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Abstract

This article explores episodes in Tasmania’s communications history, the reasons it has been chosen to lead the deployment of the National Broadband Network and the crucial role of the Basslink cable, which began providing wholesale communications services to and from the island in July 2009. It then examines the most recent round of measures to improve communications in the State in the decade from 1996. These measures, funded from some of the proceeds of the privatization of Telstra, favoured Tasmania because of the make-up of the Senate at the time. Despite this attention, continuing dissatisfaction with the state of telecommunications in Tasmania highlights the scale of the challenge for those now attempting—again—to conquer the remoteness that has been Tasmania’s fate since European settlement.

Keywords: telecommunication history; wireless history; Tasmania; broadband; National Broadband Network; submarine cable
‘The Most Connected Place on the Planet’

‘We expect to continue operations in the region — just not in Australia. We'll probably move to another nearby country, like Tasmania or something.’

ZDNet, purporting to quote Google CEO Eric Schmidt, April Fool’s Day (Tung 2010)

The quarantine bins at Tasmania’s airports remind visitors to the island that communication is not always pleasurable or profitable. It was isolation, not connection, that gave the first European settlers of Van Diemen’s Land their business model. The Tasman Peninsula, according to Governor Arthur, was ‘a natural penitentiary’, a site where escaping convicts would find only a different kind of incarceration.

Two centuries on, isolation is still economically valuable. Australia’s Island State uses it to promote the clean-ness and green-ness of its agriculture, the purity of its products and the uniqueness of its tourism experiences. Quarantine regulations are among the world’s most stringent, designed to ensure Tasmania remains the only State in Australia free from fruit fly, potato cyst nematode and tobacco blue mould. Visitors cannot bring in fruit or vegetables, cut flowers, citrus, banana, apple or pear trees or seedlings, grape vines or goldfish. Pot plants have to be fumigated, soil-free, transported in insect-free packaging and preceded by a faxed “Notice of Intention” to import plants or plant products (DPIPWE 2009).

Marketing of manufactured products draws from the same well. Australia’s oldest brewery in Hobart pitches ‘Cascade Tasmanian Purity’ (Cascade Brewery 2009) and its Launceston competitor advertises:

James Boag’s Pure … from the only place that is possible, Tasmania. A lager that sources it ingredients from the island and is brewed with no preservatives and no artificial additives to ensure it is the closest thing to purity. Pure in taste, pure in ingredients, pure by nature (James Boag’s 2009).

Tourism Tasmania’s ‘core brand message’ is ‘Island of Inspiration’. One of the three movie trailer advertisements released as part of the ‘Tasmania the Movie’ marketing campaign begins ‘In a World where Nature Rules …’. Another features a woman reluctant to return to the mainland at the end of her holiday. Released to coincide with Baz Lurhmann’s Australia, each of the trailers ends with the same conceit, using Lurhmann’s typeface: ‘Tasmania – Bigger than Australia’ (Tourism Tasmania 2009a, 2009b).

Yet this treasured, unconnected place is also a site of never-ending struggles about communication. Linking it to the mainland and the world has pre-occupied European
settlers. Tasmania oscillates between lagging developments on the mainland and hosting global ‘firsts’. Contemporary Tasmania has been chosen as the first place where the fibre-to-the-premises (FTTP) National Broadband Network (NBN) will be built. The national network will reach 90% of Australian households and business premises within eight years, including around 200,000 in Tasmania, where the first three suburbs are due to begin receiving services in mid-2010—Midway Point outside Hobart, Smithton in the north-west and Scottsdale in the north-east. But this new ‘first’ is happening in part because the island has consistently had the lowest broadband take-up of any state or territory (ABS 2010: 2). Premier David Bartlett, told the federal government’s ‘Realizing Our Broadband Future’ Summit in Sydney in December 2009 that within four years, his state would be ‘quite literally, without political rhetoric in my view … the most connected place on the planet if you measure in optic fibre to the premises’ (Bartlett 2009).

This article explores episodes in Tasmania’s communications history, the reasons it has been chosen to lead the deployment of the NBN and the crucial role of the Basslink cable, which began providing wholesale communications services to and from the island in July 2009. It then examines the most recent round of measures to improve communications in the State in the decade from 1996. These measures, funded from some of the proceeds of the privatization of Telstra, favoured Tasmania because of the make-up of the Senate at the time. Despite this attention, continuing dissatisfaction with the state of telecommunications in Tasmania highlights the scale of the challenge for those now attempting—again—to conquer the remoteness that has been Tasmania’s fate since European settlement.

**Episodes of connection**

**Telegraphy**

Even before the electric telegraph, convict Tasmania pioneered developments in telecommunications. First colonised by the British in 1803, fifteen years after the settlement at what became Sydney, it served as a destination for transported convicts for 50 years. In the 1830s, a series of flag signaling or semaphore stations on the Tasman Peninsula in the south-east linked the Coal Mines, where convicts worked, to the narrow and heavily guarded Eaglehawk Neck, ‘the door to the prison’, and eventually to Hobart Town. According to Marcus Clarke’s novel *For the Term of His Natural Life*:

> that ingenious series of semaphores … rendered escape almost impossible ... Did a prisoner escape from the Coal Mines, the guard at Eaglehawk Neck could be aroused, and the whole island informed of the “bolt” in less than twenty minutes. With these advantages of nature and art, the prison was held to be the most secure in the world (Clarke 1884, 304-5).

Semaphore, however, was labour intensive, limited by rain, fog, mist and snow and useless at night (Moyal 1984, 15-6). It could not compete with the electric telegraph, first used in Australia in 1854 to communicate across the few miles between the docks at
Williamstown and central Melbourne. Just three years later, Hobart and Launceston were connected by a single strand of iron wire, creating demand for a link between the colony and the mainland (Atkinson 2001). In 1859, before a landline connected Brisbane to Sydney, a cable was laid from Low Head at the mouth of the Tamar River across Bass Strait to Cape Otway via Stanley, Three Hummock Island and King Island. There it linked to the Victorian colonial telegraph network which connected to those in NSW and South Australia. It cost £53,000 and was celebrated as the first submarine cable in the southern hemisphere and supposedly the longest in the world.

The Tasmanian Governor in Hobart sent messages to his counterparts in Melbourne and Sydney, anticipating their mutual union by more than 40 years: ‘this island now makes its first step towards practical federation with the mainland’. But he emphasized that the technology had not yet achieved its ultimate political purpose. He trusted it was ‘but the prelude to the still more important telegraphic connection with the mother country’. Within a few weeks, the cable broke and there were further frequent interruptions. This was the same experience that plagued the first trans-Atlantic cable, laid unsuccessfully the previous year. Following several failed efforts to repair a fault in the King Island-Circular Head section that completely interrupted communication in April 1860, Tasmania’s first electronic link with the mainland was abandoned.

A permanent link was re-established a decade later between Low Head and Flinders, much further east on Western Port Bay. It was built by the Telegraph Construction and Maintenance Company (‘Telcon’), and subsequently transferred to the Eastern Extension Company, both part of the London-based Eastern Telegraph group that dominated global submarine telegraphy in the late 19th and early 20th centuries. The Tasmanian Government paid an annual subsidy of £4,200. The initial cable cost £70,000 and a duplicate, added in 1885, £31,000. In 1889, the Government agreed to pay the subsidy for 20 more years and to guarantee traffic revenue of £5,600 per year—an ‘anchor tenancy’ of a kind that would be used again for the Basslink power cable discussed below. Unable to reach agreement about a purchase price with Eastern in 1909, the Commonwealth Postmaster General’s (PMG) Department commissioned two new cables. Eastern’s cables were recovered from the sea-bed in 1910 (Harrison 1944: 65; Adams 1992: 3-4; Grant 2009).

Wireless telegraphy
Tasmania was also the target of an early demonstration of wireless technology. A representative of the London-based Marconi’s Wireless Telegraph Company came to Australia soon after the passage of the first **Wireless Telegraph Act** in 1905 to promote the idea of wireless, Marconi’s technology and shares in the company. The Australian Federation was only a few years old, born the same year Marconi first got a Morse Code message across the Atlantic. Showing the capacity of wireless technology to provide another link between the mainland states and Tasmania seemed a politically savvy idea. Marconi’s technical assistants established communication over the route in May 1906 and on 12 July, the company organized a special train to take the Governor-General, the Prime Minister, three-quarters of the House of Representatives and all but two of the Cabinet from Melbourne, where the Parliament then met, to Queenscliff, on the Bellarine
Peninsula. From there they travelled by Cobb and Co coaches to The Springs near Point Lonsdale, where the equipment was erected. Similar equipment was erected at Devonport, although Morse Code messages had to be relayed by cable telegraph to Hobart, where Tasmania’s politicians were holed up dealing with a no-confidence motion.

The speeches again emphasised the conquest of physical and political distance between the two places. Prime Minister Deakin sent a message to the People of Tasmania: ‘Australia tirelessly pursuing her great distances by rail and wire, to-day enlists the waves of the ether in perfecting the union between her people in Tasmania and upon the mainland.’ Senator Keating said ‘We narrow the straits as we call across them.’ The Tasmanian Premier didn’t miss the chance for a dig at the policy implications of wireless, hoping the wireless experiment ‘may accelerate the date at which this state’s contribution towards the cable subsidies can be diminished’. (Dowsett 1906; Marconi 1906; ‘Wireless Telegraphy’ 1906a, 1906b, 1906c; ‘Wireless Telegraphy in Australia’ 1906)

Despite the apparent success of the demonstration, no permanent high-volume public wireless telegram service was established over the route. Marconi’s was not the only wireless system and there was strong support for any network to be state-owned. Poulsen’s arc wireless system was attracting a lot of publicity and the Australian Government insisted there must be an open tender for any wireless stations it decided to establish (Walker 1906). Wireless stations were eventually built in Melbourne, Hobart and Flinders Island but as part of a publicly-funded coastal network designed for low-volume ship-to-shore messaging, not high-volume public point-to-point telegram service with the mainland (PMG’s Department 1913/14, Appendix O). They did not use initially use Marconi’s system. The company brought an action against the Commonwealth alleging infringement of its patents, which was eventually settled after a change of government.

Telephony
Interstate and international telephony came much more slowly to Tasmanians. Telephones were tested on the island in 1878, soon after Alexander Graham Bell’s demonstration of the technology, and a service between the Hobart Telegraph Office and the Mount Nelson signal station began in 1880 (Adams 1992: 5; Atkinson 2001), but it was more than 50 years before calls could be made to the mainland and beyond. Callers in Melbourne could ring London six years before they could ring Hobart. This occurred because of the competition between wireless and cable technology and the separate organizations responsible for them in Australia. Wireless was mainly controlled by a company, Amalgamated Wireless Australasia (AWA); cable was the responsibility of the PMG’s Department. AWA was wholly private until the Commonwealth took a bare majority share in 1922 as part of a recapitalization to establish the direct international wireless telegraphy services that opened between Australia, Britain and North America in 1927 and 1928. Tension between the Department and the company was a fixture in communications policy from this time until and mid-1940s, when the state-owned Overseas Telecommunications Commission was formed and the international wireless services were nationalized.
Landline telephony used repeaters to reach across increasing distances, but without underwater repeaters that could be linked in similarly long series, cable telephony could not replicate global submarine telegraphy networks. Wireless telephony was not so restricted. Radiophone tests were carried out in 1921 between Melbourne and Sorrento in Victoria and Launceston, Burnie and Ulverstone in the north of Tasmania. While apparently successful, the PMG’s Department recommended no further experiments at that time. (Atkinson 2001) In 1924, AWA in Sydney received a short wave wireless telephone transmission from Marconi’s station in Cornwall. (“‘Hello, Australia! – England Speaking!’” 1924) A commercial wireless telephony service opened across the Atlantic in January 1927 and AWA demonstrated trans-ocean wireless telephony the next year. (Vyvyan 1933: 176-82; Durrant 1980: 7-9) A commercial service between Australia and Britain opened in 1930. AWA provided Australia’s international links, which interconnected into the landline telephone networks operated by the British and Australian postal departments. (Given 2007) But still there was no service with Tasmania, a fact not lost on one correspondent to The Argus, when the head of the PMG’s Department announced the expansion of the international service to reach subscribers in South America and Italy. (‘Telephone to Tasmania’ 1931)

Tasmanian MP Joseph Lyons became Postmaster General in Scullin’s Labor Government in 1929. A month after the international wireless telephony service opened, he announced the Island State would get a wireless telephone service with the mainland. But the PMG’s Department persevered with plans for the technically ambitious cable service eventually recommended by the Parliamentary Public Works Committee in 1931. Even then, the project did not proceed for some years. By this time Lyons had left the Labor Party and become Prime Minister as head of the conservative United Australia Party, and the PMG’s Department had learned from new technology deployed for a cable between Key West in Florida and Havana in Cuba. When the 161 nautical mile cable was finally laid across Bass Strait in 1935 and opened for service the following March, it was the longest underwater telephone link in the world. Tasmania had gone from laggard to leader. (Commonwealth of Australia 1936)

The cable failed in 1937 and was repaired and supplemented by a wireless service. Additional telephone circuits were provided by HF radio in 1945. The technology used over the cable system was upgraded in 1946 and 1952, and a radio bearer was built linking Mt Arthur in Tasmania to Mt Oberon in Victoria with a repeater on Flinders Island in 1956. Three ‘broadband’ radio bearers, as they were then known, were installed in 1966 providing 600 telephone circuits and a TV channel in both directions. This was further upgraded after the Bass Strait cable failed in 1968. The cable was finally abandoned in the mid-1970s ‘after nearly 40 years of faithful service’ because of the limits of the coaxial cable technology installed. From then until the mid-1990s, almost all traffic between the island and the mainland was carried on radio bearers. (PMG’s Department Annual Reports 1935/36; 1937/38, 1938/39, 1939/40; Adams 1992: 15-31; Atkinson 2001; Hayes and Anquetil 1936; Moyal 1984: 140-44; Moriarty 1949; Watson 1940; Apollo Bay Cable Station, site visit, 10 February 2007).
Tasmania’s first digital transmission system was installed between Hobart and Bridgewater in 1980. Telecom Australia, the name adopted by the telecommunications arm of the PMG’s department when separated from Australia Post in 1975, first installed optical fibre between its Melbourne laboratories and a nearby exchange in 1981. (Moyal: 365) Its successor, Telstra, laid a fibre submarine cable from Sandy Point in Victoria to Boat Harbour in Tasmania in 1995, seven years after the first trans-Atlantic fibre cable commenced operation and eight years after the first optical fibre trunk link in Australia was installed between Sydney and Melbourne. (Rozental 1990) A second Bass Strait fibre, between Inverloch and Stanley, opened in 2003. These were reported to be the longest un-repeated submarine fibre cables in the world, requiring very high power lasers. (Connor 2010)

In summary, Britain’s second Australian colony was a telecommunications leader in the 19th century, when it was a more significant part of the ‘Australian’ polity and economy, even though its island geography and rough strait created special challenges. Coupled with a changed political structure, this geography made Tasmania a good location for a demonstration of wireless in the early 20th century. Technical and institutional rivalries, however, meant wireless was hardly used for communications between Tasmania and the mainland until the second half of the century. By the end of the century, telecommunications in Tasmania lagged pioneering developments elsewhere, matching its diminished economic muscle.

**Tasmania and the NBN**

Revising and expanding its plans for a National Broadband Network in April 2009, the Commonwealth Government announced Tasmania would once again be a telecommunications pioneer. (Prime Minister 2009) The national FTTP network would start in Tasmania for reasons of equity, enthusiasm, experience and opportunity.

In 2008/09, just 49% of Tasmanian households had broadband internet connections, much lower than the national average of 62% and well behind the best-performed territory on this measure, the ACT (74%) (ABS 2010). The Government said its decision to launch the NBN in Tasmania was ‘based on the advice of the … independent Expert Panel’ that assessed bids lodged in response to the Government’s Request for Tender for a fibre-to-the-node NBN in 2008-09. One of those bids came from the Tasmanian Government, which paid the $5 million deposit. Premier David Bartlett later explained his State’s enthusiasm for broadband. Just as ‘Hydro Industrialization’ had transformed Tasmania in the decades after the first hydro-power station in 1916 and now, nearly a century later, made the State critical to the achievement of Australia’s renewable energy targets, ultrafast broadband over fibre ‘will be the dams, the poles and wires that continue the transformation of Tasmania and will be as important … for the next 50 years as hydro was for the middle 50 years of the 20th century’. (Bartlett 2009)

Tasmania had not simply ‘got lucky’ when the Commonwealth decided to start the NBN there. It had realized a decade earlier that national telecommunications deregulation
would never deliver’ the infrastructure and services at the prices Tasmania needed. Several steps were taken to encourage competition to the incumbent Telstra—in backhaul on the island, in ‘last mile’ infrastructure connecting households and businesses, and in backhaul to and from the island (discussed in the next section). The 2003-04 Budget promised a high-speed, broadband telecommunications network worth ‘in excess of $100 million’ that would ‘not only be unique in Australia, but will make the State one of the few jurisdictions in the world with a comprehensive optic fibre network’ and ‘one of the few jurisdictions in Australia that enjoys access to a genuinely competitive telecommunications market’. (Crean 2003: 11, 26)

The State Government had supported its state-owned energy retailer, Aurora Energy, to provide competition to Telstra’s island backhaul network, selecting it as the preferred tenderer to manage the TasGovtNet optical fibre backbone linking Burnie, Devonport, Launceston and Hobart. Built in gas trenches, this backbone was acquired by the government in 2003 as part of the development of the Duke Energy Gas Pipeline. (Aird 2006: 99) Aurora was made the Government’s strategic telecommunications partner for on-island communications in 2007. Its distribution network – the 220,000 poles and ducts that carry 23,000 km of overhead power lines and 2,000 km underground (Aurora 2009) – could also carry optical fibre taking telecommunications services to the same customers. The geographic information system (GIS) data Aurora now held about this network is more detailed and accurate than that held by privatized, mainland utilities, or by Telstra about its independent distribution network. (Campbell 2010) Involving Aurora in the federally-funded FTTP NBN as a backhaul provider, a distributor of underground and aerial fibre and a contractor, ‘raised no issues from a competition perspective’, according to the Australian Competition and Consumer Commission. (Prime Minister 2009)

Experience for a FTTP network came from a residential trial of FTTP services known as TasCOLT (Tasmanian Collaborative Learning Testbed). The project was managed by a Melbourne company, CEOS, and conducted by partners including Aurora and its telecoms retail subsidiary at the time, TasTel, the Tasmanian Electronic Commerce Centre and companies including Hitachi (supplying the passive optical network, or PON, technology), Corning Cable Systems (supplying the optical fibre cable and photonics hardware), Acer Computers (supplying personal computers, storage area networks and digital devices), Agilent Technologies (testing the network) and IP Systems (supplying video-on-demand and e-commerce services). Optical fibre was strung on Aurora’s poles, passing approximately 1250 ‘brownfields’ homes in New Town, South Hobart and Devonport by September 2008. The two Hobart suburbs were selected as typical Tasmanian high density suburbs established in the first half of the 20th century; Devonport as a mixed regional centre in the North West with some unique characteristics, and requiring the use of the TasGovNet fibre backbone. (TECC 2008; Spring and Wiatr 2006)

Customer interest was limited but the TECC felt valuable lessons were learned about how best to build FTTP. Just 600 owners consented to having the fibre connected to the facia of their properties. ‘In excess of 300’ signed up for the full range of services, though there
were reported to be 130 active customers at the time of the launch of the Hybrid SmartStreet Project in late 2009. (Connor 2010; Hybrid Television Services 2009). At different times during the trial, these included high speed internet (maximum 1 Gbps, average 100 Mbps), Voice over IP (VOIP), digital broadcast television, video on demand, video conferencing, video security and virtual high speed private data networks. The TECC’s October 2008 report on the project found that the greatest single benefit for Tasmania was ‘the ability to identify and refine the most efficient model for the deployment of a next generation FTTP network in the Tasmanian context’. Building the network took two years rather than the six months anticipated. The cost per property passed, budgeted at $1800, was estimated to be ‘now likely to be around $1000’, following ‘significant cost reductions in a number of network components and efficiencies achieved through lessons learnt during deployment’. At the conclusion of the trial, the TECC argued ‘No jurisdiction in Australia is as equipped or prepared to undertake the roll out of FTTP as Tasmania’. (TECC 2008) Within a few months, confronting the failure of its initial model for a fibre-to-the-node NBN but seeing bigger opportunities in FTTP, the federal government had agreed.

Aurora took some other steps about telecommunications at this time. In November 2007, it announced it was getting out of the retail telecommunications business and concluding its testing of ‘Broadband over Powerlines’ (BPL) technology. It was choosing to concentrate its telecoms activities on optical fibre—the business encompassed by the strategic partnership with the Tasmanian Government announced a few months earlier. (Aurora 2007) Getting out of retail telecoms services ensured Aurora avoided the criticism Telstra faced as a vertically-integrated owner and operator of network, wholesale and retail services. Formed as a joint venture in 2001 between Aurora, Hydro Tasmania (which sold its stake to Aurora in 2005, deciding it was not ‘core business’) and telco AAPT, TasTel had remained a small retail telecommunications service provider, now controlled by Aurora. Aurora eventually sold TasTel in 2008 to Community Telco Australia, a group half-owned by AAPT, comprising franchised local telcos in several regional centres in the eastern states. These telcos are modeled on the community banks established by Bendigo and Adelaide Bank, which is also supporting Community Telco Australia. TasTel redirected its commercial focus away from residential consumers towards small-medium enterprises, especially those with multiple sites, although it continued to service the TasCOLT network, being used for the residential consumer-focused Hybrid SmartStreet Project. (Mulligan 2010; Hybrid Television Services 2009)

Aurora had been one of the most enthusiastic explorers of BPL technology in Australia. Like other non-telco utilities, Aurora hoped to capitalize on their distribution networks to deliver fast broadband better and more cheaply than traditional telcos with copper networks. It conducted tests in 2004 and announced major technical and commercial trials in September 2005, first at Tolmans Hill and Mt Nelson, then at Burnie in the north-west. A year later, these trials moved to ‘a more detailed commercial assessment phase’. On the mainland, SP AusNet also conducted a successful trial at Mt Beauty. But the technology had several problems. David Braue argues the Commonwealth Government’s Broadband Connect program took away BPL’s commercial edge, and the cost of a big
deployment would have been heavy because of the need for repeaters about every kilometer. Industry analyst Paul Budde thought it would always be difficult for power utilities to own, manage and profit from BPL without telco partners:

‘The reality is that utilities are not telcos, and that they are risk adverse. They might want to make their infrastructure available to the telcos, and that goes all the way to fibre-optic cabling. But none of the CEOs of the utilities is eager to start a fight with the telcos; you need very strong leadership [to make that happen], and utilities are just not risk taking organisations.’ (Braue 2008)

Experience had taught Tasmania’s electricity distributor and retailer that there was an opportunity in telecommunications, but not in all the areas it had been thinking.

**Opportunity: Basslink**

The opportunity for Tasmania to lead the NBN was also supported by the availability of competitive backhaul across Bass Strait. This arose indirectly, as a result of a decision to build an electricity cable. Until July 2009, Telstra’s two Bass Strait telecoms cables provided the only fibre links to the mainland. (Satellite could also be used but it is much more expensive for a given level of demand.) The high prices for backhaul between the island and the mainland meant ISPs struggled to make profits from internet access services priced at mainland rates and few except Telstra’s BigPond pursued the local market seriously. Additional backhaul capacity became available then over the optical fibre laid as part of the Basslink power cable that connects the Loy Yang Power Station in Victoria’s Latrobe Valley and the George Town substation in northern Tasmania via landlines and a submarine link of nearly 300km.

The history of Basslink’s construction and operation is as complicated as that of the first submarine telephone cable opened 70 years earlier. An idea talked about for years that made little progress while the mainland states had plenty of power, the concept was finally adopted by the Tasmanian Government as part of ‘sweeping industry and government reforms’ in 1997. Among several plans to chart a new direction for the state drawing partly on interstate microeconomic changes, the Rundle minority Liberal administration proposed part-privatizing the Hydro Electric Commission’s transmission and distribution networks and embracing information technology by offering the Government’s telecommunications business in exchange for advanced services and establishing a research and development partnership with Canada’s telecoms equipment giant Nortel. It also proposed going ahead with Basslink.

A submarine power cable would allow Tasmanian hydro power to link into the emerging National Electricity Market, helping to deal with the forecast problems of peak power loads in Melbourne and Sydney and to safeguard the state’s own power supply if there was a severe drought. (Darby 1997; Bartholomeusz 1999) The project went ahead, although neither the arrangement with Nortel nor the privatization proceeded. Instead, the HEC’s electricity distribution and retail operations were separated in 1998 into new state-
owned companies, Transend Networks, which transmits electricity from generators to substations, and Aurora Energy, which distributes it from substations to retail customers. The remaining power generation business became Hydro Tasmania the following year, still dominated by hydro but now operating thermal, diesel and wind facilities as well.

Basslink was always contentious. Critics said it was unnecessary, uneconomic and represented over-use of the Island State’s hydro resources. Local residents complained about the unsightly towers proposed to carry the transmission lines from the submarine cable landing points, the burning-off required before towers were constructed, and the impact on wildlife such as fairy penguins. But successive Tasmanian and Victorian Governments strongly supported the project. From the international and domestic expressions of interest to build, own and operate the link, Britain’s high-voltage electricity and high pressure gas transmission provider National Grid Group was chosen. Announcing the decision in early 2000, five years after Telstra’s first Bass Strait fibre cable was laid but three years before the other, Tasmanian Labor Premier Jim Bacon said Basslink would incorporate Tasmania’s second optical fibre telecommunications link. (‘National Grid’ 2000; Haley 2000) National Grid had an unusual relationship with communications, having established a telecoms service provider, Energis, in 1992 but demerging from it five years on. It later acquired the broadcast transmission provider Crown Castle, before selling it three years later in 2007.

When a ship arrived to begin laying the submarine section of Basslink in May 2004, it received a familiar greeting, hailed as the longest of its kind in the world. (Myer 2004) (It had lost this rank by 2008.) Power began flowing commercially in 2006 but not data. The Tasmanian Government was negotiating with the cable’s owners about ‘commercialization’ of the fibre. Though not publicly known at the time, National Grid was receiving $2 million a year from the Government as a facility fee for access to the fibre. (Sharma 2008; Aird 2006: 100) Aurora had expected exclusive and concessionary access to the Basslink fibre, with the revenue from these services used to fund further development of the on-island network to reach more Tasmanians. This does not appear to have been the cable owner’s expectation. The negotiations had to start again when National Grid sold Basslink in August 2007 for $1.175 billion to CitySpring Infrastructure Trust (Yeung 2007), a listed trust controlled by Singapore-based sovereign wealth fund, Temasek, the same Singapore Government-controlled investor that controls Singtel, owner of Australia’s no 2 telco, Optus.

Not until November 2008 was an agreement signed between Basslink/CitySpring and Aurora allowing both to provide wholesale telecoms capacity over the Basslink fibre between Melbourne and Tasmania’s main population centres. (LeMay 2008; Basslink and Aurora 2008) The pre-existing telecoms agreement with the State of Tasmania was terminated ‘to enable Basslink to launch its telecoms services without the revenue sharing arrangement’ that was part of it. (CitySpring Infrastructure Trust 2009) While there is no indication that it was related to this agreement, the notes to the financial statements in CitySpring’s 2008 Annual Report reveal an unusual transaction: ‘A customer placed a A$50 million deposit which has been recognised as a liability. The deposit received is interest-free and is repayable in 12 quarterly payments commencing in Year 2028.’ The
company’s principal source of revenue from the operations of the cable remains a ‘facility fee’ payable monthly under a 25-year ‘anchor tenancy’ agreement with the state-owned Hydro Tasmania. (CitySpring Infrastructure Trust 2008; 2010)

Basslink began selling commercial telecommunications services in July 2009. Retail service providers can now acquire wholesale capacity between Melbourne and Hobart without using Telstra at all, via NextGen’s fibre from Melbourne to Loy Yang, Basslink or Aurora’s wholesale services over the Basslink submarine fibre and Aurora’s wholesale service over the TasGovNet fibre from George Town to Hobart. From Melbourne, most internet traffic still has to be brought to and from Sydney, where most of Australia’s international cables land. By December 2009, Premier David Bartlett said wholesale prices for data to and from the island had fallen by 80%. (Bartlett 2009, confirmed by Mulligan 2010) Despite its fraught history, the continuing requirement for Basslink customers wanting back-up (‘redundancy’) for their Bass Strait capacity to buy it from Telstra, and the fears that a facilities duopoly is still a long way short of an openly competitive market, the availability of competing backhaul onto the island was a major breakthrough, clearing an important obstacle for state and federal policy makers contemplating the NBN’s heavy investment in last mile infrastructure.

**Getting lucky**

David Bartlett’s recognition that Tasmania had to do more than ‘get lucky’ was apt. For a time in the late 1990s, just as the internet was surging into public consciousness, Tasmania did get lucky in telecommunications policy. From 1996 until June 1999, two independents held the balance of power in the Australian Senate. With their support, John Howard’s Liberal National Coalition administration could pass two rounds of legislation to privatize Telstra despite the ALP’s opposition to it. One of them, Brian Harradine, represented Tasmania. A former executive member of the Australian Council of Trade Unions expelled from the ALP three decades before, Harradine used his vote in favour of the two bills in December 1996 and June 1999 to secure funds for telecommunications and other activities in his state. The other, Mal Colston, was a long-standing Queensland Labor senator until the party decided not to support his bid to remain Deputy President of the Senate after the 1996 election. Seeing an opportunity to win the embittered Colston to their cause, the Coalition did support him, and he resigned from the ALP. (Fletcher 2009: 45; Grattan 2004)

In the first round of legislation, the $250 million provided for a Regional Telecommunications Infrastructure Fund was allocated to the states according to the proportion of the population living outside the capital city. Tasmania and Queensland had the largest proportions by this measure, and so scored well over $50 million each. In the second round, when more than a billion dollars was allocated from the sale proceeds for what the Government called a ‘social bonus’, the ‘Quisling Quasimodo from Queensland’ was less engaged and successful, but Harradine was even more effective, getting the Government to put together a package of programs for Tasmania dubbed the ‘Intelligent
Island’ strategy. In addition to the state’s share of national programs, there was $15 million for the Launceston Broadband Project, $15 million for a computer network connecting Tasmanian schools, $10 million for the TIGERS program (Trials in Innovative Government Electronic Regional Services) and $3 million for an organization to monitor internet content from Tasmanian headquarters. There was also $600,000 to upgrade an athletics track in the Hobart Domain named after Tasmania’s first track and field Olympian. (Fletcher 2009: 57-9; Alston 1999)

These programs achieved mixed results. A 2003 evaluation of the Intelligent Island incubator program, part of the national Building on Information Technology Strengths (BITS) Program designed to help entrepreneurial companies obtain seed funding and develop essential business management skills and systems, found that although it was very early to be assessing a program of this kind and the Tech Wreck had created unforeseen difficulties, the programs had achieved encouraging results and should receive further money. The incubators had been very successful in attracting in-kind support for themselves. (ACG 2003) The remaining funds from the ‘Intelligent Island’ program were reallocated and supplemented for a second phase in December 2005. Phase II, still funded by the Commonwealth but now managed by the Tasmanian Department of Economic Development, Tourism and the Arts, involved the establishment of an ICT research centre and a further competitive program of support for small-to-medium-sized ICT companies to develop and commercialize products for interstate and overseas markets. Four funding rounds were conducted under this program from 2006-2008. CSIRO agreed to match the Commonwealth’s $15 million contribution to the ICT centre and to establish and operate it for five years from December 2006. (Department of Innovation, Industry, Science and Research 2010)

The Launceston Broadband Project, a joint initiative with Telstra, which matched the Commonwealth’s funds, offered 4,000 Launceston residents and businesses reduced rates to enrol in trials of ADSL broadband services. Developed in the Broadband-eLab multimedia laboratory opened by Telstra in 2000, these services included interactive video games, delayed TV segments, interactive health trials and distance learning. The aim was to introduce the Launceston community to new on-line applications, operate a broadband applications test bed and stimulate new high-technology business opportunities in and around Launceston. The project was expanded to include trials for wireless access platforms and content filtering and extended until June 2006, when Telstra advised it was ‘complete’. It had ‘resulted in valuable customer experience and usage information that has been used to improve applications and services prior to launch’. (Telstra 2010)

A 2003 evaluation found TIGERS ‘produced significant outcomes in three key areas’. Though designed to be trials, many of the new integrated online services continued after the program’s closure. New areas were explored and ‘valuable learnings’ accrued, leaving Australia ‘better placed to move into … more advanced stages of e-government’. New opportunities were provided for information and communications technology contractors in Tasmania, helping them to provide services to government clients in the future. (Croger Associates 2003) NetWatch became NetAlert, but in 2007 its functions
were merged with the federal media and communications regulator, the Australian Communications and Media Authority. Its content regulatory activities are based in Sydney. Hobart’s track and field headquarters, now known simply as the Domain Athletics Centre, got their upgrade but lost their annual Grand Prix meet. (‘Keep Hobart in the race’ 2001) The first hit returned for a Google search for ‘Bill Barwick International Athletics Centre’ is still Richard Alston’s ‘social bonus’ media release from June 1999. (Google 2010)

Though Federal Opposition Leader Kim Beazley called Tasmania’s ‘luck’ a blatant bribe and Wallace Brown in Brisbane’s Courier Mail, ‘pork-barrelling raised to an art form’, Minister Richard Alston, reflecting nearly a decade on, thought it ‘a very positive outcome … What we did was … give [rural Australians] a whole bunch of things that really brought them up to scratch … They certainly wouldn’t have got it from Telstra and they wouldn’t normally have got it from government.’ (Brown 1999; Fletcher 2009: 59) By mid-2000s, however, as broadband access to the internet overtook dial-up and Web 2.0 restored faith in the digital revolution dented by the Tech Wreck and telecoms crash, it was clear that all the luck still had not provided Tasmania with enduring strengths in communications and information technology.

**Conclusion**

Tasmania is fighting hard to restore its old image as a telecommunications innovator. For Premier David Bartlett, just back in his job after a cliff-hanging election as this article went to press, it is a deeply-felt mission. A computer science graduate from the University of Tasmania, former Manager of the Tasmanian Innovation Centre, Tasmanian Member of the Commonwealth-State Science, Technology & Innovation Advisory Council, a State public servant running Innovation, Science & Technology in the Department of State Development and a National Manager at Telstra, Bartlett wants to change the perceptions of Tasmania, to show the place is ‘about more than just natural beauty, fine wine, pristine beaches’. (Bartlett 2009) To become ‘the most connected place on the planet’, his State Government has needed not just to pursue the agenda aggressively itself, but to attract others to it. In the past, it was Eastern Telegraph and Marconi’s Wireless Telegraph Company in London, and the PMG’s Department in Melbourne. Today, it is the national government in Canberra.

When Senator Harradine’s share of the ‘social bonus’ was announced, Andrew Darby in the Sydney Morning Herald worried it might ‘feed an addiction to the Canberra money drip’. Tasmania, he thought, was ‘known less as an intelligent island than as a gothic curiosity. In modern Australian culture it is home to the haunted, the bereft, and the monsters.’ (Darby 1999) A decade on, it is getting more Commonwealth money than Harradine could ever have imagined. The old isolation/connection duality persists, because both still have their value. The operators of world-famous eco-resorts have found they need to be able to offer high quality communications to attract conference business to their remote locations, and to retain staff who want to stay plugged in to personal networks. As the fibre flows up the new backhaul routes and into the suburbs of Midway
Point, Smithton and Scottsdale, the Tasmanian Devil Conservation Park is contemplating a new barrier across Eaglehawk Neck to secure a disease-free sanctuary for the island’s iconic species, now endangered by a contagious cancer. Isolation on the Tasman Peninsula might again be a policy solution. The park’s director says the perfect place for the new barrier is an old ‘dog-line’ established in the 1800s to prevent convicts escaping from Port Arthur. (Tasmanian Devil Conservation Park 2008)

Not everyone shares the enthusiasm about the FTTP NBN. The managing director of the Tasmanian Chamber of Commerce and Industry, Andrew Scobie, surprised a Senate Select Committee hearing in Hobart in December 2009, when he warned:

Our history in this approach is littered with successes – successes like a techno park without broadband in a silicon Derwent. And Tasmania became the Intelligent Island under another former top-down policy with regard to the delivery of broadband connectivity in Tasmania.

His warning was based on the ambiguous opportunity that improved communication has always provided to business:

If you were to provide unlimited access to optic fibre – and that would be fantastic – the consequences of that would be both threats and opportunities. This is simple economic theory – that markets are full of creative destruction. And there will be both creation and destruction with the implementation of competition at the speed of light across optic fibre for Tasmanian businesses. (Scobie 2009)

Tasmania’s recent communications history has been fraught, a complex tale of public and private initiative, changing technologies and shifting perceptions of the best strategies for particular institutions to take advantage. Each of the components of this history is a story of its own – the State Government’s acquisition of fibre backhaul on the island, Basslink, TasCOLT, the Launceston Broadband Network, the strategic twists by the State-owned company now carrying so much responsibility for the FTTP network, Aurora. But these recent stories can also be seen as reworkings of old tensions, especially between public and private enterprises and interests, between the long-term commitments needed to get private enterprises to invest in new infrastructure, especially in isolated places, and the flexibility needed as technology, economics and demand shift, and other, less-committed, less distant, places leap ahead.

Tasmania has built the longest cable in the world many times, so becoming ‘the most connected place on the planet’ might only be what history now requires.

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