History of Telecommunications in Australia

1876 Australia and New Zealand are linked. For the business community, telegraph and cable services were pivotal to growth. Merchants, wholesales, importers, mining investors, exporters, land dealers, manufacturers, bankers, farmers and shipowners were quick to grasp the opportunities afforded by the seemingly miraculous new communication with England and Europe.

1872 Completion of the Australian Overland Telegraph line, one of Australia's most significant and impressive engineering feats, which runs 3200 km from Port Augusta in South Australia to Darwin linking Australia to Java and then onto Europe.

1869 Tasmania is linked to the mainland with 117-mile long submarine telegraphic cable.

1861 Queensland joins the international Telegraph nexus with the establishment of the Sydney – Brisbane Telegraph

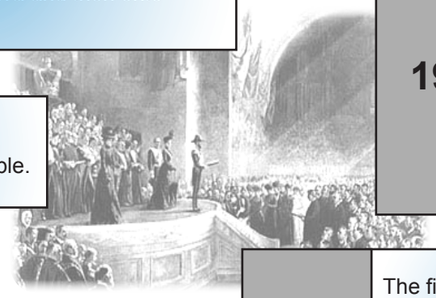
1859 During Victoria's colonial gold rush a new morse code technology uses a single copper wire running from Elizabeth Street in Melbourne to Seymour, Wangaratta, Beechworth and onto the Murray River border.

1858 A Telegraph line is completed between Adelaide and Melbourne.

1854 The Australian Electrical Telegraphy Company links William Street in Melbourne to Port Melbourne. Within two years 12,000 telegraphs are sent linking transport and trade and opening up commerce in Victoria

1905 The Commonwealth parliament passes the first Wireless Telegraphy Act

1902 The first photoelectric fax machine appears, the invention of Dr Arthur Korn. It is also the year that a submarine cable is laid from Southport in Queensland to Vancouver in Canada.



1901 The new Australian Constitution is the new Commonwealth Government the power "to take-over, control and administer" all State postal telegraphic, telephonic and other like services.

There are 33,000 phones in Australia and 43,000 miles of Telegraph lines with all the communications now under the direction of the newly formed Postmaster General Department of the Commonwealth (PMG).

1893 The first public telephone opens in Sydney's GPO.
The various Colonial Telegraph departments and branches are reorganised under the Colonial Postmasters General.

1879 It is the dawn of early telephony with Australia's first telephone service launched connecting the Melbourne and South Melbourne offices of Robson Bros with the first telephone exchange opening in Melbourne a year later.

Exchanges are opened in all other colonies' capital cities by 1887.

1877 Western Australia at first reluctant to adopt telegraphic technology, eventually opens up with the establishment of the Perth – Adelaide telegraph line with 11,000 telegrams been handled in the first year.

1922 It is the era of radio.
Billy Hughes becomes the first Australian Prime Minister to make a broadcast by radio transmission.
The Sydney to Brisbane telephone trunk line opens.

1914 The first automated exchange opens in Newtown, Sydney. Australians are sending more telegrams per head of population the most other people. By May of the same year, there are 19 wireless stations positioned along the Australian and New Guinea coastlines.

1912 Automated telephone switching is introduced into Australia. The first automated telephone exchange opens in Geelong.

1911 The number of telephones in Australia reaches 100,000. A threefold increase since Federation.

1906 There is a demonstration of wireless communication across Bass Strait using Marconi's technology.

1854 - 1876 **1877 - 1905** **1906 - 1922**

History of Telecommunications in Australia

1932 The Australian Broadcasting Commission is formed with control vested in the PMG.
At this stage, there are 48 commercial stations as well as 4 regional stations as part of the national network. There are 350,000 licensed listeners in Australia and a total audience of three quarters of a million people.

1931 AWA launches an experimental Worldwide Forecast Service, The voice of Australia that over the years would broadcast cricket, entertainment, lectures and talks.

1930 A wireless telephone service operates between Australia and England.

This is followed by Australia and New Zealand, which is linked using beam wireless stations in Victoria.

1927 A short wave Telegraph service is established between Australia and England using the technology of short wave wireless communication. The technology is pioneered by Marconi Electrical conglomerate.
Amalgamated Wireless Australasia (AWA) launches an experimental international shortwave service.

1925 Research staff at the PMG research laboratories engineer the first simultaneous interstate broadcast amongst a six radio stations.

Australia becomes the first country in the world to introduce rural automatic exchanges.

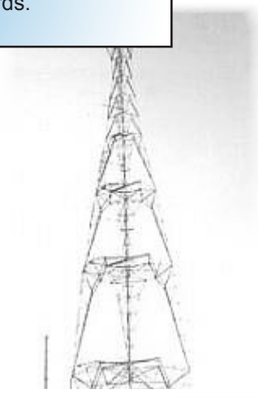
1923 Harry Percy Brown becomes the head of the PMG, beginning a transformation that reshapes the organisation modernising communications.
Automatic totally replaces the manual operator and within two years there 22 automatic exchanges operating in Australia.
Australia is rank seventh in Telephone penetration per population in the world.

1922 - 1932

1950s A mobile radiotelephone service is introduced and extended to emergency services.
Ninety five per cent of Australians have radio receivers.
Five hundred rural automatic exchanges are operating. 1000 trunk circuits and 150 carrier telephone systems are added to the network.

1947 The ABC introduces its own news service.

1946 The Overseas Telecommunications Commission (OTC) is established to administer Australia's international telecommunications services and their development towards world standards.



1939 Australia's first overseas radio broadcasting service begins operation.
There are 17 licensed radio sets for every hundred members of Australia's population.

1935 A submarine cable is laid connecting Tasmania by telephony to the mainland.

1934 The first wireless beamed picture-gram service opens between Australia and England.

1934 - 1950

1962 The government realises it needs to build new infrastructure as telephone systems are becoming increasingly overloaded.

The Sydney to Melbourne coaxial cable is a revolutionary technology and a significant new artery in Australian telecommunications.

Broadband cable and radio systems carrying television relays and high telephony transmission stretch to Cairns. Communication lines that are now beginning to work the continent ae very different from the aerial open lines of 50 years before. Coaxial cables and microwave radio systems will in-twine the continent before the end of the 1960s

1958 Australia's first telex service is open by the OTC. By June 1959 the Australian Telex service is available in 27 countries.

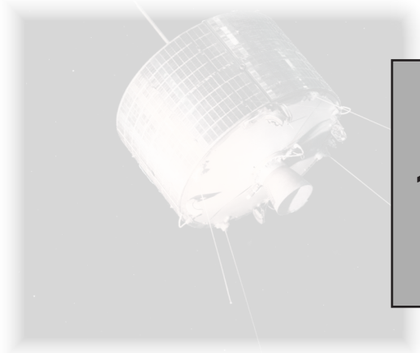
1956 Australia's first television broadcasters made from a commercial station in Sydney and in November two national stations are opened, one in Sydney and the other in Melbourne.
By 1960 all capital cities are connected to television.

1954 Telex enters the Australian telecommunication network for business applications.
A manual operated exchange is set up by the PMG linking teleprinter terminals and receivers in Sydney and Melbourne.

1953 Perth is first capital city in Australia to have a fully automatic telephone network. Four years later, nearly all capital cities are fully automatic.

1953 - 1962

History of Telecommunications in Australia

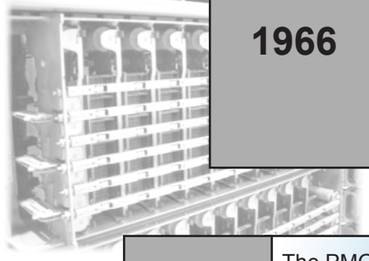


1973 The Internet Protocol (TCP/IP) is developed in the USA. The protocol is employed in the Australian Computer Science Network, with software developed at the Sydney University

1970 Optical Fibre for telecommunications is first developed in the laboratories of Standard Telephoning Cables (STC) in the UK..

1967 The introduction of the SEACOM cable via Queensland Coast provides major additional overseas telecommunications capacity, without the disadvantage of satellite hop delays

1966 A year after North America and Europe are linked by satellite, the international communication satellite (INTELSAT II) is launched in Australia.
Two years later all of the Australia's public telecommunication system has international access by satellite.
It is also the year that sees Australia's first international satellite broadcast with the UK.



1964 The PMG experiments with data services, sending computerised stock exchange and business information over the telephone system. Australia has become a member of the International Telecommunication Satellite Organisation (INTELSAT).

1963 Crossbar exchanges are installed in all mainland capital cities.
Two years later, STD services reach over 100,000 customers.
Computers are introduced into the Research Laboratories of the PMG.
The 14,000 km coaxial cable, COMPAC is opened linking Australia and New Zealand to Canada.

1979 The world's first major solar powered link is installed on the 580 km microwave telecommunications route between Alice Springs and Tenant Creek in the Northern Territory. The following year thirteen islands in the Torres Strait are linked to the Australian mainland by this low-power energy system.

1978 Stored Program Controlled (SPC) technology is introduced, providing a more flexible switching system. The first local SPC exchange, and AXE exchange developed by Ericsson is installed at Endeavour Hills, Victoria. The Endeavour Hills exchange uses analogue switching. Future AXE exchanges use more cost effective digital switching.

1977 Telecom Australia celebrates its 4 millionth telephone service. Australia's first solar powered telephone exchange is opened at Glen Valley in the Victorian Alps.
Telecom adopts the Ericsson's ARE11 telephone system.

1976 International subscriber dialling is introduced with access to 13 countries. This gross to 70 countries by mid 1978.
FM radio is introduced.

1975 Telecom Australia and Australia Post are formed as arm's-length Government business enterprises. At this stage, Telecom has net assets of $4000m and 3.5m telephone subscribers. Telecom sets itself that goal of a telephone in every home by the year 2000. This goal is effectively achieved by 1987.
The same year sees the advent of colour television in Australia.

1974 The PMG installs Australia's first computer-controlled telephone exchange, the 10C Trunk exchange at Pitt Street Sydney.

1985 Australia's first geostationary Communication satellite is launch by AUSSAT, the organisation established in 1981 to oversee Australia's satellite system. Eventually the government decides to sell AUSSAT couple with a telecommunication license to Optus communications.

1983 Optical fibre cable is installed into the public telecommunications network in Brisbane and Melbourne.
The world's longest solar powered communication being is opened in Western Australia between Port Headland and Kununurra. The link provides people in that remote locality with telephone services for the first time.
Features are introduced into phone services that allow users to store phone numbers, abbreviated dialling and use call-back facilities.

1982 There is lobbying from the private sector to end Telecom's monopolies. The then Fraser Government sets up the Davison Inquiry which recommends spliting Telecom into two businesses one managing the natural monopoly of the copper access network and the other that would compete with the private sector in supplying network services. The government does not support the recommendation.

1981 Telecom launches its first automatic mobile telephone system in Melbourne and Sydney, supplied by (NEC) Japan. System provides fully automatic access to vehicles using local, trunk and international networks.
Optical fibre Cable is first install to handle telecommunications traffic, In a field trial between Telecom's research laboratories in Clayton to a nearby exchange in South East Melbourne.

1980 After four years of often-gruelling work under testing conditions, a 2500 km cable route is installed. The route stretches from Ceduna in South Australia to Cobar in New South Wales and on from Dubbo to Brisbane, linking Western Australia, South Australia and the eastern states to the rest of the world. The cable route is capable of carrying 5500 simultaneous telephone communications

1963 - 1973 **1974 - 1979** **1980 - 1985**

History of Telecommunications in Australia

1993

Telecom Australia changes its name to Telstra.

Telstra embarks on a programme to modernise its switch and transmission infrastructure. The progamme completed by 2000 sees its network infrastructure fully digital.

Telstra and launches a new 2G digital mobile phone (GSM) network.
Telstra continues to operate its AMPS analog network that has over 635,000 analogue mobile phone connectioons

The World Wide Web becomes mainstream with the release of the Mosaic browser.

The public telegraphy service is closed.

1991

A new Telecommunications Act is passed that initially opens the market to limited infrastructure competition to Telecom by one other fix network carrier (Optus) and by two other mobile carriers. More open competition is foreshadowed by 1997.
Australia's first commercial Internet Service provider (connect.com) opens for business.
Telecom Australia merges with OTC to become the first Australian & Overseas telecommunications Corporation and 1993 it becomes known as Telstra Corporation.

1990

International computer network attracts attention with the establishment of the Internet link via satellite to Australia's own fledging Internet system is the Australian Academic and Research Network (AARNet).

1989

A new telecommunications industry regulator AUSTEL is created, In anticipation of the opening up of the industry to if the infrastructure competition starting in1991 when customer premises equipment is thrown open to competition.

1987

All areas in Australia now have access to a standard telephone service.

Telecom Australia launches Australia's first cellular network based on the USA AMPS (Advanced Mobile Phone System)

Handheld mobile phones 'the Brick' are sold for $4,250,

1999

Telstra launches the CDMA (Code Division Multiple Access) mobile network. Ten years later the system is decommissioned.

1998

Telstra MobileNet customers (both AMPS and digital networks) now exceed three million.

Telstra announced plans to build a new network to replace the analog (AMPS) network, which was to be phased out due to governmentregulation.

The new network was to be based on CDMA (Code Division Multiple Access) technology and is backward compatible with analog mobile handsets.

1997

The telecommunication industry is re-regulated and open to full competition under a regulator (the Australian Competition and Consumer Commission). Most limitations on the number of licensed players are removed.
Telstra Is partially privatised with its shares sold to the public by the Commonwealth Government.
Australia has one of the world's highest levels of mobile telephone ownership.

1996

Optus and Telstra are rolling out their HFC networks.These access networks virtually duplicate each other and only pass approximately 2.5 million out of Australia's 10 million homes.

Mobiles now has the one million digital customers connections together with 2.6 million anlog (AMPS) customers.

1995

Pay television is launched.

2006

The NextG wireless network is launched.

NEXTG™ NETWORK

2005

The Internet's capabilities expand a social media in Opal's people to interact with each other through Facebook and YouTube.
The government sells its remaining stake in Telstra in a decade long effort to privatise Australia's biggest telephone company.

The launch of Australia's first online movies downloads service.

2001

Mobile phones exceeds the number of landlines (over10.7 million).

E-commerce is gaining traction with 13% small and medium size businesses already participating in this new forum and a further 36% expecting to move online within the following year.

2000

ADSL is introduced as an electronic add-on to the copper access telephone network.
The mobile analog (AMPS) network is fully phased out.

1987 - 1993 | **1995 - 1999** | **2000 - 2006**