CHAPTER XI.

TRANSPORT AND COMMUNICATION.

PART I.—TRANSPORT.

Note.—Most of the statistics in this Part, except those relating to road traffic accidents, cover the year 1955-56. In some divisions, particularly B., Government Railways, the statistics have been advanced two years since the previous issue but, owing to the exigencies of space, it has been impossible in some cases to show figures for both 1954-55 and 1955-56 in the tables. More detailed figures for 1954-55 will be found in *Transport and Communication*, Bulletin No. 46.

A. SHIPPING.

§ 1. Control of Shipping.

- 1. War-time Control.—An account of the action taken by the Commonwealth Government to control and regulate shipping throughout Australian waters during the 1939-45 War was given in Official Year Book No. 36, pp. 121-130.
- 2. Post-war Control and Developments.—A brief account of the post-war control of shipping and the establishment of the Australian Stevedoring Industry Board and the Australian Shipping Board will be found in Official Year Book No. 39, pp. 147-8.

The Maritime Industry Commission established during the 1939-45 War under National Security legislation was abolished on 19th December, 1952. Permanent legislation to cover many of the matters formerly dealt with by the Commission was enacted in 1952 in the form of amendments to the Navigation Act 1912-1950 (see page 384).

As at 30th June, 1956, the Australian Shipping Board operated 47 vessels totalling 177,532 gross tons, of which three vessels totalling 14,917 gross tons were operated on time charter from private owners. The Government-owned shipping, totalling 44 vessels of 162,615 gross tons (of which two vessels totalling 4,601 gross tons were on charter to private companies or other shipping organizations), comprised thirteen "A" or River Class vessels of an average of 5,145 gross tons, five "B" Class vessels of an average of 3,923 gross tons, seven "D" Class vessels of an average of 2,345 gross tons, two "D/A" Class vessels of an average of 2,407 gross tons, five "E" Class vessels of an average of 584 gross tons, two "Y" Class vessels of an average of 3,460 gross tons and a collier of 4,887 gross tons, all of which were built in Australian yards, plus nine vessels, totalling 40,157 gross tons, which were built overseas.

In the international sphere, ratification is still being awaited from four of 21 shipowning nations of a Convention establishing an Inter-Governmental Maritime Consultative Organization within the framework of the United Nations. The major objectives of this organization will be to provide machinery for co-operation among governments with shipping engaged in international trade, and to encourage the removal by governments of discriminatory action and unnecessary restrictions regarding such shipping.

This organization is designed to replace the United Maritime Consultative Council which was established on a tentative basis after the expiry of the war-time United Maritime Authority and Combined Adjustment Board.

Up to 1st July, 1956, ratifications by seventeen countries had been lodged, and there is a possibility of the four others ratifying in the near future, thus bringing the organization into force.

§ 2. System of Record.

In the system of recording statistics of oversea shipping, Australia is considered as a unit, and therefore only one entry and one clearance are counted for each voyage, without regard to the number of States visited (see also § 4 following, paragraph 1).

On arrival at, or departure from, a port in Australia, whether from or for an oversea country or from another port in Australia, the master or agent must "enter" the vessel with the Customs authorities at the port, and supply certain prescribed information in regard to the ship, passengers and cargo. At the end of each month the information so obtained is forwarded to this Bureau. This arrangement has been in operation since 1st July, 1924.

The volume of the vessel, as distinct from the cargo it carries, is recorded in net tons, i.e., the gross tonnage or internal cubic capacity less certain deductions on account of crew spaces, engine room, water ballast and other spaces not used for passengers or cargo. It is thus a rough measure of the capacity of the vessel for cargo or passengers. The unit of measurement is the ton revisiter of 100 cubic feet.

The majority of cargo is recorded in terms of the ton weight of 2,240 lb. However, some additional cargo, mainly bulky commodities, is shipped and recorded on the basis of 40 cubic feet of space occupied representing one ton measurement.

From 1st July, 1914, trade and shipping statistics of Australia have been recorded for the financial years ending 30th June.

§ 3. Oversea Shipping.

1. Total Movement.—The following table shows the number of entrances and clearances combined of oversea vessels at Australian ports, and the aggregate net tonnage, during each of the years 1951-52 to 1955-56:—

OVERSEA SHIPPING: ENTRANCES AND CLEARANCES (COMBINED) OF VESSELS DIRECT, AUSTRALIA.

Particulars.	1951-52.	1952-53.	1953–54.	1954–55.	1955–56.
Number of Vessels Net Tonnage '000 tons	4,136	4,041	4,127	4,505	4,882
	18,225	17,571	17,733	20,003	22,324

The average net tonnage per vessel rose from 2,919 tons per vessel in 1921-22 to 4,573 tons in 1955-56.

Particulars of the total oversea movement of shipping for each year from 1822 to 1920-21 will be found in Official Year Book No. 15, p. 507, and for each year from 1921-22 to 1950-51 in Official Year Book No. 40, p. 97.

2. Total Oversea Shipping, States.—The following table shows, for each State and the Northern Territory, the number of entrances and clearances of vessels direct from and to oversea countries, and the aggregate net tonnage, during the year 1955-56.

OVERSEA SHIPPING:	ENTRANCES AND C	CLEARANCES C	OF VESSELS DIRECT,							
1955-56.										

Particulars	•	n.s.w.	Vic.	Qld.	S.A.	W.A.	Tas.	N.T.	Aust.
Clearances	No.	713	457	347	198	655	39	16	2,425
	net tons	2,979	2,374	1,207	768	3,742	126	32	11,228
	No.	618	429	490	223	646	36	15	2,457
	net tons	2,485	2,190	1,893	954	3,369	172	33	11,096

3. Shipping Communication with Various Countries.—A vessel arriving in Australia from overseas is recorded as coming from the country where the voyage commenced, irrespective of the number of intermediate ports of call. Similarly, a vessel leaving Australia is recorded as going to the country where the voyage terminated.

The following table shows statistics of the net tonnage entered and cleared, with cargo and in ballast, according to the principal countries where vessels commenced or terminated their voyages to or from Australia.

OVERSEA SHIPPING: COUNTRIES FROM WHICH ENTERED OR FOR WHICH CLEARED, AUSTRALIA.

Country from which Entered	With Cargo	Net Ton	nage Enter	red ('000).	Net Ton	nage Clear	red ('000)
or for which Cleared.	or in Ballast.	1953–54.	1954–55.	1955–56.	1953-54.	1954–55.	1955–56
United Kingdom {	Cargo Ballast	1,897	2,004 11	1,833	2,159 29	1,966 207	2,002 121
New Zealand {	Cargo Ballast	521 255	641 339	568 383	761 91	911 101	953 65
Other Commonwealth Countries {	Cargo Ballast	1,902 220	2,248 155	2,249 136	1,412 667	1,440 1,089	1,497
Bahrein Islands	Cargo Ballast	549 7	506	436 3	87 359	65 407	71 418
Indonesia	Cargo Ballast	609 196	671 61	567 92	108 552	116 529	155 650
Japan	Cargo Ballast	309 282	283 98	344 254	348 8	315 18	502 10
United States of America {	Cargo Ballast	462 1	476 5	496	228 60	221 49	340 51
Other Foreign Countries {	Cargo Ballast	1,487 164	2,333 108	3,602 190	1,076 906	1,123 1,507	1,367 1,891
Total {	Cargo Ballast	7,736 1,146	9,162 777	10,095 1,133	6,179 2,672	6,157 3,907	6,887 4,209
Total Cargo and Ballast		8,882	9,939	11,228	8,851	10,064	11.096

4. Nationality of Oversea Shipping.—Owing to war conditions, the proportion of shipping of British nationality progressively declined from 72.82 per cent. of the total tonnage entered in 1938-39 to 43.40 per cent. in 1943-44. On the other hand, the proportion of American (U.S.) shipping visiting Australia during the same period advanced from 2.61 per cent. in 1938-39 to 33.07 per cent. in 1943-44. Thereafter the trend was reversed, and in 1950-51 the proportion of British shipping entered was 70.83 per cent. and of American 2.34 per cent. In 1955-56 the proportion of British shipping entered had fallen to 59.23 per cent.

Particulars of the nationality of oversea shipping which entered Australia during each of the years 1953-54 to 1955-56 are given in the following table.

OVERSEA SHIPPING:	NATIONALITY	OF VESSELS	ENTERED,	AUSTRALIA.
	('000 Ne	t Tons.)		

Vessels Registered at Ports in—	1953– 54.	1954- 55.	1955- 56.	Vessels Registered at Ports in—	1953- 54.	1954- 55.	1955- 56.
Commonwealth Countries— Australia New Zealand United Kingdom Other	300 400 4,933 203	347 423 5,207 241	308 395 5,730 218	Foreign Countries— continued Norway Panama Sweden U.S.A Other	776 310 329 160 223	1,129 382 326 160 163	1,246 473 480 182 262
In Cargo In Ballast	5,107 729	5,695 523	5, 908 743	In Cargo In Ballast	2,629 417	3,467 254	4,187 390
Total Commonwealth Countries Proportion of total %	5,836	6,218 62.56	6,651 59.24	Total Foreign Countries Proportion of total %	3,046 34.29	3,721 37.44	4,577 40.76
Foreign Countries— Denmark	144 163 2 266 142	173 185 54 332 209	283 192 142 379 308	All Countries— In Cargo Proportion of total % In Ballast Proportion of total %	1,146	9,162 92.17 777 7.83	10,095 89.91 1.133 10.09
Netherlands	531	608	630	Grand Total	8,882	9,939	11,228

The Australian tonnage which entered Australian ports from overseas during the year 1955-56 represented 2.74 per cent. of the total tonnage entered and was confined mainly to the New Zealand and Pacific Islands trade.

The proportion of oversea shipping tonnage which entered Australia in cargo fell from 88.87 per cent. in 1938-39 to 79.37 per cent. in 1947-48. In 1955-56 it was 89.91 per cent. The proportion of shipping which cleared in cargo, however, declined from 87.64 per cent. in 1938-39 to 62.06 per cent. in 1955-56, the trend over the period being generally downward.

§ 4. Interstate Shipping.

1. System of Record.—Interstate Shipping comprises two elements: (a) Vessels engaged solely in interstate trade; and (b) Vessels trading between Australia and oversea countries and in the course of their voyages proceeding from one State to another. (It should be mentioned that these vessels, except under special circumstances, do not engage in interstate carrying.) No complexity enters into the record of those in category (a), but with regard to the method of recording the movements of the oversea vessels (b) some explanation is necessary. Each State desires that its shipping statistics (which are prepared in this Bureau) should show in full its shipping communication with oversea countries, but at the same time it is necessary to avoid any duplication in the statistics for Australia as a whole. In order to meet these dual requirements, a vessel arriving in any State from an oversea country-say the United Kingdom-via another State, is recorded in the second State as from the United Kingdom via States, thus distinguishing the movement from a direct oversea entry. Continuing the voyage, the vessel is again recorded for the statistics of the third State as from the United Kingdom via other States. On an inward voyage the clearance from the first State to the second State is a clearance interstate, and is included with interstate tonnage in conformity with the pre-federation practice of the States, and to preserve the continuity of State statistics. Thus, movements of ships which are, from the standpoint of Australia as a whole, purely coastal movements, must for the individual States be recorded as "Oversea via other States" or "Interstate" according to the direction of the movement. The significance of the record of these movements will be more clearly seen from the following tabular presentation of the inward and outward voyages to and from Australia of a mail steamer which, it is presumed, reaches Fremantle (Western Australia) and then proceeds to the terminal port of the voyage-Sydney (New South Wales)-via South Australia and Victoria. From the terminal port the vessel will commence the outward voyage, and retrace its inward track.

ITINERARY OF AN OVERSEA VESSEL ON THE AUSTRALIAN COAST.

			Recorded as-			
Particulars.	For the and Austr	for	For the States.			
Inward Voyage—	;					
Enters Fremantle from United Kingdom	Oversea	direct				
Clears Fremantle for Adelaide Enters Adelaide from United Kingdom	••	• •	Interstate direct			
via Fremantle				Oversea via States		
Clears Adelaide for Melbourne			Interstate direct			
Enters Melbourne from United Kingdom	i		i			
via Adelaide Clears Melbourne for Sydney	••	• •	Interstate direct	Oversea via States		
Enters Sydney from United Kingdom via	••	••	interstate direct			
Melbourne		• •		Oversea via States		
Outward Voyage—						
Clears Sydney for United Kingdom via	1					
Melbourne		• •		Oversea via States		
Enters Melbourne from Sydney Clears Melbourne for United Kingdom		• •	Interstate direct			
via Adelaide	l		i	Oversea via States		
Enters Adelaide from Melbourne			Interstate direct			
Clears Adelaide for United Kingdom via	1					
Fremantle Enters Fremantle from Adelaide	••	• •	Interstate direct	Oversea via States		
Clears Fremantle for United Kingdom	Oversea	direct	interstate direct			

From the method outlined above, the requirements for Australia and for the individual States are ascertained as follows. (a) The aggregate of all ships recorded for each State as "Oversea direct" gives the oversea shipping for Australia as a whole; (b) the aggregate for all ships recorded in any State as "Oversea direct" plus those recorded as "Oversea via States" gives the total oversea shipping for that State; and (c) the aggregate for all ships recorded as "Oversea via States" may also be used, together with those recorded as "Interstate direct", to furnish figures showing the total interstate movement of shipping.

It should be remembered, however, that all oversea vessels do not follow the same itinerary as the vessel in the table above.

2. Interstate Movement.—(i) Interstate Direct. The following table shows the number of entrances and the net tonnage of vessels recorded into each State and the Northern Territory from any other State (including oversea vessels on interstate direct voyages) during each of the years 1953-54 to 1955-56. The shipping of the Murray River, between the States of New South Wales, Victoria and South Australia, is excluded.

INTERSTATE MOVEMENT OF SHIPPING: ENTRANCES OF VESSELS INTERSTATE DIRECT.

State on To	State or Territory.			Number.		Net Tons ('000).			
State of Terr	1953–54.	1954–55.	1955–56.	1953–54.	1954-55.	1955–56.			
New South Wales			1,595	1,584	1,634	4,470	4,553	4,606	
Victoria			1,586	1,555	1,614	4,030	4,058	4,475	
Queensland			559	598	597	1,409	1,541	1,554	
South Australia			928	963	1,027	3,301	3,476	3,733	
Western Australia			491	524	554	2,428	2,725	2,753	
Tasmania			965	960	893	1,068	1,085	984	
Northern Territory	••	• •	30	40	38	41	77	55	
Australia			6,154	6,224	6,357	16,747	17,515	18,160	

From 1938-39 the total net tonnage of interstate shipping declined steadily each year until 1942-43, when it represented only 38 per cent. of the total for the pre-war year. It remained practically unchanged during the next three years, but increased by almost one-third in 1946-47. By 1955-56 the total had risen to 91 per cent. of the 1938-39 total.

(ii) Oversea via States. To ascertain the aggregate movement of shipping between the States, including the total interstate movement of oversea vessels, the figures in the following table, which show the number of entrances and clearances of vessels to and from oversea countries via other Australian States and the aggregate tonnage, must be added to those in the preceding table.

INTERSTATE MOVEMENT OF SHIPPING: ENTRANCES AND CLEARANCES OF VESSELS OVERSEA VIA OTHER AUSTRALIAN STATES, 1955-56.

Particulars.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	N.T.	Aust.
Entrances No.	585 3,142	686 3,688	262 1,367	334 1.781	37 242	98 475	3 13	2,005 10,708
Clearances No.	484	484 2,692	184 866	296 1,516	30 171	110 473		1,588

Oversea vessels moving interstate are with few exceptions not engaged in the active interstate trade of Australia, but are merely proceeding to the several States in continuation of their oversea voyages.

(iii) Total, Australia. The following table shows the total interstate movement of shipping, including oversea vessels travelling oversea via States and interstate direct, for each of the years 1951-52 to 1955-56.

INTERSTATE MOVEMENT OF SHIPPING: TOTAL, AUSTRALIA.

Particulars.		1951–52.	1952-53.	1953-54.	1954–55.	1955–56.	
Entrances		No.	6,694 24,072	7,525 25,583	7,983 26,925	8,300 28,515	8,362 28,868
Clearances		No.	6,652 23,875	7,481 25,359	8,036 27,190	8,151 28,292	8,460 29,095

(iv) Total, States. The following table shows, for each State and the Northern Territory, the number of entrances and clearances of vessels from and for other States (including the interstate movement of oversea vessels) during the year 1955-56, together with the aggregate net tonnage.

INTERSTATE MOVEMENT OF SHIPPING: TOTAL, 1955-56.

Particulars.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	N.T.	Aust.
Entrances . No. '000 net tons Clearances No. '000 net tons	2,219	2,300	859	1,361	591	991	41	8,362
	7,748	8,163	2,921	5,514	2,995	1,459	68	28,868
	2,350	2,326	752	1,341	622	1,027	42	8,460
	8,252	8,283	2,279	5,355	3,407	1,449	70	29,095

3. Shipping Engaged Solely in Interstate Trade.—The following table shows, for each State and the Northern Territory, the number of entrances direct from other States, of vessels engaged solely in interstate trade during the year 1955-56, together with the net tonnage.

SHIPPING ENGAGED SOLELY IN INTERSTATE TRADE: ENTRANCES, 1955-56.

Particulars.		N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	N.T.	Aust.
Ships entered Net tons	'000	1,298 3,126		362 645	758 2,349	187 691	792 625	37 54	4,626 9,495

4. Interstate and Coastal Shipping Services.—The following table shows particulars, so far as they are available, of all vessels engaged in the regular interstate or coastal services at the end of each of the years 1951 to 1955:—

INTERSTATE AND COASTAL SHIPPING SERVICES: AUSTRALIA.

Par	ticulars.		1951.	1952.	1953.	1954.	1955.
Number of compani	es operating		32	31	31	36	42
Number of vessels			173	173	172	174	185
Tannaga Gross			492,558	494,580	501,782	524,975	522,326
Tonnage \ Net			272,003	273,824	277,294	289,854	283,771
Horsepower (Nomin	ial)		47,027	47,126	49,159	53,017	50,455
Number of passen- gers for which licensed(a)	1st class 2nd class and	 steerage	2,171 706	2,244 648	2,208 621	2,198 626	1,966 648
Complement of	Masters and Engineers	officers	629 738	652 742	650 751	675 785	709 795
Crew	Other		4,907	4,884	4,886	4,950	4,853

⁽a) Excludes purely day-passenger accommodation.

Note. — This table excludes particulars of a small number of chartered vessels for which returns could not be obtained.

§ 5. Shipping at Principal Ports.

1. Total Shipping, Australia.—The following table shows the total volume of shipping—oversea, interstate and coastwise—which entered the principal ports of Australia during the years 1954-55 and 1955-56. Warships are excluded from the table. Corresponding figures each year from 1949-50 will be found in *Transport and Communication*, Bulletin No. 46.

TOTAL SHIPPING: ENTRANCES AT PRINCIPAL PORTS, AUSTRALIA.

		1954	-55.	1955	5–56.	Dest of Fort		1954	-55.	1955	5–56.
Port of Entry.		Num- ber.	Net Tons.	Num- ber.	Net Tons.	Port of Entry.		Num- ber.	Net Tons.	Num- ber.	Net Tons.
New South Wales—		4 200	'000.	4.261	'000.	South Australia-		2 621	'000.	2,491	'000.
Newcastle .		4,399 2,261 611	9,702 3,516 1,885	4,361 2,457 578	9,519 3,775 1,778	Port Lincoln Port Pirie Rapid Bay Wallaroo		2,621 298 352 79 105 475	5,215 372 892 192 124 1,373	221 315 133 125 478	5,180 310 848 181 130 1,412
Contains	••	2,527 474	9,029 1,611	2,502 454	9,183 1,980	Albany Bunbury Carnarvon Geraldton	_	1,078 62 64 115 105 132	5,708 289 168 152 307 330	1,202 64 56 97 103 128	6,418 255 155 147 275 292
Bowen	 	1,167 77 279 80 93	3,707 235 622 248 271	1,128 82 233 75 98	3,685 270 624 276 282	Tasmania— Hobart Burnie Devonport Launceston		360 229 260 433	856 331 209 461	396 224 228 378	864 332 196 419
	 	112 294	217 987	126 329	286 993	Northern Territory- Darwin	<u> </u>	58	134	57	101

2. Total Shipping—Australia, New Zealand and the United Kingdom.—The following table shows the total shipping tonnage which entered the principal ports of Australia during 1955-56 and New Zealand and the United Kingdom during 1955.

TOTAL SHIPPING: ENTRANCES AT PORTS, AUSTRALIA, NEW ZEALAND AND THE UNITED KINGDOM.

('000 Net Tons.)

Port.	Net Tonnage Entered.	Port.	Net Tonnage Entered.	Port	Net Tonnage Entered.
Australia— Sydney (N.S.W.) Melbourne (Vic.) Fremantle (W.A.) Adelaide (S.A.) Newcastle (N.S.W.) Brisbane (Old.) Geelong (Vic.) Port Kembla (N.S.W.) Whyalla (S.A.) Townsville (Old.) Hobart (Tas.) Port Pirie (S.A.) Cairns (Old.) Launceston (Tas.) Burnie (Tas.) Port Lincoln (S.A.) Yampi (W.A.)	9,519 9,183 6,418 5,180 3,775 3,685 1,980 1,778 1,412 993 864 848 624 419 332 310 292	AUSTRALIA—continued. Rockhampton (Qld.) Mackay (Qld.) Gladstone (Qld.) New ZEALAND— Wellington Auckland Lyttleton Otago Napier New Plymouth Bluff ENGLAND AND WALES— London Southampton Liverpool (including Birkenhead)	286 282 276 3,950 2,998 2,511 1,078 579 476 437 35,115 20,125	Hull Bristol Swansea	8,278 (a)6,128 5,662 5,579 5,109 (a)4,303 4,184 4,065 7,110

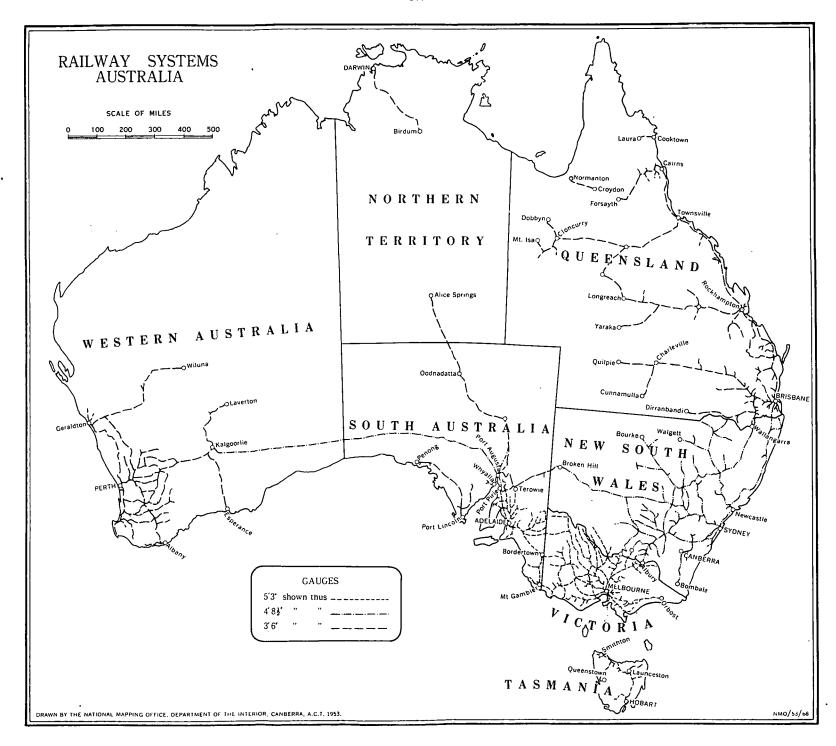
⁽a) Oversea direct entrances only.

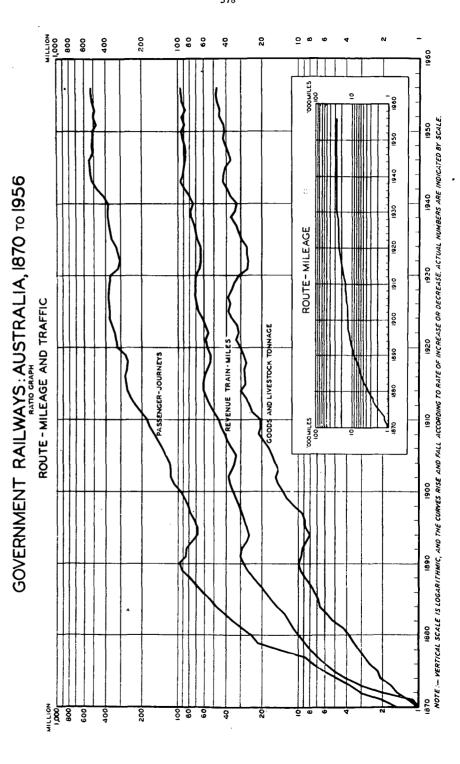
§ 6. Shipping Cargo.

1. Oversea and Interstate Cargo.—(i) Australia. The table hereunder shows the aggregate tonnage of oversea cargo discharged and shipped and the tonnage of interstate cargo shipped at Australian ports for the years 1951-52 to 1955-56. The majority of cargo is recorded in terms of the ton weight of 2,240 lbs. However, some additional cargo, mainly bulky commodities, is shipped and recorded on the basis of 40 cubic feet of space occupied representing one ton measurement.

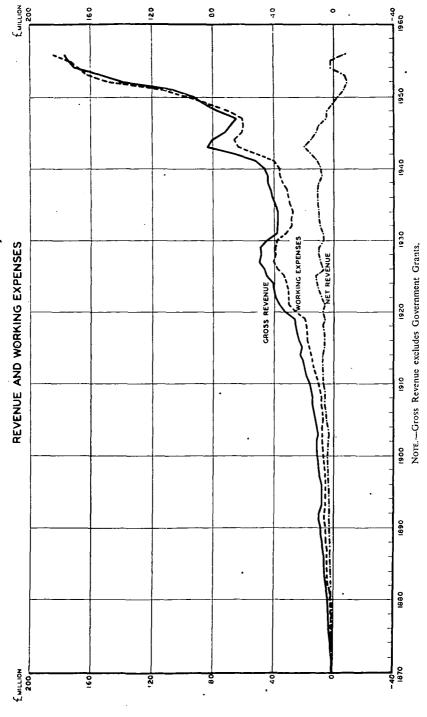
SHIPPING CARGO MOVEMENT: AUSTRALIA. ('000.)

37			Oversea	Cargo.		Interstate Cargo.			
rear.	Year.		rged.	Shipp	ped.	Shipped.			
		Tons Weight.	Tons Meas.	Tons Weight.	Tons Meas.	Tons Weight.	Tons Meas.		
1951-52	[9,727	4,682	4,487	1,231	7,697	1,324		
1952-53		7,733	1,929	6,045	1,452	8,447	1,275		
1953-54		8,520	2,812	5,765	1,355	9,105	1,539		
1954-55		10,992	3,403	6,084	1,420	10,212	1,472		
1955–56		12,431	3,421	6,667	1,546	11,632	1,315		

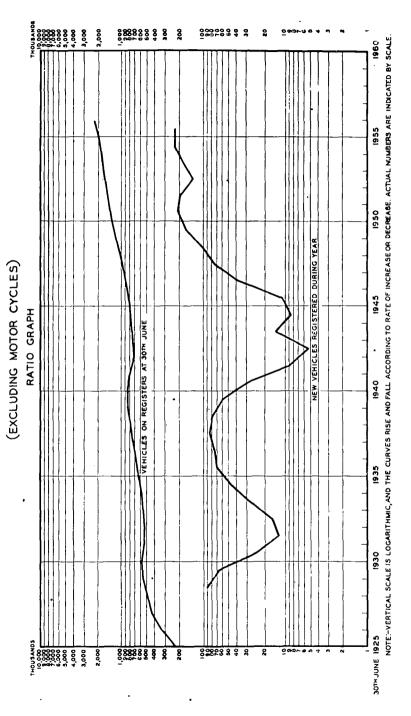




GOVERNMENT RAILWAYS: AUSTRALIA, 1870 TO 1956



MOTOR VEHICLE REGISTRATIONS: AUSTRALIA, 1925 TO 1956



(ii) Principal Ports. The following table shows the tonnage of oversea and interstate cargo discharged and shipped at principal ports during 1955-56.

CARGO DISCHARGED AND SHIPPED AT PRINCIPAL PORTS, 1955-56. ('000.)

					(1000						
	_				Disch	arged.		į	Ship	oped.	
	Port.			Ove	rsea.	Inter	state.	Ove	rsea.	Inter	state.
				Tons Wt.	Tons Meas.	Tons Wt.	Tons Meas.	Tons Wt.	Tons Meas.	Tons Wt.	Tons Meas
Sydney				2,646	1,340	776	324	847	435	358	285
Newcastle Port Kembla	• •	• • •		469 207	21	1,821 2,424	2	283 195	; 5	2,596 566	••
Other	• •		::		::		::	15	1.1		2
Total, i	New Sout	h Wales		3,322	1,361	5,021	326	1,340	451	3,520	287
Melbourne			.:	2 362	1,274	2,208	368	565	550	617	372
Geelong	••	• •		2,362 2,286	32	251		778		576	
Portland	••	••	• •	31	••	10	••	16	•••		
Total,	Victoria	••		4,679	1,306	2,469	368	1,359	550	1,193	372
Brisbane				577	214	425	210	568	103	31	62
Cairns		• •		80	11	41	20	123	11	95	31
Gladstone		• •	• •	40	• • •	20	,	23 179	3	126	
Mackay Townsville	• •	• •	• •	23 86	4	18 68	40	199	9	70 88	4
Other	::	••	•	4		ĬŤ	15	198	10	148	13
Total,	Queenslar	ıd		810	229	589	286	1,290	136	558	110
Port Adelaide				515	346	1,550	139	426	110	182	1 40
Ardrossan	• •					l ' l		180		103	
Port Pirie	• •	• •	• •	40	••	212	••	477	• •	233	• •
Rapid Bay Whyalla	• •	••	• •	4	• • •	263	••	·i4	• •	357 3,118	• •
Other	::	::	::	85	2	47	2	277	40	203	1
Total, S	South Aus	stralia		644	348	2,072	141	1,374	150	4,196	141
Fremantle				2,596	130	271	211	836	67	1,101	58
Geraldton	::			34		10		150	4	49	
Yampi	• •	• •	• •	ا ـ ـ ـ ا	• •	.2		::.	•:-	479	• • • •
Other	••	••	••	76		14	6	189	45	15	43
Total, V	Vest ern A	lustralia		2,706	130	297	217	1,175	116	1,644	101
Hobart				145	15	477	39	73	130	262	38
Burnie				40	3	41	35	27	1	65	107
Launceston	• •	• •	••	34	23	109	101	25	8	39	95
Other	••	••	••	5		71	56		4	150	64
Total, T	asmania	••		224	46	698	231	126	143	516	304
Darwin	••	••	••	46	1	38	3	3		5	••
Total, N	orthern i	Territory	••	46	I	38	3	3		5	•••
Australi	ia	••	:	12,431	3,421	11,184	1,572	6,667	1,546	11,632	1,315

2. Oversea Cargo by Nationality of Vessels.—The following table shows the total oversea cargo, discharged and shipped combined, according to the nationality of the vessels, during the years 1953-54 to 1955-56:—

OVERSEA CARGO DISCHARGED AND SHIPPED: NATIONALITY OF VESSELS, AUSTRALIA.

(.000.)

Vessels Registered at Ports in—	1953	-54.	1954	–55.	1955	-56.
	Tons	Tons	Tons	Tons	Tons	Tons
	Weight.	Meas.	Weight.	Meas.	Weight.	Meas.
Commonwealth Countries— Australia	218	108	357	106	250	117
	92	32	160	35	121	45
	452	298	472	327	432	380
	7,678	2,801	8,792	3,014	9,377	2,924
	189	84	274	134	239	128
Total, Commonwealth Countries	8,629	3.323	10,055	3,616	10,419	3,594
	60.41	79.75	58.88	74.97	54.56	72.36
Foreign Countries— Denmark France Germany(a) Italy Japan Netherlands Norway Panama Sweden United States of America Other	310	32	388	44	566	88
	229	31	242	41	221	47
	20	4	134	69	320	96
	148	52	217	71	167	67
	247	17	432	63	547	83
	862	168	1,091	198	1,131	190
	1,814	168	2,499	246	2,985	294
	627	10	765	27	886	47
	749	156	719	221	1,135	236
	192	188	235	174	253	161
	458	18	299	53	467	64
Total, Foreign Countries Proportion of Total % Grand Total	5,656 39.59	844 20.25 4,167	7,021 41.12 17,076	1,207 25.03	8,678 45.44 19,097	1,373 27.64 4,967

(a) Federal Republic.

Owing to war conditions the proportion of cargo carried in British Commonwealth vessels decreased from 72.43 per cent. in 1938-39 to 41.37 per cent. in 1943-44, but increased to 77.51 per cent. in 1946-47. It has since declined, and in 1955-56 was 58.23 per cent.

§ 7. Vessels Built and Registered.

1. Vessels Built.—The following table shows the number and tonnage of vessels built in Australia during each of the calendar years 1952 to 1956, so far as such information can be ascertained from the Shipping Registers of the various States. The Merchant Shipping Act, under which vessels are registered in Australia, does not, however, make it compulsory to register vessels under 15 tons burden if engaged in river or coastal trade. Larger vessels are also exempt from registration if not engaged in trade. Yachts and small trading vessels may be, and frequently are, registered at the request of the owners.

VESSELS BUILT AND REGISTERED IN AUSTRALIA.

			Steam.		Motor.(a)				Sailing		Total.			
Yea	ar.		Tonr	nage.		Toni	nage.		Ton	nage.		Ton	nage.	
		No.	Gross.	Net.	No.	Gross.	Net.	No.	Gross.	Net.	No.	Gross.	Net.	
		—												
1952		1	4,054	2,070	7	2,520	1,382	1	5	3	9	6,579	3,455	
1953		3	11,744	6,647	4	7,889	4,051	. 3	23	22	10	19 6 56	10,720	
1954		2	11,289	5,706	12	11,890	6,546				14	23,179	12,252	
1955		2	3,905	1,903	9	185	156	2	9	9	13	- 4,099	2,068	
1956		1	7,583	4,203	22	14,552	8,432	1	3	3	24	22,138	12,638	

(a) Includes vessels with auxiliary motors.

2. Vessels Registered.—The following table shows the number and net tonnage of steam, sailing and other vessels on the register of each State and the Northern Territory at 31st December, 1955:—

VESSELS REGISTERED, 31st DECEMBER, 1955.

				Sail	ing.		H	rges, ilks,		
State or Territory.	Steam and Motor.			lled by only.	Aux	d with iliary wer.	etc.	edges, , not elf- celled.	Т	otal.
	No.	Net Tons.	No.	Net Tons.	No.	Net Tons.	No.	Net Tons.	No.	Net Tons.
New South Wales	303	67,699	26	2,101	91	1,233	10	948	430	71,981
Victoria	188	173,460	49	595	54		36	13,432	327	189,057
Queensland	93	29,978	57	726	60	780	11	1,421	221	32,905
South Australia	77	27,600	15	307	40	2,083	39	6,172	171	36,162
Western Australia	82	7,092	211	3,144	59	1,475	5	478	357	12,189
Tasmania	43	7,622	46	1,467	95	2,478	2	513	186	12,080
Northern Territory		••	16	154	9	177	• •		25	331
Australia	786	313,451	420	8,494	408	9,796	103	22,964	1,717	354,705

3. World Shipping Tonnage.—Issues of the Official Year Book prior to No. 39 contained tables, compiled from *Lloyd's Register of Shipping*, showing the number and gross tonnage of steam, motor and sailing vessels owned by the various maritime countries of the world. The tables are not repeated in this issue, but the following information is derived from the same source.

At 1st July, 1956, the total steamers, motorships and auxiliary sailing vessels of 100 gross tons and upwards throughout the world amounted to 33,052, with a gross tonnage of 105,200,000. Of these totals, steamers numbered 16,475 for 67,494,000 gross tons, motorships 15,554 for 37,504,000 gross tons and auxiliary sailing vessels 1,023 for 202,000 gross tons. In addition, there were 3,677 oil tankers of 100 gross tons and upwards with a gross tonnage of 28,211,000. Australian steamers, motorships and auxiliary sailing vessels, 359 for 606,000 gross tons, constituted 1.09 per cent. and 0.58 per cent. respectively of the total numbers and tonnage. There were no Australian oil tankers of 100 gross tons and upwards registered.

§ 8. Miscellaneous.

1. Lighthouses.—A list of the principal lighthouses on the coast of Australia, giving details of the location, number, colour, character, period, candle-power and visibility of each light so far as particulars are available will be found in *Transport and Communication*, Bulletin No. 46.

- 2. Distances by Sea.—The distances by sea between the ports of the capital cities of Australia and the most important ports in other countries which trade with Australia were shown in Transport and Communication, Bulletin No. 46.
- 3. Shipping Freight Rates.—The Quarterly Summary of Australian Statistics shows a list of the ruling freight rates for general merchandise in respect of both oversea and interstate shipments. At 31st December, 1956, the rate for general merchandise from Australia to the United Kingdom and the Continent was £8 19s. per ton weight or measurement while the rates for wheat and wool (greasy) were respectively £10 per ton weight and 2.97d. less 7 per cent, per lb. These rates, which are expressed in sterling, are subject to an adjustment of 25½ per cent. when freight is prepaid in Australia.
- 4. Depth of Water at Main Ports.—A table, compiled from information supplied by the Director of Navigation, showing the depth of water available and tides at principal ports of Australia at 1st January, 1956, was included in Transport and Communication, Bulletin No. 46.
- 5. Shipping Losses and Casualties.—Courts of Marine Inquiry are constituted by a magistrate assisted by skilled assessors, and, when necessary, are held at the principal port in each State and at Launceston (Tasmania). Such courts have power to deal with the certificates of officers who are found at fault. Particulars of shipping losses and casualties reported on or near the coast during each of the years 1952 to 1956 are shown in the table below. This information also was furnished by the Director of Navigation.

	Shipping Losses.				Other Si	hipping Ca	sualties.	Total Sh	ipping Cas	sualties
Ye:	ır.	Vessels.	Net Tons.	Lives Lost.	Vessels.	Net Tons.	Lives Lost.	Vessels.	Net Tons.	Lives Lost.
1952		1	197	16	152	431,654		153	431,851	16
953					85	242,972		85	242,972	
954					149	426,878		149	426,878	
955		1	53		220	694,847		221	694,900	
956		2	529	18	237	771,418		239	771,947	18

6. Commonwealth Navigation and Shipping Legislation.—By section 51 (i) of the Commonwealth Constitution, the Parliament of the Commonwealth is empowered to make laws in respect of trade and commerce with other countries and among the States. By section 98 the power in this particular respect is further defined as extending to navigation and shipping.

A review of the introduction and development of the Navigation Act 1912-1950 was given in Official Year Book No. 40, pp. 110-2. Amendments to the Principal Act were made by the Navigation Act 1952, the provisions of which covered the settlement of maritime industrial disputes, standards of accommodation to be provided on ships and the engagement and discipline of seamen.

Other shipping Acts under the trade and commerce power of the Commonwealth are the Sea-Carriage of Goods Act 1924, the Seamen's Compensation Act 1911-1954, and the Seamen's War Pensions and Allowances Act 1940-1955.

7. Ports and Harbours.—A report on "The Turn-round of Ships in Australian Ports" was submitted to the Commonwealth Government by Henry Basten, C.M.G., on 4th January, 1952. The report deals with all factors affecting the turn-round of ships and congestion in Australian ports and the measures that might be taken to effect improvement on both shortterm and long-term bases.

B. GOVERNMENT RAILWAYS.

1. General.—The first steam-operated railway in Australia, between Melbourne and Port Melbourne, a distance of two miles, was opened on 12th September, 1854. It was owned and operated by the Melbourne and Hobson's Bay Railway Co. In the next one hundred years the mileage increased greatly and at 30th June, 1956, 26,473 route-miles (excluding several hundred miles of privately-owned line) were open for traffic. The operation of Australia-wide services is, however, greatly hampered by the presence of many break-of-gauge stations, necessitated by the several gauges at present in use. The policy of government ownership and control of railways has been adopted in each State and at 30th June, 1956, 24,272 route-miles were owned by the State Governments and 2,201 route-miles by the Commonwealth Government. In the following tables details of the four lines owned by the Commonwealth are grouped and shown with the totals for the various State-owned systems. Separate particulars for each Commonwealth line and more detailed statistics for all lines are shown in the annual bulletin, Transport and Communication.

In some States there are comparatively small privately-owned railway systems offering passenger and freight services to the public. Details of these private railways were included in Official Year Book No. 39 and previous issues, but owing to their relative unimportance and the incomplete nature of the statistics available the series has been discontinued.

2. Railway Communication in Australia.—An account of the progress of railway construction in Australia since the opening of the first line in 1854 will be found in Official Year Book No. 6, p. 681 and in No. 22, p. 259. The main ports on the mainland are connected by lines running approximately parallel to the coast and are the focal points of lines which radiate inland to the agricultural, mining and pastoral areas of the continent to a distance which reaches 600 miles at some points. However, Darwin in the Northern Territory is not connected by rail to any other port in Australia. A 3 ft. 6 in. gauge railway extends southward from Darwin to Birdum, a distance of 317 miles, and from Port Augusta in South Australia northwards to Alice Springs in the Northern Territory, a distance of 771 miles.

The heavy traffic of the 1939-45 War, coming after a period of depression when replacement of track and rolling stock had not been maintained at desirable levels, placed a severe strain on the railway systems, which required extensive post-war rehabilitation. Track works were restored and improved and many new items of rolling stock replaced worn-out equipment. Besides the construction of air-conditioned passenger trains and high-capacity goods rolling stock, many new locomotives were built and others purchased. In recent years there has been a significant development of diesel-electric traction and the number of diesel-electric locomotives in service has risen from two at 30th June, 1949 to 254 at 30th June, 1956. The electrification of the Gippsland line in Victoria and the Western Line in New South Wales has recently been completed.

3. Government Railways Development.—In spite of the great extensions of State railways since 1875 and the construction of various railways by the Commonwealth Government, there are still, in some States, immense areas of country which are as yet practically undeveloped, and in which little in the nature of permanent settlement has been accomplished. The general policy of the States was to extend the existing lines inland in the form of light railways as settlement increased, and while it is true that lines which were not likely to be commercially successful in the immediate future were constructed from time to time for the purpose of encouraging settlement, the general principle that the railways should be self-supporting was kept in view.

The greatest recorded route-mileage of government railways was 27,234 at 30th June, 1941. Although short lengths of line have been opened since that date, most railway construction is being confined to the duplication and electrification of existing main lines. The closure of other lines (mainly developmental branch lines whose retention would have been uneconomic), especially in Victoria and Western Australia, has resulted in a considerable decrease in route-mileage. Variations in route-mileage in each State and Territory during the ten years ended 30th June, 1956 are shown in the following table.

GOVERNMENT RAILWAYS: VARIATIONS IN ROUTE-MILEAGE, TEN YEARS ENDED 30th JUNE, 1956.

(Miles.)

			(1/1He51)			
State or Terr	ritory.		Route-mileage at 30th June.		ring Ten Years e, 1956 due to—	Route-mileage at 30th June,
				Lines Opened.	Lines Closed.	1956.
New South Wales			6,331	2	27	6,306
Victoria			4,545	15	318	4,242
Queensland			6,566	1	110	6,456
South Australia			3,799	17		3,816
Western Australia			4,835	16	278	4,573
Tasmania			641	1	56	585
Northern Territory			490			490
Australian Capital T	erritory	••	5			5
Australia	••		27,212	50	789	26,473

4. Standardization of Railway Gauges .- A summary of the report and recommendations relating to the standardization of Australia's railway gauges on the basis of a 4 ft. 81 in. gauge, made in March, 1945, at the request of the Commonwealth Government by the late Sir Harold Clapp, then Director-General of Land Transport, Commonwealth Department of Transport, together with an outline of the agreement between the Commonwealth Government and the States of New South Wales, Victoria and South Australia regarding the standardization of railway gauges in their respective States, is contained in Official Year Book No. 37, pp. 146-9. The agreement, which was signed in 1946, was ratified by the Governments of the Commonwealth, of Victoria and of South Australia, but not by the New South Wales Government. After some time had elapsed and New South Wales had failed to ratify the agreement, the Commonwealth Government decided to enter into a separate agreement with South Australia, and the necessary legislation was enacted in 1949 by each Government concerned. Action was also taken to invite the Victorian Government to discuss the subject of a separate agreement, but to date there has been no legislative action. The Commonwealth-South Australia Agreement provides for the same standardization work to be carried out in South Australia as would have been carried out had New South Wales ratified the original Commonwealth-Three States Agreement, and that over a period of years the Commonwealth should contribute 70 per cent. and South Australia be responsible for the remaining 30 per cent. of the estimated cost.

A map showing the railway systems of Australia according to gauge appears on page 377.

5. Grafton-South Brisbane (Uniform Gauge) Line.—The first step towards uniform gauge railway communication between the capitals of the mainland States was effected in 1930 with the construction of the 4 ft. 8½ in. gauge line from Grafton to South Brisbane. The finance required for the construction was provided by the Commonwealth Government. For details of the agreement between the Commonwealth and New South Wales and Queensland, see Official Year Book No. 31, p. 122.

This line is operated by the New South Wales Railways and details of operations in New South Wales are included with those of the New South Wales system. Details of operations on the Queensland portion are included with Queensland railway statistics unless otherwise specified.

6. Mileage Open for Traffic, all Lines.—Almost all the railways open for general traffic in Australia are owned and controlled by the State or Commonwealth Governments. Private lines have been laid down for the purpose of opening up forest lands, mining districts or sugar areas. These lines are not generally used for the conveyance of passengers or the public conveyance of goods.

The following table shows the route-mileage of Commonwealth and State lines open in each State and Territory at various periods since the inauguration of railways in Australia in 1854:—

GOVERNMENT RAILWAYS: ROUTE-MILEAGE OPEN.
(Miles.)

At 30th J	une—	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
1855(a)		14	2		7					23
1861(a)		73	114		56					243
1871(a)		358	276	218	133		45			1,030
1881(a)		996	1,247	800	832	92	45			4,012
1891		2,182	2,763	2,195	1,666	198	351	145	١	9,500
1901		2,846	3,237	2,801	1,736	1,355	457	145		12,577
1911		3,762	3,523	3,868	1,935	2,376	470	145		16,079
1921		5,043	4,267	5,752	3,408	3,992	630	199	5	23,296
1931		6,247	4,514	6,529	3,898	4,634	665	317	5	26,809
1941		6,368	4,518	6,567	3,809	4,835	642	490	5	27,234
1951		6,354	4,445	6,560	3,805	4,682	605	490	5	26,946
1955		6,305	4.248	6,553	3,816	4,565	605	490	5	26,587
1956		6,306	4,242	6,456	3,816	4,573	585	490	5	26,473

(a) At 31st December.

At 30th June, 1956, 255 route-miles in Victoria and 138 route-miles in New South Wales were electrified.

The next table shows for each State the length of government lines open in relation to both population and area at 30th June, 1956.

GOVERNMENT RAILWAYS: ROUTE-MILEAGE OPEN AT 30th JUNE, 1956. (Miles.)

Particulars.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
Route-mileage open Per 1,000 of population Per 1,000 square miles		1.63	6,456 4.71 9.63	4.50	6.75	1.83	26.78	0.15	

7. Classification of Lines according to Gauge, at 30th June, 1956.—The next table shows the route-mileage of government railways open in each State and Territory at 30th June, 1956, classified according to gauge.

GOVERNMENT RAILWAYS: GAUGES, AT 30th JUNE, 1956. (Route-miles.)

Gauge.	N.S.W.	Vic.	Qid.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
5 ft. 3 in. 4 ft. 8½ in. 3 ft. 6 in. 2 ft. 6 in. 2 ft. 0 in.	 (a) 203 6,103 	4,208 34	(b) 69 6,357	1,622 (c) 654 (d)1,540	(c) 454 4,119	585	(c) 490 ::	(c) ·· 5	6,033 7,285 13,091 34 30
Total	 6,306	4,242	6,456	3,816	4,573	585	490	5	26,473

⁽a) Portion of Victorian system. (b) Queensland section of Grafton-South Brisbane Uniform Gauge Line. (c) Portion of Commonwealth system. (d) Includes 598 miles of Commonwealth system.

8. Summary of Operations.—In the following table a summary is shown of the operations of government railways open in Australia during the years ended 30th June, 1955 and 1956:—

GOVERNMENT RAILWAYS: SUMMARY OF OPERATIONS.

		1954–55.			1955–56.			
Particulars.	C'wealth Rail- ways.	State Rail- ways.	Total.	C'wealth Rail- ways.	State Rail- ways.	Total.		
Route-mileage, 30th June mile Gross revenue £'000	3,741	24,386 170,229 440	26,587 173,970 440	2,201 4,741 487	24,272 172,443 441	26,473 177,184 442		
Working expenses £'00 ,, per revenue train-mile		169,556	172,477	(a) 3,176	181,746	184,922		
penc		438	436	326	465	461		
Net revenue £ 000		673	1,493	1,565	-9,303 -24	-7,738 -19		
Revenue train-miles '09		92,722	94.751	2,336	93,898	96,234		
Passenger-journeys '00	215	516,642	516,857	230	514.507	514.737		
Goods and livestock carried '000 ton		46,882	47,698	918	45,856	46,774		
Average number of employees(b) .	2.335	139,701	142,036	2,399	140.716	143,115		
" earnings per employee	£ 790	876	874	843	934	932		

⁽a) Excludes amounts paid for Commissioner's salary, government contributions under the Superannuation Act, Accident and Insurance Fund, proportion of salaries of Auditor-General's staff and loan redemption and conversion charges—1954-55, £110,369; 1955-56, £80,834. (b) Excludes construction staff except in respect of Victoria.

A graph showing the route-mileage and traffic of government railways from 1870 to 1955-56 appears on page 378.

^{9.} Summary, States.—The following table shows, for government railways in Australia, particulars of the mileage open, cost of construction and equipment, passengers and goods carried and train-miles run during 1954-55 and 1955-56.

GOVERNMENT RAILWAYS: SUMMARY, STATES.

		Mileage	Open.(a)	Cost of Construc- tion and	Passenger-	Goods and	Revenue
Railway System.		Route- miles.	Track- miles.	Equipment during Year.		Livestock Carried.	Train- miles.
	}		-	(£'000.)	(.000.)	('000 tons.)	(000.)
			1954–5	5.			
New South Wales		6,102	8,460	11,011	281,417	(b)19,386	37,294
Victoria		4,451	5,843	9,406	169,204	10,082	18,740
Oueensland		6,553	7,494	3,503	35,919	8,492	19,637
South Australia		2,564	3,186	2,086	16,849	4,474	7,216
Western Australia		4,111	4,689	5,885	10,139	3,407	7,769
Tasmania		605	706	387	3,114	1,041	2,066
Commonwealth		2,201	2,366	922	215	816	2,029
Australia		26,587	32,744	33,200	516,857	47,698	94,751
			1955–5	6.	<u> </u>		
New South Wales]	6,103	8,467	16,542	280,470	(b)18,787	38,478
Victoria		4,445	5,833	8,844	166,708	9,607	18,635
Queensland	1	6,456	7,494	3,502	35,647	8,180	19,289
South Australia	\	2,564	3,193	2,672	16,434	4,414	7,113
Western Australia		4,119	4,700	4,187	12,271	3,793	8,278
Tasmania		585	686	313	2,977	1,075	2,105
Commonwealth		2,201	2,461	748	230	918	2,336
Australia		26,473	32,834	36,808	514,737	46,774	96,234

⁽a) At 30th June.

- 10. Gross Revenue.—(i) General. The gross revenue is composed of (a) receipts from coaching traffic, including the carriage of mails, horses, parcels, etc., by passenger trains; (b) receipts from the carriage of goods and livestock; and (c) rents and miscellaneous items. State Government grants are excluded. Details of these grants made during 1955-56 are as follows:—£1,000,000 for the working of country development lines and £800,000 to subsidize payments from Superannuation Account in New South Wales; £10,006 recoup on operating the Kerang-Koondrook Tramway in Victoria; £3,250,000 towards working expenses and £800,000 towards debt charges in South Australia; and £10,000 for sick leave funds in Tasmania.
- (ii) Coaching, Goods and Miscellaneous Receipts. (a) Summary. In the following table the gross revenue is shown for the years 1953-54 to 1955-56, together with the revenue per average route-mile worked and per revenue train-mile:—

GOVERNMENT RAILWAYS: GROSS REVENUE.(a)

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	C'wealth.	Aust.	
				ROSS REVI	ENUE.				
1953–54 1954–55	 74,569 73,361	35,707 37,667	30,223 31,625	12,718 12,939	11,111	2,133 2,322	3,402 3,741	169,863 173,970	
1955-56	 75,386	37,032	31,312	13,098	13,080	2,535	4,741	177,184	

⁽a) Excludes government grants; see para. 10 (i) above.

⁽b) Partly estimated.

Year.		N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	C'wealth.	Aust.
		Gross	REVENU	E PER AV	rerage R	OUTE-MILE	Worked	·	
1953–54 1954–55 1955–56	•••	12,222 12,022 12,352	7,806 8,449 8,322	4,607 4,823 5,961	4,960 5,047 5,108	2,703 2,996 3,175	3,526 3,839 4,260	1,546 1,700 2,154	6,380 6,54 6,689
			Gross Re		R REVEN	ue Train-	MILE.		
1953–54 1954–55 1955–56	• • • • • • • • • • • • • • • • • • • •	477.16 469.78 470.21	468.21 482.39 476.94	376.98 386.52 389.60	414.78 430.34 441.92	370.17 380.43 379.21	269.72 269.72 288.98	418.09 442.47 487.04	436.18 439.80 441.88

⁽a) Excludes government grants; see para. 10 (i) above.

(b) Distribution. The following table shows the gross revenue for the years 1954-55 and 1955-56 classified according to the main three sources of receipts.

GOVERNMENT RAILWAYS: DISTRIBUTION OF GROSS REVENUE. (£'000.)

			1954–55.		1955–56.				
Railway System.		Coaching.	Goods and Livestock.	Miscel- laneous.	Coaching.	Goods and Livestock.	Miscel- laneous.		
New South Wales		17,787	51,803	3,771	19,616	51,963	3,807		
Victoria		11,132	24,417	2,118	12,207	22,635	2,190		
Queensland		4,651	26,106	868	4,683	25,736	893		
South Australia		1,780	10,242	917	1,841	10,350	907		
Western Australia		1,351	10,360	604	1,492	10,989	599		
Tasmania		217	2,043	62	222	2,246	67		
Commonwealth	••	803	2,650	288	972	3,437	332		
Australia		37,721	127,621	8,628	41,033	127,356	8,795		

11. Working Expenses.—(i) General. In order to make an adequate comparison of the working expenses as between the several States and Territories, allowance should be made for the variation of gauges and of physical and traffic conditions, not only on the different systems of the State and Commonwealth railways, but also on different portions of the same system. When traffic is light, the proportion of working expenses to revenue is naturally greater than when traffic is heavy; and this is especially true in Australia, where ton-mile rates are in many cases based on a tapering principle—i.e., a lower rate per ton-mile is charged upon merchandise from remote interior districts—and where on many of the lines there is but little back loading.

Working expenses, wherever presented in the Railways section of this chapter, exclude interest, sinking fund, exchange and certain other payments (see paras. 12 and 13 following).

During the 1939-45 War, large amounts were set aside by the railways as reserves, mainly to provide for depreciation and accrued leave, to be expended as circumstances permit. Particulars of these amounts, which were included in working expenses and which in the year 1942-43 aggregated nearly £10 million and over the whole period about £30 million, were given in Official Year Book No. 38, p. 175.

(ii) Working Expenses. The following table shows the total working expenses, the ratio of working expenses to gross revenue and working expenses per average route-mile worked and per revenue train-mile for the years 1953-54 to 1955-56:—

GOVERNMENT RAILWAYS: WORKING EXPENSES.

Year.		N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	C'wealth.	Aust.
			To		KING EXI	PENSES.			
1953–54		68,197	35,951	29,103	14,934	14,298	2,804	2,897	168,184
1954–55 1955–56		68,397 74,904	37,032 38,026	30,946 33,873	15,414 15,761	14,690 15,920	3,077 3,262	2,921 3,176	172,477 184,922
		Rati	o of Wo		(PENSES TO r Cent.)	O GROSS I	Revenue.	1	l
1953–54		91.45	100.68	96.30	117.42	128.68	131.48	85.14	99.01
1954–55 1955–56	• •	93.23 99.36	98.31 102.68	97.85 108.18	119.12 120.33	119.29 121.71	132.50 128.69	78.09 66.99	99.14 104.36
		Workin	NG EXPEN	SES PER A	VERAGE (£.)	ROUTE-MII	E Work	ED.	
1953-54		11,178	7,860	4,436	5,825	3,478	4,635	1,316	6,317
1954–55 1955–56		11,209 12,273	8,307 8,545	4,720 5,247	6,012 6,146	3,574 3,864	5,086 5,482	1,327 1,443	6,485 6,981
		w	ORKING E		PER REVE Pence.)	NUE TRAI	N-MILE.	<u> </u>	i
1953–54		436.39	471.41	363.01	487.05	476.35	354.64	355.98	431.86
1954–55 1955–56	• •	437.99	474.26 489.74	378.22 421.46	512.64	453.81	357.38	345.51	436.02

⁽a) See para. 8, note (a), page 387.

GOVERNMENT RAILWAYS: DISTRIBUTION OF WORKING EXPENSES. (£'000.)

Railway System.		Mainten- ance of Way and Works.	Motive Power.(a)	Traffic.	Other Charges.	Total Working Expenses.
		195	4-55.			
New South Wales	[11,485	28,840	16,248	11,824	68,397
Victoria		7,885	12,281	9,286	7,580	37,032
Queensland	1	7,295	14,699	7,197	1,755	30,946
South Australia(b)		2,771	7,488	3,593	1,562	15,414
Western Australia(b)		2,378	6,991	3,102	2,219	14,690
Tasmania(b)		785	1.303	647	342	3,077
Commonwealth(c)		802	1,307	612	200	2,921
Australia		33,401	72,909	40,685	25,482	172,477
		195	55-56.			
New South Wales		13,297	31,639	17,537	12,431	74,904
Victoria		7,786	12,011	9,812	8,417	38,026
Queensland		8,162	16,091	7,747	1,873	33,873
South Australia(b)		2,980	7,525	3,630	1,626	15,761
Western Australia(b)		2,692	7,405	3,395	2,428	15,920
Tasmania(b)		824	1,405	669	364	3,262
Commonwealth(c)		1,026	1,208	695	247	3,176
Australia		36,767	77,284	43,485	27,386	184,922

⁽a) Includes maintenance of rolling stock.
(c) See para. 8, note (a), page 387.

⁽iii) Distribution. The following table shows the total working expenses for the years 1954-55 and 1955-56 classified according to the main four expenditure headings.

⁽b) Includes provision of reserves for depreciation.

12. Net Revenue.—The following table shows for the years 1953-54 to 1955-56 the net revenue, i.e., the excess of gross revenue over working expenses, the amount of such net revenue per average route-mile worked and per revenue train-mile, the interest on railway loan expenditure and the profit or loss after paying interest:—

GOVERNMENT RAILWAYS: NET REVENUE, INTEREST, AND PROFIT OR LOSS.

N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	C'wealth.	Aust.
				NUE.			
4,964	- 244 635 - 994	1,120 679 - 2,561	- 2,216 - 2,475 - 2,663	- 3,187 - 2,375 - 2,840	- 671 - 755 - 727	(a) 505 (a) 820 (a) 1,565	1,679 1,493 - 7,738
NET	REVENUE	PER AVER	RAGE ROU	TE-MILE V	Vorked.	·	
813	- 54 142 - 223	171 103 - 397	- 865 - 965 - 1,038	- 775 - 578 - 689	- 1,109 - 1,247 - 1,222	(a) 230 (a) 373 (a) 711	63 56 292
	NET REV			E TRAIN-M	IILE.		
40.77 31.79 3.00	- 3.20 8.13 -12.80	13.97 8.30 -31.86	- 82.30	— 73.38	-87.66	(a) 96.96	3.78
				ITS.			
	2,303 2,545 2,874	2,211 2,460 2,630	1,162 1,288 1,471	1,134 1,411 1,721	254 282 322	(b) 404 (b) 407 (b) 385	(c)14,07 15,49 17,43
	<u> </u>		_	OSS.		·	:
- 151 - 2,136 - 7,550	- 2,547 - 1,910 - 3,868	- 1,091 - 1,781 - 5,191	- 3,378 - 3,763 - 4,134	- 4,321 - 3,786 - 4,561	- 925 - 1,037 - 1,049	(a) 101 (a) 413 (a) 1,180	- 12,39 - 14,00 - 25,17
	6,372 4,964 482 NET 1,044 813 79 40.77 31.79 3.00	6,372 - 244 4,964 635 - 994 NET REVENUE 1,044 - 54 813 79 - 223 NET REVENUE 40.77 - 3.20 8.13 3.00 -12.80 6,523 2,303 7,100 2,545 8,032 2,874 - 151 - 2,547 - 1,910	TOTAL N (4) 6,372 - 244 1,120 4,964 635 679 482 - 994 - 2,561 NET REVENUE PER AVER 1,044 - 54 171 813 142 103 79 - 223 - 397 NET REVENUE PER (F) 40.77 - 3.20 13.97 31.79 8.13 8.30 3.00 -12.80 -31.86 INTERES (4) 6,523 2,303 -31.86 INTERES (4) 6,523 2,303 2,211 7,100 2,545 2,460 8,032 2,874 2,630 NET PRO (4) NET PRO (4) NET PRO (4) 151 - 2,547 - 1,091 - 1,781	TOTAL NET REVER (£'000.) 6,372	TOTAL NET REVENUE. (£'000.) 6,372	TOTAL NET REVENUE. (£'000.) 6,372	TOTAL NET REVENUE. (£'000.) 6,372

A graph showing the gross and net revenue and working expenses from 1870 to 1955-56 appears on page 379.

Note.-Minus sign (-) denotes loss.

13. Exchange.—Exchange on interest payments abroad and certain other charges are not included in the table above. These items are not charged against the railways in Queensland and Western Australia and have been excluded for the purposes of comparison.

In the remaining States the amounts paid on account of exchange during 1955-56 were:—New South Wales, £482,000; Victoria, £127,949; South Australia, £56,105; and Tasmania, £3,912.

14. Traffic.—(i) General. Reference has already been made to the difference in the traffic conditions on many of the lines. These conditions differ not only in the several State and Commonwealth systems, but also on different lines in the same system, and apply to both passenger and goods traffic. By far the greater part of the population of Australia is confined to a fringe of country near the coast, more especially in the eastern and southern districts. A large proportion of the railway traffic between the chief centres of population is therefore carried over lines in the neighbourhood of the coast, and is thus, in some cases, open to seaborne competition. In recent years competition from road and air transport has become an important factor.

The following table shows particulars of railway traffic for the years 1953-54 to 1955-56:—

GOVERNMENT RAILWAYS: TRAFFIC.

Year.		N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	C'wealth.	Aust.
		14.5.44.	Vic.	Q land.	S. Aust.	W. Aust.	1 45.	C wealth.	Aust
		Pas	SENGER-JO	URNEYS (Suburban	and Cou	ntry).		
				('000.)				
1953–54		278,904	166,106	35,879	17,605	8,678	3,285	224	510,68
1954-55		281,417	169,204	35,919	16,849	10,139	3,114	215	516,85
195556	• •	280,470	166,708	35,647	16,434	12,271	2,977	230	514,73
PASSENGER	-1011	RNEYS (S	URURBAN	AND CO	UNTRY) P	ER AVERA	GE ROI	TE-MILE	Workei
, , , , , , , , , , , , , , , , , , , ,					ımber.)				
1953–54		45,714	36,315	5,469	6,866	2,111	5,430	102	19,18
1954-55		46,119	37,955	5,478	6,571	2,466	5,147	98	19,43
1955–56	• •	45,956	37,462	5,522	6,410	2,979	5,003	104	19,433
		· <u>·</u>	Goos	os and I	IVESTOCK	CARRIED.	<u> </u>	·	<u>'_</u>
			0001		0 Tons.)	CARRIED.			
1953–54		(a) 20,140	9,200	8,081	4,433	3,206	968	762	46,796
1954–55		19,386	10,082	8,492	4,474	3,407	1,041	816	47.69
1955–56	•••	18,787	9,607	8,180	4,414	3,793	1,075	918	46,77
	God	DS AND I	IVESTOCK	CARRIED	PER AVE	RAGE ROL	ITF-MIT F	WORKED	
	300				Tons.)		MILE	- OKKLO:	
1953–54		3,301	2,011	1,232	1,729	780	1,600	346	1,75
1954-55		3,177	2,262	1,295	1,745	829	1,721	371	1,79
1955-56		3,176	2,159	1,315	1,722	921	1,807	417	1,76
		1 .,-,+	1 .,	_,	1	1	1 -,-,-	1	_,,

⁽a) Partly estimated.

⁽ii) Passenger Traffic. With the exception of the Commonwealth Railway Systems which operate only country services, all systems provide both suburban and country passenger services. Traffic classed as "suburban" moves between stations within a classified suburban

area around each capital city whilst traffic classified as "country" originates or terminates at stations outside of this suburban area. Particulars of suburban and country passenger traffic are shown separately in the two tables following.

(a) Suburban Passenger Traffic. The following table shows for the years 1953-54 to 1955-56 a summary of suburban passenger operations. Most of the suburban services in New South Wales and Victoria are operated within electrified areas.

GOVERNMENT RAILWAYS: SUBURBAN PASSENGER SUMMARY.

			!			Subur	ban Passe	nger Earn	ings.
Year.	Suburban Passenger- journeys.	Suburban Passenger Train- miles.	Total Suburban Passenger- miles.	Average Number of Passengers per Train- mile.	Average Mileage per Passenger- journey.	Gross.	Per Pas- senger- journey.	Per Pas- senger- mile.	Per Pas- senger Train- mile.
	('000.)	('000.)	('000.)		(Miles.)	(£'000.)	(Pence.)	(Pence.)	(Pence.)
	2		Ne	w South	WALES.				
	a 266,000	11,381	(b)	(b)	(b)	(b)	(b)	(b)	(b)
	a 269,016 a 269,000	11,503 11,886	(b) (b)	(b) (b)	(b) (b)	(b) (b)	(b) (b)	(b) (b)	(b) (b)
	12 203,0001	11,000,		1 (0) 1) (0)	1 (6)	1 (0)	1 (0)
				Victoria					
1953–54 1954–55	159,984 162,957	8,193 8,236	1,359,415 1,376,307	166 167	8.50 8.45	6,008 6,088	9.01 8.97	1.06	176
1955-56	161,124	8,298	1,379,610	166	8.56	7,005	10.43	1.22	203
	<u> </u>		 -	<u>'</u>		<u> </u>		·	·
				Queensla	ND.				
1953-54	29,475	2,065	(b)	(b)	(b)	755	6.15	(b)	88
1954-55 1955-56	29,712 29,748	2,099 2,019	(b) (b)	(b) (b)	(b) (b)	767 749	6.19	(b) (b)	88 89
		2,0151	(-)	1 (-)		, , , , , ,			
			So	UTH AUST	RALIA.				
1953-54	16,122	1,768	146,852	83	9.11	532	7.90	0.87	72
1954–55 1955–56	15,450 15,061	1,772 1,778	143,003 140,906	81	8.49 9.36	526 567	8.17 9.04	0.88	71 77
1933-30	13,001	1,770	170,200		7.30	307	7.04	0.57	'''
	•		Wes	STERN AUS	TRALIA.				,
1953-54	7,816	731	55,916	77	7.15	238	7.31	1.02	78
1954-55 1955-56	9,354 11,481	1,038	66,456 80,408	64 52	6.56 5.79	293 362	7.51 7.56	1.06	68 67
1933-36	11,401	1,290	00,400	32 1	3.19	302	1.30	1.08	
				TASMANIA	۸.				
1953-54	2,509	208;	15,654	75	6.24	53	5.05	0.81	61
1954-55	2,519 2,443	239 250	14,683 13,568	61 54	5.83 5.55	51 47	4.87 4.66	0.83	51 46
1955–56	2,443	230	13,368	34 1	3.33	4/	4.00	0.04	40

(a) Estimated.

(b) Not available.

Note.—Train-miles refer to revenue mileages only-

(b) Country Passenger Traffic. The following table shows for the years 1953-54 to 1955-56 a summary of country passenger operations.

GOVERNMENT RAILWAYS: COUNTRY PASSENGER SUMMARY.

953-54 (b 954-55 (b	Country assenger-ourneys. ('000.) ('000.) ('000.) ('1000.) ('1000.) ('1000.) ('1000.)	Country Passenger Trainmiles. (a) ('000.)	Total Country Passenger- miles. ('000.) Nev (c) (c) (c) (c)	Average Number of Passengers per Train- mile. V SOUTH		Gross.	Per Pas- senger- journey. (Pence.)	Per Pas- senger- mile. (Pence.)	Per Pas- senger Train- mile. (Pence.)								
953–55 (tb 955–56 (tb 953–54 (b 953–54 (b 953–54 (b	6,121 6,247	10,508	(c) (c)	(c)	WALES.	(£'000.)	(Pence.)	(Pence.)	(Pence.)								
953–55 (tb 955–56 (tb 953–54 (b 953–54 (b 953–54 (b	6,121 6,247	10,408	(c) (c)	(c)													
953–55 (tb 955–56 (tb 953–54 (b 953–54 (b 953–54 (b	6,121 6,247	10,408	(c)		(a)	New South Wales.											
955–56 (£	6,121 6,247			(c)	(c)	(c)	(c)	(c)	(c)								
953–54 954–55 955–56	6,121 6,247	10,005[(6)	(c)	(c) (c)	(c) (c)	(c) (c)	(c) (c)	(c) (c)								
954–55 955–56 953–54	6,247			''	′—· · —	!_ (0) _	(6)		1 (0)								
954–55 955–56 953–54	6,247			Victoria			,										
955–56		4,591	498,544		81.45 79.66	3,811	149.43	1.83	199								
953-54		4,590 4,653	497,644 459,828		82.34	3,789	162.83	1.98	195								
				_'	<u>'</u>	'	'	'	·								
				QUEENSLA		1 2 315	1 00 04		, ,, ,								
734-33 1	6,404 6,207	4,844 5,079	(c) (c)	(c) (c)	(c) (c)	2,616	98.04	(c) (c)	114								
955-56	5,899		(c)	(c)	(c)	2,524	102.68	(c)	106								
			So	итн Аиѕт	RALIA.			· 									
953-54	1,483	2,236			90.14	1 865		1.55	1 89								
954-55	1,399					824	141.43	1.57	87								
955-56	1,373	2,154	125,088	55	91.08	802	140.13	1.54	85								
			WE	STERN AUS	STRALIA.												
953-54	862					645	179.43	1.94									
1954-55	785				1 '	667	203.89	2.03									
1955–56	790	1,677	82,81	3 47	104.85	678	205.95	1.96	97								
				TASMAN	IA.												
1953-54	776		1,			121	37.51	1.32									
1954–55 1955–56	595 534		,,			120 115	48.29	1.36	1								
1933-30		700	12,32	6) 23	30.39	1 113	1 31.92	1.42	1 33								
			Co	OMMONWEA	LTH.(d)												
1953-54	224	1			1	1	648.1										
1954-55 1955-56	215 230		,		344.88	615 710	685.4										
		ixed train	'	(b) Estima		(c) Not	7-72.0	1.31	1 20.								

Note.—Train-miles refer to revenue mileages only.

⁽iii) Freight Traffic. (a) Classification. Some indication of the differing conditions of the traffic in each system may be gained from an examination of the tonnage of the various classes of commodities carried, and of the revenue derived therefrom. The following table shows the quantities of various commodities carried during 1954-55 and 1955-56.

GOVERNMENT RAILWAYS: CLASSIFICATION OF COMMODITIES CARRIED. ('000 Tons.)

Railway System.		Coal, Coke and Shale.	Other Minerals.	Grain and Flour.	w	ool.	Live- stock.	All Other Com- modities.	Total.		
1954–55.											
New South Wales		(a)	(a)	(b)1,092	(c)	181	(c) 719	17,394	19,386		
Victoria		2,006	114	2,647	1.	139	574	4,602	10,082		
Queensland		(d)1,723	(e) 693	(f)3,464	1	71	805	1,736	8,492		
South Australia		492	1,077	1,030	ł	45	208	1,622	4,474		
Western Australia		588	157	947	1	48	128	1,539	3,407		
Tasmania		243	40	(f) 41	1	3	25	689	1,041		
Commonwealth		506	15	6	1	4	70	215	816		
Australia		(g)	(g)	(g)		491	2,529	27,797	47,698		
			19	55–56.							
New South Wales		(a)	(a)	(b)1,272	(c)	203	(c) 731	16,581	18,787		
Victoria		2,038	113	2,260	1	144	480	4,572	9,607		
Queensland		(d)1,597	(e) 716	(f)3,291	(64	807	1,705	8,180		
South Australia		259	1,198	1,042	1	45	230	1,640	4,414		
Western Australia		520	187	1,340	1	61	138	1,547	3,793		
Tasmania		246	48	(f) 34	i	4	26	717	1,075		
Commonwealth		454	34	7	i	4	122	297	918		
Australia . (g) (g) (g) 525 2,534 27,059 46,774											
(a) Included with "All Other Commodities". (b) Wheat only. (c) Estimated. shale. (e) Includes shale. (f) Agricultural produce. (g) Not available. (d) Excludes											

⁽b) Revenue. The following table shows the revenue derived from goods and livestock traffic during 1954-55 and 1955-56:—

GOVERNMENT RAILWAYS: REVENUE FROM GOODS AND LIVESTOCK TRAFFIC. (£'000.)

(2 000.)												
Railway System.		Coal, Coke and Shale.	Other Minerals	Grain and Flour.	Wool.	Live- stock.	All Other Com- modities.	Total.				
1954–55.												
New South Wales . 8,185 (a) (a) 3,522 40,096 51,803												
Victoria		2,283	145	5,684	836	1,572	13,897	24,417				
Queensland		(b)2,911	(c)1,915	(d)5,257	1,130	3,182	11,711	26,106				
South Australia		327	2,855	1,498	245	649	4,668	10,242				
Western Australia	٠.	1,159	423	1,797	296	378	6,307	10,360				
Tasmania		513	89	'(d) 88	11	66	1,276	2,043				
Commonwealth		814	59	10	24	222	1.521	2.650				
Australia		16,192	(e)	(e)	(e)	9,591	79,476	127,621				
			19	55–56.								
New South Wales		8,576	(a)	(a)	(a)	3,799	39,588	51,963				
Victoria		2,384	142	4,671	712	1,346	13,380	22,635				
Oueensland		(b)2,675	(c)1,995	(d)5,185	1,065	3,361	11,455	25,736				
South Australia		185	3,091	1,558	253	712	4,551	10,350				
Western Australia		1,025	516	2,420	379	395	6,254	10,989				
Tasmania		579	118	(d) 74	19	66	1,390	2,246				
Commonwealth	٠.	777	143	9	23	324	2,161	3,437				
								127,356				

⁽a) Included with revenue from "All Other Commodities".
(c) Includes revenue from shale. (d) Agricultural produce.

⁽b) Excludes revenue from shale.(e) Not available.

(c) Freight Summary. A summary of freight traffic on each railway system for each of the years 1953-54 to 1955-56 is shown in the following table.

GOVERNMENT RAILWAYS: FREIGHT SUMMARY.

					Good	ls and Liv	estock Ea	rnings.				
Year.	Revenue Goods Train miles. (a)	Total Revenue Net Ton- miles.	Average Train Load (Paying Traffic).	Average Haul per Ton.	Gross.	Per Average Route- mile Worked.	Per Revenue Net Ton- mile.	Per Revenue Goods Train- mile.	Density of Traffic. (b)			
	('000.)	('000.)	(Tons.)	(Miles.)	(£'000.)	(£)	(Pence.)	(Pence.)				
			New	South	Wales.							
1953-54	14,811	c2,849,803	(c) 186	(c) 142	52,847	8,662	4.45	826	c 467,104			
195455		c2,965,614		(c) 153	51,803	8,490	4.19	823	c 486,007			
1955-56	15,104	c2,942,192	(c) 188	(c) 157	51,963	8,514	4.24	797	c 482,089			
Victoria.												
1953-54	5,471	1,269,772	231	138	22,655	4,926	4.28	990	277,606			
195455	5,866	1,426,415		141	24,417	5,477	4.11	994	319,967			
1955-56	5,638	1,324,877	234	138	22,635	5,086	4.10	958	297,725			
${\tt Queensland}.(d)$												
1953-54	10,242	1,355,948	114	173	24,217	3,756	4.27	489	208,897			
1954-55	10,650	1,376,781		168	25,428	3,919	4.43	520	212,204			
1955–56	10,340	1,387,331	121	176	25,140	3,936	4.35	527	217,212			
			Sou	TH AUS	TRALIA.							
1953-54	3,037	684,848	214	140	10,007	3,903	3.51	791	267,101			
1954-55	2,959	677,128		151	10,242	3,995	3.63	774	264,090			
1955–56	2,865	643,801	209	146	10,350	4,037	3.86	808	251,092			
	•		WEST	TERN AU	STRALIA.							
1953-54	4,944	537,799	108	168	9,308	2,226	4.15	440	130,819			
1954-55	5,185	556,505		163	10,360	2,520	4.47	480	135,370			
1955–56	5,311	603,418	115	160	10,989	2,668	4.33	497	147,710			
				TASMAN	IIA.							
1953-54	982	87,533		90	1,855	3,066	5.09	437	144,683			
1954–55	1,024	96,178		92	2,043	3,377	5.10	462	158,972			
1955-56	1,031	101,210	95	94	2,246	3,774	5.32	504	170,100			
			Con	IMONWEA	\LTH.(<i>e</i>)							
1953-54	1,036	167,468		220	2,320	1,054	3.33	459	76,087			
1954-55	1,104	196,824		241	2,650	1,204	3.80	492	89,425			
1955–56	1,340	265,790	178	289	3,437	1,561	3.10	551	120,759			

⁽a) Excludes mixed train-miles. (b) Total ton-miles per average route-mile worked. (c) Partly estimated. (d) Excludes Queensland portion of Grafton-South Brisbane (Uniform Gauge) Line, (e) Railways controlled by the Commonwealth Government.

^{15.} Rolling Stock.—The following table shows the number of rolling stock of Government railways at 30th June, 1956.

GOVERNMENT RAILWAYS: ROLLING STOCK(a) AT 30th JUNE, 1956.

			Locom	otives.			Goods		
Railway System.		Steam.	Diesel- electric.	Other.	Total.	Coaching Stock.(b)	Goods Stock.	Service Stock.	
New South Wales		1,164	37	6	1,207	3,749	25,742	1,051	
Victoria		476	46	35	557	(c)2,379	21,232	(d)1,160	
Queensland		791	28	4	823	1,540	26,696	1,397	
South Australia		327	18		345	(c) 698	8,685	(d) 470	
Western Australia		368	62	10	440	604	12,095	744	
Tasmania		91	32	8	131	173	2,647	116	
Commonwealth		149	31		180	192	2,040	479	
Australia		3,366	254	63	3,683	(e)9,389	99,137	(e)5,418	

⁽a) Included in Capital Account. (b) Includes all brake vans. (c) Excludes 54 interstate coaching stock owned jointly by Victoria and South Australia. (d) Excludes one dynamometer car owned jointly by Victoria and South Australia. (e) Includes stock owned jointly by Victoria and South Australia.

16. Accidents.—The following table shows particulars of the number of persons killed or injured through train accidents and the movement of rolling stock on the government railways of Australia during the years 1954-55 and 1955-56:—

GOVERNMENT RAILWAYS: ACCIDENTS.(a)

Particulars.		N.S.W.	Vic.	Q1d.	S.A.	W.A.	Tas.	C'wth.	Aust.
				1954–55					
Persons killed Persons injured		60 660	35 592	14 151	15 137	19 256	3 13	23	146 1,832
				1955–56	б				
Persons killed Persons injured	• •	84 812	32 630	20 122	14 129	17 177	1 18		168 1,888

⁽a) Excludes accidents to railway employees.

17. Consumption of Coal, Oil and Petrol.—The following table shows the quantities of coal, oil and petrol consumed by the various government railways during 1955-56:—

GOVERNMENT RAILWAYS: COAL, OIL AND PETROL CONSUMED, 1955-56.

	Co	al.			Petrol for		
Railway System.	Locomo- tives.	Other Purposes.	Diesel Oil.(a)	Fuel Oil.(b)	Lubri- cation.	Other Purposes.	Rail Cars.
New South Wales Victoria Queensland South Australia Western Australia Tasmania Commonwealth	'000 tons. 1,523 207 696 170 317 38 12	'000 tons. 18 14 8 8 8	'000 gal. 3,898 6,885 2,665 2,064 2,693 1,141 2,783	'000 gal. 12,025 11,370 20,915 1,711	'000 gal. 477 344 424 (c) 314 44 76	'000 gal. 647 1,431 831 (c) 1,130 127 501	'000 gal. 68 5 143 156 62
Australia	2,963	54	22,129	46,479	(c)	(c)	439

⁽a) Used in internal combustion engines of locomotives and rail cars. furnaces of steam locomotives. (c) Not available.

⁽b) Used in oil-fired

^{18.} Staff Employed and Salaries and Wages Paid.—The following table shows details of the average staff employed and the salaries and wages paid by the government railways of Australia during 1954-55 and 1955-56.

GOVERNMENT	RAILWAYS:	AVERAGE	NUMBER	OF	EMPLOYEES	AND
	SALARII	ES AND W	AGES PAII).		

Railway System.		Ор	erating St	aff.	Const	ruction St	Total Salaties and Wages	Average Earnings Per Fm-			
		Salaried.	Wages.	Total.	Salaried.	Wages.	Total.	Paid. (£'000.)	ployee.		
1954-55.											
New South Wales		9,490	45,844	55,334	46	378	424	49,485	887		
Victoria		(b)5,123	(b)25,079	(b)30,202	(c)	(c)	(c)	27,433	908		
Queensland		4,385	23,393			547	570	23,800	840		
South Australia		1,897	8,491	10,388		1,196	1,206	10,530	908		
Western Australia		2,094	11,256			30	32	10,969	820		
Tasmania		355	2,294			225	250	2,285	788		
Commonwealth	• •	353	1,982	2,335	i 6	198	204	2,006	790		
Australia		d 23,697	d118,339	d 142,036	112	2,574	2,686	126,508	874		
				1955-56	ó.	·	·				
New South Wales		9,580	45.511	55,091	45	335	380	54.447	982		
Victoria	::	(b)5,177	(b)24,469			(6)	(c)	28.188	951		
Oueensland	• • •	4,483	24,926			804	837	26.083	862		
South Australia		1,886	8,348	10,234	11	1,157	1,168	10,846	951		
Western Australia		2,081	11,629	13,710)!	8	8	11,910	868		
Tasmania		375	2,251	2,626		255	268	2,395	828		
Commonwealth	••	347	2,052	2,399	4	213	217	2,204	843		
Australia		d 23,929	d119,186	d143,115	106	2,772	2,878	136,073	932		

⁽a) In Victoria, Queensland and Western Australia a considerable amount of construction work is carried out by private contractors and the staff engaged is therefore not under the control of the Railways Commissioners. (b) Includes construction staff. (c) Included with operating staff. (d) Includes construction staff, Victoria.

C. TRAMWAY AND TROLLEY-BUS SERVICES.

1. Systems in Operation.—(i) General. Tramway systems are in operation in all the State capital cities and in a number of the larger towns of Australia. Since 1st April, 1947, all systems have been operated by government or municipal authorities. Tramway systems are located in the following cities—New South Wales, Sydney; Victoria, Melbourne, Bendigo and Ballaarat; Queensland, Brisbane; South Australia, Adelaide; Western Australia, Perth; and Tasmania, Hobart. In Sydney, Brisbane, Adelaide, Perth and Hobart, tramway systems are supplemented by trolley-bus services. All systems are electric.

In many parts of Australia private lines used for special purposes in connexion with the timber, mining, sugar, or other industries are often called tramways, but they are more properly railways and the traffic on them has nothing in common with that of the street tramways for the conveyance of passengers, which are dealt with in the present section.

(ii) Total Mileage Open and Classification of Lines. The following table shows, for each State, the total route-mileage of tramway lines open for general passenger traffic at 30th June, 1956, classified (a) according to the controlling authority; (b) according to gauge. Trolley-bus route-mileage also is shown.

TRAMWAY AND TROLLEY-BUS SERVICES: ROUTE-MILEAGE OPEN AT 30th JUNE, 1956.

			(1)	vines.)				
Particulars		N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
		According	з то Со	NTROLLIN	G Аυтно	RITY.	'	
Government	••	113	173	1	1	34	30	350
Municipal				85	83			168
Total		113	173	85	83	34	30	518
		A	CCORDIN	NG TO GA	AUGE.			
Tramways—		1		:	[1		
5 ft. 3 in.		1 [5			1]	5
4 ft. 8½ in.		107	168	66	60	1 1		401
3 ft. 6 in.		1 1			1	12	9	21
Trolley-buses		6		19	23	22	21	91
Total		113	173	85	83	34	30	518

2. Summary of Operations, Australia.—The following table gives a summary of the working of all tramway systems in Australia for the years 1951-52 to 1955-56:—

TRAMWAY AND TROLLEY-BUS SERVICES: SUMMARY OF OPERATIONS, AUSTRALIA.(a)

)	1			[
Particulars.		Unit.	1951–52.	1952–53.	1953–54.	1954-55.	1955-56
Average mileage open for traffic		route-mile	543	530	529	527	528
		track-mile	990	990	992	994	991
Tramcars(b)		ł	2,996	2,833	2,714	2,626	2,619
Net increase in capital equipment di	uring			1	1	1	1 '
year(c)		£,000	2,075	911	861	910	1,034
Gross revenue(c)(d)		,,	15,121	15,968	15.780	15,267	15,878
Working expenses(c)(e)	• •	,,,	17,109	18,420	18,181	17,797	18.558
Net revenue(c)		",	- 1,988	-2,452	- 2,401	-2.530	-2.680
Interest(c)		"	536	628	656	714	846
	gross	. "			1	, , ,	•••
revenue(c)	•	per cent.	113.15	115.36	115 22	116.57	116.88
Car-miles	•	000	68,036	66,185	64,186	60.878	58,881
Gross revenue per car-mile(c)		pence	53.43	58.16	59.40	60.79	65.69
Working expenses per car-mile(c)	• •	pence	60.45	67 09	68.43	70 86	76 78
Net revenue per car-mile(c)		pence	- 7.02	- 8.93	- 9 03	- 10 07	-11.09
Passenger-journeys		''000	688,800	652,987	637,289	619,279	593,284
Passenger-journeys per car-mile(c)			10.12	9.87	9.93	10.17	10.08
Average gross revenue per passe		• • •					
journey(c)		pence	5.29	5.92	6.01	6.01	6.55
Persons employed at end of year(c)()	n .i.		18,309	16,051	15,743	15,030	14,499
Accidents-		1	, , , , ,	1	, , , , , ,	,	,
Persons killed		l	(c) 72	(c) 72	(c) 59	(c) 58	42
"injured			c 5,448	c 3,255	c 2,993	c 3,177	3,077

⁽a) Includes particulars of Hobart and Launceston Municipal Council Omnibus Services.
(b) Includes trolley-buses. (c) Excludes Queensland trolley-buses. (d) Excludes government grants.
(c) Includes provision of reserves for depreciation, etc. (f) Includes motor omnibus employees in South Australia, but excludes a number of employees in New South Wales and Western Australia who cannot be distributed between tramways and omnibuses.

Note.--Minus sign (-) denotes loss.

3. Traffic and Accidents.—Particulars of the traffic of electric tramways and the accidents which occurred in the movement of rolling stock during 1955-56 are shown for each State in the following table:—

TRAMWAY AND TROLLEY-BUS SERVICES: TRAFFIC AND ACCIDENTS, 1955-56.

		Average Mileage Open for Traffic.					Pas-	Acci	dents.
State.		Route- miles.	Track-	Tram- cars. (a)	Car- miles.	Pas- senger- journeys.	journeys per Car- mile.	Perso Killed.	Injured.
					('000.)	(.000.)			
New South Wales Victoria Queensland		115 177 85	221 329 154	789 880 438	12,002 24,082 10,208	174,954 222,524 106,959	14.58 9.24 10.48	17	(b) 869 1,100 590
South Australia Western Australia Tasmania	::	88 33 30	170 60 57	255 130 127	7,225 2,039 (d) 3,325	48,152 15,862 (d)24,833	6.66 7.78 (d) 7.47	(c) 4	(c) 204 263 (d) 51
Australia		528	991	2,619	58,881	593,284	10.08	42	3,077

⁽a) Includes trolley-buses. (b) Excludes accidents to employees. (c) Includes particulars for municipal-owned omnibus services. (d) Includes particulars of Hobart and Launceston Municipal Council Omnibus Services.

^{4.} State Details.—The following table shows a summary of the operations of electric tramways in each State for the years 1953-54 to 1955-56.

TRAMWAY AND TROLLEY-BUS SERVICES: SUMMARY OF OPERATIONS.

Year ended 30th June—	Mileage Open for Traffic at 30th June.	Net Increase in Capital Equip- ment during Year.	Gross Rev- enue. (a)	Working Expenses.	Net Rev- enue.	In- terest.	Ratio of Working Ex- penses to Gross Revenue.	Car- miles.	Passenger- journeys.	Persons Em- ployed at end of Year
	(Route- miles.)	(£'000.)	(£'000.)	(£'000.)	(£'000.)	(£'000.)	(Per cent.)	('000.)	('000.)	
				New	South	H WALE	s.			
1954	126	-135		6,883	-1,827	183	136.15	16,542	203,508	(c)4,65
1955	117	-829	4,731	6,416	-1,685	194	135.61	14,663	191,958	(c)4,07
1956	113	206	4,231	6,136	-1,905	192	145.03	12,002	174,954	(d)3,92
					Victor	RIA.				
1954	175	667	5,441)	5,588	-147	1141	102.70	24,130	222,541	5,40
1955	175		5,345		-347	132	106.48	23,173	220,095	5,40
1956	173	886	6,324	6,715	- 391	217	106.18	24,082	222,524	5,26
				(QUEENS	LAND.				
954	74)	(e) 63)	(e) 2.293!	e 2.237	(e) 56	(e) 1051	e 97.55	10,303	112,522	(e)2,42
955	80						e100.46	10,245	111,910	
956	85						e 98.29	10,208	106,959	
				Sou	тн Аи	STRALIA				
1954	92	(f) 161	1,776	2,236	-460	190	125.93	7,916	56,966	(g)2,21
1955	92				-346			7,646		(g)2,05
1956	83	142	1,797	2,012	-215	256	111.94	7,225		(g)1,98
				WEST	ERN A	USTRALI	Α.			
			509	610			110 031	2,307	18,743	470
954	30	331	2091	010	-1016	371	119.82			
1954	30 31	33 32	487	573	-101 -86	37 34	119.82	2,205	17,289	445
1954 1955 1956		32			- 86				17,289 15,862	445 427
1955	31	32	487	573 554	- 86 -118	34 33	117.63	2,205		
1955 1956	31 34	32 24	487 436	573 554	- 86 -118 TASMAN	34 33 (A.(h)	117.63 126.94	2,205 2,039	15,862	42
1955	31 34 (i) 30	32 24 72	487 436 705	573 554 7	- 86 -118 TASMAN	34 33 (A.(h)	117.63 126.94 88.94	2,205 2,039 2,988	23,009	573
1955 1956 1954 1955	31 34	32 24 72 48	487 436	573 554 7 627 666	- 86 -118 TASMAN	34 33 (A.(h)	117.63 126.94	2,205 2,039	15,862	42
1955 1956 1954 1955	(i) 30 (i) 30	32 24 72 48	487 436 705 611	573 554 627 666 752	- 86 -118 TASMANI - 78 - 55 - 93	34 33 (A.(h) 27 37 38	117.63 126.94 88.94 109.14	2,205 2,039 2,988 2,946	23,009 23,118	57. 566
1955 1956 1954 1955	(i) 30 (i) 30 (i) 30 (i) 30	32 24 72 48 72	705 611 659	573 554 627 666 752	- 86 -118 78 -55 -93 Austrai	34 33 IA.(h) 27 37 38 LIA.(j)	88.94 109.14 114.16	2,205 2,039 2,988 2,946 3,325	23,009 23,118 24,833	577 566 61
1955 1956 1954 1955	(i) 30 (i) 30	32 24 72 48 72 861	705 611 659	573 554 627 666 752	- 86 -118 TASMANI - 78 - 55 - 93	34 33 (A.(h) 27 37 38	117.63 126.94 88.94 109.14	2,205 2,039 2,988 2,946	23,009 23,118	57. 566

⁽a) Excludes government grants. (b) Includes provision of reserves for depreciation, etc. (c) Excludes administrative staff not distributable between omnibus and tramway services. (d) Excludes 1,430 administrative staff and 585 salaried staff who cannot be distributed between omnibus and tramway services. (e) Excludes rolley-bus services, particulars of which are included with omnibus services. (f) Includes capital expenditure on motor omnibus services. (g) Includes motor omnibus employees of Adelaide Municipal Tramways Trust. (h) Includes particulars of Hobart and Launceston Municipal Council Omnibus Services. (i) Tramway and trolley-bus mileage only. At 30th June, 1956, Hobart and Launceston Municipal Council Omnibus route-mileage was 45 miles. (f) See notes (a) to (i).

D. MOTOR OMNIBUS SERVICES.

1. General.—Motor omnibus services have been in operation for some years in the capital cities and many of the larger towns of Australia. Government and municipal authorities operate certain services and the others are run by private operators; in the States the former are run in conjunction with the existing electric tramway systems.

2. Government and Municipal Services.—(i) Summary of Operations, States. The following table gives a summary, for the years 1954-55 and 1955-56, of the operations of omnibus systems controlled by government and municipal authorities.

MOTOR OMNIBUS SERVICES:	GOVERNMENT AND MUNICIPAL.

Particula	rs.		N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	A.C.T.	Aust.				
	1954-55.													
Length of route	·.	miles	484	64		38	2,873		46	4,492				
Omnibuses			1,314	215	257	140,	226	84	65	2,301				
Net increase in capi	tal equ		'.						1					
during year	••	£'000	184	-26	(a) -85	408		(b) 16		545				
Gross revenue(c)	٠.	£'000	5,686	1,415		347	954			9,613				
Working expenses		£'000	7,769		(a)1,003	512	949			12,063				
Omnibus-miles		'000	33,106	7,241	5,533	2,592		(b)1,137		57,513				
Passenger-journeys	٠.	'000	217,882	56,511	29,496	11,538		(b)1,809	(d)3,700	346,749				
Persons employed	• •		(e) 5,090	1,055	(a) 711	(f)	(e) 151	(b) 76	142	(g)7,225				
				1955-	-56.									
Length of route		miles	490	63	426	54	2,886	606	46	4,571				
Omnibuses			1,294	292	254	162		98	65	2,392				
Net increase in capi	tal equ	ipment								-,				
during year		£'000	432	-4	(a) 113	251	31	(b) -78	20	765				
Gross revenue(c)		£'000	5,731	1,135	(a) 938	537	945	(b) 177	129	9,592				
Working expenses		£'000	8,457	1,283	(a)1,104	752	1,013			12,970				
Omnibus-miles	• •	'000	33,987	5,859		3,517	7,204			57,809				
Passenger-journeys		'000	220,543	37,509	29,410	15,363	25,825	(b)1,186	(d)3,925	333,761				
Persons employed			(e) 5,203	890	(a) 694	(f)	(e) 141	(b) 60	142	(g) 7,130				

⁽a) Includes particulars of trolley-bus services. (b) Excludes Hobart and Launceston Municipal Council Services. (c) Excludes government grants. (d) Estimated. (e) Excludes staff not distributable between omnibus and tramway services. (f) Not available; employees are interchangeable with electric tramway employees and are included therewith (see p. 400). (g) See notes applicable to individual States.

Note.—Minus sign (-) denotes decrease.

(ii) Summary of Operations, Australia. The following table gives a summary of the working of motor omnibus services in Australia under government and municipal control during each of the years 1951-52 to 1955-56.

MOTOR OMNIBUS SERVICES: GOVERNMENT AND MUNICIPAL, AUSTRALIA.

Particulars.	Unit.	1951~52.	1952–53.	1953–54.	1954-55.	1955-56.
Length of route Omnibuses	mile	4,490 2,141	4,562 2,258			4,571 2,392
Net increase in capital equipment during year (a)(b)			(c) 1,494		545	
Gross revenue $(a)(b)$ Working expenses $(a)(b)$	£'000	8,542 10,298	11,465	11,387	12,063	12,970
Net revenue(a)(b)	£'000	-1,756			-2,450	
gross revenue $(a)(b)$ Omnibus-miles (a)	per cent.	120.56 54,011			125.48 57,513	
Gross revenue per omnibus- $mile(a)(b)$	pence	37.87	40.18	37.07	39.70	39.23
Working expenses per omnibus- mile(a)(b)	pence	45.66 -7.79			49.81 -10.11	
Net revenue per omnibus-mileab Passenger-journeys(a) Passenger-journeys per omnibus-	'000	330,124				
mile(a) Average gross revenue per		6.11	6.05	5.97	6.03	5.77
passenger-journey (a)(b) Persons employed(d)	pence	6.15 8,174		6.12 7,308		6.68 7,130
, , , , , , , , , , , , , , , , , , , ,		,	,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	, -	,

⁽a) Excludes Hobart and Launceston Municipal Council Services, Council trolley-bus services. (c) Excludes South Australia.

⁽b) Includes Brisbane City
(d) See relevant notes to table

Note.-Minus sign (-) denotes loss.

3. Private Services.—(i) General. Particulars of motor omnibus services under the control of private operators are recorded in the States of New South Wales, South Australia and Western Australia only.

In New South Wales, particulars are compiled for the Metropolitan and Newcastle Transport districts only, but in South Australia and in Western Australia particulars of all services throughout the State are included.

(ii) Summary of Operations. The following table shows the operations of motor omnibus services under the control of private operators in New South Wales, South Australia and Western Australia during each of the years 1953-54 to 1955-56:—

MOTOR OMNIBUS SERVICES: PRIVATE.

Year.		Number of Omnibuses.	Omnibus- miles.	Passenger- journeys.	Value of Plant and Equipment.	Gross Revenue.	Persons Employed					
			('000.)	('000.)	(£'000.)	(£'000.)	<u> </u>					
New South Wales.(a)												
1953–54		806	20,195	88,639	990	2,426	1,369					
1954-55		836	20,587	89,508	1,032	2,536	1,340					
1955–56	• •	851	20,630	85,177	1,119	2,707	1,345					
			South	Australia.								
050 54		(b)	5.045	12.272	12	6 650	!					
1953–54	• •	112	5,845	13,373		658 669	il .					
1954-55 1955-56	• •	114 113	6,213 6,082	14,058 13,508	(c)	707	(c)					
			Western	Australia		<u> </u>	<u> </u>					
1953–54		423	12,550	34,211	1,124	1,661	971					
1954–55		388	13,190	33,860	1,024	1,674	906					
1955-56		372	12,172	32,607	1,125	1,581	827					

E. FERRY (PASSENGER) SERVICES.

- 1. General.—Ferry services to transport passengers are operated in the following States—New South Wales, at Sydney and Newcastle; Western Australia, on the Swan River at Perth; Tasmania, on the Derwent River at Hobart, on the Mersey River at Devonport and across D'Entrecasteaux Channel to Bruny Island. Control is exercised both by governmental authorities and by private operators. In Victoria and Queensland the services operated are not extensive, and there are no ferry services in South Australia.
- 2. Summary of Operations.—The operations of ferry passenger services in New South Wales, Western Australia and Tasmania during the years 1953-54 to 1955-56 are summarized in the following table. Particulars of passengers carried on vehicular ferries are not included.

FERRY (PASSENGER) SERVICES.

Y	ear.		ecole	Passenger Accom- modation.	Passenger- journeys. ('000.)	Gross Revenue. (£.)	Persons Employed.						
	New South Wales—Sydney and Newcastle. 1953-54 : 38 21,388 19,464 771,697 366												
1953–54	·:.			21,388	19,464	771,697	366						
1954–55			38	22,055	18,936	785,827	350						
1955–56	:		39	22,696	18,056	741,695	346						
		West	ERN AUS	TRALIA-P									
1953–54	• •		4	785	530	10,754	12						
1954–55	• •		4	785	469	11.480	11						
1955–56			4]	785	437	9,944	10						
		Tasmania	—Новаг	T AND DE	VONPORT.								
1953-54			5	1,512	1,253	29,165	25						
1954-55			6	1,607	1,355	33,863	35						
1955-56			5	1.582	1.034	29,531	33						

F. MOTOR VEHICLES.

- 1. Motor Industry.—Chapter VII.—Manufacturing Industry contains summarized information on the motor industry of Australia and includes therein some data on the imports of motor bodies and chassis. Chapter X.—Trade contains further data on imports, including those of petroleum products.
- 2. Taxi-cabs and Other Hire Vehicles.—In the capital cities and in many of the provincial centres taxi-cabs and other vehicles ply for hire under licence granted by either the Commissioner of Police or the local government authority concerned. As most of these vehicles are independently controlled by individuals or small companies, it has not been possible to obtain complete data in respect of their operations.
- 3. Motor Omnibuses.—In both urban and provincial centres motor omnibus traffic has assumed considerable proportions during recent years and in some States the railway and tramway systems run motor services complementary to their main services. There has been a considerable replacement also, during the last few years, of existing tramway services by trolley-bus and motor omnibus services. (See Divisions C. and D. of this chapter.)
- 4. Motor Vehicles on the Register, etc.—(i) Registrations and Revenue. The following table shows particulars of the registration of motor vehicles, licences issued and revenue received for 1955-56 and a summary for Australia for each of the years 1951-52 to 1955-56. It should be noted that in Victoria registration is made on the basis of the purpose for which the vehicle is to be used; consequently, motor car registrations are overstated by the inclusion of commercial vehicles registered for private use.

A graph showing for all motor vehicles other than motor cycles the registrations in force at 30th June of each year from 1925 to 1956 will be found on p. 380.

MOTOR VEHICLES: REGISTRATIONS AND REVENUE.

	Numbe	r of Moto 30	r Vehicle h June.(4		Number of	Gross Revenue derived from—				
State or Territory, and Year.	Motor Cars.(b)	Com- mercial Vehicles.	Motor Cycles.	Total.	Per 1,000 of Popu- lation at 30th June.	Drivers' and Riders'	Vehicle Regis- trations and Motor Tax.	Drivers' and Riders' etc., Licences.	Other Sources.	Total.
	1	J	j		<u> </u>		(£'000.)	(£'000.)	(£'000.)	(£'000.)

STATES AND TERRITORIES, 1955-56.

N.S.W Victoria(d) Queensland S. Aust W. Aust Tasmania Nor. Terr. A.C.T	483,397 498,584 179,190 154,358 98,875 48,973 1,904 6,978	127,393 63,630 65,626 22,380 3,077	27,675 20,394 20,713 13,873 4,800 566	677,916 326,977 238,701 178,374 76,153 5,547	260 239 281 264 238 303	(e) 292,793 202,495 89,659 7,541	9,211 5,604 4,363 3,123 1,296 734 35 72	824 401 136 398 119 45 5	1,072 1,048 889 22 144 148 1	11,107 7,053 5,388 3,543 1,559 927 41 80
Australia	d1,472,259	d 678,857	125,575	2,276,691	241	∫2457246	24,438	1,935	3,325	29,698

SUMMARY, AUSTRALIA.

1951-52 1952-53 1953-54 1954-55	(d) 1,030,992 1,107,659 1,199,833 1,347,082 1,472,259	579,444 606,899 649,609	153,933 1, 147,639 1, 140,614 1, 133,029 2, 125,575 2.	834,742 947,346 129,720	208 218 231	(g) 2,194,167 2,288,370 2,148,119 2,295,854 2,457,246	18,780 20,450 22,951	1,635 1,814	3,708 4,326 3,760	20,939 23,891 26,411 28,525 29,698
1955–56	1,472,259	678,857	125,575	276,691	241	2,457,246	24,438	1,935	3,325	29,698

(a) Excludes, at 30th June, 1956, trailers (137,507), road tractors, etc. (29,426), and dealers' plates (8,794). Excludes Northern Territory registrations prior to 1953-54. (b) Includes taxis and hire cars. (c) Includes lorries, vans, omnibuses and utilities. (d) See para. 4 on previous page. (e) As from 1st October, 1952, drivers' and riders' licences have not been issued on an annual basis in Queensland. (f) Excludes Queensland. (g) Excludes Queensland from 1953-54.

Note.—All Commonwealth-owned vehicles are included except those belonging to the Defence Services. Prior to 31st January, 1956, Department of the Navy vehicles were also included.

(ii) Relation to Population. The table hereunder shows the number of vehicles (excluding motor cycles) registered per 1,000 of population in each State and Territory at 31st December, 1921, and at 30th June for each of the years 1939 and 1952 to 1956.

MOTOR VEHICLES (EXCLUDING MOTOR CYCLES) REGISTERED PER 1,000 OF POPULATION.

Date.		N.S.W.	Vic.	Q'land.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
31st Dec., 1921		15	16	8	24	12	13	(a)		b 15
30th June, 1939	• •	107	125 212	118	137 224	133 195	96 167	218	174 223	118 b 187
,, 1952 1953	• •	168	211	188	234	204	180	(a) (a)		b 187 b 192
,, 1953 ,, 1954		179	215	199	245	217	193	206	241	201
" 1955		193	241	216	257	238	212	269	267	220
,, 1956		204	250	224	257	243	223	272	277	228

(a) Not available. (b) Excludes Northern Territory.

Note.—See Note to previous table.

5. New Vehicles Registered.—(i) States and Territories, 1955-56. The following table shows the number of new vehicles registered in each State and Territory during 1955-56. A graph showing the number of new motor vehicles (excluding motor cycles) registered during each of the years 1928-29 to 1955-56 will be found on page 380.

NEW MOTOR VEHICLES REGISTERED, 1955-56.

Vehicles.	N.S.W.	Vic.	Q'land.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Total.
Motor cars(b) Commercial veh-	56,074	53,511	19,629	17,461	10,115	5,461	214	1,133	a163,598
icles, etc.(c) Motor cycles	25,994 2,971	16,882 2,360				2,632 332	343 63		(a)69,312 10,530
Tetal .	85,039	72,753	32,689	25,896	16,462	8,425	620	1,556	243,440

⁽a) See para. 4 on page 403. omnibuses and utilities.

NOTE.—See NOTE to table at top of page 404.

(ii) Australia. Particulars of the number of new vehicles registered in Australia during each of the years 1951-52 to 1955-56 are shown in the following table:-

NEW MOTOR VEHICLES REGISTERED: AUSTRALIA.

Vehicles.		1951-52. (a)	1952-53.	1953–54.	1954–55.	1955-56.
Motor cars $(b)(c)$ Commercial vehicles, etc. $(c)(d)$ Motor cycles		125,760 73,020 22,155	93,417 52,290 (e)11,289		166,801 67,188 11,282	163,598 69,312 10,530
Total	••	220,935	e. 156,996	193,857	245,271	243,440

⁽a) Excludes Northern Territory. (b) Includes taxis and hir peace 403. (d) Includes Iorries, vans, omnibuses and utilities. registered in the Northern Territory.

NOTE.—See NOTE to table at top of page 404.

- 6. World Motor Vehicle Statistics, 1956.—Particulars of motor vehicle registrations throughout the world were included in issues of the Official Year Book prior to No. 39. This information was derived from the results of the World Motor Census, conducted by the American Automobile magazine. Detailed particulars are not repeated in this issue, but information derived from Automobile Facts and Figures shows that there were 96,001,316 motor cars, trucks and omnibuses registered in various countries of the world at 1st January, 1956. This was an increase of 9 per cent. on the figure for the previous year, 88,472,163, and was the highest figure attained to that date. Of these vehicles, 62,793,749 or 56 per cent. of the world total were in the United States of America, and Australian registrations amounted to 2 per cent.
- 7. Survey of Motor Vehicles, 1947-48.—A survey of motor vehicles (excluding motor cycles) registered at 30th June, 1948 was carried out by the Commonwealth Statistician in collaboration with the Government Statisticians and Road Transport authorities in the States. Results were published in a series of bulletins dealing with each State separately and with Australia as a whole, and summarized particulars were included in Transport and Communication, Bulletin No. 40. For subsequent periods similar surveys have been carried out in respect of new vehicles only. The results have been published by this Bureau in the annual bulletin, Transport and Communication and, since July, 1951, in the Monthly Bulletin of Registrations of New Motor Vehicles. Information contained in the latter includes the make, type and R.A.C. horsepower of new motor vehicles registered in each State and Territory.

A census has been taken of motor vehicles registered at 31st December, 1955 and results are being published in separate bulletins for each State, the Territories and the Commonwealth.

⁽b) Includes taxis and hire cars.

⁽c) Includes lorries, vans

⁽b) Includes taxis and hire cars.

⁽c) See para. 4 on (e) Excludes motor cycles

G. ROAD TRAFFIC ACCIDENTS.

Note.—Information relating to road traffic accidents for 1955-56, except that for total accidents and casualties, became available too late for inclusion in this section. Detailed statistics have therefore been restricted to the year 1954-55.

- 1. General.—Prior to the year 1949-50, it was not possible to make proper comparisons between States of the number of accidents recorded, because of the differences in legislation regarding the reporting of accidents and the degree to which the legislation could be enforced. However, arrangements were made, in co-operation with the Australian Road Safety Council and the various police and transport authorities concerned, to obtain the numbers of road traffic accidents on a comparable basis from all States in respect of the year ended 30th June, 1950 and subsequent years. This was achieved by restricting the statistics so that they related only to those accidents which resulted in death or bodily injury to any person, or in damage in excess of £10 to property. It is considered that there was little difference in the recording of accidents as between States for the years 1949-50 to 1953-54, except in the case of Western Australia, where statistics shown relate to all accidents which occurred in the metropolitan area and, in the remainder of the State, for periods prior to 1st January, 1953, only to those which involved fatal or "near-fatal" injury. Statistics are now collected on a comparable basis for all States except Tasmania, where, under legislation passed on 10th August, 1954, it is no longer obligatory to report accidents involving only damage to property. It should be noted, however, that the comparability of the statistics between States even on this basis still depends on the degree to which accidents so defined are in fact recorded by the police.
- 2. Total Accidents Recorded.—(i) 1954-55. The following table gives a summary of accidents recorded and casualties in each State and the Australian Capital Territory for the year 1954-55.

ACCIDENTS (KNOWN TO THE POLICE) WHICH OCCURRED IN PUBLIC THOROUGHFARES: ACCIDENTS RECORDED AND CASUALTIES, 1954-55.

			Pe	ersons Kille	d.	Pers	ons Injure	i.(c)
State or Territory.	Total Accidents Recorded. (a)		Number.	Per 100,000 of Mean Popu- lation.	Per 10,000 Motor Vehicles Regis- tered.	Number.	Per 100,000 of Mean Popu- lation.	Per 10,000 Motor Vehicles Regis- tered.
New South Wales	35,315	12,557	798	23	11	15,959	457	225
Victoria	15,093	10.217	528	21 20	8	12.833	509	204
Queensland	21,478	6,586	273	20	9	8,421	626	274
South Australia	12,304	3,098	173	21	8	3,926	479	171
W. Australia	10,715	3,149	206	31	12	4,036	613	239
Tasmania	2.642	864	57	18	8	1,111	353	155
Aust. Cap. Terr.	251	131	7	22	8	179	552	203
Total	97,758	36,602	2,042	22	10	46,465	506	219

⁽a) Total accidents causing death or injury to persons or damage exceeding £10 to property. See reference to Tasmanian legislation above. (b) Accidents involving persons killed, and persons injured to an extent requiring surgical or medical treatment. (c) Persons injured to an extent requiring surgical or medical treatment.

(ii) Summary, 1951-52 to 1955-56. A summary for Australia of accidents recorded in each of the years 1951-52 to 1955-56 is shown in the following table.

ACCIDENTS (KNOWN TO THE POLICE) WHICH OCCURRED IN PUBLIC THOROUGHFARES: ACCIDENTS RECORDED, AUSTRALIA.

Particulars.	1951-52.	1952-53.	1953–54.	1954–55.	1955-56.
Total accidents recorded(a) Accidents involving casualties(b)	68,110	75,295	87,224	97,758	105,638
	31,144	31,635	35.523	36,602	37,766

⁽a) Total accidents causing death or injury or damage exceeding £10 to property. See reference to Tasmanian legislation in para. 1. (b) Accidents involving persons killed, and persons injured to an extent requiring surgical or medical treatment.

A summary for persons killed or injured will be found on page 408.

(iii) Riders, Drivers, Pedestrians, etc., Killed or Injured. The following table shows the number of persons killed and the number injured during 1954-55 in each State and the Australian Capital Territory, classified into riders, drivers, pedestrians, etc.

ACCIDENTS (KNOWN TO THE POLICE) WHICH OCCURRED IN PUBLIC THOROUGHFARES: RIDERS, DRIVERS, PEDESTRIANS, ETC., KILLED OR INJURED, 1954-55.

Riders, Drivers, Pedestrians, etc.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	A.C.T.	Total.
		Pers	ONS KIL	LED.		-		
Drivers of Motor Vehicles	147	125	52	1 38	1 41	8	1	412
Motor Cyclists	116	62	55	30	37	10	l î	311
Pedal Cyclists	44	37	17	9	15	2	l '	124
Passengers (all types) (a)	223	117	69	44	60	19	5	537
Pedestrians	268	183	73	52	53	17		646
Other Classes(b)	:	4	7	1	1 1	1		12
Total	798	528	273	173	206	57	7	2,042
		PERSO	ns Injui	RED.(c)				
Privers of Motor Vehicles	3.567	2.812	1,691	923	766	237	41	10,037
Motor Cyclists	2,040	1.338	1.596	943	772	191	24	6.904
Pedal Cyclists	1,105	1,547	1.022	316	431	107	31	4,559
Passengers (all types) (a)	5,970	4,554	2,967	1,336	1,452	398	75	16,752
Pedestrians	3,241	2,536	1,118	404	608	175	8	8,090
Other Classes (b)	28	46	27	2	7	3		113
Not Stated	8			2				10
Total ,.	15,959	12,833	8,421	3,926	4,036	1,111	179	46,465

(a) Includes pillion riders. (b) Includes tram drivers, riders of horses and drivers of animal-drawn vehicles. (c) Persons injured to an extent requiring surgical or medical treatment.

(iv) Ages of Persons Killed or Injured. The following table shows the age groups of persons killed or injured in traffic accidents in each State and the Australian Capital Territory during 1954-55:—

ACCIDENTS (KNOWN TO THE POLICE) WHICH OCCURRED IN PUBLIC THOROUGHFARES: AGES OF PERSONS KILLED OR INJURED, 1954-55.

Mokoedinak		. AGES	OI 1.				111001		
Age Group (Years).		N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	A.C.T.	Total.
			PERS	ONS KIL	LED.		-		
Under 5		30	18	11	6	11	4	· · · ·	80
5 and under 7		17	5	8	4	1	2	١	37
7 17		69	26	17	8	11	4	1	136
17 21		94	53	44	17	26	8		242
21 " " 30 30 " " 40		148	114	51	31	32	. 6	1	383
30 ,, ,, 40	• •	96	65	34	28	19	13	2	257
40 ,, ,, 50	• •	98	52	34	15	19	6	2	226
50 ,, ,, 60		82	79	31	17	21 57	6 8		236
60 and over	• •	159	113	43	35 12	9	-	1	416 29
Not Stated	• • •		~ I				<u> </u>		
Total		798	528	273	173	206	57	7	2,042
			Person	ns Injur	ED.(a)				
Under 5		480	538	225	111	126	36	5	1,521
5 and under 7		382	373	168	85	91	35	4	1,138
7 ,, ,, 17		1,841	1,633	1,117	418	497	152	32	5,690
17 21		2,221	1,485	1,572	613	638	162	16	6,707
21 30	!	3,689	2,895	1,954	1,059	□ 866 ¦	232	49	10,744
30 40		2,441	2,074	1,189	727	481	136	38	7,086
40 50		1,832	1,460	893	426	371	114	16	5,112
50 ,, ,, 60		1.156	1,065	613	209	254	58	14	3,369
60 and over		1.471	1,040	655	245	260	60	3	3,734
Not Stated	• •	446	270	35	33	452	126_	2	1.364
Total		15,959	12,833	8,421	3,926	4,036	1,111	179	46,465

(a) Persons injured to an extent requiring surgical or medical treatment.

(v) Accidents Recorded and Casualties, classified according to Type of Vehicle, Road User, etc., Involved. The following table shows, for the year 1954-55, the number of accidents in which each of several classes of vehicles, road users, etc., was involved. The accidents involving casualties and persons killed and injured are similarly classified.

ACCIDENTS (KNOWN TO THE POLICE) WHICH OCCURRED IN PUBLIC THOROUGHFARES: ACCIDENTS RECORDED AND CASUALTIES, CLASSIFIED ACCORDING TO TYPE OF VEHICLE, ROAD USER, ETC., INVOLVED, AUSTRALIA, 1954-55.(a)

Particulars.	Motor Vehicle.	Motor Cycle.	Pedal Cycle.	Tram.	Animal and Animal-drawn Vehicle.	Pedes- trian.	Fixed Object.	Other Vehicle.
Total Accidents Recordedb Accidents Involving	92,116	11,384	5,285	2,013	2,852	8,310	8,794	439
Casualties	31,743 1,813 40,944	8,321 381 9,595	4,922 150 5,087	833 45 981	643 28 729	8,183 627 8,165	2,253 146 3,089	193 45 284

⁽a) It should be noted that, as accidents and casualties classified according to one type of road user, etc., may also be classified according to another, these totals cannot be added across to obtain grand totals. The table excludes 190 accidents recorded for which no cause was stated, of which 26 involved casualties—4 persons killed and 26 persons injured.

(b) Total accidents causing death or injury to persons or damage exceeding £10 to property. See reference to Tasmanian legislation on p. 406.

(c) Persons injured to an extent requiring surgical or medical treatment.

It will be seen, therefore, that motor vehicles were involved in 92,116 accidents, of which 31.743 involved casualties (1,813 persons killed and 40,944 persons injured). The 92,116 accidents in which motor vehicles were involved comprised 47,335 collisions with other motor vehicles, 7,490 with motor cycles, 4,045 with pedal cycles, 1,353 with trams, 2,324 with animals and animal-drawn vehicles, 7,048 with pedestrians, 8,276 with fixed objects, 386 with vehicles other than those mentioned, 13,190 instances of overturning or leaving the roadway, and 669 accidents to passengers only. The particulars of accidents in which motor cycles, pedal cycles, etc, were involved with motor vehicles are also included under their respective headings in the table above. Consequently, since the figures in each column refer to the total accidents in which the particular type of vehicle, etc., was involved, any aggregation across would result, through duplication, in considerable overstatement of the actual totals.

3. Persons Killed or Injured in Road Traffic Accidents.—The following table shows the number of persons killed or injured in road traffic accidents in each State and the Australian Capital Territory during each of the years 1951-52 to 1955-56:—

ACCIDENTS (KNOWN TO THE POLICE) WHICH OCCURRED IN PUBLIC THOROUGHFARES: PERSONS KILLED OR INJURED.

]				То	tal.
Year	•	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	A.C.T.	Num- ber.	Per 10,000 Motor Vehicles Regis- tered.
				PER	sons Ki	LLED.				·
1951-52 1952-53 1953-54 1954-55 1955-56		741 663 728 798 808	603 515 569 528 582	251 301 278 273 298	172 136 153 173 167	194 182 175 206 185	87 56 67 57 72	6 3 6 7 7	2,054 1,856 1,976 2,042 2,119	12 10 10 10 9
				Perso	ns Inju	RED.(a)				
1951-52 1952-53 1953-54 1954-55 1955-56		12,637 12,459 14,660 15,959 17,047	12,531 12,564 13,351 12,833 13,483	6,561 7,152 7,933 8,421 9,170	2,497 2,449 3,420 3,926 3,709	b 2,771 b 3,373 3,935 4,036 4,098	1,215 1,246 1,156 1,111 1,046	164 162 174 179 220	38,376 39,405 44,629 46,465 48,773	217 215 230 219 215

⁽a) Persons injured to an extent requiring surgical or medical treatment. (b) Includes all persons interesting surgical or medical treatment) in the metropolitan area but in the remainder of the State, prior to 1st January, 1953, only those suffering "near-fatal" injuries.

H. AVIATION.

1. Historical.—A short review of the progress of civil aviation in Australia up to the date of foundation of a Civil Aviation Administration was published in Official Year Book No. 16, pp. 334-5.

Aviation, 409

2. Foundation and Administration of Civil Aviation.—A brief account of the foundation and objects of this Administration will be found in Official Year Book No. 19, p. 299. Official Year Book No. 38 and earlier issues contain information on the control of civil aviation by the Board (1936) and later (1939) by the Department of that name. The Acts defining the broad principles of operation of the administration of civil aviation and the Regulations amplifying them, and the principal functions of the administration are also described.

The Department was partially re-organized in June, 1954, to provide for the more effective distribution of duties and responsibilities among senior officers. This included the appointment of an additional Assistant Director-General to the executive staff to control all ground facilities. The number of Divisions was increased from six to nine—the three administrative Divisions (Air Transport and External Relations; Administration, Personnel and Establishments; and Finance and Stores) remained unchanged, while in the technical field the Division of Airports remained unchanged; the Division of Air Navigation became the Division of Flying Operations; the Division of Airways was divided into two—Division of Airways Operations and Division of Airways Engineering; and the status of two Branches—Aviation Medicine and Accident Investigation and Analysis—was raised to that of Divisions.

In 1956 the Division of Airports was divided into two separate Divisions, namely, Airport Engineering and Aviation Buildings and Property. This latter Division became responsible for the implementation of the new organization to provide an efficient aviation fire service.

- 3. International Activity.—(i) International Organizations. A full report of the formation of the International Civil Aviation Organization, the Commonwealth Air Transport Council and the South Pacific Air Transport Council appeared in Official Year Book No. 37 and particulars of subsequent activity in the international field were included in issue No. 38. The International Civil Aviation Organization had a membership of 70 nations at 13th December, 1956. Australia has continued her representation on the council, a position which she has held since the organization was established in 1947. The Commonwealth was represented at the tenth International Civil Aviation Organization Assembly meeting at Caracas, Venezuela, in June, 1956. The tenth meeting of the South Pacific Air Transport Council was held at Melbourne in October, 1956. Further details will be found in Official Year Book No. 39 and earlier issues.
- (ii) International Air Services. Major changes in the organization of trans-Pacific and trans-Tasman airline operations were outlined in Official Year Book No. 41. Qantas Empire Airways continues to operate services to the United Kingdom through the Middle East, to Japan via Hong Kong and Manila, to South Africa across the Indian Ocean, to North America, to the British Solomon Islands, to New Guinea, to Norfolk Island and through Noumea to the New Hebrides. Qantas Empire Airways has re-equipped these services with fourteen Super Constellation aircraft which are now operating on the Pacific, United Kingdom, South Africa and Japan services. A summary of the operations of oversea services wholly or partly Australian-owned appears on page 415.

In 1955 Douglas DC4 land planes were substituted for flying-boats on the Pacific Islands service. No Australian international services are now operated by flying-boats. DC6 aircraft now link Sydney with both Auckland and Christchurch and Melbourne with Christchurch.

4. Regular Air Services within Australia.—Under the Government's rationalization plan, introduced in 1954, it was agreed that services on competitive routes such as in Queensland and the Riverina (New South Wales), should be regulated to avoid wasteful operations. Trans-Australia Airlines withdrew from operations in the Riverina but continued to serve Corowa. In Queensland this operator took over the Townsville-Mt. Isa service which was previously operated by Townsville and Country Airways.

A summary of the operations of regular air services within Australia appears on page 412 and a map showing air routes on pp. 413-4.

5. Air Ambulance Services.—A brief statement of the foundation and objects of the Air Ambulance Services will be found in Official Year Book No. 32, pp. 145 and 146.

During the year 1955-56 the Air Ambulance and Royal Flying Doctor Services continued to provide medical aid for the outback regions of Australia. The Commonwealth Department of Health operates the Northern Territory Aerial Medical Service with three Drover aircraft. The Royal Flying Doctor Service of Australia, operating from Cloncurry, Queensland (one Drover), Broken Hill, New South Wales (two Drovers), and Port Hedland, Western Australia (one Cessna and one Anson), covers a wide area of inland Australia. The Bush Church Aid Society for Australia and Tasmania, supported by funds from the Church of England, maintains two aircraft (one DH84A and one Percival Proctor III) at Ceduna, South Australia. The Federal Methodist Inland Mission (one DH82A) operates services from Meekatharra, Western Australia, and the Queensland Ambulance Transport Brigade operates a service from Cairns (one DH89A and one Auster J5B).

6. Training of Air Pilots.—A brief statement of the pre-war policy of the Commonwealth Government regarding assistance to Aero Clubs was given in Official Year Book No. 32, p. 146. A summary of the assistance granted during the years 1951 to 1956 will be found in Official Year Book No. 42, p. 253.

Under a new contract initiated in January. 1957, payments to clubs, subject to certain limitations, are made as follows:—(i) Maintenance grant of £1 10s. per hour flown at home base; (ii) maintenance grant of £2 per hour flown at other centres; (iii) licence issue bonuses of £100 for each private pilot licence gained, £150 for each commercial pilot licence gained and £50 for each initial instructor rating gained. In addition, the Commonwealth continues to accept a contingent liability to contribute at the rate of 10s. per hour flown towards each club's replacement reserve, in order to supplement the club's reserve for the purchase of specifically approved replacement aircraft.

During the year 1955-56, 294 issue and 899 renewal bonuses were gained by the assisted flying training organizations (non-profit aero clubs and commercial flying schools). Subsidized hours flown by aero clubs numbered 50,275 and the total earnings of all organizations amounted to £132,435. There were 24 aero clubs and 7 commercial flying training schools in operation during the year. In addition to civil flying training the aero clubs carried out 8,415 hours of service training and the commercial flying schools 4,114 hours.

- 7. Gliding Clubs.—For the year 1955-56 a total subsidy of £2,000 was distributed among the gliding associations in the various States. Of this amount, £1,500 was distributed among member clubs on an active membership basis, and £500 according to the number of gliding certificates issued.
- 8. Aeronautical Telecommunications.—During the year 1955-56 development and modernization of the aeronautical telecommunications system within Australia advanced in accordance with the communications plan which was developed and approved at the beginning of 1955. The aim of this plan is to standardize the equipment used in the telecommunications service, to close stations made redundant by improved range achieved by new equipment and to permit operation of the overall system with considerably reduced staff. Sixteen stations will be closed. Several short-haul teletype circuits were established, in addition to which radioteletype circuits were opened as follows:-Townsville-Port Moresby, Sydney-Darwin, Sydney-Perth, Perth-Cocos Island and Perth-Port Hedland. The tape relay system was further developed by the establishment of tape relay centres at Darwin, Perth, and Port Moresby. Instrument Landing Systems were fully commissioned at Sydney and Melbourne, while work was proceeding on similar installations at Adelaide and Hobart and a second installation at Sydney. The Distance Measuring Equipment programme was well advanced, and at the end of 1955-56 there were 61 operational units and four on test while nine more were proposed. The Visual Aural Range programme is also proceeding satisfactorily, and V.A.R. units are in operation at Singleton (New South Wales) and Rosebud (Victoria). Some non-directional beacon frequencies were changed to eliminate interference.
- 9. Air Traffic Control.-Work in the Air Traffic Control Branch covered the commissioning of new facilities, the introduction of procedures and standards to take full advantage of new navigation aids, and planning for greater efficiency and to meet the challenge of high-speed, high-altitude aircraft. At Sydney Air Traffic Control centre modern control presentation equipment of Australian design was commissioned, aerodrome control towers at Tamworth (New South Wales), Wynyard (Tasmania) and Wewak (New Guinea) were brought into operation and the control tower at Devonport (Tasmania) was decommissioned. Positive anti-collision service was introduced along the controlled routes between Brisbane and Melbourne to a height of 22,500 feet, increasing the previous area of responsibility by 10,000 feet; vertical separation of 2,000 feet was introduced above 15,000 feet and the I.C.A.O. altimetry procedures were tested and rejected. Plans were developed to extend the application of Distance Measuring Equipment to increase flexibility along the airways. In continuation of efforts to oversee the safety of individual aircraft, improved procedures for the dissemination of significant weather information were brought into operation, flight planning was simplified and route specifications were reviewed and re-issued. An Aeronautical Information Services Branch, created at the end of 1955, produced and issued the Australian Aeronautical Information Publication which won high praise from the industry and international aviation authorities. A complete review of the Search and Rescue organization was commenced with the object of providing the service in a manner which placed a lesser burden on the Royal Australian Air Force.
- 10. Meteorological Aids to Civil Aviation.—The development of working arrangements between the newly constituted Bureau of Meteorology and the Department was commenced. A review of the present scale of meteorological aids to civil aviation, now in progress, will

be finalized in the form of a plan covering all aspects of the provision of meteorological services to civil aviation. At fifty aerodromes in Australia and its Territories officers of the Bureau of Meteorology provide forecasting and observing services for civil aviation.

- 11. Aircraft Parts and Materials.—At 30th June, 1956, the number of firms and organizations approved by the Department of Civil Aviation to trade in the aircraft industry was 444. With the introduction of gas turbine engines and pressurized aircraft, certain firms have been approved to undertake the specialized work of overhaul, repair and maintenance of these engines and of accessories. The major fuel and oil companies have been brought under a system of quality control.
- 12. Aircraft Overhaul and Repair.—Aircraft overhaul and repair is carried out in workshops approved by the Director-General of Civil Aviation. Components and accessories are now certified on release notes signed by approved members of the firm's inspection organization.
- 13. Test and Examination of Aircraft Parts and Materials.—In the past the Department adopted the practice of approving laboratories for this work, but these approvals have now been terminated in favour of test houses and laboratories registered by the National Association of Testing Authorities, except when production is for the manufacturer's own use. Certificates issued under registration by the Association are acceptable to any Commonwealth Government Department.
- 14. Statistical Summaries.—(i) Registrations, Licences, etc. The following table provides a summary of the civil aviation registrations and licences in force in Australia at 30th June of each of the years 1952 to 1956.

CIVIL AVIATION: REGISTRATIONS, LICENCES, ETC., AUSTRALIA.(a)

		A	t 30th June-	-	
Particulars.	1952.	1953.	1954.	1955.	1956.
Registered aircraft owners	343	369	384	414	437
Registered aircraft	786	821	845	887	934
Pilots' Licences		į.			Ì
Private	1,444	1,677	2,035	2,245	2,453
Commercial	470	518	552	582	578
Senior Commercial		!	[76
Student	2,644	2,639	2,831	3,193	3,272
Helicopter (Commercial)					11
1st Class Airline Transport	513	495	515	548	600
2nd ,, ,, ,,	35	45	34	25	9
3rd ,, ,, ,,	400	371	368	390	394
Navigators' Licences—					
Flight Navigator	155	163	166	161	177
Radio Operators' Licences—	100	100			
1st Class Flight Radio Tele-		1	Ì		
graphy Operator	98	93	88	78	75
Flight Radio Telephony	- 1		-		
Operator—		ļ	. [ĺ
1st Class	825	850	834	820	1
2nd	258	243	275	309	(b)1,386
3rd ,	41	70	113	137	(0,1,000
Flight Engineers' Licences	53	58	67	98	94
Aircraft Maintenance Engineers'	33	30	٠. ا	,,]
Licences	1,720	1,790	1,757	1,747	1.818
Aerodromes—	1,,,20	1,,,,,	1,,,,,,		',,,,
Government	189	186	198	185	188
D. L.C.	269	260	262	303	301
Fluing Done Boson(a)	11	15	16	13	13
riying Boat Bases(c)	11	13	10	13	13

⁽a) Except for aerodromes and flying-boat bases, includes the Territory of Papua and New Guinea.
(b) Now only one category (Flight Radiotelephone Operator).
(c) Includes alighting areas.

⁽ii) Aircraft on the Australian Register. A summary of aircraft on the Australian register at 31st December, 1956, classified according to the principal types of operation in which they are engaged, is shown in the following table.

AIRCRAFT ON THE AUSTRALIAN REGISTER(a), 31st DECEMBER, 1956.

Type of Aircraft.	Number.	Type of Aircraft.	Number.
(i) Aircraft Engaged in Regular Public Transport—		(iii) Aircraft used for Private Purposes—	
Douglas DC3	71	Auster (all Types)	91
Douglas DC4 (Skymaster)	17	DH82, DH82A (Tiger Moth)	57
Lockheed 1049 (Super Con-	-	Percival Proctor	14
stellation)	13	Avro Anson MKI	13
Vickers Viscount 720, 747, 756	11	DH94 (Moth Minor)	10
Douglas DC6, DC6B	6	Wackett Trainer CA-6	10
Avro Anson	7	DH87A and B (Hornet Moth)	10
Convair Liners (Types 240 and		DH60 G and M Moth	8
340)	5	Cessna (170B and 180)	10
DH104 (Dove)	5	Ryan ST-M	9
DHA-3 (Drover MKII)	5	Miles M65 Gemini	7
Other Types	19	Fairchild 24 W-41A (Argus)	7
Total	159	Other Types	81
(ii) Aircraft Available for Air Charter—		Total	327
Auster (All Types)	51	(iv) Aircraft used for other Pur-	
Avro Anson	16	poses(b)—	'
Percival Proctor	16	DH82, DH82A (Tiger Moth)	206
DH82, DH82A (Tiger Moth)	14	Auster (all Types)	35
DH84 (Dragon)	12	DHC1 (Chipmunk)	24
Cessna	10	Other Types	49
Other Types	45	Total	314
Total	164	Grand Total	964

⁽a) Includes those based in the Territory of Papua and New Guinea. aerial top-dressing, etc.

CIVIL AVIATION: OPERATIONS OF REGULAR INTERNAL SERVICES, AUSTRALIA.

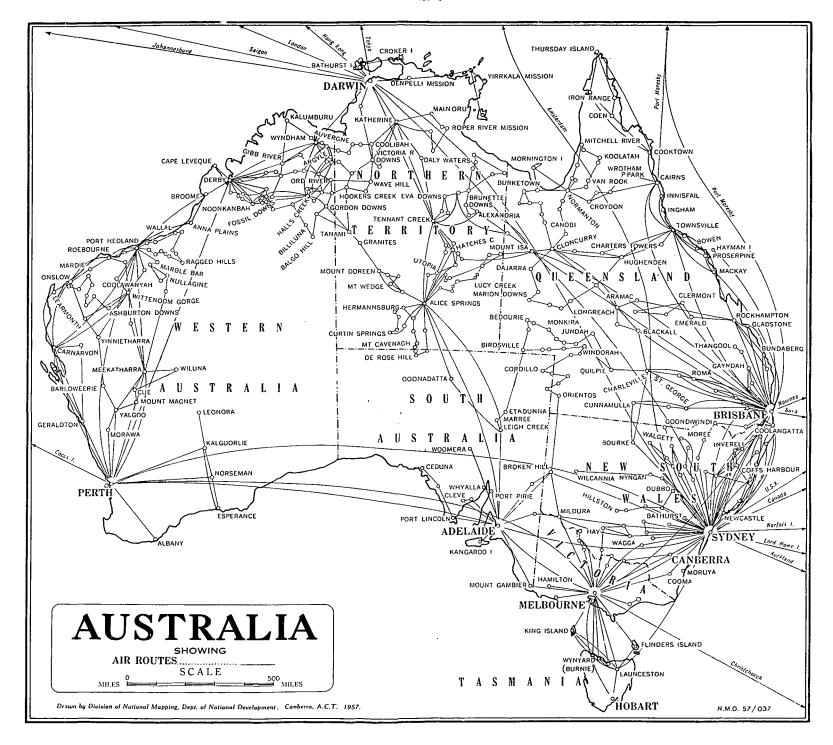
Partic	ulars.			1951–52.	1952-53.	1953–54.	1954–55.	1955–56.
Hours flown Miles Paying passengers Paying passenger-miles		::	,000 ,000	260,947 41,831 1,828,506 721,573	237,640 39,059 1,706,446 667,321	251,019 41,014 1,772,357 702,139	257,787 43,513 1,918,125 765,652	251,900 43,701 2.020,380 827,885
Freight— Tons(a) Ton-miles(a) Mail—	::	::	'oòò	57,464 26,684	57,635 27,167	69,479 32,650	78,711 36,984	84,446 38,909
Tons(a) Ton-miles(a)	::	• •	°000	2,681 1,285	2,311 1,166	2,316 1,225	2,317 1,257	2,478 1,357

⁽a) In terms of short tons (2,000 lb.).

⁽b) Flying School training,

⁽iii) Operations of Regular Internal Services. The next table summarizes the flying activities of regular internal services operating within Australia during each of the years 1951-52 to 1955-56.

⁽iv) Operations of Oversea Services wholly or partly Australian-owned. The following table furnishes a summary of oversea services, wholly or partly owned by Australian interests, operating between Australia and oversea countries, including Pacific islands and the Territory of Papua and New Guinea, during the years 1951–52 to 1955–56. The operations of Qantas Empire Airways, Tasman Empire Airways Ltd. and British Commonwealth Pacific Airlines are included, but those of Canadian Pacific Airlines, K.L.M. and Pan-American Airways are excluded.



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CIVIL AVIATION: OPERATIONS OF OVERSEA SERVICES.(a)

Particulars.				1951-52.	1952-53.	1953-54.	195455.	1955-56.
Route miles (unduplica Hours flown Miles ,, Paying passengers	ted) a	t 30th Ju	ne	43,455 50,336 10,664 95,134	66,558 54,148 11,565 97,753	64,250 53,580 11,464 102,965	63,774 49,326 11,128 114,371	58,618 50,665 12,028 131,934
Paying passenger-miles Freight— Tons(b)		::	'000 	265,756 2,138	275,206 1,957	290,603	317,565 2,662	383,930
Ton-miles(b) Mail— Tons(b)			'000	6,716 1,141		2,295 8,331	9,372 1,442	10,494 1,491
Ton-miles(b).	•	•	,000	6,162	6,122	7,718	7,927	8,458

⁽a) Airlines wholly or partly owned by Australian interests.

(v) Accidents and Casualties. The number of accidents involving aircraft on the Australian register in which persons were killed or injured is shown in the following table for the years 1951-52 to 1955-56.

CIVIL AVIATION: ACCIDENTS INVOLVING AUSTRALIAN AIRCRAFT.(a)

Particu	ılars.	1951-52.	1952-53.	1953–54.	1954–55.	1955-56.
Number(b) Persons killed Persons injured		 25 37 22	16 5 19	26 36 27	22 27 19	31 22 27

⁽a) Includes accidents and casualties in the Territory of Papua and New Guinea. all accidents irrespective of whether involving death or injury.

(b) Includes

15. Territory of Papua and New Guinea.—In this area there were, at 30th September, 1956, 25 aerodromes, 2 water airports, 19 water aerodromes and 5 alighting areas under the control of the Department of Civil Aviation; 47 aerodromes under the control of the Territory Administration; and 20 aerodromes, 6 water aerodromes and 2 alighting areas under private control. Ten cleared heliports and approximately 300 helicopter clearings were also in existence.

Five companies conduct regular services between the major aerodromes. Charter flights can be arranged to almost any locality. Further information may be found in Chapter V.—The Territories of Australia.

During the year 1955-56, three accidents occurred in which one person was killed and five persons were injured. These figures are included in the total accidents for Australia in the table above.

PART II.—COMMUNICATION.

A. POSTS; TELEGRAPHS; TELEPHONES; CABLE AND RADIO COMMUNICATION.

Note.—The statistics in this Division have been advanced two years since the previous issue but, owing to the exigencies of space, it has been impossible in some cases to show figures for both 1954-55 and 1955-56 in the tables. More detailed figures for 1954-55 will be found in *Transport and Communication*, Bulletin No. 46. In all the tables in this Division particulars for the Australian Capital Territory are included with those for New South Wales, while the South Australian figures include particulars for the Northern Territory.

§ 1. General.

1. The Postmaster-General's Department.—Under the provisions of the Post and Telegraph Act 1901, the Department was placed under the control of the Postmaster-General. The Director-General of Posts and Telegraphs controls the Department under the Postmaster-General, whilst the principal officer in each State is the Deputy-Director of Posts and Telegraphs.

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⁽b) In terms of short tons (2,000 lb.).

2. Postal Facilities.—(i) Relation to Area and Population. The following statement shows the number of post offices, the area in square miles and the number of inhabitants to each post office (including non-official offices) and the number of inhabitants to each 100 square miles in each State and in Australia at 30th June, 1956. In order to judge clearly the relative postal facilities provided in each State, the area of country to each office as well as the number of inhabitants per office should be taken into account.

POSTAL FACILITIES: RELATION TO AREA AND POPULATION AT 30th JUNE, 1956.

Particulars.	N.S.W.	Vic.	Q'land.	S.A.	W.A.	Tas.	Aust.
Number of post offices(a) Number of square miles of territory per	2,572	2,344	1,259	898	635	514	8,222
office	120	37	533		1,537	51	362
Number of inhabitants per office	1,395	1,111	1,089	965	1,067	622	1,147
Number of inhabitants per 100 square	1		1			1	i
miles	1,156	2,964	204	96	69	1,219	317

⁽a) Includes "official," "semi-official," and "non-official" offices.

The foregoing table does not include "telephone" offices at which there is no postal business.

(ii) Number of Offices. The following table shows the number of post offices (exclusive of telephone offices) in each State at 30th June, 1955 and 1956.

	NUMB	ER O	F POS	T OFFI	CES.			
Type of Office.	N.S	s.w.	Vic.	Q'land.	S. Aust.	W.Aust.	Tas.	Aust.
		30тн	JUNE,	1955.	· ·	·		
Official and Semi-official Non-official		502 063	304 2,058	212 1,047	165 726	150 488	52 467	1,385 6,849
Total	2,	565	2,362	1,259	891	638	519	8,234
		30тн	JUNE,	1956.		1		
Official and Semi-official Non-official	1	507 065	305 2,039	211 1,048	168	151 484	53 461	1,395 6,827
Total	2,	572	2,344	1,259	898	635	514	8,222

(iii) Employees and Mail Contractors. The number of employees and mail contractors in the Central Office and in each of the States at 30th June, 1955 and 1956 are given in the following table:—

NUMBER OF	POSTA	L_EMPI	LOYEES	AND N	AAIL C	ONTRA	CTORS.	
Particulars.	Central Office.	N.S.W.	Vic.	Q'land.	S.A.	W.A.	Tas.	Aust.
		30ті	H JUNE,	1955.		,		
Employees Mail Contractors(a)	1,006	33,860 2,001	24,221 1,085	13,160 1,274	8,101 378	5,841 284	3,397 280	89,586 5,302
	·	30т	H JUNE,	1956.			<u></u>	!
Employees Mail Contractors(a)	1,054	34,180 2,175	24,588 1,041	13,411 1,292	8,364 372	6,070 291	3,505 278	91,172 5,449

⁽a) Includes persons employed to drive vehicles.

3. Gross Revenue, Branches—Postmaster-General's Department.—The gross revenue (actual collections) in respect of each branch of the Department during the years 1954-55 and 1955-56 is shown in the table hereunder:—

POSTMASTER-GENERAL'S DEPARTMENT: GROSS REVENUE.(a) (£'000.)

Sources.	N.S.W.	Vic.(b).	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
		1954-5	5.				
Postage	9,644	7,003	3,196	2,052	1,588	656	24,139
Money order commission and		ĺ			1		1
poundage on postal notes	376	234	99	80	49	24	862
Private boxes and bags	62	42	33	21	14	8	180
Miscellaneous	823	673	406	183	145	78	2,308
Total, Postal	10,905	7,952	3,734	2,336	1,796	766	27,489
Telegraphs	1,708	1,253	884	514	452	123	4,934
Telephones	15,947	11,924	5,510	3,632	2,296	1,093	40,402
Grand Total	28,560	21,129	10,128	6,482	4,544	1,982	72,825
		1955–5	6.		· · · · · · · · · · · · · · · · · · ·		
Postage	10,302	7,355	3,359	2,228	1,664	672	25,580
Money order commission and				İ	1		
poundage on postal notes	416	242	107	89	56	25	935
Private boxes and bags	63	43	33	22	15	9	185
Miscellaneous	840	1,767	324	177	166	56	3,330
Total, Postal	11,621	9,407	3,823	2,516	1,901	762	30,030
Telegraphs	1,611	1,305	906	538	473	127	4,960
Telegraphs	17,216	13,236	6,112			1,213	44,351
Grand Total	30,448	23,948	10,841	7,087	4,915	2,102	79,341

⁽a) The figures in this table relate to revenue actually collected during the year as recorded for Treasury purposes.

(b) Includes Central Office collections.

For each of the years 1951-52 to 1953-54 the gross revenue for Australia was £59,371,000, £64,398,000 and £67,797,000 respectively.

Gross revenue for the year 1955-56 increased by 8.9 per cent. compared with that for the previous year. Revenue of the Postal, Telegraph and Telephone branches increased by 9.2 per cent., 0.5 per cent. and 9.8 per cent. respectively.

4. Expenditure, Postmaster-General's Department.—(i) Distribution. The following table shows, as far as possible, the distribution of expenditure (actual payments) in each State during the years 1954–55 and 1955–56, as shown by records kept for Treasury purposes. The table must not be regarded as a statement of the working expenses of the Department, since items relating to new works, interest, etc., are included therein.

POSTMASTER-GENERAL'S DEPARTMENT : DISTRIBUTION OF EXPENDITURE.(a)

(£'000.)

			(£ 000.	,				
Particulars.	Central Office.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
			1954-55	i.				
Expenditure from Ordinary	t i							
Votes— Salaries and payments	1				ĺ) i)
in the nature of								
salary	366	13,017	9,112 881	5,055 392	3,139 266	2,069	1,228 101	33,986 3,337 1,713
General expenses Stores and material	17	1,417 760	428	193	147	113	55	1,713
Mail services	(b)2,946	1,333	638	708	322	225	104	6,276
Fngineering services (other than capital	}				1	}		1
works)	583	9,782	6,517	3,568	2,126	1,612	823	25,011
Other services	211	•••	••	••			•••	211
Total	4,190	26,309	17,576	9,916	6,000	4,232	2,311	70,534
Rent, repairs, maintenance		434	248	120	94	68	13	977
Proportion of audit ex- penses Capital works and		14	9	5	3	2	1	34
services(c)—								
Telegraph and telephone New buildings, etc	26	9,449	6,909 1,124	3,449 333	1,924 273	1,366 240	960 218	24,083 3,256
Other expenditure, not		1,000	1,124	333	2/3	2.40	2.0	1
allocated to States	(d)4,702		••	••			•••	4,702
Grand Total	8,918	37,274	25,866	13,823	8,294	5,908	3,503	103,586
			1955-50	5.				
Expenditure from Ordinary		1						
Votes—		i						
Salaries and payments in the nature of	1		ļ	1		1		1
salary	447	14,354	9,998	5,605	3,441	2,318	1,356	37,51
General expenses Stores and material	64	1,652 773	1,030 432	431 276	306 142	236 120	134 72	3,85 1,83
Mail services	(e)3,860	1,715	809	827	449	275	118	8,05
Engineering services			1					
(other than capital works)	779	11,185	7,546	4,308	2,416	1,926	984	29,14
Other services	200						••	20
Total	5,370	29,679	19,815	11,447	6,754	4,875	2,664	80,60
			i			-		
Rent, repairs, maintenance		427	307	120	103	73	24	1,05
Proportion of audit	ł	1	1		1	1		
expenses Capital works and	3	15	10	. 6	3	2	1	4
services(c)— Telegraph and telephone	33	10,285	6,848	3,075	2,063	1,567	975	24,84
New buildings, etc		1,580	1,200	312	228	405	199	3,92
Other expenditure, not allocated to States	(f)3,929							3,92
	1	l	i				1	-

⁽a) The figures in this table represent actual payments made during the year as recorded for Treasury purposes. (b) Expenditure on air-mail services, £2,795,000 and conveyance of mails in other countries, £151,000. (c) Includes expenditure from loan fund. (d) Includes expenditure not apportioned to States, i.e., interest on loans, £1,304,000; sinking fund, £1,655,000; superannuation contributions, £1,475,000; transferred officers' pensions and allowances, £6,000; pensions and retiring allowances, £10,000; and loans redemption and conversion, £252,000. (e) Expenditure on airmail services. (f) Includes expenditure not apportioned to States, i.e., interest on loans, £885,000; sinking fund, £1,438,000; superannuation contributions, £1,592,000; transferred officers' pensions and allowances, £5,000; and pensions and retiring allowances, £9,000.

- (ii) Totals. Actual payments made for each of the years 1951-52 to 1953-54, respectively, were:—£93,109,000, £98,344,000 and £99,478,000. Total expenditure increased by 10.4 per cent. during 1955-56, compared with that during 1954-55.
- 5. Profit or Loss, Postmaster-General's Department.—The foregoing statements of gross revenue and expenditure represent actual collections and payments made and cannot be taken to represent the actual results of the working of the Department for the year. The net results for each branch, after providing for working expenses (including superannuation, pensions and depreciation) and interest charges including exchange, are shown in 'the following table for the years 1951-52 to 1955-56.

POSTMASTER-GENERAL'S DEPARTMENT: PROFIT OR LOSS, BRANCHES. (£'000.)

Bran	Branch.			51-52.	19	52-53.	19	53–54.	19	1954-55.		55-56.
Postal Telegraph Telephone	••		_	544 900 2,107		2,417 1,453 2,932		.,		2,254 800 2,905		2,402 1,202 3,179
All Branches				663	-	938		153	-	149	_	425

Note.-Minus sign (-) indicates loss.

6. Fixed Assets.—(i) Details, 1955-56. The following table shows particulars of the fixed assets of the Postmaster-General's Department from 1st July, 1955 to 30th June, 1956:—

POSTMASTER-GENERAL'S DEPARTMENT : FIXED ASSETS. (£'000.)

Particulars.	Net Value, 1st July, 1955.	Capital Expendi- ture, 1955-56.	Gross Value, 30th June, 1956.	Deprecia- tion, etc., 1955-56. (a).	Net Value, 30th June, 1956.
Telephone service plant (excluding					
trunk lines)	200 (05	27,574	228,269	2,940	225,329
Joint trunk and telegraph plant (aeria	i l	,	1	,	1
wires, conduits, and cables)	33,310	3,722	37,032	333	36,699
Telegraph service plant	2,139	253	2,392	80	2,312
Postal service plant	1,120	78	1,198	25	1,173
Sites, buildings, furniture and office					1
equipment	35,085	4,364	39,449	126	39,323
Miscellaneous plant	12,856	2,453	15,309	454	14,855
Total	285,205	38,444	323,649	3,958	319,691

(a) Includes dismantled assets, depreciation written off, and assets transferred.

(ii) Net Value. The net value of the fixed assets of the Postmaster-General's Department at 30th June in each of the years 1952 to 1954, respectively, was:—£194,749,000, £222,981,000 and £253,627,000.

§ 2. Posts.

1. Postal Matter Dealt With.—(i) States, 1955-56. The following table shows a summary of the postal matter dealt with in each State during the year 1955-56. Mail matter posted in Australia for delivery therein is necessarily handled at least twice, but only the number of distinct articles handled is included in the following table.

POSTAL MATTER DEALT WITH(a): STATES, 1955-56.

('000.)

State.	 Letters.	Papers and Packets. (c)	Parcels.	Regis- tered Articles. (e)	Letters.	Papers and Packets. (c)	Parcels.	Regis- tered Articles.
٠	Posted fo	or delivery	within A	ustralia.	Post	d for deli	very Over	seas.
New South Wales Victoria Queensland South Australia Western Australia Tasmania Australia	 502,661 381,778 171,935 120,096 90,928 41,455 1,308,853	9,734 7,852	4,315 2,479 1,426 1,179 232 16,024	2,060 1,145 908 570 16,026	8,965 5,506 3,861 5,315 339 39,740	3,999 1,086 705 1,544 18 16,897	174 50 50 36 18	247 71 67 62 32 1,117
New South Wales Victoria Queensland South Australia Western Australia Tasmania Australia	 41,346 10,155 4,509 4,298 3,786 1,535 65,629	23,124 8,485 4,438 5,066 5,413 1,661	317 141	852 207 31 30 60 53	559,761 400,898 181,950 128,255 100,029	138,851 74,983 33,427 17,565 16,691 9,531	7,061 4,630 2,588 1,526 1,263 266	8,004 5,283 2,162 1,242 1,030 655

⁽a) See explanation in para. 1. (i) above. enclosed in envelopes and sorted with letters. included in letter mail. (d) Includes registered, cash on delivery and duty parcels. (e) Includes registered articles other than parcels.

(ii) Australia. The next table shows the total postal matter dealt with in Australia during each of the years 1951-52 to 1955-56.

TOTAL POSTAL MATTER DEALT WITH: AUSTRALIA.

		Letters, I and Lett	Postcards er-cards.		papers ackets.	Parce	els.(a)	Registere Articles of than Parce	
Year.	<u> </u>	Total. ('000.)	Per 1,000 of Mean Popula- tion.	Total. ('000.)	Per 1,000 of Mean Popula- tion.	Total. ('000.)	Per 1,000 of Mean Popula- tion.	Total. ('000.)	Per 1,000 of Mean Popula- tion.
1951-52		1,197,990	140,467	249,678	29,275	16,670	1,955	17,948	2,104
1952-53		1,228,685	140,675	244,363	27,978	16,313	1,868	16,479	1,887
1953-54		1,309,099	147,084	261,180	29,345	16,639	1,869	16,703	1,877
1954-55		1,344,642	147,922	274,158	30,160	16,765	1,844	17,628	1,939
1955-56		1,414,222	151.811	291.048	31,243	17,334	1,861	18,376	1.973

⁽a) Includes registered, cash on delivery and duty parcels.

^{2.} Cash on Delivery Parcels Post.—(i) General. The Postmaster-General's Department undertakes, upon prepayment of a prescribed commission, to deliver registered articles sent by parcels post within Australia, or between Australia and Lord Howe Island, Norfolk Island, Nauru, Territory of Papua and New Guinea, or Fiji, to recover from the addressee on delivery a sum of money specified by the sender, and to remit the sum to the sender. The object of the system is to meet the requirements of persons who wish to pay at the time of receipt for articles sent to them, and of traders and others who do not wish their goods to be delivered except on payment.

⁽ii) States. The next table shows particulars regarding the cash on delivery parcels posted in each State for the years 1954-55 and 1955-56.

CASH ON DELIVERY PARCELS POST: STATES.

Particulars.		N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
			19	54–55.				
Parcels posted Value Revenue(a)	000°£ 000°£	369 1,311 97	167 585 50	176 567 43	59 178 16	71 153 18	3 10 1	845 2,804 225
			19	955–56.				
Parcels posted Value Revenue(a)	,000 £,000 £,000	344 1,240 90	137 420 49	157 526 39	55 177 1 11	65 151 16	4 12 1	762 2,526 206

⁽a) From commission and postage.

(iii) Australia. In the following table particulars of cash on delivery parcels posted in Australia are shown for the years 1951-52 to 1955-56.

CASH ON DELIVERY PARCELS POST: AUSTRALIA.

Particulars.		1951–52.	1952–53.	1953–54.	1953–54. 1954–55.		
Parcels posted Value		,000 £,000	899 2,876	837 2,656	888 2,876	845 2,804	762 2,526
Revenue(a)	••	£'000	236	221	239	225	206

⁽a) From commission and postage.

- 3. Total Cost of Carriage of Mails.—During 1955-56 the total amounts paid for the carriage of mails, as disclosed by the Profit and Loss Account of the Postal Branch, were as follows:—Inland mails—departmental transport £873,000, road £2,441,000, railway £1,193,000, air £650,000; Coastwise mails—£33,000; Oversea mails—sea £135,000, air £3,036,000; Grand total—£8,361,000.
- 4. Transactions of the Dead Letter Offices.—During the year 1955-56, 1,844,000 letters were returned to writers or delivered, 353,000 were destroyed in accordance with the Act, and 254,000 were returned to other countries as unclaimed—a total of 2,451,000. Corresponding particulars for packets were—636,000, 238,000, 40,000 and 914,000. There were 3,365,000 articles handled in all.
- 5. Money Orders and Postal Notes.—(i) General. The issue of money orders and postal notes is regulated by sections 74-79 of the Post and Telegraph Act 1901-1949. The maximum amount for which a single money order payable within Australia may be obtained is £40, but additional orders will be issued upon request when larger amounts are to be remitted. The maximum amount permitted to be sent to any person in the dollar area is £A.5 per month and for remittances to countries outside the dollar area, £A.10 per week. A postal note cannot be issued for a sum larger than twenty shillings.

(ii) States. Particulars regarding the business transactions in each State for the years 1954-55 and 1955-56 are shown hereunder:—

MONEY ORDERS AND POSTAL NOTES: TRANSACTIONS, STATES. (£'000.)

	l 		1954–55.			1955-56.				
State.	Money Orders.			Postal Notes.		Money Orders.			Postal Notes.	
	Issued.	Paid.	Net Com- mission.	Issued.	Pound- age.	Issued.	Paid.	Net Com- mission.	Issued.	Pound- age.
New South Wales Victoria	30,641 14,136 7,569 4,149 3,334 1,870	30,970 14,400 7,160 3,844 3,219 1,669	110 62 32 27	4,400 2,980 955 1,106 569 216	125 36 48 24	35,175 16,374 8,338 4,774 3,659 1,900	34,866 16,287 7,869 4,407 3,485 2,671	127 69 37 31	4,590 2,791 998 1,223 628 220	181 115 38 53 25
Australia	61,699	61,262	459	10,226	410	70,220	69,585	495	10,450	421

(iii) Australia. The next table shows the number and value of money orders and postal notes issued and paid in Australia in each of the years 1951-52 to 1955-56.

MONEY ORDERS AND POSTAL NOTES: TRANSACTIONS, AUSTRALIA.

			Money	Orders.			Postal	Notes.	
Year.	Year. Issued.		ed.	Pai	d.	Issu	ed.	Paid.	
		Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.
1951–52 1952–53		'000. 5,404 5,666	£'000. 49,495 53,088	'000. 5,362 5,578	£'000. 49,439 53,075	'000. 26,476 26,793	£'000. 11,608 11,658	'000. 26,590 26,658	£'000. 11,675 11,614
1953-54 1954-55 1955-56	• • • • • • • • • • • • • • • • • • • •	6,080 6,755 7,638	56,175 61,699 70,220	5,960 6,617 7,337	56,082 61,262 69,585	26,168 21,816 23,128	11,465 10,226 10,450	26,082 21,867 22,124	11,441 10,249 9,959

(iv) Classification of Money Orders Issued and Paid. Of the total money orders issued in Australia during 1955-56, 7,337,000 valued at £69,083,000 were payable in Australia, 12,000 (£35,000) in New Zealand, 219,000 (£771,000) in the United Kingdom and 70,000 (£331,000) in other countries. Of the total money orders paid in Australia during 1955-56, 7,195,000 (£68,838,000) were issued in Australia, 41,000 (£116,000) in New Zealand, 63,000 (£335,000) in the United Kingdom and 38,000 (£296,000) in other countries.

Money orders payable or issued in foreign countries, and which have been sent from or to Australia through the General Post Office in London, are included in those payable or issued in the United Kingdom.

(v) Postal Notes Paid. The following table shows the number and value of postal notes paid in each State during the years 1954-55 and 1955-56. The number and value of postal notes issued and paid in each of the years 1951-52 to 1955-56 have been given in the previous table.

		195	1 –55.		1955-56.					
Postal Notes Paid in—	Issued in Sta		Issued in State		Issued in Stat		Issued in Other States.			
	'000.	£'000.	'000.	£'000.	'000.	£'000.	'000.	£'000.		
New South Wales	7,225	3,651	1,293	575	8,217	3,801	1,474	631		
Victoria	5,568	2,425	1,942	768	5,242	2,312	2,270	876		
Queensland	1,436	704	697	348	1,457	736	690	367		
South Australia	897	481	106	54	943	492	103	51		
Western Australia	738	373	225	62	1,014	419	181	54		
Tasmania	315	136	1,425	672	293	127	240	93		
Australia	16,179	7,770	5,688	2,479	17,166	7,887	4,958	2,072		

POSTAL NOTES PAID: STATE OF ISSUE.

§ 3. Telegraphs.

1. General.—A review of the development of telegraph services in Australia up to 1921 appeared in Official Year Book No. 15, p. 625, and subsequent developments of importance have been dealt with in later issues. During the past few years substantial improvements in both the speed and grade of telegraph services throughout Australia have been effected, the entire system being subjected to intensive re-organization. The external circulation system of the Australian telegraph service has been considerably modified, and direct communication has been established between cities and towns which formerly were served through intermediate repeating centres.

Telephone subscribers may telephone telegrams for onward transmission, or have messages telephoned to them. The fee for the service is small, and the system means, in effect, that the telegraph system is brought into the home of every telephone subscriber. The number of telegrams lodged by telephone during the year 1955-56 (details for 1954-55 in parentheses) was about 8.6 (8.2) million or approximately 36 (34) per cent. of the total lodgments. The number of telegrams telephoned to subscribers totalled 4.5 (4.2) million.

A radiogram service is provided to certain isolated places throughout Australia and a number of privately-operated wireless transceiver stations have been established at various centres throughout the Commonwealth, enabling telegrams to be exchanged with departmental telegraph offices. Stations sponsored by the Royal Flying Doctor Service of Australia can communicate by wireless with base stations.

The picturegram service between Melbourne and Sydney, which was established in 1929, but which was suspended during 1942, was restored and extended to Brisbane and Adelaide in 1949, to Perth in 1950 and to Hobart and Newcastle in 1951. The equipment installed at these points also permits the direct transmission and reception of oversea photoelegrams. Portable picture-transmitting apparatus has been provided for use at country centres in New South Wales and Victoria and was first used for the opening of the 19th Federal Parliament at Canberra on 21st February, 1950. In 1955-56 (1954-55 details in parentheses) 6,445 (9,660) picturegrams were lodged for destinations within Australia, 1,382 (1,295) were transmitted to oversea destinations and 3,775 (2,959) were received from other countries. Between 30th June, 1954 and 30th June, 1956, service between Australia and overseas was extended by the establishment of facilities for the transmission of pictures to and from Japan.

As from 20th May, 1953, the Department authorized the connexion of privatelyowned picturegram equipment to the public telephone trunk line network for the transmission of pictures. The new facilities are provided subject to certain restrictions where Departmental picturegram services operate and to payment of appropriate charges to cover the use of trunk line channels and equipment. Pictures from overseas may now be routed direct to private receivers. Teleprinter services (i.e., typewriting over electrical circuits), affording the great advantage of direct and instantaneous communication between points within the same building or separated by distances up to thousands of miles, and printergram services, that is, leased teleprinter channels between the premises of subscribers and chief telegraph offices for the transmission and reception of telegrams, are available. The number of printergram services rose from 143 to 193 during 1955-56. Messages transmitted over these services totalled 1,252,000 during 1954-55 and 750,000 during 1955-56.

- 2. Telegraph and Telephone Mileage.—At 30th June, 1956 the combined single-wire mileages for both telegraph and telephone purposes were:—aerial, underground and submarine cables—exchange 6,202,000 miles, trunk telephone and telegraph 213,000 miles; aerial wires—telephone, trunk and/or telegraph purposes 538,000 miles, exchange and non-exchange service lines 713,000 miles. The mileages of conduits and pole routes were 10,800 duct miles and 117,000 miles respectively. Conduits now include only ducts and conduits with an internal diameter of 2 inches or over. Those with a diameter of less than 2 inches are not recorded separately and are included with underground cables. The mileages in each State may be found in *Transport and Communication*, Bulletin No. 47.
- 3. Telegraph Offices.—(i) States. The numbers of telegraph offices, including railway telegraph offices, in the various States at 30th June, 1956 were:—New South Wales, 3,282; Victoria, 2,344; Queensland, 1,748; South Australia, 955; Western Australia, 994; Tasmania, 573.
- (ii) Australia. The numbers of telegraph offices in Australia at 30th June of each of the years 1952 to 1956 respectively were:—9,830, 9,902, 9,909, 9,907 and 9,896.
- 4. Telegrams Dispatched within Australia.—(i) States. The following table shows the number of telegrams dispatched to places within the Commonwealth and to adjacent islands and to ships at sea, according to the class of message transmitted:—

('000.)Paid and Collect. Unpaid. Total Tele-State. Ordin-Ur-Letter-Radio-Ser-Meteorgrams. Total. : Total. Press. vice. ological ary. gent. gram. gram. 7,432 4,531 3,650 New South Wales 461 68 7 8,048 8,569 165 147 71 56 25 258 377 155 22 34 29 22 4,999 4,292 2,006 16 4,741 3,915 151 107 Victoria 13 12 17 71 193 184 95 Queensland 1,693 46 1.851 60 South Australia Western Australia 205 ,737 63 63 142 2,100 Tasmania 6 50 634 Australia, 1955-56 22,600 1954-55 19,691 960 21,174 847 1,539

TELEGRAMS DISPATCHED, 1955-56.

(ii) Australia. Telegrams dispatched to destinations within Australia and to adjacent islands and to ships at sea, during each of the years 1951-52 to 1953-54 respectively, numbered:—27,080,000, 23,407,000 and 22,536,000.

§ 4. Telephones.

1. General.—Particulars of the total mileage of lines used exclusively for telephone purposes are not available, but are combined with all other line mileage. Particulars of the total single wire mileage used for telephone, trunk and/or telegraph purposes are shown in § 3, para. 2, above.

During 1955-56, 79,239 telephone subscribers' lines and 116,540 telephones were added to the system, compared with 77,760 lines and 111,569 telephones in 1954-55. With an average at 30th June, 1956, of one telephone to every six persons, Australia had a telephone density exceeded by that of only six other countries. The trunk line network was increased by 65,570 channel miles and at 30th June, 1956, had reached 926,717 miles;

52,171 of these additional channel miles were obtained by the installation of carrier-wave equipment, some of which was installed on radio-telephone bearers. Carrier-wave facilities enable several speech paths to be obtained from one pair of wires or, in the case of radio-telephone systems, without wires at all, and are designed to transmit the voice with greater fidelity than the wire pairs on which they are based. An alternative aerial route between Melbourne and Sydney has been completed and work is in progress to provide a direct route for traffic from Sydney to Adelaide and Perth. Sixteen additional trunk line channels are being provided between Tasmania and the mainland.

Ten automatic exchanges were brought into operation in metropolitan areas during the year, together with 15 country and 93 rural automatic exchanges. At 30th June, 1956, there were 274 automatic exchanges in the metropolitan areas and 940 in country districts, to which 1,192,000 telephones were connected, representing 70 per cent. of the total number in use in Australia.

2. Summary.—Particulars relating to the telephone services in each State at 30th June, 1956, are shown in the following table:—

Particulars.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Exchanges Telephone Offices (including Ex-	2,325	1,764	1,334	694	756	398	7,271
changes)	3,459	2,557	1,835	1,020	981	554	10,406
Lines connected '000 Instruments connected '000	449 648	382 544	164 218	107 149	69 9 6	36 4 9	1,207 1,704
(i) Subscribers' instruments'000	634	533	212	144	93	47	1,663
(ii) Public telephones '000	7.4	4.9	3.1	1.7	1.3	0.8	19.2
(iii) Other local instruments '000	6.9	6.1	3.3	2.6	1.8	1.0	21.7
Instruments per 1,000 of population	181	209	159	171	141	154	181

TELEPHONE SERVICES: SUMMARY, 30th JUNE, 1956.

Of the total telephones (1,704,000) in service at 30th June, 1956, 627,000 or 37 per cent. were connected to exchanges situated beyond the limits of the metropolitan telephone networks.

3. Subscribers' Lines and Calling Rates.—The next table shows the number of subscribers' lines and the daily calling rates at central, suburban and country telephone exchanges in the several States for 1955-56:—

TELEPHONES: SUBSCRIBERS' LINES AND DAILY CALLING RATES, 1955-56.

	Cen Excha	tral inges.		irban anges.	Country Exchanges.		
State.	Sub- scribers' Lines Connected.	Average Outward Calls Daily per Line.	Sub- scribers' Lines Connected.	Average Outward Calls Daily per Line.	Sub- scribers' Lines Connected.	Average Outward Calls J Daily P per Line.	
New South Wales Victoria Queensland South Australia Western Australia Tasmania	32,209 21,465 10,166 8,721 10,337 6,103	10.00 10.00 10.82 9.27 7.41 4.46	233,500 215,605 66,034 52,632 31,870 6,220	3.59 3.22 2.49 2.66 3.07 2.37	160,546 130,880 77,131 38,213 22,232 20,792	1.84 1.25 1.80 1.24 1.32 1.63	

A comparison of the average daily calling rates for each class of exchange shows that Queensland registered the greatest number of calls per line at central exchanges, and New South Wales at both suburban and country exchanges.

4. Effective Paid Local Calls.—The numbers of effective paid local calls from subscribers' and public telephones in the various States during the years 1954-55 and 1955-56 appear hereunder.

TELEPHONES: NUMBER OF EFFECTIVE PAID LOCAL CALLS. (Million.)

Calls.	N.	s.w.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
			1954-5	5.				
Subscribers' From public telephones	::	408 56	300 33	119	75 10	57 8	22 2	981 122
Total		464	333	132	85	65	24	1,103
			1955-5	6.		<u>' </u>		
Subscribers' From public telephones	::	447 52	329 32	127 12	82 10	63 7	23 2	1,071 115
Total		499	361	139	92	70	25	1,186

5. Trunk Line Calls and Revenue.—In the next table the number of telephone trunk line calls recorded, the amount of revenue received, and the average revenue per call are shown for each State and Australia for the years 1954-55 and 1955-56.

TELEPHONES: TRUNK LINE CALLS AND REVENUE.

Particulars.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia
		19	54-55.	,	,		
Total calls '000	30,056	26,019	15,671	8,767	5,099	4,284	89,896
Total revenue £'000	4,946	3,604	2,442	1,387	789	479	13,647
Average revenue per]
call pence	39.49	33.24	37.40	37.96	37.15	26.82	36.43
		19	955-56.				
Total calls '000	33,013	28,683	17,346	9,532	5,614	4,924	99,112
Total revenue £'000	/	4,050	2,749	1,527	860	554	15,314
Average revenue per call pence	40.52	33.88	38.04	38.45	36.77	27.01	37.08

The number of trunk line calls during 1955-56 increased by 9.2 million, or 10 per cent., compared with the figure for the previous year, whilst the average revenue per call increased by 1.8 per cent.

6. Oversea Telephone Services.—During the years 1954-55 and 1955-56, radio-telephone services were established between Australia and Chile, Greece, Poland, Uruguay and the Virgin Islands, bringing the number of countries with which radio-telephone communication is available to 77. Service is also provided to certain trans-Atlantic liners, ships off the Australian coast, H.M.A. ships, and H.M.N.Z. ships when cruising in Australian waters.

The amount of traffic handled over the radio-telephone services increased by 21 per cent. over that handled in 1954-55. During 1955-56 (1954-55 details in parentheses), the number of calls connected was 60,633 (49,937), comprising 31,569 (25,180) originating in Australia and 29,064 (24,757) incoming calls.

- 7. Revenue from Telephones.—Particulars regarding the revenue from telephone services are included in tables in § 1 (see pp. 417-9).
- 8. World Telephone Statistics, 1956.—Information derived, in the main, from statistics compiled by the American Telephone and Telegraph Company shows that at 1st January, 1956, there were more than 101 million telephones in use throughout the world. The United States of America, with over 56 million, possessed by far the greatest proportion of these (56 per cent.). The United States of America also had the highest recorded number of instruments per 100 population, namely, 34. Figures for other leading countries were as follows:—Sweden 30, Canada 26, New Zealand 25, Switzerland 24, Denmark 20. At June, 1956, the number of telephones in Australia per 100 persons was 18.

§ 5. Cable and Radio Communication.

- 1. General.—Descriptions of the various cable services between Australia and other countries were given in Official Year Book No. 22, pp. 335-6 and earlier issues.
- 2. Merging of Cable and Wireless Interests.—Following upon the recommendations of the Imperial Wireless and Cable Conference in London in 1928, which examined the situation that had arisen as the result of the competition of the beam wireless with the cable services, Imperial and International Communications Limited (since renamed Cable and Wireless Ltd.) was formed and took over the operations of the Pacific Cable Board and the control of the Eastern Extension Cable Company and the Marconi Wireless Company. For subsequent developments, leading eventually to the establishment of the Overseas Telecommunications Commission, see Official Year Book No. 37, pp. 220-4.
- 3. Oversea Cable and Radio Traffic,—(i) States. The number of telegrams received from and dispatched overseas in each State during 1954-55 and 1955-56 is shown hereunder:—

INTERNATIONAL TELEGRAMS: STATES.

				('000.)				
Particulars.		N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
		· <u>·</u>	1	954–55.	·	,		
Received Dispatched	••	677 662	522 461	69 83	63 77	71 72	20 21	1,422 1,376
Total		1,339	983	152	140	143	41	2,798
			19	955-56.	<u> </u>			<u>'</u>
Received Dispatched	••	689 653	519 461	74 87	65 79	74 74	20 20	1,441 1,374
Total		1,342	980	161	144	148	40	2,815

(ii) Australia. (a) Number of Telegrams. The following table shows the number of international telegrams received from and dispatched overseas during the years 1951-52 to 1955-56:—

INTERNATIONAL TELEGRAMS: AUSTRALIA.

			`				
Partic	Particulars.		1951–52.	1952–53.	1953-54.	1954~55.	1955–56.
Received Dispatched			1,357 1,329	1,238 1,207	1,308 1,283	1,422 1,376	1,441 1,374
Total	••		2,686	2,445	2,591	2,798	2,815

(b) Number of Words. Particulars of the international business, originating and terminating in Australia, transacted over the cable and radio services during the years 1954-55 and 1955-56 are shown in the following table:—

INTERNATIONAL	TELEGRAMS:	NUMBER	OF	WORDS,	AUSTRALIA.(a)
	CO	00 Words.)			

Class of Telegram.				nber of Wor insmitted to-		Number of Words Received from—			
Class of	class of Telegram.		United Kingdom.			United Kingdom.	Other Places.	Total.	
Ordinary			4,972	7,352	12,324	4,204	6,111	10,315	
Letter			5,673	9,228	14,901	5,617	7,609	13,226	
Press			2,547	1,807	4,354	8,994	3,268	12,262	
Government			395	978	1,373	1,104	1,733	2,837	
Greetings			1,021	701	1,722	889	832	1,721	
Other	••	• •		16	16]	93	93.	
Total,	1955–56		14,608	20,082	34,690	20,808	19,646	40,454	
	195455		17,862	19,654	37,516	22,163	18,493	40,656	

⁽a) International business, originating and terminating in Australia, transacted over the cable and radio services.

Words transmitted to "Other places" included 3,163,696 to the United States of America and 4,565,939 to New Zealand and the Pacific Islands. Words received from "Other places" included 3,424,321 from the United States of America and 4,112,922 from New Zealand and the Pacific Islands.

- 4. Coast Stations.—At 30th June, 1956, there were 54 wireless stations established at points around the Australian coast and 12 about the coast of Papua and New Guinea. During the year ended 31st March, 1956, these stations handled 580,254 messages (498,358 paying, 13,972 free traffic and 67,924 meteorological) with a total of 12,081,193 paying words.
- 5. Radio-communication Stations Authorized.—(i) States and Territories, 30th June, 1956. The following table shows particulars of the different classes of radio-communication stations authorized in Australia and the External Territories at 30th June, 1956. Figures relate to radio-communication (radio telegraph and radio telephone) stations only; particulars of broadcasting stations and of broadcast listeners' licences are shown on pp. 430 and 434.

RADIO-COMMUNICATION STATIONS AUTHORIZED, 30th JUNE, 1956.

State or		Ti	ransmitti	ng and F	Receiving]	Red	Receiving Only.				
Territory for which Authori- zed.	Ama- teur.	Aero- nauti- cal.(a)	Coast.	Land.	Mobile (Gene- ral). (d)	Miscel- laneous.	Total.	Land.	Mobile (Gene- ral). (d)	Total.	Grand Total.		
N.S.W	1,078	12	15	789	4,224	45	6,163	79	1	80	6,243		
Vic	1,043	7	7	480	3,128	31	4,696	184	34	218	4,914		
Q'land	330	20	8	594	1,457	8	2,417	61	26	87	2,504		
S. Aust	370	7	5	251	1,196	7	1.836			8	1,844		
W. Aust.	207	17	7	388	704	7	1,330	34		34	1,364		
Tas	124	6	10	96	233	5	474	1	'	1	475		
Nor. Terr.	10	5	2	181	29		227	4		4	231		
A.C.T	26	1		11	81	1	120				120		
Total.													
Aust.	3,188	75	54	2,790	11,052	104	17,263	371	61	432	17,695		
Ext. Terr.	53	12	12	302	77		456			•••	456		
Grand													
Total	3,241	87	66	3.092	e 13.212	104	e 19,802	371	61	432	e 20,234		

⁽a) Ground stations (aeradio stations) for communication with aircraft stations. (b) Ground stations for communication with ship stations. (c) Stations established at fixed locations on land for the conduct of point-to-point services and for communication with mobile stations. (d) Stations installed in motor vehicles and small harbour vessels not falling within the definition of ship stations or aircraft stations, and stations comprising small portable apparatus used for various purposes. (e) Includes 2773-aircraft stations, 1,322 ship stations and 484 "other" stations which cannot be classified according to States, etc.

(ii) Australia and External Territories, 30th June, 1952 to 1956. The following table shows the total number of radio-communication stations authorized in Australia and External Territories at 30th June of the years 1952 to 1956.

RADIO-COMMUNICATION STATIONS AUTHORIZED: AUSTRALIA AND EXTERNAL TERRITORIES.

	Transmitting and Receiving.								Receiving Only.			
At 30th June—	Ama-	Aero- nauti-	Coast.	ł		Mob	Mobile.(d)		Miscel- lan- eous.		Mobile	
	teur.		(b)	(c)	Gene- ral.	Air- craft.	Ship.	Other.	cous.	Land.	(Gene- ral). (d)	
1952 1953 1954 1955 1956	2,937 2,977 2,980 3,144 3,241	70 84 91 91 87	39 42 49 54 66	1,835 2,107 2,359 2,675 3,092	3,063 4,144 5,327 7,987 11,129	230	708 755 808 1,059 1,322	177 247 266 412 484	66 72 83 98 104	387 390 382 398 371	181 165 73 50 61	9,693 11,213 12,650 16,229 20,234

See notes to previous table.

B. BROADCASTING AND TELEVISION.

§ 1. Introductory.

- 1. General.—Broadcasting and television services in Australia operate under the Broadcasting and Television Act 1942–1956 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 (see para. 3 below). Details of each service will be found on pp. 430-4.
- 2. Legislation.—The Broadcasting and Television Act 1956 came into force on 1st July, 1956, with the exception of the provisions relating to television viewers' licences, which have operated from 1st January, 1957. The Broadcasting Act 1942–1954, as amended by the new Act, is now cited as the Broadcasting and Television Act 1942–1956.

The effect of the new legislation was to prescribe, in detail, the conditions upon which television services would be established and conducted in the Commonwealth (in this respect, the Minister in his second reading speech on the Bill stated that it was intended to give effect, to a very large extent, to the recommendations contained in the report of the Royal Commission on Television) and to amend the existing legislation in relation to broadcasting in the light of the experience of broadcasting administration since the previous major amendment to the broadcasting legislation in 1948. The Bill provided for the repeal of the Television Act 1953, and, generally speaking, integrated the broadcasting and television provisions, with considerable amendments, into one legislative structure.

A separate Act, the Broadcasting and Television Stations Licence Fees Act 1956, became law on 1st July, 1956. It prescribes the fees payable annually by licensees of commercial broadcasting stations and commercial television stations.

3. The Australian Broadcasting Control Board.—The Board, which was constituted on 15th March, 1949, operates under the Ministerial jurisdiction of the Postmaster-General, and its principal functions, as set out in section 16 of the Broadcasting and Television Act 1942–1956, are to ensure:—(a) that services by broadcasting stations and television stations are provided in accordance with plans from time to time prepared by the Board and approved by the Minister; (b) that the technical equipment and operation of such stations are in accordance with such standards and practices as the Board considers to be appropriate; and (c) that adequate and comprehensive programmes are provided by the stations to serve the best interests of the general public.

In addition, the Board may exercise such other functions as are prescribed in relation to broadcasting stations and television stations.

The Board is empowered to make recommendations to the Minister as to the exercise by the Minister of any power under Part IV. of the Act which relates to the Commercial Broadcasting Service.

The Board has power, subject to the direction of the Minister:—(a) to determine the situation and operating power of a broadcasting or television station; (b) to determine the frequencies of broadcasting and television stations within bands of frequencies notified to the Board by the Postmaster-General as being available; (c) to regulate the establishment and operation of networks of commercial broadcasting or television stations and the making of arrangements by licensees for the provision of programmes or the broadcasting or televising of advertisements.

The Board also has power:—(a) to determine the conditions subject to which advertisements may be broadcast or televised by licensees; (b) to determine the hours during which programmes may be broadcast or televised; and (c) to conduct examinations as to the competency of persons to operate the technical equipment of broadcasting and television stations and to charge appropriate fees.

The Board is obliged to hold public inquiries into applications made to the Minister for licences for commercial broadcasting and television stations in areas for which the Minister proposes to grant licences and into any other matter within its functions if the Board thinks it necessary or desirable, or the Minister so directs. The Board, in exercising its powers and functions in relation to commercial broadcasting and television stations, is obliged to consult representatives of those stations.

Subject to the approval of the Minister and of the Treasurer, the Board may provide financial and other assistance to commercial broadcasting stations for the purpose of ensuring that programmes of adequate extent, standard and variety are provided in the areas served by these stations.

Section 8 of the Act provides that the Board shall consist of five members (including two part-time members) appointed by the Governor-General, one of whom, other than a part-time member, shall be chairman. No person shall be appointed as a member of the Board who: -(a) has any financial interest whether direct or indirect, in any company which is the licensee of, or an applicant for a licence for, a commercial broadcasting or television station or manufactures or deals in equipment for the transmission or reception of broadcasting or television programmes; (b) is a member of the governing body of any company or other association of persons which is the licensee of, or an applicant for a licence for, a commercial broadcasting or television station; or (c) is the licensee of, or an applicant for a licence for, a commercial broadcasting or television station.

§ 2. Broadcasting.

1. General.—Broadcasting services in Australia are provided by the National Broadcasting Service and the Commercial Broadcasting Service. The former also operates in the Territory of Papua and New Guinea. The following table shows the number of broadcasting stations in operation at 30th June, 1956:—

Type of Statio	on.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Papua and New Guinea.	Total.
National— Medium F quency Short-wave	Fre-	14	5	12	6	7 2	4	2	2	1	53
Commercial		36	20	20	8	14	8		"1		107

BROADCASTING STATIONS, 30th JUNE, 1956.

- 2. The National Broadcasting Service.—(i) General. In sound broadcasting, the programmes of the National Broadcasting Service are provided by the Australian Broadcasting Commission and the provision and operation of transmitters and technical facilities in the studios are the responsibility of the Postmaster-General's Department.
- (ii) The Australian Broadcasting Commission. The Broadcasting and Television Act 1942–1956 provides that the Commission shall consist of seven members, one of whom shall be a woman.

Under the provisions of the Act the Commission shall provide, and shall broadcast from transmitting stations made available by the Postmaster-General, adequate and comprehensive programmes and shall take in the interests of the community all such measures as, in the opinion of the Commission, are conducive to the full development of suitable broadcasting programmes.

The Commission prepares estimates of its receipts and expenditure for each financial year and submits these estimates to the Minister. Appropriations are made by Parliament for the purposes of the Commission and these, together with all other moneys received by the Commission, are paid into an account in the Commonwealth Bank of Australia. From this account are defrayed all costs, charges, expenses, etc., incurred by the Commission in the exercise of its powers and functions under the Act. For particulars of the financial operations of the Commission see Chapter XXI.—Public Finance.

(iii) Technical Facilities. At 30th June, 1956, the National Broadcasting Service comprised 62 transmitting stations as follows:—

Medium-wave Stations-

New South Wales-

2BL and 2FC Sydney, 2BA Bega, 2CO Corowa, 2CR Cumnock, 2KP Smithtown, 2LG Lithgow, 2ML Murwillumbah, 2NA and 2NC Newcastle, 2NB Broken Hill, 2NR Grafton, 2NU Manilla, 2TR Taree.

Victoria-

3AR and 3LO Melbourne, 3GI Sale, 3WL Warrnambool, 3WV Dooen. Queensland---

4QG and 4QR Brisbane, 4AT Atherton, 4GM Gympie, 4QA Mackay, 4QB Pialba, 4QL Longreach, 4QN Townsville, 4QS Dalby, 4QY Cairns, 4RK Rockhampton, 4SO Southport.

South Australia-

5AN and 5CL Adelaide, 5CK Crystal Brook, 5LN Port Lincoln, 5MG Mt. Gambier, 5WM Woomera.

Western Australia-

6WF and 6WN Perth, 6AL Albany, 6GF Kalgoorlie, 6GN Geraldton, 6NM Northam, 6WA Wagin.

Tasmania-

7ZL and 7ZR Hobart, 7NT Kelso, 7QN Queenstown.

Northern Territory-

5AL Alice Springs, 5DR Darwin.

Australian Capital Territory— 2CN and 2CY Canberra.

Papua-

9PA Port Moresby.

Short-wave Stations-

VLI Sydney, New South Wales, VLG, VLH and VLR Lyndhurst, Victoria, VLQ and VLM Brisbane, Queensland, VLW and VLX Perth, Western Australia, VLT Port Moresby, Papua.

The medium-wave transmitters operate in the medium frequency broadcast band 540 to 1,600 kilocycles per second. From the short-wave stations, using frequencies within the band 3 to 30 megacycles per second, service is given to listeners in sparsely populated parts of Australia such as the north-west of Western Australia, the Northern Territory, and northern and central Queensland and in Papua and New Guinea and adjacent islands.

Programmes for country stations are normally relayed from the control studio of the nearest capital city, high-quality programme transmission lines being used for the purpose. A number of programme channels are utilized 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.

In June, 1956, 39 of the medium-wave stations were situated outside the six State capital cities and additional country stations are to be constructed. When these additions have been made, the medium-wave and short-wave stations together will provide for clear reception of the programmes of the National Broadcasting Service in practically every part of Australia.

(iv) Programme Facilities.—(a) General. The programmes of the Australian Broadcasting Commission cover a wide range of activities which are indicated briefly in the following paragraphs. The proportion of broadcasting time allocated to the various types of programme during 1955-56 was as follows:—Classical Music, 22.3 per cent.; Light Music, 15.1 per cent.; Variety, 18.2 per cent.; News, 7.8 per cent.; Talks, 6.8 per cent.; Sport, 4.8 per cent.; Parliament, 4.5 per cent.; Drama and Features, 3.9 per cent.; Youth Education, 3.7 per cent.; Religion, 3.5 per cent.; Children's Session, 2.3 per cent.; Rural Broadcasts, 1.7 per cent.; Non-departmental, 5.4 per cent.

(b) Music. The A.B.C. is to-day the biggest concert-giving organization in the Commonwealth, and the immense growth of interest in music in this country is illustrated by the fact that Australian listeners in increasing numbers now welcome the opportunity of hearing fine music on the air and in the concert hall and have magnificently supported the presentation of orchestral concerts and of recitals by the best musicians from their own country and from overseas. In 1936 small regular orchestras were formed by the A.B.C. in Sydney, Melbourne, Brisbane, Adelaide, Perth and Hobart, and from these foundations have grown our present orchestras. Those in Sydney and Melbourne measure up to first-class orchestras overseas, whilst those in the other capital cities are showing rapid improvement and are now the equal of orchestras in many places of comparable size in Europe or America. Until 1946 the cost of these orchestras was met solely by the A.B.C., but since then State Governments and major municipal bodies in all States have agreed to contribute towards the expense.

The close co-operation between a broadcasting organization, city authorities and State Governments to establish and maintain symphony orchestras is unique in the world.

In 1955-56, the A.B.C. organized 551 public orchestral concerts (including 159 free concerts for school children and 45 free concerts for adults and 189 public recitals by famous artists throughout the Commonwealth. Of these concerts, 203 were given outside the State capitals, including 72 free orchestral concerts for school children.

The policy of the A.B.C. so far as individual artists are concerned has always been to develop local talent and at the same time to give its audiences the opportunity of hearing famous international musicians.

- (c) Drama and Features. Drama programmes are designed to give listeners opportunities, which they might not otherwise have, of hearing the great plays of all nations as well as adaptations of the best modern stage plays and also those written specially for broadcasting. The main regular drama programmes are broadcast on Saturday and Monday evenings, and special series of longer plays are also given at various times during the year.
- In recent years the technique of the feature programme has also been developed in this country. The feature is a form of entertainment which is unique to radio, consisting of specially written programmes designed to present information in an interesting way, and it may deal with a very wide variety of subjects ranging from history and current events to science and the arts. A number of Australian writers have become interested in this form of entertainment and about 97 per cent. of the features broadcast are written by Australians. Local writers also contribute a large proportion of the plays broadcast and every effort is made to assist and encourage their work.
- (d) Youth Education. The A.B.C. provides a regular series of broadcasts to schools as an addition to normal class-room education. The total number of listening schools at the end of June, 1956 was 8,116 or about 82 per cent. of all schools, State and private, throughout the Commonwealth. Many of the school broadcasts are presented in dramatized form, as this method makes the material more vivid and interesting to the young listener. For the very young children, the Commission broadcasts every week-day the "Kindergarten of the Air", a type of broadcast which originated in Australia. (See also Chapter XII.—Education, on this subject.)
- (e) Talks. The aim of the Talks Department is to provide programmes which will keep the listener well informed on current affairs and on general topics. Many of the talks in the first category are now presented in a magazine type of session consisting of a number of short items linked by a narrator. An extension of this type of programme is the documentary, in which radio goes into the field to analyse or to describe, using the actual sounds and voices recorded on location.

Major controversial topics are covered in the "Nation's Forum of the Air", using the debating technique with questions in person from the studio audience and telephoned from listeners. Another outstanding session is "News Review", containing at least five comments on the news of the day recorded over landline from all States of the Commonwealth and, in the case of significant world events, from overseas by radio-telephone.

(f) Rural Broadcasts. The Rural Broadcasts Department was commenced in 1945 to serve the needs of country listeners. It has proved to be of great value to men and women on the land throughout Australia, by giving them the latest market reports and information on general conditions, and by keeping them informed on rural development overseas. The interstate market report is the only Australia-wide market service available to the Australian rural population. Programmes are exchanged with radio organizations in England, Canada, the United States of America and elsewhere, and several visits to Australia by well-known farm radio personalities have also been arranged. The department has encouraged the work of Junior Farmers' Clubs in Australia, and has sponsored competitions for members in connexion with the Royal Agricultural Shows in Sydney and Melbourne.

- (g) News. On 1st June, 1947, the Australian Broadcasting Commission's independent news service came into full operation. Since that date the Commission has collected the Australian news for its bulletins independently of the press and it has, in addition to a large staff throughout Australia, a London news room for the selection and transmission of news secured from the major oversea news agencies. Nine national news bulletins are broadcast daily, and are followed by State bulletins of news of State interest. In addition, two or more regional bulletins are broadcast by local stations in country areas on most days of the week, and for remote country districts special bulletins are broadcast on short-wave. For oversea listeners 22 bulletins daily are broadcast through the Radio Australia transmitters. These bulletins, which are given in English, French, Mandarin, Indonesian and Thai, are directed to every continent, but concentrate on the Pacific and Asian areas. The A.B.C. also rebroadcasts for Australian listeners, by arrangement with the British Broadcasting Corporation, two B.B.C. news bulletins each day.
- (h) Other Activities. The broadcasting of the proceedings of Federal Parliament commenced as a regular service in July, 1946. At present these broadcasts are confined to one of the two national transmitters in each capital city and to one domestic short-wave station (VLR), but it is hoped that more country listeners will eventually be able to hear them.

The National Children's Hour, presented seven days a week, is composed of over 40 programme items, including stories, music, games, and items about art, literature, natural history and sport. There is a children's newsreel and a Brains Trust, discussing, through children, topics of wide general interest. The Argonauts' Club is an important part of the session and encourages children between the ages of 7 and 17 in self-expression and the appreciation of cultural subjects, but the provision of entertainment suitable for children is the main purpose of the session.

In co-operation with the various religious denominations, the A.B.C. broadcasts several religious sessions each week-day in addition to those given on Sundays. These religious broadcasts include relays of normal church services and a variety of special programmes of talks and sacred music. The modern trend towards the use of religious drama is also followed.

The variety and sporting programmes of the A.B.C. provide the lighter side of the service. In its variety sessions the A.B.C. does everything possible to assist local artists in order to increase the amount of first-class talent in this country, and encouragement is also given to Australian composers of light music. The A.B.C. dance bands in Sydney and Melbourne are regarded as being two of the most outstanding bands in Australia.

The coverage of sport at home and abroad by the A.B.C. is comprehensive. On Saturday afternoons the sporting panel provides listeners with progress results, scores and descriptions from half a dozen or more fields of sport. Events of international interest such as Test matches, the Davis Cup, etc., are covered by simultaneous descriptions from A.B.C. commentators. In covering events overseas, the A.B.C. is indebted to the B.B.C. for its collaboration in Great Britain, to the New Zealand Broadcasting Service for events in New Zealand and to broadcasting organizations in many other countries.

- 3. 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 Board. The maximum 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 £25 on the grant of the licence, and thereafter annually, £25 plus one per cent. of the gross earnings of the station from the broadcasting of advertisements or other matter during the preceding financial year. Licensees of these stations rely for their income on the broadcasting of advertisements and other publicity.
- At 30th June, 1956, there were 107 commercial broadcasting stations in operation. A table showing the call sign, location, frequency and aerial power of each of these stations may be found in *Transport and Communication*, Bulletin No. 47.
- 4. Overseas Broadcasting Service.—There are four short-wave stations at Shepparton, Victoria (VLA, VLB, VLC, VLD) for use only in the oversea service known as "Radio Australia". As in the case of the National Broadcasting Service, these stations are maintained by the Postmaster-General's Department and their programmes are arranged by the A.B.C. During certain periods station VLG Lyndhurst, a unit of the National Broadcasting Service, is also used for the purpose of oversea transmissions. The programmes, which give news and information about Australia, presented objectively, as well as entertainment, are directed mainly to South-East Asia and the Pacific. Twenty-two of the regular transmissions are in foreign languages. The oversea audience has grown very substantially in recent years, as evidenced by a large and increasing number of letters from listeners abroad.

5. Broadcast Listeners' Licences.—(i) General. Broadcast listeners' licences are issued at post offices in accordance with section 96 of the Broadcasting and Television Act 1942–1956. A single licence authorizes every broadcast 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/or ordinarily kept at that address; (b) installed in a vehicle which is ordinarily in the possession of the holder, or of a member of his family, and is ordinarily kept at that address while not in use.

The fee for a broadcast listener's licence or a renewal thereof is:—Zone 1, £2 15s.; Zone 2, £1 8s. Zone 1 is the area within approximately 250 miles of specified broadcasting

stations and Zone 2 is the remainder of the Commonwealth.

A licence may be granted at one-quarter of the ordinary fee to any person who (a) is in receipt of a pension under Part III. or Part IV. of the Social Services Act 1947–1956 or a service pension, or a pension in respect of total and permanent incapacity, under the Repatriation Act 1920–1956 or the Repatriation (Far East Strategic Reserve) Act 1956; and (b) lives alone or with any person whose income does not exceed the maximum amount of income and pension allowed under Part III. or Part IV. of the Social Services Act 1947–1956 or section 87 of the Repatriation Act 1920–1956.

Licences are granted free of charge to blind persons over 16 years of age and also to schools.

(ii) Licences in Force. The following table shows the number of broadcast listeners' licences in force at five-year intervals from 1925 to 1956.

At 30th June-		N.S.W.(a)	Vic.	Qld.	S.A.(b)	W.A.	Tas.	Aust.	
1925	· ·	•••	34,857	20,290	1,267	3,331	3,562	567	63,874
1930			111,253	140,072	23,335	25,729	5,755	6,048	312,192
1935			279,166	237,247	67,546	76,515	41,257	20,121	721,852
1940			458,256	348,264	151,152	124,928	87,790	42,191	1,212,581
1945(c)			548,074	394,315	180,089	146,611	98,210	47,930	1,415,229
1950(c)			683,271	505,078	260,033	195,261	133,199	64,369	1,841,211
1955`			746,050	549,690	293,542	223,593	150,199	71,602	2,034,676
1956			776,284	554,339	301,371	228,625	153,445	74,729	2,088,793

BROADCAST LISTENERS' LICENCES IN FORCE.

(a) Includes Australian Capital Territory. (b) Includes Northern Territory. (c) Excludes longered for receivers in excess of one. These licences were introduced in July, 1942 and were abolished on 31st December, 1951.

Of the 2,088,793 broadcast listeners' licences in force at 30th June, 1956, 1,206,698 or 57.7 per cent. were held by persons situated in metropolitan areas and 882,095 or 42.3 per cent. by persons in country areas. Of the latter, only 12,600 were in respect of Zone 2.

6. Radio-inductive Interference.—In each State of the Commonwealth, the Postmaster-General's Department maintains a staff of experts with suitable equipment and transport, for the purpose of investigating complaints of radio-inductive interference to the reception of broadcast programmes and to defence and civil radio-communication services.

During the year 1955-56, 10,948 sources of trouble were eliminated as a result of Departmental efforts or by other action. About 4,000 suppressors were fitted to offending appliances as recommended by investigating officers, who carried out 43,195 inspections in metropolitan and country areas.

7. Prosecutions under the Broadcasting Act.—Persons convicted during the year ended 30th June, 1956 for operating unlicensed broadcast receivers numbered 4,386. Fines and costs amounting to £20,036 were imposed.

§ 3. Television.

- 1. General.—Television services in Australia operate under the Broadcasting and Television Act 1942-1956 and comprise the National Television Service and the Commercial Television Service. A brief review of the relevant legislation is given in para. 2, page 429.
- 2. The National Television Service.—Under the Broadcasting and Television Act 1942-1956 the A.B.C. provides the programmes for the National Television Service from stations made available for the purpose by the Postmaster-General. Two stations have been established, ABN Sydney and ABV Mclbourne, both operating on Channel 2.
- 3. The Commercial Television Service.—Licences for commercial television stations have been granted as follows:—Sydney—ATN (Channel 7), TCN (Channel 9); Melbourne—HSV (Channel 7), GTV (Channel 9).