

ADSL in Australia

[Click here](#) to read more about PPPoEoA, the system Telstra followed with its retail customers

What dates was ADSL launched in Australia's state and territories before the NBN

In Australia, consumer ADSL broadband did not have separate, distinct launch dates for individual states and territories. Instead, it was launched as a coordinated **national commercial rollout on a single date: August 2000**.

Telstra (then the dominant telecommunications provider owning the country's copper network) officially launched its retail and wholesale ADSL services nationwide on **22 August 2000**.

The Nature of the Rollout

Because ADSL relies on installing specialized hardware called Digital Subscriber Line Access Multiplexers (DSLAMs) inside existing telephone exchanges, the technology was rolled out strictly on an **exchange-by-exchange basis** rather than a state-by-state framework.

- **Initial Launch (August 2000):** Services first went live across selected metropolitan exchanges in the state capital cities (Sydney, Melbourne, Brisbane, Adelaide, Perth, and Hobart) where infrastructure upgrades were completed first.
- **The Nationwide Expansion (2000–2002):** Telstra aggressively scaled the rollout over the next two years, upgrading nearly 1,300 major exchanges across every state and territory to reach roughly 90% of the Australian population by mid-2002.
- **Regional & Rural Expansion (2003 onwards):** For smaller regional areas across the states and territories, Telstra introduced an **ADSL Demand Register** in October 2003. Under this scheme, smaller local exchanges in regional towns were only upgraded once a minimum threshold of local residents (usually around 150 confirmed sign-ups) registered their demand.

Key Subsequent Milestones (Pre-NBN)

Before the National Broadband Network (NBN) proposal took off in 2009, the ADSL landscape saw major national upgrades:

- **March 2005 (ADSL2+):** Adelaide-based ISP Internode bypassed Telstra's network limits to turn on Australia's first **ADSL2+ services**. It went live concurrently in **Melbourne, Adelaide, and rural South Australian towns**, offering speeds up to 12-24 Mbps.
- **November 2007 (Naked DSL):** iiNet launched the nation's first Naked DSL plans, removing the forced requirement of paying for a copper landline rental just to get broadband.

What happened in Canberra

While Canberra was included in the nationwide Telstra ADSL rollout from August 2000, **the ACT completely diverged from the rest of Australia by bypassing standard ADSL altogether**.

Instead of waiting for Telstra's slow copper upgrades, Canberra built its own independent, cutting-edge telecommunications network.

1. The TransACT VDSL Network (January 2001)

Just months after ADSL launched nationally, a Canberra-based company called **TransACT** launched Australia's first major **VDSL (Fibre-to-the-Kerb)** network.

- **The Technology:** TransACT ran high-speed fibre-optic lines directly into local streets, stopping roughly 300 metres from homes. It used very short runs of copper for the final stretch.
- **The "Triple Play":** Long before Netflix or the NBN existed, Canberrans on this network in the early 2000s were uniquely able to get a single bundle combining high-speed internet, video-on-demand TV, and phone services.
- **The Footprint:** The network quickly grew to pass over 55,000 premises, covering a massive chunk of established Canberra.

2. Upgrading to VDSL2 (2009)

While the rest of Australia was heavily reliant on standard ADSL2+ speeds (which dropped drastically the further you lived from a telephone exchange), TransACT began upgrading Canberra's network to **VDSL2** in 2009. This provided speeds up to four times faster than the country's standard ADSL networks at the time.

3. The NBN Clash in Canberra

When NBN Co began rolling out its federal network, Canberra's unique infrastructure created structural complications:

- **The Overbuild Controversy:** In the mid-2010s, the ACT Government openly criticized NBN Co for wasting resources by installing NBN Fibre-to-the-Node (FTTN) systems in inner North Canberra. These suburbs already enjoyed ultra-fast, NBN-level speeds through the existing TransACT network, while technologically disadvantaged parts of Canberra were left waiting on sub-2Mbps connections.
- **The Corporate Buyouts:** TransACT was eventually bought out by internet provider iiNet (and later became part of the TPG group).
- **Gungahlin's Early Transition:** Because parts of Canberra had alternative networks, the copper switch-off timeline varied. In July 2014, parts of Gungahlin became some of the very first areas in the ACT to have their legacy Telstra copper and ADSL lines completely retired to force the migration to the official NBN.

What happened in Queensland

Because of Queensland's vast, highly decentralized geography, its pre-NBN broadband narrative was defined by a massive **digital divide between Brisbane and the regions**, severe infrastructure bottlenecks, and an eventual state-driven revolt against Telstra's rollout limits.

The era was marked by the following key developments across the state:

1. The Pair Gain Deficit and "Rim Zones"

When Telstra rolled out ADSL in Queensland's rapid-growth metropolitan corridors (such as the Gold Coast, Sunshine Coast, and Brisbane suburbs like Aspley, Kenmore, and Bracken Ridge), thousands of households hit a major roadblock: **Pair Gain Systems**.

- To save money on laying copper lines during the 1990s housing booms, Telstra had installed digital multipliers (often called RIMs) that split a single copper phone line among multiple houses.
- While perfect for voice calls, these systems were completely incompatible with ADSL.
- This created infamous "suburban internet deserts." A resident in a brand-new home on the Gold Coast or in Brisbane's outer west could be entirely locked out of broadband, while an older home 100 metres away on a direct copper line enjoyed full ADSL speeds.

2. Regional Queensland and the "Demand Register" Holdout

Because Queensland has more population centers outside its capital than any other mainland state, regional towns were heavily disadvantaged by Telstra's standard rollout metrics.

- Major hubs like Cairns, Townsville, Mackay, and Bundaberg had ADSL turned on early at central city exchanges, but the surrounding agricultural and coastal communities were left on dial-up.
- Under Telstra's **ADSL Demand Register** scheme, smaller communities had to petition, rally, and hit a strict minimum threshold of residents pledging to buy broadband before Telstra would commit to upgrading the local exchange. Regional Queensland communities routinely spent years campaigning just to get basic 1.5 Mbps ADSL.

3. The Neighbourhood HFC Cable Duopoly

While regional areas starved for speed, inner Brisbane and parts of the Gold Coast became a battleground for Australia's fastest pre-NBN internet: **Hybrid Fibre-Coaxial (HFC) cable**.

- During the late 1990s and early 2000s, Telstra (BigPond) and Optus physically dug up streets to lay competing pay-TV and internet cable lines side-by-side.
- Suburbs with access to this infrastructure bypassed ADSL entirely, accessing speeds up to 30 Mbps (and later 100 Mbps) long before the NBN was conceived.

4. The State Government Rebel Plan (2007–2008)

Frustrated by Telstra's slow wholesale upgrades in the regions, the Queensland Government decided to take matters into its own hands.

- In the late 2000s, the state developed a strategy leveraging its government-owned electricity assets (like Energex and Ergon Energy).
- The plan was to run **high-capacity fibre-optic cables along existing regional electricity transmission grids**, essentially threatening to build a state-owned wholesale broadband network to compete directly with Telstra and bypass the copper bottleneck.

5. Transition to the NBN

Because Queensland's pre-NBN network was so fragmented, it became a critical testing ground and focal point for the rollout of the National Broadband Network (NBN):

- **Early Fixed Wireless:** Because regional ADSL was so poor, parts of the Darling Downs and Northern Queensland were fast-tracked for early NBN Fixed Wireless and satellite trials starting in 2012–2013 to bridge the massive rural internet gap.
- **The First Migrations:** Suburbs like Goodna (Ipswich) switched on in 2013, and Aspley became the first area in Brisbane to completely decommission its legacy Telstra ADSL lines in September 2014.
- **The HFC Legacy:** Queensland's extensive pre-existing pay-TV cable lines meant the state was chosen as the **national launch site for NBN's upgraded HFC cable platform** in 2016. NBN Co bought the old Telstra and Optus cable lines, using them to deliver high-speed broadband to Brisbane households.

Apparently, Townsville Armidale and Tasmania implemented the NBN in 2010. What was happening in Western Australia?

While Townsville (Queensland), Armidale (New South Wales), and small pockets of Tasmania were chosen as the high-profile "First Release Sites" to trial the early Fibre-to-the-Premises (FTTP) rollout in 2010, **Western Australia was completely left out of the initial NBN mainland trials.**

Because WA did not have an official first-wave release site, the state spent 2010 grappling with acute ADSL infrastructure shortages, pioneering its own private high-speed alternatives, and preparing for an entirely different kind of early rollout.

1. The Critical ADSL "Morley Bottleneck"

In 2010, WA was suffering from some of the worst suburban broadband shortages in the country. Rapid housing developments in Perth's outer fringes and high density in older inner suburbs meant that local telephone exchanges were completely maxed out.

In areas like **Morley, Ellenbrook, and Baldivis**, thousands of residents trying to order standard ADSL were flatly rejected by Telstra because there were physically no ports or copper line profiles left in the exchanges. Because WA wasn't on the 2010 NBN trial list, frustrated locals were left stuck on expensive, quota-heavy 3G wireless sticks for years while waiting for infrastructure relief.

2. The Private Sector Stepped Up (iiNet's Perth Takeover)

Because the federal government's NBN wouldn't touch WA for some time, Perth-born internet provider **iiNet** took matters into its own hands.

Throughout 2010, iiNet aggressively installed its own custom hardware inside Telstra's WA exchanges. They built an extensive, independent **ADSL2+ network** that offered the state its first taste of competitive, high-speed broadband. Because iiNet was headquartered in Perth, WA consumers actually enjoyed some of the most aggressive, budget-friendly "naked broadband" and heavy data quotas in the country—provided their local exchange wasn't already physically full.

3. WA's Unique "Greenfields" Advantage

While WA missed out on retrofitting established suburbs in 2010, it became an accidental pioneer for the NBN via a policy known as **Greenfields deployments**.

During the mining boom, Perth and regional hubs like Mandurah were rapidly expanding with brand-new housing estates. The federal government mandated that any new housing development containing more than 100 lots after 2010 could no longer have Telstra copper installed. Instead, NBN Co was forced to step in and lay fibre. As a result, while older Perth suburbs starved for basic ADSL ports, residents moving into brand-new outer-suburban master-planned estates became some of the very first people in WA to get raw FTTP connections.

4. The Second-Wave Release Sites (2011)

Western Australia finally got its official entry into the NBN rollout framework when NBN Co announced its **Second-Wave Release Sites**. The locations chosen to represent WA's diverse geography for the structural design trials included:

- **Victoria Park:** Representing dense, inner-metropolitan Perth character housing.
- **Geraldton:** Chosen to test how regional, isolated coastal hubs handled fiber distribution.
- **Mandurah / Meadow Springs:** Representing rapid-growth, high-volume coastal suburban corridors.

Actual construction in these areas didn't begin shifting gears until 2012, and **Victoria Park** ultimately made history in **March 2015** as the very first area in Western Australia to have its legacy copper network switched off completely, finalising its transition to the NBN.

And Darwin and the Northern Territory. Did they mostly depend on Satellite?

Yes and no. The pre-NBN telecommunications story of the Northern Territory is a tale of two completely different extremes: **urban major centres had surprisingly robust fibre backbones, while remote communities depended entirely on a punishingly unreliable satellite monopoly.**

1. Urban Centres (Darwin & Alice Springs) Bypassed the "ADSL Trap"

Unlike the suburban bottlenecks seen in Perth or Brisbane, Darwin and major territory hubs (such as Alice Springs, Katherine, and Nhulunbuy) were actually **highly connected via terrestrial fibre long before the NBN**.

- **The Defence & Mining Backbones:** Because of the NT's critical role in national defence (e.g., Pine Gap) and multinational mining operations, telecom giants had already laid high-capacity subsea and transcontinental fibre-optic lines linking Darwin directly to Adelaide, Queensland, and Southeast Asia.
- **Early FTTP Upgrades:** When the NBN rolled out, Darwin, Katherine, and Nhulunbuy were so physically compact and close to these existing transit networks that they were fast-tracked directly for **Fibre-to-the-Premises (FTTP)**. They completely bypassed the messy intermediate copper upgrades (like FTTN) that plagued the rest of Australia.

2. Remote Areas: The Brutal Satellite Reality

Move just an hour outside of Darwin or Alice Springs, and the situation flipped completely. For the vast majority of the NT's 750+ remote communities and homeland regions, **satellite was the only option—and it was deeply flawed.**

Prior to the NBN's launch of its dedicated *Sky Muster* satellites in 2015, remote Territorians relied on the federal **Interim Satellite Service (ISS)** and private VSAT providers (like Speedcast). This setup suffered from massive structural problems:

- **The Extreme Weather Failure:** The NT's extreme climate was an enemy to pre-NBN satellite technology. During the Top End's monsoonal "Wet Season," heavy cloud cover and intense tropical downpours triggered a phenomenon called **rain fade**. This would completely drop the satellite signal, plunging entire communities, medical clinics, and schools into digital blackouts for days at a time.
- **The "Lag" Bottleneck:** High latency (the time it takes for data to beam up to space and back) meant vital modern applications could not function. Territorians could not reliably use live telehealth video conferencing, distance-education software for isolated kids, or standard corporate VPNs.
- **Severe Data Starvation:** Pre-NBN satellite plans featured minuscule data caps (often just 5GB to 10GB per month). Once a household hit that cap, speeds were "shaped" down to slower-than-dial-up speeds.

3. The Great "Dark Fibre" Controversy (2015)

The reliance on satellite created immense friction between the Northern Territory Government and the Federal NBN rollout planners.

In a series of blistering public submissions in 2015, the NT Government revealed that **33 remote indigenous communities already had physical fibre-optic cables running directly into them.** Mining companies and state infrastructure projects had left behind thousands of kilometres of high-speed "dark fibre" lines.

Instead of plugging these communities into the existing fibre network, the Federal NBN policy at the time mandated that they be **forced onto the incoming NBN satellite service.** The NT Government argued that this actively downgraded the communities, forcing people who lived on top of fibre networks to use weather-sensitive satellite dishes instead.

Situation in Northern Territory and much of Western Australia in 2026

By **2026**, the telecommunications landscape in the Northern Territory and Western Australia has undergone a profound shift. The old digital divide—defined by weather-sensitive satellite dishes and data-starved remote communities—is being dismantled by a massive multi-orbit satellite war and aggressive fibre expansions.

The situation in these regions is defined by major structural changes:

1. The LEO Satellite Revolution (The Starlink vs. Amazon Leo War)

For the massive expanses of the WA outback and remote NT homelands, **2026 marks the decline of the legacy NBN Sky Muster geostationary satellites.**

- **The Amazon Leo Partnership:** NBN Co. signed a massive contractual agreement to deploy Low Earth Orbit (LEO) satellite broadband via **Amazon Leo** (formerly Project Kuiper). This service brings high-speed, low-latency wholesale broadband to over 300,000 remote premises, targeting the exact areas that used to suffer from geostationary lag. Advocacy groups like BIRRR have spent 2026 managing the formal transition guidelines away from Sky Muster as those older satellites approach the end of their operational lifespans.
- **The Dual-LEO Market:** Australia has effectively become a premier dual-LEO operator market. Remote cattle stations, mining patches, and Indigenous communities are choosing between **Starlink** (serving individuals and enterprises directly) and NBN's wholesale **Amazon Leo** channel. This has permanently solved the old "rain fade" and latency issues, bringing city-grade speeds to the deepest parts of the desert.

2. Direct-to-Cell Mobile Coverage

The concept of "mobile coverage" in the vast unserved pockets of WA and the NT has been entirely redefined.

- In **February 2026**, Telstra commercially launched its **satellite-to-mobile messaging service**.
- This tech bypasses traditional cell towers entirely, allowing standard mobile phones to connect directly to overhead satellites.
- For truck drivers on the Stuart Highway or miners in the Pilbara, it has provided a vital emergency lifeline across the 60% of the Australian landmass that lacks a physical cellular signal.

3. Urban Centres Overhauled with "Full Fibre"

In major hubs like Darwin, Palmerston, Perth, Fremantle, and large regional centres (e.g., Geraldton, Bunbury, and Alice Springs), the legacy copper network is nearly extinct.

- NBN Co's massive nation-wide push to upgrade millions of premises from FTTN/FTTC to **Fibre-to-the-Premises (FTTP)** has hit its stride.
- Close to 90% of the fixed-line footprint in these jurisdictions can now access download speeds near **1 Gbps**.
- Furthermore, through **Enterprise Ethernet**, regional businesses in defined business zones across WA and the NT can now purchase symmetrical upload/download speeds pushing up to **10 Gbps**.

4. Shrinking the Satellite Footprint via Fixed Wireless

Thousands of semi-rural premises on the fringes of Perth, Mandurah, Darwin, and Katherine have been completely offloaded from satellite networks. [NBN Co](#) finalized a major structural upgrade program that dramatically expanded the physical reach of its **Fixed Wireless network**.

- Over 120,000 homes nationally that were previously restricted to satellite have been migrated onto Fixed Wireless towers.
- In 2026, these Fixed Wireless sectors feature uncapped data and higher-speed tiers (*Home Fast* and *Superfast*), removing the data-rationing anxiety of the early 2010s.

5. First Nations Digital Inclusion

The NT, in particular, has seen targeted infrastructure deployment via the **First Nations Digital Inclusion Roadmap**. Across 2024–2025, NBN Co successfully activated free, high-capacity **Community Wi-Fi** in dozens of highly isolated remote communities to bridge the closing-the-gap educational divide. This works alongside initiatives like the School Student Broadband Initiative (SSBI), which continues to provide free internet access to thousands of disadvantaged families.

Are you tracking the telecommunications situation for a **specific remote community or mining hub** in WA/NT, or would you like to know more about the **pricing changes** affecting NBN plans?

Just a timeline of Australia Internet since 2000

The modern era of Australian internet has been defined by a fierce tug-of-war between legacy copper, political policy shifts, and an eventual leap into multi-orbit satellite and full-fibre technology.

Here is the timeline of Australia's internet journey from **2000 to 2026**:

The ADSL & Cable Era (2000–2008)

- **August 2000:** Telstra officially launches the **first commercial consumer ADSL services**, artificially capping top download speeds at a measly **1.5 Mbps / 256 Kbps**.
- **January 2001:** Bypassing Telstra's slow copper rollout, **TransACT** launches Australia's first private VDSL (Fibre-to-the-Kerb) "triple play" network in Canberra.
- **October 2003:** Telstra creates the **ADSL Demand Register**, forcing regional towns to hit strict local registration quotas before upgrading regional exchanges.
- **March 2005:** Internode activates Australia's first **ADSL2+ services** in Adelaide and Melbourne, introducing theoretical speeds up to 24 Mbps.
- **November 2007:** iiNet launches the nation's first **Naked DSL** packages, freeing consumers from forced copper landline rental fees.

The Early NBN Vision (2009–2013)

- **April 2009:** The Rudd Labor Government officially announces the creation of the **National Broadband Network (NBN)**, establishing NBN Co to build a state-owned, wholesale-only network aiming for **93% Fibre-to-the-Premises (FTTP)**.
- **July 2010:** Tasmania becomes the first location to test the early operational NBN architecture.
- **May 2011:** **Armidale, Townsville, Minnamurra, and Willunga** go live as the first five mainland FTTP trial sites.

The Political Shift & The "Multi-Technology Mix" (2013–2019)

- **September 2013:** Following a change in federal government, the incoming Abbott Coalition overhauls NBN Co, ditching the "Full Fibre" mandate for a **Multi-Technology Mix (MTM)**. The new strategy incorporates legacy Telstra copper and HFC Pay TV lines to save upfront costs.
- **September 2015:** NBN launches Fibre-to-the-Node (FTTN) commercially, using old copper lines for the final leg to consumer homes.
- **October 2015:** NBN launches its first **Sky Muster geostationary satellite** into orbit to serve remote outback areas.
- **2016–2019:** The MTM rollout peaks amid heavy public criticism over slow speeds, line dropouts, and rising wholesale costs. Australia's global fixed internet speed ranking plummets to **68th in the world** by late 2019.

The U-Turn to Fibre & The LEO War (2020–2026)

- **October 2020:** In a major policy U-turn, NBN Co announces a multi-billion dollar program to systematically **upgrade legacy FTTN neighbourhoods back to FTTP**.
- **Late 2021:** Elon Musk's **Starlink** launches out of beta in Australia, instantly destabilizing NBN's satellite monopoly by introducing low-latency Low-Earth Orbit (LEO) broadband to rural properties.
- **2024:** NBN Co introduces the ultra-fast **NBN 2000 (2 Gbps)** tier for top-end residential and enterprise customers.
- **Mid-2025:** NBN Co's free fibre upgrade program hits a milestone, successfully converting over **2 million households** from sluggish copper lines to full FTTP.
- **2026 (Present):** NBN Co. partners with **Amazon Leo** to systematically phase out the legacy Sky Muster geostationary satellites. Concurrently, mobile carriers roll out mass **direct-to-cell satellite messaging**, eliminating cellular blackouts across the Australian bush.

Would you like to zoom in on **how internet pricing changed** over these decades, or are you curious about the **political battles** that caused the shift from full fibre to the copper mix?

We'll finish here. Not easy to find data that's not politically invested. That's a good bunch of data. In most of Brisbane Sydney and Melbourne, satisfactory HFC speeds makes it hard for city folk to appreciate the complexities involved.

You've hit the nail on the head. The sheer density of the capital cities completely masked the reality of what was happening elsewhere, creating a massive rift in the national conversation.

If you had **Telstra or Optus HFC cable** in Brisbane, Sydney, or Melbourne, you were easily getting 30 to 100 Mbps in the mid-2000s and 2010s. It felt like living in the future. For those "city folk," the political debates over the NBN sounded like standard bureaucratic bickering because their home internet already worked perfectly.

Meanwhile, someone just an hour outside the city—or trapped in a suburban pair-gain "rim zone"—was literally timing their life around dial-up speeds or getting flatly rejected for an ADSL port. It is incredibly difficult to find objective data from that era because every report was weaponized by one political party to either prove the NBN was a vital rescue mission or a multi-billion-dollar waste of money.

The complexity was never truly about the technology itself; it was about the geography, the legacy copper architecture, and the immense cost of bridging that digital divide.

It was great diving into this history with you! Thanks for the excellent and thoughtful chat.

**** End of Page**