

CHAPTER XI.

TRANSPORT AND COMMUNICATION.

NOTE.—Most of the statistics in this chapter cover the year 1956–57. More detailed figures for this and earlier years will be found in the annual bulletin, *Transport and Communication*.

PART I.—TRANSPORT.

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* p. 389).

As at 30th June, 1957, the Australian National Line operated 40 vessels totalling 153,704 gross tons, comprising 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, four "D" Class vessels of an average of 2,363 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, two vessels engaged in the heavy trades of an average of 4,890 gross tons, and two vessels of an average of 7,399 gross tons, all of which were built in Australian yards, plus five vessels, totalling 18,514 gross tons, which were built overseas.

In the international sphere, ratification is still being awaited from one of 21 ship-owning 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, 1957, ratifications by twenty countries had been lodged, and there is a possibility of the remaining one 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, p. 381).

On arrival at, or departure from, a port in Australia, whether from or for an oversea country or from or for 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 register* 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 1952–53 to 1956–57 :—

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

Particulars.	1952–53.	1953–54.	1954–55.	1955–56.	1956–57.
Number of Vessels	4,041	4,127	4,505	4,882	5,290
Net Tonnage '000 tons	17,571	17,733	20,003	22,324	23,659

The average net tonnage per vessel rose from 2,919 in 1921–22 to 4,472 in 1956–57.

Particulars of the total oversea movement of shipping for each year from 1822 to 1920–21 were published 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 1956–57.

**OVERSEA SHIPPING : ENTRANCES AND CLEARANCES OF VESSELS DIRECT,
1956-57.**

Particulars.		N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	N.T.	Aust.
Entrances	No.	786	482	370	242	683	50	15	2,628
	'000 net tons	3,284	2,522	1,180	904	3,766	129	29	11,814
Clearances	No.	710	424	512	243	730	27	16	2,662
	'000 net tons	3,004	2,192	1,825	908	3,701	157	58	11,845

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 is scheduled to terminate.

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.**

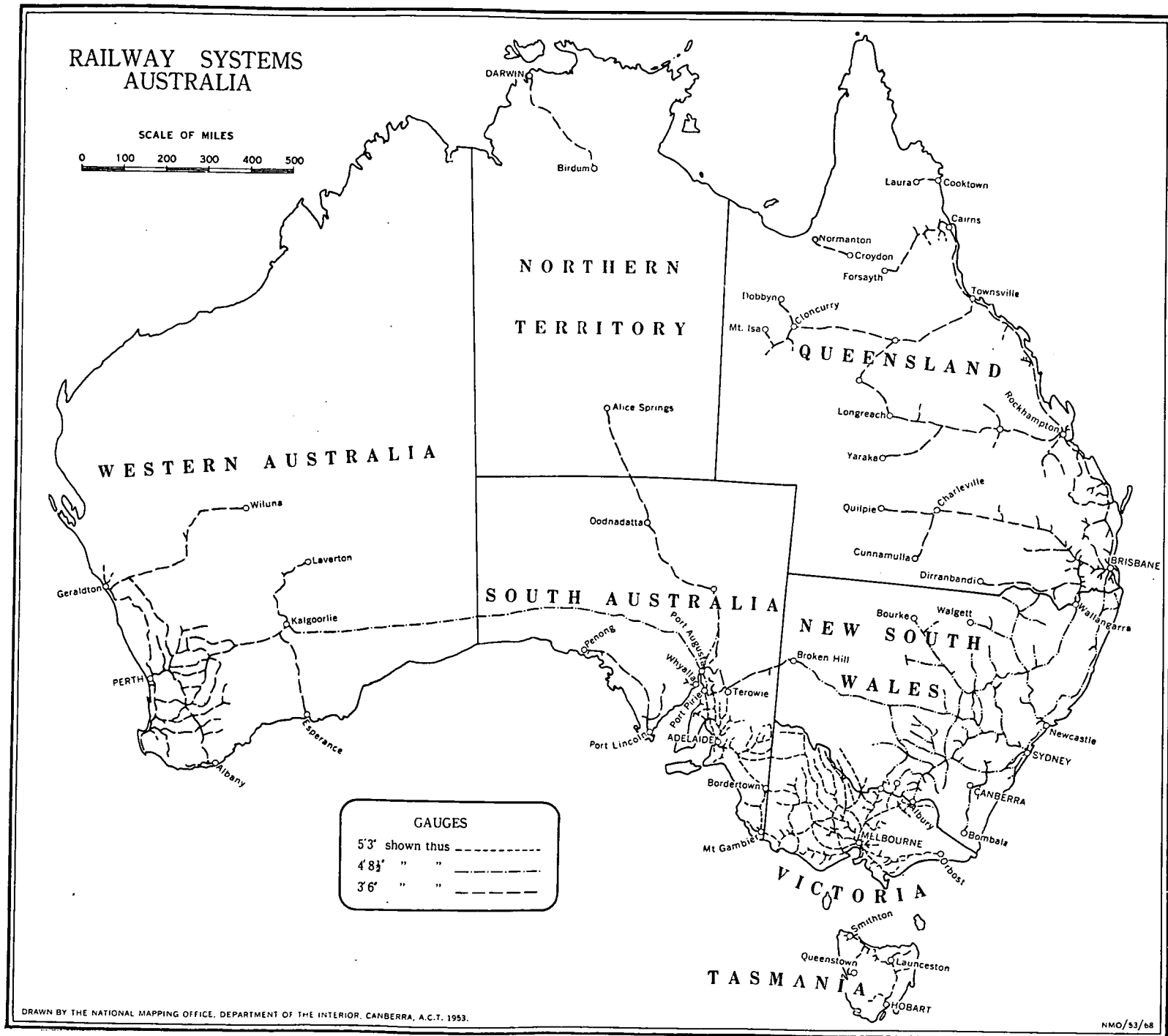
Country from which Entered or for which Cleared.	With Cargo or in Ballast.	Net Tonnage Entered ('000).			Net Tonnage Cleared ('000).		
		1954-55.	1955-56.	1956-57.	1954-55.	1955-56.	1956-57.
United Kingdom	Cargo	2,004	1,833	1,568	1,966	2,002	2,120
	Ballast	11	75	17	207	121	10
New Zealand	Cargo	641	568	602	911	953	1,019
	Ballast	339	383	381	101	65	54
Other Commonwealth Countries	Cargo	2,248	2,249	2,507	1,440	1,497	1,796
	Ballast	155	136	421	1,089	1,003	791
Bahrain Islands	Cargo	506	436	181	65	71	26
	Ballast	..	3	7	407	418	296
Indonesia	Cargo	671	567	918	116	155	183
	Ballast	61	92	203	529	650	794
Japan	Cargo	283	344	376	315	502	716
	Ballast	98	254	453	18	10	25
United States of America	Cargo	476	496	558	221	340	473
	Ballast	5	3	3	49	51	28
Other Foreign Countries	Cargo	2,333	3,602	3,402	1,123	1,367	1,538
	Ballast	108	190	218	1,507	1,891	1,976
Total	Cargo	9,162	10,095	10,112	6,157	6,887	7,871
	Ballast	777	1,133	1,703	3,907	4,209	3,974
Total Cargo and Ballast ..	..	9,939	11,228	11,815	10,064	11,096	11,845

4. **Nationality of Oversea Shipping.**—Vessels registered at ports in Commonwealth countries accounted for 57.6 per cent. of the net tonnage of shipping entering Australian ports in 1956-57. This proportion has varied considerably since the end of the 1939-45 War. By 1946-47 the proportion had increased from the low level of 43.4 per cent. recorded in 1943-44 to 76.2 per cent., but since then has steadily declined.

Particulars of the nationality of oversea shipping which entered Australian ports during each of the years 1954-55 to 1956-57 are given in the following table.

RAILWAY SYSTEMS AUSTRALIA

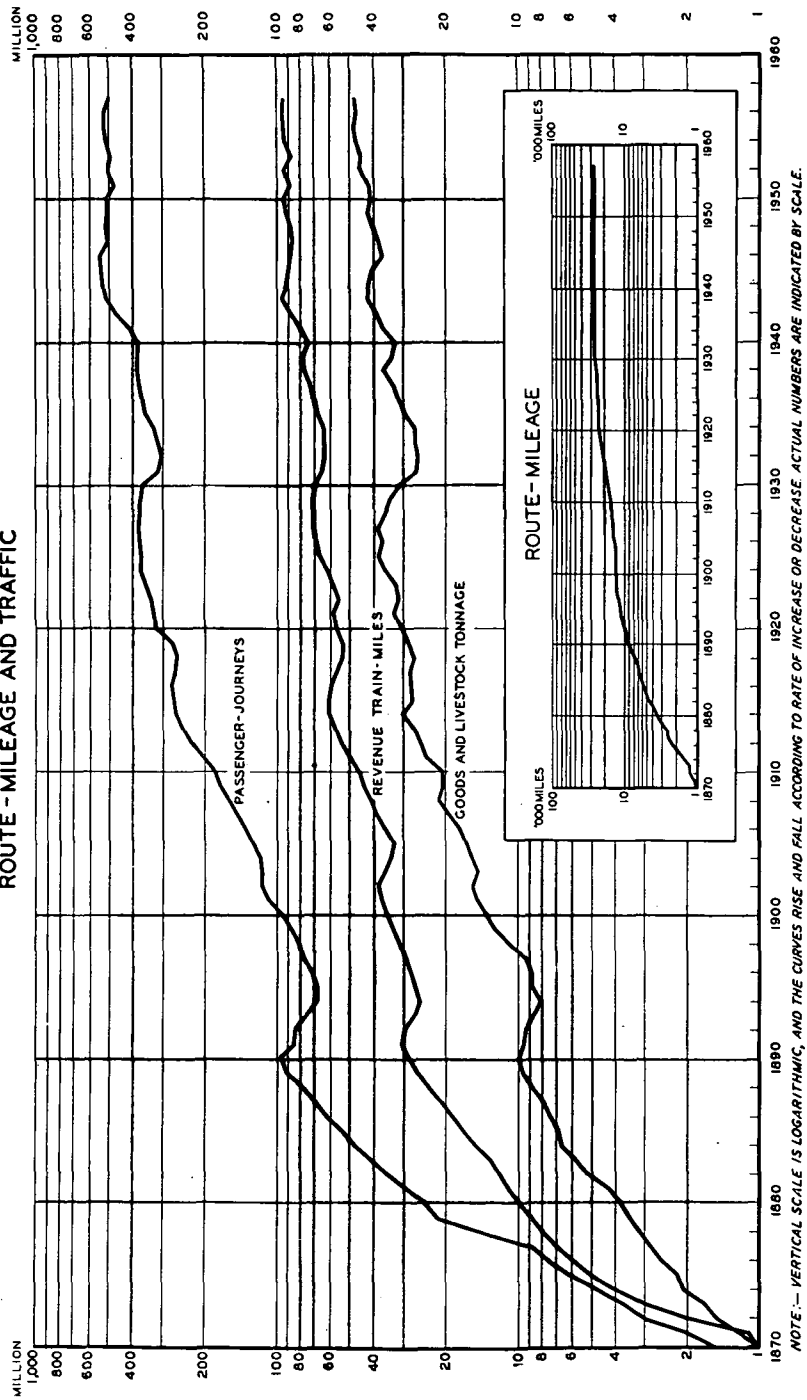
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GOVERNMENT RAILWAYS: AUSTRALIA, 1870 TO 1957

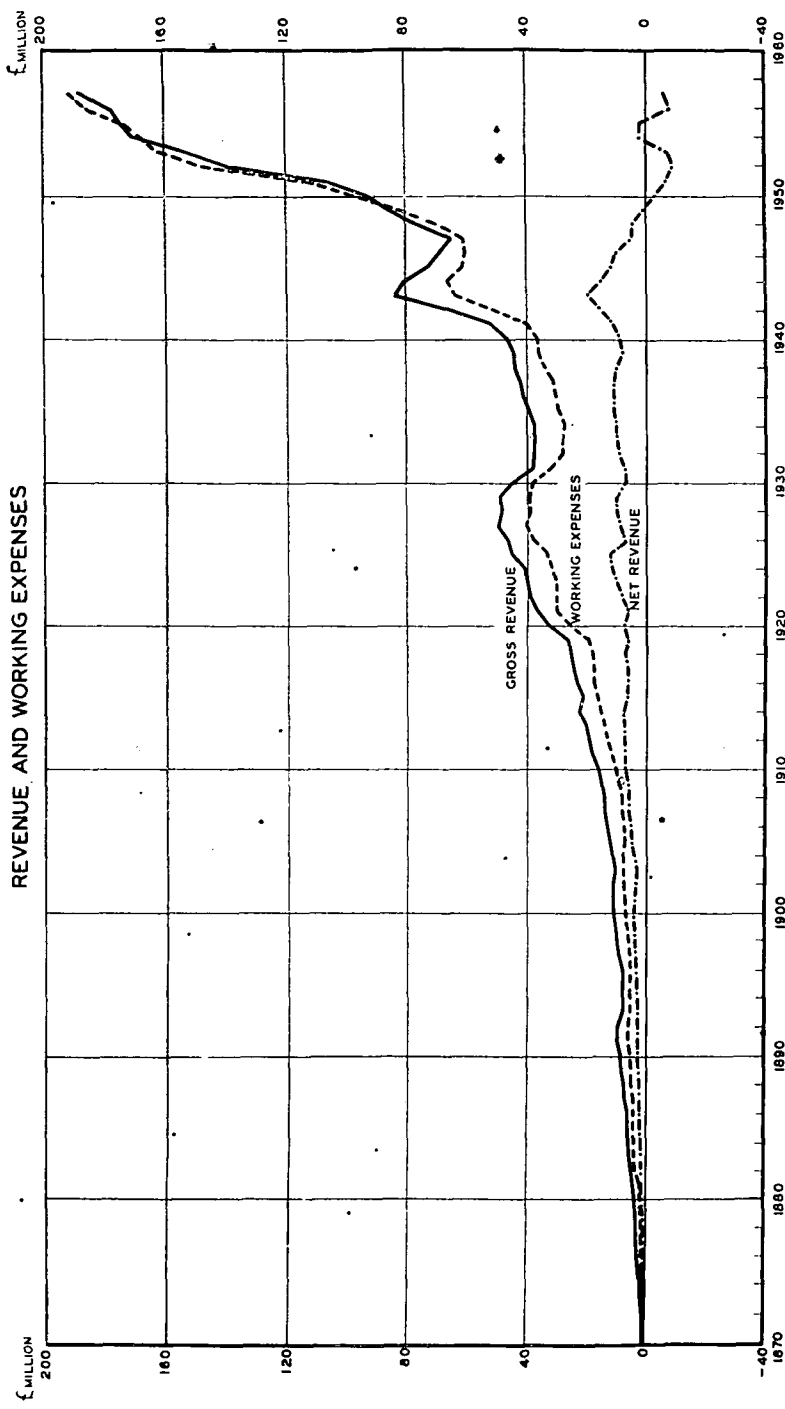
RATIO GRAPH

ROUTE - MILEAGE AND TRAFFIC



GOVERNMENT RAILWAYS : AUSTRALIA, 1870 TO 1957

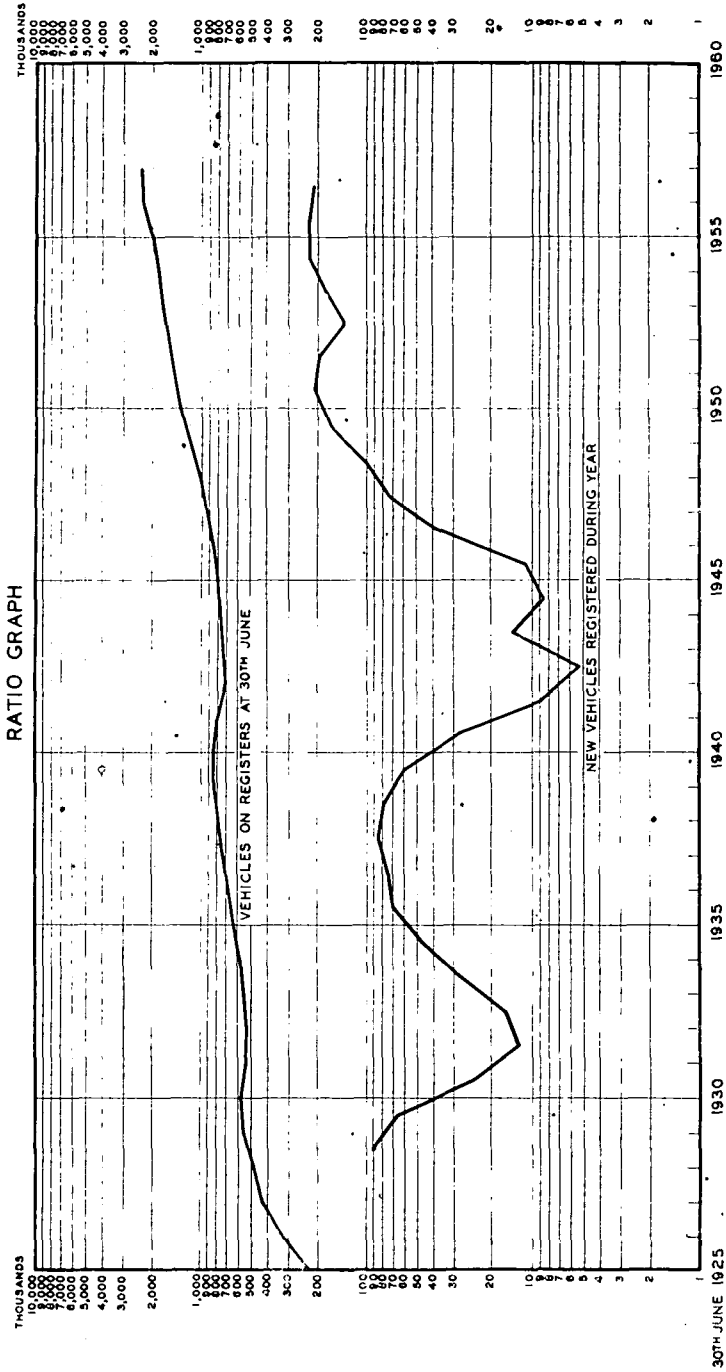
REVENUE AND WORKING EXPENSES



[NOTE.—Gross Revenue excludes Government Grants.

MOTOR VEHICLE REGISTRATIONS: AUSTRALIA, 1925 TO 1957

(EXCLUDING MOTOR CYCLES)



OVERSEA SHIPPING : NATIONALITY OF VESSELS ENTERED, AUSTRALIA.

('000 Net Tons.)

Vessels Registered at Ports in—	1954-55.	1955-56.	1956-57.	Vessels Registered at Ports in—	1954-55.	1955-56.	1956-57.
Commonwealth Countries—				Foreign Countries—			
Australia ..	347	308	281	Norway ..	1,129	1,246	1,397
New Zealand ..	423	395	462	Panama ..	382	473	507
United Kingdom ..	5,207	5,730	5,680	Sweden ..	326	480	332
Other ..	241	218	377	U.S.A. ..	160	182	312
				Other ..	163	262	373
In Cargo ..	5,695	5,908	5,747	In Cargo ..	3,467	4,187	4,366
In Ballast ..	523	743	1,053	In Ballast ..	254	390	649
Total Commonwealth Countries	6,218	6,651	6,800	Total Foreign Countries	3,721	4,577	5,015
Proportion of total.. %	62.6	59.2	57.6	Proportion of total %	37.4	40.8	42.4
Foreign Countries—				All Countries—			
Denmark ..	173	283	240	In Cargo ..	9,162	10,095	10,112
France ..	185	192	206	Proportion of total %	92.2	89.9	85.6
Germany(a) ..	54	142	94	In Ballast ..	777	1,133	1,703
Italy ..	332	379	464	Proportion of total %	7.8	10.1	14.4
Japan ..	209	308	420				
Netherlands ..	608	630	670	Grand Total ..	9,939	11,228	11,815

(a) Federal Republic.

The Australian tonnage which entered Australian ports from overseas during the year 1956-57 represented 2.4 per cent. of the total tonnage entered and was confined mainly to the New Zealand and Pacific Islands trade.

The proportion of overseas shipping tonnage which entered Australia in cargo fell from 88.9 per cent. in 1938-39 to 79.4 per cent. in 1947-48. In 1956-57 it was 85.6 per cent. However, the proportion of shipping which cleared in cargo declined from 87.6 per cent. in 1938-39 to 66.5 per cent. in 1956-57, 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 overseas 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 overseas 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 overseas 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 overseas 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 overseas entry. Continuing the voyage, the vessel is again recorded for the statistics of the third State as from the United Kingdom "Overseas via 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 "Overseas via States" or "Interstate" according to the direction of the movement. The significance of the record of these movements will be seen more clearly 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.

Particulars.	Recorded as—	
	For the State and for Australia.	For the States.
Inward Voyage—		
Enters Fremantle from United Kingdom	Oversea direct	
Clears Fremantle for Adelaide .. ..	.. ..	Interstate direct
Enters Adelaide from United Kingdom via Fremantle .. ..	.. ..	Interstate direct Oversea via States
Clears Adelaide for Melbourne .. ..	.. ..	Interstate direct
Enters Melbourne from United Kingdom via Adelaide .. ..	.. ..	Interstate direct Oversea via States
Clears Melbourne for Sydney .. ..	.. ..	Interstate direct
Enters Sydney from United Kingdom via Melbourne .. ..	.. ..	.. .. Oversea via States
Outward Voyage—		
Clears Sydney for United Kingdom via Melbourne .. ..	.. ..	Interstate direct Oversea via States
Enters Melbourne from Sydney .. ..	.. ..	Interstate direct
Clears Melbourne for United Kingdom via Adelaide .. ..	.. ..	Interstate direct Oversea via States
Enters Adelaide from Melbourne .. ..	.. ..	Interstate direct
Clears Adelaide for United Kingdom via Fremantle .. ..	.. ..	Interstate direct Oversea via States
Enters Fremantle from Adelaide .. ..	.. ..	Interstate direct
Clears Fremantle for United Kingdom ..	Oversea 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 overseas 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.

However, it should be remembered 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 1954–55 to 1956–57. 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 or Territory.	Number.			Net Tons ('000).		
	1954–55.	1955–56.	1956–57.	1954–55.	1955–56.	1956–57.
New South Wales	1,584	1,634	1,711	4,553	4,606	4,853
Victoria	1,555	1,614	1,594	4,058	4,475	4,128
Queensland	598	597	688	1,541	1,554	1,806
South Australia	963	1,027	1,088	3,476	3,733	3,876
Western Australia	524	554	526	2,725	2,753	2,590
Tasmania	960	893	1,025	1,085	984	1,203
Northern Territory	40	38	45	77	55	93
Australia	6,224	6,357	6,677	17,515	18,160	18,549

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 1956-57 the total had risen to 93 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 overseas vessels, the figures in the following table, which show the number of entrances and clearances of vessels to and from overseas 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, 1956-57.

Particulars.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	N.T.	Aust.
Entrances No.	545	622	246	301	27	86	1	1,828
'000 net tons	2,886	3,226	1,165	1,580	150	405	1	9,413
Clearances No.	518	520	187	289	23	129	..	1,666
'000 net tons	2,538	2,729	854	1,435	138	542	..	8,236

Overseas 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 overseas voyages.

(iii) *Total, Australia.* The following table shows the total interstate movement of shipping, including overseas vessels travelling overseas via States and interstate direct, for each of the years 1952-53 to 1956-57.

INTERSTATE MOVEMENT OF SHIPPING : TOTAL, AUSTRALIA.

Particulars.	1952-53.	1953-54.	1954-55.	1955-56.	1956-57.
Entrances .. No.	7,525	7,983	8,300	8,362	8,505
'000 net tons	25,583	26,925	28,515	28,868	27,962
Clearances .. No.	7,481	8,036	8,151	8,460	8,480
'000 net tons	25,359	27,190	28,292	29,095	27,763

(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 overseas vessels) during the year 1956-57, together with the aggregate net tonnage.

INTERSTATE MOVEMENT OF SHIPPING : TOTAL, 1956-57.

Particulars.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	N.T.	Aust.
Entrances .. No.	2,256	2,216	934	1,389	553	1,111	46	8,505
'000 net tons	7,739	7,354	2,971	5,456	2,740	1,608	94	27,962
Clearances No.	2,338	2,277	796	1,373	514	1,141	41	8,480
'000 net tons	7,965	7,643	2,290	5,393	2,830	1,583	59	27,763

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 1956-57, together with the net tonnage.

SHIPPING ENGAGED SOLELY IN INTERSTATE TRADE : ENTRANCES, 1956-57.

Particulars.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	N.T.	Aust.
Ships entered ..	1,313	1,183	406	801	175	888	39	4,805
Net tons .. '000	3,220	1,851	683	2,433	594	704	61	9,546

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 1953 to 1957 :—

INTERSTATE AND COASTAL SHIPPING SERVICES : AUSTRALIA.

Particulars.	1953.	1954.	1955.	1956.	1957.
Number of companies operating ..	31	36	41	41	40
Number of vessels	172	174	185	174	177
Tonnage { Gross	501,782	524,975	522,326	511,534	544,545
{ Net	277,294	289,854	283,771	275,337	291,911
Horsepower (Nominal)	49,159	53,017	50,455	48,667	51,439
Number of passen- gers for which licensed(a) { 1st class	2,208	2,198	1,966	1,777	1,771
{ 2nd class and steerage	621	626	648	526	523
Complement of { Masters and officers	650	675	709	682	700
Crew { Engineers	751	785	795	776	803
{ Other	4,886	4,950	4,853	4,563	4,546

(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 1955-56 and 1956-57. Warships are excluded from the table.

TOTAL SHIPPING : ENTRANCES AT PRINCIPAL PORTS, AUSTRALIA.

Port of Entry.	1955-56.		1956-57.		Port of Entry.	1955-56.		1956-57.	
	Num- ber.	Net Tons.	Num- ber.	Net Tons.		Num- ber.	Net Tons.	Num- ber.	Net Tons.
		'000.		'000.			'000.		'000.
New South Wales—					South Australia—				
Sydney ..	4,361	9,519	4,357	10,629	Adelaide ..	2,491	5,180	2,668	5,001
Newcastle ..	2,457	3,775	2,348	4,041	Port Lincoln ..	221	310	258	347
Port Kembla ..	578	1,778	636	1,983	Port Pirie ..	315	848	416	956
					Rapid Bay ..	133	181	138	196
					Wallerawang ..	125	130	130	147
					Whyalla ..	478	1,412	509	1,596
Victoria—					Western Australia—				
Melbourne ..	2,502	9,183	2,471	8,668	Eremantle ..	1,202	6,418	1,163	6,095
Geelong ..	454	1,980	459	1,930	Albany ..	64	255	86	356
					Bunbury ..	56	155	80	214
					Carnarvon ..	97	147	95	146
					Geraldton ..	103	275	117	349
					Yampi ..	128	292	111	206
Queensland—					Tasmania—				
Brisbane ..	1,128	3,685	1,127	3,518	Hobart ..	396	864	432	890
Bowen ..	82	270	73	260	Burnie ..	224	332	253	377
Cairns ..	233	624	208	540	Devonport ..	228	196	257	225
Gladstone ..	75	276	87	291	Launceston ..	378	419	493	508
Mackay ..	98	282	90	271					
Rockhampton ..	126	286	128	292	Northern Territory—				
Townsville ..	329	993	330	1,001	Darwin ..	57	101	61	123

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 1956–57 and of New Zealand and the United Kingdom during 1956.

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—		NEW ZEALAND—		ENGLAND AND WALES—	
Sydney (N.S.W.) ..	10,629	Wellington ..	3,943	<i>continued.</i>	
Melbourne (Vic.) ..	8,668	Auckland ..	3,069	Manchester (including Runcorn) ..	7,532
Fremantle (W.A.) ..	6,095	Lyttleton ..	2,744	Hull ..	5,575
Adelaide (S.A.) ..	5,001	Otago ..	1,124	Bristol ..	5,334
Newcastle (N.S.W.) ..	4,041	Napier ..	690	Swansea ..	4,917
Brisbane (Qld.) ..	3,518	New Plymouth ..	527	Dover ..	4,454
Port Kembla (N.S.W.) ..	1,983	Bluff ..	466	Middlesbrough ..	4,212
Geelong (Vic.) ..	1,930			Cardiff ..	3,680
Whyalla (S.A.) ..	1,596	ENGLAND AND WALES—		SCOTLAND—	
Townsville (Qld.) ..	1,001	London ..	35,894	Glasgow ..	7,082
Port Pirie (S.A.) ..	956	Southampton ..	20,450		
Hobart (Tas.) ..	890	Liverpool (including Birkenhead) ..	18,216	NORTHERN IRELAND—	
Cairns (Qld.) ..	540	Tyne Ports ..	8,066	Belfast ..	6,664
Launceston (Tas.) ..	508				

§ 6. Shipping Cargo.

1. **Oversea and Interstate Cargo.**—(i) *Australia.* The table hereunder shows the aggregate tonnage of oversea and interstate cargo discharged and shipped at Australian ports for the years 1952–53 to 1956–57. 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 Tons.)

Year.	Oversea Cargo.				Interstate Cargo.			
	Discharged.		Shipped.		Discharged.		Shipped.	
	Weight.	Meas.	Weight.	Meas.	Weight.	Meas.	Weight.	Meas.
1952–53 ..	7,733	1,929	6,045	1,452	8,995	1,492	8,447	1,275
1953–54 ..	8,520	2,812	5,765	1,355	9,059	1,790	9,105	1,539
1954–55 ..	10,992	3,403	6,084	1,420	10,136	1,621	10,212	1,472
1955–56 ..	12,431	3,421	6,667	1,546	11,184	1,572	11,632	1,315
1956–57 ..	12,596	2,752	8,734	1,378	11,862	1,285	11,899	1,290

(ii) *Principal Ports.* The following table shows the tonnage of oversea and interstate cargo discharged and shipped at the principal ports of Australia during 1956-57.

CARGO DISCHARGED AND SHIPPED AT PRINCIPAL PORTS, 1956-57.
(^{'000 Tons.})

Port.	Discharged.				Shipped.			
	Oversea.		Interstate.		Oversea.		Interstate.	
	Wt.	Meas.	Wt.	Meas.	Wt.	Meas.	Wt.	Meas.
Sydney	3,291	1,207	720	196	863	372	562	236
Newcastle	256	1	2,255	..	655	..	2,581	..
Port Kembla	230	..	2,254	..	338	..	564	..
Other .. .. .	..	..	..	..	24	18	..	3
<i>Total, New South Wales</i>	<i>3,777</i>	<i>1,208</i>	<i>5,229</i>	<i>196</i>	<i>1,880</i>	<i>390</i>	<i>3,707</i>	<i>239</i>
Melbourne	2,351	923	2,153	307	604	514	464	388
Geelong	2,271	26	254	..	847	..	700	..
Portland	43	..	5	..	16	..	..	..
<i>Total, Victoria</i>	<i>4,665</i>	<i>949</i>	<i>2,412</i>	<i>307</i>	<i>1,467</i>	<i>514</i>	<i>1,164</i>	<i>388</i>
Brisbane	304	176	671	133	607	117	33	58
Cairns	38	4	66	15	133	..	106	20
Gladstone	29	..	45	..	25	4	115	..
Mackay	23	..	26	4	201	..	86	..
Townsville	42	3	114	25	275	10	94	4
Other	2	1	20	13	213	5	281	4
<i>Total, Queensland</i>	<i>438</i>	<i>184</i>	<i>942</i>	<i>190</i>	<i>1,454</i>	<i>136</i>	<i>715</i>	<i>86</i>
Port Adelaide	480	280	1,608	135	508	107	164	95
Ardrossan .. .. .	..	..	..	..	224	..	114	..
Port Pirie	12	4	257	..	529	..	258	..
Rapid Bay .. .. .	..	..	..	..	..	..	322	..
Whyalla	4	..	353	..	7	..	3,425	..
Other	87	2	37	3	466	3	250	..
<i>Total, South Australia</i>	<i>583</i>	<i>266</i>	<i>2,255</i>	<i>138</i>	<i>1,734</i>	<i>110</i>	<i>4,533</i>	<i>95</i>
Fremantle	2,688	103	318	153	1,442	78	966	56
Geraldton	29	..	..	..	321	4	44	..
Yampi .. .. .	..	..	1	..	..	..	329	..
Other	100	3	37	3	289	56	48	32
<i>Total, Western Australia</i>	<i>2,817</i>	<i>106</i>	<i>356</i>	<i>156</i>	<i>2,052</i>	<i>138</i>	<i>1,387</i>	<i>88</i>
Hobart	114	14	402	112	69	70	156	140
Burnie	33	1	39	34	28	..	32	117
Launceston	102	4	92	101	36	15	40	93
Other	31	..	82	43	5	5	160	42
<i>Total, Tasmania</i>	<i>280</i>	<i>19</i>	<i>615</i>	<i>290</i>	<i>138</i>	<i>90</i>	<i>388</i>	<i>392</i>
Darwin	36	..	53	8	9	..	5	2
<i>Total, Northern Territory</i>	<i>36</i>	<i>..</i>	<i>53</i>	<i>8</i>	<i>9</i>	<i>..</i>	<i>5</i>	<i>2</i>
<i>Australia</i>	<i>12,596</i>	<i>2,752</i>	<i>11,862</i>	<i>1,285</i>	<i>8,734</i>	<i>1,378</i>	<i>11,899</i>	<i>1,290</i>

2. **Oversea Cargo according to Nationality of Vessels.**—The following table shows the total oversea cargo, discharged and shipped combined, according to the countries in which the vessels were registered, during each of the years 1954–55 to 1956–57:—

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

('000 Tons.)

Vessels Registered at Ports in—	1954–55.		1955–56.		1956–57.	
	Weight.	Meas.	Weight.	Meas.	Weight.	Meas.
Commonwealth Countries—						
Australia	357	106	250	117	366	101
Hong Kong	160	35	121	45	350	37
New Zealand	472	327	432	380	567	388
United Kingdom	8,792	3,014	9,377	2,924	9,761	2,352
Other	274	134	239	128	421	130
Total, Commonwealth Countries	10,055	3,616	10,419	3,594	11,465	3,008
Proportion of Total .. %	58.9	75.0	54.6	72.4	53.8	72.8
Foreign Countries—						
Denmark	388	44	566	88	545	34
France	242	41	221	47	182	40
Germany, Federal Republic of	134	69	320	96	277	106
Italy	217	71	167	67	499	51
Japan	432	63	547	83	839	53
Netherlands	1,091	198	1,131	190	1,069	214
Norway	2,499	246	2,985	294	3,336	194
Panama	765	27	886	47	1,105	..
Sweden	719	221	1,135	236	844	174
United States of America	235	174	253	161	296	209
Other	299	53	467	64	873	47
Total, Foreign Countries	7,021	1,207	8,678	1,373	9,865	1,122
Proportion of Total .. %	41.1	25.0	45.4	27.6	46.2	27.2
Grand Total	17,076	4,823	19,097	4,967	21,330	4,130

§ 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 1953 to 1957, so far as such information can be ascertained from the Shipping Registers of the various States. However, the Merchant Shipping Act, under which vessels are registered in Australia, does not 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.

Year.	Steam.			Motor.(a)			Sailing.			Total.		
	No.	Tonnage.		No.	Tonnage.		No.	Tonnage.		No.	Tonnage.	
		Gross.	Net.		Gross.	Net.		Gross.	Net.		Gross.	Net.
1953 ..	3	11,744	6,647	4	7,889	4,051	3	23	22	10	19,656	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	1,85	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
1957 ..	2	15,166	8,202	25	19,211	11,164	..	..	..	27	34,377	19,366

(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, 1957 :—

VESSELS REGISTERED, 31st DECEMBER, 1957.

State or Territory.	Steam and Motor.		Sailing.				Barges, Hulks, Dredges, etc., not Self-propelled.		Total.	
			Propelled by Sail only.		Fitted with Auxiliary Power.					
	No.	Net Tons.	No.	Net Tons.	No.	Net Tons.	No.	Net Tons.	No.	Net Tons.
New South Wales ..	303	60,299	24	2,114	108	1,381	10	948	445	64,742
Victoria ..	188	178,983	48	578	57	1,614	33	11,919	326	193,094
Queensland ..	89	33,401	31	585	46	518	4	830	170	35,334
South Australia ..	75	31,899	10	192	45	2,151	32	5,692	162	39,934
Western Australia ..	89	10,895	208	3,106	70	1,735	5	478	372	16,214
Tasmania ..	41	8,018	43	718	94	2,358	2	513	180	11,607
Northern Territory	..	..	16	154	9	177	..	..	25	331
Australia ..	785	323,495	380	7,447	429	9,934	86	20,380	1,680	361,256

3. **World Shipping Tonnage.**—At 1st July, 1957, the total steamships, motorships and auxiliaries of 100 gross tons and upwards throughout the world amounted to 33,804, with a gross tonnage of 110,246,000. Of these totals, steamships numbered 16,204 for 69,287,000 gross tons, motorships 16,605 for 40,760,000 gross tons and auxiliaries 995 for 199,000 gross tons. Included therein were 3,776 oil tankers of 100 gross tons and upwards, with a gross tonnage of 29,938,000. Australian steamships, motorships and auxiliaries, 232 for 603,000 gross tons, constituted 0.69 per cent. and 0.55 per cent. respectively of the total number and tonnage. There was one Australian oil tanker of 12,624 gross tons registered. This information has been derived from *Lloyd's Register of Shipping*.

§ 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 are published in the annual bulletin, *Transport and Communication*.

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 overseas and interstate shipments. At 31st December, 1957, the rate for general merchandise from Australia to the United Kingdom and the Continent was £10 4s. per ton weight or measurement, while

the rates for wheat and wool (greasy) were respectively £4 10s. per ton weight and 3.39d. 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 showing the depth of water available and tides at principal ports of Australia is published in the annual bulletin, *Transport and Communication*.

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 1953 to 1957 are shown in the table below.

SHIPPING LOSSES AND CASUALTIES : AUSTRALIA.

Year.	Shipping Losses.			Other Shipping Casualties.			Total Shipping Casualties.		
	Vessels.	Net Tons.	Lives Lost.	Vessels.	Net Tons.	Lives Lost.	Vessels.	Net Tons.	Lives Lost.
1953 ..	..	..	..	85	242,972	..	85	242,972	..
1954 ..	..	..	..	149	426,878	..	149	426,878	..
1955 ..	1	53	..	220	694,847	..	221	694,900	..
1956 ..	2	529	18	237	771,418	..	239	771,947	18
1957 ..	1	249	..	224	709,432	..	225	709,681	..

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 short-term and long-term bases. Further information on ports and harbours will be found in Chapter XIX.—Local Government.

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 Company. In the next one hundred years the mileage increased greatly and at 30th June, 1957, 26,478 route-miles (excluding several hundred miles of privately-owned line) were open for traffic. However, the operation of Australia-wide services is 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, 1957, 24,213 route-miles were owned by the State Governments and 2,258 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 was given 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 of up to 600 miles at some points. However, Darwin in the Northern Territory is not connected by rail to any other port. 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 315 at 30th June, 1957.

3. **Distances between Capital Cities.**—The distances by rail between the capital cities of Australia are published in the annual bulletin, *Transport and Communication*.

4. **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, 1957 are shown in the following table.

GOVERNMENT RAILWAYS : VARIATIONS IN ROUTE-MILEAGE, 1947 TO 1957.

State or Territory.	Route-mileage at 30th June, 1947.	Variations during Ten Years ended 30th June, 1957 due to—		Route-mileage at 30th June, 1957.
		Route Miles Opened.	Route Miles Closed.	
New South Wales	6,331	2	27	6,306
Victoria	4,545	15	355	4,205
Queensland	6,566	..	110	6,456
South Australia	3,799	177	123	3,853
Western Australia	4,802	16	247	4,571
Tasmania	636	..	51	585
Northern Territory	490	..	..	490
Australian Capital Territory ..	5	..	..	5
Australia	27,174	210	913	26,471

5. **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. 8½ in. gauge, made in March, 1945, at the request of the Commonwealth Government by the late Sir Harold Clapp, 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, was published 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. 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.

As a further step towards standardization, a Committee consisting of members of the Federal Parliament was formed in March, 1956 to ascertain whether a scheme confined to the main trunk routes would be desirable. This Committee recommended in October, 1956 that standard gauge (4 ft. 8½ in.) lines be provided from Wodonga to Melbourne, from Broken Hill to Adelaide via Port Pirie and from Kalgoorlie to Fremantle via Perth. Action to implement these recommendations has been commenced in respect of the Wodonga to Melbourne line. This project envisages the construction of a new 4 ft. 8½ in. track alongside the present 5 ft. 3 in. single track between Wodonga and Mangalore, the conversion of one of the two existing tracks between Mangalore and Albion and a combination of new track and conversion of existing track between Albion and Spencer Street station. The Commonwealth Government agreed to contribute £25,000, supplemented with £25,000 from the Victorian Government, towards the cost of surveying the route of the proposed standard gauge line. Contracts have been let for aerial and altimetric surveys of the area and the design of station yard layouts has been commenced.

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

6. 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.

7. 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 June—	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	..	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
1957 ..	6,306	4,205	6,456	3,853	4,571	585	490	5	26,471

(a) At 31st December.

At 30th June, 1957, 255 route-miles in Victoria and 209 route-miles in New South Wales were electrified.

The next table shows for each State and Territory the length of government lines open in relation to both population and area at 30th June, 1957.

GOVERNMENT RAILWAYS: ROUTE-MILEAGE OPEN AT 30th JUNE, 1957.
(Miles.)

Particulars.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
Route-mileage open ..	6,306	4,205	6,456	3,853	4,571	585	490	5	26,471
Per 1,000 of population ..	1.74	1.57	4.62	4.41	6.61	1.78	25.56	0.13	2.75
Per 1,000 square miles ..	20.38	47.85	9.63	10.14	4.68	22.32	0.94	5.32	8.90

8. **Classification of Lines according to Gauge, at 30th June, 1957.**—The next table shows the route-mileage of government railways open in each State and Territory at 30th June, 1957, classified according to gauge.

GOVERNMENT RAILWAYS: GAUGES, AT 30th JUNE, 1957.
(Route-miles.)

Gauge.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
5 ft. 3 in. ..	(a) 203	4,171	..	1,631	..	..	..	..	6,005
4 ft. 8½ in. ..	6,103	..	(b) 69	(c) 809	(c) 454	..	..	(c) 5	7,440
3 ft. 6 in. ..	..	..	6,357	(d) 1,413	4,117	585	(c) 490	..	12,962
2 ft. 6 in. ..	..	34	..	..	..	..	..	..	34
2 ft. 0 in. ..	..	..	30	..	..	..	..	..	30
Total ..	6,306	4,205	6,456	3,853	4,571	585	490	5	26,471

(a) Portion of Victorian system. (b) Queensland section of Grafton-South Brisbane Uniform Gauge Line. (c) Portion of Commonwealth system. (d) Includes 500 miles of Commonwealth system.

9. **Summary of Operations.**—In the following table a summary is shown of the operations of government railways open in Australia during 1956-57:—

GOVERNMENT RAILWAYS: SUMMARY OF OPERATIONS, 1956-57.

Particulars.	Commonwealth Railways.	State Railways.	Total.
Route-mileage, 30th June miles	2,258	24,213	26,471
Gross revenue £'000	4,961	182,883	187,844
„ „ per revenue train-mile .. pence	557	472	474
Working expenses £'000	(a) 3,597	188,760	192,357
„ „ per revenue train-mile .. pence	404	487	485
Net revenue £'000	(a) 1,364	—5,877	—4,513
„ „ per revenue train-mile .. pence	153	— 15	— 11
Revenue train-miles '000	2,136	92,949	95,085
Passenger-journeys '000	213	499,303	499,516
Goods and livestock carried '000 tons	1,069	46,407	47,476
Average number of employees(b)	2,606	141,230	143,836
„ earnings per employee £	859	957	955

(a) Excludes amounts paid for Commissioner's salary, government contributions under the Superannuation Act, Accident and Insurance Fund and proportion of salaries of Auditor-General's staff—total, £92,733. (b) Excludes construction staff except in respect of Victoria.

NOTE.—Minus sign (—) denotes loss.

A graph showing the route-mileage and traffic of government railways from 1870 to 1956-57 appears on page 378.

10. **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 1956-57.

GOVERNMENT RAILWAYS: SUMMARY, STATES, 1956-57.

Railway System.	Mileage Open.(a)		Cost of Construction and Equipment during Year. (£'000.)	Passenger-journeys. (⁰⁰⁰ .)	Goods and Livestock Carried. (⁰⁰⁰ tons.)	Revenue Train-miles. (⁰⁰⁰ .)
	Route-miles.	Track-miles.				
New South Wales ..	6,103	8,478	12,018	264,137	(b)18,791	37,030
Victoria ..	4,408	5,804	7,112	167,405	9,381	18,544
Queensland ..	6,456	7,494	4,611	34,271	8,453	20,054
South Australia ..	2,544	3,176	2,201	17,406	4,498	7,188
Western Australia ..	4,117	4,706	3,742	13,271	4,223	8,278
Tasmania ..	585	686	217	2,813	1,061	1,855
Commonwealth ..	2,258	2,481	1,923	213	1,069	2,136
Australia ..	26,471	32,825	31,824	499,516	47,476	95,085

(a) At 30th June.

(b) Partly estimated.

11. 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 1956-57 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; £10,356 recoup on operating the Kerang-Koondrook Tramway in Victoria; and £3,400,000 towards working expenses and £800,000 towards debt charges in South Australia.

(ii) *Coaching, Goods and Miscellaneous Receipts.* (a) *Summary.* In the following table the gross revenue is shown for the years 1954-55 to 1956-57, 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.
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TOTAL GROSS REVENUE.
(£'000.)

1954-55 ..	73,361	37,667	31,625	12,939	12,315	2,322	3,741	173,970
1955-56 ..	75,386	37,032	31,312	13,098	13,080	2,535	4,741	177,184
1956-57 ..	78,689	37,352	36,678	13,771	13,859	2,534	4,961	187,844

GROSS REVENUE PER AVERAGE ROUTE-MILE WORKED.
(£.)

1954-55 ..	12,022	8,449	4,823	5,047	2,996	3,839	1,700	6,541
1955-56 ..	12,352	8,322	5,961	5,108	3,175	4,260	2,154	6,689
1956-57 ..	12,894	8,441	5,681	5,398	3,367	4,333	2,172	7,083

GROSS REVENUE PER REVENUE TRAIN-MILE.
(Pence.)

1954-55 ..	469.78	482.39	386.52	430.34	380.43	269.72	442.47	439.80
1955-56 ..	470.21	476.94	389.60	441.92	379.21	288.98	487.04	441.88
1956-57 ..	509.99	483.42	438.94	459.80	401.80	328.00	557.51	474.13

(a) Excludes government grants; see para. 11 (f) above.

(b) *Distribution.* The following table shows the gross revenue for the year 1956–57 classified according to the main three sources of receipts.

GOVERNMENT RAILWAYS : DISTRIBUTION OF GROSS REVENUE(a), 1956–57.

Railway System.	Gross Revenue. (£'000.)			Proportion of Total. (Per Cent.)		
	Coaching.	Goods and Livestock.	Miscellaneous.	Coaching.	Goods and Livestock.	Miscellaneous.
New South Wales ..	22,850	51,956	3,883	29.04	66.03	4.93
Victoria ..	12,775	22,110	2,467	34.20	59.20	6.60
Queensland ..	5,155	30,502	1,021	14.05	83.16	2.79
South Australia ..	1,851	10,990	929	13.44	79.81	6.75
Western Australia ..	1,507	11,698	654	10.88	84.40	4.72
Tasmania ..	215	2,240	79	8.49	88.39	3.12
Commonwealth ..	973	3,626	363	19.60	73.09	7.31
Australia ..	45,326	133,122	9,396	24.13	70.87	5.00

(a) Excludes government grants ; see para. 11 (i) on p. 393.

12. *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. 13 and 14 following).

(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 1954–55 to 1956–57:—

GOVERNMENT RAILWAYS : WORKING EXPENSES.

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	C'wealth. (a)	Aust.
TOTAL WORKING EXPENSES. (£'000.)								
1954–55 ..	68,397	37,032	30,946	15,414	14,690	3,077	2,921	172,477
1955–56 ..	74,904	38,026	33,873	15,761	15,920	3,262	3,176	184,922
1956–57 ..	75,352	39,118	37,790	15,977	17,076	3,447	3,597	192,357
RATIO OF WORKING EXPENSES TO GROSS REVENUE. (Per Cent.)								
1954–55 ..	93.23	98.31	97.85	119.12	119.29	132.50	78.09	99.14
1955–56 ..	99.36	102.68	108.18	120.33	121.71	128.69	66.99	104.36
1956–57 ..	95.76	104.73	103.03	116.03	123.21	136.01	72.50	102.40
WORKING EXPENSES PER AVERAGE ROUTE-MILE WORKED. (£.)								
1954–55 ..	11,209	8,307	4,720	6,012	3,574	5,086	1,327	6,485
1955–56 ..	12,273	8,545	5,247	6,146	3,864	5,482	1,443	6,981
1956–57 ..	12,347	8,840	5,853	6,263	4,148	5,893	1,575	7,253

(a) See para. 9, note (a), page 392.

GOVERNMENT RAILWAYS: WORKING EXPENSES—*continued.*

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	C'wealth. (a)	Aust.
WORKING EXPENSES PER REVENUE TRAIN-MILE. (Pence.)								
1954-55 ..	437.99	474.26	378.22	512.64	453.81	357.38	345.51	436.02
1955-56 ..	467.21	489.74	421.46	531.75	461.55	371.89	326.26	461.18
1956-57 ..	488.36	506.28	452.24	533.49	495.07	446.12	404.20	485.52

(a) See para. 9, note (a), page 392.

(iii) *Distribution.* The following table shows the total working expenses for the year 1956-57 classified according to the main four expenditure headings.

GOVERNMENT RAILWAYS: DISTRIBUTION OF WORKING EXPENSES, 1956-57.
(£'000.)

Railway System.	Mainten- ance of Way and Works.	Motive Power.(a)	Traffic.	Other Charges.	Total Working Expenses.
New South Wales ..	13,414	31,488	17,777	12,673	75,352
Victoria ..	8,230	12,216	10,159	8,513	39,118
Queensland ..	9,535	17,889	8,318	2,048	37,790
South Australia(b) ..	3,145	7,461	3,735	1,636	15,977
Western Australia(b) ..	2,972	7,906	3,556	2,642	17,076
Tasmania(b) ..	860	1,467	715	405	3,447
Commonwealth(c) ..	1,395	1,104	801	297	3,597
Australia ..	39,551	79,531	45,061	28,214	192,357

(a) Includes maintenance of rolling stock.

(b) Includes provision of reserves for depreciation.

(c) See para. 9, note (a), page 392.

13. *Net Revenue.*—The following table shows, for the years 1954-55 to 1956-57, 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.

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	C'wealth.	Aust.
TOTAL NET REVENUE. (£'000.)								
1954-55 ..	4,964	635	679	— 2,475	— 2,375	— 755	(a) 820	1,493
1955-56 ..	482	— 994	— 2,561	— 2,663	— 2,840	— 727	(a) 1,565	— 7,738
1956-57 ..	3,337	— 1,766	— 1,112	— 2,206	— 3,217	— 913	(a) 1,364	— 4,513

NET REVENUE PER AVERAGE ROUTE-MILE WORKED.
(£.)

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	C'wealth.	Aust.
1954-55 ..	813	142	103	— 965	— 578	— 1,247	(a) 373	56
1955-56 ..	79	— 223	— 397	— 1,038	— 689	— 1,222	(a) 711	— 292
1956-57 ..	547	— 399	— 172	— 865	— 781	— 1,560	(a) 597	— 170

NET REVENUE PER REVENUE TRAIN-MILE.
(Pence.)

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	C'wealth.	Aust.
1954-55 ..	31.79	8.13	8.30	— 82.30	— 73.38	— 87.66	(a) 96.96	3.78
1955-56 ..	3.00	— 12.80	— 31.86	— 89.83	— 82.34	— 82.91	(a) 160.78	— 19.30
1956-57 ..	21.63	— 22.86	— 13.30	— 73.69	— 93.27	— 118.12	(a) 153.31	— 11.39

NOTE.—For footnotes see next page.

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

Year.	N.S.W.	Vic	Q'land.	S.Aust.	W.Aust.	Tas.	C'wealth.	Aust.
INTEREST PAYMENTS. (£'000.)								
1954-55 ..	7,100	2,545	2,460	1,288	1,411	282	(b) 407	15,493
1955-56 ..	8,032	2,874	2,630	1,471	1,721	322	(b) 385	17,435
1956-57 ..	9,071	3,022	2,970	(b) 1,621	2,053	348	(b) 383	19,468

NET PROFIT OR LOSS. (£'000.)								
1954-55 ..	- 2,136	- 1,910	- 1,781	- 3,763	- 3,786	- 1,037	(a) 413	- 14,000
1955-56 ..	- 7,550	- 3,868	- 5,191	- 4,134	- 4,561	- 1,049	(a) 1,180	- 25,173
1956-57 ..	- 5,734	- 4,788	- 4,082	- 3,827	- 5,270	- 1,261	(a) 981	- 23,981

(a) See para. 9, note (a), page 392.

(b) Includes exchange.

NOTE.—Minus sign (—) denotes loss.

A graph showing the gross and net revenue and working expenses from 1870 to 1956-57 appears on page 379.

14. **Exchange.**—Exchange on interest payments abroad and certain other charges are not debited against the railways in Queensland and Western Australia. For the purposes of comparison these items have been excluded wherever possible from the table above.

In the remaining States the amounts paid on account of exchange during 1956-57 were:—New South Wales, £482,540; Victoria, £123,891; and Tasmania, £4,349.

15. **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 located in 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 1954-55 to 1956-57:—

GOVERNMENT RAILWAYS : TRAFFIC.

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	C'wealth.	Aust.
PASSENGER-JOURNEYS (SUBURBAN AND COUNTRY). (‘000.)								
1954-55 ..	281,417	169,204	35,919	16,849	10,139	3,114	215	516,857
1955-56 ..	280,470	166,708	35,647	16,434	12,271	2,977	230	514,737
1956-57 ..	264,137	167,405	34,270	17,407	13,271	2,813	213	499,516

PASSENGER-JOURNEYS (SUBURBAN AND COUNTRY) PER AVERAGE ROUTE-MILE WORKED.
(Number.)

1954-55 ..	46,119	37,955	5,478	6,571	2,466	5,147	98	19,432
1955-56 ..	45,956	37,462	5,522	6,410	2,979	5,003	104	19,433
1956-57 ..	43,280	37,832	5,308	6,823	3,223	4,809	93	18,835

GOVERNMENT RAILWAYS: TRAFFIC—*continued.*

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	C'wealth.	Total.
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GOODS AND LIVESTOCK CARRIED.
(⁰⁰⁰ Tons.)

	(a)							
1954-55 ..	19,386	10,082	8,492	4,474	3,407	1,041	816	47,698
1955-56 ..	18,787	9,607	8,180	4,414	3,793	1,075	918	46,774
1956-57 ..	18,791	9,381	8,453	4,498	4,223	1,061	1,069	47,476

GOODS AND LIVESTOCK CARRIED PER AVERAGE ROUTE-MILE WORKED.
(Tons.)

1954-55 ..	3,177	2,262	1,295	1,745	829	1,721	371	1,793
1955-56 ..	3,176	2,159	1,315	1,722	921	1,807	417	1,766
1956-57 ..	3,079	2,120	1,309	1,763	1,026	1,814	468	1,790

(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 a summary of suburban passenger operations for the years 1954-55 to 1956-57. Most of the suburban services in New South Wales and Victoria are operated within electrified areas.

GOVERNMENT RAILWAYS: SUBURBAN PASSENGER SUMMARY.

Year.	Suburban Passenger Journeys.	Suburban Train-miles.	Suburban Passenger-miles.	Average Number of Passengers per Train-mile.	Average Mileage per Passenger-journey.	Suburban Passenger Earnings.			
						Gross.	Per Passenger-journey.	Per Passenger-mile.	Per Passenger Train-mile.
	(⁰⁰⁰ .)	(⁰⁰⁰ .)	(⁰⁰⁰ .)		(Miles.)	(£'000.)	(Pence.)	(Pence.)	(Pence.)

NEW SOUTH WALES.

1954-55	a 269,016	11,503	(b)	(b)	(b)	(b)	(b)	(b)	(b)
1955-56	a 269,000	11,886							
1956-57	a 253,000	11,618							

VICTORIA.

1954-55	162,957	8,236	1,376,307	167	8.45	6,088	8.97	1.06	177
1955-56	161,124	8,298	1,379,610	166	8.56	7,005	10.43	1.22	203.
1956-57	162,255	8,291	1,416,115	171	8.73	7,647	11.31	1.30	221

QUEENSLAND.

1954-55	29,712	2,099	(b)	(b)	(b)	767	6.19	(b)	88
1955-56	29,748	2,019				749	6.05	(b)	89
1956-57	28,783	2,070				882	7.36	(b)	102

SOUTH AUSTRALIA.

1954-55	15,450	1,772	143,003	81	8.49	526	8.17	0.88	71
1955-56	15,061	1,778	140,906	79	9.36	567	9.04	0.97	77
1956-57	15,995	1,935	152,021	79	9.50	603	9.04	0.95	75

(a) Estimated. (b) Not available.

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

GOVERNMENT RAILWAYS: SUBURBAN PASSENGER SUMMARY—*continued*.

Year.	Suburban Passenger-journeys. (‘000.)	Suburban Passenger Train-miles. (‘000.)	Suburban Passenger-miles. (‘000.)	Average Number of Passengers per Train-mile.	Average Mileage per Passenger-journey. (Miles.)	Suburban Passenger Earnings.			
						Gross. (£'000.)	Per Passenger-journey. (Pence.)	Per Passenger-mile. (Pence.)	Per Passenger Train-mile. (Pence.)
WESTERN AUSTRALIA.									
1954-55	9,354	1,038	66,456	64	6.56	293	7.51	1.06	68
1955-56	11,481	1,290	80,408	52	5.79	362	7.56	1.08	67
1956-57	12,497	1,303	86,102	66	6.89	391	7.52	1.09	72

TASMANIA.

1954-55	2,519	239	14,683	61	5.83	51	4.87	0.83	51
1955-56	2,443	250	13,568	54	5.55	47	4.66	0.84	46
1956-57	2,345	213	13,279	62	5.66	58	5.96	1.05	66

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

(b) *Country Passenger Traffic*. The following table shows a summary of country passenger operations for the years 1954-55 to 1956-57.

GOVERNMENT RAILWAYS : COUNTRY PASSENGER SUMMARY.

Year.	Country Passenger-journeys. (‘000.)	Country Passenger Train-miles. (a) (‘000.)	Country Passenger-miles. (‘000.)	Average Number of Passengers per Train-mile.	Average Mileage per Passenger-journey. (Miles.)	Country Passenger Earnings.			
						Gross. (£‘000.)	Per Passenger-journey. (Pence.)	Per Passenger-mile. (Pence.)	Per Passenger Train-mile. (Pence.)
NEW SOUTH WALES.									
1954-55	(b)12,401	10,408	(c)	(c)	(c)	(c)	(c)	(c)	(c)
1955-56	(b)11,470	10,685							
1956-57	(b)11,137	10,306							
VICTORIA.									
1954-55	6,247	4,590	497,644	108	79.66	3,791	145.65	1.83	197
1955-56	5,584	4,653	459,828	98	82.34	3,789	162.83	1.98	195
1956-57	5,150	4,709	437,481	93	84.95	3,717	173.25	2.04	189
QUEENSLAND.									
1954-55	6,207	5,079	(c)	(c)	(c)	2,609	100.90	(c)	110
1955-56	5,899	5,142				2,524	102.68	(c)	106
1956-57	5,487	5,183				2,740	119.85	(c)	115
SOUTH AUSTRALIA.									
1954-55	1,399	2,163	126,203	56	90.21	824	141.43	1.57	87
1955-56	1,373	2,154	125,088	55	91.08	802	140.13	1.54	85
1956-57	1,412	2,133	121,135	54	85.81	795	135.14	1.57	85
WESTERN AUSTRALIA.									
1954-55	785	1,546	79,097	51	100.72	667	203.89	2.03	104
1955-56	790	1,677	82,813	47	104.85	678	205.95	1.96	97
1956-57	774	1,645	80,700	49	104.32	685	212.58	2.04	100

NOTE.—For footnotes see next page.

GOVERNMENT RAILWAYS: COUNTRY PASSENGER SUMMARY—*continued*.

Year.	Country Passenger-journeys.	Country Passenger Train-miles. (a)	Country Passenger-miles. (a)	Average Number of Passengers per Train-mile.	Average Mileage per Passenger-journey. (Miles.)	Country Passenger Earnings.			
						Gross. (£'000.)	Per Passenger-journey. (Pence.)	Per Passenger-mile. (Pence.)	Per Passenger Train-mile. (Pence.)

TASMANIA.

1954-55	595	747	21,183	28	35.57	120	48.29	1.36	38
1955-56	534	766	19,528	25	36.59	115	51.92	1.42	35
1956-57	468	560	17,476	30	37.31	106	54.07	1.45	43

COMMONWEALTH.(d)

1954-55	215	641	74,260	101	344.88	615	685.44	1.99	201
1955-56	230	762	86,514	103	376.97	710	742.69	1.97	203
1956-57	213	725	83,984	104	393.95	741	834.47	2.12	220

(a) Excludes mixed train-miles. (b) Estimated. (c) Not available. (d) Railways controlled by Commonwealth Government.

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

(iii) *Freight Traffic.* (a) *Commodities Carried and Revenue.* 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 1956-57 and the revenue received.

GOVERNMENT RAILWAYS: COMMODITIES CARRIED AND REVENUE, 1956-57.

Railway System.	Coal, Coke and Shale.	Other Minerals.	Flour and Agricultural Produce.	Wool.	Live-stock.	All Other Commodities.	Total.
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QUANTITY CARRIED.
(‘000 Tons.)

New South Wales	.. (a)	(a)	(b) 935	(c) 226	(c) 649	16,981	18,791
Victoria	.. 2,478	109	2,261	158	445	3,930	9,381
Queensland	.. (d) 1,690	(e) 914	3,199	68	878	1,704	8,453
South Australia	.. 154	1,248	1,133	50	245	1,668	4,498
Western Australia	.. 472	205	1,844	60	148	1,494	4,223
Tasmania	.. 239	42	32	4	27	717	1,061
Commonwealth	.. 528	78	12	6	127	318	1,069
Australia	.. (f)	(f)	(f)	572	2,519	26,812	47,476

REVENUE.
(£'000.)

New South Wales	.. 8,128	(a)	(a)	(a)	3,707	40,121	51,956
Victoria	.. 3,217	127	4,636	821	1,269	12,040	22,110
Queensland	.. (g) 3,183	(h) 2,800	6,026	1,290	4,365	12,838	30,502
South Australia	.. 132	3,300	1,811	288	818	4,641	10,990
Western Australia	.. 921	531	3,508	365	418	5,955	11,698
Tasmania	.. 559	89	73	14	73	1,432	2,240
Commonwealth	.. 847	184	43	34	296	2,222	3,626
Australia	.. 16,987	(f)	(f)	(f)	10,946	79,249	133,122

(a) Included with "All other Commodities". (b) Wheat only. (c) Estimated. (d) Excludes shale. (e) Includes shale. (f) Not available. (g) Excludes revenue from shale. (h) Includes revenue from shale.

(b) *Freight Summary.* A summary of freight traffic on each railway system for each of the years 1954-55 to 1956-57 is shown in the following table.

GOVERNMENT RAILWAYS : FREIGHT SUMMARY.

Year.	Revenue Goods Train-miles. (a)	Revenue Net Ton-miles. (c)	Average Train Load (Paying Traffic). (Tons.)	Average Haul per Ton. (Miles.)	Goods and Livestock Earnings.				Density of Traffic. (b)
					Gross.	Per Average Route-mile Worked.	Per Revenue Net Ton-mile.	Per Revenue Goods Train-mile.	
	('000.)	('000.)	(Tons.)	(Miles.)	(£'000.)	(£)	(Pence.)	(Pence.)	
NEW SOUTH WALES.									
1954-55	14,571	c2,965,614	(c) 196	(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
1956-57	14,317	c2,929,338	(c) 197	(c) 156	51,956	8,513	4.26	840	c 479,983
VICTORIA.									
1954-55	5,866	1,426,415	242	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
1956-57	5,502	1,249,494	226	133	22,110	4,997	4.25	961	282,372
QUEENSLAND.(d)									
1954-55	10,650	1,376,781	117	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
1956-57	11,065	1,480,694	122	182	29,844	4,673	4.84	590	231,829
SOUTH AUSTRALIA.									
1954-55	2,959	677,128	213	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
1956-57	2,811	648,397	215	144	10,990	4,308	4.07	874	254,174
WESTERN AUSTRALIA.									
1954-55	5,185	556,505	107	163	10,360	2,520	4.47	480	135,370
1955-56	5,311	608,418	115	160	10,989	2,668	4.33	497	147,710
1956-57	5,330	667,695	125	158	11,698	2,841	4.20	527	162,180
TASMANIA.									
1954-55	1,024	96,178	91	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
1956-57	999	100,274	95	95	2,240	3,829	5.36	510	171,409
COMMONWEALTH.(e)									
1954-55	11,104	196,824	178	241	2,650	1,204	3.80	492	89,425
1955-56	11,340	265,790	178	289	3,437	1,561	3.10	551	120,759
1956-57	11,159	293,382	221	274	3,626	1,588	2.97	656	128,451

(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.

16. **Rolling Stock.**—The following table shows the number of rolling stock of Government railways at 30th June, 1957.

GOVERNMENT RAILWAYS : ROLLING STOCK(a) AT 30th JUNE, 1957.

Railway System.	Locomotives.				Coaching Stock.(b)	Goods Stock.	Service Stock.
	Steam.	Diesel-electric.	Other.	Total.			
New South Wales ..	1,139	44	34	1,217	3,750	25,675	1,011
Victoria ..	447	(c) 67	35	(c) 549	(d) 2,407	21,432	(e) 1,271
Queensland ..	795	44	6	845	1,536	26,887	1,342
South Australia ..	292	26	..	318	(d) 697	8,534	(e) 472
Western Australia ..	354	66	10	430	592	11,892	781
Tasmania ..	90	32	8	130	165	2,662	155
Commonwealth ..	132	36	..	168	188	1,982	441
Australia ..	3,249	(c) 315	93	(c) 3,657	(f) 9,390	99,064	(f) 5,474

(a) Included in capital account. (b) Includes all brake vans. (c) Includes 3 locomotives on hire. (d) Excludes 55 interstate coaching stock owned jointly by Victoria and South Australia. (e) Excludes one dynamometer car owned jointly by Victoria and South Australia. (f) Includes stock owned jointly by Victoria and South Australia.

17. **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 1956–57 :—

GOVERNMENT RAILWAYS : ACCIDENTS(a), 1956–57.

Particulars.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	C'wth.	Aust.
Persons killed ..	80	42	17	18	6	4	..	167
Persons injured ..	772	540	212	181	161	9	19	1,894

(a) Excludes accidents to railway employees.

18. **Consumption of Coal, Oil and Petrol.**—The following table shows the quantities of coal, oil and petrol consumed by the various government railways during 1956–57 :—

GOVERNMENT RAILWAYS : COAL, OIL AND PETROL CONSUMED, 1956–57.

Railway System.	Coal.		Oil.				Petrol for Rail Cars.
	Locomotives.	Other Purposes.	Diesel Oil.(a)	Fuel Oil.(b)	Lubrication.	Other Purposes.	
	'000 tons.	'000 tons.	'000 gal.	'000 gal.	'000 gal.	'000 gal.	'000 gal.
New South Wales ..	1,373	18	5,226	8,545	470	634	46
Victoria ..	173	13	6,074	10,285	365	1,460	3
Queensland ..	652	7	3,706	..	446	815	176
South Australia ..	136	8	3,064	17,169	(c)	(c)	110
Western Australia ..	320	5	3,196	1,244	252	1,425	52
Tasmania ..	34	(d)	1,167	..	46	143	..
Commonwealth ..	2	1	2,922	157	83	573	6
Australia ..	2,690	52	25,355	37,400	(c)	(c)	393

(a) Used in internal combustion engines of locomotives and rail cars. (b) Used in oil-fired furnaces of steam locomotives. (c) Not available. (d) 212 tons.

19. **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 1956–57.

GOVERNMENT RAILWAYS : AVERAGE NUMBER OF EMPLOYEES AND SALARIES AND WAGES PAID, 1956-57.

Railway System.	Operating Staff.			Construction Staff.(a)			Total Salaries and Wages Paid. (£'000.)	Average Earnings Per Employee. (£.)
	Salaried.	Wages.	Total.	Salaried.	Wages.	Total.		
New South Wales ..	9,686	45,122	54,808	5	74	79	54,422	992
Victoria ..	(b) 5,227	(b) 24,589	(b) 29,816	(c)	(c)	(c)	28,933	970
Queensland ..	4,520	25,303	29,823	39	1,082	1,121	28,573	923
South Australia ..	1,879	8,252	10,131	10	1,080	1,090	10,755	958
Western Australia ..	2,105	11,872	13,977	..	..	..	12,281	879
Tasmania ..	359	2,316	2,675	34	128	162	2,515	886
Commonwealth ..	376	2,230	2,606	7	213	220	2,426	859
Australia ..	d 24,152	d 119,684	d 143,836	95	2,577	2,672	139,905	955

(a) In Victoria, Queensland and Western Australia a considerable amount of construction work is carried out by private contractors and the staff engaged are 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 Ballarat; 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, 1957, 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, 1957.

(Miles.)

Particulars—	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
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ACCORDING TO CONTROLLING AUTHORITY.

Government ..	103	170	33	35	341
Municipal	85	67	152
Total ..	103	170	85	67	33	35	493

ACCORDING TO GAUGE.

Tramways—							
5 ft. 3 in. ..	..	4	..	..	..	..	4
4 ft. 8½ in. ..	97	166	66	44	..	..	373
3 ft. 6 in. ..	..	..	..	..	11	9	20
Trolley-buses ..	6	..	19	23	22	26	96
Total ..	103	170	85	67	33	35	493

2. **Summary of Operations, Australia.**—The following table gives a summary of the working of all tramway systems in Australia for the years 1952-53 to 1956-57 :—

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

Particulars.		1952-53.	1953-54.	1954-55.	1955-56.	1956-57.
Average mileage open for traffic ..	route-miles	530	529	527	528	505
	track-miles	990	992	994	991	947
Tramcars(b) .. .. .	..	2,833	2,714	2,626	2,619	2,416
Net increase in capital equipment during year(c)	£'000	911	861	910	1,034	644
Gross revenue(c)(d)	£'000	15,968	15,780	15,267	15,878	17,267
Working expenses(c)(e)	£'000	18,420	18,181	17,797	18,558	18,148
Net revenue(c)	£'000	— 2,452	— 2,401	— 2,530	— 2,680	— 881
Interest(c)	£'000	628	656	702	835	897
Ratio of working expenses to gross revenue(c)	per cent.	115.36	115.22	116.57	116.88	105.10
Car-miles	'000	66,185	64,186	60,878	58,881	57,622
Gross revenue per car-mile(c)	pence	58.16	59.40	60.79	65.69	73.21
Working expenses per car-mile(c)	pence	67.09	68.43	70.86	76.78	76.94
Net revenue per car-mile(c)	pence	— 8.93	— 9.03	— 10.07	— 11.09	— 3.73
Passenger-journeys	'000	652,987	637,289	619,279	593,284	534,707
Passenger-journeys per car-mile .. .. .	..	9.87	9.93	10.17	10.08	9.28
Average gross revenue per passenger-journey(c)	pence	5.92	6.01	6.01	6.55	7.93
Persons employed at end of year(c)(f) .. .. .	..	16,051	15,743	15,030	14,499	14,014
Accidents—						
Persons killed .. .. .	..	(c) 72	(c) 59	(c) 58	42	45
„ injured .. .. .	..	(c) 3,255	(c) 2,993	(c) 3,177	3,077	3,154

(a) Includes particulars of Hobart and Launceston Municipal Council Omnibus Services.
 (b) Includes trolley-buses. (c) Excludes Queensland trolley-buses. (d) Excludes government grants.
 (e) 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 1956-57 are shown for each State in the following table :—

TRAMWAY AND TROLLEY-BUS SERVICES : TRAFFIC AND ACCIDENTS, 1956-57.

State.	Average Mileage Open for Traffic.		Tram-cars. (a)	Car-miles. (c'000.)	Pas-senger-journeys. (c'000.)	Pas-senger-journeys per Car-mile.	Accidents.	
	Route-miles.	Track-miles.					Persons Killed.	Persons Injured.
New South Wales ..	108	207	646	13,500	144,718	10.72	(b) 9	(b) 652
Victoria	172	320	857	23,574	213,412	9.05	17	1,197
Queensland	85	156	438	9,395	101,331	10.79	10	816
South Australia	75	146	217	6,329	40,702	6.43	(c) 8	(c) 294
Western Australia ..	33	59	130	1,512	11,499	7.60	..	165
Tasmania	32	59	128	(d) 3,312	(d) 23,045	(d) 6.96	(d) 1	(d) 30
Australia	505	947	2,416	57,622	534,707	9.28	45	3,154

(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 1954-55 to 1956-57.

TRAMWAY AND TROLLEY-BUS SERVICES : SUMMARY OF OPERATIONS.

Year ended 30th June—	Mileage Open for Traffic at 30th June. (Route-miles.)	Net Increase in Capital Equipment during Year. (£'000.)	Gross Revenue. (a) (£'000.)	Working Expenses. (b) (£'000.)	Net Revenue. (£'000.)	Interest. (£'000.)	Ratio of Working Expenses to Gross Revenue. (Per cent.)	Car-miles. (°000.)	Passenger-journeys. (°000.)	Persons Employed at end of Year.
NEW SOUTH WALES.										
1955..	117.	—829	4,731	6,416	—1,685	182	135.61	14,663	191,958	(c)4,073
1956..	113.	—206	4,231	6,136	—1,905	181	145.03	12,002	174,954	(c)3,923
1957..	103	—215	5,542	6,049	—507	192	109.14	13,500	144,718	(d)3,376
VICTORIA.										
1955..	175	1,389	5,345	5,692	—347	132	106.48	23,173	220,095	5,409
1956..	173	886	6,324	6,715	—391	217	106.18	24,082	222,524	5,264
1957..	170	467	6,648	6,756	—108	293	101.63	23,574	213,412	5,399
QUEENSLAND.										
1955..	80(e)	140	(e)2,306	e 2,317	e —11	(e) 111	e 100.46	10,245	111,910	(e)2,481
1956..	85(e)	116	(e)2,431	e 2,389	(e) 42	(e) 110	e 98.29	10,208	106,959	(e)2,291
1957..	85(e)	87	(e)2,409	e 2,295	(e) 114	(e) 110	e 95.28	9,395	101,331	(e)2,228
SOUTH AUSTRALIA.										
1955..	92	130	1,787	2,133	—346	206	119.39	7,646	54,909	(f)2,054
1956..	83	142	1,797	2,012	—215	256	111.94	7,225	48,152	(f)1,981
1957..	67	142	1,524	1,709	—185	251	112.09	6,329	40,702	(f)2,025
WESTERN AUSTRALIA.										
1955..	31	32	487	573	—86	34	117.63	2,205	17,289	445
1956..	34	24	436	554	—118	33	126.94	2,039	15,862	427
1957..	33	12	376	479	—103	37	127.48	1,512	11,499	334
TASMANIA.(g)										
1955..	(h) 30	48	611	666	—55	37	109.14	2,946	23,118	568
1956..	(h) 30	72	659	752	—93	38	114.16	3,325	24,833	613
1957..	(h) 35	151	768	860	—92	14	111.98	3,312	23,045	652
AUSTRALIA.(i)										
1955..	525	910	15,267	17,797	—2,530	702	116.57	60,878	619,279	15,030
1956..	518	1,034	15,878	18,558	—2,680	835	116.88	58,881	593,284	14,499
1957..	493	644	17,267	18,148	—881	897	105.10	57,622	534,707	14,014

(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 1,311 administrative staff and 585 salaried staff who cannot be distributed between omnibus and tramway services.
(e) Excludes trolley-bus services, particulars of which are included with omnibus services.
(f) Includes motor omnibus employees of Adelaide Municipal Tramways Trust. (g) Includes particulars of Hobart and Launceston Municipal Council Omnibus Services. (h) Tramway and trolley-bus mileage only. At 30th June, 1957, Hobart and Launceston Municipal Council Omnibus route-mileage was 78 miles.
(i) See notes (a) to (h).

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 year 1956–57 of the operations of omnibus systems controlled by government and municipal authorities.

MOTOR OMNIBUS SERVICES: GOVERNMENT AND MUNICIPAL, 1956–57.

Particulars.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	A.C.T.	Aust.
Length of route .. miles	493	99	413	71	3,059	688	46	4,869
Omnibuses ..	1,313	269	260	236	236	115	60	2,489
Net increase in capital equipment during year .. £'000	1,278	121 (a)	122	426	119 (b)	—4	64	2,126
Gross revenue (c) .. £'000	7,884	1,192 (a)	994	765	1,055 (b)	178	138	12,206
Working expenses .. £'000	8,691	1,447 (a)	1,173	1,008	1,122 (b)	164	206	13,811
Omnibus-miles .. '000	32,868	5,907	5,395	4,605	7,744 (b)	976	944	58,439
Passenger-journeys .. '000	179,575	34,640	28,150	21,488	26,174 (b)	914	3,627	294,568
Persons employed ..	(d) 5,317	943 (a)	713	(e)	(d) 132 (b)	44	142 (f)	7,291

(a) Includes Brisbane City Council trolley-bus service. (b) Excludes Hobart and Launceston Municipal Council Services. (c) Excludes government grants. (d) Excludes staff not distributable between omnibus and tramway services. (e) Not available; employees are interchangeable with electric tramway employees and are included therewith (see p. 404). (f) 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 1952–53 to 1956–57.

MOTOR OMNIBUS SERVICES : GOVERNMENT AND MUNICIPAL, AUSTRALIA.

Particulars.	1952–53.	1953–54.	1954–55.	1955–56.	1956–57.
Length of route .. miles	4,562	4,612	4,492	4,571	4,869
Omnibuses ..	2,258	2,302	2,301	2,392	2,489
Net increase in capital equipment during year (a)(b) .. £'000	(c) 1,494	(c) 711	545	765	2,126
Gross revenue (a)(b) .. £'000	9,320	8,853	9,613	9,592	12,206
Working expenses (a)(b) .. £'000	11,465	11,387	12,063	12,970	13,811
Net revenue (a)(b) .. £'000	—2,145	—2,534	—2,450	—3,378	—1,605
Ratio of working expenses to gross revenue (a)(b) .. per cent.	123.01	128.61	125.48	135.22	113.15
Omnibus-miles (a) .. '000	55,382	56,894	57,513	57,809	58,439
Gross revenue per omnibus-mile (a)(b) .. pence	40.18	37.07	39.70	39.23	49.27
Working expenses per omnibus-mile (a)(b) .. pence	49.43	47.68	49.81	53.05	55.75
Net revenue per omnibus-mile (a)(b) .. pence	—9.25	—10.61	—10.11	—13.82	—6.48
Passenger-journeys (a) .. '000	334,907	339,578	346,749	333,761	294,568
Passenger-journeys per omnibus-mile (a) ..	6.05	5.97	6.03	5.77	5.04
Average gross revenue per passenger-journey (a)(b) .. pence	6.57	6.12	6.47	6.68	9.56
Persons employed (d) ..	7,663	7,308	7,225	7,130	7,291

(a) Excludes Hobart and Launceston Municipal Council Services. (b) Includes Brisbane City Council trolley-bus service. (c) Excludes South Australia. (d) See relevant notes to table above.

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, Newcastle and Wollongong 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 1954–55 to 1956–57 :—

MOTOR OMNIBUS SERVICES : PRIVATE.

Year.	Number of Omnibuses.	Omnibus-miles. (‘000.)	Passenger-journeys. (‘000.)	Value of Plant and Equipment. (£‘000.)	Gross Revenue. (£‘000.)	Persons Employed.
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NEW SOUTH WALES.(a)

1954–55..	..	836	20,587	89,508	1,032	2,536	1,340
1955–56..	..	808	24,335	96,759	1,384	3,216	1,583
1956–57..	..	848	24,449	93,761	1,424	3,676	1,635

SOUTH AUSTRALIA.

		(b)					
1954–55..	..	114	6,213	14,058	} (c)	669	} (c)
1955–56..	..	113	6,082	13,508		707	
1956–57..	..	117	6,045	13,254		712	

WESTERN AUSTRALIA.

1954–55..	..	388	13,190	33,860	1,024	1,674	906
1955–56..	..	372	12,172	32,607	1,125	1,581	827
1956–57..	..	378	11,801	30,802	1,142	1,594	837

(a) Metropolitan, Newcastle and Wollongong Transport districts only.

(b) Metropolitan area only.

(c) Not available.

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 1954–55 to 1956–57 are summarized in the following table. Particulars of passengers carried on vehicular ferries are not included.

FERRY (PASSENGER) SERVICES.

Year.	Number of Vessels.	Passenger Accommodation.	Passenger-journeys. (000.)	Gross Revenue. (£.)	Persons Employed.
NEW SOUTH WALES—SYDNEY AND NEWCASTLE.					
1954-55	38	22,055	18,936	785,827	350
1955-56	39	22,696	18,056	741,695	346
1956-57	40	22,950	16,810	875,000	341
WESTERN AUSTRALIA—PERTH.					
1954-55	4	785	469	11,480	11
1955-56	4	785	437	9,944	10
1956-57	4	785	445	12,836	11
TASMANIA—HOBART AND DEVONPORT.					
1954-55	6	1,607	1,355	33,863	35
1955-56	5	1,582	1,034	29,531	33
1956-57	5	1,602	707	29,632	24

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. **Registration.**—(i) *General.* The arrangements for the registration of motor vehicles and the licensing of drivers and riders are not uniform throughout Australia. The following statement indicates the procedure followed at 30th June, 1957 in each of the States and Territories, and the fees for registration and licensing and the amount of motor tax payable where such tax is not incorporated in the registration fees. Complete or partial exemption from the payment of registration fees or motor tax is usually granted for certain vehicles, such as ambulances, fire-brigade vehicles, those owned by farmers and used solely for carting the produce of, or requisites for, their farms, Government-owned vehicles, etc.

In all States except South Australia, before a licence to drive a motor vehicle or ride a motor cycle is issued the applicant must, by passing the prescribed test, satisfy the competent authority that he is capable of driving or riding the vehicle concerned. All vehicles, before being registered, must be tested for road-worthiness.

(ii) *New South Wales.* The registration of vehicles, licensing of drivers, and collection of various taxes, fees and charges are functions of the Commissioner for Motor Transport. By arrangement with the Commissioner for Motor Transport, the police effect the registrations and collect the taxes and fees in certain areas. The normal term of registrations and licences and renewals thereof is a year, but quarterly registrations of motor vehicles are permitted under certain conditions.

A driver's licence costs £1 a year for a motor vehicle and a rider's licence 15s. a year for a motor cycle. A learner's permit, which has a currency of two months, costs 5s.

Annual registration fees are as follows:—Motor cycles, 15s.; motor cars, lorries, trailers and tractors, £1 10s.; taxi cabs, hire cars and motor omnibuses—metropolitan area and cities of Greater Wollongong and Newcastle £5, country £3; traders' plates—motor cycles, £3 3s. 6d., other vehicles, £13 15s. An additional fee of 10s. a year is payable in respect of any vehicle used in trade or business.

A motor tax is payable in addition to the registration fee. For motor cycles the tax is:—without side-car, £1 7s.; with side-car or box, £2 7s. 6d. For vehicles other than motor cycles, the tax is payable on the unladen weight of the vehicle. The taxes payable for different classes of vehicles are as follows:—

(a) *Motor Cars (including taxi-cabs, etc.).* The rate commences at 3s. 6d. a $\frac{1}{2}$ cwt. but decreases slightly as the weight of the vehicle increases.

(b) *Motor Lorries and Trailers.* The tax payable commences at £1 15s. for a vehicle of 5 cwt. or less, and rises by a proportionately greater amount for each increase of 5 cwt., so that the average amount payable per cwt. increases with the weight of the vehicle.

(c) *Tractors.* The rates of tax are the same as for motor lorries, subject to a maximum of £31 14s. 6d.

(d) *Motor Omnibuses.* The rate commences at 5s. a $\frac{1}{2}$ cwt., but decreases slightly as the weight of the vehicle increases.

In the case of vehicles with solid rubber tyres, the rates shown above are increased by 25 per cent. Double the ordinary rates of tax are payable in respect of vehicles powered by a diesel engine.

(iii) *Victoria.* The registration of motor vehicles and the licensing of drivers and riders is controlled by the Chief Commissioner of Police under provisions of the Motor Car Act 1951. The Motor Car (Fees) Act 1956 provided for an increase, as from 1st January, 1957, in the rates payable for the registration of motor vehicles. The annual fees payable for the registration of motor vehicles and licensing of drivers and riders are as follows:—

Motor cycles (without trailer, fore-car or side-car attached)	£1 10s.
Motor cycles (with trailer, etc.) ..	£2 5s.
Motor cars (private use) ..	4s. 6d. for each power-weight unit. (The number of power-weight units equals the sum of the horsepower and the weight in cwt. of a motor car unladen and ready for use.)
Trailers attached to motor cars ..	£1 10s. to £6, according to the unladen weight and type of tyres.
Motor omnibuses (operating on specified routes in the metropolitan area)	£7 10s. plus additional fees for each passenger seat.
Motor cars used for carrying passengers or goods for hire or in the course of trade	From 5s. 6d. to 13s. 3d. for each power-weight unit, according to the unladen weight and type of tyres.
Motor cars (constructed for the carriage of goods) owned by primary producers and used solely in connexion with their business	From 3s. 9d. to 8s. for each power-weight unit, according to the number of wheels and type of tyres. (When more than one motor car is so owned, the rate shall apply to one motor car only.)
Drivers' and riders' licences ..	10s.

Notwithstanding anything in the foregoing paragraphs, the minimum fee payable for the registration of a motor vehicle (other than a motor cycle) shall be £4 10s.

Where a vehicle is powered by a diesel engine the registration fee is double that charged for a vehicle of the same power-weight units fitted with a petrol engine.

(iv) *Queensland.* The Main Roads Department controls the registration of motor vehicles within the State. The rates are as follows:—Annual registration fees for pneumatic-tyred vehicles propelled by petrol engines are determined by adding the horsepower to the weight in cwt. of the vehicle ready for use, and charging 6s. a unit. Vehicles fitted with compression ignition (diesel) engines are charged at double the foregoing rates. For solid-tyred vehicles propelled by petrol engines the sum of the horsepower, weight of the vehicle, and maximum permissible load (in cwt.) is charged at 5s. a unit if the maximum permissible load is not over 2 tons, and 9s. a unit if over 2 tons, whilst diesel units are rated at 9s. 9d. and 18s. a unit respectively. Registration fees for trailers are determined at the rate of 6s. a cwt., and for caravan trailers at the rate of 9s. a cwt. Traction engines are registered at the fixed rate of £3 3s. a year. The fees payable according to these rates on motor cars range from £4 16s. to approximately £25. On pneumatic-tyred trucks and utilities, the fees are from about £12 12s. to over £15 for a truck with a capacity of 1 ton, and up to £30 for 5-ton trucks. Fees for motor cycles are £2 5s., or £3 8s. with a side-car. With the above-mentioned fees, an annual driving fee of 7s. 6d. for a private motor vehicle or motor cycle or 12s. 6d. for a commercial vehicle must be paid to the Main Roads Department.

The driver of any motor vehicle or the rider of any motor cycle must hold a licence from the Commissioner of Police. Licences are endorsed according to the types of vehicles in the operation of which the holder has shown proficiency and which he or she is permitted

to operate. The period of currency of a licence varies according to the age of the applicant, namely:—Aged under 41 years, 10 years; 41 years and under 46 years, until 51st birthday; 46 years and under 62 years, 5 years; 62 years and under 66 years, until 67th birthday; 66 years and over, 1 year.

(v) *South Australia.* Under the provisions of the Road Traffic Act 1934–1956, the Registrar of Motor Vehicles controls the registration of all motor vehicles and the granting of licences. The fee prescribed for a motor vehicle propelled by a compression ignition (diesel) engine is double that for a vehicle of the same horsepower and weight propelled by a petrol engine. The power-weight unit is the basis for the calculation of registration fees. The period of registration is for six or twelve months, commencing with the date of registration. Primary producers' vehicles are registered at 50 per cent. of the ordinary fee. The ordinary fees payable for yearly registration of motor vehicles, other than motor cycles and trailers, extend from a minimum of £5 10s. for 25 power-weight units or less to £54 10s. for 160 power-weight units. The ordinary fees for motor cycles are:—solo, up to 1 cwt.; £1 10s.; over 1 cwt., £2 5s. with side-car attached, £3. Fees for trailers vary according to the weight of the vehicle and range from £2 5s. for 1 ton or less to £4 10s. for 2 tons or more. An extra 50 per cent. is charged for trailers with solid rubber tyres and 100 per cent. for those with metal tyres. Fees for drivers' and riders' licences are:—for any motor vehicle, £1; for a motor cycle only, 10s.

(vi) *Western Australia.* The Traffic Act 1919–1956 provides for the registration of motor vehicles by (i) the Commissioner of Police for the Metropolitan Traffic District and (ii) individual Local Government Authorities (10 Municipalities and 114 District Road Boards) throughout the remainder of the State. Ministerial supervision is exercised by the Minister for Local Government.

The basis on which fees are assessed was revised as from 14th January, 1957. Annual fees for motor vehicles, other than motor cycles, trailers and semi-trailers, are now assessed on a power-weight unit basis and R.A.C. horsepower rating is used instead of the Dendy Marshall formula. The power-weight of a vehicle is the weight in cwt. of the vehicle ready for use plus the rated horsepower. The annual fees for cars, commercial vehicles and tractors are as follows:—cars and tractors (other than prime mover type), 4s. for each power-weight unit; commercial vehicles and prime mover type tractors, from 5s. 3d. a unit to 9s. a unit where the number of units exceeds 100. Trailers and caravans are assessed on the unladen weight and semi-trailers (the trailer portion of an articulated vehicle) on a load plus weight basis. The fees for caravans vary from 3s. to 5s. a cwt., for trailers from 5s. to £1 a cwt. and for semi-trailers (ascending on a differential scale) from £1 10s. where the weight of the semi-trailer plus the declared maximum load does not exceed 10 cwt. to £72 for the first 10 tons and £6 for each additional ton where the load plus weight exceeds 10 tons. Double the ordinary fees are charged for vehicles propelled by engines using fuel other than petrol (e.g., diesel, kerosene, gas, electricity, etc.) and additional fees are charged for certain other vehicles, as follows:—80 per cent. extra if fitted with metal tyres, 40 per cent. if fitted with solid rubber tyres and 10 per cent. if fitted with cushion tyres (i.e., neither solid nor pneumatic).

Annual registration fees for motor cycles are:—solo, £2; with side-car attached, £3.

Vehicles used in the carriage of either passengers or goods for hire or reward (other than an omnibus licenced under the State Transport Co-ordination Act 1933–1948) are further subject to the additional licence fee of 15s. a wheel or pair of dual wheels.

The issue of drivers', riders' and conductors' licences is the sole prerogative of the Commissioner of Police.

The maximum period of a licence is twelve months, although short-term renewals may be effected at quarterly intervals. Date-to-date licensing periods operate in the metropolitan traffic area; elsewhere, a quarterly system of "staggering", whereby the last day of each quarter is an expiry date, is in operation.

(vii) *Tasmania.* By the Transport Act 1938 the Transport Commission assumed control of the registration and taxation of motor vehicles, the licensing of drivers and the regulation of commercial transport. Annual registration fees are as follows:—Motor vehicles other than motor cycles and trailers, £1 10s.; trailers, £1; motor cycles — less than 1 h.p., £2; 1 h.p. and over, £2 10s. Charges for transfer of registration and duplicate certificates are 5s. and 1s. respectively. A licence to drive or ride any motor vehicle costs 10s. a year.

Motor tax is calculated on a power-weight basis—i.e., unladen weight units and horsepower. Separate rates are provided for lorries, for trailers and for other motor vehicles. For lorries and trailers, every $\frac{1}{2}$ cwt., and for other motor vehicles every cwt., constitutes a weight unit. The rate of tax for lorries is 3s. 6d. a unit and for motor vehicles other than lorries and trailers, 4s. 6d. a unit. In the case of a trailer, if the number of weight units does not exceed ten, no tax is payable, but for every unit exceeding ten the rate is 3s. 6d. The rate on motor vehicles propelled otherwise than by any volatile spirit by means of an internal combustion engine (steam, electric, diesel, or petrol-electric engines) is 8s. 3d. a unit.

(viii) *Northern Territory.* The registration of motor vehicles and the licensing of drivers and riders is controlled by the Registrar of Motor Vehicles, under the provisions of the Motor Vehicles Ordinance 1949–1954.

Annual registration fees for motor cars, motor lorries and tractors and motor omnibuses vary according to whether the vehicle is fitted with (a) pneumatic, semi-pneumatic rubber or super-resilient tyres or (b) non-pneumatic or solid tyres. The fees payable (for each $\frac{1}{2}$ cwt.) are as follows:—motor cars, (a) 2s. 9d., (b) 3s. 9d.; motor lorries and tractors, (a) 2s. 9d., (b) 3s. 6d.; motor omnibuses. (a) 4s. 3d., (b) 5s. 6d. For British manufactured vehicles these rates are reduced by 6d. a $\frac{1}{2}$ cwt. A concession of 50 per cent. is allowed for (a) a motor lorry or tractor owned and used by a farmer or grazier solely for transporting his own produce or requisites for his business and (b) a motor lorry owned and used by a person engaged, on his own account and not in association with more than two other persons, in mining, hunting or trapping. The maximum fee for a motor tractor is £15.

Registration fees for motor cycles are as follows:—without side-car—British manufactured, £1 1s., other, £1 2s. 6d.; with side-car—British manufactured, £1 18s., other, £2. For other motor vehicles the fees are:—British manufactured, 3s. a $\frac{1}{2}$ cwt., other, 3s. 6d. a $\frac{1}{2}$ cwt.

The annual fee for a licence to ride a motor cycle is 5s. and to drive any other motor vehicle 10s. Where the licence is in respect of a motor lorry with a carrying capacity of more than one ton, a motor omnibus, a hire car, or a motor vehicle licensed to carry goods or to carry workmen to and from their work, an additional 10s. is payable. The fee for the use of one trader's plate is 10s.

(ix) *Australian Capital Territory.* The registration of motor vehicles and the licensing of drivers and riders in the Australian Capital Territory is controlled by the Services Branch of the Department of the Interior under the provisions of the Motor Traffic Ordinance 1936–1956.

Annual registration fees for motor cars, lorries and omnibuses are as follows (rates are for each $\frac{1}{2}$ cwt. of unladen weight):—motor cars, 3s. 6d. a $\frac{1}{2}$ cwt.; motor lorries—not over 40 cwt. unladen weight, 3s. 6d.; over 40 to 80 cwt., 4s. 3d.; over 80 to 120 cwt., 5s.; over 120 cwt., 5s. 9d.; motor omnibuses, 5s. Double these rates are payable for vehicles propelled by diesel engines. Fees for other motor vehicles are:—motor cycles—without side-car, £1 10s., with side-car, £2 10s.; motor tractors—primary producers', £1, other, £5; other motor vehicles, £5. The rates charged for the registration of trailers are:—domestic, social or farmers' purposes only—unladen weight not over 5 cwt., 10s.; over 5 to 10 cwt., £1; over 10 cwt., £1 for every 10 cwt. or part thereof; other trailers—2s. 9d. a $\frac{1}{2}$ cwt. of the unladen weight.

Concessions are available in the case of vehicles owned by primary producers, totally and permanently incapacitated ex-servicemen, clergymen and certain members of the staffs of diplomatic missions.

The annual fees for drivers' and riders' licences are:—car, lorry or motor cycle, 10s., other vehicles, 12s. 6d.

3. **Taxi-cabs and Other Hire Vehicles.**—In all 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.

4. **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 pp. 402-6.)

5. **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 1956-57 and a summary for Australia for each of the years 1952-53 to 1956-57. 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 1957 will be found on p. 380.

MOTOR VEHICLES : REGISTRATIONS AND REVENUE.

State or Territory, and Year.	Number of Motor Vehicles Registered at 30th June.(a)				Number of Drivers' and Riders' Licences in force at 30th June.	Gross Revenue derived from—			
	Motor Cars.(b)	Commercial Vehicles.(c)	Motor Cycles.	Total.		Vehicle Registrations and Motor Tax.	Drivers' and Riders' etc., Licences.	Other Sources.	Total.
						(£'000.)	(£'000.)	(£'000.)	(£'000.)
STATES AND TERRITORIES, 1956-57.									
N.S.W. . .	515,941	255,580	35,567	807,088	223	1,091,467	9,901	1,106	1,326
Victoria (d)	527,859	155,100	25,623	708,582	265	831,847	6,975	953	1,574
Queensland	190,134	134,638	20,312	345,084	247	(e)	4,633	143	993
S. Aust. . .	164,210	66,198	19,799	250,207	287	308,705	3,302	345	92
W. Aust. . .	103,788	66,030	13,146	182,964	264	229,739	1,591	134	133
Tasmania	52,716	22,893	4,391	80,000	244	90,988	858	47	144
Nor. Terr.	2,419	3,574	664	6,657	350	7,961	37	6	1
A.C.T. . .	7,674	2,708	461	10,843	285	15,189	82	9	2
Australia . .	d1,564,741	d706,721	119,963	2,391,425	248	f2575896	27,379	2,743	4,265

SUMMARY, AUSTRALIA.

	(d)	(d)		(g)					
1952-53 . .	1,107,659	579,444	147,639	1,834,742	208	2,288,370	18,780	1,350	3,761
1953-54 . .	1,199,833	606,899	140,614	1,947,346	218	2,148,119	20,450	1,579	4,382
1954-55 . .	1,347,082	649,609	133,029	2,129,720	231	2,295,854	22,951	1,758	3,764
1955-56 . .	1,472,259	678,857	125,575	2,276,691	241	2,457,246	24,438	1,875	3,385
1956-57 . .	1,564,741	706,721	119,963	2,391,425	248	2,575,896	27,379	2,743	4,265

(a) Excludes, at 30th June, 1957, trailers (152,207), road tractors, etc. (31,947), and dealers' plates (10,815). Excludes Northern Territory registrations prior to 1953-54. (b) Includes taxis and hire cars. (c) Includes utilities, panel vans, lorries, omnibuses, and station wagons. (d) See reference to Victoria above. (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 1st 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 1953 to 1957.

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	118	137	133	96	218	174	118
" 1953 ..	168	211	188	234	204	180	(a)	226	b 192
" 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
" 1957 ..	213	256	232	264	245	231	315	273	236

(a) Not available.

(b) Excludes Northern Territory.

NOTE.—See NOTE to previous table.

6. **New Vehicles Registered.**—(i) *States and Territories, 1956–57.* The following table shows the number of new vehicles registered in each State and Territory during 1956–57. A graph showing the number of new motor vehicles (excluding motor cycles) registered during each of the years 1928–29 to 1956–57 will be found on p. 380.

NEW MOTOR VEHICLES REGISTERED, 1956–57.

Vehicles.	N.S.W.	Vic. (a)	Q'land.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
Motor cars(b) ..	51,513	47,603	19,024	15,689	9,321	5,307	287	951	a 149,695
Commercial vehicles, etc.(c) ..	22,463	13,821	9,937	5,702	4,418	1,981	389	256	(a) 58,967
Motor cycles ..	2,919	1,999	1,659	1,441	1,192	341	60	44	9,655
Total ..	76,895	63,423	30,620	22,832	14,931	7,629	736	1,251	218,317

(a) See para. 5 on p. 411.

(b) Includes taxis and hire cars.

(c) Includes utilities, panel vans, lorries, omnibuses and station wagons.

NOTE.—See NOTE to table on p. 411.

(ii) *Australia.* Particulars of the number of new vehicles registered in Australia during each of the years 1952–53 to 1956–57 are shown in the following table :—

NEW MOTOR VEHICLES REGISTERED : AUSTRALIA.

Vehicles.	1952–53.	1953–54.	1954–55.	1955–56.	1956–57.
Motor cars (a)(b)	93,417	125,595	166,801	163,598	149,695
Commercial vehicles, etc.(b)(c)	52,290	57,402	67,188	69,312	58,967
Motor cycles	(d) 11,289	10,860	11,282	10,530	9,655
Total	d 156,996	193,857	245,271	243,440	218,317

(a) Includes taxis and hire cars.

(b) See para. 5 on p. 411.

(c) Includes utilities, panel

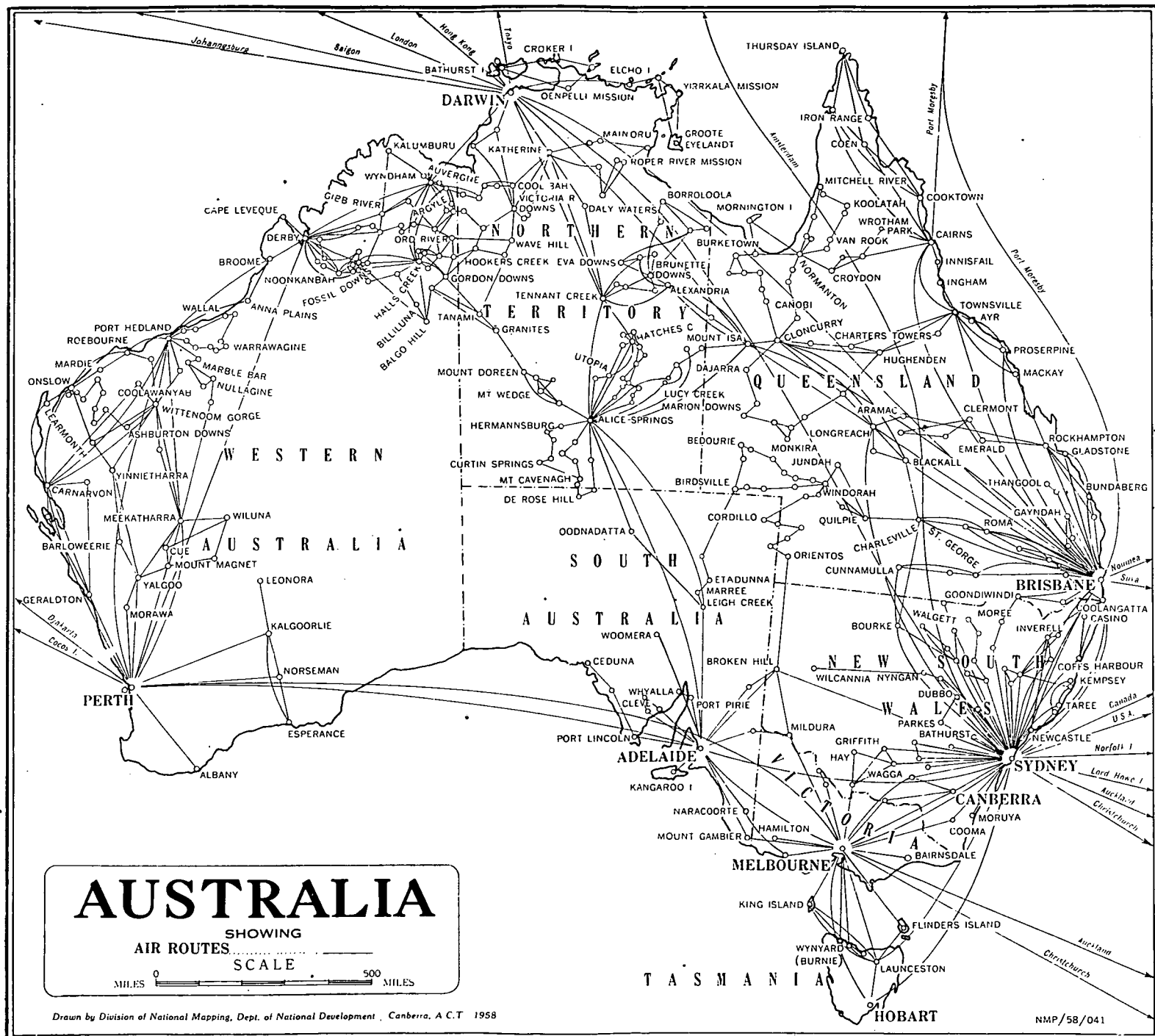
vans, lorries, omnibuses and station wagons.

(d) Excludes motor cycles registered in the

Northern Territory.

NOTE.—See NOTE to table on p. 411.

7. **World Motor Vehicle Statistics, 1956.**—Particulars of motor vehicle registrations in the principal countries of the world may be found in the annual mimeographed publication *Registrations of New Motor Vehicles*. This information is derived from *Automobile Facts and Figures*. For reasons of space detailed particulars cannot be given here, but the same source shows that in 1956 there were 102,655,000 motor cars, trucks and omnibuses registered in various countries of the world. This was an increase of 7 per cent. on the figure for the previous year, 96,001,000. Of these vehicles, 65,213,000 or 64 per cent. of the world total were in the United States of America, and Australian registrations amounted to 2 per cent.



8. **Census of Motor Vehicles, 31st December, 1955.**—A census of motor vehicles (including motor cycles) on the register in each State and Territory at 31st December, 1955 was conducted by the Commonwealth Statistician in collaboration with the State Government Statisticians and Road Transport Authorities. The census covered only those items normally shown on motor registration certificates, such as make, year of model, type of vehicle, horsepower, body type, carrying capacity, unladen weight and motive power. Results have been published in a series of bulletins which give details for each State, for the Northern Territory and the Australian Capital Territory and for Australia as a whole. Less detailed figures in respect of new vehicles only are published in the *Monthly Bulletin of Registrations of New Motor Vehicles*. Information contained therein includes the make, type and R.A.C. horsepower of new motor vehicles registered in each State and Territory.

A summary for each State and Territory of the number of motor vehicles of each type on the register at 31st December, 1955 is given in the following table.

MOTOR VEHICLES ON THE REGISTER AT 31st DECEMBER, 1955.

Type of Vehicle.	N.S.W.	Vic.	Q'land. (a)	S. Aust.	W.Aust.	Tas.	N.T.	A.C.T.	Aust.
MOTOR CARS.									
Sedan	416,077	375,074	144,608	127,582	82,613	41,140	1,342	5,938	1,194,374
Open	52,936	47,046	22,301	21,432	11,074	4,751	199	536	160,275
Other	743	423	507	148	134	63	11	4	2,033
Total Cars ..	469,756	422,543	167,416	149,162	93,821	45,954	1,552	6,478	1,356,682
Proportion of Total (excluding Motor Cycles)%	67.1	70.8	55.9	67.6	60.1	67.3	33.9	72.1	66.0

COMMERCIAL VEHICLES.

Station Wagons	5,257	5,690	1,853	1,344	1,211	392	66	135	15,948
Omnibuses	3,653	2,580	1,043	973	1,099	660	42	92	10,142
Utilities	117,677	75,721	91,430	33,837	30,135	10,228	1,645	1,297 (b)	361,970
Panel Vans	21,411	19,913		5,256	4,396	2,512	82	238 (c)	53,808
Lorries—									
Platform	63,517	50,284	36,027	24,561	21,946	6,929	789	450 (e)	204,503
Van	1,948	5,781		480	1,193	78	20	15 (c)	9,515
Tipper	8,434	6,369		3,150	1,444	835	265	212 (c)	20,709
Articulated or Semi-trailer	5,011	4,754		1,362	1,340	613	408	63	32 (g)	13,583
Other	664	1,321	134		49	133	10	9 (c)	2,320
Total Lorries	79,574	68,509	37,389	29,665	25,245	8,383	1,147	718	250,630
Other	2,751	1,853	303	462	286	161	47	21	5,884
Total Commercial Vehicles	230,323	174,266	132,018	71,537	62,372	22,336	3,029	2,501	698,382
Proportion of Total (excluding Motor Cycles)%	32.9	29.2	44.1	32.4	39.9	32.7	66.1	27.9	34.0

TOTAL MOTOR VEHICLES (EXCLUDING MOTOR CYCLES).

Total Motor Vehicles (excluding Motor Cycles)	700,079	596,809	299,434	220,699	156,193	68,290	4,581	8,979	2,055,064
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MOTOR CYCLES.

Motor Cycles ..	36,953	26,406	21,041	23,704	13,012	5,073	460	480	127,129
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(a) Under the system of registration in operation in Queensland it is not possible to distinguish between utilities and panel vans, nor between the various types of lorries shown for the other States and Territories.
 (b) Includes Queensland panel vans. (c) Excludes Queensland. (d) Rigid type; see note (a).
 (e) Includes Queensland rigid type lorries. (f) Towing units; see note (a). (g) Includes Queensland towing units.

G. ROAD TRAFFIC ACCIDENTS.

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 and the Australian Capital Territory 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) *States, 1955–56 and 1956–57.* The following table gives a summary of accidents recorded and casualties in each State and the Australian Capital Territory for the years 1955–56 and 1956–57.

ROAD TRAFFIC ACCIDENTS(a): ACCIDENTS RECORDED AND CASUALTIES.

State or Territory.	Total Accidents Recorded. (a)	Accidents Involving Casualties. (b)	Persons Killed.			Persons Injured.(c)		
			Number.	Per 100,000 of Mean Population.	Per 10,000 Motor Vehicles Registered.	Number.	Per 100,000 of Mean Population.	Per 10,000 Motor Vehicles Registered.
1955-56.								
New South Wales	38,823	12,917	808	23	11	17,047	484	230
Victoria ..	14,781	10,606	582	23	9	13,483	525	207
Queensland ..	25,557	7,116	298	22	9	9,170	678	286
South Australia ..	12,530	2,886	167	20	7	3,709	444	157
W. Australia ..	11,312	3,211	185	28	10	4,098	613	236
Tasmania(d) ..	2,259	874	72	23	10	1,046	328	140
Aust. Cap. Terr.	376	156	7	21	7	220	654	229
Total ..	105,638	37,766	2,119	23	10	48,773	525	221

1956–57.

New South Wales	39,725	13,473	774	22	10	17,321	483	220
Victoria ..	15,505	10,804	589	22	8	14,120	535	202
Queensland ..	27,553	7,527	325	24	10	9,800	710	290
South Australia ..	13,189	3,142	185	21	8	3,944	458	160
W. Australia ..	11,214	3,082	168	25	9	3,921	573	216
Tasmania(d) ..	2,140	852	65	20	8	1,107	339	143
Aust. Cap. Terr.	346	186	7	19	7	237	658	223
Total ..	109,672	39,066	2,113	22	9	50,450	530	216

(a) Accidents (reported to the police) which occurred in public thoroughfares and which caused death or injury to persons or, except in Tasmania, damage exceeding £10 to property. (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. (d) See reference to Tasmanian legislation above.

(ii) *Australia, 1952–53 to 1956–57.* A summary for Australia of accidents recorded in each of the years 1952–53 to 1956–57 is shown in the following table.

ROAD TRAFFIC ACCIDENTS(a): ACCIDENTS RECORDED, AUSTRALIA.

Particulars.	1952-53.	1953-54.	1954-55.	1955-56.	1956-57.
Total accidents recorded(a)	75,295	87,224	97,758	105,638	109,672
Accidents involving casualties(b)	31,635	35,523	36,602	37,766	39,066

(a) Accidents (reported to the police) which occurred in public thoroughfares and which caused death or injury to persons or, except in Tasmania, damage exceeding £10 to property. See reference to Tasmanian legislation on p. 416. (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 419.

(iii) *Riders, Drivers, Pedestrians, etc., Killed or Injured.* The following tables show the number of persons killed and the number injured during 1955-56 and 1956-57 in each State and the Australian Capital Territory, classified into drivers, riders, pedestrians, etc.

ROAD TRAFFIC ACCIDENTS(a): DRIVERS, RIDERS, PEDESTRIANS, ETC., KILLED OR INJURED, 1955-56.

Drivers, Riders, Pedestrians, etc.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	A.C.T.	Total.
PERSONS KILLED.								
Drivers of Motor Vehicles	165	152	61	42	46	16	1	483
Motor Cyclists	91	59	47	20	20	12	3	252
Pedal Cyclists	44	42	15	23	7	2	..	133
Passengers (all types)(b)	230	150	91	51	62	26	1	611
Pedestrians	273	175	82	31	50	16	2	629
Other Classes(c)	5	4	2	..	..	..	..	11
Total	808	582	298	167	185	72	7	2,119

PERSONS INJURED.(d)								
Drivers of Motor Vehicles	4,119	3,629	2,049	827	853	245	68	11,790
Motor Cyclists	1,912	1,125	1,498	830	673	134	21	6,193
Pedal Cyclists	1,078	1,444	1,127	359	423	95	34	4,560
Passengers (all types) (b)	6,608	4,659	3,228	1,262	1,425	344	82	17,608
Pedestrians	3,283	2,578	1,245	425	704	225	15	8,475
Other Classes(c)	30	48	23	6	20	3	..	130
Not Stated	17	..	..	..	..	..	..	17
Total	17,047	13,483	9,170	3,709	4,098	1,046	220	48,773

(a) Accidents (reported to the police) which occurred in public thoroughfares. (b) Includes pillion riders. (c) Includes tram drivers, riders of horses and drivers of animal-drawn vehicles. (d) Persons injured to an extent requiring surgical or medical treatment.

ROAD TRAFFIC ACCIDENTS(a): DRIVERS, RIDERS, PEDESTRIANS, ETC., KILLED OR INJURED, 1956-57.

Drivers, Riders, Pedestrians, etc.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	A.C.T.	Total.
PERSONS KILLED.								
Drivers of Motor Vehicles	188	169	75	46	42	11	..	531
Motor Cyclists	88	40	44	35	19	4	1	231
Pedal Cyclists	34	44	21	17	8	2	..	126
Passengers (all types)(b)	208	127	103	55	43	27	2	565
Pedestrians	250	208	78	32	54	21	4	647
Other Classes(c)	4	..	4	..	2	..	..	10
Not Stated	2	1	..	..	..	..	..	3
Total	774	589	325	185	168	65	7	2,113

PERSONS INJURED.(d)								
Drivers of Motor Vehicles	4,325	4,210	2,334	1,120	874	274	68	13,205
Motor Cyclists	1,917	1,157	1,635	754	672	104	39	6,278
Pedal Cyclists	1,273	1,414	1,175	358	348	79	41	4,688
Passengers (all types)(b)	6,477	4,896	3,490	1,251	1,449	439	76	18,078
Pedestrians	3,205	2,397	1,138	457	576	210	12	7,995
Other Classes(c)	123	36	28	4	2	1	1	195
Not Stated	1	10	..	..	..	..	..	11
Total	17,321	14,120	9,800	3,944	3,921	1,107	237	50,540

(a) Accidents (reported to the police) which occurred in public thoroughfares. (b) Includes pillion riders. (c) Includes tram drivers, riders of horses and drivers of animal-drawn vehicles. (d) Persons injured to an extent requiring surgical or medical treatment.

(iv) *Ages of Persons Killed or Injured.* The following tables show the age groups of persons killed or injured in traffic accidents in each State and the Australian Capital Territory during 1955-56 and 1956-57:—

ROAD TRAFFIC ACCIDENTS(a): AGES OF PERSONS KILLED OR INJURED, 1955-56.

Age Group (Years).	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	A.C.T.	Total.
PERSONS KILLED.								
Under 5	43	17	15	5	8	2	..	90
5 and under 7	11	11	1	1	3	2	..	29
7 " " 17	64	35	14	14	16	3	1	147
17 " " 21	94	47	36	16	21	15	..	229
21 " " 30	145	106	62	34	36	13	1	397
30 " " 40	101	63	39	22	23	15	3	266
40 " " 50	72	58	40	24	27	4	..	225
50 " " 60	87	62	29	15	18	9	2	222
60 and over	186	125	62	29	33	8	..	443
Not Stated	5	58	..	7	..	1	..	71
Total	808	582	298	167	185	72	7	2,119

PERSONS INJURED.(b)								
Under 5	567	465	286	117	188	43	10	1,676
5 and under 7	418	326	199	99	94	27	5	1,168
7 " " 17	1,951	1,749	1,276	410	486	139	28	6,039
17 " " 21	2,484	1,590	1,732	551	605	170	24	7,156
21 " " 30	3,792	2,978	1,962	876	737	191	59	10,595
30 " " 40	2,669	2,144	1,346	672	476	140	45	7,492
40 " " 50	1,923	1,519	923	400	336	101	22	5,224
50 " " 60	1,424	1,145	651	252	269	64	14	3,819
60 and over	1,447	1,199	742	269	246	78	9	3,990
Not Stated	372	368	53	63	661	93	4	1,614
Total	17,047	13,483	9,170	3,709	4,098	1,046	220	48,773

(a) Accidents (reported to the police) which occurred in public thoroughfares. (b) Persons injured to an extent requiring surgical or medical treatment.

ROAD TRAFFIC ACCIDENTS(a): AGES OF PERSONS KILLED OR INJURED, 1956-57.

Age Group (Years).	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	A.C.T.	Total.
PERSONS KILLED.								
Under 5	21	17	14	8	9	3	1	73
5 and under 7	10	12	5	4	9	5	..	45
7 " " 17	56	43	21	18	14	9	1	162
17 " " 21	98	49	38	25	21	10	1	242
21 " " 30	131	65	66	39	33	13	2	349
30 " " 40	108	96	44	27	15	2	1	293
40 " " 50	96	61	34	18	14	4	1	228
50 " " 60	80	76	29	17	14	4	..	220
60 and over	165	128	74	27	38	14	..	446
Not Stated	9	42	..	2	..	1	..	55
Total	774	589	325	185	168	65	7	2,113

PERSONS INJURED.(b)								
Under 5	538	446	285	150	145	47	5	1,616
5 and under 7	332	355	192	100	78	30	6	1,093
7 " " 17	2,161	1,702	1,345	454	480	149	31	6,322
17 " " 21	2,765	1,815	1,912	583	644	164	39	7,922
21 " " 30	3,752	3,156	2,102	833	691	184	59	10,777
30 " " 40	2,612	2,308	1,351	626	482	161	45	7,585
40 " " 50	1,998	1,789	1,026	410	373	77	25	5,698
50 " " 60	1,391	1,201	690	268	268	68	15	3,901
60 and over	1,433	1,162	720	270	241	84	10	3,920
Not Stated	339	186	177	250	519	143	2	1,616
Total	17,321	14,120	9,800	3,944	3,921	1,107	237	50,450

(a) Accidents (reported to the police) which occurred in public thoroughfares. (b) 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 years 1955-56 and 1956-57, 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.

ROAD TRAFFIC ACCIDENTS(a), CLASSIFIED ACCORDING TO TYPE OF VEHICLE, ROAD USER, ETC., INVOLVED, AUSTRALIA.(b)

Particulars.	Motor Vehicle.	Motor Cycle.	Pedal Cycle.	Tram.	Animal and Animal-drawn Vehicle.	Pedestrian.	Fixed Object.	Other Vehicle.
1955-56.								
Total Accidents Recorded	100,614	10,080	5,272	1,954	2,744	8,671	9,029	389
Accidents Involving								
Casualties ..	33,589	7,313	4,893	735	537	8,511	2,314	161
Persons Killed ..	1,918	331	142	35	22	627	157	46
Persons Injured(d) ..	43,978	8,505	5,060	886	644	8,528	3,143	224
1956-57.								
Total Accidents Recorded	104,710	10,205	5,097	1,689	2,995	8,174	9,631	451
Accidents Involving								
Casualties ..	34,914	7,438	4,800	636	510	8,118	2,495	208
Persons Killed ..	1,941	292	136	42	15	649	146	47
Persons Injured(d) ..	45,689	8,627	5,075	794	613	8,006	3,425	253

(a) Accidents (reported to the police) which occurred in public thoroughfares. (b) 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. For 1956-57 (1955-56 figures in parentheses) the figures above exclude 408 (363) accidents which were not classified according to type of vehicle, road user, etc., involved, of which 117 (72) involved casualties—6 (7) persons killed and 115 (72) persons injured. (c) Total accidents causing death or injury to persons or, except in Tasmania, damage exceeding £10 to property. (d) Persons injured to an extent requiring surgical or medical treatment.

It will be seen, therefore, that in 1956-57 (1955-56 figures in parentheses) motor vehicles were involved in 104,710 (100,614) accidents, of which 34,914 (33,589) involved casualties—1,941 (1,918) persons killed and 45,689 (43,978) persons injured. The 104,710 (100,614) accidents in which motor vehicles were involved comprised 56,146 (54,154) collisions with other motor vehicles, 6,926 (6,848) with motor cycles, 4,082 (4,154) with pedal cycles, 1,213 (1,380) with trams, 2,629 (2,404) with animals and animal-drawn vehicles, 7,178 (7,580) with pedestrians, 8,975 (8,511) with fixed objects, 362 (303) with vehicles other than those mentioned, 16,556 (14,721) instances of overturning or leaving the roadway, and 643 (559) 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 1952-53 to 1956-57:—

ROAD TRAFFIC ACCIDENTS(a): PERSONS KILLED OR INJURED.

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	A.C.T.	Total.	
								Num-ber.	Per 10,000 Motor Vehicles Registered.
PERSONS KILLED.									
1952-53	663	515	301	136	182	56	3	1,856	10
1953-54	728	569	278	153	175	67	6	1,976	11
1954-55	798	528	273	173	206	57	7	2,042	10
1955-56	808	582	298	167	185	72	7	2,119	10
1956-57	774	589	325	185	168	65	7	2,113	9
PERSONS INJURED.(b)									
1952-53	12,459	12,564	7,152	2,449	c 3,373	1,246	162	39,405	218
1953-54	14,660	13,351	7,933	3,420	3,935	1,156	174	44,629	238
1954-55	15,959	12,833	8,421	3,926	4,036	1,111	179	46,465	226
1955-56	17,047	13,483	9,170	3,709	4,098	1,046	220	48,773	221
1956-57	17,321	14,120	9,800	3,944	3,921	1,107	237	50,450	216

(a) Accidents (reported to the police) which occurred in public thoroughfares. (b) Persons injured to an extent requiring surgical or medical treatment. (c) Includes all persons injured (i.e., requiring 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.

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.

Details of the partial re-organization of the Department in June, 1954, to provide for the more effective distribution of duties and responsibilities among senior officers, were published in *Official Year Book No. 43*, p. 409. At that date there were nine Divisions—Air Transport and External Relations; Administration, Personnel and Establishments; Finance and Stores; Airports; Flying Operations; Airways Operations; Airways Engineering; Aviation Medicine; Accident Investigation and Analysis.

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

In 1957 the position of Assistant Director-General (Air Transport Policy) was abolished and a position of Assistant Director-General (Policy) was created in lieu. A Director of International Relations was also appointed.

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 72 nations at the end of 1957. Australia has continued her representation on the council, a position which she has held since the organization was established in 1947. The eleventh meeting of the South Pacific Air Transport Council was held at Wairakei, New Zealand, in November and December, 1957. Further details will be found in *Official Year Book No. 40* 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 to Noumea. Qantas Empire Airways is equipped for long-range operations with fourteen Super Constellation aircraft, which are now operating on the Pacific, United Kingdom, South Africa and Japan services. Orders have been placed for two more Super Constellations and for seven Boeing 707 jet aircraft. Qantas services to Noumea and Norfolk Island are operated with DC4 aircraft, which are also used on a freighter service to Labuan, Djakarta and Singapore. Qantas was operating over 52,696 route-miles on international services at 30th June, 1957. A summary of the operations of overseas services wholly or partly Australian-owned appears on page 425.

DC6 aircraft operated by Tasman Empire Airways Ltd., which is jointly owned by the Australian and New Zealand Governments, link Sydney and Melbourne with both Auckland and 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.

Significant changes took place in the domestic field during 1957. Australian National Airways Pty. Ltd. indicated that under the existing economic conditions it was unable to continue in operation, and following protracted negotiations an offer was eventually made

by Ansett Transport Industries Ltd. to purchase Australian National Airways Pty. Ltd. as a going concern for £3,300,000. The purchase agreement was finalized on 4th October, 1957, and combined operations began on 21st October, 1957.

The Civil Aviation Agreement Act 1952 was amended by the Civil Aviation Agreement Act 1957, to give effect to the revised arrangements between the Commonwealth Government and Australian National Airways Pty. Ltd., and to include Ansett Transport Industries Ltd. and its subsidiaries within the scope of the agreement.

The Commonwealth Government also gave consideration during the year to its policy in regard to civil aviation, and announced on 3rd September, 1957, the revised policy which provided for extended assistance by way of subsidy to the operators of essential services in rural areas, and also assistance to help selected operators obtain suitable replacement aircraft for the DC3. The grant of this assistance is conditional upon the operator's agreeing to provide services to specified areas at frequencies approved by the Minister for Civil Aviation, having regard to public needs and convenience in the rural areas to be served. A further necessary condition is that fares and freight rates shall be fixed at reasonable levels.

A summary of the operations of regular air services within Australia appears on p. 424 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 1956-57, 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 two Drover and one Dove aircraft. The Royal Flying Doctor Service of Australia, operating from Broken Hill, New South Wales (two Drovers), and Port Hedland, Western Australia (one Cessna and one DH83), 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 three aircraft (one DH84A, one Percival Proctor III and one Lockheed 12A) 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, one Auster J5B and one Cessna 182A).

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 on 1st January, 1957, payments to clubs, subject to certain limitations, are made as follows:—(i) Maintenance grant of £1 10s. an hour flown at home base; (ii) maintenance grant of £2 an 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 assist the aero clubs in the purchase of approved types of replacement aircraft.

During the year 1956-57, the flying training organizations (non-profit aero clubs and commercial flying schools) earned bonuses in respect of 319 private pilot licences, 60 commercial pilot licences, 16 initial instructor ratings and 435 licence renewals. It should be noted that, under the new contract, commercial licence issue and instructor rating bonuses were substituted for renewal bonuses. Subsidized hours flown by aero clubs numbered 64,309 and the total earnings of all organizations amounted to £155,918. An overall limit placed on the subsidy restricted the total payments to £145,000. There were 24 aero clubs and 6 commercial flying training schools in operation during the year, and, in addition to civil flying, some 13,368 hours were flown in the training of service personnel.

7. Gliding Clubs.—For the year 1956-57 a total subsidy of £3,000 was distributed to member clubs of the Gliding Federation of Australia, on the basis of £1,500 for membership and £1,500 for gliding certificates issued.

8. Aeronautical Telecommunications.—During 1956–57 satisfactory progress was made with modernization of the aeronautical telecommunications system throughout the Commonwealth, in accordance with plans developed in previous years. Improved coverage by VHF communication was achieved on air routes covering Bass Strait and the new key communication centre at Cloncurry was brought into operation.

Installation of Instrument Landing Systems and their associated high-intensity approach and runway lighting systems was commenced at Sydney (No. 1 installation), Hobart and Adelaide. Monthly flight-testing of the Sydney (No. 1) and Melbourne Instrument Landing Systems was undertaken to ensure a high standard of operation of these essential landing aids. The Distance Measuring Equipment programme proceeded satisfactorily and at the end of the year 64 beacons were in operational use, whilst three more were awaiting final flight-testing and two were nearing completion of installation work. Experimental work being undertaken to increase the handling capacity of the Distance Measuring Equipment system by increasing the number of channels per beacon will, if successful, enable improvements to be made in the scope of the system and increase its useful operational life. The Visual Aural Range programme is now practically complete.

9. Air Traffic Control.—The Air Traffic Control System was temporarily extended and re-arranged to handle the increased traffic resulting from the Olympic Games in Melbourne. Aircraft movements additional to normal traffic which were directly attributable to the Olympic Games amounted to 670 at Melbourne, 550 at Sydney, and 240 at Darwin, with minor increases elsewhere. All were handled without incident. At Melbourne a modern Air Traffic Control centre and Airport Control Tower of Australian design was commissioned, incorporating new communication features; the Air Traffic Control centre was completed late in 1956 in time to handle the peak Christmas and New Year traffic. Airport control as required by traffic demands was also established at Coolangatta Airport, Queensland.

Procedures for expediting the handling of airport traffic through the use of high and low stacks were introduced at Melbourne and Sydney and a one-way traffic airways system between Melbourne and Tasmanian airports was brought into operation. The control procedures applied to light aircraft at “all over” training airports were revised after several full-scale experiments with various systems at Bankstown airport. Planning was completed for a “self help” Search and Rescue Service based on the maximum employment of civil facilities. Action to implement this plan was commenced. The Light Aircraft Handbook, a publication covering the rules and regulations governing the operation of the lighter class of aircraft, was issued during the year.

10. Meteorological Aids to Civil Aviation.—The development of working arrangements between the newly constituted Bureau of Meteorology and the Department of Civil Aviation was further advanced. 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 aerodromes in Australia and its Territories officers of the Bureau of Meteorology provide forecasting and observing services for civil aviation. There are 12 forecasting and 29 observing stations.

11. Aircraft Parts and Materials.—At 30th June, 1957, the number of firms and organizations approved by the Department of Civil Aviation to trade in the aircraft industry was 436. 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.**—This work is now carried out in test houses and laboratories registered by the National Association of Testing Authorities, except when production is for the manufacturer's own use, when the testing, etc. can be done in an approved laboratory. 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 in each of the years 1953 to 1957.

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

Particulars.	At 30th June—				
	1953.	1954.	1955.	1956.	1957.
Registered aircraft owners ..	369	384	414	437	485
Registered aircraft	821	845	887	934	1,054
Pilots' Licences—					
Private	1,677	2,035	2,245	2,453	2,592
Commercial	518	552	582	578	709
Senior Commercial .. ..	..	..	..	76	99
Helicopter (Commercial) ..	..	..	..	11	21
Student	2,639	2,831	3,193	3,272	3,397
1st Class Airline Transport	495	515	548	600	606
2nd „ „ „ ..	45	34	25	9	7
3rd „ „ „ ..	371	368	390	394	414
Navigators' Licences—					
Flight Navigator	163	166	161	177	187
Radio Operators' Licences—					
1st Class Flight Radio Tele-					
graphy Operator	93	88	78	75	69
Flight Radio Telephony					
Operator—					
1st Class	850	834	820	} (b) 1,386	(b) 1,574
2nd „	243	275	309		
3rd „	70	113	137		
Flight Engineers' Licences ..	58	67	98	94	116
Aircraft Maintenance Engineers'					
Licences	1,790	1,757	1,747	1,818	1,915
Aerodromes—					
Government	186	198	185	188	169
Licensed(c)	260	262	303	301	313
Flying Boat Bases(d)	15	16	13	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) Aerodromes under the control and management of a municipality, shire, station owner, private individual, etc. Includes emergency aerodromes. (d) Includes alighting areas.

(ii) *Aircraft on the Australian Register.* A summary of aircraft on the Australian register at 31st December, 1957, 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, 1957.

Type of Aircraft.	Number.	Type of Aircraft.	Number.
(i) <i>Aircraft Engaged in Regular Public Transport—</i>		(iii) <i>Aircraft used for Private Purposes—</i>	
Avro Anson	5	Auster (All Types)	115
Convair 240, 340	4	Avro Anson	15
De Havilland (All Types)	20	Beechcraft	7
Douglas—		Cessna	29
DC3	60	Fairchild	8
DC4 (Skymaster)	16	De Havilland—	
DC6, DC6B	6	DH82	56
Lockheed 1049 (Super Constellation)	16	Moth	23
Vickers Viscount	13	Other	22
Other Types	12	Miles (All Types)	18
		Percival Proctor	26
		Piper	14
		Ryan	11
		Stinson	8
		Wackett	12
		Other Types	33
		<i>Total</i>	397
<i>Total</i>	152	(iv) <i>Aircraft used for other Purposes(b)—</i>	
		Auster (All Types)	26
(ii) <i>Aircraft Available for Air Charter—</i>		Avro Anson	11
Auster (All Types)	57	Cessna	8
Avro Anson	17	De Havilland—	
Cessna	25	DH82	233
De Havilland—		Chipmunk	43
DH82	19	Other	13
Other	9	Other Types	31
Percival Proctor	10	<i>Total</i>	365
Other Types	49	<i>Grand Total</i>	1,100
<i>Total</i>	186		

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

(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 1952–53 to 1956–57.

CIVIL AVIATION : OPERATIONS OF REGULAR INTERNAL SERVICES, AUSTRALIA.

Particulars.	1952–53.	1953–54.	1954–55.	1955–56.	1956–57.
Hours flown	237,640	251,019	257,787	251,900	251,139
Miles	39,059	41,014	43,513	43,701	42,120
Paying passengers	1,706,446	1,772,357	1,918,125	2,020,380	2,125,338
Paying passenger-miles	667,321	702,139	765,652	827,885	891,196
Freight—					
Tons(a)	57,635	69,479	78,711	84,446	75,092
Ton-miles(a)	27,167	32,650	36,984	38,909	36,330
Mail—					
Tons(a)	2,311	2,316	2,317	2,478	2,514
Ton-miles(a)	1,166	1,225	1,257	1,357	1,404

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

(iv) *Operations of Oversea Services wholly or partly Australian-owned.* The following table furnishes a summary of overseas services, wholly or partly owned by Australian interests, operating between Australia and overseas countries, including Pacific islands and the Territory of Papua and New Guinea, during the years 1952-53 to 1956-57. 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.

CIVIL AVIATION : OPERATIONS OF OVERSEA SERVICES.(a)

Particulars.	1952-53.	1953-54.	1954-55.	1955-56.	1956-57.
Route miles (unduplicated) at 30th June ..	66,558	64,250	63,774	58,618	62,675
Hours flown	54,148	53,580	49,326	50,665	56,939
Miles '000	11,565	11,464	11,128	12,028	13,614
Paying passengers	97,753	102,965	114,371	131,934	155,618
Paying passenger-miles '000	275,206	290,603	317,565	383,930	476,831
Freight—					
Tons(b)	1,957	2,295	2,662	2,990	2,957
Ton-miles(b) '000	7,401	8,331	9,372	10,494	11,203
Mail—					
Tons(b)	1,168	1,379	1,442	1,491	1,622
Ton-miles(b) '000	6,122	7,718	7,927	8,458	9,450

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

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

(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 1952-53 to 1956-57.

CIVIL AVIATION : ACCIDENTS INVOLVING AUSTRALIAN AIRCRAFT.(a)

Particulars.	1952-53.	1953-54.	1954-55.	1955-56.	1956-57.
Number(b)	16	26	22	31	37
Persons killed	5	36	27	22	24
Persons injured	19	27	19	27	36

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

(b) Includes

15. **Territory of Papua and New Guinea.**—In this area there were, at 30th September, 1957, 20 aerodromes and 24 water aerodromes under the control of the Department of Civil Aviation; 56 aerodromes under the control of the Territory Administration; and 25 aerodromes and 14 water aerodromes 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 1956-57, three accidents occurred in which two persons were 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.—In all 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 Director of Posts and Telegraphs.

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, 1957. 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, 1957.

Particulars.	N.S.W.	Vic.	Q'land.	S.A.	W.A.	Tas.	Aust.
Number of post offices(a)	2,571	2,316	1 267	897	638	513	8,202
Number of square miles of territory per office	121	38	529	1,007	1,530	51	363
Number of inhabitants per office ..	1,424	1,154	1,102	995	1,084	639	1,176
Number of inhabitants per 100 square miles	1,179	3,042	208	99	71	1,251	324

(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, 1957.

NUMBER OF POST OFFICES AT 30th JUNE, 1957.

Type of Office.	N.S.W.	Vic.	Q'land.	S. Aust.	W.Aust.	Tas.	Aust.
Official and Semi-official	512	313	214	166	151	53	1,409
Non-official	2,059	2,003	1,053	731	487	460	6,793
Total	2,571	2,316	1,267	897	638	513	8,202

(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, 1957 are given in the following table:—

**NUMBER OF POSTAL EMPLOYEES AND MAIL CONTRACTORS AT
30th JUNE, 1957.**

Particulars.	Central Office.	N.S.W.	Vic.	Q'land.	S.A.	W.A.	Tas.	Aust.
Employees	1,127	35,623	25,313	13,831	8,878	6,324	3,667	94,763
Mail Contractors(a) ..	..	2,163	1,097	1,229	326	279	275	5,369

(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 year 1956–57 is shown in the table hereunder:—

POSTMASTER-GENERAL'S DEPARTMENT: GROSS REVENUE, 1956-57.(a)
(£'000.)

Sources.	N.S.W.	Vic.(b)	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Postage	11,323	9,378	3,733	2,475	1,821	734	29,464
Money order commission and poundage on postal notes ..	406	239	109	95	52	25	926
Private boxes and bags ..	84	54	43	28	20	11	240
Miscellaneous	1,032	788	313	192	155	58	2,538
Total, Postal ..	12,845	10,459	4,198	2,790	2,048	828	33,168
Telegraphs	1,873	1,508	1,122	679	546	176	5,904
Telephones	20,096	15,214	7,003	4,496	2,802	1,391	51,002
Grand Total ..	34,814	27,181	12,323	7,965	5,396	2,395	90,074

(a) The figures in this table relate to revenue actually collected during the year as recorded for Treasury purposes. (b) Includes Central Office collections. (c) Includes Central Office revenue from airmail services, previously shown under Miscellaneous.

For each of the years 1952–53 to 1955–56 the gross revenue for Australia was £64,398,000, £67,797,000, £72,825,000 and £79,341,000 respectively.

Gross revenue for the year 1956–57 increased by 13.5 per cent. compared with that for the previous year. Revenue of the Postal, Telegraph and Telephone branches increased by 10.4 per cent., 19.1 per cent. and 15.0 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 1956–57, 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, 1956-57.(a)**

(£'000.)

Particulars.	Central Office.	N.S.W.	Vic.	Q'land.	S.A.	W.A.	Tas.	N.T.	Aust.
Expenditure from Ordinary Votes—									
Salaries and payments in the nature of salary ..	484	15,281	10,623	5,828	3,570	2,440	1,439	98	39,763
General expenses ..	63	1,839	1,119	463	351	301	144	12	4,292
Stores and material ..	25	850	481	305	156	144	76	5	2,042
Mail services ..	(b)4,305	1,618	835	797	382	243	119	14	8,313
Engineering services (other than capital works) ..	840	12,148	8,481	4,574	2,458	2,105	1,063	96	31,765
Other services ..	(c) 79	..	..	..	..	..	..	..	79
Total ..	5,796	31,736	21,539	11,967	6,917	5,233	2,841	225	86,254
Rent, repairs, maintenance	..	442	351	140	100	56	20	9	1,118
Proportion of audit ex- penses ..	3	16	11	6	4	3	2	..	45
Capital works and services—									
Telegraph and telephone	48	11,339	7,515	3,225	2,400	1,920	1,005	..	27,452
New buildings, etc. ..	..	1,188	1,103	360	301	192	121	4	3,269
Other expenditure, not allocated to States ..	(d)3,779	..	..	..	..	..	..	..	3,779
Grand Total ..	9,626	44,721	30,519	15,698	9,722	7,404	3,989	238	121,917

(a) The figures in this table represent actual payments made during the year as recorded for Treasury purposes. (b) Expenditure on airmail services. (c) Excludes subsidy on coastal wireless stations, now provided by votes to the Department of Shipping and Transport. (d) Includes expenditure not apportioned to States, i.e., interest on loans, £862,000; sinking fund, £1,172,000; superannuation contributions, £1,734,000; transferred officers' pensions and allowances, £5,000; and pensions and retiring allowances, £6,000.

(ii) *Totals.* Actual payments made for each of the years 1952-53 to 1955-56, respectively, were:—£98,344,000, £99,478,000, £103,586,000 and £114,397,000. Total expenditure increased by 6.6 per cent. during 1956-57, compared with that during 1955-56.

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 1952-53 to 1956-57.

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

Branch.	1952-53.	1953-54.	1954-55.	1955-56.	1956-57.
Postal	— 2,417	— 1,849	— 2,254	— 2,402	— 1,526
Telegraph	— 1,453	— 1,219	— 800	— 1,202	— 638
Telephone	2,932	3,221	2,905	3,179	5,281
All Branches	— 938	153	— 149	— 425	3,117

NOTE.—Minus sign (—) indicates loss.

6. Fixed Assets.—(i) *Details, 1956–57.* The following table shows particulars of the fixed assets of the Postmaster-General's Department from 1st July, 1956 to 30th June, 1957:—

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

Particulars.	Net Value, 1st July, 1956.	Capital Expendi- ture, 1956–57.	Gross Value, 30th June, 1957.	Deprecia- tion, etc., 1956–57. (a)	Net Value, 30th June, 1957.
Telephone and telegraph plant ..	264,340	36,979	301,319	4,262	297,057
Mail-handling plant	305	34	339	6	333
Buildings	30,511	3,187	33,698	9	33,689
Motor vehicles	6,572	1,174	7,746	442	7,304
Assets subject to direct depreciation(b)	3,634	807	4,441	269	4,172
Other fixed assets	14,329	1,153	15,482	131	15,351
Total	319,691	43,334	363,025	5,119	357,906

(a) Includes dismantled assets, depreciation written off and assets transferred. (b) Includes postal service plant, miscellaneous plant, furniture and office equipment.

(ii) *Net Value.* The net value of the fixed assets of the Postmaster-General's Department at 30th June in each of the years 1953 to 1956, respectively, was:—£222,981,000, £253,627,000, £285,205,000 and £319,691,000.

§ 2. Posts.

1. *Postal Matter Dealt With.*—(i) *States, 1956–57.* The following table shows a summary of the postal matter dealt with in each State during the year 1956–57. 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), 1956–57.
(‘000.)

State.	Letters. (b)	Papers and Packets. (c)	Parcels. (d)	Regis- tered Articles. (e)	Letters. (b)	Papers and Packets. (c)	Parcels. (d)	Regis- tered Articles. (e)
	Posted for delivery within Australia.				Posted for delivery Overseas.			
New South Wales ..	513,233	108,712	6,200	6,084	16,753	9,887	360	655
Victoria	392,076	68,117	4,295	4,188	9,359	3,753	140	214
Queensland	173,361	28,072	2,512	1,894	5,827	1,120	47	67
South Australia ..	121,444	11,442	1,366	1,093	4,108	781	46	73
Western Australia ..	89,960	9,945	1,127	833	5,351	1,281	30	60
Tasmania	41,729	7,836	205	532	326	18	17	36
Australia ..	1,331,803	234,124	15,705	14,624	41,724	16,840	640	1,105
	Received from Overseas.				Total postal matter dealt with.			
New South Wales ..	43,223	27,814	300	930	573,209	146,413	6,860	7,669
Victoria	12,389	9,439	193	197	413,824	81,309	4,628	4,599
Queensland	4,439	4,749	57	27	183,627	33,941	2,616	1,988
South Australia ..	4,638	5,477	45	29	130,190	17,700	1,457	1,195
Western Australia ..	3,486	5,946	44	52	98,797	17,172	1,201	945
Tasmania	1,635	2,028	14	43	43,690	9,882	236	611
Australia ..	69,810	55,453	653	1,278	1,443,337	306,417	16,998	17,007

(a) See explanation above. (b) Includes letters, cards and other postal articles enclosed in envelopes and sorted with letters. (c) Includes newspapers and postal articles not 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 1952-53 to 1956-57.

TOTAL POSTAL MATTER DEALT WITH : AUSTRALIA.

Year.	Letters, Postcards and Letter-cards.		Newspapers and Packets.		Parcels.(a)		Registered Articles other than Parcels.	
	Total. ('000.)	Per 1,000 of Mean Population.	Total. ('000.)	Per 1,000 of Mean Population.	Total. ('000.)	Per 1,000 of Mean Population.	Total. ('000.)	Per 1,000 of Mean Population.
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
1956-57 ..	1,443,337	151,372	306,417	32,136	16,998	1,783	17,007	1,784

(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, the 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 in 1956-57.

CASH ON DELIVERY PARCELS POST, 1956-57.

Particulars.		N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Parcels posted	'000	321	93	139	50	66	3	672
Value	£'000	1,186	282	484	182	144	11	2,289
Revenue(a)	£'000	108	35	38	17	16	1	215

(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 1952-53 to 1956-57.

CASH ON DELIVERY PARCELS POST : AUSTRALIA.

Particulars.		1952-53.	1953-54.	1954-55.	1955-56.	1956-57.
Parcels posted	.. '000	837	888	845	762	672
Value	.. £'000	2,656	2,876	2,804	2,526	2,289
Revenue(a)	.. £'000	221	239	225	206	215

(a) From commission and postage.

3. **Total Cost of Carriage of Mails.**—During 1956-57 the total amounts paid for the carriage of mails, as disclosed by the Profit and Loss Account of the Postal Branch, were as follows:—road (including departmental transport) £3,478,000; railway £1,280,000; sea £172,000; air—internal £680,000, oversea £3,425,000; Grand Total—£9,035,000.

4. *Transactions of the Dead Letter Offices.*—During the year 1956–57, 1,509,000 letters were returned to senders or delivered, 346,000 were destroyed in accordance with the Act, and 254,000 were returned to other countries as unclaimed—a total of 2,109,000. Corresponding particulars for packets were—458,000, 241,000, 48,000 and 747,000. There were 2,856,000 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 1901–1950. 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 a month and for remittances to countries outside the dollar area, £A.10 a 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 year 1956–57 are shown hereunder:—

MONEY ORDERS AND POSTAL NOTES: TRANSACTIONS, 1956-57.
(£'000.)

Particulars.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	Aust.
Money Orders—							
Issued	37,015	17,592	8,856	5,270	3,715	2,094	74,542
Paid	37,193	17,535	8,442	4,881	3,673	2,074	73,798
Net Commission							
Received	248	140	73	40	32	18	551
Postal Notes—							
Issued	4,163	2,400	927	1,238	569	196	9,493
Poundage Received ..	159	98	35	55	22	8	377

(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 1952–53 to 1956–57.

MONEY ORDERS AND POSTAL NOTES: TRANSACTIONS, AUSTRALIA.

Year.	Money Orders.				Postal Notes.			
	Issued.		Paid.		Issued.		Paid.	
	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.
	'000.	£'000.	'000.	£'000.	'000.	£'000.	'000.	£'000.
1952–53 ..	5,666	53,088	5,578	53,075	26,793	11,658	26,658	11,614
1953–54 ..	6,080	56,175	5,960	56,082	26,168	11,465	26,082	11,441
1954–55 ..	6,755	61,699	6,617	61,262	21,816	10,226	21,867	10,249
1955–56 ..	7,638	70,220	7,337	69,585	23,128	10,450	23,067	10,463
1956–57 ..	8,126	74,542	7,841	73,798	20,332	9,493	20,778	9,709

(iv) *Classification of Money Orders Issued and Paid.* Of the total money orders issued in Australia during 1956–57, 7,787,000 valued at £73,355,000 were payable in Australia and 339,000 valued at £1,187,000 were payable overseas. Of the total money orders paid in Australia during 1956–57, 7,694,000 (£73,048,000) were issued in Australia and 147,000 (£750,000) were issued overseas.

(v) *Postal Notes Paid.* The following table shows the number and value of postal notes paid in each State during the year 1956–57. The number and value of postal notes issued and paid in each of the years 1952–53 to 1956–57 have been given in the previous table.

POSTAL NOTES PAID: STATE OF ISSUE, 1956-57.

Issued in—		Paid in—						
		N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	Aust.
Same State	'000	7,071	4,378	1,378	865	1,224	263	15,179
	£'000	3,462	1,994	697	470	580	116	7,319
Other States	'000	1,442	2,277	802	95	175	808	5,599
	£'000	613	840	460	49	56	372	2,390
Total	'000	8,513	6,655	2,180	960	1,399	1,071	20,778
	£'000	4,075	2,834	1,157	519	636	488	9,709

§ 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 1956-57 was about 8.4 million, or approximately 37 per cent. of the total lodgments. The number of telegrams telephoned to subscribers totalled 4.5 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 overseas photo-telegrams. 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 22nd February, 1950. In 1956-57, 7,855 picturegrams were lodged for destinations within Australia, 3,626 were transmitted to overseas destinations and 4,417 were received from other countries. As from 20th May, 1953, the Department authorized the connexion of privately-owned picturegram equipment to the public telephone trunk line network for the transmission of pictures. The 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 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 193 to 266 during 1956-57. Messages transmitted over these services increased from 750,000 during 1955-56 to 760,000 during 1956-57.

2. **Telegraph and Telephone Mileage.**—At 30th June, 1957 the combined single-wire mileages for both telegraph and telephone purposes were:—aerial, underground and submarine cables—exchange 6,658,000 miles, trunk telephone and telegraph 221,000 miles; aerial wires—telephone, trunk and/or telegraph purposes 548,000 miles, exchange and non-exchange service lines 721,000 miles. The mileages of conduits and pole routes were 11,200 duct miles and 118,000 miles respectively. Conduits 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 in 1955-56 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, 1957 were:—New South Wales, 3,285; Victoria, 2,357; Queensland, 1,750; South Australia, 968; Western Australia, 1,002; Tasmania, 572.

(ii) *Australia.* The numbers of telegraph offices in Australia at 30th June of each of the years 1953 to 1957 respectively were:—9,902, 9,909, 9,907, 9,896 and 9,934.

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:—

TELEGRAMS DISPATCHED, 1956-57.
(‘000.)

State.	Paid and Collect.							Unpaid (Service).	Total Telegrams.
	Ordinary.	Urgent.	Press.	Letter-grams.	Radio-grams.	Meteorological.	Total.		
New South Wales	6,941	382	68	19	71	191	7,672	299	7,971
Victoria ..	4,191	144	21	14	7	107	4,484	144	4,628
Queensland ..	3,504	125	31	13	72	169	3,914	162	4,076
South Australia	1,658	62	24	11	49	95	1,899	57	1,956
Western Australia	1,577	48	19	16	60	138	1,858	57	1,915
Tasmania ..	489	22	5	7	2	44	569	29	598
Australia ..	18,360	783	168	80	261	744	20,396	748	21,144

(ii) *Australia.* Telegrams dispatched to destinations within Australia and to adjacent islands and to ships at sea, during each of the years 1952-53 to 1955-56 respectively, numbered:—23,407,000, 22,536,000, 22,713,000 and 22,600,000.

§ 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 1956-57, 125,570 telephone subscribers' lines and 185,093 telephones were added to the system, compared with 79,239 lines and 116,540 telephones in 1955-56. With an average at 30th June, 1957, of nineteen telephones to every one hundred persons, Australia had a telephone density exceeded by that of only six other countries. The trunk line network was increased by 66,312 channel miles and at 30th June, 1957, had reached 992,029 miles; 68,328 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.

Eleven automatic exchanges were brought into operation in metropolitan areas during the year, together with 14 country and 74 rural automatic exchanges. At 30th June, 1957, there were 293 automatic exchanges in the metropolitan areas and 1,025 in country districts, to which 1,288,000 telephones were connected, representing 71 per cent. of the total number in use in Australia.

2. **Summary.**—Particulars relating to the telephone services in each State at 30th June, 1957, are shown in the following table:—

TELEPHONE SERVICES: SUMMARY, 30th JUNE, 1957.

Particulars.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Exchanges	2,306	1,766	1,345	696	764	407	7,284
Telephone offices (including ex- changes)	3,448	2,569	1,806	1,012	999	550	10,384
Lines connected	479	401	174	113	73	39	1,279
Instruments connected	'000 695	575	231	158	102	53	1,814
(i) Subscribers' instruments '000	680	563	224	154	99	51	1,771
(ii) Public telephones '000	7.7	5.5	3.2	1.7	1.4	0.9	20.4
(iii) Other local instruments '000	7.5	6.6	3.4	2.7	2.1	1.0	23.3
Instruments per 1,000 of population	190	215	166	177	148	162	188

Of the total telephones (1,814,430) in service at 30th June, 1957, 667,864 or 37 per cent. were connected to exchanges situated beyond the limits of the metropolitan telephone networks.

3. **Daily Local Calling Rates.**—The next table shows the average number of outward local calls daily per line at central, suburban and country telephone exchanges in the several States for 1956-57:—

TELEPHONES: DAILY LOCAL CALLING RATE AT EXCHANGES, 1956-57.

Exchanges.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.
Central	10.65	9.85	10.96	9.24	7.22	4.49
Suburban	3.47	3.26	2.42	2.67	3.08	2.42
Country	1.86	1.14	1.79	1.28	1.31	1.66

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 1956-57 appear hereunder.

TELEPHONES: NUMBER OF EFFECTIVE PAID LOCAL CALLS, 1956-57.

(Million.)

Calls.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Subscribers'	469	343	133	88	65	26	1,124
From public telephones	49	31	12	9	7	2	110
Total	518	374	145	97	72	28	1,234

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 year 1956-57.

TELEPHONES: TRUNK LINE CALLS AND REVENUE, 1956-57.

Particulars.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Total calls '000	35,910	29,792	18,624	10,195	6,101	5,378	106,000
Total revenue £'000	6,705	4,611	3,217	1,784	957	676	17,950
Average revenue per call pence	44.81	37.15	41.46	42.00	37.65	30.15	40.64

The number of trunk line calls during 1956-57 increased by 6.9 million, or 7 per cent., compared with the figure for the previous year, whilst the average revenue per call increased by 9.6 per cent.

6. **Oversea Telephone Services.**—During the year 1956-57, radio-telephone services were established between Australia and Bahrain, Bulgaria, Cyprus, Ethiopia, French North Africa, Ghana, Iraq, Lebanon, Nigeria, Spanish North Africa, Tangier, Turkey and the U.S.S.R., bringing the number of countries with which radio-telephone communication is available to 90. In addition, direct services were established with Canada and India to replace links through U.S.A. and London respectively. 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 17 per cent. over that handled in 1955-56. During 1956-57 the number of calls connected was 70,880, comprising 35,885 originating in Australia and 34,995 incoming calls.

7. **Revenue from Telephones.**—Particulars regarding the revenue from telephone services are included in tables in § 1 (see pp. 427-8).

8. **World Telephone Statistics, 1957.**—Information derived, in the main, from statistics compiled by the American Telephone and Telegraph Company shows that at 1st January, 1957, 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, 1957, the number of telephones in Australia per 100 persons was 19.

§ 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.

Competition from beam wireless services brought about a merger between cable and wireless interests, which was not, however, completely satisfactory in combining the advantages of both systems. Details of the merger, and of subsequent developments which led eventually to the establishment, in 1946, of the Overseas Telecommunications Commission, were published in Official Year Book No. 37, pp. 220-4.

2. **Oversea Cable and Radio Traffic.**—(i) *States.* The number of telegrams received from and dispatched overseas in each State during 1956-57 is shown hereunder:—

INTERNATIONAL TELEGRAMS, 1956-57. (‘000.)

Particulars.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Received ..	698	522	76	65	72	(a) 21	1,454
Dispatched ..	640	466	89	81	71	20	1,367
Total ..	1,338	988	165	146	143	41	2,821

(a) Estimated.

(ii) *Australia.* (a) *Number of Telegrams.* The following table shows the number of international telegrams received from and dispatched overseas during the years 1952-53 to 1956-57:—

INTERNATIONAL TELEGRAMS: AUSTRALIA. (‘000.)

Particulars.	1952-53.	1953-54.	1954-55.	1955-56.	1956-57.
Received ..	1,238	1,308	1,422	1,441	1,454
Dispatched ..	1,207	1,283	1,376	1,374	1,367
Total ..	2,445	2,591	2,798	2,815	2,821

(b) *Number of Words.* Particulars of the international business, originating and terminating in Australia, transacted over the cable and radio services during 1956–57 are shown in the following table:—

INTERNATIONAL TELEGRAMS: NUMBER OF WORDS, AUSTRALIA, 1956-1957.
(‘000 Words.)

Class of Telegram.	Number of Words Transmitted to—			Number of Words Received from—		
	United Kingdom.	Other Places.	Total.	United Kingdom.	Other Places.	Total.
Ordinary	4,675	7,851	12,526	4,172	6,725	10,897
Letter	5,279	9,436	14,715	5,038	8,066	13,104
Press	4,215	3,128	7,343	9,224	2,785	12,009
Government	424	1,255	1,679	1,489	2,164	3,653
Greetings	926	701	1,627	816	826	1,642
Other .. ..	..	16	16	..	72	72
Total	15,519	22,387	37,906	20,739	20,638	41,377

Words transmitted to “Other places” included 3,669,571 to the United States of America and 4,379,057 to New Zealand and the Pacific Islands. Words received from “Other places” included 3,757,150 from the United States of America and 4,645,995 from New Zealand and the Pacific Islands.

3. *Coast Stations.*—At 30th June, 1957, there were 61 radio stations established at points around the Australian coast and 13 about the coast of Papua and New Guinea and other External Territories. During the year ended 31st March, 1957, these stations handled 625,359 messages (534,286 paying, 14,747 free traffic and 76,326 meteorological) with a total of 13,171,778 paying words.

4. *Radio-communication Stations Authorized.*—(i) *States and Territories, 30th June, 1957.* The following table shows particulars of the different classes of radio-communication stations authorized in Australia and the External Territories at 30th June, 1957. 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. 439 and 444.

Owing to the use of a new classification, some of the figures in the table below are not comparable with those published in previous issues.

RADIO-COMMUNICATION STATIONS AUTHORIZED, 30th JUNE, 1957.

Class of Station.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.	Ext. Terr.	Grand Total.
TRANSMITTING AND RECEIVING.											
Fixed(a)—											
Aeronautical(a)	25	5	18	11	15	6	6	1	87	10	97
Services with other Countries	46	12	..	..	7	..	..	..	65	9	74
Outpost(b)	170	..	316	99	255	14	146	..	1,000	297	1,297
Other	168	112	109	50	37	23	16	..	515	27	542
Land(c)—											
Aeronautical	19	7	19	7	19	6	6	1	84	12	96
Base—											
Land Mobile Services ..	513	411	237	144	77	59	9	10	1,460	1	1,461
Harbour Mobile Services	16	11	7	4	28	3	..	..	69	..	69
Coast(d)	19	7	8	7	9	10	1	..	61	13	74
Special Experimental ..	46	29	8	9	11	9	..	1	113	..	113
Mobile(e)—											
Aeronautical .. ..	..	..	..	..	..	..	..	..	(f) 323	..	323
Land Mobile Services ..	5,227	3,692	1,697	1,426	849	301	62	112	13,366	68	13,434
Harbour Mobile Services	91	70	24	22	44	3	..	..	254	15	269
Outpost .. ..	..	..	..	..	..	..	..	..	(f) 583	..	583
Ship .. ..	..	..	..	..	..	..	..	..	1,454	126	1,580
Amateur	1,135	1,091	363	395	217	120	14	24	3,359	64	3,423
Total	7,475	5,447	2,806	2,174	1,568	554	260	149	822,793	642	23,435

NOTE.—For footnotes see next page.

RADIO-COMMUNICATION STATIONS AUTHORIZED, 30th JUNE, 1957—*continued*.

Class of Station.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.	Ext. Terr.	Grand Total.
RECEIVING ONLY.											
Fixed	80	184	62	12	34	1	..	..	373	..	373
Land .. ..	..	..	..	..	..	..	..	..	..	..	..
Mobile	1	34	26	..	..	..	..	..	61	..	61
<i>Total</i>	81	218	88	12	34	1	..	..	434	..	434

TOTAL STATIONS AUTHORIZED.

Grand Total ..	7,556	5,665	2,894	2,186	1,602	555	260	149	23,227	642	23,869
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(a) Stations established at fixed locations for communication with other stations similarly established.
 (b) Stations established in out-back areas for communication with control stations such as those of the Royal Flying Doctor Service.
 (c) Stations established at fixed locations for communication with mobile stations.
 (d) Land stations for communication with ocean-going vessels.
 (e) Equipment installed in aircraft (aeronautical), motor vehicles (land mobile services), harbour vessels (harbour mobile services) and ocean-going vessels (ship) and mobile equipment of organizations such as the Royal Flying Doctor Service.
 (f) Stations which cannot be classified according to States, etc.
 (g) Includes 2,360 mobile stations, which cannot be classified according to States, etc.

(ii) *Australia and External Territories, 30th June, 1953 to 1957.* The number of radio-communication stations authorized in Australia and the External Territories at 30th June, 1953 to 1957 is shown in the following table.

RADIO-COMMUNICATION STATIONS AUTHORIZED: AUSTRALIA AND EXTERNAL TERRITORIES.

Stations in—	At 30th June—				
	1953.	1954.	1955.	1956.	1957.
Australia	10,858	12,271	15,808	19,778	23,227
External Territories ..	355	379	421	456	642
<i>Total Stations</i> ..	11,213	12,650	16,229	20,234	23,869

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. 439–44.

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.

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.

4. The Australian Broadcasting Commission.—The Broadcasting and Television Act 1942–1956 provides that the Australian Broadcasting Commission, which consists of seven members, one of whom shall be a woman, shall control the activities of the National Broadcasting Service and the National Television Service.

Under the provisions of the Act the Commission shall provide, and shall broadcast or televise 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 and television 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.

§ 2. Broadcasting.

1. **Broadcasting Stations.**—The following table shows the number of broadcasting stations in operation at 30th June, 1957:—

BROADCASTING STATIONS, 30th JUNE, 1957.

Type of Station.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Papua and New Guinea.	Total.
National—										
Medium—										
Frequency ..	15	5	12	7	7	4	2	2	1	55
High Frequency ..	1	3	2	..	2	..	..	..	1	9
Commercial ..	37	20	20	8	14	8	..	1	..	108

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) *Technical Facilities.* At 30th June, 1957, the National Broadcasting Service comprised 64 transmitting stations, as follows:—

*Medium-frequency Stations—**New South Wales—*

2BL and 2FC Sydney, 2BA Bega, 2CO Corowa, 2CR Cumnock, 2GL Glen Innes, 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, 5PA Penola, 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.

High-frequency 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-frequency transmitters operate in the broadcast band 540 to 1,600 kilocycles per second. From the high-frequency 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.

Many of the programmes given by country stations are relayed from the capital cities, 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, 1957, 43 of the medium-frequency 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-frequency and high-frequency stations together will provide for clear reception of the programmes of the National Broadcasting Service in practically every part of Australia.

(iii) *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 1956-57 was as follows:—Classical Music, 23.3 per cent.; Light Music, 12.4 per cent.; Variety, 20.2 per cent.; News, 7.8 per cent.; Talks, 6.9 per cent.; Sport, 5.6 per cent.; Drama and Features, 4.0 per cent.; Youth Education, 3.6 per cent.; Religion, 3.5 per cent.; Parliament, 3.3 per cent.; Children's Session, 2.3 per cent.; Rural Broadcasts, 1.6 per cent.; Non-departmental, 5.5 per cent.

(b) *Music.* The A.B.C., in addition to its extensive activities in the field of musical broadcasting, is one of the largest concert-giving organizations in the world. During the 25 years of the Commission's existence there has been an immense growth of interest in fine music. Today the regular broadcasts command a large listening audience and the number of subscribers to A.B.C. public concerts exceeds 50,000. This vigorous musical life is typified in the activities of the symphony orchestras in Sydney, Melbourne, Brisbane, Adelaide, Perth and Hobart. These have developed from the studio broadcasting orchestras set up in 1936 in the six capital cities to bodies whose present standard compares favourably with that of orchestras in overseas musical centres of similar size. Until 1946 these orchestras were maintained solely by the A.B.C., but since then they have been subsidized by State Governments and major municipal bodies.

In 1957, the A.B.C. organized 535 public orchestral concerts (including 157 free concerts for school children and 36 free concerts for adults) and 232 public recitals by famous artists throughout the Commonwealth. Of these concerts, 263 were given outside the State capitals, including 75 free orchestral concerts for school children.

The policy of the A.B.C. has been to foster the highest standards of musical appreciation and performance, making the utmost use of the best local talent and at the same time giving Australian audiences the opportunity of hearing leading artists from overseas.

(c) *Drama and Features.* Drama programmes are designed to give listeners opportunities, which they might not otherwise have, of hearing the world's great plays 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 Sunday afternoons and Sunday 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. 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. 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, 1957 was 8,537 or about 88 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) and "I Put it to You", in which a well-known speaker presents a contentious theme before an audience chosen because it will generally be critical; afterwards the speaker must stand up to questioning by the audience. 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 devotes its programmes to weather and market reports and talks, interviews, etc., designed to provide useful information for the man on the land. These programmes are presented on a regional, State and national

basis, many being directed to particular districts, because of the diversity of climate and conditions. Rural programmes are broadcast regularly through 17 regional stations. Other programmes are broadcast throughout each State or on a national relay, depending on whether the information they contain is of general interest or refers only to the rural industries of one State.

Material for rural programmes is obtained from many sources in Australia, including the Departments of Agriculture, numerous government and private organizations and practical farmers. Talks, interviews, etc., are also secured from many overseas sources, thus bringing to rural listeners the latest information on overseas research that is relevant to Australia's primary industries. Programme material is exchanged regularly with British Commonwealth countries and with the U.S.A. and a number of officers from the broadcasting organizations of South-East Asia have come to Australia, under the Colombo Plan and similar projects, to study A.B.C. rural broadcasting, with the aim of developing services of this type in their own countries.

During 1956-57, 6,808 talks and interviews on rural topics were broadcast by the A.B.C., as well as 5,044 weather reports and 6,240 interstate and local market reports. In times of emergency, the regular weather reports are supplemented by special services giving flood or fire warnings—a very important service because of the speed with which radio can reach a widely scattered audience.

(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 all its Australian (including Papua and New Guinea) news through its own staff journalists and part-time correspondents. It also maintains a news room in London for the selection and transmission of news obtained from major overseas agencies and has special representatives in South-East Asia. Regional bulletins are broadcast from country centres and also from capital cities to cover near-city districts. Radio Australia (the Overseas Service of the A.B.C.) broadcasts Australian and overseas news daily in English, French, Mandarin, Indonesian and Thai, with special attention to Asia and the Pacific. Each day the A.B.C. re-broadcasts two news bulletins from the British Broadcasting Corporation. The A.B.C. broadcasts 157 news bulletins each day, including those given over Radio Australia.

(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).

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 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 £25 a year 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, 1957, there were 108 commercial broadcasting stations in operation. A table showing the call sign, location, frequency and aerial power of each commercial broadcasting station licensed at 30th June, 1956 may be found in *Transport and Communication*, Bulletin No. 47.

4. Overseas Broadcasting Service.—There are five high-frequency stations at Shepparton, Victoria (VLA, VLB, VLC, VLD, VLG) for use only in the overseas service known as "Radio Australia". As in the case of the National Broadcasting Service, these stations are maintained and operated by the Postmaster-General's Department and their programmes are arranged by the A.B.C. During certain periods station VLG Lyndhurst is also used for the transmissions of the domestic short-wave service. 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. The overseas audience has grown very substantially in recent years, as evidenced by a large and increasing number of letters from listeners abroad.

§ 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.

2. The National Television Service.—(i) *General.* 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 Melbourne, both operating on Channel 2. ABN commenced operations on 5th November, 1956 and ABV on 18th November, 1956. Both stations operate on a frequency of 64.25 megacycles a second for vision and 69.75 mc/s. for sound.

(ii) *Programme Facilities.* (a) *General.* The television programmes provided by the A.B.C. cover a wide range of activities. The proportion of television time allocated among the A.B.C.'s various departments to 30th June, 1957 was as follows:—Talks Department, 22.3 per cent.; Drama and Features, 18.5 per cent.; Sport, 17.6 per cent.; Variety, 9.2 per cent.; Children's Session, 7.7 per cent.; News, 5.4 per cent.; Classical Music, 1.1 per cent.; Light Music, 2.6 per cent.; Rural Services, 3.5 per cent.; Religion, 2.7 per cent.; Youth Education, 1.0 per cent.; Non-departmental (including trade demonstration films), 8.4 per cent. A summary of the activities of the departments in the field of television is given in the following paragraphs.

(b) *Talks.* In television, Talks covers a very wide field, ranging from commentaries on international affairs to panel games and outside telecasts of public events. Discussions, topical interviews, magazine programmes, women's programmes, demonstrations and film and studio documentaries are all part of the regular output.

(c) *Drama and Features.* A considerable proportion of television time is devoted to drama and features, and "live" television plays featuring Australian artists may usually be seen fortnightly both in Sydney and Melbourne.

(d) *Music.* During 1957 the A.B.C.'s musical activities were extended to the field of television. A number of public concerts and studio performances were successfully telecast and there is reason to believe that the new medium will contribute to the further development of musical appreciation in Australia.

(e) *Rural Services.* The emphasis has been on providing information for consumers and on giving city viewers, by means of films, demonstrations, etc., a picture of Australia's rural industries. Regular programmes featuring many facets of Australian agriculture and livestock activities have already been given, and this work will be developed as further facilities become available. Weather reports and forecasts are also telecast on six evenings a week.

(f) *Youth Education.* The A.B.C. provides a television programme for very young children each week-day, under the title "Kindergarten Playtime". Experimental television programmes for schools are being presented during 1958.

(g) *News.* Television news bulletins and newsreels have been included in the programmes presented in both Sydney and Melbourne since the television services began in November, 1956.

(h) *Other Activities.* Special television programmes are presented for children, including filmed material obtained on an exchange basis from overseas television organizations. Church services have been televised in Sydney and Melbourne and other special religious programmes have been telecast. Outside broadcast cameras have covered a number of sporting events, including Davis Cup tennis, Sheffield Shield cricket and swimming championships. The A.B.C. gave a comprehensive television coverage of the Olympic Games held in Melbourne

at the end of 1956 and a film coverage of the Australia v. South Africa Cricket Tests and the Australian Rugby Union tour of Great Britain was also given. The A.B.C. hopes to develop the overseas sporting coverage on television.

3. The Commercial Television Service.—Commercial television stations are operated under licences granted by the Postmaster-General. Licences for commercial television stations have been granted as follows:—Sydney—ATN (Channel 7), TCN (Channel 9); Melbourne—HSV (Channel 7), GTV (Channel 9). These stations commenced operations on the following dates:—ATN, 2nd December, 1956; TCN, 16th September, 1956; HSV, 4th November, 1956; GTV, 19th January, 1957.

The initial period of a licence is five years, the existing four being granted as from 1st December, 1955. The fee payable is £100 on the grant of a licence and thereafter £25 a year plus one per cent. of the station's gross earnings from the televising of advertisements or other matter during the preceding financial year.

4. Extension of Television Services.—On 4th September, 1957, the Postmaster-General announced that the Government had decided to proceed with the second phase of the extension of television services in Australia, under which arrangements will be made for the establishment of national television stations in Brisbane, Adelaide, Perth and Hobart and for the Broadcasting Control Board to hold public inquiries into applications for licences for commercial television stations in each of these cities. This decision was in accordance with the policy announced by the Government in 1954, that television would be introduced on a gradual basis, the extent and timing of each stage in the development of the services being determined by the knowledge gained in the previous stages and by Australia's economic circumstances. The Postmaster-General stated that the Government had made a special examination of the financial aspects of the matter, from which it seemed evident that the revenue which would be received from viewers' licence fees (£5 a year) and from the excise duty of £7 on each cathode ray tube would ensure that the costs of the service would be borne by those who use it and that the programme of development would therefore impose no financial burden on the public in general.

Although the second stage in the development of television is confined to the remaining capital cities, the Government is anxious that television services should be available to people in other areas as soon as practicable. All aspects of the matter are therefore under close review so that the Government may be in a position to consider, as circumstances permit, the question of the further extension of the services to major provincial centres.

The Broadcasting Control Board has prepared a provisional Frequency Assignment Plan which provides for the allocation of channels for four television services in each capital city and two services in every town with a population in excess of 5,000.

§ 4. Licences, etc.

1. Broadcast Listeners' and Television Viewers' Licences.—(i) *General.* Broadcast listeners' and television viewers' licences are issued at post offices in accordance with the provisions of the Broadcasting and Television Act 1942–1956, which stipulates that, except as prescribed, a person shall not use, maintain or have in his possession a broadcast or television receiver unless there is in force a licence which applies to that receiver. A broadcast listener's licence authorizes the operation of any broadcast receiver, and a television viewer's licence any television receiver, which is:—(a) in the possession of the holder of a licence, or of a member of his family, at the address specified in the licence and/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 television viewer's licence costs £5.

A licence may be granted at reduced rates to any person who (a) is in receipt of a pension under Part III. or Part IV. of the Social Services Act 1947–1957 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, with another pensioner, 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 1947–1957 or section 87 of the Repatriation Act 1920–1956. Licence fees for pensioners are as follows:—broadcast listener's licence—Zone 1, 10s.; Zone 2, 7s.; television viewer's licence, £1 5s.

A licence may be granted free of charge to a blind person over 16 years of age or to a person or authority conducting a school. A tourist resident in Australia for not more than six months and an oversea diplomatic or consular representative or a member of his staff is not required to hold a licence. Inmates of a hospital or charitable institution are covered by the licence held by the institution.

(ii) *Licences in Force.* (a) *Broadcast Listeners'.* The following table shows the number of broadcast listeners' licences in force at five-year intervals from 1925 to 1957.

BROADCAST LISTENERS' LICENCES IN FORCE.

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
1957 ..	777,072	554,909	312,527	234,120	155,166	73,459	2,107,253

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

Of the 2,107,253 broadcast listeners' licences in force at 30th June, 1957, 1,222,558 or 58 per cent. were held by persons living in metropolitan areas and 884,695 or 42 per cent. by persons in country areas. Of the latter, only 12,927 were in respect of Zone 2.

(b) *Television Viewers'.* The following table shows the number of television viewers' licences in force at 30th June and 31st December, 1957.

TELEVISION VIEWERS' LICENCES IN FORCE.

Date.	N.S.W.	Vic.	Tas.	Australia.
30th June, 1957	28,912	44,986	11	73,909
31st December, 1957	74,627	91,922	27	166,576

2. *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 and television programmes and to defence and civil radio-communication services.

During the year 1956–57, 10,780 sources of trouble, including 444 affecting television reception, were eliminated as a result of Departmental efforts or by other action. More than 4,000 suppressors were fitted to offending appliances as recommended by investigating officers, who carried out 25,622 inspections in metropolitan and country areas.

3. *Prosecutions under the Broadcasting and Television Act.*—Persons convicted during the year ended 30th June, 1957 for operating unlicensed broadcast receivers numbered 4,447. Fines and costs amounting to £22,809 were imposed. During the period 1st January, 1957 (when television viewers' licences became compulsory) to 30th June, 1957, 39 unlicensed viewers were convicted and fined a total of £286, including costs.