Chapter 19

TRANSPORT AND COMMUNICATIONS

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Although Tasmania has not seen revolutionary changes in transport technology such as proposals for ultra high-speed trains or suburban monorail systems that have been evident in other States, innovations and improvements have never-the-less taken place. With moves to establish a high speed catamaran service across Bass Strait well underway, and the State's communications network enhanced by a new optical cable link, Tasmania's infrastructure has kept pace with the rest of Australia consistent with its needs.

19.1 TRANSPORT

Almost every sector of the community relies on the transport industry. Without road, water, air and rail transport the life-style and conveniences that we take for granted would not be possible.

19.1.1 Roads

New Road Works

The financial year 1988-89 was noteworthy for the completion of several major projects in the North-West. The Bass Highway duplication between Don Hill and Ulverstone was finished and opened in March 1989. The project, which started in 1984, comprised the duplication of 10 kilometres of road at a cost of $21 million. Also included was the construction of a new bridge over the Forth River, a five span structure costing $1.5 million.

Two link roads were completed, the Guildford to Hampshire Link Road and the Que River to Learys Corner Link Road. It is hoped these roads will provide a boost both from a tourism point of view and in terms of the general economic viability of the region. The Guilford to Hampshire link was opened on 5 May 1989 and offers an alternative route to the West Coast which bypasses the Hellyer Gorge section of the Murchison Highway. The new route, constructed at a total cost of $15.3 million, will cut 10.5 kilometres off the existing route, but will also have considerable road safety benefits, particularly in severe weather conditions.

Trams were a common form of transport in Hobart in 1954. Little damage was done in this accident when one tram switched onto a junction line and collided with another. *Photo: Mercury*

The Que River to Learys Corner Link Road connects the Cradle Mountain Tourist Road with the Murchison Highway at Learys Corner. Construction began in November 1984 and was completed at a cost of $17.5 million. This road, which was also opened on 5 May 1989, has shortened the travelling distance between Devonport and the West Coast by 41 kilometres. The principal role of the new road will be tourism-based but it is also expected to have an effect on general transport.

Another significant project in the Southern region was the completion of the Southern Outlet Highway Stage 2 duplication. This section, which continued the duplication of the highway for 1.9 kilometres, extends from Proctors Road Underpass to Shaw Road Underpass. This project was officially opened on 19 December 1988.

The final stage of the Tasman Highway Davey Street Extension was finished with the completion of the Davies Avenue interchange on the Queen's Domain. This project was constructed in just over two years. The aim of the construction was to provide improved access to Hobart's southern and western suburbs and southern parts of the State, while retaining historic buildings around the waterfront. The underpass to the Domain was constructed in such a manner as to minimise the disruption to the consistent traffic flow from the Tasman Bridge, and it allows improved access to the increasing recreational facilities on the Domain for vehicles coming from the Eastern Shore. Previously it was necessary for these vehicles to drive to the Railway Roundabout and approach from the other direction.

19.1 MOTOR VEHICLES ON REGISTER TASMANIA (a)

Year	*Number of vehicles on register ('000)*	*Vehicles per 1000 of population (no.)*
1910	0.4	2
1920	4.1	20
1930	19.5	89
1940	26.2	109
1950	43.2	156
1960	93.2	271
1970	154.3	398
1980	229.5	542
1989	284.4	631

(a) At 30 June

In the North, developments to Launceston's Southern Outlet over recent years have given much improved access to the northern centre. Final landscaping and minor works were carried out in connection with the Glen Dhu Corridor. An important further development is the Kings Meadows Connector, which will link the Southern Outlet with Hobart Road at Kings Meadows.

One of the Federal Government's road initiatives in 1988-89 was the creation of a new category of roads called national arterials. National arterials will complement the national highway system by improving access to ports, airports, railheads and areas of major production and tourism. The National Highway system is being substantially upgraded in the North of the State with the construction of the Deloraine bypass. This is expected to make a significant contribution to road safety in a section of the road that has been associated with a number of fatal accidents over the years.

Motor Vehicles

Motor vehicle registrations have grown steadily both in the number of vehicles registered and also in terms of vehicles registered for every 1000 people.

At 30 June 1989 Tasmania had the highest rate of vehicle ownership in Australia.

19.2 MOTOR VEHICLES REGISTERED, AUSTRALIAN STATES, 1989

State	*Number of vehicles on register ('000)*	*Vehicles per 1000 of population (no.)*
NSW	3 069.6	533
Vic.	2 517.1	583
Qld	1 627.0	575
SA	832.5	585
WA	950.0	597
Tas.	278.3	617
Australia	9 489.5	565

Road Traffic Accidents

In 1989 there were 80 people killed and 1997 people injured on Tasmanian roads, slightly more than in the previous two years. Alcohol was a contributing factor in 40 per cent of

Innovative Use of Traffic Accident Statistics Helps Police Combat Road Toll *

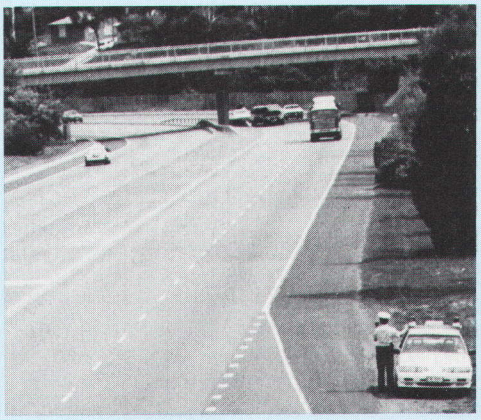
On selected urban and rural road sections in many parts of Tasmania, police are now carrying out a new form of traffic enforcement, termed Offence Deterrence Operations. Their aim is to extend more widely an approach which has been scientifically shown to reduce serious accidents on roads by up to 90 per cent. Because of the scale of the accident reductions achieved, programs modelled on the Tasmanian approach were established in Victoria and New Zealand only months after the results of the program were first published in 1988.

Currently almost 30 000 Australians are admitted to hospital and approximately 2900 die each year as a result of traffic accidents. The Bureau of Transport and Communications Economics has estimated that road accidents cost Australia $5690 million, or over $1000 for each Australian household, in 1987. Road accidents are the single largest cause of death of all Australians under 45 years of age.

Because of the scale of the traffic safety problem, innovative methods of accident prevention are constantly being sought. This fact was the impetus for the development of the Offence Deterrence Program. The approach of the program is to use computer-generated randomised deployment schedules to enable each police man-hour on patrol to produce a deterrence 'spread-of-effect' over an area up to ten times greater than that of previous methods. The patrols involve the use of stationary, clearly visible, marked vehicles. The accident-reduction effect is achieved primarily through deterrence of offences rather than punishing offending motorists by collecting fines.

The Accident Research Group's computerised accident database is used both to indicate areas requiring enforcement and to assess the level of accident reduction achieved. The assessments have shown that the method typically reduces accidents by 60 per cent on rural roads, and up to 90 per cent in built-up areas.

In the traffic safety area, such evaluation methodology has become relatively well established in the road engineering field. Cost-benefit-based evaluation methods in road engineering have led to major safety improvements, especially over the last twenty years. In general the situation has been different in the area of police traffic control. Australia-wide, around $100 million per year is budgeted for police traffic enforcement. Yet few methods of evaluation are in use in Australia for the detailed measurement of the effectiveness of basic patrol operations. Even for random breath testing, evaluations have generally been only at a jurisdiction-wide level, and the relative effects of publicity and enforcement have not been quantifiable. Overall, few documented cases exist from anywhere in the world of long-term, systematic programs for the improvement of the efficiency of police traffic control operations at patrol level.



The offence deterrence approach achieves accident reductions because, over time, motorists learn that a stretch of road is likely to be policed. But, as the policing timetable and vehicle positioning is strictly random, they cannot predict exactly when and where the policing will occur. For this reason, they learn to drive within the road rules over the entire route for which Offence Deterrence Operations have been programmed.

Based on the positive results of the evaluation of the initial trial programs, further programs have been systematically introduced in Tasmania - all with continuous evaluation intrinsic to their operation.

* by Dr Mark Leggett
Manager, Accident Research Group
Department of Roads and Transport

19.3 ROAD ACCIDENTS, TASMANIA, 1989

Year	Accidents involving casualties	Number of persons	
		Killed	Injured
1984	1 445	84	2 015
1985	1 495	78	2 070
1986	1 468	91	2 060
1987	1 407	77	1 959
1988	1 457	75	1 925
1989	1 482	80	1 997

deaths and 20 per cent of injuries. Fifty-four per cent of the 80 killed and 52 per cent of the 1997 injured were under 25 years of age.

Bus Services

1988-89 was the first full year in which the Metrofare ticket system has operated. The system has provided more detailed statistics such as the identification of lowly patronised routes. It is planned to use smaller buses on these routes in order to reduce costs. Two MAN 'midi' buses have been ordered for trialling in Hobart and Launceston.

19.4 MTT PASSENGER JOURNEYS, TASMANIA ('000)

1985-86	13 322
1986-87	12 875
1987-88	13 213
1988-89	12 783

The use of pre-paid tickets has been promoted in order to increase revenue efficiencies and to reduce passenger waiting time. Twenty-six per cent of all passengers used pre-paid tickets after the first full year of operation.

MTT patronage has shown some decrease in recent years. The relative cost of private motoring may have had some effect on passenger numbers. Despite increases in the Consumer Price Index the average price per litre of super grade petrol actually decreased in recent years, from an average 63.4 cents in 1986-87 to 62.5 cents in 1988-89, making use of private transport more attractive.

19.5 MTT OPERATING STATISTICS, 1988-89

Passenger journeys -	
Hobart	9 677 000
Launceston	2 349 000
Burnie	757 000
Vehicle kilometres	9 689 000
Revenue ($)	9 023 000
Expenditure ($)	24 575 000
Employment -	
Hobart	418
Launceston	101
Burnie	28

19.1.2 Water

With the introduction of the *Princess of Tasmania* onto the Devonport to Melbourne route in 1959 Bass Strait shipping entered a new era. Despite this quantum leap in shipping technology, however, a degree of stagnation had entered the industry by the early 1980s. Three long established lines were operating nine ships. There was limited direct competition and cargo handling techniques were inefficient. The 1980s have been a watershed. Increased competition has occurred as new operators have entered the market. Efficiency has improved with new techniques being introduced and most importantly the cost of shipping a container across Bass Strait has been reduced dramatically.

Until 1985 Tasmanian services were dominated by the Australian National Line (ANL) and Union Bulkships. ANL served the Northern ports, Burnie, Devonport and Launceston while Union served Hobart. Both companies ran services to Melbourne and to Sydney and ANL ran to Brisbane and the North Queensland ports. ANL and Union had operated this pattern of services since the introduction of containerised roll-on roll-off freight services in the mid 1960s.

In the early 1980s ANL had a fleet of six ships, the three 'trader' vessels (*Sydney, Brisbane and Townsville Traders* built in the late 1960s) the larger and more modern *Bass* and *Melbourne Trader* (based on a standard European design built in 1975 and 1976 respectively) and the passenger ferry *Empress of Australia*. Until 1982 Union had used two large gas turbine powered ships and when these became uneconomic they introduced the *Seaway Hobart* and the *Seaway Melbourne* which are

sister ships to the *Melbourne Trader*. All these vessels carry containers which are loaded onto the ship by fork lifts. This has been dubbed the STO-RO system.

In 1984 ANL began to rationalise its shipping services and withdrew from Queensland. In Tasmania it ceased cargo services from Devonport and in 1985 withdrew the *Empress of Australia*. This year saw massive changes to Bass Strait shipping. The Tasmanian Government's TT-Line took on the Melbourne-Devonport passenger/cargo service with its 19 000 tonne *Abel Tasman* recently imported from Germany. At the same time Brambles introduced the 'Mercandian' class vessel *Challenger B* on a three times weekly service between Burnie and Melbourne.

These two new entrants not only provided a degree of competition in Bass Strait shipping but also introduced new technology cargo handling arrangements. TT-Line brought back the use of road trailers as the cargo carrying unit in line with the latest European short sea practice. (It had been tried in the early 1960s by ANL.) Brambles used containers but loaded them onto the ship using MAFI trailers. These are low rigid trailers with only one axle capable of carrying four containers at a time and are loaded prior to the arrival of the ship.

Abel Tasman. *Photo: TT-Line*

When the ship arrives in port the MAFI trailers on the ship are towed off and the previously loaded MAFIs ashore are towed on. This greatly speeds up cargo handling rates compared to the STO-RO system and also uses less shore labour.

Following the withdrawal of its Queensland services ANL progressively phased out its 'Trader' vessels between 1985 and 1987. In early 1988 ANL lost a large contract for carrying paper for APPM to Brambles and sold the *Melbourne Trader*. Thus in less than four years ANL had reduced its operations in Tasmania from six ships to one, the *Bass Trader*. Brambles chartered the small Swedish Ro-Ro the *Gute* to help carry the increased volumes of cargo on its Burnie-Melbourne service.

Currently Tasmania is served by eight ships operated by five shipping lines. While four of these vessels have been employed in the service throughout, the replacement of each is under consideration. Of the ships recently introduced the *Challenger B* has already been replaced with the *Stena Topper* renamed *Tasmania B*. The Tasmanian Government has been studying the options for replacing both *Straitsman* and the *Abel Tasman*. It is understood that ANL may also announce the commissioning of a new freight vessel in the near future.

Ferries

Bruny Island Service

Transport Tasmania has signed a contract for a replacement ferry for the Kettering to Roberts Point run. The new ferry will cost $5.2 million and is expected to be delivered by 31 August 1990. The new vessel has an overall length of 52 metres and will have a capacity for 74 medium sized vehicles and 400 persons. It will cater for loaded semi-trailers with a gross weight of 44 tonnes. With a clear main deck height of 4.5 metres, it will allow tourist buses with air conditioning units on top, as well as other overheight vehicles, to be carried on the main deck. The new vessel will replace the *Mangana* which will be put up for sale. The *Harry O'May* will become the standby ferry.

Bass Strait Service

Record passenger figures highlighted a successful year for the TT-Line's ferry *Abel Tasman*. In the twelve months to June 1989, the TT-Line recorded an operating surplus of $8.3 million, almost double that of the previous year.

A total of 216 768 passengers travelled on the *Abel Tasman* during 1988-89, an increase of 18 per cent on the previous financial year. The number of vehicles carried increased by 13 per cent to 55 294.

The TT-Line adopted an innovative marketing strategy with the introduction of a number of packages. The 'Naughty Weekender' offered three nights from $147 - the return journey on the *Abel Tasman* (two night's accommodation) - and one night in Tasmania. This resulted in an average 100 passengers coming to Tasmania each weekend. The 'If You're Willing I'm Abel' package, offering five nights in Melbourne and the return passage from Tasmania for $313 was also popular.

19.1.3 Air

Air transport provides a vital role in the maintenance and development of passenger and freight flows between Tasmania and the mainland - a role far more important than in other States where alternative additional transport modes for interstate movement of passengers and freight exist.

Australian, Ansett and East-West provide regular domestic services to and from Tasmania. Qantas flies twice weekly to Melbourne or Sydney to connect with international flights, and Air New Zealand flies weekly between Hobart and Christchurch. Internally, Airlines of Tasmania, Scenic Air, Par Avion and Tasair provide passenger, charter and tourist flights within the State. Airlines of Tasmania and Promair connect King and Flinders islands and provide interstate service between Tasmania and Victoria.

Hobart Airport is located 18 kilometres from the city and is ranked eighth in the volume of passengers handled at Australian terminals.

19.6 DOMESTIC AIR TRANSPORT, 1988

Airports	*Aircraft movements*	*Passengers ('000)*	*Freight (tonnes)*
Hobart	7 971	520	6 392
Launceston	11 285	360	35 227
Devonport	6 143	173	124
Wynyard	2 455	66	135

On 1 January 1988, the Federal Airports Corporation was vested with the operation of the airport, as well as 16 other major airports throughout Australia, including Cambridge and Launceston. From 1 April 1989 a further six airports were incorporated in the FAC network.

The airport has been developed to accommodate Boeing 747 aircraft operating to places as far away as Singapore. International operations are provided by Air New Zealand flying to Christchurch, New Zealand, and by Qantas to Sydney and beyond. A new international terminal building and extended runway were completed in 1985. The runway is 2251 metres long and is serviced by modern radio navigation aids to permit all weather use. Over 17 000 international passengers used Hobart in 1988.

Launceston Airport is also operated by the Federal Airports Corporation and is located some 16 kilometres south-east of Launceston City. The airport ranks as the next busiest to Hobart handling about 360 000 passengers each year, and more freight than any other airport in Tasmania through Ipec, Australian and Ansett freight operations. This airport is ranked fifth in Australia for the movement of freight.

The Airport is the base for Airlines of Tasmania and the Flying Doctor Service, and is also used for commuter operations, flying training, light aircraft charter, and other aerial work operations.

Tasmania has nine other aerodromes at Cambridge, Devonport, Flinders Island, King Island, Queenstown, Smithton, St Helens, Strahan, and Wynyard. Devonport and Wynyard airports have runways large enough to carry jet aircraft and handle regular passenger services to Victoria, while the remainder predominantly cater for internal commuter, charter and private aircraft services.

19.1.4 Rail

On 1 July 1975 control of the State's railway system was transferred to the Commonwealth Government. All regular passenger train services in Tasmania ceased in 1978, as the railways had carried relatively few passengers for decades and budget constraints forced cutbacks in public expenditure. Today the State's rail system is used only to transport goods or to run an occasional tourist excursion.

Operational and financial responsibility for the Tasmanian railways was assumed by the

Optical Fibre Communications

Various techniques have been used to provide long-distance telephone links. Early methods relied on the transmission of electrical pulses via coaxial cable. Radio or microwave technology has also been used. In this method information is carried by electromagnetic waves having the frequency of radio or microwaves. Over the last few years Telecom has been carrying out the development of an optical fibre network which is expected to greatly enhance the capacity and reliablity of long distance telephone links.

The basis of fibre optics is the transmission of laser light through a waveguide. The waveguide is in essence a very thin fibre made of silica glass through which the light beam travels. In practice there are two coaxial cylinders of slightly different refractive index. When a light beam strikes the boundary at a glancing angle it is totally internally reflected, so that the light beam is constrained in the fibre system. The beam can thus be routed in a convenient manner and need not be limited to straight line propagation.

The light beam itself does travel in short straight lines as it is bounced off the reflecting surfaces, but the net effect is for the beam to travel in any desired path. In effect, the light beam can be made to travel round corners. In a long distance telephone link the information from the 'local' telephone lines is converted to light pulses which travel along the fibre link and are reconverted at the other end.

Checking the optical-fibre cable as it passes through the laying tube into the ground near Perth. Photo: Mercury

What are the advantages of fibre optic technology?

Any long distance communications link requires sufficient capacity to handle a number of different 'messages' at the same time. It is this large capacity which makes optical fibre links so attractive. The capacity for sending information is much greater with fibre optics than the present radio link system. The optical fibre system has the added advantage over radio methods that it is not affected by changing atmospheric conditions.

Another key factor in any transmission system is the extent to which transmission losses occur. Normally these occur whatever the method of transmission, and increase with distance. Over the distances used intelephone systems this can be quite significant. Modern optical fibre systems have relatively small transmission losses. In fact the idea of optical fibre transmission has been around for some time but a principal drawback to its practical application was the high transmission losses that occurred when the technology was first developed. For instance, in the best fibres obtainable prior to 1970, light waves retained only about 1 per cent of their energy after travelling 20 metres. By 1984 the transparency of fibres had been improved to a level whereby only 10 per cent of energy was lost over 20 kilometres. More efficient fibres are constantly being developed, but even so it is usual to 'boost' the signal at regular intervals when long distances are involved.

Australian National Railways Commission in 1978. In 1985, the Commonwealth Government advised details of future funding for the Tasmanian region, to be called Tasrail, with a contract for three years and requirements that certain achievements had to be met.

Since the transfer in 1978 of Tasrail from the State Government to the Australian National Railways Corporation, freight hauled until 1988 had grown by 74 per cent. The track system had been upgraded to a good standard with a $26 million capital investment, and also a large working expenditure.

Tasrail's mainline freight capacity has been significantly increased by adding 457 upgraded wagons and 34 locomotives to the fleet. This has allowed retirement of obsolete stock. Tasrail's operational fleet in 1988 consisted of 824 wagons and 53 locomotives.

The railways play a vital role in Tasmania's prosperity - in 1987-88, Tasrail moved 2 360 700 tonnes of freight, an increase of 6.6 per cent on that for 1986-87.

Tasrail aims to get bulk tonnage onto rail, thus making the highway safer for the general public and encouraging the tourist industry.

In 1988, the Federal Government agreed to continue to support rail operations in Tasmania for a further five years in order to ensure a measure of stability and predictability, which will assist Tasrail to achieve higher productivity and greater efficiency.

19.7 TASRAIL FREIGHT ('000 tonnes)

Commodity	*1987-88*	*%*
Woodchip logs	818.6	34.7
Coal	375.3	15.9
Cement	330.0	14.0
Containers	300.7	12.7
Pulpwood logs	221.7	9.4
Sulphuric acid	131.3	5.6
Timber	61.7	2.6
Fertilizer	61.0	2.6
Other goods	60.4	2.5
Total	2 360.7	100.0

19.2 TELECOMMUNICATIONS

Australia's telecommunications infrastructure has recently undergone dramatic changes. From January 1989, Telecom became a corporation. At the same time markets which were the exclusive responsibility of Telecom such as cabling and wiring of customer premises, PABX maintenance and standard feature telephones for second and subsequent telephones were opened up to competition.

Network developments

One of Telecom's major objectives is the upgrading of existing long distance links with optical fibre technology. Optical fibre cables are essentially small diameter flexible glass rods along which information is transmitted by impressing on and off pulses on a laser light beam. The optical links will greatly increase the carrying capacity of existing links. In Tasmania an optical fibre link has been made between Hobart and Launceston, replacing the existing microwave or radio link. It is planned to extend the link to Smithton in the future.

The telephone service between Northern Tasmania and the mainland was considerably upgraded in April 1989 when Telecom completed a digital radio link via Flinders Island. All telephone traffic between Tasmania and the mainland now goes by radio signal. In addition fax and data traffic are carried by the same method. The radio link is a big improvement on the old undersea coaxial cable because of greatly increased carrying capacity. Even so it is expected that the radio links will shortly be nearing capacity and a submarine optical fibre cable connecting Tasmania to the mainland is planned.

19.8 TELECOMMUNICATIONS SERVICES, TASMANIA, DECEMBER, 1989.

Households with at least one phone	93%
No. of public phones	1 091
Telephone services in operation	190 040
No. of local calls made	171 233 000
No. of trunk and STD (exl. ISD)	45 458 000

New Services

Telecom in 1988-89 introduced a variety of new products and services. The 0055 information services provided access to a wide range of topics. In 1988-89 Australian users made seven million calls on 1300 services. A telephone calling card, Telecard, was introduced which allows the customer to make phone calls without cash from any phone. The Integrated Services Digital Network (ISDN) Commercial Service allows voice, text, data, video and image services to be carried on the one network.

19.3 POSTAL SERVICES

1 July 1989 marked a major milestone in the development of the Australian postal service. The former Australian Postal Commission (Australia Post), established with vesting in 1975, became a fully fledged Corporation from that date. The new *Australian Postal Corporation Act* provides a solid framework for Australia Post to develop into an innovative and responsive service enterprise.

Australia Post is required to provide a letter service at a universal price and meet minimum financial targets. The Act also provides Australia Post with the freedom to offer a whole range of services and products not available under previous legislation.

Australia Post provides surface and airmail services, both within Australia and to and from other countries for the carriage of letters, cards, aerogrammes, newspapers, packets and parcels. Special services include priority paid, cash on delivery, security post, response services, private boxes and locked bags and several reduced rate services. It also operates an express courier service and electronic postal services, together with a money transfer service, and sells a range of packaging products, postal stationery and philatelic items.

In September 1988 the Electronic Counter Service network was introduced in Tasmania. Computerised terminals for the processing of payments on behalf of agencies such as Commonwealth, State and local authorities, and private sector principals are now operating in all official post offices and 53 post office agencies. Tasmania was the first State in Australia to have this service.

Australia Post employs approximately 600 staff in Tasmania. There are 40 post offices and 180 post office agencies. Mail was distributed to 179 800 different delivery points throughout the State during 1988-89 - 163 700 households and 16 100 businesses.

The Future: Changes are on the way involving a major expansion of electronic postal services and the introduction of new technologies such as Optical Character Readers (computerised letter sorting machines) to improve customer service and productivity. Australia Post is also progressing towards containerisation of mail.

19.4 RADIO AND TELEVISION SERVICES

Radio and television broadcasting fall within the jurisdiction of the Commonwealth Government and are the responsibility of the Minister for Transport and Communications. Federal bodies which are directly involved include the Department of Transport and Communications, Australian Broadcasting Tribunal (ABT), Australian Broadcasting Corporation (ABC), Special Broadcasting Service (SBS) and the Australian Telecommunications Commission (ATC).

The Australian broadcasting system consists of three types of services:

- national radio and television services provided by the ABC and SBS;
- commercial radio and television services provided by commercial companies under licence; and
- public radio services provided by non-profit making corporations under licence.

The *Broadcasting Act* 1942 governs the establishment and operation of commercial and public services. It also contains provisions relating to the SBS and the ABT. The *Australian Broadcasting Corporation Act* 1983 provides for the ABC. The Minister for Transport and Communications is responsible for developing policy, legislation and for planning of the overall system. The Minister is also responsible for approving the technical operation of services and for investigating interference to the transmission or reception of programs. The Department of Transport and Communications

provides advice on all matters the Minister is responsible for, and in many instances undertakes functions on behalf of the Minister. An important function of the Minister is the consideration of all planning proposals for the establishment of radio and television services. For commercial and public services, once the Minister has approved proposals and invited applications for a licence, such applications are considered by the ABT.

National Broadcasting Services

The ABC currently provides one television service nationally, four radio services (two AM and two FM) in the capital cities and two radio services (one AM and one FM) in regional areas (although not all areas are yet receiving ABC FM).

The ABC is a major user of the new Australian satellite system, Aussat, and this enables people to receive ABC television and three ABC radio services although they live in remote areas or areas in which it is extremely difficult to receive broadcasting signals by terrestrial means. However, reception via satellite will only be possible with the necessary equipment.

Commercial Broadcasting Services

A commercial radio or television licensee is required under the Broadcasting Act to undertake to provide an adequate and comprehensive service to people within the service area of the licensee and to use and encourage the use of Australian resources. Whether a licensee has met the undertaking is a matter of judgement for the Tribunal after considering all relevant information, including views and comment from interested members of the public through the licensing process. Commercial broadcasters receive most of their income from the broadcasting of advertisements. Commercial broadcasting licensees are required to pay licence fees annually.

It is planned in the future to extend the services of both TVT Hobart and TNT North-East Tasmania to cover the whole State, thus providing all viewers with two competing commercial services.

Commercial radio services on the FM band are also being extended. Hobart had its first commercial FM radio service on air in 1990, and a service is also planned for Northern Tasmania.

SBS television will be extended to Northern Tasmania in 1993.

19.9 RADIO STATIONS IN OPERATION AT 30 JUNE 1989

Call Sign	*Classification*	*Location*
7ZL	National	Hobart
7ZR	National	Hobart
7NT	National	Launceston
7QN(a)	National	Queenstown
7FG(a)	National	Fingal Valley
7SH(a)	National	St Helens
7HO	Commercial	Hobart
7HT	Commercial	Hobart
7AD	Commercial	Devonport
7BU	Commercial	Burnie
7EX	Commercial	Launceston
7LA	Commercial	Launceston
7XS	Commercial	Queenstown
7SD	Commercial	Scottsdale
7THE	Public	Hobart
7HFC	Public	Hobart
7LTN	Public	Launceston
7WAY	Public	Launceston
7RGY	Public	Geeveston
7ABC	National	Hobart
		Launceston
		NE Tasmania

(a) Transmits, in the main, programs originating from 7NT.

Public Broadcasting Services

Public radio services have expanded rapidly throughout Australia since 1978 when the then Minister announced policy guide-lines for its development. From 12 stations in 1978, the sector now comprises over 70 services in 1989. There are five public radio stations in Tasmania. 7RPM Hobart, a specialised station for the print-handicapped, will be licensed in 1990. At that time its current frequency will be changed to the ordinary broadcast band. A new public radio station is planned for Burnie. Funds may come from a variety of sources including government and non-government grants, subscriptions and sponsorship announcements. Public radio services are essentially local in focus and may program material which reflect the wide range of interests, informational, cultural and educational, in each service area.

Program and Advertising Standards

Commercial and public licensees are required to meet the Tribunal's standards. The ABC is

required to have regard to the standards but are not obliged to meet them. The standards include requirements relating to Australian content, the acceptability of program material, duration and suitability of advertisements and, in the case of television, special provisions relating to children's programs.

The Tribunal does not maintain an office in Tasmania, but the files for local public inquiries are held in local public libraries for perusal. Complaints about programs on commercial and public stations may be addressed to the Tribunal in writing at 76 Berry Street, North Sydney, 2060, or by phoning the Melbourne office (03) 670 1777.

19.10 TELEVISION STATIONS IN OPERATION, 30 JUNE 1989

Call sign and channel	*Area*	*Transmitter location*
National -		
ABT2	Hobart	Mt Wellington
ABNT3(a)	NE Tasmania	Mt Barrow
ABKT11(a)	King Island	Gentle Annie Hill
SBS	Hobart	Mt Wellington
Commercial -		
TVT6	Hobart	Mt Wellington
TNT9	NE Tasmania	Mt Barrow

(a) Transmits programs originating from ABT2.

Licence Renewals

Public hearings were held during 1988 and 1989 to renew the licences for 7HO, 7HT, 7HFC, 7THE, 7QT and 7EX. As a result, several conditions were placed on these licences.

In the case of 7HT, the licensee was to report to the Tribunal 12 months from the renewal on changes designed to ensure full and complete disclosure of the financial situation of 7HT as an entity independent from ENT Ltd or any associated company, and research into the acceptability to the community of the service provided by 7HT and any programming changes made or proposed as a result of this research. The licence for 7EX is not yet renewed, but matters considered by the Tribunal were similar to those for 7HT.

In the case of 7THE, the licensee was to report to the Tribunal at six-monthly intervals giving full details of the station's financial situation, details of management reforms and corporate restructuring, improvements in the technical operation of the station, details of research and the programming changes resulting from it, and the ways in which volunteers and the community are encouraged to participate in the decision-making processes and the programming of the station. Should the Tribunal not deem this condition to have been adequately met, it will consider whether to hold an inquiry into the suspension or revocation of the licence, or the imposition of further conditions.

The hearings for 7HO, 7HFC and 7QT (now 7XS) were uncontroversial, and no conditions were imposed. All of the other licences which fell due during the period were renewed without public hearings.

A public hearing was held in 1988 for the grant of a commercial FM licence to serve Hobart and Southern Tasmania. The licence was granted to Southern Tasmania FM Stereo Pty Ltd. A public hearing was held in 1989 into the grant of a licence for a public radio station to serve the North-West Coast region of Tasmania, but the licence has not yet been granted.

19.11 LICENCE EXPIRY DATES OF BROADCASTING STATIONS, TASMANIA

Commercial Television	
TVT	26 - 7 - 1992
TNT	30 - 7 - 1992
Commercial Radio	
7AD	30 - 6 - 1990
7BU	30 - 6 - 1990
7EX	31 - 3 - 1989
7HO	31 - 3 - 1991
7HT	17 - 4 - 1992
7LA	17 - 7 - 1992
7SD	30 - 6 - 1990
7XS	31 - 3 - 1991
Public Radio	
7HFC	30 - 6 - 1991
7LTN	31 - 10 - 1992
7RGY	9 - 10 - 1992
7THE	6 - 6 - 1992
7WAY	31 - 10 - 1992

New Radio Station

TTT-FM, Tasmania's first new commercial radio station in 53 years officially began broadcasting on 4 July 1990 from studios in Liverpool Street, Hobart.

The broadcast was the culmination of more than three years work, particularly on research to ensure it reached the right market. The station is targeted at the 20-to-40 age group.

It is 90 per cent owned by small local shareholders representing a broad cross section of the Hobart community.

Microwave Links, Intrastate Relays and Translator Stations

The prime sources of programs in Hobart are the commercial and national studios which are linked to their Mt Wellington transmitters (TVT6 and ABT2) by microwave links; the commercial studio in Launceston feeds programs to its Mt Barrow transmitter (TNT9) by the same method.

As there is no national studio at Launceston, the transmitter on Mt Barrow (ABNT 3) relays the Hobart national programs through the broadband radio link. A similar service is also available to commercial stations.

19.5 REFERENCES

ABS Publications Produced by the Tasmanian Office:

Motor Vehicle Registrations, Tasmania (9303.6), monthly.
Road Traffic Accidents Involving Casualties (9405.6), quarterly.
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Other Publications:

Australian Postal Commission, *Annual Report* 1988-89.
Australian Telecommunications Commission, *Annual Report* 1988-89.
Metropolitan Transport Trust, *Annual Report*, 1987-88, Tasmanian Government Printer, Hobart.
Australian National Railways Commission, *Annual Report*.