journey. Statistics of the occupations of long-term visitors arriving in Australia and Australian residents departing overseas (long-term) are of general interest and are shown in the following table.

OVERSEAS VISITORS ARRIVING AND AUSTRALIAN RESIDENTS DEPARTING, BY OCCUPATION AND SEX: AUSTRALIA, 1972

Occupation group	Overseas visitors arriving			Australian residents departing		
	Males	Females	Persons	Males	Females	Persons
Professional, technical, and related workers .	2,431	1,979	4,410	5,433	5,385	10,818
Administrative, executive, and managerial workers	958	104	1,062	1,725	223	1,948
Clerical workers	519	1,908	2,427	2,158	6,124	8,282
Sales workers	521	193	714	1,028	641	1,669
Farmers, fishermen, hunters, timber getters, and related workers . . .	444	15	459	499	32	531
Miners, quarrymen, and related workers .	69	..	69	155	..	155
Workers in transport and communication .	508	105	613	975	247	1,222
Craftsmen and production-process workers .	2,620	218	2,838	6,593	883	7,476
Labourers(a)	733	..	733	3,943	..	3,943
Service (protective and other), sport, and recreation workers	1,072	525	1,597	904	1,030	1,934
Occupation inadequately described or not stated	678	162	840	645	171	816
Persons not in the labour force—						
Children and students	3,892	3,132	7,024	8,869	8,489	17,358
Other	318	3,455	3,773	618	10,083	10,701
Total	14,763	11,796	26,559	33,545	33,308	66,853

(a) Labourers (so described), not elsewhere classified and freight handlers, including waterside workers.

Direct transit travellers

As indicated on page 392, all the preceding figures in this section exclude persons who arrive in and depart from Australia on the same ship's journey or on the same flight or who do not leave the airports' transit area. Persons thus excluded are not normally considered visitors to Australia. For instance, settlers or other persons going to New Zealand, Papua New Guinea, or other neighbouring countries, or leaving such countries may travel through Australia on their way. On the other hand, all persons visiting Australia on cruise vessels, which may remain in Australian waters for a considerable time, are also treated as direct transit travellers and are thus excluded from the figures shown on previous pages. Information about direct transit passengers on ships calling at Australian ports is given in the next table.

OVERSEAS SHIPPING PASSENGERS IN DIRECT TRANSIT(a): AUSTRALIA, 1970 TO 1972

Approximate period from first to last Australian port (days)	1970		1971		1972	
	Passengers	Passenger days	Passengers	Passenger days	Passengers	Passenger days
Less than 3 . . .	3,942	5,057	3,965	6,316	5,066	8,267
3 and less than 5 . .	4,701	14,924	2,429	8,592	3,752	12,211
5 and less than 7 . .	6,516	37,445	2,402	14,397	2,944	17,348
7 and less than 9 . .	3,745	28,107	7,568	56,586	7,483	54,718
9 and less than 11 . .	3,362	30,668	3,964	37,000	3,155	29,418
11 and less than 22 . .	2,267	26,304	580	7,765	263	3,615
22 and over . . .	161	4,506	35	1,024	24	903
Total . . .	24,694	147,011	20,943	131,680	22,687	126,480

(a) Persons who arrived in and departed from Australia on the same ship's voyage.

Sea cruises from Australia

The foregoing statistics exclude passengers on pleasure cruises commencing and finishing in Australia on ships not then engaged in regular voyages, and to which modified documentation requirements apply. Until 13 June 1972 such cruises were restricted to a period not exceeding 30 days and to ports in the South-West Pacific. On that date the period was extended to 6 weeks and the ports visited to those adjoining the Pacific or Indian oceans but excluding those on the east coast of Africa or the west coast of the Americas. The numbers of cruises and cruise passengers during the last three years are shown in the following table.

SHORT PLEASURE CRUISES IN THE SOUTH-WEST PACIFIC AUSTRALIA, 1970 TO 1972

Duration of cruise in days(a)	1970		1971		1972	
	Cruises	Passengers	Cruises	Passengers	Cruises	Passengers
Less than 7	3	3,543	2	1,672	..	..
7 and less than 10	3	2,993	3	3,443	6	6,604
10 and less than 13	18	18,912	7	6,568	14	12,574
13 and less than 16	12	11,725	31	28,195	30	20,999
16 and less than 19	9	4,514	20	2,542	8	4,359
19 and less than 22			2	1,742	2	740
22 and less than 31	3	1,897	..	..	3	1,509
31 and over	..	..	..	..	1	249
Total	48	43,584	65	44,162	64	47,034

(a) The duration of a cruise is the period during which the ship is absent from Australia.

Tourist organisation

The Australian Tourist Commission was established by the Commonwealth Government under the *Australian Tourist Commission Act* 1967. Its objectives are the encouragement of visits to Australia, and travel in Australia by people from other countries The seven man Commission comprises a chairman appointed by the Commonwealth Government; two appointees to represent private industry, selected by the Commonwealth Government from a panel of names put forward by the Australian National Travel Association; two other voting members, at least one of whom is an officer of the Public Service of the Commonwealth; and two non-voting representatives nominated by the State Governments.

For 1971–72 the Commonwealth Government provided $2,650,000 to the Commission, to be spent, mainly in overseas countries, on advertising campaigns and in associated promotional activities. The Commission brings to Australia travel agents, writers, photographers and other publicists to see at first hand what the country has to offer visitors. It takes no part in the detailed organisation of tourist activities in Australia but is a member of the Australia and New Zealand Government Tourist Conference and provides the secretariat for the Tourist Ministers' Council. The Minister for Tourism and Recreation is a member of the Tourist Ministers' Council together with Ministers in charge of tourism in the six States, the Northern Territory and Papua New Guinea. The Commission has its Head Office in Melbourne and branch offices in London, Frankfurt, New York, Chicago, Los Angeles, Auckland, Tokyo and Sydney.

The Australian National Travel Association, which is described on pages 1161-2 of the special article Travel and Tourism in Year Book No. 52, was formerly responsible, *inter alia*, for the promotion overseas of Australia as a tourist destination. Since the creation of the Australian Tourist Commission, the Association concentrates on the encouragement of the growth and development of travel and tourism within Australia, and the improvement of the standard and variety of facilities and services provided by private enterprise for the use of both domestic and overseas visitors. It acts as a co-ordinating body for its members, provides a clearing house for information, and conducts surveys into aspects of local tourist activity. The Association is governed by a Board representative of travel and tourist interests on which the Commonwealth Government is no longer represented. The Association's office is located in Sydney.