

## Section 6: Technical data

This data has been made available to purchasers of *A History of Regional Commercial Television in Australia* (Palgrave Macmillan 2022) as well as a service to other researchers with an interest in regional commercial television history. Please contact Michael Thurlow at [michael@channel35.au](mailto:michael@channel35.au) if you have any questions, queries, or comments.

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### Data sources

The data in this section was derived from the following sources unless otherwise indicated:

- ABCB annual reports, 1961-76
- ABCB licence grant inquiry reports, 1960-76
- ABT annual reports, 1976-1992
- ABA annual reports, 1992-2003
- ACMA annual reports, 2003-2019

Appendix 6.1. Frequency allocations, 1961-77

The following table lists analogue frequencies allocated to regional commercial television stations, 1961-77.

Station	Frequency
<b>Stage 3 stations</b>	
CTC Canberra	Channel 7
NBN Newcastle	Channel 3
WIN Illawarra	Channel 4
RTN Richmond-Tweed	Channel 8
CBN Central Tablelands	Channel 8
BTV Ballarat	Channel 6
BCV Bendigo	Channel 8
GLV Latrobe Valley <sup>1</sup>	Channel 10
GMV Goulburn Valley	Channel 8
DDQ Darling Downs <sup>2</sup>	Channel 10
RTQ Rockhampton	Channel 7
TNQ Townsville	Channel 10
TNT North-Eastern Tasmania	Channel 9
<b>Stage 4 stations</b>	
NEN Upper Namoi	Channel 9
RVN South Western Slopes	Channel 2
NRN Grafton-Kempsey <sup>3</sup>	Channel 11
AMV Upper Namoi	Channel 4
WBQ Wide Bay <sup>4</sup>	Channel 8
ECN Manning River	Channel 8
MTN Murrumbidgee Irrigation	Channel 9
BKN Broken Hill	Channel 7
STV Mildura	Channel 8
FNQ Cairns	Channel 10
MVQ Mackay	Channel 6
SES South East SA	Channel 8
BTW Bunbury	Channel 3
GSW Southern Agricultural	Channel 9
<b>Stage 6 stations</b>	
GTS Spencer Gulf North	Channel 4
VEW Kalgoorlie	Channel 8
ITQ Mount Isa	Channel 8
NTD Darwin	Channel 8
RTS Loxton/Renmark	Channel 5A
GTW Geraldton	Channel 11

Appendix 6.2. Regional relays, 1965-85

The following table lists full and partial regional relays, 1965-85.

Station	Relay
CWN	Full relay ex-CBN from 1 December 1965 <sup>5</sup>
SDQ	Full relay ex-DDQ from 26 February 1966 <sup>6</sup>
GSW	Full relay ex-BTW from 23 August 1968 <sup>7</sup>
ECN	Full relay ex-NRN from 1 March 1969 <sup>8</sup>
RTN	Full relay ex-NRN from 7 August 1971 <sup>9</sup>
ECN	Full relay ex-NEN from 28 November 1971 <sup>10</sup> (replaced ex-NRN relay)
AMV	Substantial relay ex-RVN from 24 October 1972 <sup>11</sup>
MTN	Substantial relay ex-CBN from 1 October 1973 <sup>12</sup>
GLV	Substantial relay ex-BCV from 8 November 1973 <sup>13</sup>
FNQ	Substantial relay ex-TNQ from 25 July 1974 <sup>14</sup>
BKN	Substantial relay ex-GTS from 26 November 1974 <sup>15</sup>
STV	Substantial relay ex-BCV 12 July 1975 <sup>16</sup>
SES	Substantial relay ex-BTV from mid-1980 <sup>17</sup>
VEW	Full relay ex-BTW from 29 December 1985 <sup>18</sup>

**Note:** Full relay = full program taken on relay from parent station with no local opt-outs. Substantial relay = majority of programs taken on relay from parent station with some local opt-outs.

Appendix 6.3. Translator stations, 1966-88

The following table lists translator stations in operation, 1966-88.

	1966	1971	1976	1981	1988
CTC	1	2	3	3	5
NBN	-	-	1	3	4
WIN	-	1	3	5	5
RTN	2	3	3	3	7
CBN	1	2	3	4	6
CWN	1	2	2	2	3
BTV	1	3	3	3	4
BCV	-	1	1	1	1
GLV	-	-	-	3	3
GMV	-	2	3	4	7
DDQ	-	1	1	-	1
SDQ	-	-	-	-	-
RTQ	-	1	3	3	8
TNQ	1	2	3	3	3
TNT	2	7	6	11	11
NEN	-	4	4	7	9
RVN	-	-	-	2	3
NRN	-	-	-	-	-
AMV <sup>19</sup>	1	2	3	4	-
WBQ/SEQ	-	1	3	3	3
ECN	-	-	1	-	1
MTN	-	-	-	1	1
BKN	-	-	-	-	-
STV	-	-	-	-	-
FNQ	-	-	-	9	11
MVQ	-	-	4	4	9
SES	-	-	-	-	3
BTW	-	-	-	5	6
GSW	-	-	1	1	1
GTS	-	2	2	2	3
VEW <sup>20</sup>	-	-	1	2	7
ITQ <sup>21</sup>	-	-	1	1	-
NTD	-	-	-	-	-
RTS	-	-	-	-	-
GTW	-	-	-	-	3
WAW	-	-	-	-	37
IMP	-	-	-	-	8
QQQ	-	-	-	-	14
<b>Total</b>	<b>10</b>	<b>37</b>	<b>55</b>	<b>91</b>	<b>193</b>

## Appendix 6.4. Multi-channel launch dates, 2007-18

The following table list multi-channel launch dates, 2007-18.

Markets	Launch date
<b>Prime/GWN</b>	
Prime HD	15 October 2007
7TWO (Prime only)	23 December 2009 <sup>22</sup>
7mate (Prime/GWN)	25 September 2010 <sup>23</sup>
4ME	25 September 2011 <sup>24</sup>
7TWO (GWN)	Early 2012
iShop TV	1 May 2013 <sup>25</sup>
Racing.com (Prime/GWN)	28 July 2015 <sup>26</sup>
7flix (Prime only)	3 September 2017 <sup>27</sup>
<b>WIN (Primary)</b>	
WIN HD	17 March 2008 <sup>28</sup>
Go! <sup>29</sup>	9 August 2009 <sup>30</sup>
Gem	26 September 2010 <sup>31</sup>
WIN Gold <sup>32</sup>	1 May 2012 <sup>33</sup>
Gold 2	13 July 2013 <sup>34</sup>
WIN HD relaunch (QLD, SNSW, Vic)	1 March 2016
9Life (QLD, SNSW, Vic)	1 March 2016 <sup>35</sup>
9Life (Griffith, Tasmania, SA)	2 March 2016
WIN HD relaunch (Griffith, Tasmania, SA)	2 March 2016
WIN HD relaunch (Regional WA)	10 March 2016 <sup>36</sup>
9Life (Regional WA)	10 March 2016 <sup>37</sup>
<b>Note:</b> WIN switched its primary affiliation from Nine to Ten from 1 July 2016 and commenced carrying Ten sub-channels in place of those from Nine on that day.	
Sky News on WIN	2 September 2018 <sup>38</sup>
<b>WIN (Griffith/South Australia)</b>	
7TWO, 7mate, 9Gem, 9Go!, ONE, Eleven (Griffith)	January-June 2012 <sup>39</sup>
7TWO, ONE, Eleven (South Australia)	From 10 November 2011 <sup>40</sup>
<b>Southern Cross (Ten affiliated stations)</b>	
ONE <sup>41</sup> (QLD, SNSW, Vic)	2 July 2009 <sup>42</sup>
Eleven <sup>43</sup>	11 January 2011
TVSN	From December 2012
Aspire TV	21 May 2013 <sup>44</sup>
Spree TV	17 September 2013 <sup>45</sup>
SBN	17 July 2017 <sup>46</sup>
<b>Note:</b> Southern Cross switched its primary affiliation from Ten to Nine on 1 July 2016 and commenced carrying Nine sub-channels in place of those from Ten on that day.	
Your Money	1 October 2018 <sup>47</sup>
<b>Southern Cross (Seven-affiliated stations)</b>	
7TWO (Tasmania, Darwin)	1 December 2009 <sup>48</sup>
7mate (Tasmania)	24 October 2010 <sup>49</sup>
7mate (Darwin)	24 October 2010 <sup>50</sup>
7TWO (Central Australia, South Australia)	January 2012

<b>Markets</b>	<b>Launch date</b>
Racing.com	29 August 2015 <sup>51</sup>
<b>Seven (Regional Queensland)</b>	
7TWO	1 November 2009 <sup>52</sup>
7mate	25 September 2010 <sup>53</sup>
7flix	28 February 2016 <sup>54</sup>
Racing.com	June 2015 <sup>55</sup>
7food network	1 December 2018 <sup>56</sup>
<b>Nine (Northern NSW and Darwin)</b>	
9HD <sup>57</sup> (Darwin)	17 March 2008
9HD (Northern NSW)	17 March 2008
Go! (Northern NSW)	9 August 2009
Go! (Darwin)	18 October 2010 <sup>58</sup>
Gem <sup>59</sup> (Northern NSW)	26 September 2010
Gem (Darwin)	18 October 2010 <sup>60</sup>
9HD relaunch (Darwin)	26 November 2015 <sup>61</sup>
9HD relaunch (Northern NSW)	1 March 2016 <sup>62</sup>
9Life (Northern NSW)	1 March 2016 <sup>63</sup>
9Life (Darwin)	2017
Your Money	1 October 2018
<b>Imparja</b>	
Go! (North/Central/East)	December 2010
Go! (Eastern SA)	11 November 2011
Gem	26 September 2010
<b>Other</b>	
ONE (Tasmanian Digital Television)	30 July 2009 <sup>64</sup>
ONE (Mildura Digital Television)	1 December 2009 <sup>65</sup>

Appendix 6.5. Analogue switchover, 2010-13

The following table lists analogue switch-over dates for Australian television markets.<sup>66</sup>

<b>Market</b>	<b>Switch-over date</b>
Mildura	30 June 2010
Regional South Australia and Broken Hill	15 December 2010
Regional Victoria	5 May 2011
Regional Queensland	6 December 2011
Southern NSW and ACT	6 June 2012
Northern NSW	27 November 2012
Adelaide	2 April 2013
Tasmania	9 April 2013
Perth	16 April 2013
Brisbane	28 May 2013
Regional and Remote WA	25 June 2013
Darwin	30 July 2013
Sydney	3 December 2013
Melbourne	10 December 2013
Remote Central and Eastern Australia	10 December 2013

## Notes

- <sup>1</sup> GLV frequency changed from Channel 10 to Channel 8 on 20 January 1980 to reduce interference to/from Melbourne stations and enable ATVO Melbourne to transmit on Channel 10.
- <sup>2</sup> DDQ frequency changed from Channel 10 to Channel 8 on 10 September 1988 to enable TVQQ Brisbane to transmit on Channel 10.
- <sup>3</sup> ABCB, *Annual Report*, 1966, p. 47. NRN frequency changed from Channel 11 to Channel 10 on 19 January 1966 to avoid interference from the national station in the adjoining Richmond-Tweed service area.
- <sup>4</sup> WBQ call-sign changed to SEQ by mid-1976 to reflect the station's coverage of south-east Queensland beyond the Wide Bay area. See: WBL (WBQ), *Annual Report*, 1975; WBL (SEQ), *Annual Report*, 1975.
- <sup>5</sup> CWN operated as full and permanent relay from CBN from inception.
- <sup>6</sup> SDQ operated as full and permanent relay from DDQ from inception.
- <sup>7</sup> GSW operated as full and permanent relay from BTW from inception.
- <sup>8</sup> NAA/Vic: B2152, ECN/4 PART 2: ABCB, ECN LRR, 1970 (21421339).
- <sup>9</sup> NAA/Vic: B2152, RTN/4 PART 2: ABCB, RTN LRR, 1972 (21421381).
- <sup>10</sup> ABT, NEN/ECN LRR, No. 592/87, 1987. This replaced the previous third-party relay from NRN which had commenced on 1 March 1969.
- <sup>11</sup> "Relay system set up by RVN-AMV," *AMW*, 9 November 1972, p. 42.
- <sup>12</sup> MTL (MTN), *Annual Report*, 1973.
- <sup>13</sup> NAA/NSW: B2152, BCV/4 PART 2: ABCB, BCV LRR, 1974 (13781500).
- <sup>14</sup> NAA/Vic: B2305, TL/1/17 PART 1: ABCB, FNQ LRR, 1975 (21432194).
- <sup>15</sup> ABT, GTS LRR No. 444/86, 1986.
- <sup>16</sup> NAA/Vic: B2305, TL/1/19 PART 2: ABT, STV LRR, 1977 (21432195). The BCV-STV link was established using Telecom facilities but was replaced by a microwave link facility in September/October 1976. See NAA Sydney: B2152, BCV/4 PART 2: BCV LRR, 1977 (13781500).
- <sup>17</sup> SEL (SES), *Annual Report*, 1981; ABT, BTV LRR, No. 67/81 R(RT), 1981. The latter states the relay agreement was dated 22 April 1980 however it is not known when the relay commenced.
- <sup>18</sup> ABT, VEW LRR No. 602/87, 1987.
- <sup>19</sup> SMHA translator closed in June 1966. Khancoban translator closed in November 1975.
- <sup>20</sup> VEW York and VEW Tammin closed c.1987.
- <sup>21</sup> ITQ Gunpowder closed 31 July 1984. ITQ Mary Kathleen closed mid-1985. ITQ Cloncurry closed c.1987.
- <sup>22</sup> David Knox, "7TWO to launch on Prime," *TV Tonight*, 22 December 2009, <https://tvtonight.com.au/2009/12/7two-to-launch-on-prime.html>, accessed online 5 April 2019.
- <sup>23</sup> David Knox, "7mate on Prime," *TV Tonight*, 25 August 2010, <https://tvtonight.com.au/2010/08/7mate-on-prime.html>, accessed online 7 October 2019.
- <sup>24</sup> Paul McIntyre "Prime unveils brand-funded datacast channel," *AdNews*, 28 September 2011, <http://www.adnews.com.au/adnews/prime-unveils-brand-funded-datacast-channel>, accessed online 6 April 2019. 4ME was launched as a joint venture between Prime/Brand New Media. The channel closed on 30 April 2016 in regional areas after Brand New Media was placed in administration.
- <sup>25</sup> Prime Media Group, *Annual Report*, 2013, p. 6.
- <sup>26</sup> "Racing channel expands into regions," *Racing.com*, 28 July 2015, <https://www.racing.com/news/2015-07-28/racing-channel-expands-into-regions>, accessed online 6 April 2015. Prime provided an interim service from 28 July until 29 August 2015.
- <sup>27</sup> David Knox, "Prime to launch 7flix in September," *TV Tonight*, 4 August 2017, <https://tvtonight.com.au/2017/08/prime-to-launch-7flix-in-september.html>, accessed online 6 April 2019.
- <sup>28</sup> WIN HD ceased transmission on 26 September 2010 with the launch of Gem.
- <sup>29</sup> Go! was rebranded as 9Go! from 26 November 2015.
- <sup>30</sup> David Knox, "9HD makes way for GO!," *TV Tonight*, 3 August 2009 <https://tvtonight.com.au/2009/08/9hd-makes-way-for-go.html>, accessed online 10 April 2019. WIN ceased carrying 9Go! from 30 June 2016.
- <sup>31</sup> WIN ceased carrying 9Gem from 30 June 2016.
- <sup>32</sup> WIN Gold was rebranded as Gold from 5 May 2012.
- <sup>33</sup> David Knox, "WIN Gold launches on Channel 84," *TV Tonight*, 1 May 2012, <https://tvtonight.com.au/2012/05/win-gold-launches-on-channel-84.html>, accessed online 6 April 2019.
- <sup>34</sup> David Knox, "WIN launches GOLD2," *TV Tonight*, 13 July 2013, <https://tvtonight.com.au/2013/07/win-launches-gold2.html>, accessed online 6 April 2019. Gold 2 was launched as a five-hour time shift of Gold. Gold



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2 was replaced by the Nine Network's Extra on 19 July 2016.

<sup>35</sup> WIN ceased carrying 9Life from 30 June 2016.

<sup>36</sup> David Knox, "WIN HD and 9Life now in regional WA," TV Tonight, 10 March 2016, <https://tvtonight.com.au/2016/03/win-hd-and-9life-now-in-regional-wa.html>, accessed online 6 April 2019.

<sup>37</sup> David Knox, "WIN HD and 9Life now in regional WA."

<sup>38</sup> Max Mason, "Australian News Channel and WIN partner to bring Sky News to free-to-air for the first time," *AFR*, 28 May 2018, <https://www.afr.com/business/media-and-marketing/tv/australian-news-channel-and-win-partner-to-bring-sky-news-to-freetoair-for-first-time-20180525-h10k0d>, accessed online 6 April 2019.

<sup>39</sup> Digital Switchover Taskforce, "New digital multichannel TV services for Griffith and the Murrumbidgee Irrigation Area," (press release), January 2012, [http://www.wintv.com.au/uploads/files/Fact sheet WIN multichannels Griffith MIA, January 2012.pdf](http://www.wintv.com.au/uploads/files/Fact%20sheet%20WIN%20multichannels%20Griffith%20MIA,%20January%202012.pdf), accessed online 27 December 2019.

<sup>40</sup> David Knox, "More digital channels for regional South Australia," TV Tonight, 2 November 2011, <https://tvtonight.com.au/2011/11/more-digital-channels-for-regional-south-australia.html>, accessed online 27 December 2019.

<sup>41</sup> ONE was rebranded as 10 Boss from 31 October 2018, then 10 Bold from 10 December 2018 due to a trademark conflict with Fairfax Media.

<sup>42</sup> David Knox, "Southern Cross adds ONE HD from July 2," TV Tonight, 16 June 2009, <https://tvtonight.com.au/2009/06/southern-cross-adds-one-hd-from-july-2.html>, accessed online 6 April 2019.

<sup>43</sup> Eleven was rebranded as 10 Peach from 31 October 2018.

<sup>44</sup> Southern Cross ceased broadcasting Aspire TV in Tasmania and Darwin on 29 August 2015 to accommodate Racing.com; in Spencer Gulf (SGS) and Broken Hill (SCN) on 1 July 2016; and in Northern NSW (NRN) on 31 August 2017 following its acquisition by WIN.

<sup>45</sup> David Knox, "TEN tipped to launch new datacasting channel," TV Tonight, 10 September 2013, <https://tvtonight.com.au/2013/09/ten-tipped-to-launch-new-datacasting-channel.html>, accessed online 6 April 2019.

<sup>46</sup> David Knox, "Religious channel coming to Southern Cross network," TV Tonight, 15 July 2017, <https://tvtonight.com.au/2017/07/religious-channel-coming-to-southern-cross-network.html>, accessed online 7 October 2019.

<sup>47</sup> Holly Byrnes, "Australia's new TV show and channel yourMoney being launched to help viewers," *News.com.au*, 23 September 2018, <https://www.news.com.au/entertainment/tv/australias-new-tv-show-and-channel-yourmoney-being-launched-to-help-viewers/news-story/228d314672b4b9d43e78f31be3118607>, accessed online 6 April 2019.

<sup>48</sup> David Knox, "7TWO for Tassie/Darwin, ONE for Mildura," TV Tonight, 1 December 2009, <https://tvtonight.com.au/2009/12/7two-for-tassie-darwin-one-for-mildura.html>, accessed online 5 April 2019.

<sup>49</sup> "Date set for 7mate's Tassie TV debut," *Mercury* (Hobart), 18 September 2010, p. 3.

<sup>50</sup> Nick Calacouras, "New TV channels a free choice," *Northern Territory News*, 24 September 2010, p. 5.

<sup>51</sup> Tom Biddington, "Southern Cross TV picks up Racing.com," 28 August 2015, *Racing.com*, <https://www.racing.com/news/2015-08-28/southern-cross-tv-picks-up-racingcom>, accessed online 6 April 2019. Available in SA and Broken Hill on Ch 68 and Darwin on Ch 78.

<sup>52</sup> David Knox, "7TWO to launch on November 1st," TV Tonight, 23 October 2009, <https://tvtonight.com.au/2009/10/7two-to-launch-november-1st.html>, accessed online 5 April 2019.

<sup>53</sup> David Knox, "7mate on Prime."

<sup>54</sup> David Knox, "7flix is on the air," TV Tonight, 28 February 2016, <https://tvtonight.com.au/2016/02/7flix-is-on-the-air.html>, accessed online 10 April 2019.

<sup>55</sup> "Racing channel expands into regions," *Racing.com*, 28 July 2015, <https://www.racing.com/news/2015-07-28/racing-channel-expands-into-regions>, accessed online 6 April 2015. Prime provided an interim service from 28 July until 29 August 2015. Interim service.

<sup>56</sup> James Manning, "Seven launching Australia's latest TV food channel," *Mediaweek*, 26 October 2018, <https://mediaweek.com.au/seven-launching-7food/>, accessed online 6 April 2019. 7food network was available in selected regional markets only. The service ceased operation in December 2019 due to poor ratings.

<sup>57</sup> 9HD reverted to a HD simulcast from 3 August 2009 for Go! then ceased transmission on 26 September 2010.

<sup>58</sup> Nick Calacouras, "New TV channels a free choice."

<sup>59</sup> Gem was rebranded as 9Gem from 26 November 2015.

<sup>60</sup> Nick Calacouras, "New TV channels a free choice."

<sup>61</sup> Claire Reilly, "Nine Network to live stream all channels and revamp HD," CNET, 28 October 2015, <https://www.cnet.com/news/nine-network-to-live-stream-all-channels-and-revamp-hd/>, accessed online 6 April 2019.

<sup>62</sup> "New Digital Television Services coming to NBN," *NBN*, <http://www.nbntv.com.au/content/new-digital-television-services-coming-to-nbn>, viewed online 6 April 2019.

<sup>63</sup> NBN, "New Digital Television Services coming to NBN."

<sup>64</sup> David Knox, "ONE HD in Tassie July 30," *TV Tonight*, 7 July 2009, <https://tvtonight.com.au/2009/07/one-hd-in-tassie-july-30.html>, accessed online 6 April 2019.

<sup>65</sup> David Knox, "7TWO for Tassie/Darwin, ONE for Mildura."

<sup>66</sup> DOC, *Annual Report*, 2014, p. 41.