Switchover Evaluation Report

July 2014

The **Switchover Evaluation Report** is published by the Digital Switchover Taskforce in the Department of Communications.

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1. Executive Summary

1.1. Introduction

In September 2008, the then Department of Broadband, Communications and the Digital Economy commissioned Newspoll to undertake research into Australian households' readiness for digital television (Digital Tracker). The Digital Tracker survey was conducted quarterly from 2009 to 2013 (20 quarters). Following the completion of the switchover to digital-only television in December 2013, a final survey was conducted Australia wide in February 2014 to measure the overall impact of the switchover.

1.2. Methodology

This report draws together data from the Digital Tracker and associated research conducted by Newspoll including surveys conducted in each area immediately following a switchover (post switchover surveys) to evaluate the switchover of Australia to digital television. As such, it is an evaluation of the switchover through the "eyes" of the Digital Tracker.

1.3. Main findings

1.3.1. Households

(a) The beginning

The first Digital Tracker was conducted in January to March 2009 (Quarter 1, 2009) and at that time over three-quarters (82 per cent) of households were aware of the switchover, just under half (47 per cent) had converted and 15 per cent were negative to the switchover.

(b) The first switchover area

- The first area to switch off the analog TV signal was Mildura/ Sunraysia on 30 June 2010 and, immediately following the switchover, in the 25,100 households in the Mildura/ Sunraysia TV transmission area there were high levels of satisfaction with the switchover:
- 99 per cent could watch digital TV following the switchover.
- 95 per cent were getting good reception.
- 87 per cent were satisfied with the government's handling of the switchover to digital television and only three per cent were dissatisfied.
- Just about all said that the government had kept them well informed, both on when it would happen (99 per cent) and what to do to convert (91 per cent).
- Satisfaction with digital television was high (86 per cent satisfied and only four per cent dissatisfied).
- There was very little negativity to the digital television switchover with only a small proportion of households (four per cent) against the digital switchover - most were either for it (80 per cent) or neutral (16 per cent).
- 23 per cent had some problem when converting to digital television including 16 per cent who had work done on their antenna when they converted to digital TV.
- Eight per cent said they got some direct help from the government to convert to digital TV and 95 per cent of these households were satisfied with help they received.

(c) The remaining switchover areas

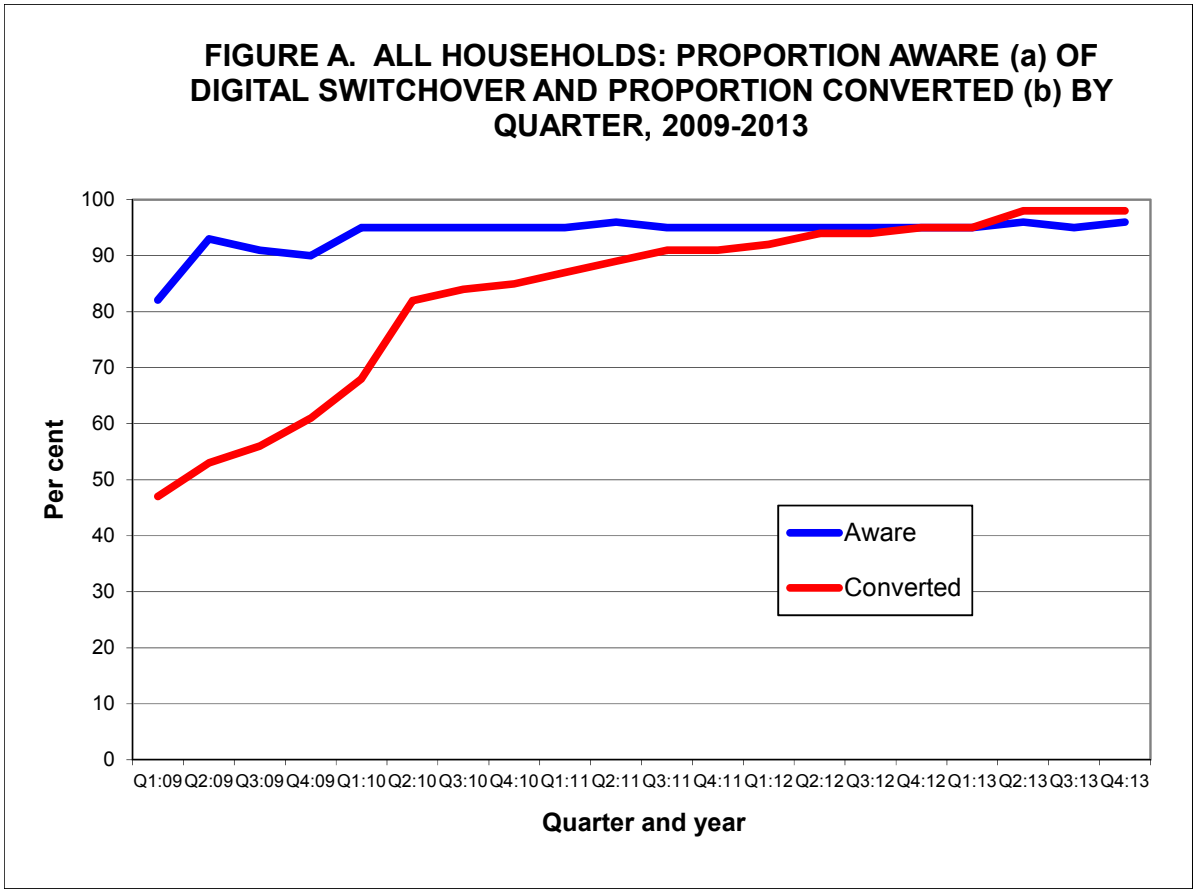
Similar positive results were found for the other 14 switchover window areas.

(d) Over the life of the Digital Tracker

Over the life of the Digital Tracker (January 2009 to December 2013):

- Awareness of the government's plan to switch Australia over to digital television started at 82 per cent, rose to 90 per cent following the launch of a national campaign in 2009 to raise awareness and then remained at about 95 per cent (see Figure A).
- The digital television conversion rate (that is, households that could watch at least all the standard definition digital free to air channels on their main television set) maintained an upward trend from 47 per cent in Quarter 1, 2009 to 98 per cent in Quarter 4, 2013 (see Figure A).

Figure A. All households: Proportion aware (a) of Digital Switchover and proportion converted (b) by quarter, 2009-2013



(a) At any given point in time, it includes only areas yet to switch over. (b) At any given point in time, it includes all areas and assumes 100 per cent for areas that have switched over.

(e) Digital TV only environment

About two months after digital television switchover had been completed across Australia all indications were that the digital switchover was successful:

- Just about all (99 per cent) households were watching digital TV.

- 79 per cent were satisfied with digital TV.
- There was very little negativity to the digital switchover (only five per cent remained negative), and
- Only five per cent were dissatisfied with the government's handling of switchover.

1.3.2. Stakeholders

Research was conducted with stakeholders (including television retailers, antenna installers and Digital Switchover Liaison Officers) in Regional South Australia, Regional Victoria and Regional Queensland a few months following the switchover in these areas. The main findings were:

1. There was general agreement that the Taskforce did a great job in making everybody aware of the digital switchover.

2. There was considerable variation in the assessed "smoothness" of the transition to digital both across and within the switchover areas. It was observed that more effort was required in identifying the "uniqueness" factors of areas as regards digital conversion such as historical factors, topography or transmission tower locations and to utilise local people like Digital Switchover Liaison Officers (DSLOs) to tailor the general message to better suit the area. The main message that digital switchover was straight forward, cost effective, with improved picture, sound and more channels was satisfactory for the majority of households and other stakeholders but it required customisation when dealing with areas that had reception problems.

3. Local communities considered DSLOs to be a very important player in ensuring a smooth transition.

4. The Retail Advisor Scheme was not considered by most retailers to be of any great benefit to them (that is, it did not increase their TV equipment sales) although they conceded it had some benefits in better informing their staff on digital matters. However, Newspoll believed the scheme should be retained for the benefit of TV customers and more actively promoted. The registration process was considered to be relatively straight forward.

5. There did not appear to be a large take up of the Antenna Installer Endorsement Scheme (AIES) and those in the scheme generally did not see it to be of great benefit to them. However Newspoll believed that the scheme should be retained for the benefit of TV customers and more actively promoted so that installers were more likely to see a direct benefit to them. In addition, installers did see the benefit in helping to send a message to the various installation "cowboys" about the need for quality and the importance of not misrepresenting themselves as qualified installers. There should be more effective communication with local antenna installers. It was important that as soon as the DSLO commenced working with local communities that technical people from Taskforce visited switchover areas to talk to local installers about issues, acknowledge local problems, talk about solutions (like the Viewer Access Satellite Television service - VAST) and explain the rationale for the Household Assistance Scheme (HAS).

6. Usage of the website varied considerably across the stakeholders reflecting their different interests, responsibilities and needs. There was some concern that it was too cluttered and was serving too many purposes. mySwitch was seen as a very useful tool by most of stakeholders that used the website.

7. Most stakeholders reported that they received information (brochures, posters, etc) from the Taskforce in a timely fashion.

8. Digital reception issues were fertile ground for myths and misconceptions as regards the true cause of reception problems. There was a need for a technical help line/desk that dealt specifically with reception problems.

9. Issues were raised concerning HAS, including the need to ensure that eligible households knew about the scheme, that HAS recipients got a high quality set top box, that it was properly installed by qualified installers (with a digital meter), that any reception problems were identified and that some support service was available. There was some evidence of low quality installation practices.

1.4. Conclusions

Overall, there was a relatively smooth transition from the analog only TV environment (pre 30 June 2010) to the digital-only TV environment (post 10 December 2013).

Other, more specific, conclusions are:

1. Just about every household who wanted to watch television could watch digital television when the analog TV signal was switched off in their area.

2. Conversion happened progressively within areas over the switchover period which helped ensure the transition was smooth and there was no large last minute scramble to convert at switchover time.

3. By the time of switchover in any area, there was very little negativity or dissatisfaction with either the switchover itself or the government's handling of the switchover.

4. All households and stakeholders (such as antenna installers and television retailers) were kept well informed about what was happening and what they had to do to ensure a smooth transition to digital.

5. The main problems that arose related to reception issues and in particular where reception was a challenge due to topography or distance (within very specific geographic areas). In addition, about one-third of households had some problem when converting to digital television and most of these had to have work done on their antenna.

2. Introduction

On 18 December 2007 Senator Stephen Conroy, the then Minister for Broadband, Communications and the Digital Economy, announced the formation of a Digital Switchover Taskforce (the Taskforce) within the Department of Broadband, Communications and the Digital Economy (the Department) to drive the work necessary to deliver the switchover to digital-only television by the end of 2013. The Taskforce was to work closely with the broadcasting industry, the retail sector and other stakeholders to ensure the smooth transition to digital-only television broadcasts and to ensure that viewers enjoyed the associated benefits.

The Taskforce recognised that for switchover to be a success it was essential to have access to key tracking information on the progress of households in preparing for switchover and their understanding of the impending change to their television environment. In September 2008, the Department commissioned Newspoll to undertake research into Australian households' readiness for digital television (Digital Tracker) through a quarterly survey of Australian households.

The overall objective of the Digital Tracker (and related research) was to provide high quality data to the Taskforce to maximise the chances of a smooth transition to digital television for all Australians.

More specifically, the Digital Tracker measured and reported on the following five critical success measures to provide an indication of Australia's digital readiness:

1. Awareness (heard of switchover)
2. Understanding (knew how to convert to digital TV)
3. Attitudes (positive or negative to switchover)
4. Conversion (had converted main TV set to digital)
5. Satisfaction (with digital TV)

After an extensive development and testing phase in 2008, the first quarterly Digital Tracker was conducted in January to March 2009 with 9,900 respondents. The scope of the survey was all Australian households and interviews were conducted by telephone. The sample design was a random survey stratified by the 33 switchover areas. The survey methodology is detailed in the explanatory notes section of the Digital Tracker full reports published on a quarterly basis. These reports are available on the Department's website at www.communications.gov.au/television/digital_tv_in_australia/digital_switchover_reports.

The sample design reflected the fact that the switching off of the analog TV signal would be phased in geographically over the period 2010 to 2013 according to the following timeframe;

- Mildura/ Sunraysia (switchover on 30 June 2010)
- Regional South Australia (switchover on 15 December 2010)
- Regional Victoria (switchover on 5 May 2011)
- Regional Queensland (switchover on 6 December 2011)
- Southern NSW (switchover on 5 June 2012)
- Northern NSW (switchover on 27 November 2012)
- Adelaide (switchover on 2 April 2013)

- Tasmania (switchover on 9 April 2013)
- Perth (switchover on 16 April 2013)
- Brisbane (switchover on 28 May 2013)
- Regional and Remote Western Australia (switchover on 25 June 2013)
- Darwin (switchover on 30 July 2013)
- Sydney (switchover on 3 December 2013)
- Melbourne (switchover on 10 December 2013)
- Remote Central and Eastern Australia (switchover on 10 December 2013)

This report draws together data from the Digital Tracker and associated research conducted by Newspoll including surveys conducted in each area immediately following a switchover (post switchover surveys) to evaluate the switchover of Australia to digital television. As such, it is an evaluation of the switchover through the "eyes" of the Digital Tracker.

3. Switchover story (through the Digital Tracker)

3.1. Putting the switchover into context

3.1.1. A brief history of digital TV

Australian television first entered the digital age well over a decade ago on 1 January 2001.

On that day, all five networks – ABC, Seven, Nine, Ten, SBS – commenced full-time standard-definition digital transmission in Sydney, Melbourne, Brisbane, Adelaide and Perth as part of the initial roll-out of digital television. High-definition signals were not to launch until later in the year.

However, very few would have actually witnessed those first digital transmissions on 1 January 2001 due to the cost of the equipment – a standard definition set top box (STB) would have cost around $700 and a high-definition box over $1,000. As for television sets with integrated digital tuners, if you could get one then they would cost around $5,000 for standard definition set and $8,000 for a high definition set.

Foxtel's digital subscription television service began in March 2004 and on 1 February 2007 Foxtel announced that its service was 100 per cent digital with 100 channels, interactive features and many other viewing options.

By the middle of the decade it was realised that the government's initial planned cut-off date for analog television, 2008 for the major capital cities, was fast approaching and conversion rates were lower than anticipated. While digital television had many benefits, including improved picture and sound quality and a range of new services, households were slow to embrace the digital option. The proportion of households with digital free-to-air television was 42 per cent in 2007 (up from 30 per cent in 2006 and 13 per cent in 2005) based on surveys funded by the Australian Communications and Media Authority (ACMA).

In December 2007, the Australian Government announced a firm date of December 2013 for ceasing analog television broadcasting. The Taskforce was established to coordinate the switchover to digital-only television and to work with industry to co-ordinate, support and promote the digital switchover and ensure that all Australian households were prepared for the change.

By 2007, networks were allowed to start offering exclusive high-definition content, not in simulcast with the analog or standard-definition signals, which led to Seven, Nine and Ten launching HD-specific channels which offered limited amounts of exclusive programming, though this was mostly restricted to off-peak daytime or late-night timeslots so that major prime-time programming was still able to be viewed in high definition.

Late in 2008, the free-to-air broadcasters collaborated to launch a joint initiative, Freeview, to promote digital television to the wider audience on behalf of all networks.

Over the period 2009 to 2011 a number of digital channels, some simulcast with analog and others digital-only, were launched including:

- One HD (2009)
- GO! (2009)
- 7TWO (2009)

- ABC3 (2009)
- SBS2 (2009)
- ABCNews24 (2010)
- 7mate (2010)
- GEM (2010)
- Eleven (2011)

3.1.2. Factors impacting on conversion

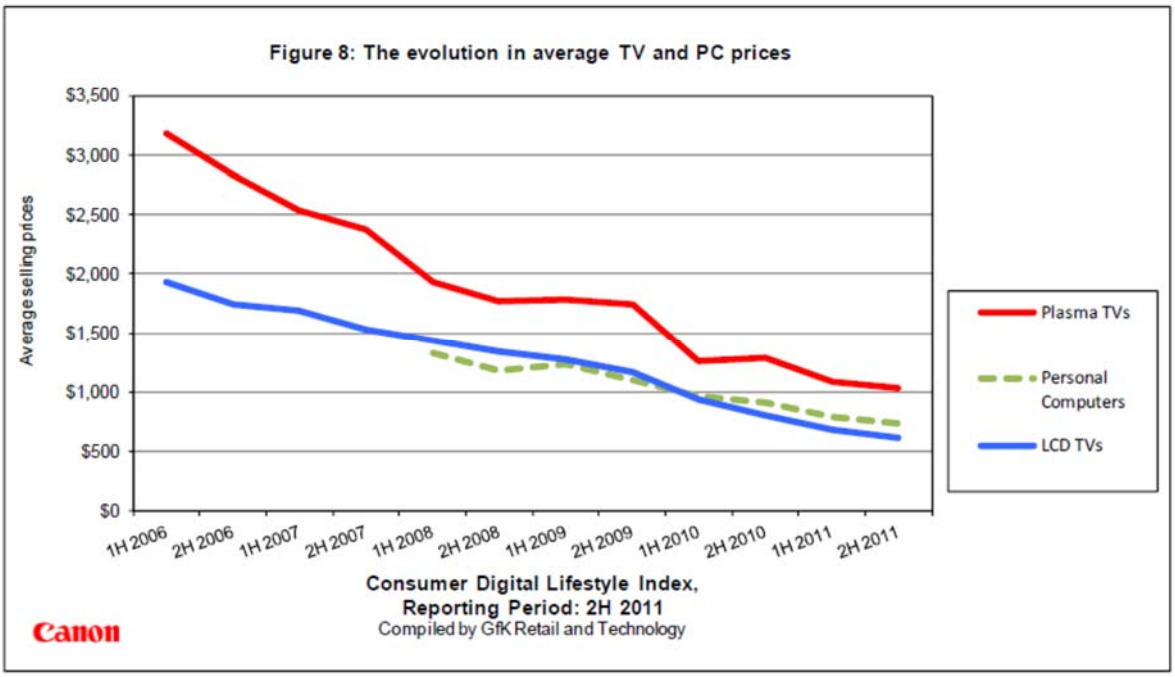
In addition to the effort by the Taskforce to ensure a smooth transition to digital television, some of the main factors that would impact on a household's decision to convert to digital television were:

- Cost of switching to digital TV (cost of set top boxes and digital TVs and also possible antenna upgrading).
- Digital offering covering quality of picture, sound and content (household's perceived value in switching).
- Condition of current TV (there is a natural updating process - 29 per cent of households bought a new television in the 12 months to May 2011 according to an ACMA report Television Sets in Australian households 2011), and
- Switch off of the analog TV signal.

It has already been noted that the digital TV content increased considerably over the period 2009 to 2011 and this would help households make the decision to convert to digital TV.

In addition, the price of digital TV equipment fell quite markedly over the period. For digital TVs, the price fell from around $5,000 in 2001 to $3,000 in 2009 to $400 or less now. These falls are reflected in data from the Canon Consumer Digital Lifestyle Index (see figure below).

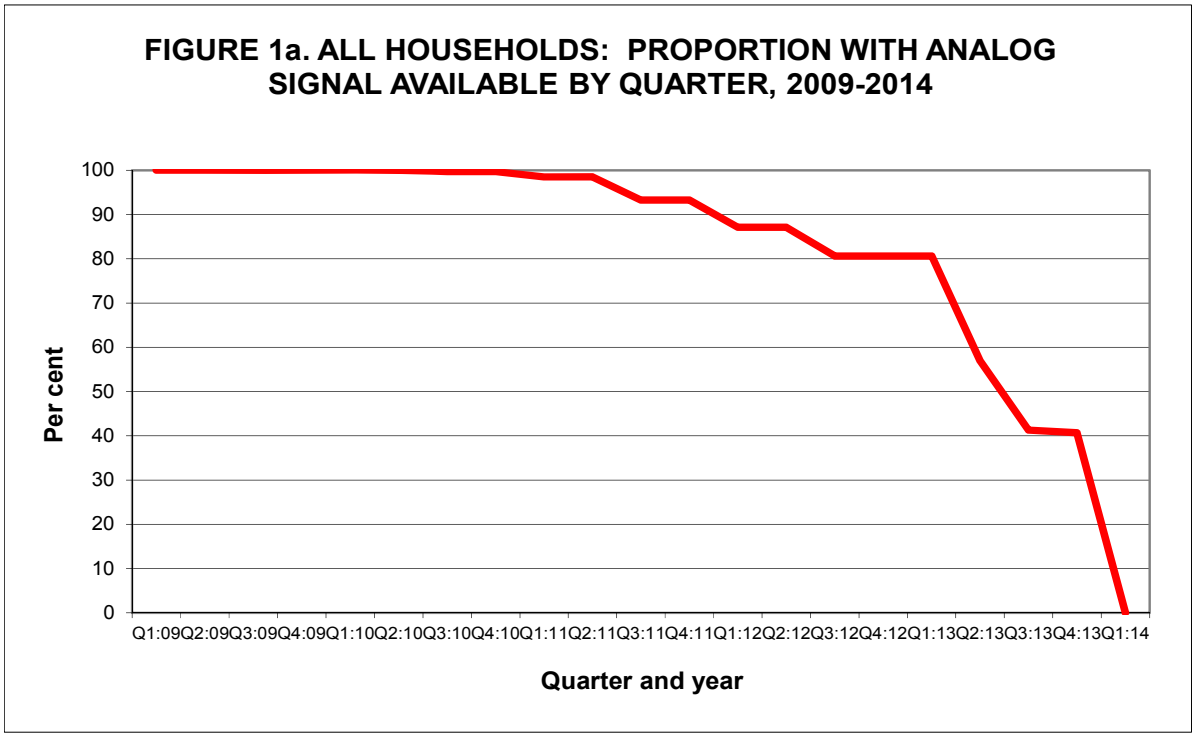
The evolution in average TV and PC prices



Source: *Canon Consumer Digital Lifestyle Index*

The switching off of the analog TV signal was certainly an inducement to convert although the Taskforce was keen to ensure that households did not leave it to the last minute to convert to digital TV. As already noted, the switchover was phased in over the period 2010 to 2013 with the proportion of households that could access an analog signal falling slowly from 100 per cent prior to the Mildura/ Sunraysia switchover on 30 June 2010 to 80 per cent at the beginning of 2013 and then rapidly falling to zero per cent by the 10 December 2013 (see Figure 1a).

Figure 1a. All households: Proportion with analog signal available by quarter, 2009-2014



3.2 Overview of digital switchover: awareness and conversion (2009 - 2014)

Awareness of the government's plan to switch Australia over to digital television reached 90 per cent in 2009 following the launch of a national campaign to raise awareness and subsequently remained at about 95 per cent (see Figure 1b).

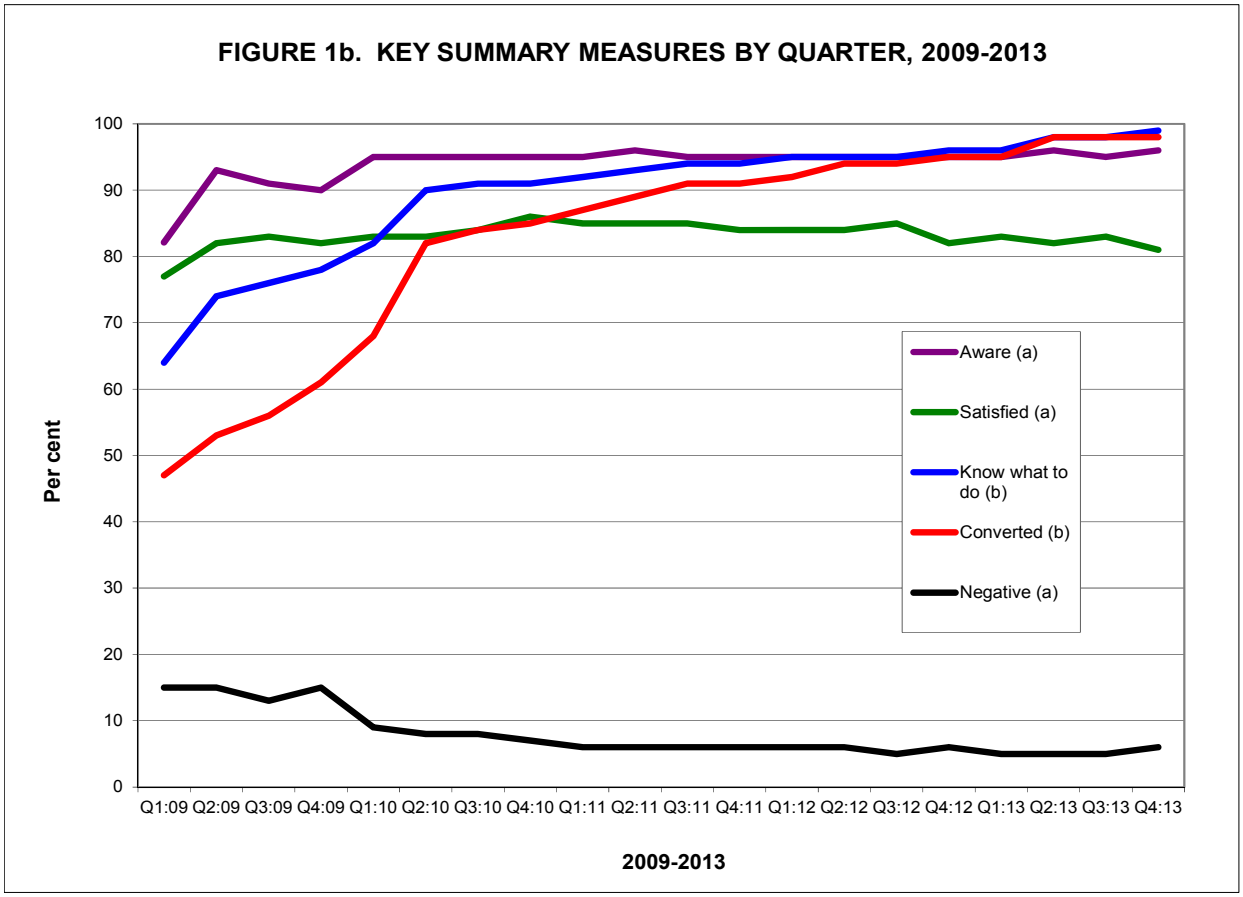
The proportion of households in Australia that converted to digital television (that is, those who could watch at least all the standard definition digital free to air channels on their main television set) maintained an upward trend from 47 per cent in Quarter 1, 2009 to 98 per cent in Quarter 4, 2013 (see Figure 1b).

The proportion of households that knew how to convert to digital maintained an upward trend from 64 per cent in Quarter 1, 2009 to 99 per cent in Quarter 4, 2013 (see Figure 1b).

For those households watching digital TV, the proportion that were satisfied with digital TV remained relatively steady over the period 2009 to 2014, fluctuating between 77 per cent and 86 per cent (see Figure 1b).

The proportion of households that were negative to the digital switchover declined over the period from 15 per cent in Quarter 1, 2009 to six per cent in Quarter 4, 2013 (see Figure 1b).

Figure 1b. Key summary measures by quarter, 2009-2103

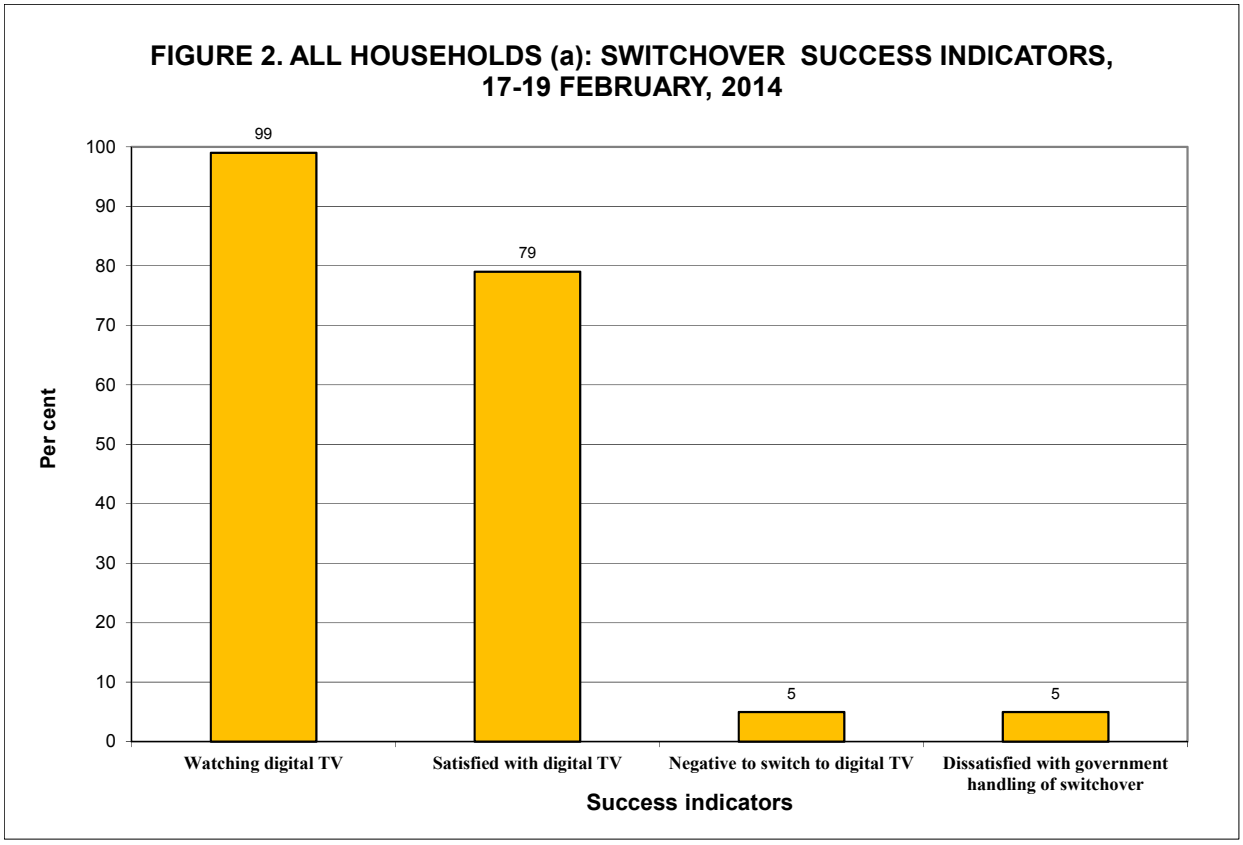


(a) At any quarter, areas that have switched over are excluded. (b) Includes all areas in Australia and is based on the 2012 revised definition of converted – see Appendix 2 for details.

About two months after digital television switchover had been completed across Australia all indications were that the digital switchover was successful:

- Just about all (99 per cent) households were watching digital TV.
- 79 per cent were satisfied with digital TV.
- There was very little negativity to the digital switchover (only five per cent remained negative), and
- Only five per cent were dissatisfied with the government's handling of switchover (see Figure 2).

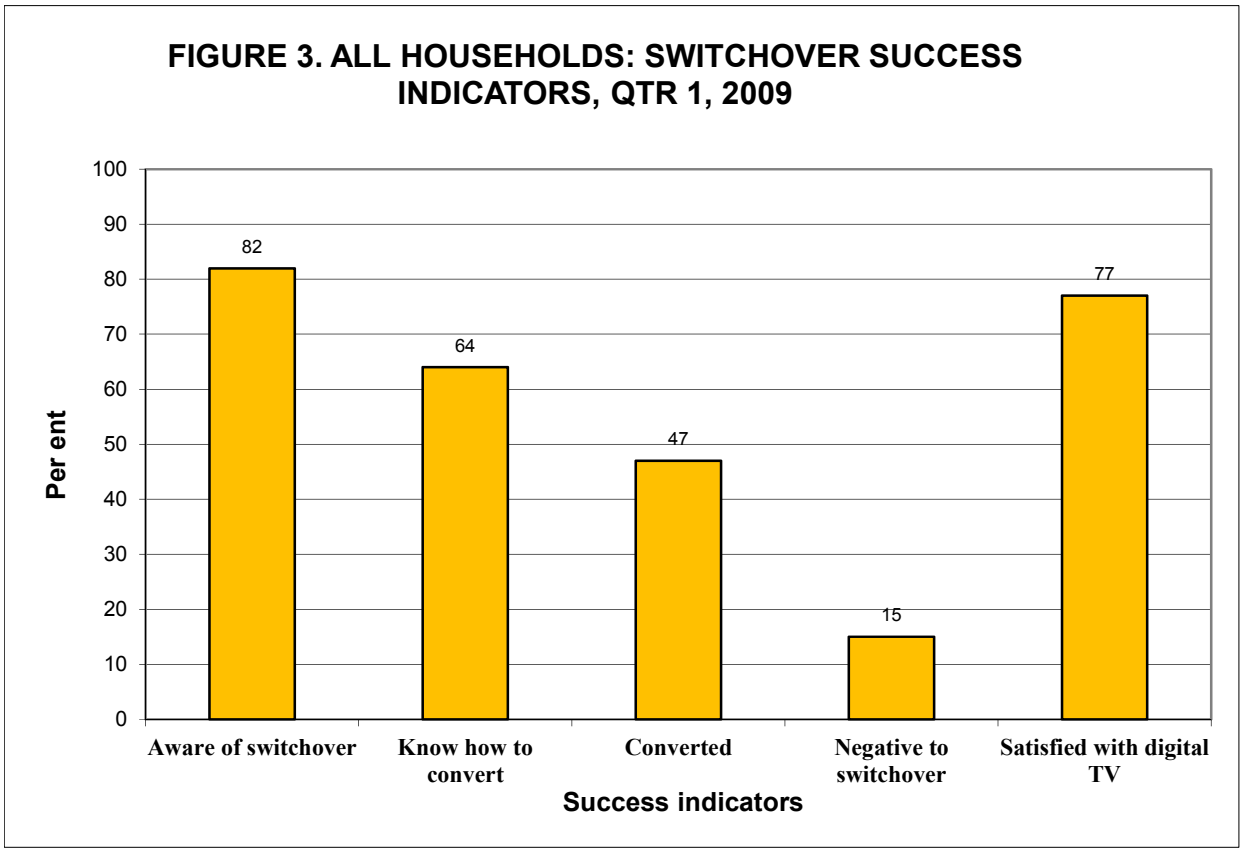
Figure 2. All households (a): Switchover success indicators, 17-19 February, 2014



3.3 The beginning

After extensive development the first Digital Tracker was conducted in January to March 2009 (Quarter 1, 2009). At that time over three-quarters (82 per cent) of households were aware of the switchover, just under half (47 per cent) had converted and 15 per cent were negative to the switchover (see Figure 3).

Figure 3. All household: Switchover success indicators, quarter 1, 2009



3.4 The first switchover area – Mildura/Sunraysia

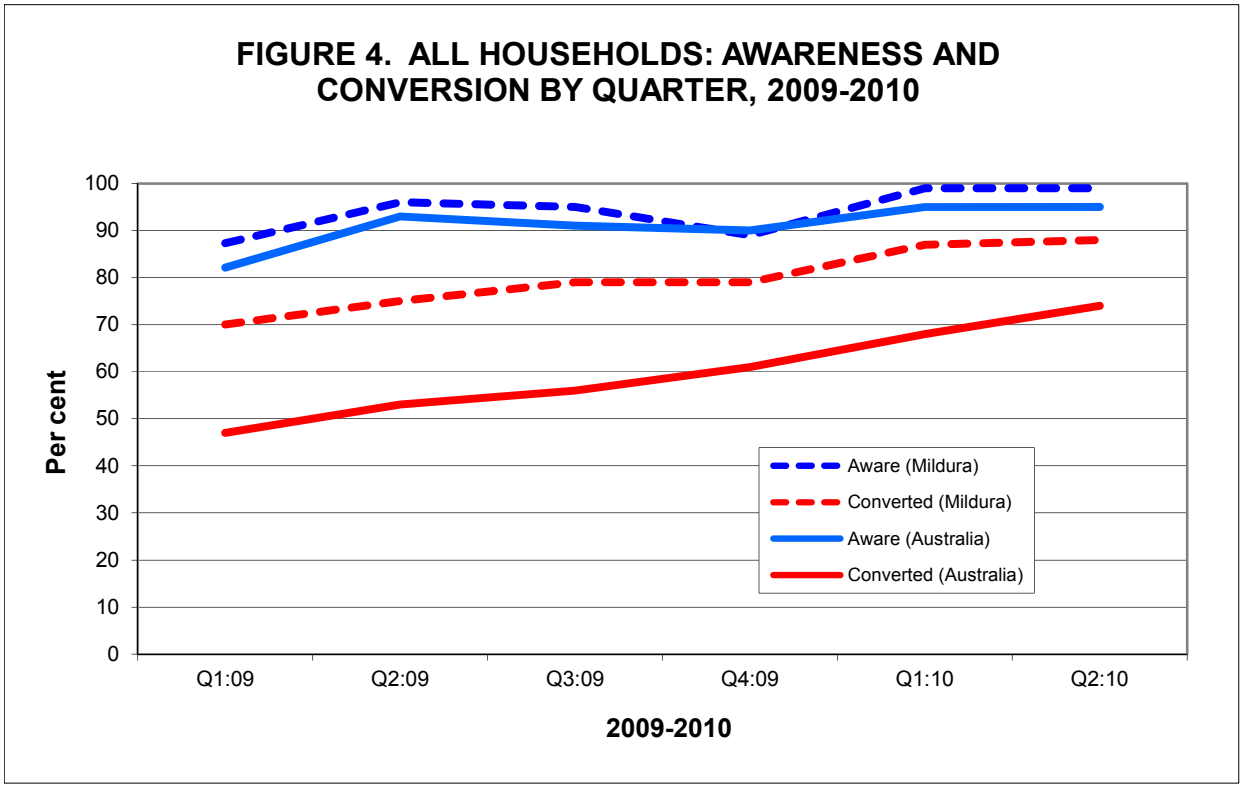
The first area to switch off the analog TV signal was Mildura/ Sunraysia on 30 June 2010.

3.4.1 Leading up to switchover

Awareness in Mildura/ Sunraysia of the government's plan to switch Australia over to digital television started at 87 per cent in Quarter 1, 2009 and increased to 99 per cent in Quarter 2, 2010 (see Figure 4).

The proportion of households in Mildura/ Sunraysia that converted to digital television (that is, they could watch at least all the standard definition digital free to air channels on their main television set) maintained an upward trend from 70 per cent in Quarter 1, 2009 to 88 per cent in Quarter 2, 2010 (see Figure 4). Over this period, the conversion rate in Mildura/ Sunraysia was a lot higher than for Australia as a whole.

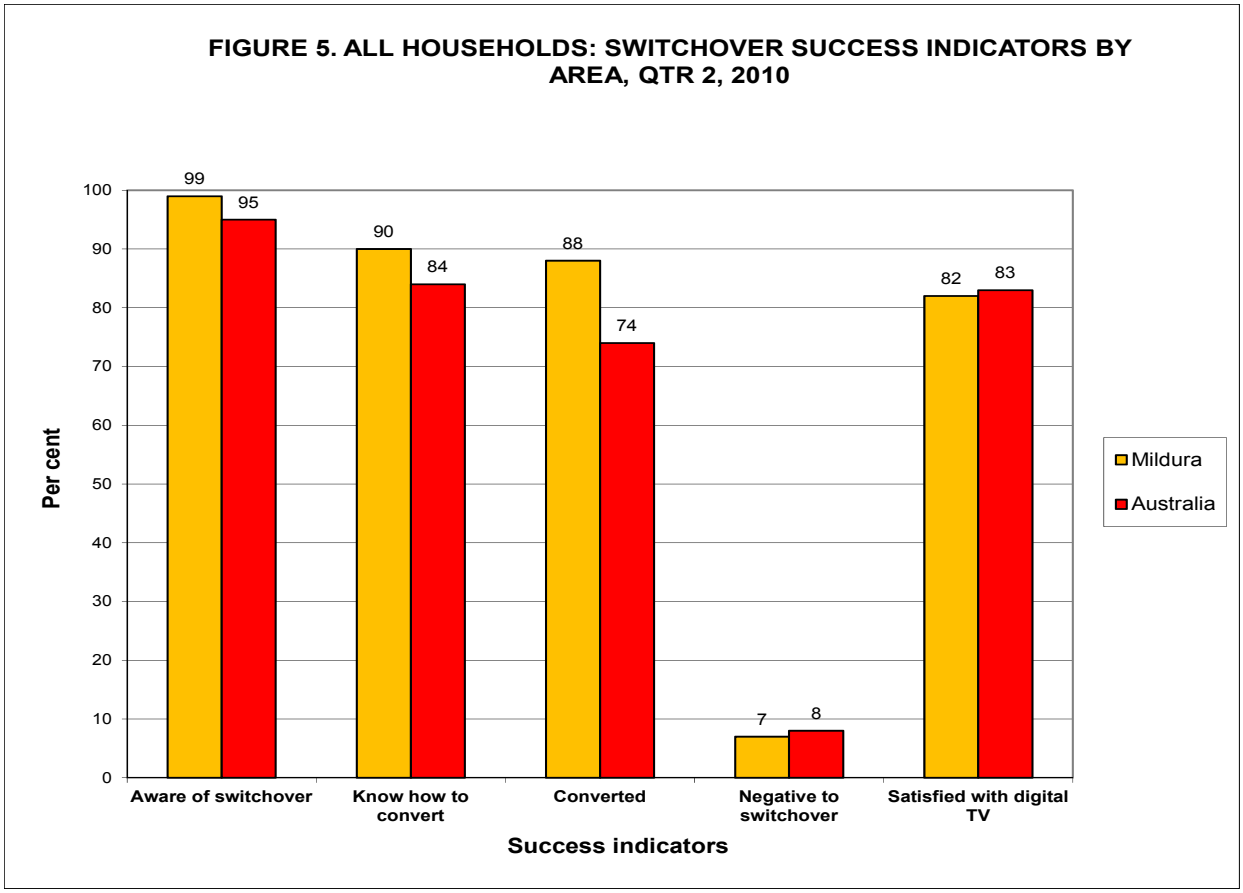
Figure 4. All households: Awareness and conversion by quarter, 2009-2010



In the quarter leading up to the switchover in Mildura/ Sunraysia, the indications were that the digital switchover would be successful:

- Just about all (99 per cent) were aware of switchover.
- 88 per cent were converted to digital TV, and
- There was very little negativity to the digital switchover (only seven per cent remained negative) (Figure 5).

Figure 5. All households: Switchover success indicators by area, quarter 2, 2010



3.4.2 Immediately after switchover

Immediately following the switchover, the 25,100 households in the Mildura/ Sunraysia TV transmission area were asked about the impact of the switchover (post switchover survey) and results indicated high levels of satisfaction (see Figure 6).

Key impact indicators for Mildura/ Sunraysia households were:

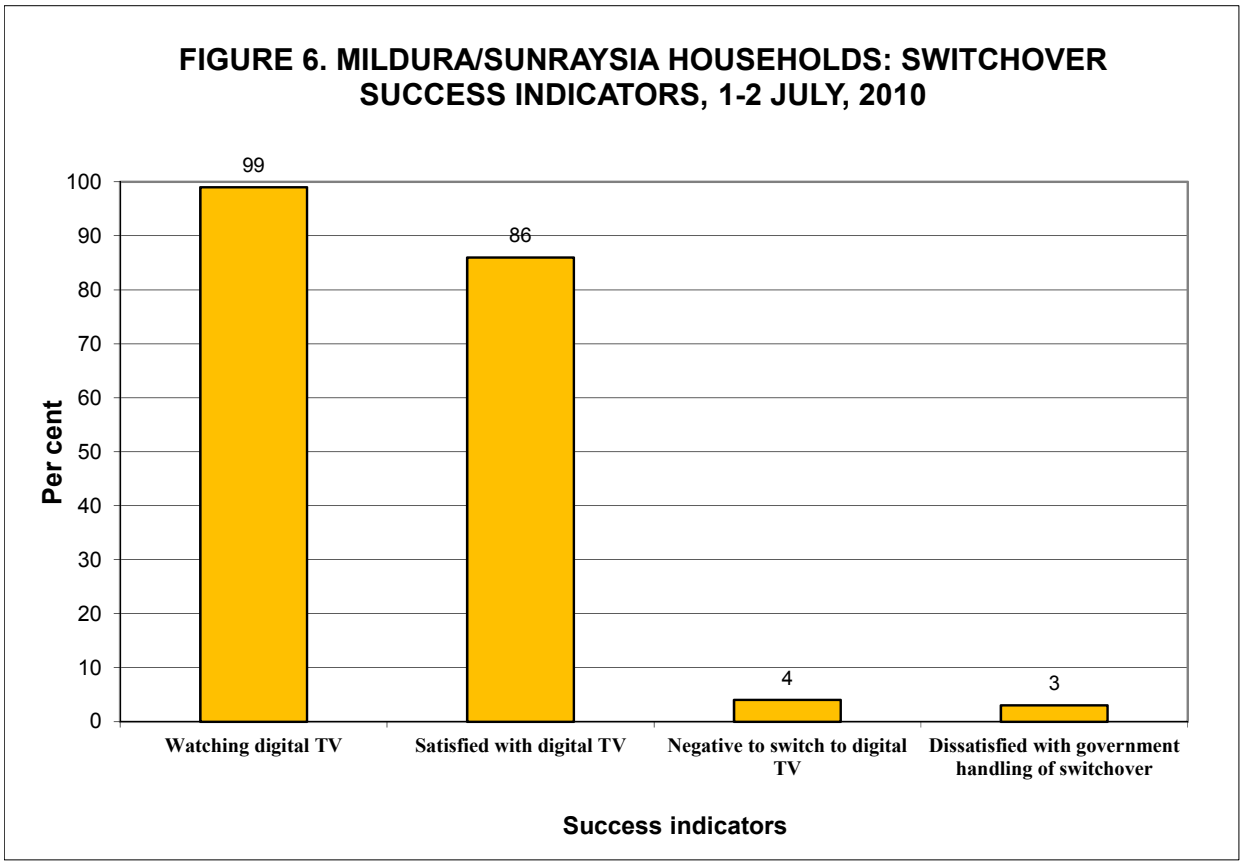
- 99 per cent could watch digital TV following the switchover.
- 95 per cent were getting good reception.
- 23 per cent had some problem when converting to digital television including 16 per cent who had work done on their antenna when they converted to digital TV, and
- Eight per cent said they got some direct help from the government to convert to digital TV and 95 per cent of these households were satisfied with help they received.

Key effectiveness indicators for Mildura/ Sunraysia households were:

- Eighty seven per cent were satisfied with the government's handling of the switchover to digital television and only three per cent were dissatisfied.
- There was very little negativity to the digital television switchover with only a small proportion of households (four per cent) against the digital switchover - most were either for it (80 per cent) or neutral (16 per cent).
- Satisfaction with digital television was high (86 per cent satisfied and only four per cent dissatisfied), and
- Just about all said that the government had kept them well informed, both on when it would happen (99 per cent) and what to do to convert (91 per cent).

**Note that a summary of the results of the post switchover surveys for all 15 switchover areas is at Appendix 1.*

Figure 6. Mildura/Sunraysia households: Switchover success indicators, 1-2 July. 2010



3.5 The second switchover area - Regional South Australia

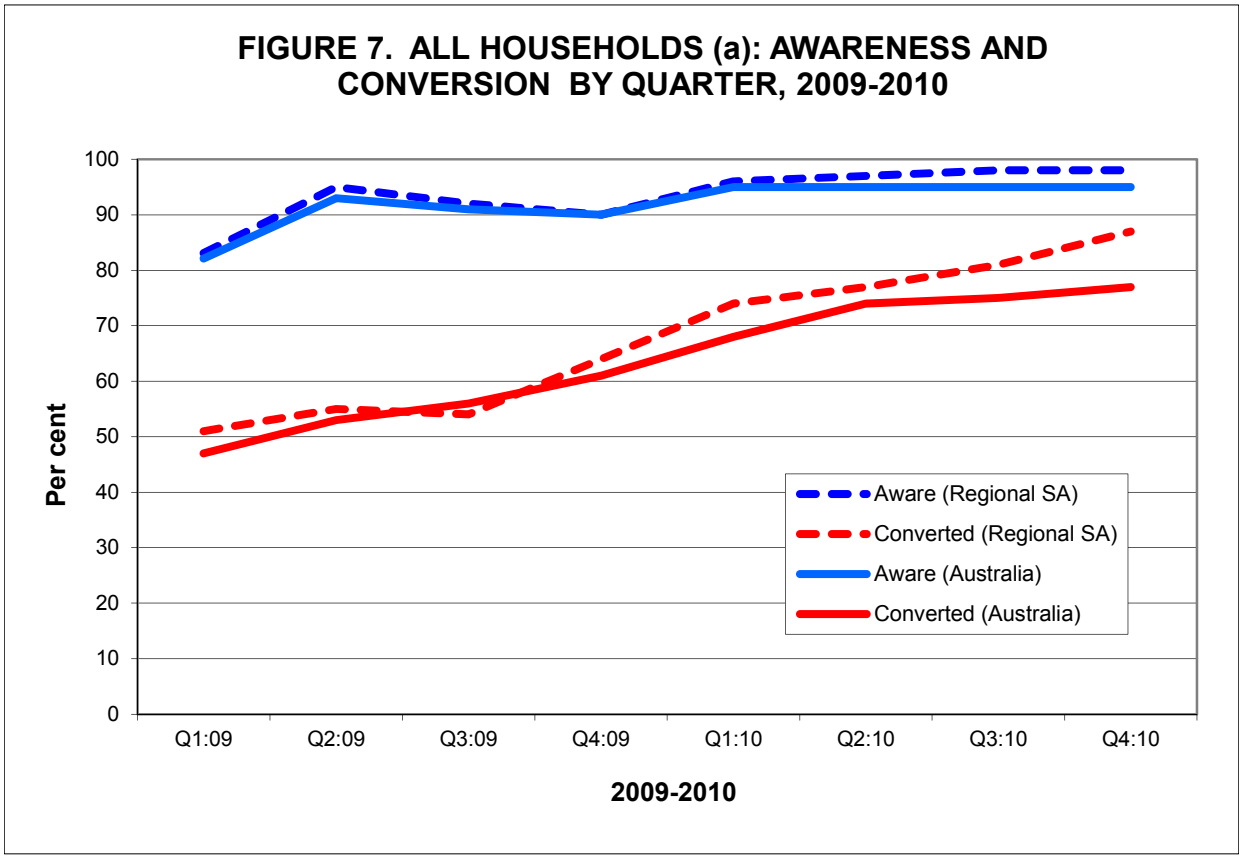
The second area to switch off the analog TV signal was Regional South Australia on 15 December 2010.

3.5.1 Leading up to switchover

Awareness in Regional South Australia of the government's plan to switch Australia over to digital television started at 83 per cent in Quarter 1, 2009 and increased to 98 per cent in Quarter 4, 2010 (see Figure 7).

The proportion of households in Regional South Australia that converted to digital television (that is, they could watch at least all the standard definition digital free to air channels on their main television set) maintained an upward trend from 51 per cent in Quarter 1, 2009 to 87 per cent in Quarter 4, 2010 (see Figure 7). Over this period, the conversion rate in Regional South Australia started out much the same as for Australia as a whole but progressively increased as switchover approached on 15 December, 2010.

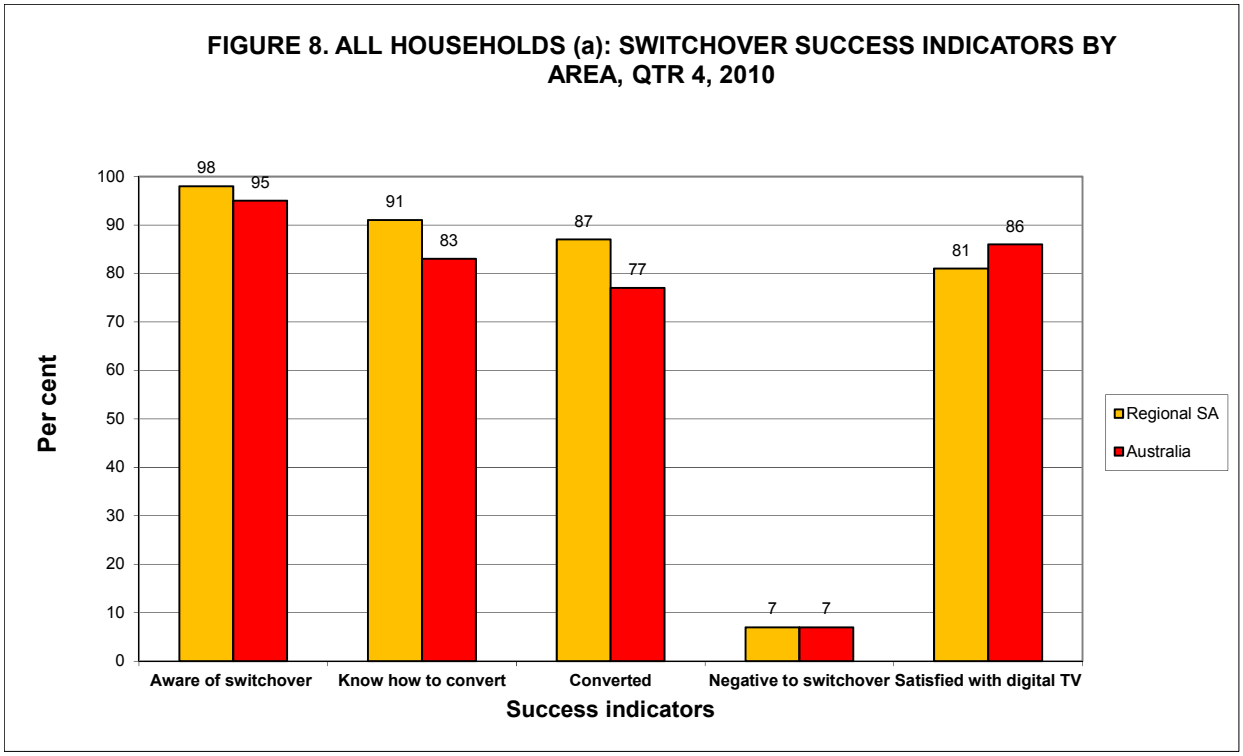
Figure 7. All households (a): Awareness and conversion by quarter, 2009-2010



In the quarter leading up to the switchover in Regional South Australia, the indications were that the digital switchover would be successful:

- Just about all (98 per cent) were aware of switchover.
- 87 per cent were converted to digital TV, and
- There was very little negativity to the digital switchover (only seven per cent remained negative) (Figure 8).

Figure 8. All households (a): Switchover success indicators by area, quarter 4, 2010



3.5.2 Immediately after switchover

Immediately following the switchover, the 99,200 households in the Regional South Australia TV transmission area were asked about the impact of the switchover and results indicated high levels of satisfaction (see Figure 9).

Key impact indicators for Regional South Australia households were:

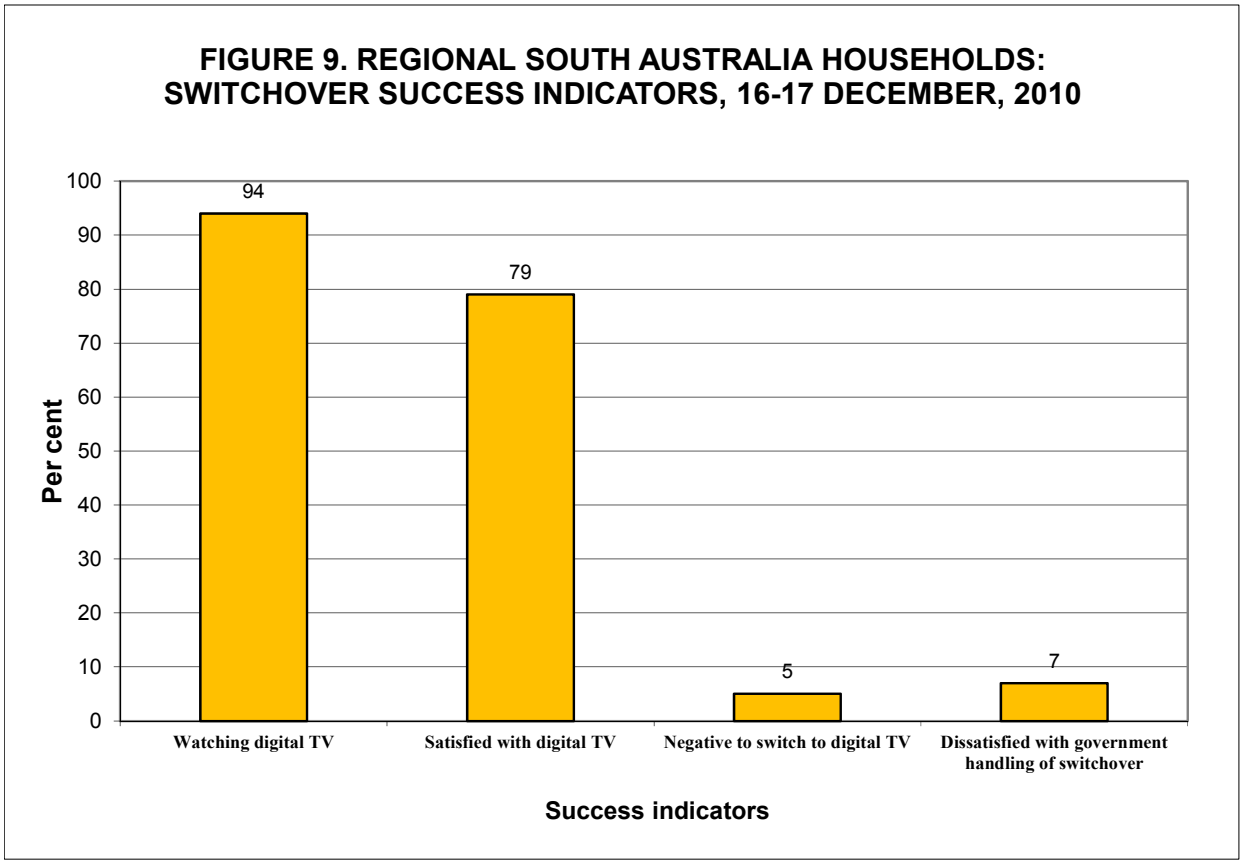
- 94 per cent could watch digital TV following the switchover.
- 91 per cent were getting good reception.
- 39 per cent had some problem when converting to digital television including 35 per cent who had work done on their antenna when they converted to digital TV, and
- 13 per cent said they got some direct help from the government to convert to digital TV and 95 per cent of these households were satisfied with help they received.

Key effectiveness indicators for Regional South Australia households were:

- Eighty per cent were satisfied with the government's handling of the switchover to digital television and only seven per cent are dissatisfied.

- There was very little negativity to the digital television switchover with only a small proportion of households (five per cent) against the digital switchover - most were either for it (77 per cent) or neutral (18 per cent).
- Satisfaction with digital television was high (79 per cent satisfied and only 10 per cent dissatisfied).
- Just about all said that the government had kept them well informed, both on when it would happen (95 per cent) and what to do to convert (90 per cent).
- There was no major variation across the four switchover areas (Broken Hill, Mount Gambier/South East South Australia, Riverland and Spencer Gulf) in most of the key indicators referred to above, and
- The main difference was that Spencer Gulf and Mount Gambier/South East South Australia households had more problems converting to digital than did those in Riverland and Broken Hill and this was mainly due to reception problems that required work to be done on their antenna system.

Figure 9. Regional South Australia households: Switchover success indicators, 16-17 December 2010



3.5.3 Stakeholders

Research was conducted by Newspoll in March 2011 to obtain stakeholder feedback on the digital switchover process in Regional South Australia covering Broken Hill, Riverland, Mount Gambier/South East South Australia and Spencer Gulf.

The research design was a random sample of stakeholders in the Regional South Australia switchover window stratified by type of stakeholder (retailers, antenna installers, DSLOs and other key players in state government and industry) and geographic area (the four areas within this window). Interviews were conducted using a mixture of face to face and phone interviews. A total of 65 interviews were conducted in March 2011 – 14 face to face and 51 by phone.

The main findings were:

1. There was uniform agreement that the Taskforce did a great job in making everybody aware of the digital switchover.
2. There was considerable variation in the assessed "smoothness" of the transition to digital both across and within the switchover areas ranging from very smooth in Broken Hill to not very smooth in areas like Mount Gambier and Spencer Gulf where reception problems still persisted in March 2011.
3. There was a view in many areas that the Taskforce messages over-promised on quality of reception, range of digital channels and cost of becoming digitally ready.
4. Some areas felt that they have been "left behind" with unresolved reception problems and no perceived interest by the Taskforce in these problems being resolved.
5. Some concerns were raised in relation to HAS about the quality of the service that HAS recipients were getting and the lack of any "after sales" service.
6. DSLOs were considered by all at the ground level to be a very important player in ensuring a smooth transition although more consideration needs to be given to the size of the geographic area they are responsible for as much of their more effective work is done face to face.
7. The Retail Advisor Scheme was not considered by most retailers to be of any great benefit to them (that is, did not increase their TV equipment sales) although they conceded it had some benefits in better informing their staff on digital matters - they would rather have had it than not have had it. The registration process was considered to be relatively straight forward.
8. The Antenna Installer Endorsement Scheme was not considered by most installers to be of any great benefit to them (that is, it did not increase the work they got) although they conceded that it had some benefits in helping to send a message to the various installation "cowboys" about the need for a quality digital signal meter. The endorsement process was considered to be relatively straight forward for most.
9. Usage of the website varied considerably across the stakeholders reflecting their different interests, responsibilities and needs. There was some concern that it was too cluttered and was serving too many purposes. mySwitch was seen as a very useful tool by most of stakeholders that used the website.
10. Most stakeholders reported that they received information (brochures, posters, etc) from the Taskforce in a timely fashion although there were a couple of instances where some posters warning people that the switchover was imminent came a bit late (day of switchover).
11. Installers and retailers could not understand why access to VAST seemed so geographically restrictive given it was taxpayer funded.

12. Digital reception issues were fertile ground for myths and misconceptions as regards the true cause of reception problems.

3.6 The third switchover area - Regional Victoria

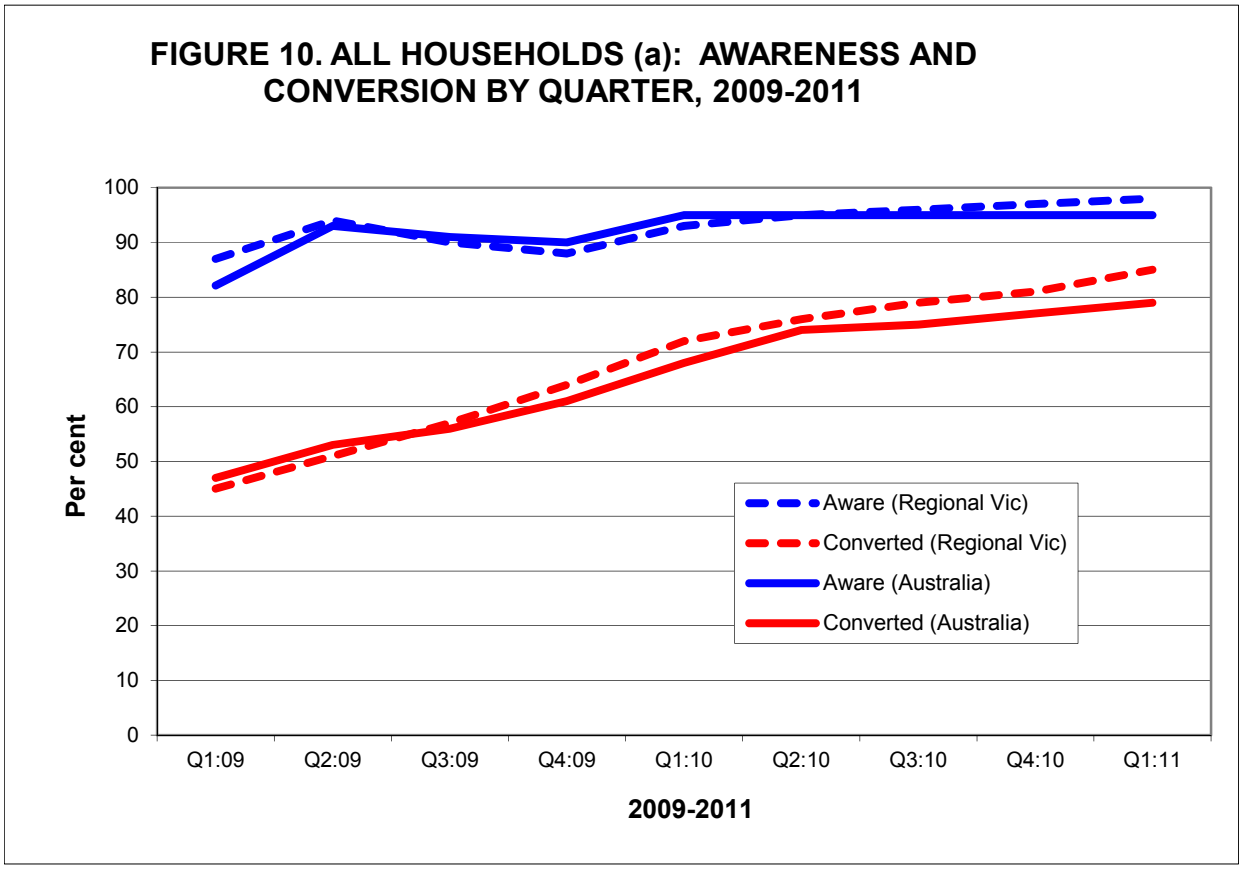
The third area to switch off the analog TV signal was Regional Victoria on 5 May 2011.

3.6.1 Leading up to switchover

Awareness in Regional Victoria of the government's plan to switch Australia over to digital television started at 87 per cent in Quarter 1, 2009 and increased to 98 per cent in Quarter 1, 2011 (see Figure 10).

The proportion of households in Regional Victoria that converted to digital television (that is, those who could watch at least all the standard definition digital free to air channels on their main television set) maintained an upward trend from 45 per cent in Quarter 1, 2009 to 85 per cent in Quarter 1, 2011 (see Figure 10). Over this period, the conversion rate in Regional Victoria started out much the same as for Australia as a whole but got increasingly higher than for Australia as a whole as switchover approached on 5 May, 2011.

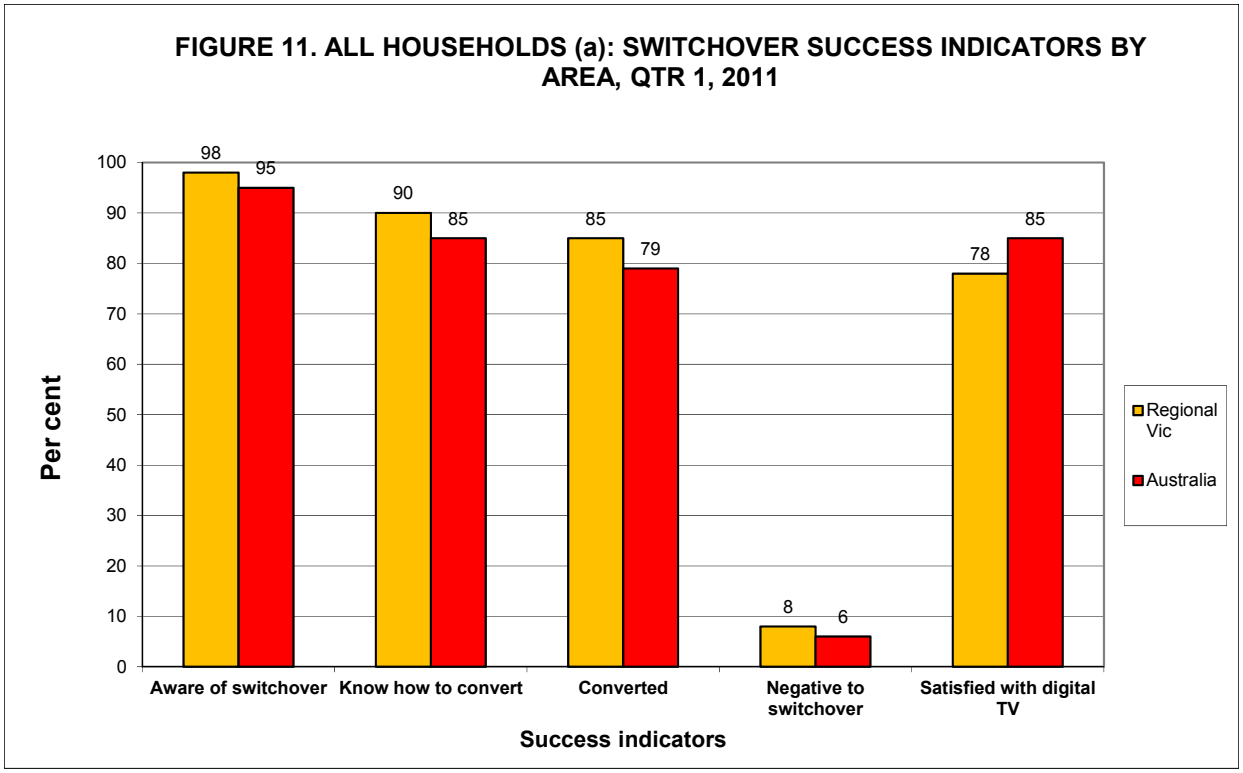
Figure 10. All households (a): Awareness and conversion by quarter, 2009-2011



In the full quarter leading up to the switchover in Regional Victoria, the indications were that the digital switchover would be successful:

- Just about all (98 per cent) were aware of switchover.
- 85 per cent were converted to digital TV, and
- There was very little negativity to the digital switchover (only six per cent remained negative) (Figure 11).

Figure 11. All households (a): Switchover success indicators by area, quarter 1, 2011



3.6.2 Immediately after switchover

Immediately following the switchover, the 443,500 households in the Regional Victoria TV transmission area were asked about the impact of the switchover and results indicated high levels of satisfaction (see Figure 12).

Key impact indicators for Regional Victoria households were:

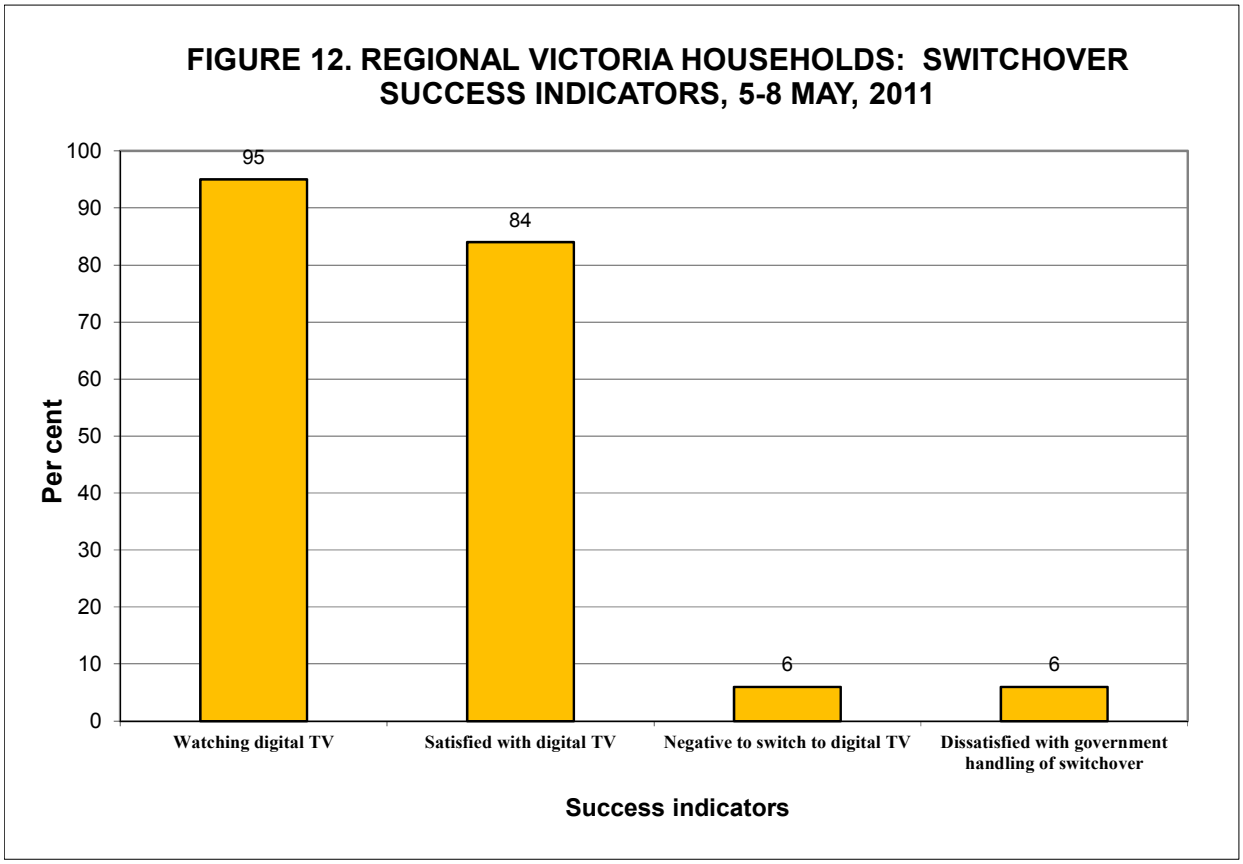
- 95 per cent could watch digital TV following the switchover.
- 90 per cent were getting good reception.
- 30 per cent had some problem when converting to digital television and most of these had work done on their antenna when they converted to digital TV, and
- Five per cent said they got some direct help from the government to convert to digital TV and 92 per cent of these households were satisfied with help they received.

Key effectiveness indicators for Regional Victoria households were:

- Seventy eight per cent were satisfied with the government's handling of the switchover to digital television and only six per cent were dissatisfied.

- There was very little negativity to the digital television switchover with only a small proportion of households (six per cent) against the digital switchover - most were either for it (74 per cent) or neutral (19 per cent).
- Satisfaction with digital television was high (84 per cent satisfied and only eight per cent dissatisfied).
- Just about all said that the government had kept them well informed, both on when it would happen (94 per cent) and what to do to convert (87 per cent).
- There was no major variation across the four switchover areas (Gippsland, Goulburn Valley/ Upper Murray, North Central Victoria and South West Victoria) in most of the key indicators referred to above, and
- The main difference was that North Central Victorian households had more problems converting to digital than did those in the other areas and this was mainly due to reception problems that required work to be done on their antenna systems.

Figure 12. Regional Victoria households: Switchover success indicators, 5-8 May, 2011



3.6.3 Stakeholders

Research was conducted by Newspoll in June 2011 to obtain stakeholder feedback on the digital switchover process in Regional Victoria covering Gippsland, Goulburn Valley/Upper Murray, Northern Central Victoria and South West Victoria.

The research design was a random sample of stakeholders in the Regional Victoria switchover window stratified by type of stakeholder (retailers, antenna installers, DSLOs and other key players in state government and industry) and geographic area (the four areas within this window). Interviews were conducted using a mixture of face to face and phone interviews. A total of 63 interviews were conducted – 20 face to face and 43 by phone.

The main findings were:

1. The transition to digital in Regional Victoria was very smooth for most involved (households and other stakeholders).
2. A team leader for DSLOs added considerable value and was a model worth considering in other regions.
3. It was important to factor in that there was an ever declining pool of those who have not switched over and this pool was increasingly made up of "problem cases" in terms of negative attitudes to switchover due to fear of change, isolation, poverty or bad location for digital reception. This posed many challenges to the DSLO. For example, after 3 months into the job, reception issues start to dominate and DSLOs could lose confidence if not up to speed on some of the less technical aspects.
4. More effort could be put into identifying the "uniqueness" factors of areas as regards digital conversion such as historical baggage, topography or transmission tower locations and using local people like DSLOs to tailor the general message to better suit the area. The main message delivered by DST that digital switchover was easy and cheap and you got a better picture and more channels was fine for the majority of households and other stakeholders but needed to be changed a bit when dealing with areas that had reception problems.
5. The Retail Advisor Scheme should be retained for the benefit of TV customers and more actively promoted to customers so that retailers were more likely to see a direct benefit to them.
6. The Antenna Installer Endorsement Scheme should be retained for the benefit of TV customers and more actively promoted so that installers were more likely to see a direct benefit to them. There should be more effective communication with local antenna installers through perhaps a regular newsletter updating them on developments. This could go to installers in all areas yet to be switched over. It is important that as soon as there was a DSLO on board, that technical people from DST visit switchover areas to talk to local installers about issues, build some bridges by recognising local problems, talking about solutions (like VAST) and explaining rationale for HAS and use of "outsiders".
7. There was a need for a technical help line/desk that deals specifically with reception problems.
8. Issues were raised concerning HAS that deserved some attention. Included among these were the need to ensure that eligible households knew about the scheme, that HAS recipients got a high quality STB that it was properly installed by qualified installers (with a digital meter), that any reception problems was identified and sorted and that some back-up service was available. There was some evidence of low quality installation practices although problems were less widespread than in Regional South Australia.

3.7 The fourth switchover area – Regional Queensland

The fourth area to switch off the analog TV signal was Regional Queensland on 6 December 2011.

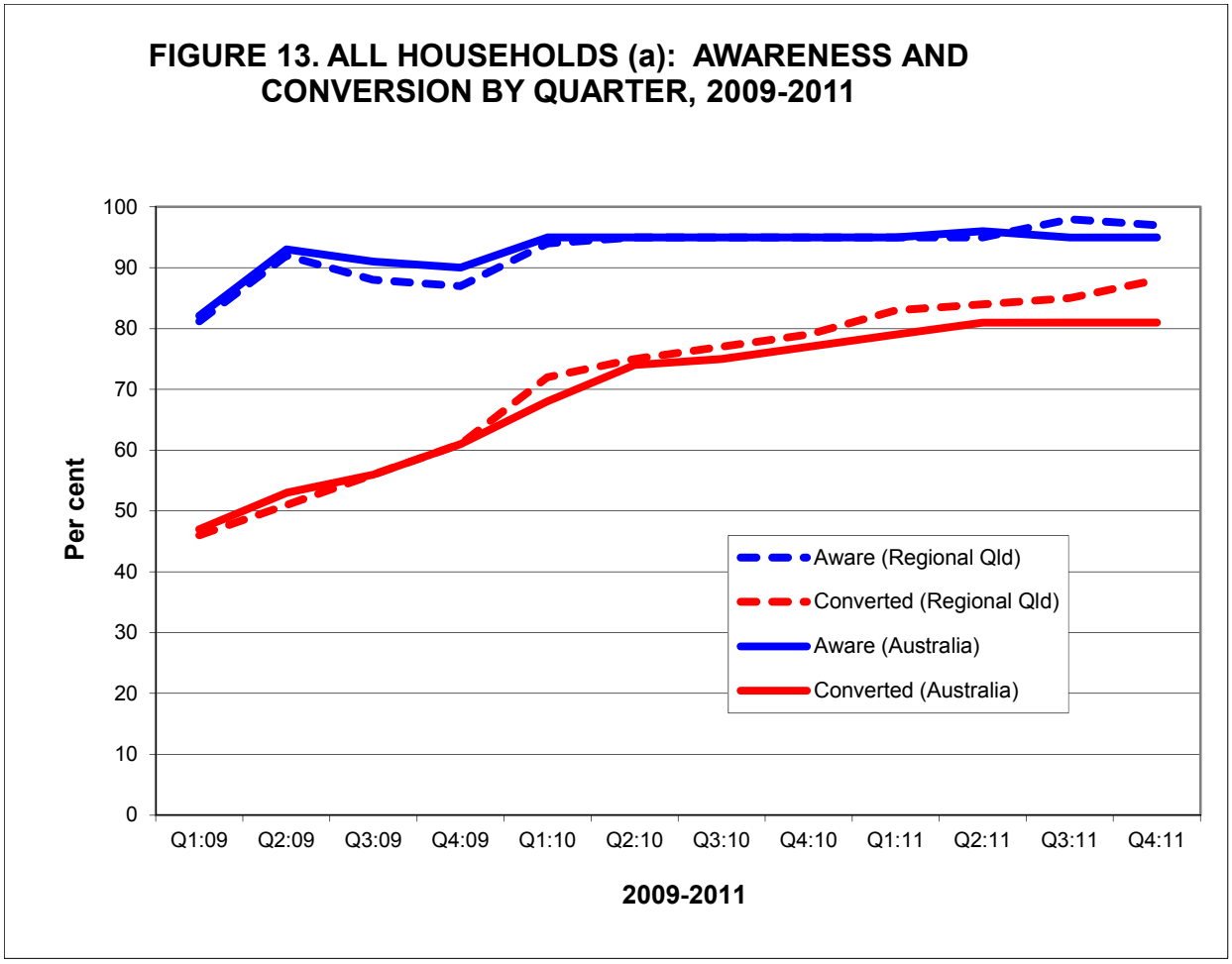
3.7.1 Leading up to switchover

Awareness in Regional Queensland of the government's plan to switch Australia over to digital television started at 81 per cent in Quarter 1, 2009 and increased to 97 per cent in Quarter 4, 2011 (see Figure 13).

The proportion of households in Regional Queensland that converted to digital television (that is, they could watch at least all the standard definition digital free to air channels on their main

television set) maintained an upward trend from 46 per cent in Quarter 1, 2009 to 88 per cent in Quarter 4, 2011 (see Figure 13). Over this period, the conversion rate in Regional Queensland started out much the same as for Australia as a whole but got increasingly higher than for Australia as a whole as switchover approached on 6 December, 2011.

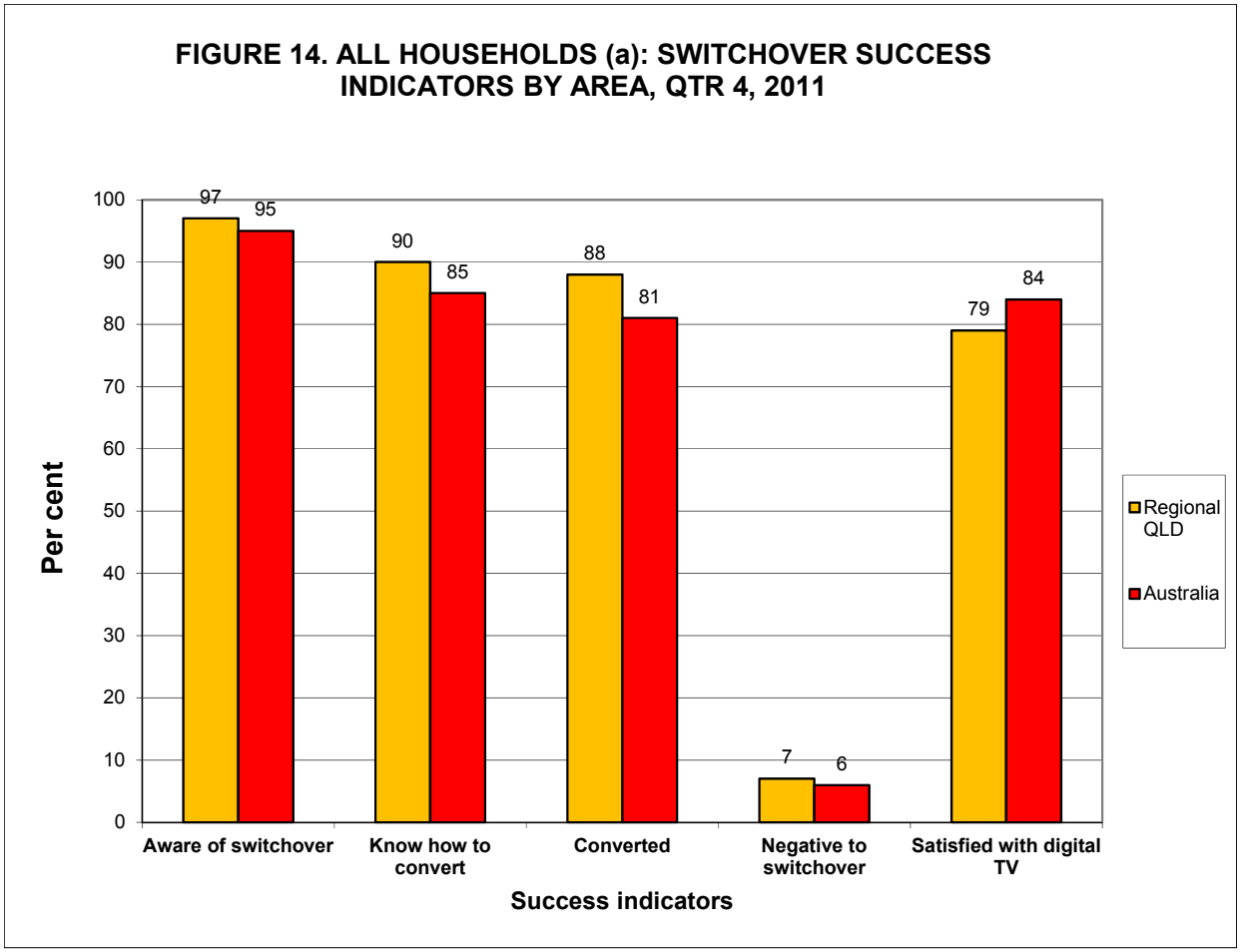
Figure 13. All households (a): Awareness and conversion by quarter, 2009-2011



In the full quarter leading up to the switchover in Regional Queensland, the indications were that the digital switchover would be successful:

- Just about all (97 per cent) were aware of switchover.
- 88 per cent were converted to digital TV, and
- There was very little negativity to the digital switchover (only seven per cent remained negative) (Figure 14).

Figure 14. All households (a): Switchover success indicators by area, quarter 4, 2011



3.7.2 Immediately after switchover

Immediately following the switchover, the 518,800 households in the Regional Queensland TV transmission area were asked about the impact of the switchover and results indicated high levels of satisfaction (see Figure 15).

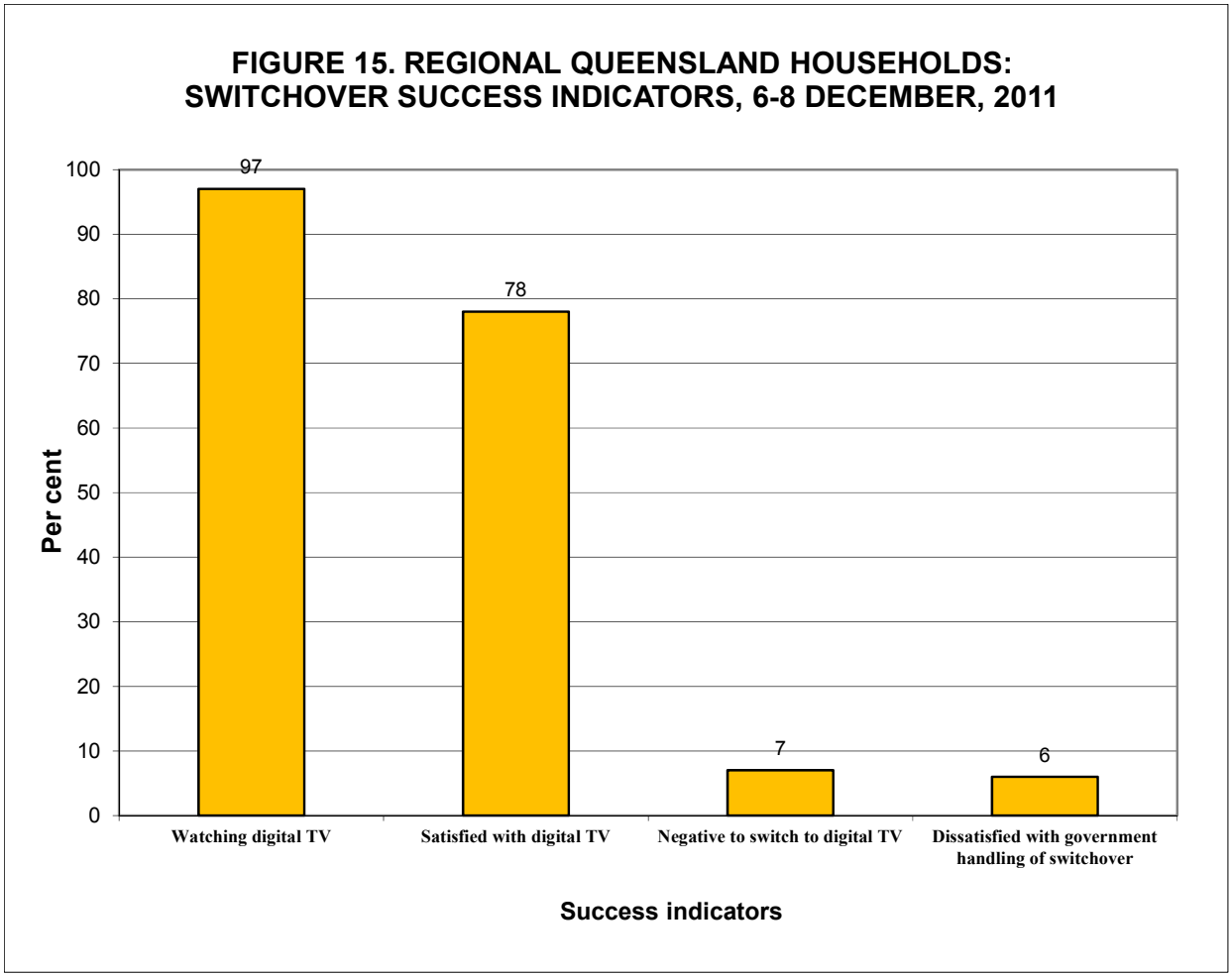
Key impact indicators for Regional Queensland households were:

- 97 per cent could watch digital TV following the switchover
- 89 per cent were getting good reception
- 27 per cent had some problem when converting to digital television and most of these had work done on their antenna when they converted to digital TV, and
- Four per cent said they got some direct help from the government to convert to digital TV and 95 per cent of these households were satisfied with help they received.

Key effectiveness indicators for Regional Queensland households were:

- Seventy six per cent were satisfied with the government's handling of the switchover to digital television and only six per cent were dissatisfied.
- There was very little negativity to the digital television switchover with only a small proportion of households (seven per cent) against the digital switchover - most were either for it (70 per cent) or neutral (17 per cent).
- Satisfaction with digital television was high (78 per cent satisfied and only 11 per cent dissatisfied).
- Just about all said that the government kept them well informed, both on when it would happen (92 per cent) and what to do to convert (88 per cent), and
- There was no major variation across the six switchover areas (Capricornia, Darling Downs, Far North Queensland, North Queensland, Qld Central Coast/ Whitsundays and Wide Bay) in most of the key indicators referred to above.

Figure 15. Regional Queensland households: Switchover success indicators, 6-8 December, 2011



3.7.3 Stakeholders

Research was conducted by Newspoll in May 2012 to obtain stakeholder feedback on the digital switchover process in Regional Queensland covering Capricornia, Darling Downs, Far North Queensland, North Queensland, Qld Central Coast/Whitsundays and Wide Bay.

The research design was a random sample of stakeholders in the Regional Queensland switchover window stratified by type of stakeholder (retailers, antenna installers, DSLOs and other key players in state government and industry) and geographic area (the six areas within this window). Interviews were conducted using a mixture of face to face and phone interviews. A total of 58 interviews were conducted – 13 face to face and 45 by phone.

The main findings were:

1. Overall, stakeholders thought that the switchover went very smoothly (giving ratings of at least 7 out of 10) and that the DST had ensured that households were aware of what was happening and what they had to do. There were some problem areas where distance and/or topography made things difficult for reception of a terrestrial signal although these were eventually resolved, some more efficiently and effectively than others. Six months after the switch off of the analog signal there was no evidence of any major problems although a few small areas still had reception problems where all the digital channels were not consistently available.
2. The main "negative" of switchover continues to be with antenna installers who, irrespective of whether endorsed or not, generally were not happy with "outsiders" doing the HAS installations. However, installers were even more unhappy with local "cowboys" making out they were qualified antenna installers.
3. It was important to factor in that there was an ever declining pool of those who had not switched over and this pool was increasingly made up of "problem cases" in terms of negative attitudes to switchover due to fear of change, isolation, poverty or bad location for digital reception. This posed a number of challenges for DST including the message they sent out to households (see next point) and the nature of the role of the DSLOs and the skills needed.
4. The switchover message may have needed some reworking to better reflect an environment where everyone that was going to know about digital switchover through such messaging already did know and that issues now were more about reception than getting a STB or digital TV. In addition, more effort should be put into identifying the "uniqueness" factors of areas as regards digital conversion such as historical context, topography or transmission tower locations and use local people like DSLOs to tailor the general message to better suit the area.
5. Locations where households cannot get proper coverage from the main broadcast towers were a challenge for all involved and in most cases reception issues were resolved with either a (up-graded) self-help transmission tower or providing households with access to VAST and SSS. There was some confusion among stakeholders as to the Department's rationale for upgrading self-help transmitters or making VAST available.
6. There did not appear to be a large take-up of the Antenna Installer Endorsement Scheme (AIES) scheme and those in the scheme generally did not see it to be of great benefit to

them. However Newspoll believed that the scheme should be retained for the benefit of TV customers and more actively promoted so that installers were more likely to see a direct benefit to them. It was important that DST visited switchover areas to talk to local installers and build some bridges by recognising and understanding local problems, talking through solutions (like VAST) and explaining the rationale for HAS and the use of "outsiders".

7. There did not appear to be a large take-up of the Retail Advisor Scheme and it seemed to be limited more to the major chains like Dick Smith, Good Guys and Radio Rentals. Those in the scheme generally did not see a great benefit to them in terms of giving them an edge on their competitors.

8. The HAS program came in for a lot of criticism by stakeholders although it appears, based on the post switchover survey results, that the size of the problem was very much exaggerated. Most antenna installers and retailers knew of at least a few cases where the workmanship was poor or was not appropriate for that household (installed VAST when not needed). Exacerbating the situation was the fact that local antenna installers were generally quite angry that "outsiders" were operating in their patch and with their customers. Some thought that by being endorsed under AIES they would get to do the HAS installations. Concerns were also raised that households did not fully understand HAS eligibility conditions. In particular, many households were not aware that if you already had a digital TV or STB but had poor reception then you could still apply for assistance to sort out the reception problem.

9. Overall, stakeholders thought that VAST was a great option and it had made a lot of households very happy and improved their TV viewing experience. Some concerns were raised concerning the need to wait 15 days after installation before a household got the commercial channels. Another concern was the perceived reluctance of the Department to give some households access to VAST because they were in a non VAST area but the installer cannot get a terrestrial signal.

3.8 The fifth switchover area – Southern New South Wales (NSW)

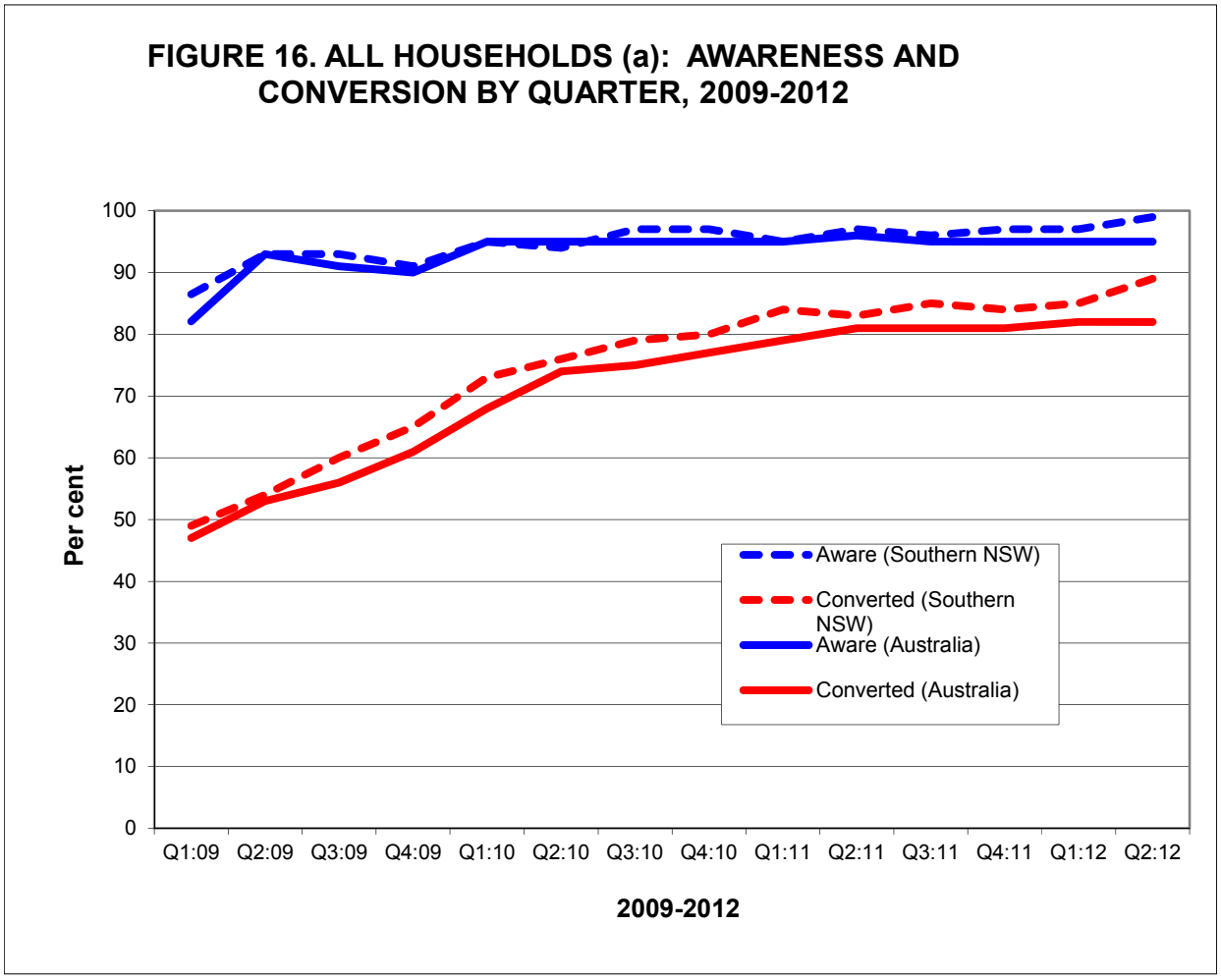
The fifth area to switch off the analog TV signal was Southern NSW on 5 June 2012.

3.8.1 Leading up to switchover

Awareness in Southern NSW of the government's plan to switch Australia over to digital television started at 87 per cent in Quarter 1, 2009 and increased to 99 per cent in Quarter 2, 2012 (see Figure 16).

The proportion of households in Southern NSW that converted to digital television (that is, they could watch at least all the standard definition digital free to air channels on their main television set) maintained an upward trend from 49 per cent in Quarter 1, 2009 to 89 per cent in Quarter 2, 2012 (see Figure 16). Over this period, the conversion rate in Southern NSW was always a bit higher than that for Australia as a whole and this difference increased as Southern NSW approached switchover on 5 June, 2012.

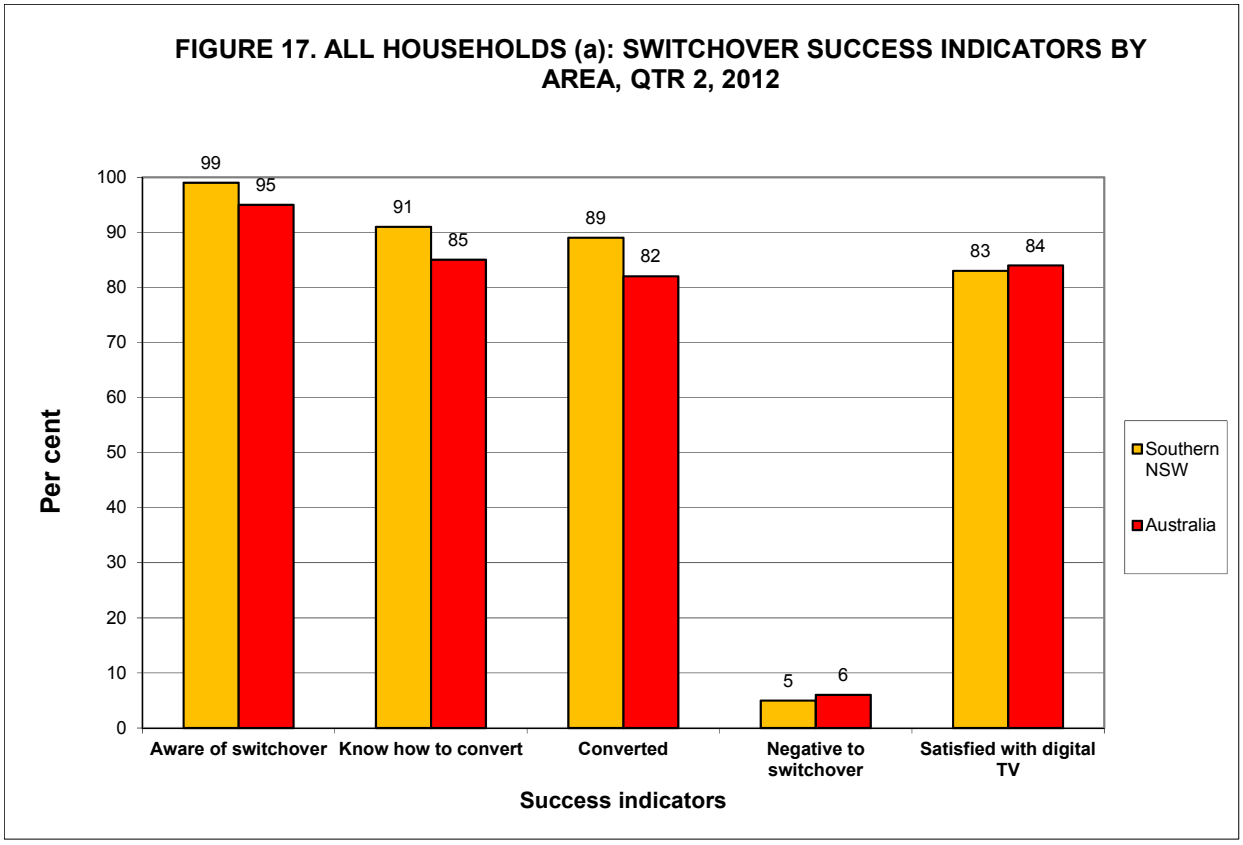
Figure 16. All households (a): Awareness and conversion by quarter, 2009-2012



In the full quarter leading up to the switchover in Southern NSW, the indications were that the digital switchover would be successful:

- Just about all (99 per cent) were aware of switchover
- 89 per cent were converted to digital TV, and
- There was very little negativity to the digital switchover (only six per cent remained negative) (Figure 17).

Figure 17. All households (a): Switchover success indicators by area, quarter 2, 2012



3.8.2 Immediately after switchover

Immediately following the switchover, the 564,200 households in the Southern NSW TV transmission area were asked about the impact of the switchover and results indicated high levels of satisfaction (see Figure 18).

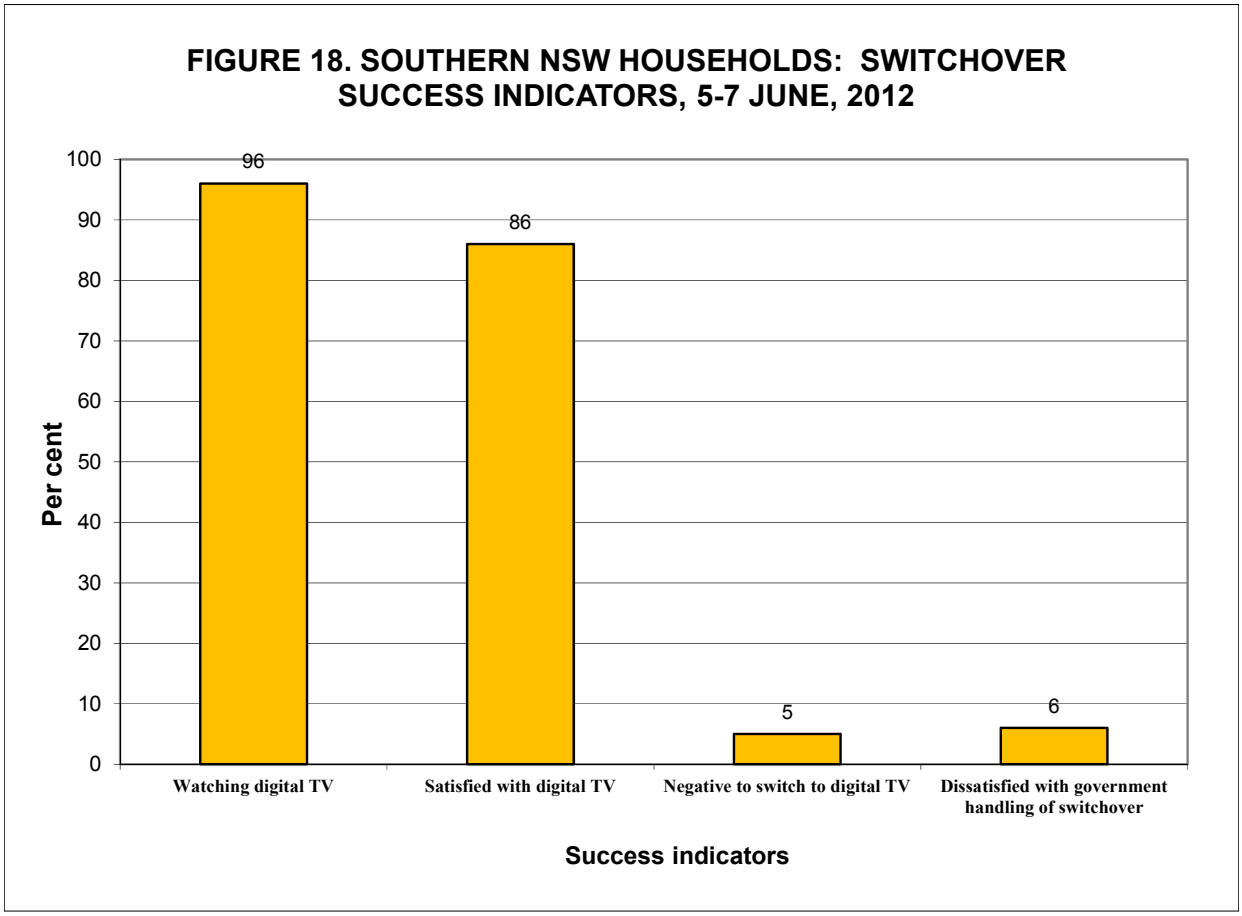
Key impact indicators for Southern NSW households surveyed were:

- 96 per cent could watch digital TV following the switchover
- 92 per cent were getting good reception
- 28 per cent had some problem when converting to digital television and most of these had work done on their antenna when they converted to digital TV, and
- Three per cent said they got some direct help from the government to convert to digital TV and 93 per cent of these households were satisfied with help they received and zero per cent were dissatisfied.

Key effectiveness indicators for Southern NSW households surveyed were:

- 76 per cent were satisfied with the government's handling of the switchover to digital television and only six per cent were dissatisfied.
- There was very little negativity to the digital television switchover with only a small proportion of households (five per cent) against the digital switchover - most were either for it (76 per cent) or neutral (19 per cent).
- Satisfaction with digital television was high 86 per cent satisfied and only 6 per cent dissatisfied).
- The vast majority said that the government kept them well informed, both on when it would happen (92 per cent) and what to do to convert (85 per cent), and
- There was no major variation across the five switchover areas (ACT and Southern Tablelands, Central Tablelands and Central Western Slopes, Griffith/Murrumbidgee Irrigation Area, Illawarra and the South Coast and South West Slopes and Eastern Riverina) on most of the key indicators referred to above.

Figure 18. Southern NSW households: Switchover success indicators, 5-7 June, 2012



3.9 The sixth switchover area – Northern NSW

The sixth area to switch off the analog TV signal was Northern NSW on 27 November 2012.

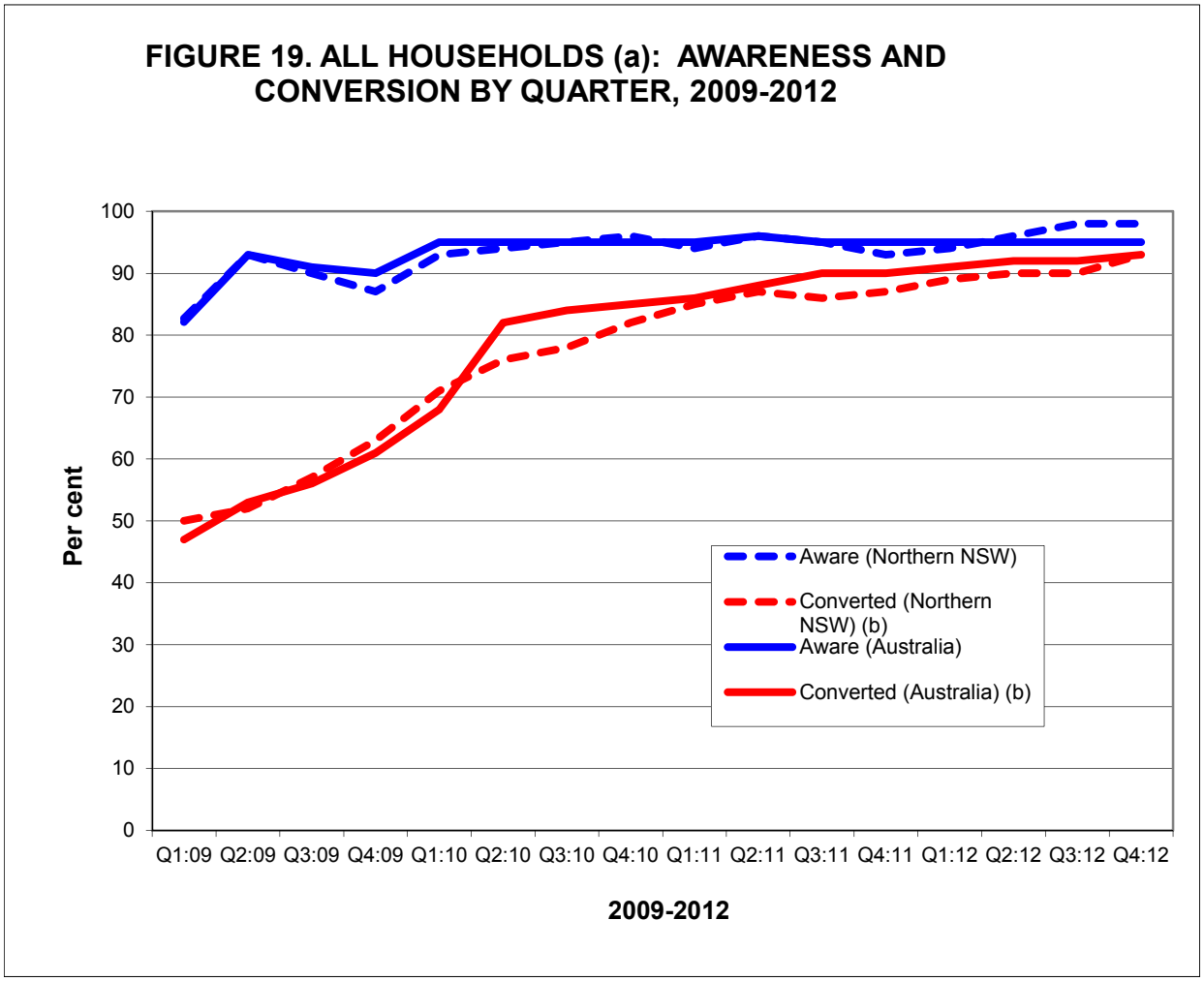
3.9.1 Leading up to switchover

Awareness in Northern NSW of the government's plan to switch Australia over to digital television started at 83 per cent in Quarter 1, 2009 and increased to 98 per cent in Quarter 4, 2012 (see Figure 19).

The proportion of households in Northern NSW that converted to digital television (that is, they could watch at least all the standard definition digital free to air channels on their main television set) maintained an upward trend from 50 per cent in Quarter 1, 2009 to 93 per cent in Quarter 4, 2012 (see Figure 19). Over this period, the conversion rate in Northern NSW stayed much the same as for Australia as a whole.

**Note that conversion based on the 2012 revised definition – see Appendix 2 for details.*

Figure 19. All households (a): Awareness and conversion by quarter, 2009-2012

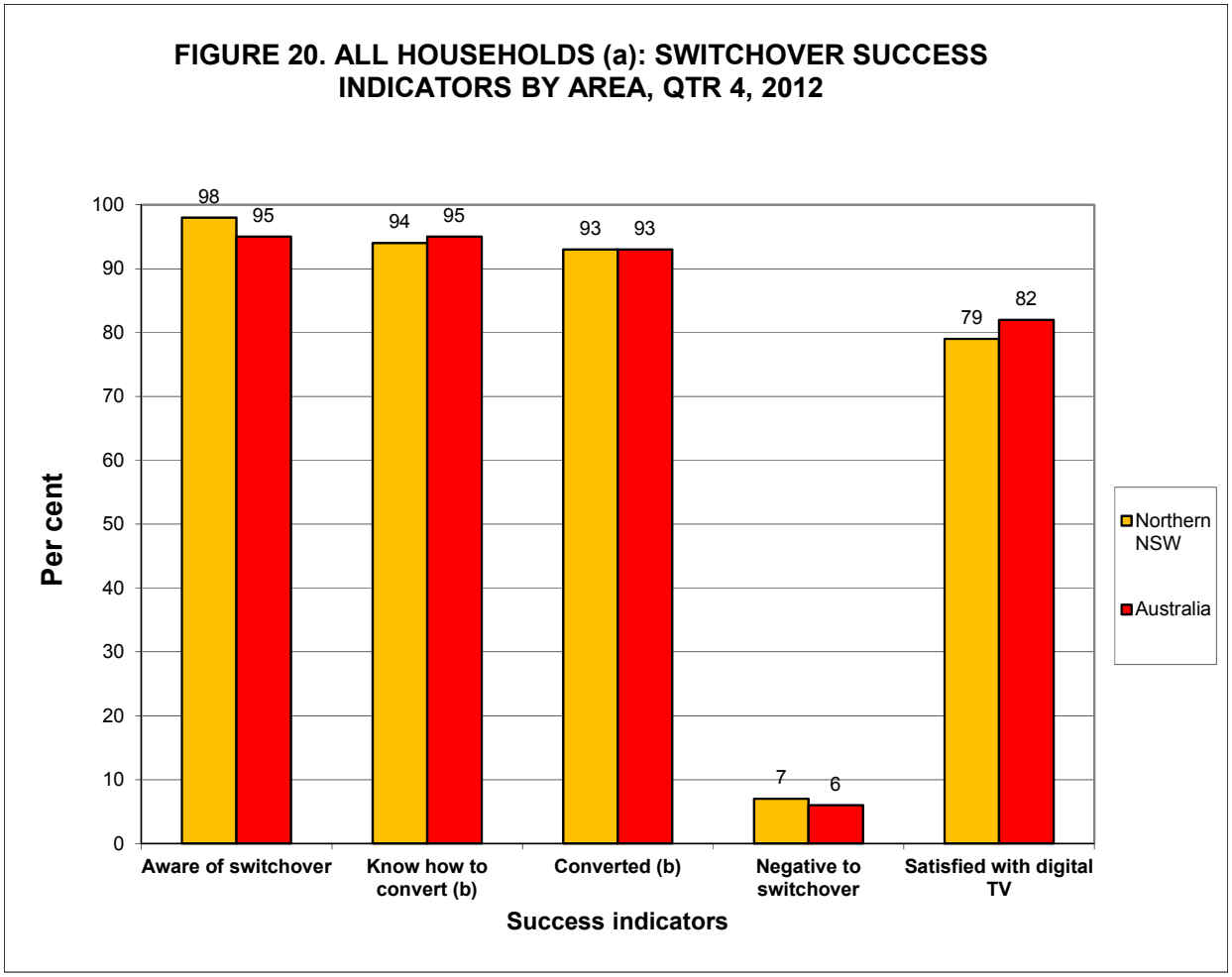


(a) Excludes areas that have already switched over. (b) Based on the 2012 revised definition of converted – see Appendix 2 for details.

In the full quarter leading up to the switchover in Northern NSW, the indications were that the digital switchover would be successful:

- Just about all (98 per cent) were aware of switchover.
- 93 per cent were converted to digital TV, and
- There was very little negativity to the digital switchover (only six per cent remained negative) (Figure 20).

Figure 20. All households (a): Switchover success indicators by area, quarter 4, 2012



(a) Excludes areas that have already switched over. (b) Based on the 2012 revised definition of converted – see Appendix 2 for details.

3.9.2 Immediately after switchover

Immediately following the switchover, the 556,000 households in the Northern NSW TV transmission area were asked about the impact of the switchover and results indicated high levels of satisfaction (see Figure 21).

Key impact indicators for Northern NSW households were:

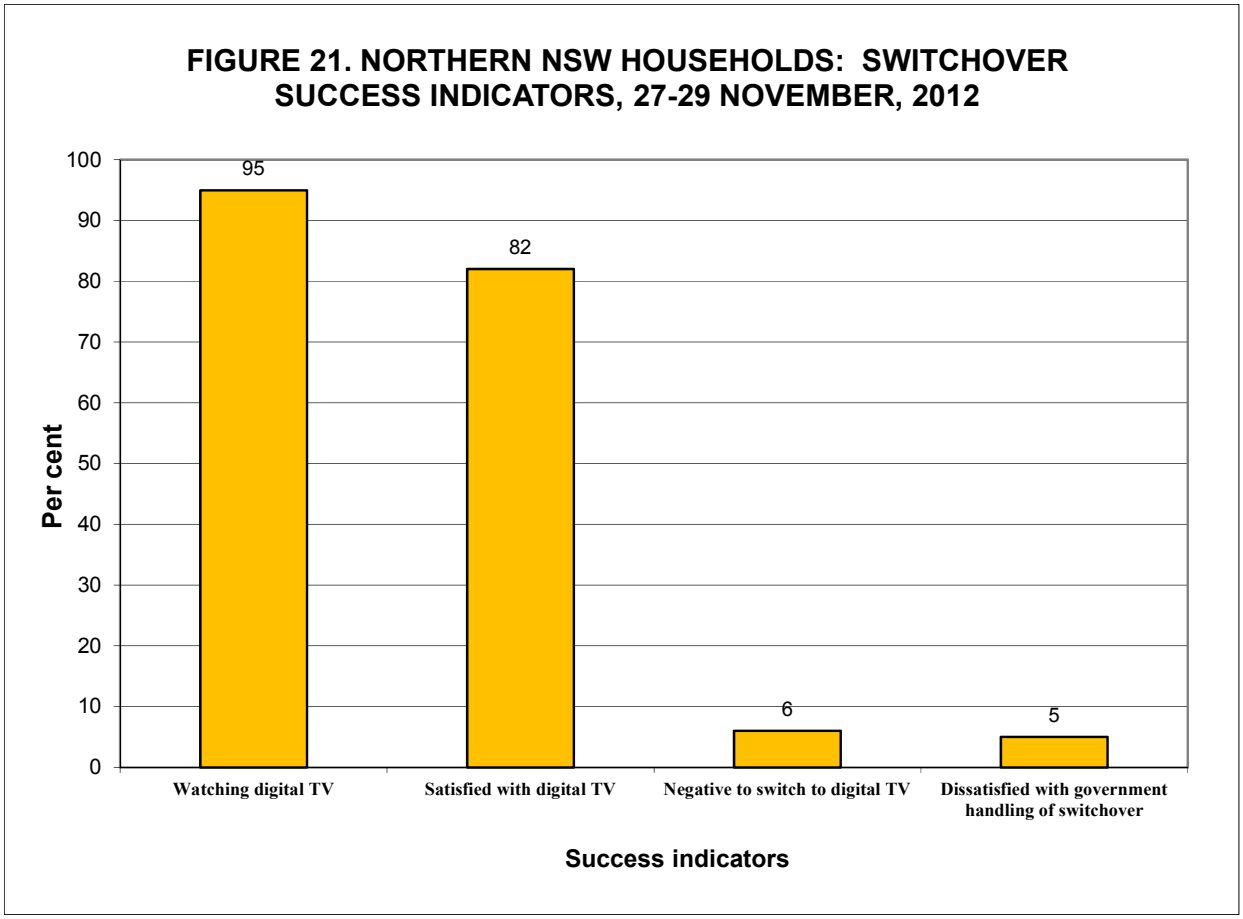
- 95 per cent could watch digital TV following the switchover.
- 89 per cent were getting good reception.
- 30 per cent had some problem when converting to digital television and most of these had work done on their antenna when they converted to digital TV, and

- Five per cent said they got some direct help from the government to convert to digital TV and 90 per cent of these households were satisfied with help they received and eight per cent were dissatisfied.

Key effectiveness indicators for Northern NSW households were:

- 76 per cent were satisfied with the government's handling of the switchover to digital television and only five per cent were dissatisfied.
- There was very little negativity to the digital television switchover with only a small proportion of households (six per cent) against the digital switchover - most were either for it (74 per cent) or neutral (21 per cent).
- Satisfaction with digital television was high with 82 per cent satisfied and only eight per cent dissatisfied, and
- The vast majority said that the government kept them well informed, both on when the switchover would happen (92 per cent) and what to do to convert (86 per cent).

Figure 21. Northern NSW households: Switchover success indicators, 27-29 November, 2012



3.10 The seventh switchover area – Adelaide

The seventh area to switch off the analog TV signal was Adelaide on 2 April 2013.

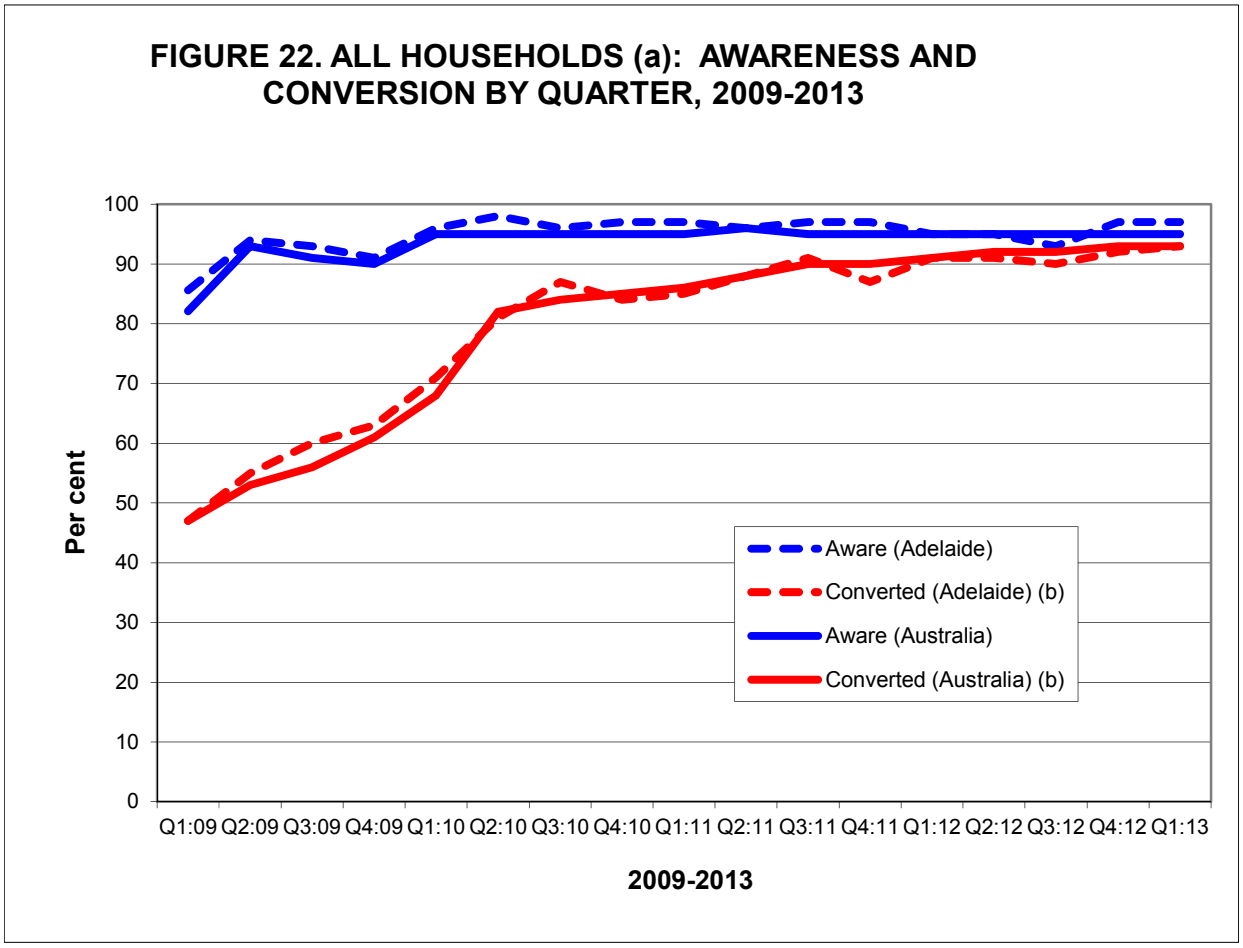
3.10.1 Leading up to switchover

Awareness in Adelaide of the government's plan to switch Australia over to digital television started at 86 per cent in Quarter 1, 2009 and increased to 97 per cent in Quarter 1, 2013 (see Figure 22).

The proportion of households in Adelaide that converted to digital television (that is, they could watch at least all the standard definition digital free to air channels on their main television set) maintained an upward trend from 47 per cent in Quarter 1, 2009 to 93 per cent in Quarter 1, 2013 (see Figure 22). Over this period, the conversion rate in Adelaide stayed much the same as for Australia as a whole.

**Note that conversion based on the 2012 revised definition – see Appendix 2 for details.*

Figure 22. All households (a): Awareness and conversion by quarter, 2009-2013

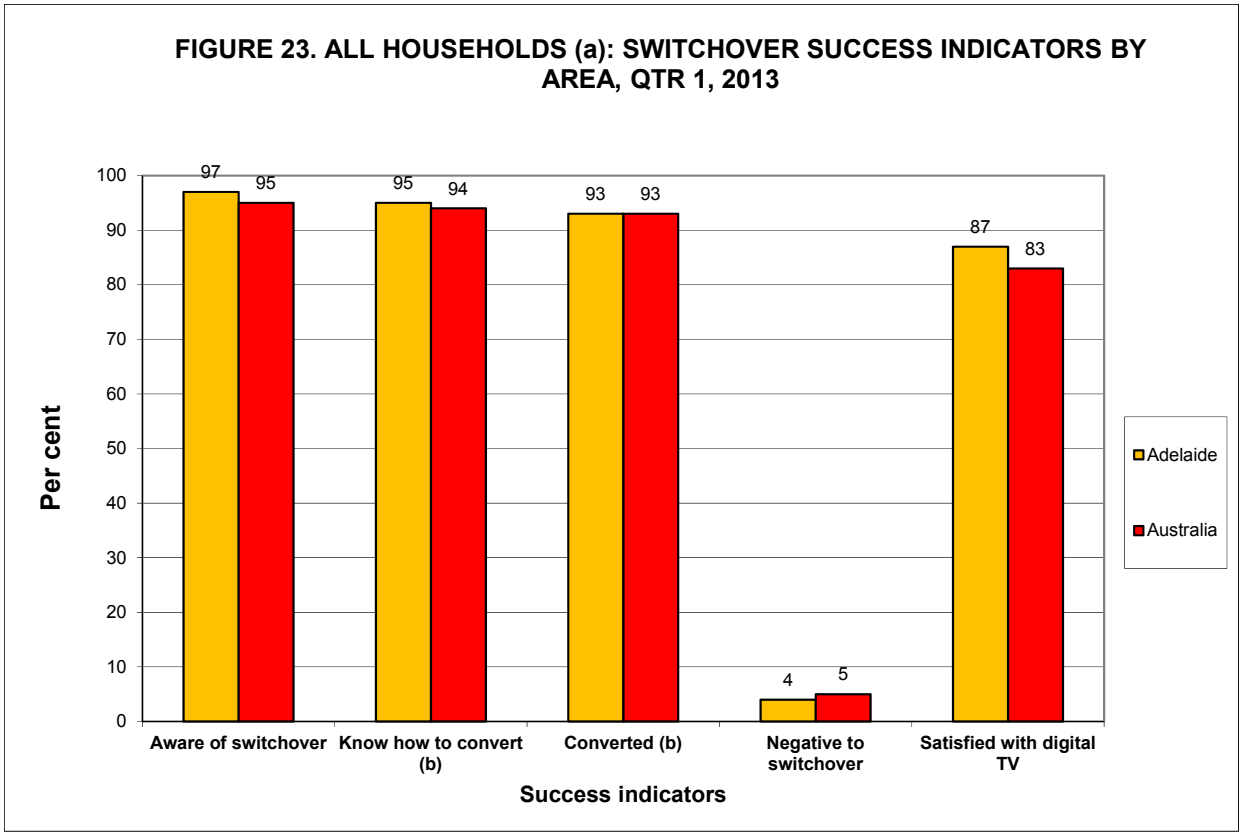


(a) Excludes areas that have already switched over. (b) Based on the 2012 revised definition of converted – see Appendix 2 for details.

In the full quarter leading up to the switchover in Adelaide, the indications were that the digital switchover would be successful:

- Just about all (97 per cent) were aware of switchover.
- 93 per cent were converted to digital TV, and
- There was very little negativity to the digital switchover (only five per cent remained negative) (Figure 23).

Figure 23. All households (a): Switchover success indicators by area, quarter 1, 2013



(a) Excludes areas that have already switched over. (b) Based on the 2012 revised definition of converted – see Appendix 2 for details.

3.10.2 Immediately after switchover

Immediately following the switchover, the 572,300 households in the Adelaide TV transmission area were asked about the impact of the switchover and results indicated high levels of satisfaction (see Figure 24).

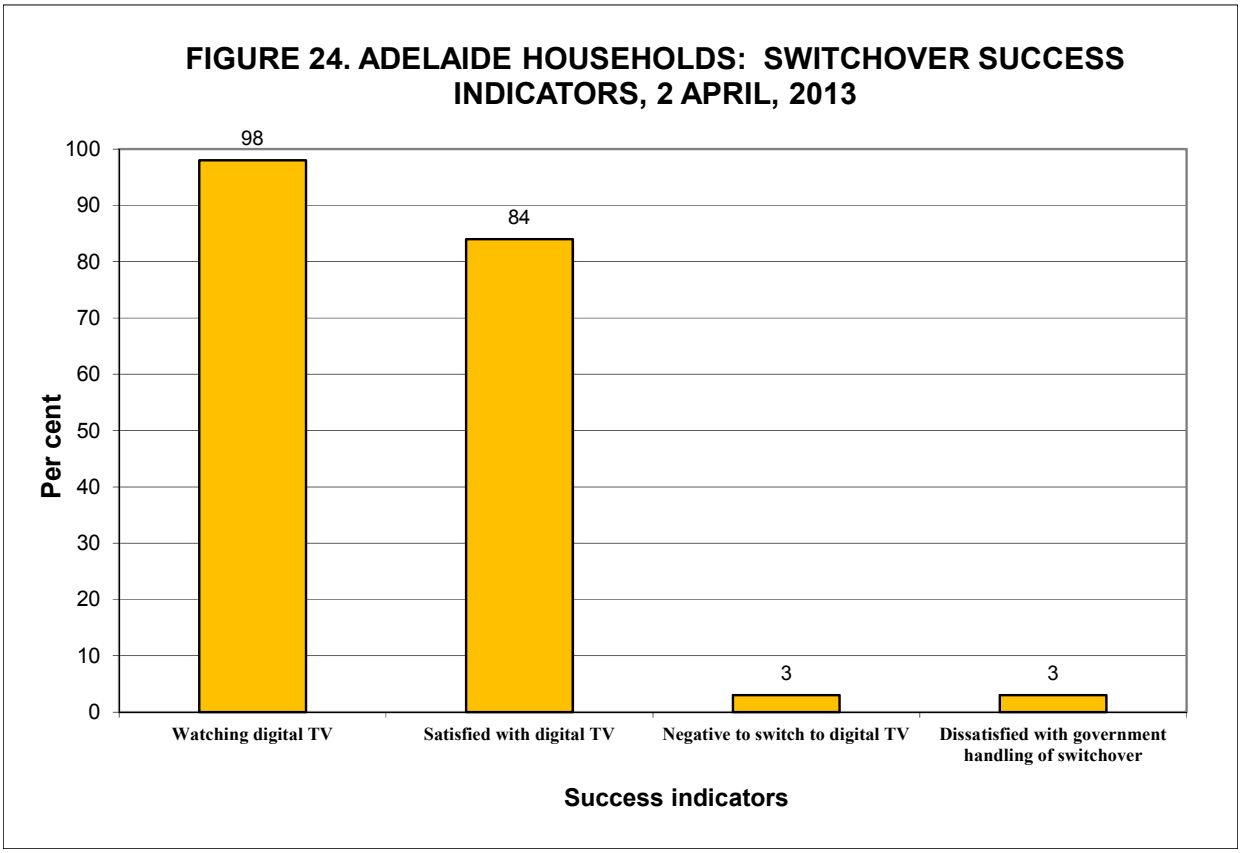
Key impact indicators for Adelaide households were:

- 98 per cent could watch digital TV following the switchover.
- 95 per cent were getting good reception.
- 29 per cent had some problem when converting to digital television and most of these had work done on their antenna when they converted to digital TV, and
- Four per cent said they got some direct help from the government to convert to digital TV and 89 per cent of these households were satisfied with help they received and 9 per cent were dissatisfied.

Key effectiveness indicators for Adelaide households were:

- 78 per cent were satisfied with the government's handling of the switchover to digital television and only three per cent were dissatisfied.
- There was very little negativity to the digital television switchover with only a small proportion of households (three per cent) against the digital switchover - most were either for it (79 per cent) or neutral (18 per cent).
- Satisfaction with digital television was high with 84 per cent satisfied and only five per cent dissatisfied, and
- The vast majority said that the government kept them well informed, both on when it would happen (95 per cent) and what to do to convert (90 per cent).

Figure 24. Adelaide households: Switchover success indicators, 2 April, 2013



3.11 The eighth switchover area – Tasmania

The eighth area to switch off the analog TV signal was Tasmania on 9 April 2013.

3.11.1 Leading up to switchover

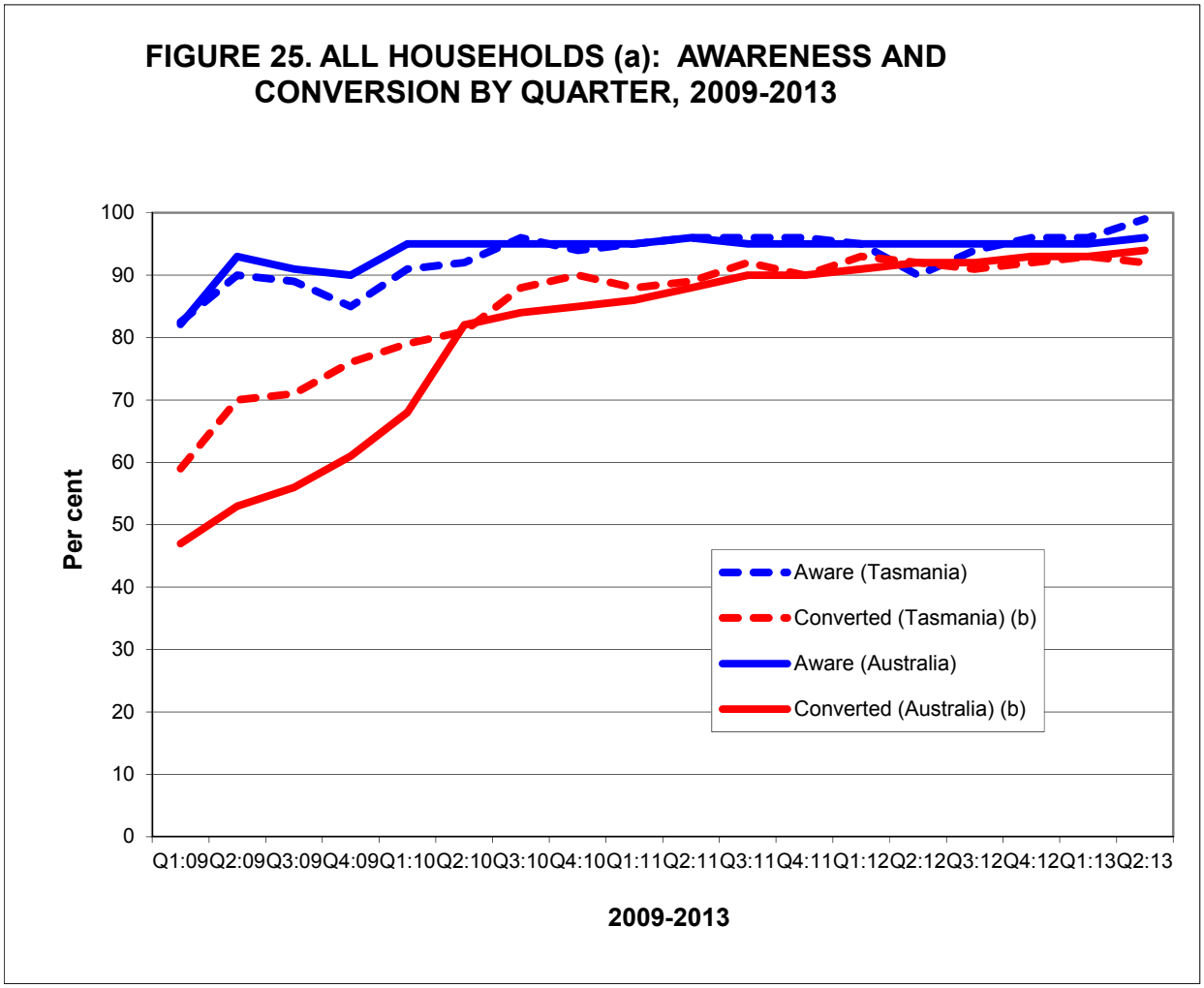
Awareness in Tasmania of the government's plan to switch Australia over to digital television started at 83 per cent in Quarter 1, 2009 and increased to 99 per cent in Quarter 2, 2013 (see Figure 25).

The proportion of households in Tasmania that converted to digital television (that is, they could watch at least all the standard definition digital free to air channels on their main television set) maintained an upward trend from 59 per cent in Quarter 1, 2009 to 92 per cent in Quarter 2, 2013 (see Figure 25). Over this period, the conversion rate in Tasmania started out higher than that for

Australia as a whole but by the start of 2011 the two rates were much the same and remained that way through to Quarter 2, 2013.

**Note that conversion based on the 2012 revised definition – see Appendix 2 for details.*

Figure 25. All households (a): Awareness and conversion by quarter, 2009-2013

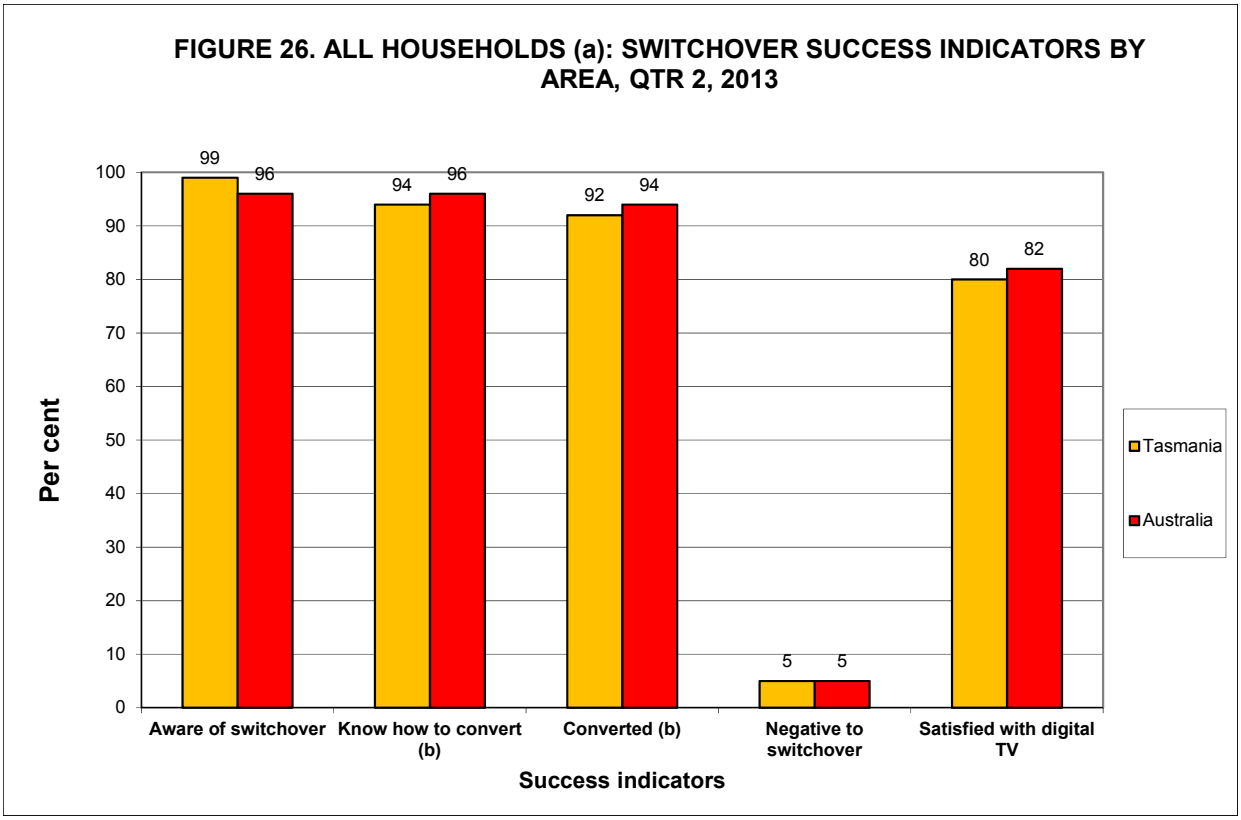


(a) Excludes areas that have already switched over. (b) Based on the 2012 revised definition of converted – see Appendix 2 for details.

In the full quarter leading up to the switchover in Tasmania, the indications were that the digital switchover would be successful:

- Just about all (99 per cent) were aware of switchover
- 92 per cent were converted to digital TV, and
- There was very little negativity to the digital switchover (only five per cent remained negative) (Figure 26).

Figure 26. All households (a): Switchover success indicators by area, quarter 2, 2013



(a) Excludes areas that have already switched over. (b) Based on the 2012 revised definition of converted – see Appendix 2 for details.

3.11.2 Immediately after switchover

Immediately following the switchover, the 209,300 households in the Tasmania TV transmission area were asked about the impact of the switchover and results indicated high levels of satisfaction (see Figure 27).

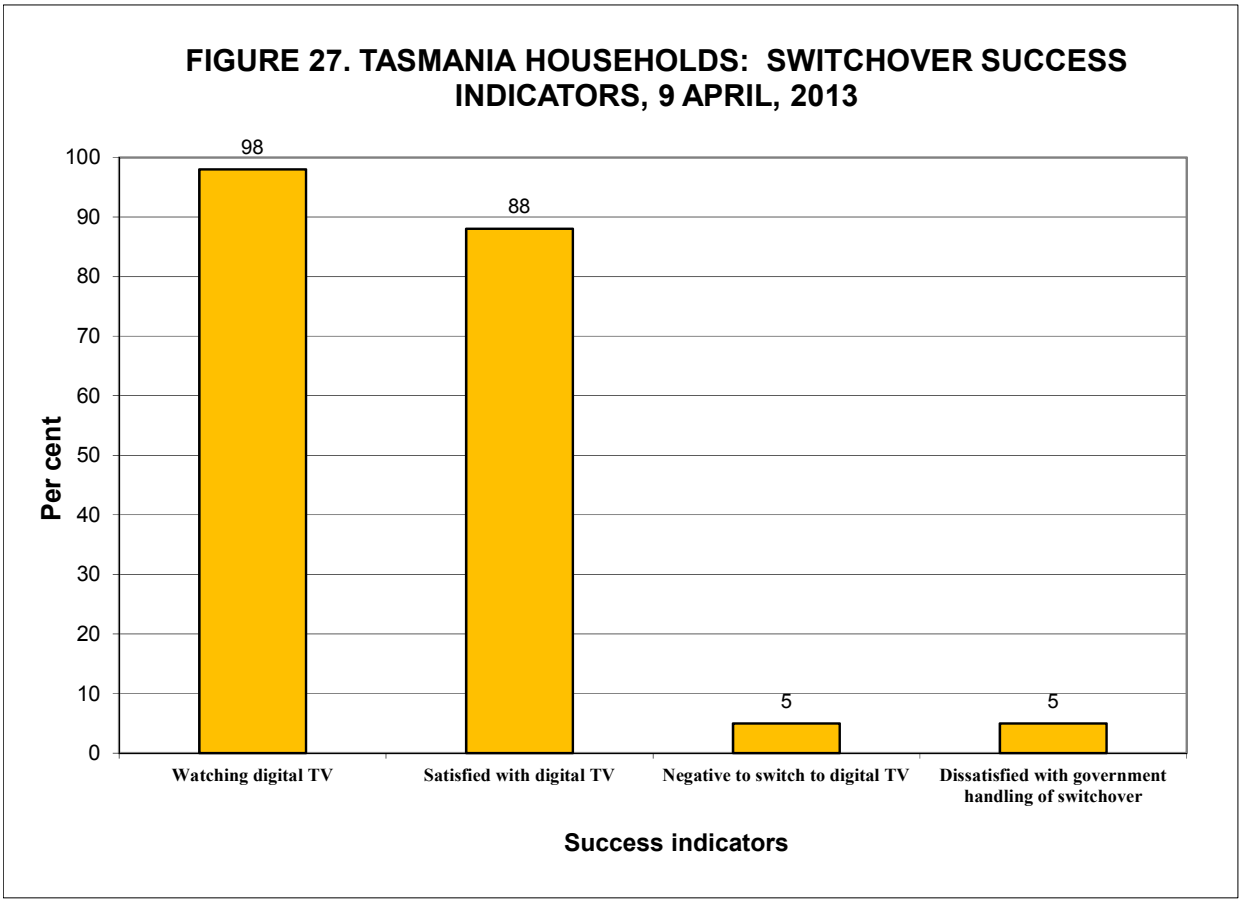
Key impact indicators for Tasmania households were:

- 98 per cent could watch digital TV following the switchover.
- 91 per cent were getting good reception.
- 29 per cent had some problem when converting to digital television and most of these had work done on their antenna when they converted to digital TV, and
- Three per cent said they got some direct help from the government to convert to digital TV and 93 per cent of these households were satisfied with help they received and seven per cent were dissatisfied.

Key effectiveness indicators for Tasmania households were:

- 75 per cent were satisfied with the government's handling of the switchover to digital television and only five per cent were dissatisfied.
- There was very little negativity to the digital television switchover with only a small proportion of households (five per cent) against the digital switchover - most were either for it (75 per cent) or neutral (21 per cent).
- Satisfaction with digital television was high with 88 per cent satisfied and only five per cent dissatisfied, and
- The vast majority said that the government kept them well informed, both on when it would happen (91 per cent) and what to do to convert (82 per cent).

Figure 27. Tasmania households: Switchover success indicators, 9 April, 2013



3.12 The ninth switchover area – Perth

The ninth area to switch off the analog TV signal was Perth on 16 April 2013.

3.12.1 Leading up to switchover

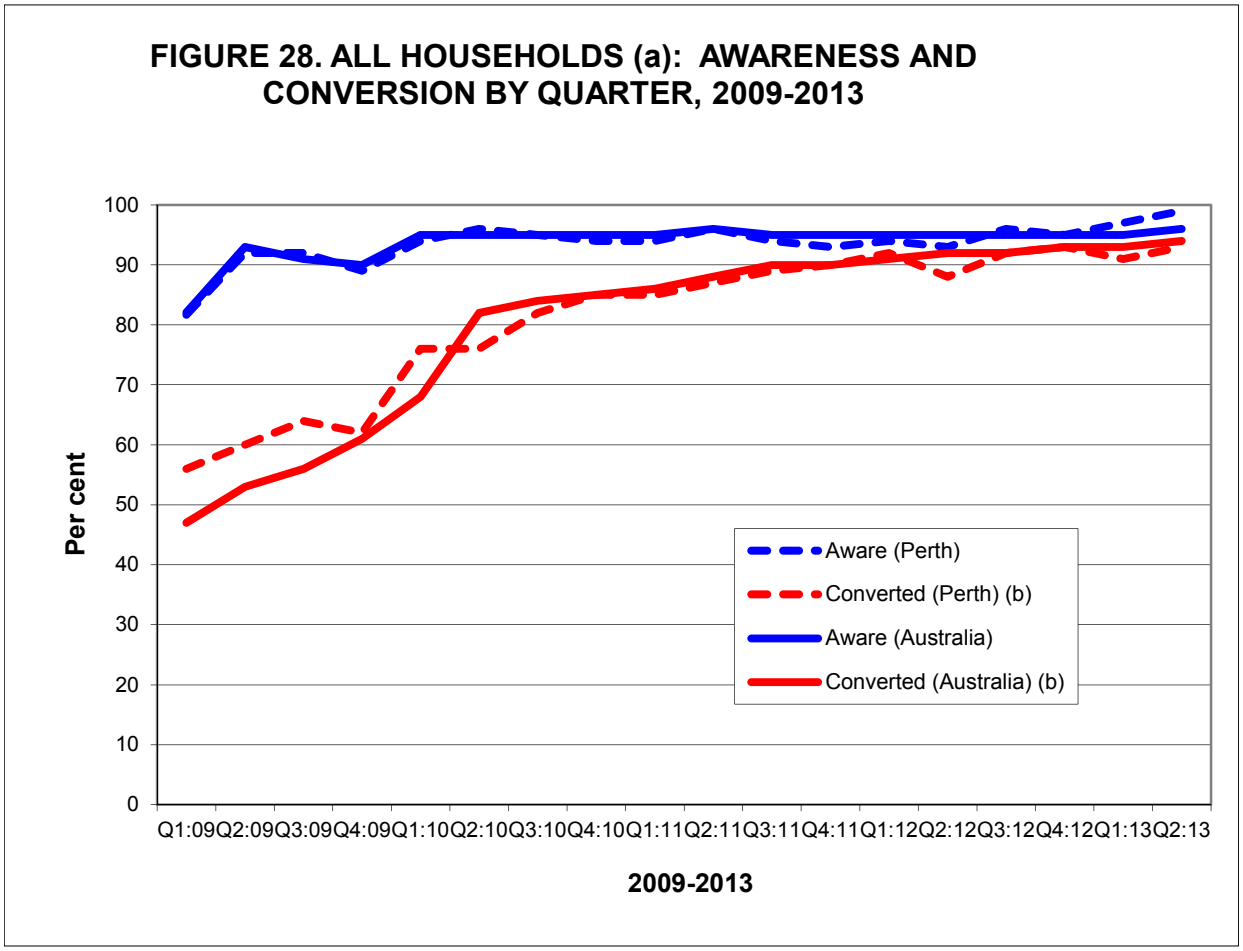
Awareness in Perth of the government's plan to switch Australia over to digital television started at 82 per cent in Quarter 1, 2009 and increased to 99 per cent in Quarter 2, 2013 (see Figure 28).

The proportion of households in Perth that converted to digital television (that is, they could watch at least all the standard definition digital free to air channels on their main television set) maintained an upward trend from 56 per cent in Quarter 1, 2009 to 93 per cent in Quarter 2, 2013 (see Figure

28). Over this period, the conversion rate in Perth started out a bit higher but for most of the time it was much the same as for Australia as a whole.

**Note that conversion based on the 2012 revised definition – see Appendix 2 for details.*

Figure 28. All households (a): Awareness and conversion by quarter, 2009-2013

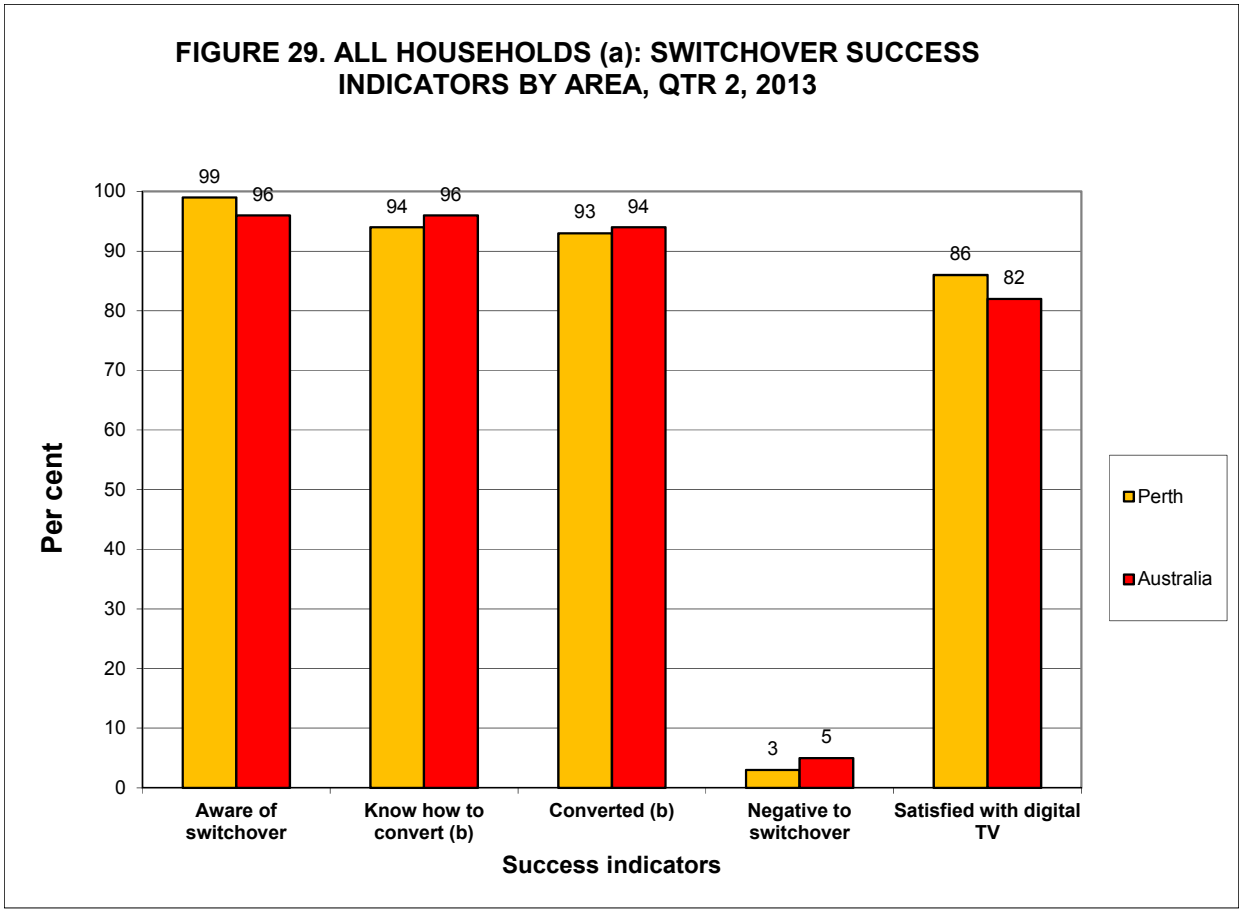


(a) Excludes areas that have already switched over. (b) Based on the 2012 revised definition of converted – see Appendix 2 for details.

In the full quarter leading up to the switchover in Perth, the indications were that the digital switchover would be successful:

- Just about all (99 per cent) were aware of switchover.
- 93 per cent were converted to digital TV, and
- There was very little negativity to the digital switchover (only five per cent remained negative) (Figure 29).

Figure 29. All households (a): Switchover success indicators by area, quarter 2, 2013



(a) Excludes areas that have already switched over. (b) Based on the 2012 revised definition of converted – see Appendix 2 for details.

3.12.2 Immediately after switchover

Immediately following the switchover, the 722,800 households in the Perth TV transmission area were asked about the impact of the switchover and results indicated high levels of satisfaction (see Figure 30).

Key impact indicators for Perth households were:

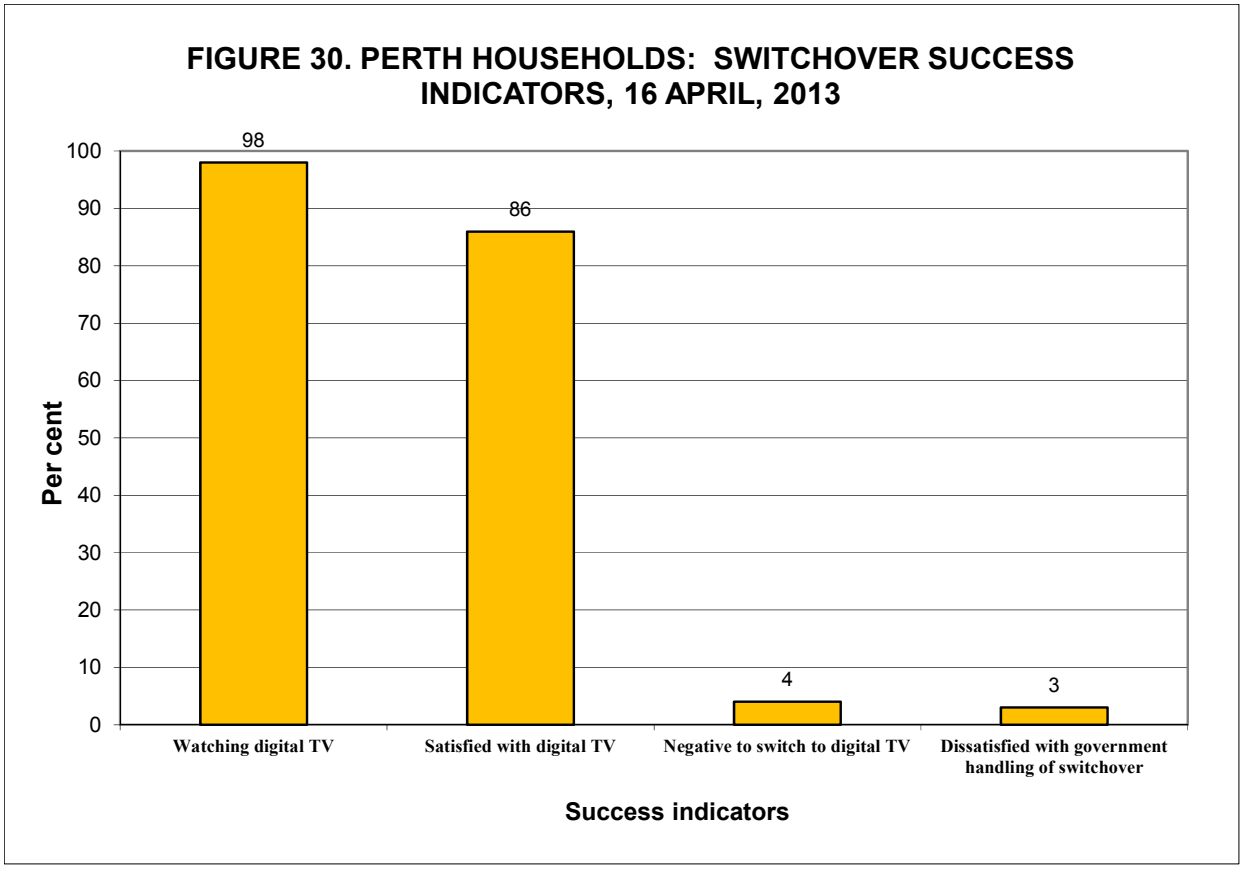
- 98 per cent could watch digital TV following the switchover.
- 94 per cent were getting good reception.
- 24 per cent had some problem when converting to digital television and most of these had work done on their antenna when they converted to digital TV, and

- One per cent said they got some direct help from the government to convert to digital TV and 89 per cent of these households were satisfied with help they received and six per cent were dissatisfied.

Key effectiveness indicators for Perth households were:

- 77 per cent were satisfied with the government's handling of the switchover to digital television and only three per cent were dissatisfied.
- There was very little negativity to the digital television switchover with only a small proportion of households (four per cent) against the digital switchover - most were either for it (77 per cent) or neutral (20 per cent).
- Satisfaction with digital television was high with 86 per cent satisfied and only four per cent dissatisfied, and
- The vast majority said that the government kept them well informed, both on when it would happen (93 per cent) and what to do to convert (84 per cent).

Figure 30. Perth households (a): Switchover success indicators, 16 April, 2013



3.13 The tenth switchover area – Brisbane

The tenth area to switch off the analog TV signal was Brisbane on 28 May 2013.

3.13.1 Leading up to switchover

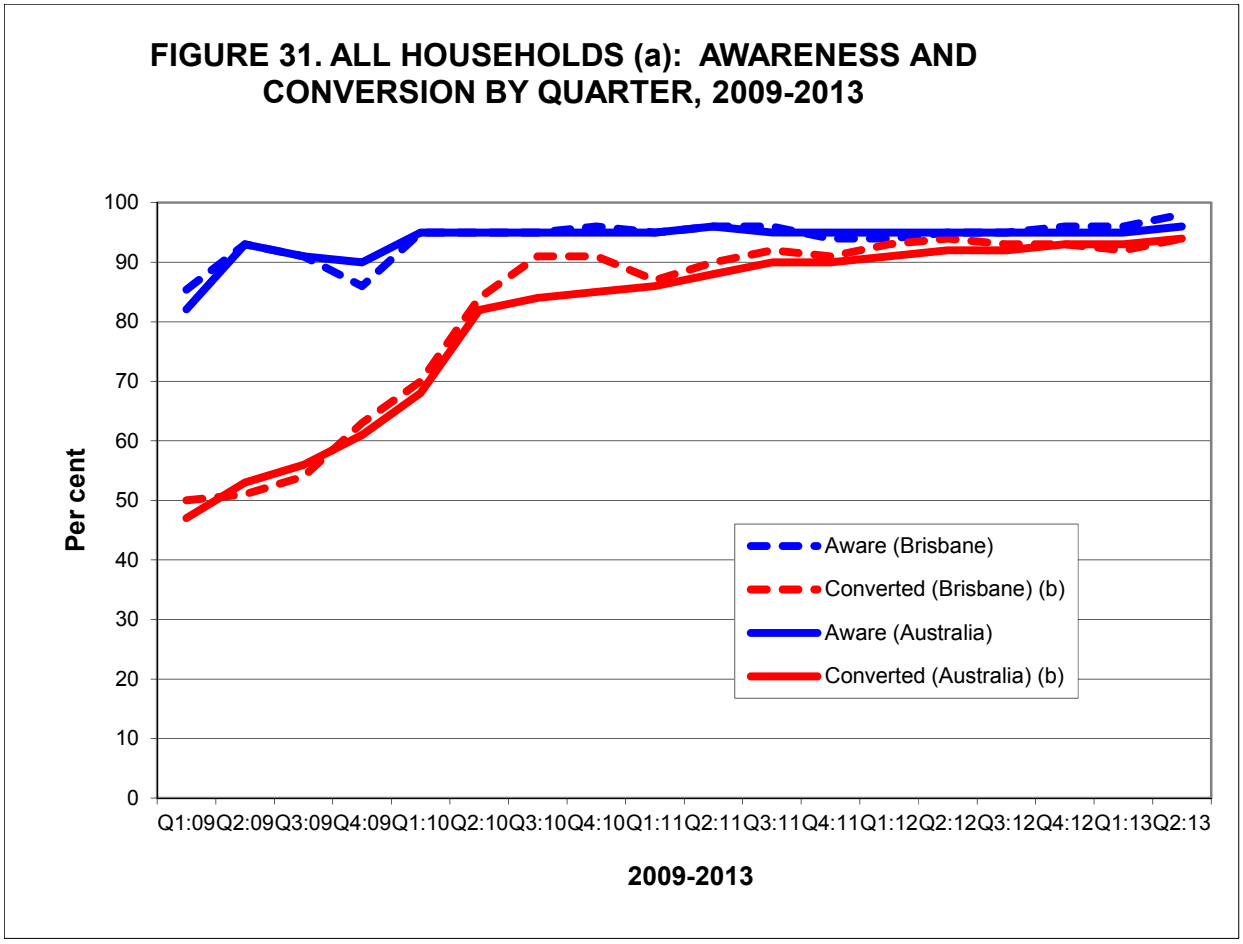
Awareness in Brisbane of the government's plan to switch Australia over to digital television started at 85 per cent in Quarter 1, 2009 and increased to 98 per cent in Quarter 2, 2013 (see Figure 31).

The proportion of households in Brisbane that converted to digital television (that is, they could watch at least all the standard definition digital free to air channels on their main television set)

maintained an upward trend from 50 per cent in Quarter 1, 2009 to 94 per cent in Quarter 2, 2013 (see Figure 31). Over this period, the conversion rate in Brisbane stayed much the same as for Australia as a whole.

**Note that conversion based on the 2012 revised definition – see Appendix 2 for details.*

Figure 31. All households (a): Awareness and conversion by quarter, 2009-2013

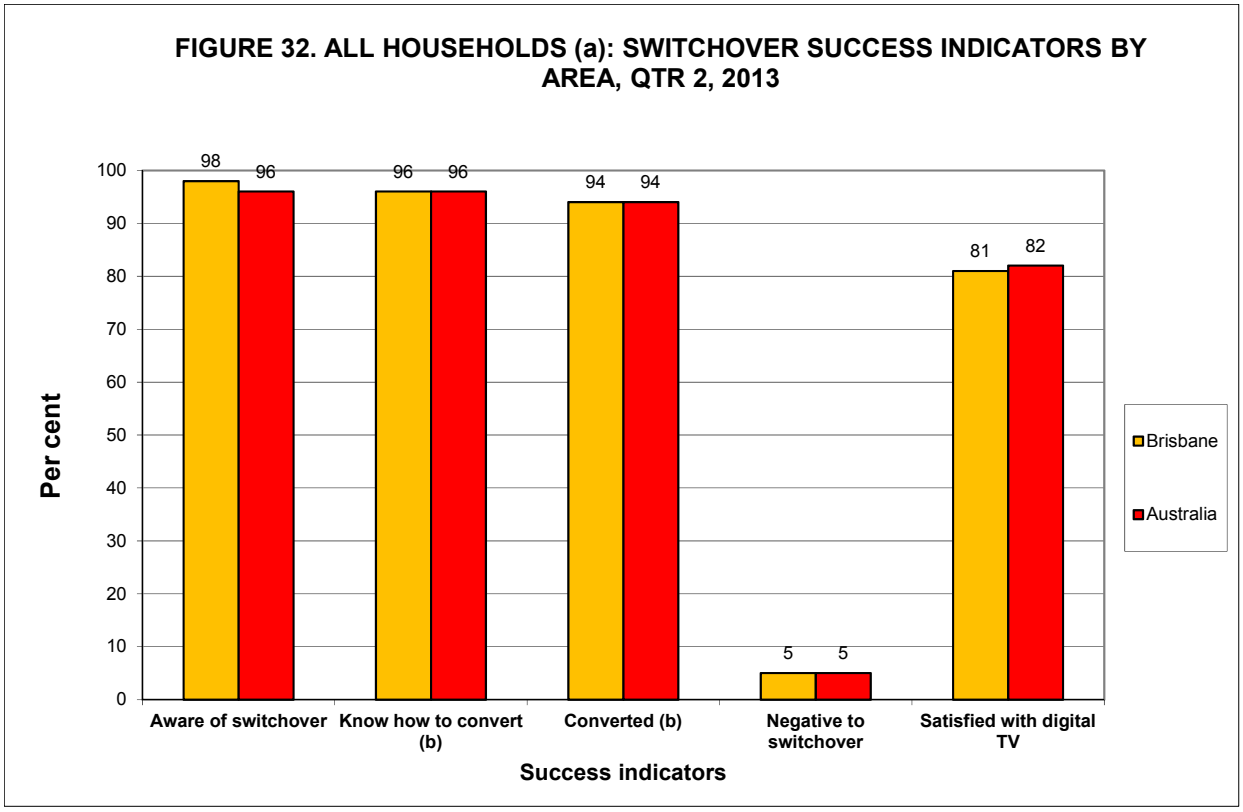


(a) Excludes areas that have already switched over. (b) Based on the 2012 revised definition of converted – see Appendix 2 for details.

In the full quarter leading up to the switchover in Brisbane, the indications were that the digital switchover would be successful:

- Just about all (98 per cent) were aware of switchover.
- 94 per cent were converted to digital TV, and
- There was very little negativity to the digital switchover (only five per cent remained negative) (Figure 32).

Figure 32. All households (a): Switchover success indicators by area, quarter 2, 2013



(a) Excludes areas that have already switched over. (b) Based on the 2012 revised definition of converted – see Appendix 2 for details.

3.13.2 Immediately after switchover

Immediately following the switchover, the 1,192,800 households in the Brisbane TV transmission area were asked about the impact of the switchover and results indicated high levels of satisfaction (see Figure 33).

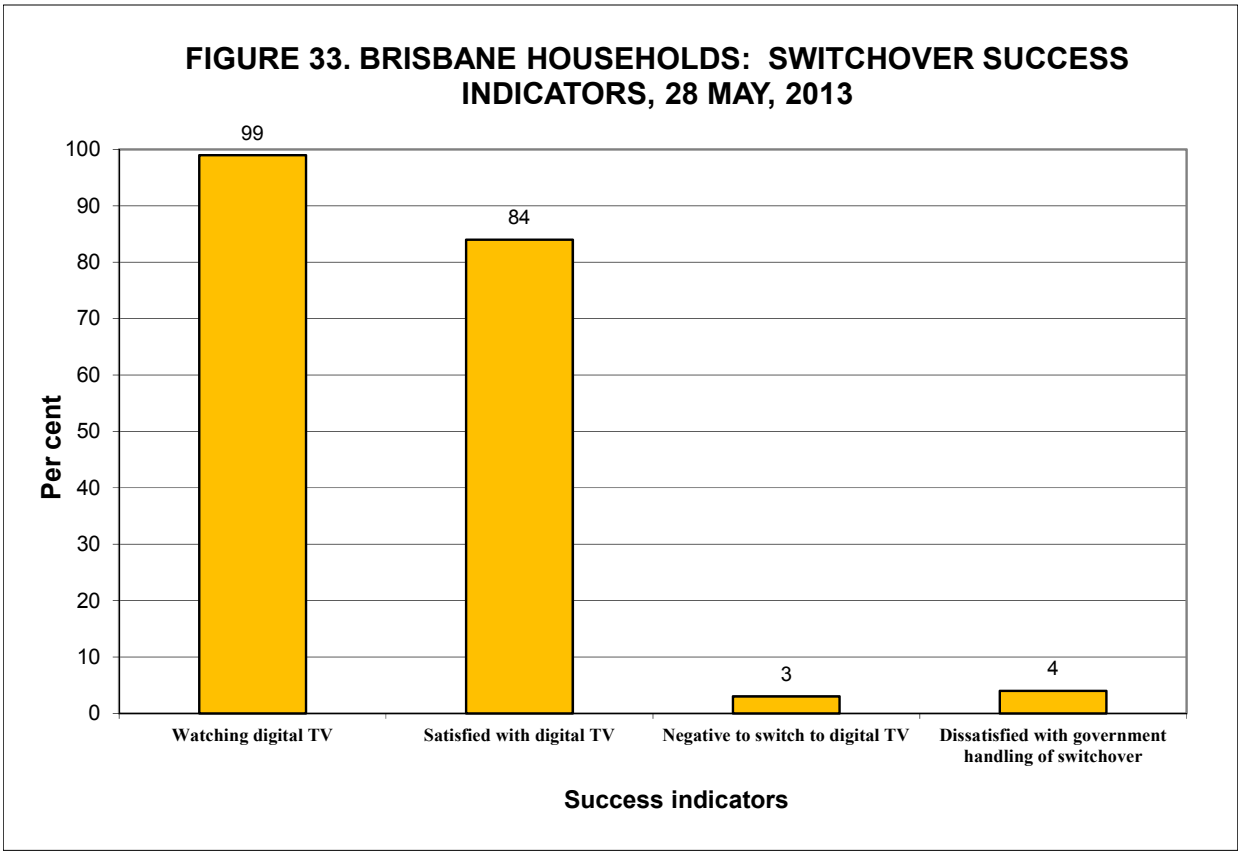
Key impact indicators for Brisbane households were:

- 99 per cent could watch digital TV following the switchover.
- 92 per cent were getting good reception.
- 22 per cent had some problem when converting to digital television and most of these had work done on their antenna when they converted to digital TV, and
- Two per cent said they got some direct help from the government to convert to digital TV and 93 per cent of these households were satisfied with help they received and seven per cent were dissatisfied.

Key effectiveness indicators for Brisbane households were:

- 81 per cent were satisfied with the government's handling of the switchover to digital television and only four per cent were dissatisfied.
- There was very little negativity to the digital television switchover with only a small proportion of households (three per cent) against the digital switchover - most were either for it (75 per cent) or neutral (22 per cent).
- Satisfaction with digital television was high with 84 per cent satisfied and only seven per cent dissatisfied. and
- The vast majority said that the government kept them well informed, both on when it would happen (91 per cent) and what to do to convert (81 per cent).

Figure 33. Brisbane households: Switchover success indicators, 28 May, 2013



3.14 The eleventh switchover area – Regional and Remote Western Australia (RRWA)

The eleventh area to switch off the analog TV signal was Regional and Remote Western Australia on 25 June 2013.

3.14.1 Leading up to switchover

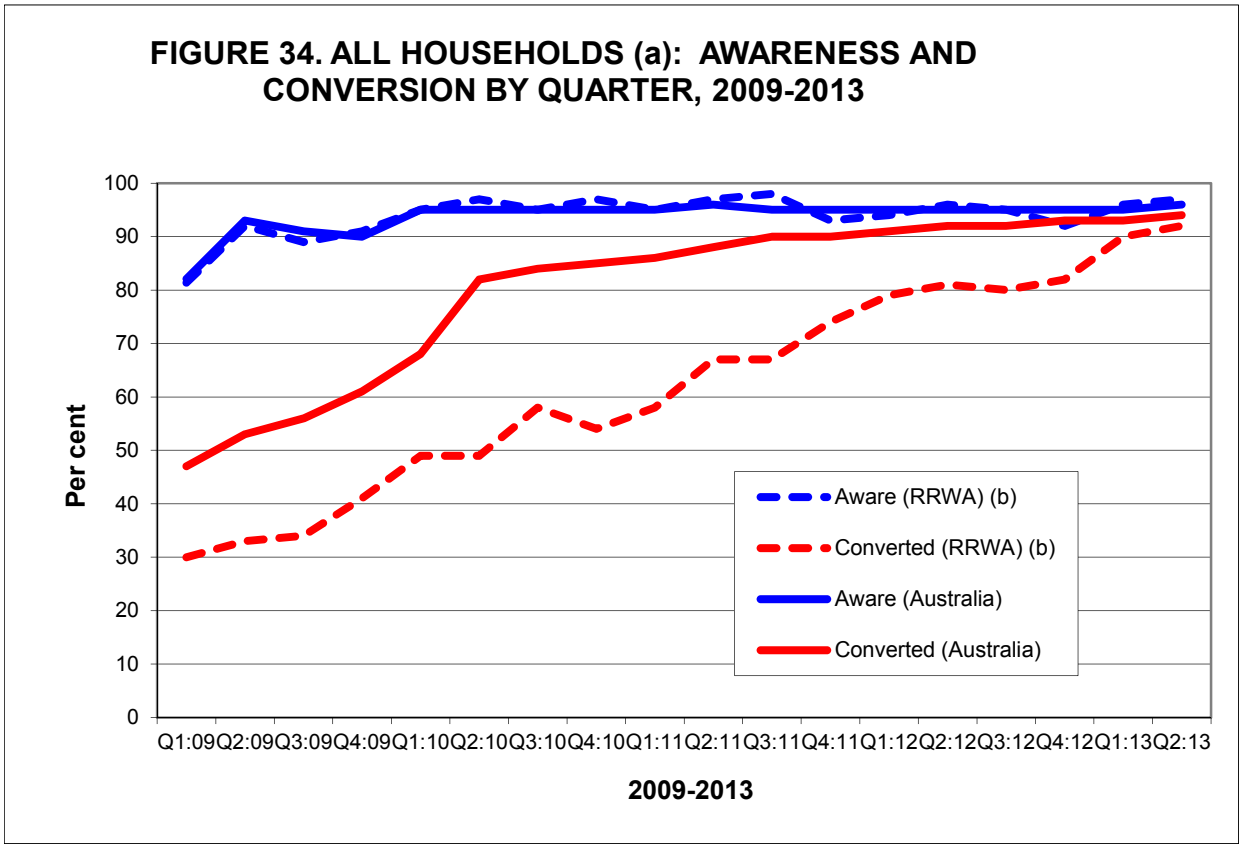
Awareness in Regional and Remote Western Australia of the government's plan to switch Australia over to digital television started at 81 per cent in Quarter 1, 2009 and increased to 97 per cent in Quarter 2, 2013 (see Figure 34).

The proportion of households in Regional and Remote Western Australia that converted to digital television (that is, they could watch at least all the standard definition digital free to air channels on

their main television set) maintained an upward trend from 30 per cent in Quarter 1, 2009 to 92 per cent in Quarter 2, 2013 (see Figure 34). Over this period, the conversion rate in Regional and Remote Western Australia stayed well below that for Australia as a whole for most of the period although eventually the gap narrowed as Regional and Remote Western Australia approached switchover on 25 June 2013.

**Note that conversion based on the 2012 revised definition – see Appendix 2 for details.*

Figure 34. All households (a): Awareness and conversion by quarter, 2009-2013

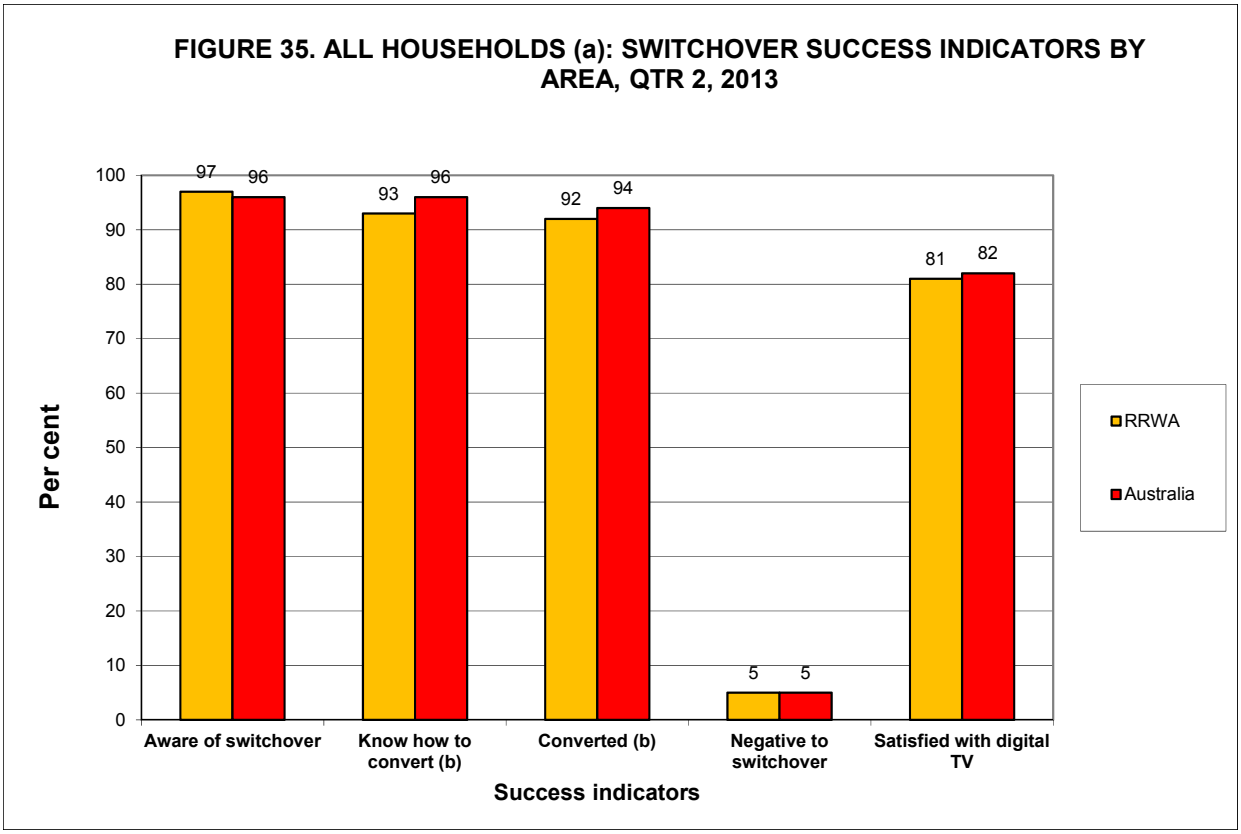


(a) Excludes areas that have already switched over. (b) Based on the 2012 revised definition of converted – see Appendix 2 for details.

In the full quarter leading up to the switchover in Regional and Remote Western Australia, the indications were that the digital switchover would be successful:

- Just about all (97 per cent) were aware of switchover.
- 92 per cent were converted to digital TV, and
- There was very little negativity to the digital switchover (only five per cent remained negative) (Figure 35).

Figure 35. All households (a): Switchover success indicators by area, quarter 2, 2013



(a) Excludes areas that have already switched over. (b) Based on the 2012 revised definition of converted – see Appendix 2 for details.

3.14.2 Immediately after switchover

Immediately following the switchover, the 184,700 households in the RRWA TV transmission area were asked about the impact of the switchover and results indicated high levels of satisfaction (see Figure 36).

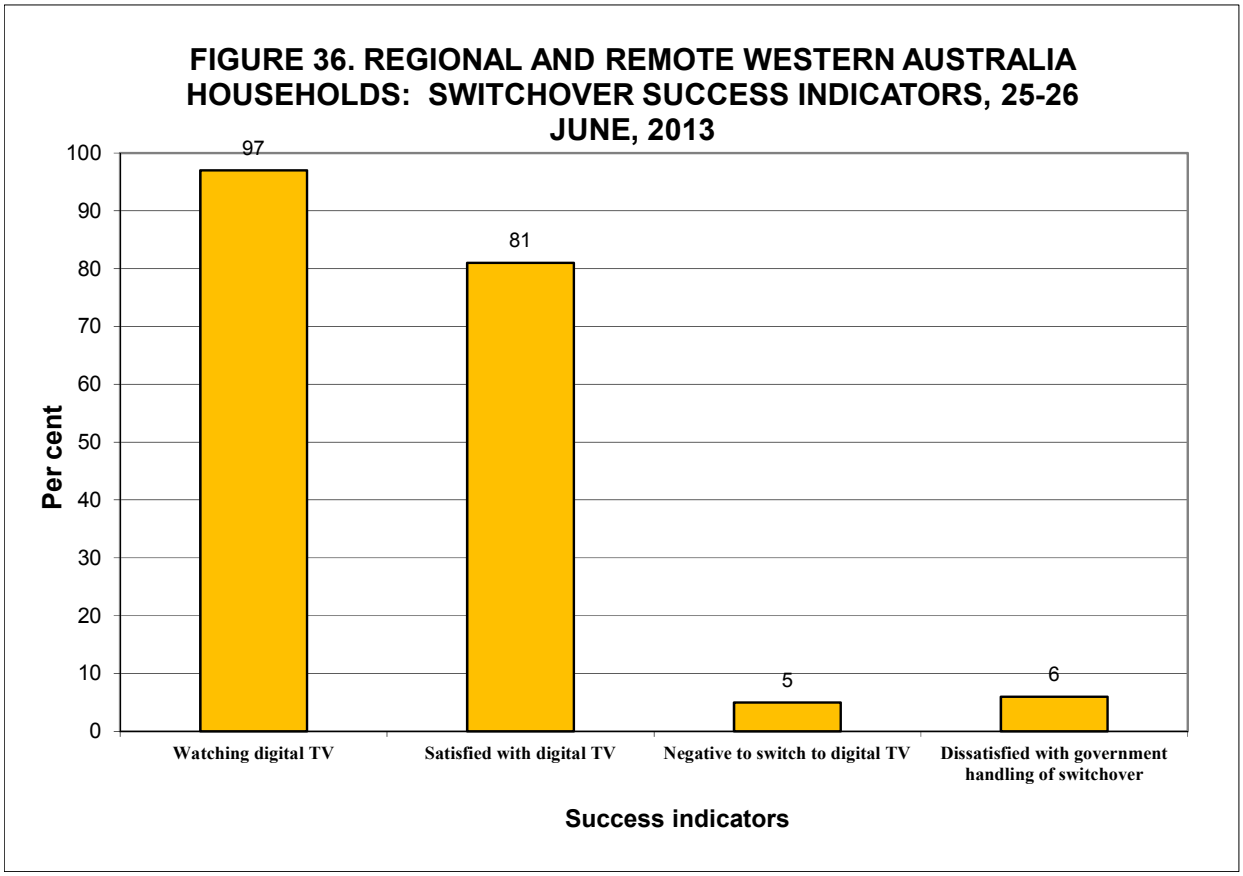
Key impact indicators for RRWA households were:

- 97 per cent could watch digital TV following the switchover.
- 86 per cent were getting good reception.
- 26 per cent had some problem when converting to digital television and most of these had work done on their antenna when they converted to digital TV, and
- Four per cent said they got some direct help from the government to convert to digital TV and 86 per cent of these households were satisfied with help they received and eight per cent were dissatisfied.

Key effectiveness indicators for RRWA households were:

- 74 per cent were satisfied with the government's handling of the switchover to digital television and only 6 per cent were dissatisfied.
- There was very little negativity to the digital television switchover with only a small proportion of households (five per cent) against the digital switchover - most were either for it (76 per cent) or neutral (18 per cent).
- Satisfaction with digital television was high with 81 per cent satisfied and only eight per cent dissatisfied, and
- The vast majority said that the government kept them well informed, both on when it would happen (91 per cent) and what to do to convert (85 per cent).

Figure 36. Regional and remote Western Australia households: Switchover success indicators, 25-26 June, 2013



3.15 The twelfth switchover area – Darwin

The twelfth area to switch off the analog TV signal was Darwin on 30 July 2013.

3.15.1 Leading up to switchover

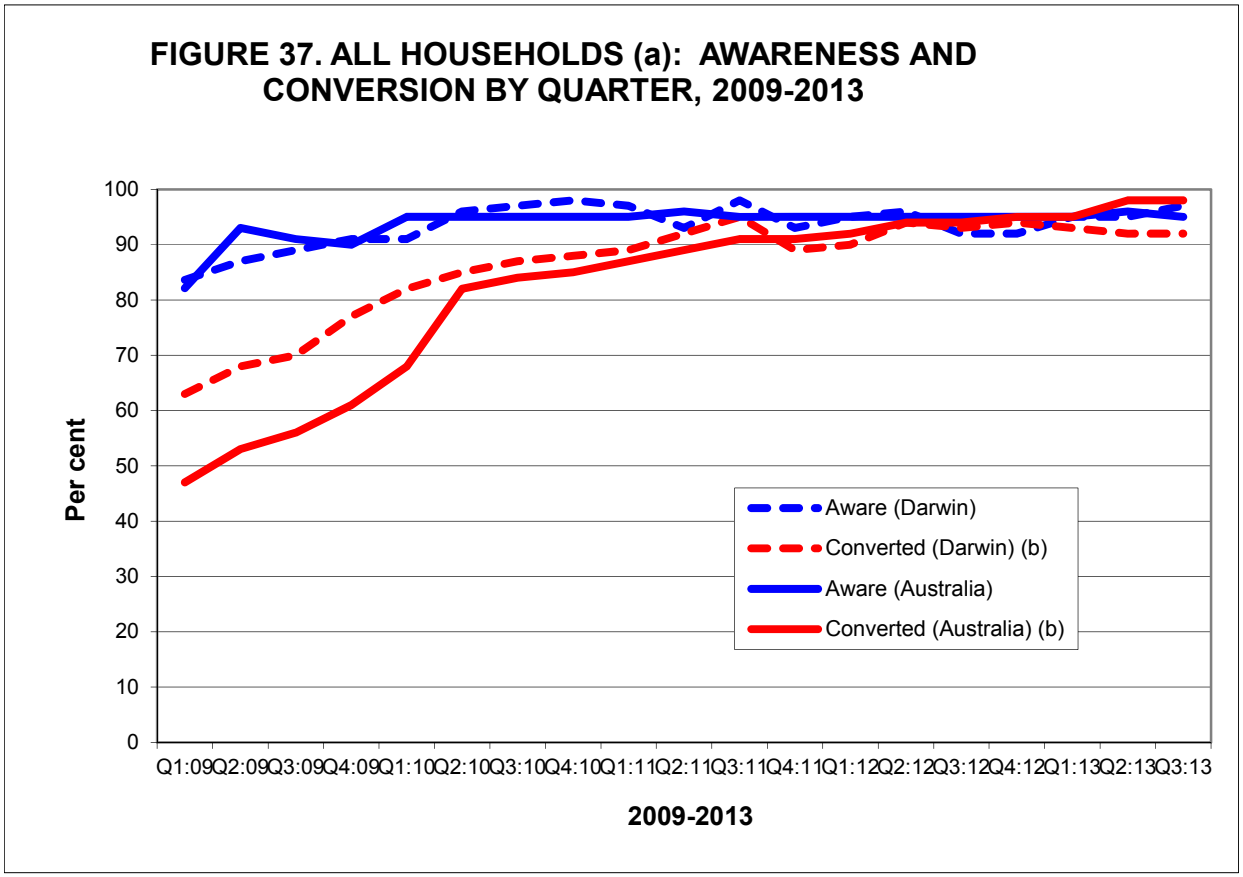
Awareness in Darwin of the government's plan to switch Australia over to digital television started at 84 per cent in Quarter 1, 2009 and increased to 97 per cent in Quarter 3, 2013 (see Figure 37).

The proportion of households in Darwin that converted to digital television (that is, they could watch at least all the standard definition digital free to air channels on their main television set) maintained an upward trend from 63 per cent in Quarter 1, 2009 to 92 per cent in Quarter 3, 2013 (see Figure

37). Over this period, the conversion rate in Darwin started out higher than that for Australia as a whole but the gap narrowed as Darwin approached switchover on 30 July 2013.

**Note that conversion based on the 2012 revised definition – see Appendix 2 for details.*

Figure 37. All households (a): Awareness and conversion by quarter, 2009-2013

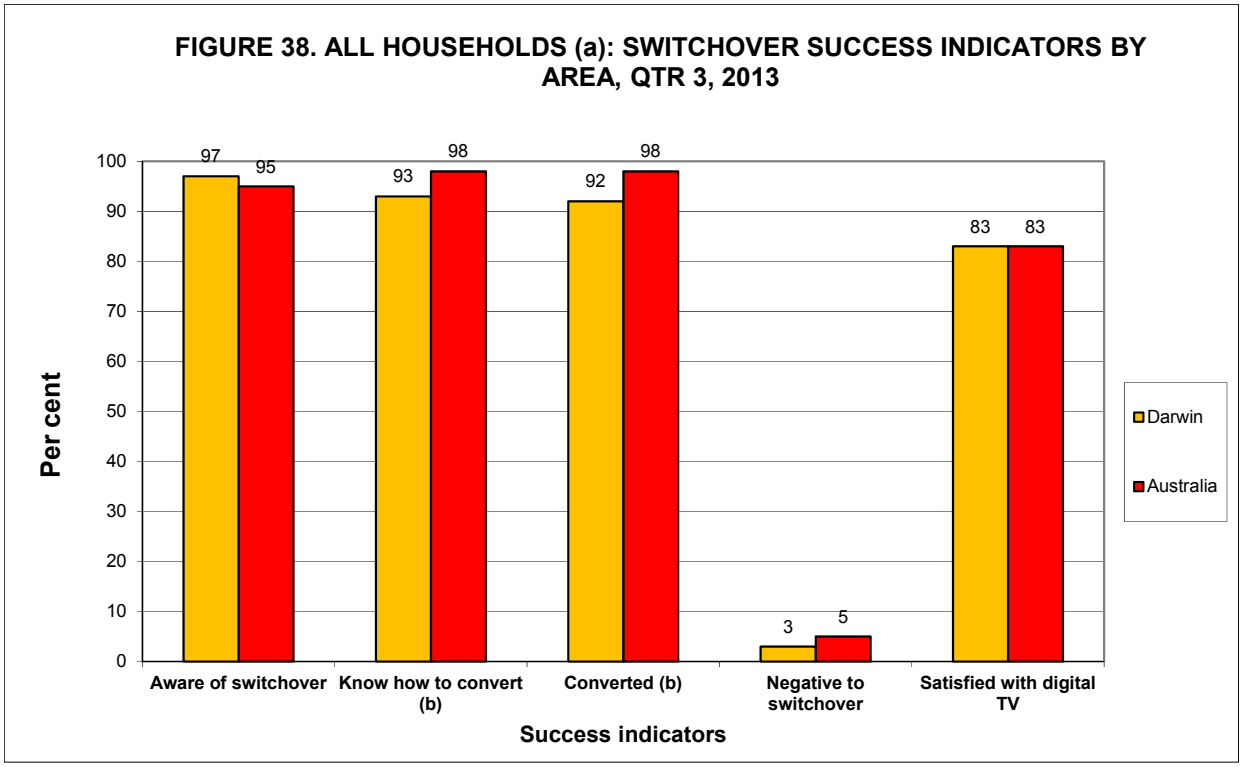


(a) Includes areas that have already switched over. (b) Based on the 2012 revised definition of converted – see Appendix 2 for details.

In the full quarter leading up to the switchover in Darwin, the indications were that the digital switchover would be successful:

- Just about all (97 per cent) were aware of switchover.
- 92 per cent were converted to digital TV, and
- There was very little negativity to the digital switchover (only five per cent remained negative) (Figure 38).

Figure 38. All households (a): Switchover success indicators by area, quarter 3, 2013



(a) Includes areas that have already switched over. (b) Based on the 2012 revised definition of converted – see Appendix 2 for details.

3.15.2 Immediately after switchover

Immediately following the switchover, the 48,700 households in the Darwin TV transmission area were asked about the impact of the switchover and results indicated high levels of satisfaction (se Figure 39).

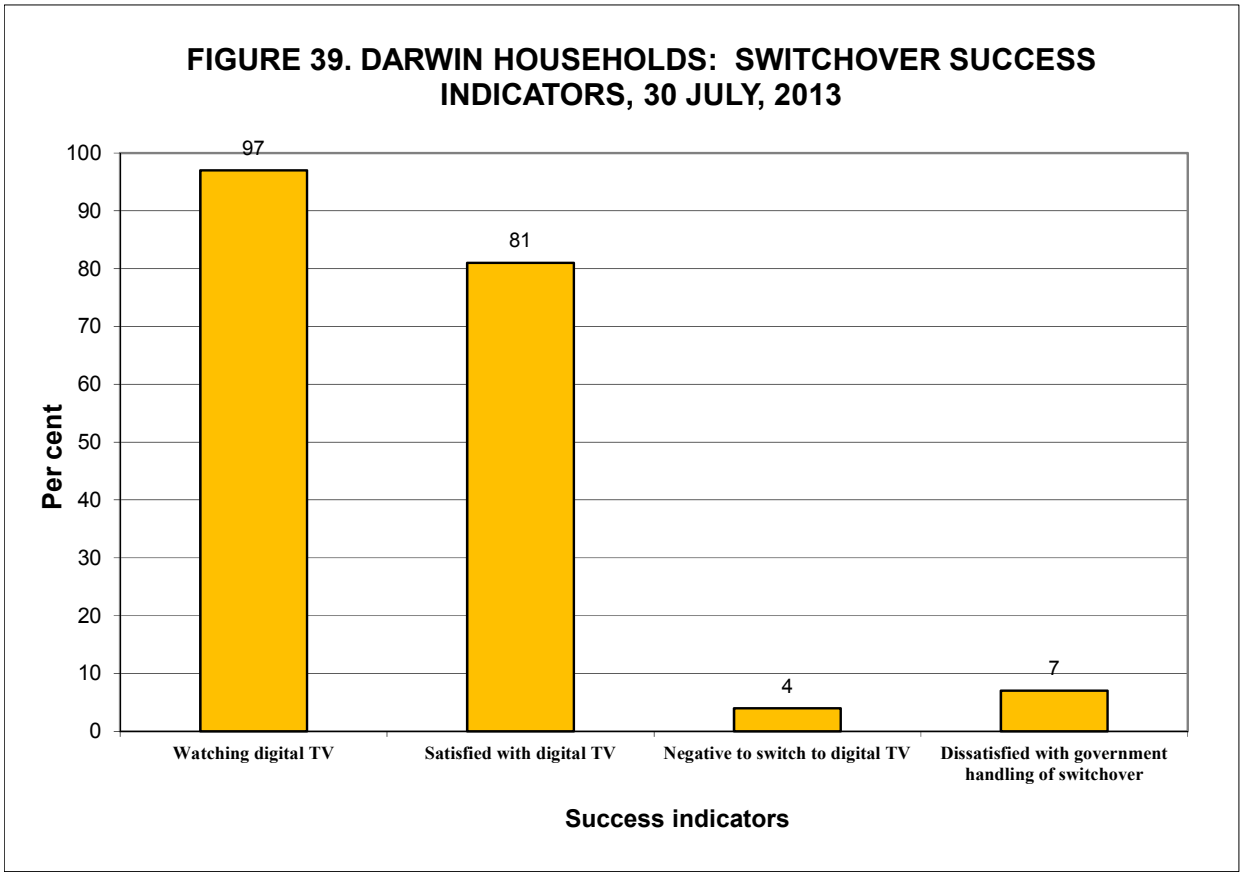
Key impact indicators for Darwin households were:

- 97 per cent could watch digital TV following the switchover.
- 90 per cent were getting good reception.
- 28 per cent had some problem when converting to digital television and most of these had work done on their antenna when they converted to digital TV, and
- One per cent said they got some direct help from the government to convert to digital TV and all of these households were very satisfied with help they received.

Key effectiveness indicators for Darwin households were:

- 72 per cent were satisfied with the government's handling of the switchover to digital television and only seven per cent were dissatisfied.
- There was very little negativity to the digital television switchover with only a small proportion of households (four per cent) against the digital switchover - most were either for it (72 per cent) or neutral (24 per cent).
- Satisfaction with digital television was high with 81 per cent satisfied and only seven per cent dissatisfied, and
- The vast majority said that the government kept them well informed, both on when it would happen (89 per cent) and what to do to convert (81 per cent).

Figure 39. Darwin households: Switchover success indicators, 30 July, 2013



3.16 The thirteenth switchover area – Sydney

The thirteenth area to switch off the analog TV signal was Sydney on 3 December 2013.

3.16.1 Leading up to switchover

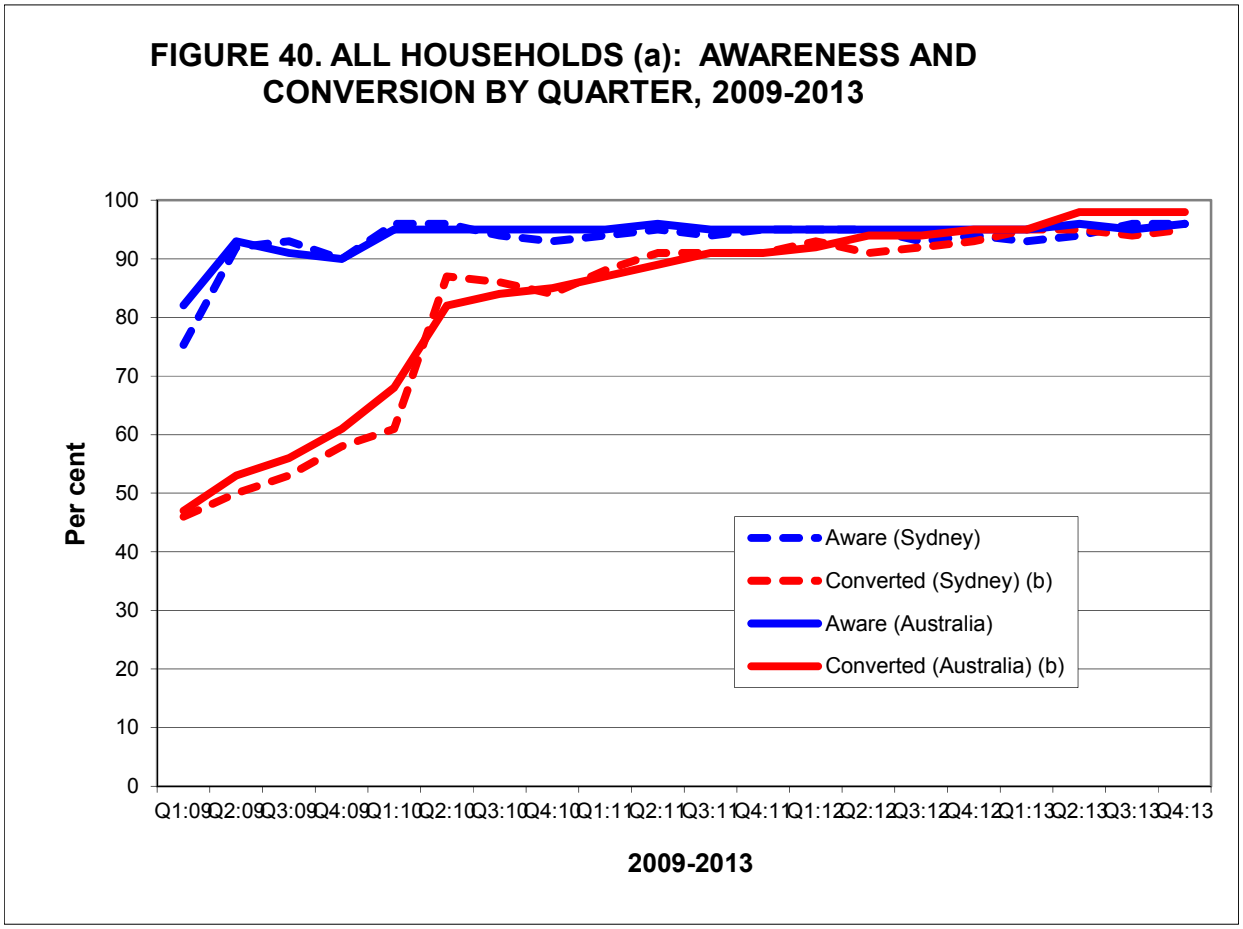
Awareness in Sydney of the government's plan to switch Australia over to digital television started at 75 per cent in Quarter 1, 2009 and increased to 96 per cent in Quarter 4, 2013 (see Figure 40).

The proportion of households in Sydney that converted to digital television (that is, they could watch at least all the standard definition digital free to air channels on their main television set) maintained an upward trend from 46 per cent in Quarter 1, 2009 to 95 per cent in Quarter 4, 2013 (see

Figure 40). Over this period, the conversion rate in Sydney stayed much the same as for Australia as a whole.

**Note that conversion based on the 2012 revised definition – see Appendix 2 for details.*

Figure 40. All households (a): Awareness and conversion by quarter, 2009-2013

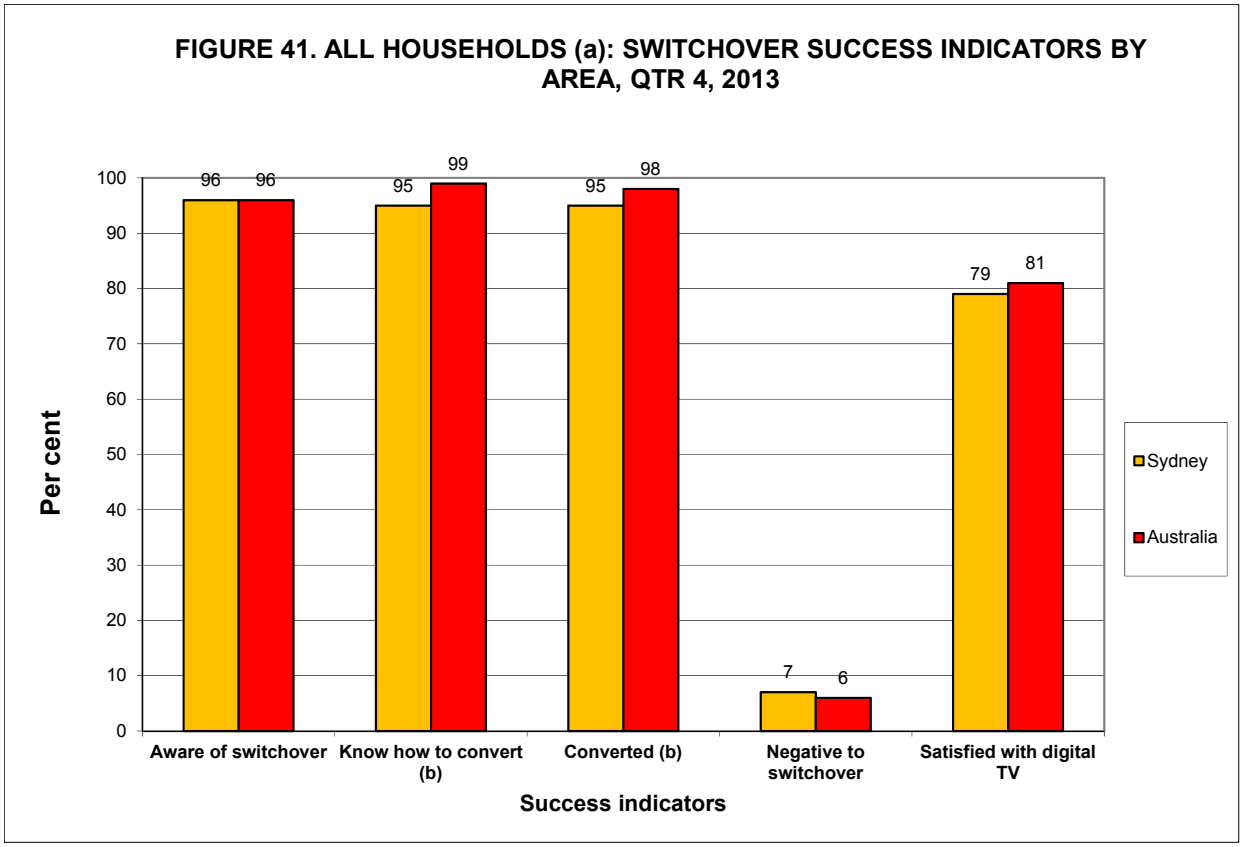


(a) Includes areas that have already switched over. (b) Based on the 2012 revised definition of converted – see Appendix 2 for details.

In the full quarter leading up to the switchover in Sydney, the indications were that the digital switchover would be successful:

- Just about all (98 per cent) were aware of switchover.
- 95 per cent were converted to digital TV, and
- There was very little negativity to the digital switchover (only six per cent remained negative) (Figure 41).

Figure 41. All households (a): Switchover success indicators by area, quarter 4, 2013



(a) Includes areas that have already switched over. (b) Based on the 2012 revised definition of converted – see Appendix 2 for details.

3.16.2 Immediately after switchover

Immediately following the switchover, the 1,738,200 households in the Sydney TV transmission area were asked about the impact of the switchover and results indicated high levels of satisfaction (se Figure 42).

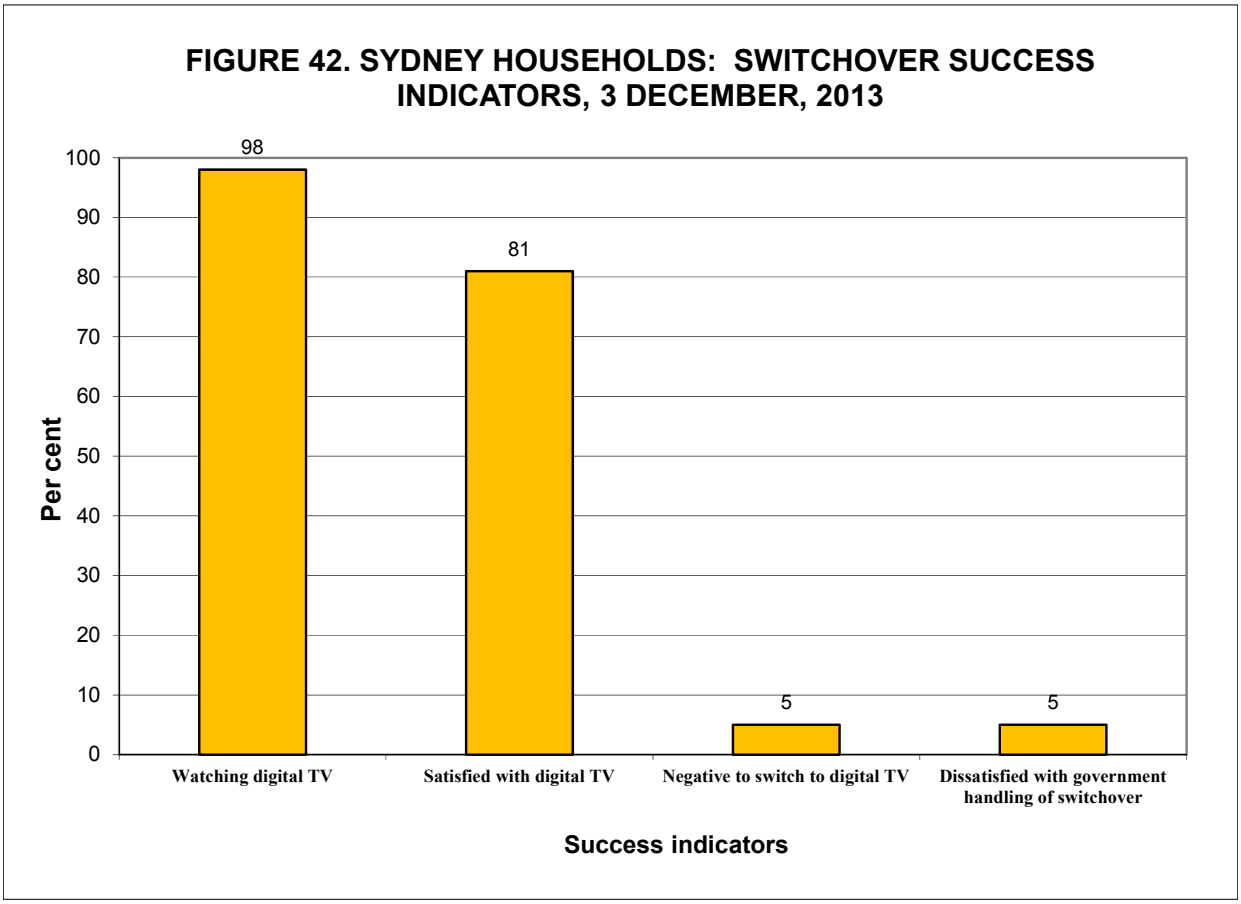
Key impact indicators for Sydney households were:

- 98 per cent could watch digital TV following the switchover.
- 91 per cent were getting good reception.
- 27 per cent had some problem when converting to digital television and most of these had work done on their antenna when they converted to digital TV, and
- Three per cent said they got some direct help from the government to convert to digital TV and 96 per cent of these households were satisfied with the help they received and four per cent were dissatisfied.

Key effectiveness indicators for Sydney households were:

- 74 per cent were satisfied with the government's handling of the switchover to digital television and only five per cent were dissatisfied.
- There was very little negativity to the digital television switchover with only a small proportion of households (five per cent) against the digital switchover - most were either for it (71 per cent) or neutral (24 per cent).
- Satisfaction with digital television was high with 81 per cent satisfied and only five per cent dissatisfied, and
- The vast majority said that the government kept them well informed, both on when it would happen (84 per cent) and what to do to convert (76 per cent).

Figure 42. Sydney households: Switchover success indicators, 3 December, 2013



3.17 The fourteenth switchover area – Melbourne

The fourteenth area to switch off the analog TV signal was Melbourne on 10 December 2013.

3.17.1 Leading up to switchover

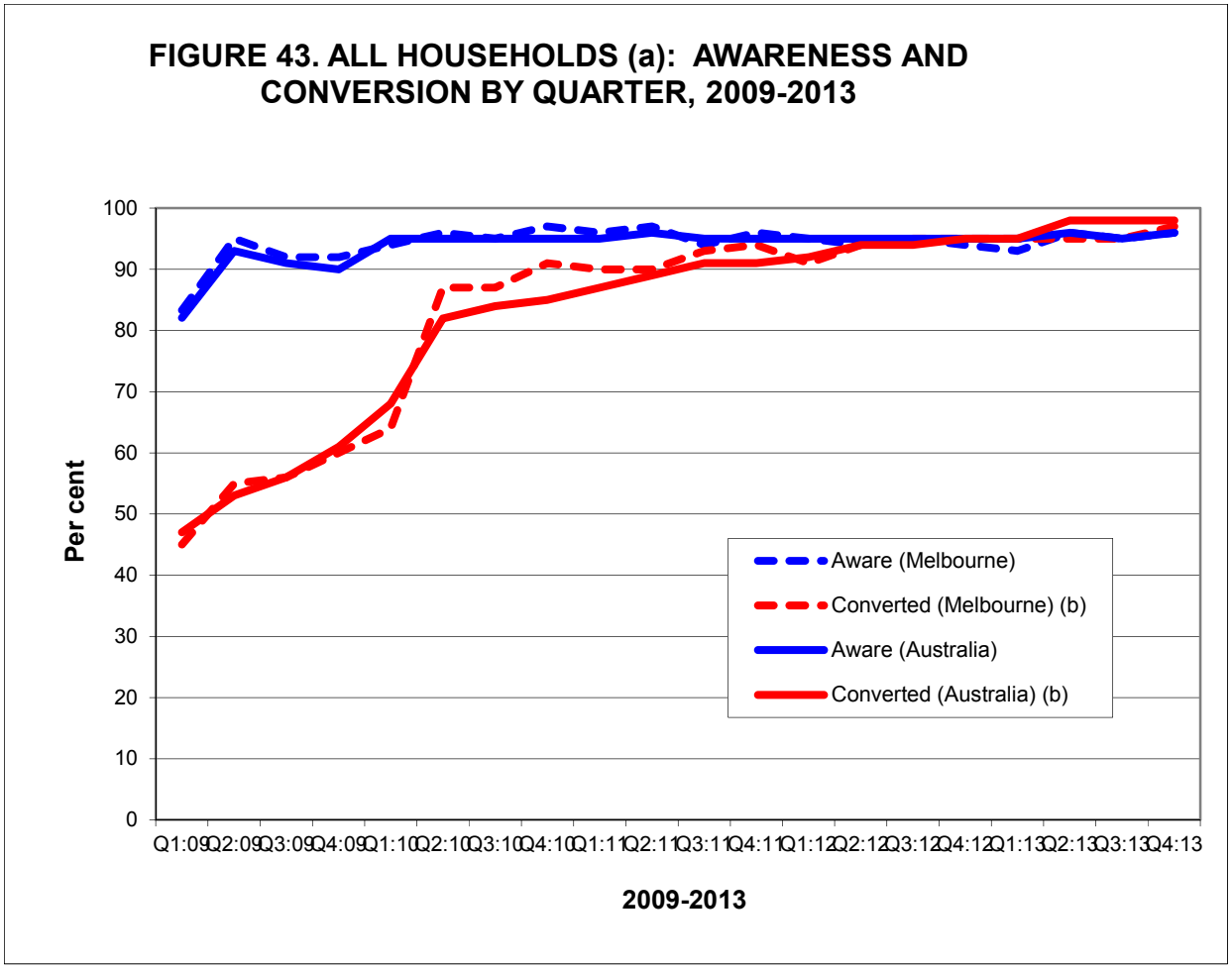
Awareness in Melbourne of the government's plan to switch Australia over to digital television started at 83 per cent in Quarter 1, 2009 and increased to 96 per cent in Quarter 4, 2013 (see Figure 43).

The proportion of households in Melbourne that converted to digital television (that is, they could watch at least all the standard definition digital free to air channels on their main television set)

maintained an upward trend from 45 per cent in Quarter 1, 2009 to 97 per cent in Quarter 4, 2013 (see Figure 43). Over this period, the conversion rate in Melbourne stayed much the same as for Australia as a whole.

**Note that conversion based on the 2012 revised definition – see Appendix 2 for details.*

Figure 43. All households (a): Awareness and conversion by quarter, 2009-2013

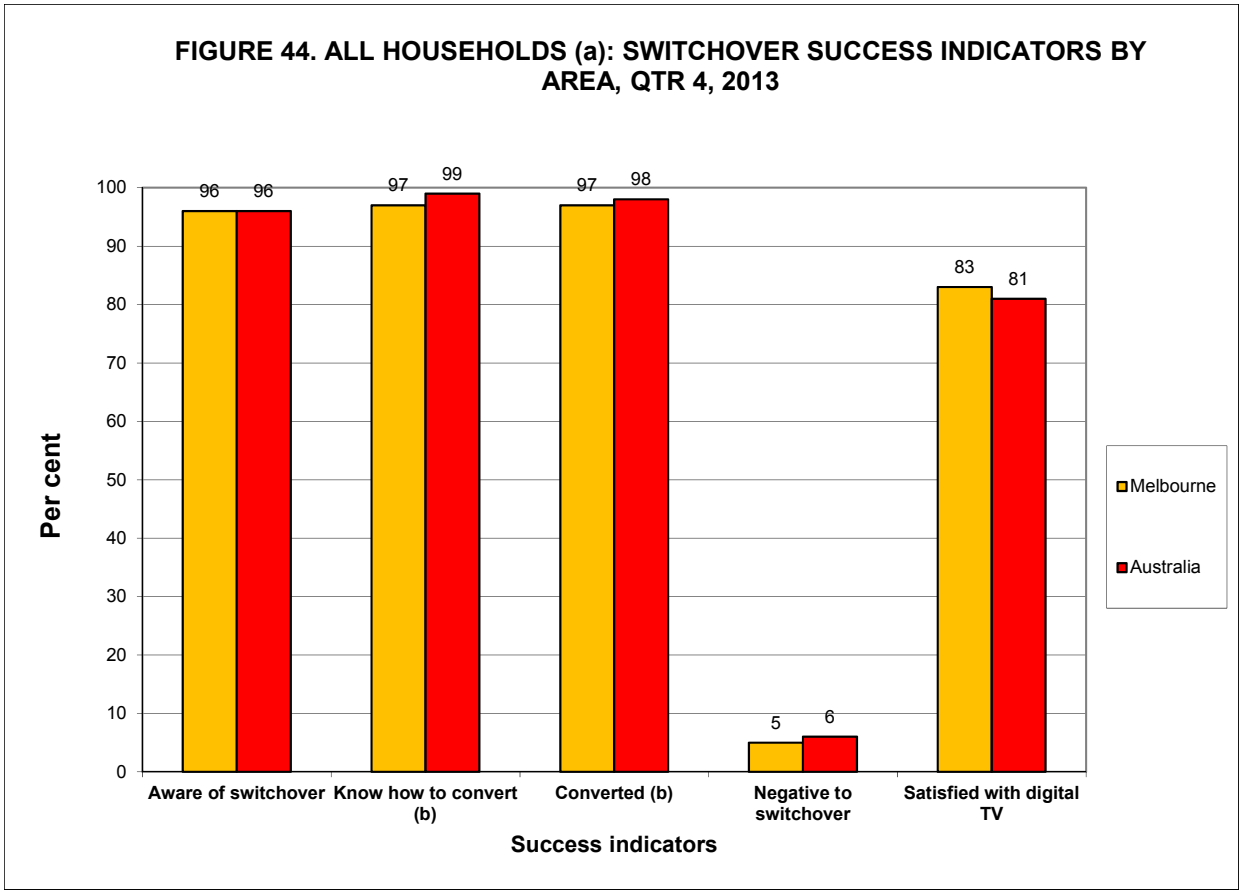


(a) Includes areas that have already switched over. (b) Based on the 2012 revised definition of converted – see Appendix 2 for details.

In the full quarter leading up to the switchover in Melbourne, the indications were that the digital switchover would be successful:

- Just about all (95 per cent) were aware of switchover.
- 97 per cent were converted to digital TV, and
- There was very little negativity to the digital switchover (only six per cent remained negative) (Figure 44).

Figure 44. All households (a): Switchover success indicators by area, quarter 4, 2013



(a) Includes areas that have already switched over. (b) Based on the 2012 revised definition of converted – see Appendix 2 for details.

3.17.2 Immediately after switchover

Immediately following the switchover, the 1,724,100 households in the Melbourne TV transmission area were asked about the impact of the switchover and results indicated high levels of satisfaction (se Figure 45).

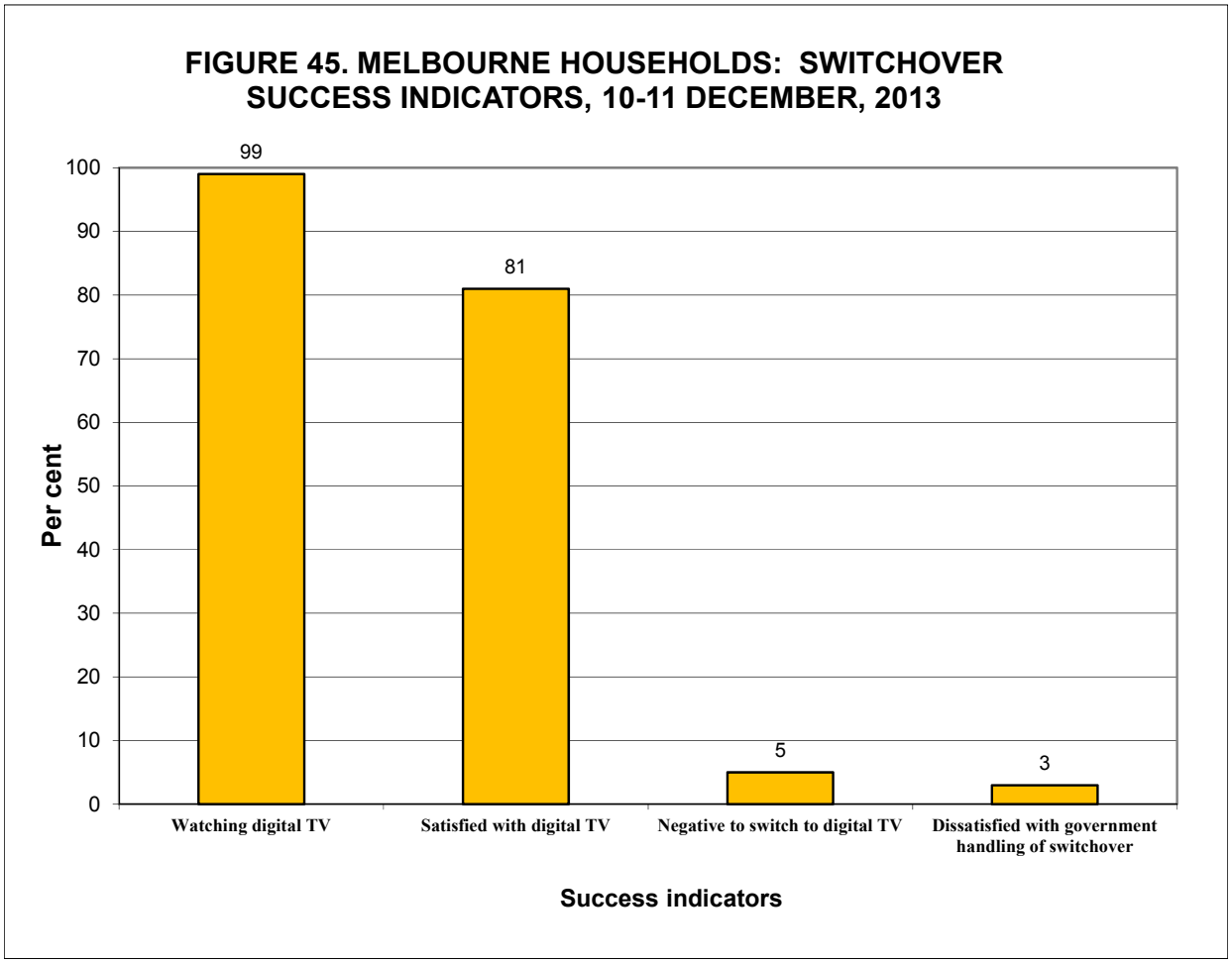
Key impact indicators for Melbourne households were:

- 99 per cent could watch digital TV following the switchover.
- 92 per cent were getting good reception.
- 25 per cent had some problem when converting to digital television and most of these had work done on their antenna when they converted to digital TV, and
- two per cent said they got some direct help from the government to convert to digital TV and 97 per cent of these households were satisfied with help they received and three per cent dissatisfied.

Key effectiveness indicators for Melbourne households were:

- 74 per cent were satisfied with the government's handling of the switchover to digital television and only three per cent were dissatisfied.
- There was very little negativity to the digital television switchover with only a small proportion of households (five per cent) against the digital switchover - most were either for it (74 per cent) or neutral (21 per cent).
- Satisfaction with digital television was high with 81 per cent satisfied and only nine per cent dissatisfied, and
- The great majority said that the government kept them well informed, both on when it would happen (89 per cent) and what to do to convert (84 per cent).

Figure 45. Melbourne households: Switchover success indicators, 10-11 December, 2013



3.18 The fifteenth switchover area – Remote Central and Eastern Australia (RCEA)

The fifteenth area to switch off the analog TV signal was Remote Central and Eastern Australia on 10 December 2013.

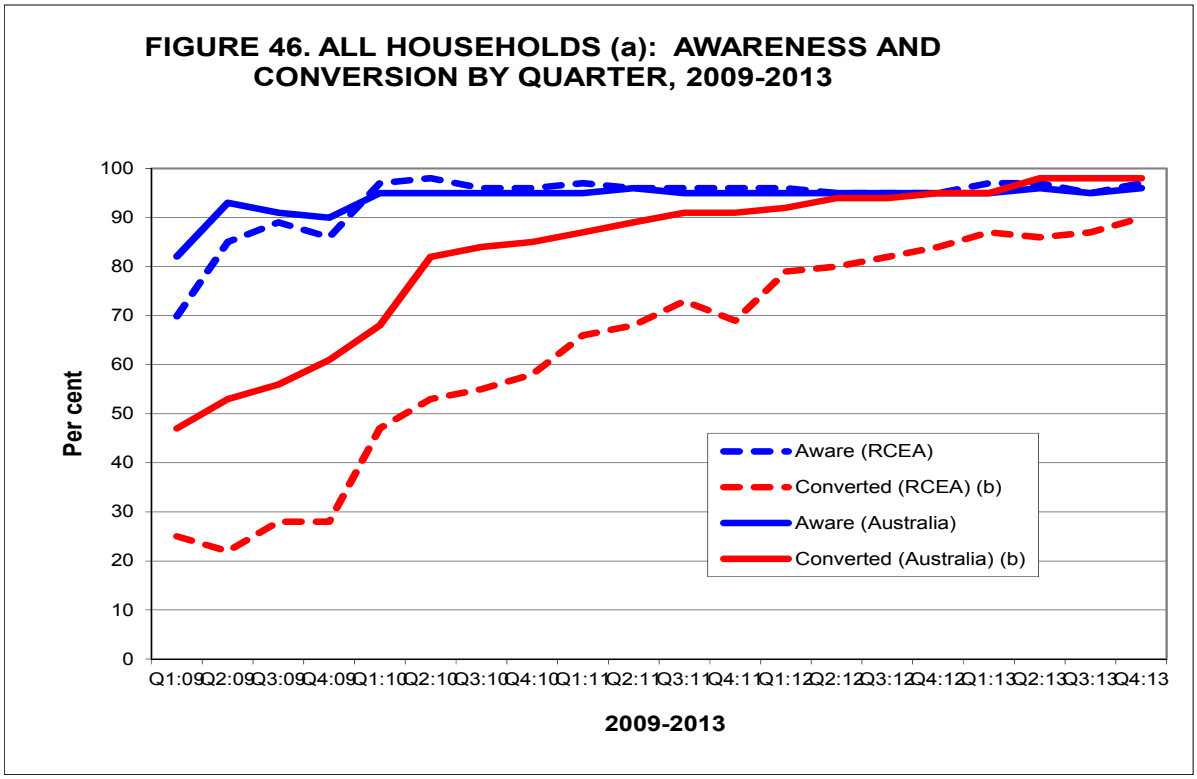
3.18.1 Leading up to switchover

Awareness in RCEA of the government's plan to switch Australia over to digital television started at 70 per cent in Quarter 1, 2009 and increased to 97 per cent in Quarter 4, 2013 (see Figure 46).

The proportion of households in RCEA that converted to digital television (that is, they could watch at least all the standard definition digital free to air channels on their main television set) maintained an upward trend from 25 per cent in Quarter 1, 2009 to 90 per cent in Quarter 4, 2013 (see Figure 46). Over this period, the conversion rate in RCEA started out much lower than that for Australia as a whole and, while the gap narrowed the closer RCEA got to switchover on 10 December 2013, it never completely closed. Evidence from the post switchover survey indicated that much of this gap comprised households that had subscription TV and were happy to use this as their TV source even though it did not provide all the commercial channels.

**Note that conversion based on the 2012 revised definition – see Appendix 2 for details.*

Figure 46. All households (a): Awareness and conversion by quarter, 2009-13

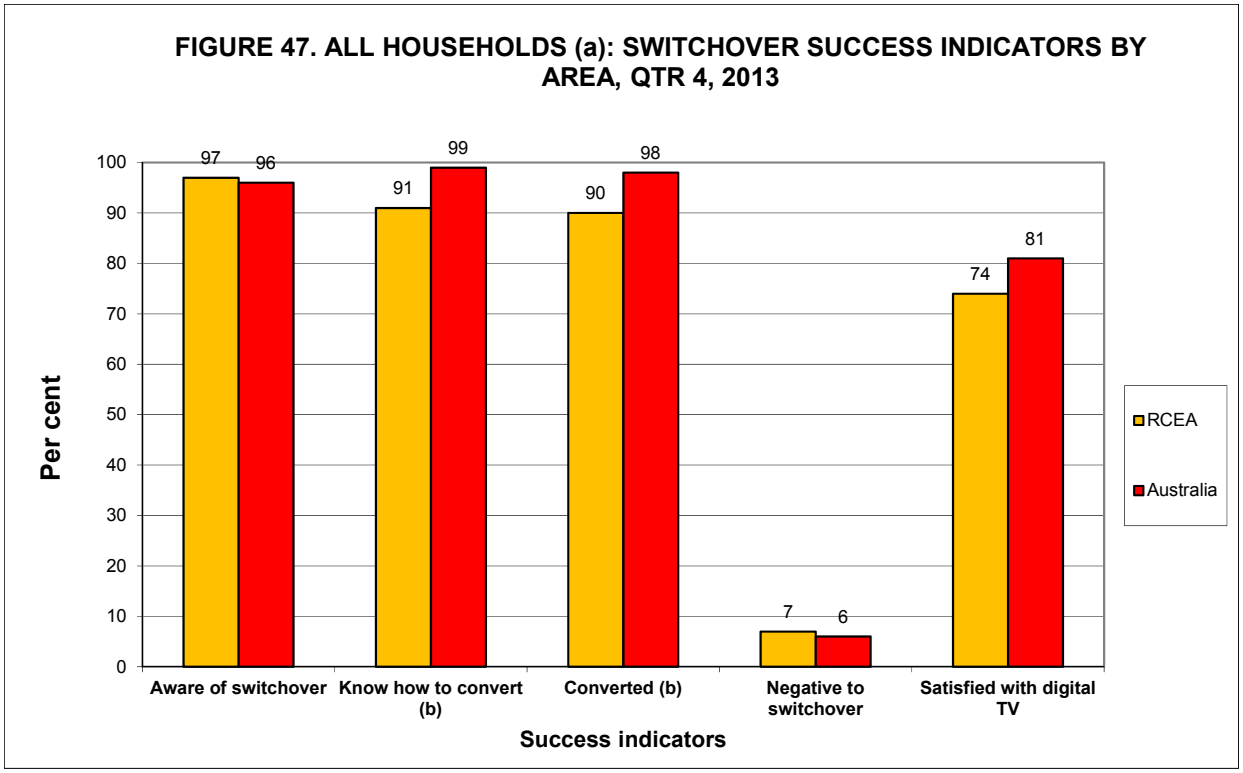


(a) Includes areas that have already switched over. (b) Based on the 2012 revised definition of converted – see Appendix 2 for details.

In the full quarter leading up to the switchover in Remote Central and Eastern Australia, the indications were that the digital switchover would be successful:

- Just about all (97 per cent) were aware of switchover.
- 90 per cent were converted to digital TV, and
- There was very little negativity to the digital switchover (only six per cent remained negative) (Figure 47).

Figure 47. All households (a): Switchover success indicators by area, quarter 4, 2013



(a) Includes areas that have already switched over. (b) Based on the 2012 revised definition of converted – see Appendix 2 for details.

3.18.2 Immediately after switchover

Immediately following the switchover, the 87,900 households in the Remote Central and Eastern Australia TV transmission area were asked about the impact of the switchover and results indicated high levels of satisfaction (se Figure 48).

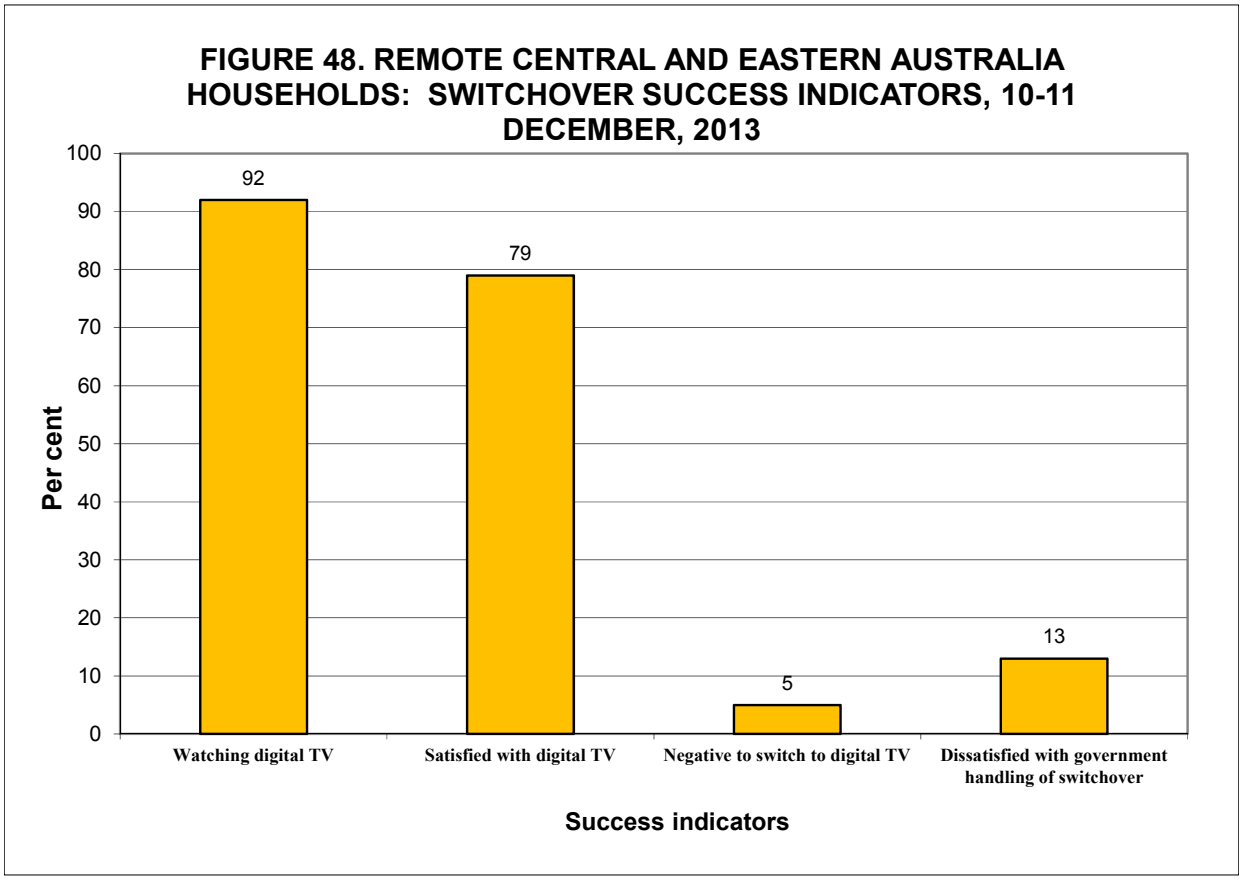
Key impact indicators for RCEA households were:

- 92 per cent could watch digital TV following the switchover and a further four per cent had subscription TV but did not receive all the commercial channels and therefore did not meet the Digital Tracker criteria for conversion.
- 88 per cent were getting good reception.
- 33 per cent had some problem when converting to digital television and most of these had work done on their antenna when they converted to digital TV, and
- 10 per cent said they got some direct help from the government to convert to digital TV and 88 per cent of these households were satisfied with help they received and six per cent dissatisfied.

Key effectiveness indicators for RCEA households were:

- 67 per cent were satisfied with the government's handling of the switchover to digital television and 13 per cent were dissatisfied.
- There was very little negativity to the digital television switchover with only a small proportion of households (five per cent) against the digital switchover - most were either for it (75 per cent) or neutral (20 per cent).
- Satisfaction with digital television was high with 79 per cent satisfied and only 10 per cent dissatisfied, and
- The great majority said that the government kept them well informed, both on when it would happen (83 per cent) and what to do to convert (79 per cent).

Figure 48. Remote Central and Eastern Australia households: Switchover success indicators, 10-11 December, 2013



3.19 Digital TV only environment

On the 17-19 February, 2014, about two months after the last two areas in Australia switched over to a digital television only environment, households across Australia were asked about the impact of the switchover (post switchover survey) and the results indicated high levels of satisfaction with switchover.

Key impact indicators for Australia are:

- 99.4 per cent were watching digital television (0.5 per cent did not have a TV set at all and 0.1 per cent did not have a working digital TV set).
- 88 per cent were getting good reception.

- 30 per cent had some problem when converting to digital television and most of these had work done on their antenna when they converted to digital TV, and
- Three per cent said they got some direct help from the government to convert to digital TV and 92 per cent of these households were satisfied with help they received and zero per cent dissatisfied.

Key effectiveness indicators for Australia are:

- 77 per cent were satisfied with the government's handling of the switchover to digital television and only five per cent were dissatisfied.
- There was very little negativity to the digital television switchover with only a small proportion of households (five per cent) against the digital switchover - most were either for it (73 per cent) or neutral (21 per cent).
- Satisfaction with digital television was high with 79 per cent satisfied and only eight per cent dissatisfied, and
- The great majority said that the government had kept them well informed, both on when it would happen (88 per cent) and what to do to convert (81 per cent).

3.20 The digitally vulnerable

In July 2011, the Taskforce commissioned Newspoll to conduct an assessment of preparedness for digital television in a single Census Collection District (CD) in a high socio-economic disadvantage area of Sydney (Guildford) in order to help in the development of community outreach strategies to help the vulnerable. In March 2012, the Taskforce commissioned Newspoll to repeat the Sydney study in a high socio-economic disadvantage area of Melbourne (Doveton).

The overall objective of the research was to assist in the development of a plan to ensure that the vulnerable were digitally ready when the analog switch off occurred in 2013.

The research design was a Computer Assisted Telephone Interviewing (CATI) survey of the CD followed by face to face interviews at all occupied private dwellings in the CD.

The main findings were:

1. Just about all households were ready for the digital switchover. Socio-economic disadvantage did not readily translate into digital vulnerability mainly because TV was an essential commodity to most of these people and it was then relatively cheap to convert even if they thought conversion meant you needed a new digital TV. Perhaps 10 per cent were not ready but most were not at any risk as they knew what they had to do and would do it closer to the switchover time.
2. The main areas for digital concern were with households that were poor, low educated, with limited support networks and in rental accommodation where some landlords had not yet responded to requests by tenants for a working antenna system. Poor English compounded the problem.
3. The vulnerable were very small in number, in fact they were so rare they would be difficult to find simply by targeting low income households. They were the result of many and varied factors that worked together to make them vulnerable.

3.21 Satellite Subsidy Scheme (SSS)

The Taskforce commissioned Newspoll to do three studies to better understand the profiles of potentially eligible households of Satellite Subsidy Scheme (SSS) in Remote Australia. The SSS was a scheme established to provide a subsidy in establishing access to the VAST service, where the household was dependent on a self-help television tower that was not converting to digital transmission.

1. SSS Regional and Remote Queensland study, November 2011
2. SSS Non-Remote Indigenous Communities (Non-RICs), February 2012
3. SSS Remote Indigenous Communities (RICs), March 2012

3.21.1 SSS Regional and Remote Queensland study, November 2011

In October 2011, the Department commissioned Newspoll to undertake research into the SSS in Regional and Remote Queensland. The relevant switchover dates for these areas was 6 December 2011 (Regional Queensland) and 10 December 2013 (Remote Queensland).

The scope of the survey was all households in communities reliant on self-help television towers in Regional and Remote Queensland. A total of 524 interviews were conducted.

The objectives of the research were to:

1. Identify barriers to the take-up of the satellite subsidy among eligible households in self-help communities.
2. Improve understanding of the penetration levels in self-help communities of Austar, Aurora and VAST.
3. Measure the level of awareness in eligible households of the SSS, including the co-payment amount, application timelines and method for opting in, as well as issues relating to SSS and HAS eligibility, and
4. Clarify how households opting into the SSS have learnt about the SSS.

The main findings were:

(i) For households in communities reliant on self-help television towers in Regional and Remote Queensland that had installed access to the VAST service:

- Three quarters (75 per cent) had had it installed in the previous 3 months.
- Just about all (98 per cent) were aware of SSS.
- Just over three-quarters (77 per cent) of households applied for the satellite subsidy.
- The great majority (95 per cent) found the subsidy application process easy.
- The great majority (89 per cent) of VAST users were satisfied with the installation process and seven per cent were dissatisfied, and
- The great majority (84 per cent) of VAST users were satisfied overall with the VAST service and 10 per cent were dissatisfied.

(ii) For households in communities reliant on self-help television towers in Regional and Remote Queensland that had installed a satellite dish but not VAST:

- Just over two-thirds (70 per cent) were aware of SSS.
- Just under two-thirds (63 per cent) of households applied for the satellite subsidy.
- The great majority (92 per cent) found the subsidy application process easy, and
- Just about all (95 per cent) were successful with their subsidy application.

(iii) For households in communities reliant on self-help television towers in Regional and Remote Queensland with no satellite dish:

- Just about all (98 per cent) were aware of the digital switchover.
- Over three-quarters (82 per cent) of households in regional areas and 67 per cent of remote households could watch digital channels on their current equipment.
- For those that cannot watch digital channels, 81 per cent were aware that they would need a satellite dish after switchover.
- About three-quarters (74 per cent) were aware of SSS.
- About three out of five (61 per cent) households applied for the satellite subsidy although higher in remote areas (78 per cent), and
- The great majority (86 per cent) were successful with their subsidy application.

3.21.2 SSS Remote Australia study, February – March 2012

On 31 January 2012, the Department commissioned Newspoll to conduct research to better understand the profiles of potentially eligible households of SSS and HAS in Remote Australia. There was an Indigenous and a non-Indigenous component.

(a) Non-Indigenous component

The scope of the phone survey was all households in communities reliant on self-help television towers in RRWA and the Northern Territory (NT) portion of Remote Central and Eastern Australia (excluding remote Indigenous communities). A total of 450 interviews were conducted.

The overall objective of the survey research was to better understand the profiles of the potentially eligible SSS and HAS households that would help plan the roll out of the joint delivery of SSS and HAS in RRWA and NT from June 2012.

The main findings were:

- While general awareness of switchover was high, knowledge about the implications of switchover was very limited.
- Awareness of digital assistance programs was low and for those aware, again the knowledge was limited and sometimes misleading. The main message households had heard about was the “free set top box for pensioners” solution to the digital problems.
- For those without a satellite dish, many were not aware of what they would need to do to become digitally ready and most were not concerned about getting a satellite service.
- The majority of households in communities reliant on self-help television towers would need help to install a satellite dish and help was generally not readily available in the local area, and

- Once fully aware of what VAST has to offer and what it costs, households in communities reliant on self-help television towers were likely to fully embrace switchover as a positive change. For those not eligible for HAS and without a satellite dish, there was still the issue of getting someone to install the dish and the cost of that installation.

(b) Indigenous component

A total of n=202 face to face interviews formed the core of the Indigenous study. These were conducted across a total of six (6) remote sites, three (3) each in Western Australia (Leonora, Warmun / Halls Creek and Wiluna) and Northern Territory (Arlparra, Barunga and Hermannsburg).

The main findings were:

- The socio-demographic profile of remote Indigenous communities suggests they would need significant levels of assistance to achieve timely and effective digital switchover;
- General awareness among these communities of the switchover was low, particularly in the NT. This was in direct contrast to the high level of importance placed on TV viewing in remote Indigenous households.
- More alarming was the general lack of household concern around the actual implications of the switchover, specifically the physical requirements of installing a satellite dish and set-top box, with a sense of ambivalence the prevailing mood.
- The fact that nearly all families in these remote Indigenous communities lived in community-owned housing arrangements may be a hidden barrier behind the perceived lack of personal responsibility to engage more directly with the switchover.
- Current analog signal TV users were generally unaware of what they would need to do to become digitally ready. Once informed they would need the installation of a satellite dish and a set-top box, levels of concern appeared to heighten, specifically around the cost of such equipment, who would pay for it, and whether government assistance was available.
- Knowledge of digital assistance for both the SSS and HAS schemes was very low, and
- The majority of households stated they would need outside help in order to install the necessary equipment, and that such help was not readily available in remote communities.

4. Conclusion

Overall, there was a relatively smooth transition from the analog only TV environment (pre 30 June 2010) to the digital-only TV environment (post 10 December 2013). Other more specific conclusions are:

- Just about every household that wanted to watch television could watch digital television when the analog TV signal was switched off in their area.
- Conversion happened progressively within areas over the switchover period, which helped ensure the transition was smooth and there was no large last minute scramble to convert at switchover time.
- By the time of switchover in any area, there was very little negativity or dissatisfaction with either the switchover itself or the government's handling of the switchover.
- All households and stakeholders (such as antenna installers and television retailers) were kept well informed about what was happening and what they had to do to ensure a smooth transition to digital.
- The main problems that arose with switchover related to reception issues and in particular where reception was a challenge due to topography or distance (very specific geographic areas). In addition, about one-third of households had some problem when converting to digital television and most of these had to have work done on their antenna.

Appendix 1: Digital Tracker Post Switchover Summary

Switchover area	Switchover date	Survey Sample (hh)	Margin of Error	Able to watch digital TV at s/over	% with good reception	% with conversion problems	% direct help from Gov and % of HH satisfied with the help	Satisfaction with digital TV
RCEA	10 Dec 2013	600	+/- 4%	92%	88%	33%	10% and 88%	79%
Melbourne	10 Dec 2013	600	+/- 4%	99%	92%	25%	2% and 97%	81%
Sydney	3 Dec 2013	600	+/- 4%	98%	91%	27%	3% and 96%	81%
Darwin	30 July 2013	600	+/- 4%	97%	90%	28%	1% and 100%	81%
RRWA	25 June 2013	600	+/- 4%	97%	86%	26%	4% and 86%	81%
Brisbane	28 May 2013	600	+/- 4%	99%	92%	22%	2% and 93%	84%
Perth	16 April 2013	600	+/- 4%	98%	94%	24%	1% and 89%	86%
Tasmania	9 April 2013	600	+/- 4%	98%	91%	29%	3% and 93%	88%
Adelaide	2 April 2013	600	+/- 4%	98%	95%	29%	4% and 89%	84%
Northern NSW	27 Nov 2012	1,800	+/- 2%	95%	89%	30%	5% and 90%	82%
Sthn NSW & ACT	5 June 2012	2,000	+/- 2%	96%	92%	28%	3% and 93%	86%
Regional Qld	6 Dec 2011	2,400	+/- 2%	97%	89%	27%	4% and 95%	78%
Regional Victoria	5 May 2011	1,600	+/- 3%	95%	90%	30%	5% and 92%	84%
Regional SA	15 Dec 2010	1,200	+/- 3%	94%	91%	39%	13% and 95%	79%
Mildura	30 June 2010	300	+/- 6%	99%	95%	23%	8% and 95%	86%

Appendix 2: Revised Concept and Measurement of Conversion Status

A2.1 Background

In August 2012, Newspoll advised the Taskforce they believed the current published estimate of conversion was conservative and, as a result, under-estimating the number of converted households.

In particular, Newspoll felt that an official conversion rate of around 80 per cent for Sydney and Melbourne was misleadingly low and the result of both how the existing concept was measured and the restrictive nature of the concept itself. Compounding the problem was that as they moved closer to switchover in these metro areas, the conversion rates was unlikely to increase to any great extent because, as detailed below, they are measuring a more conservative reality that is most unlikely to get close to 100 per cent by the time of switchover. This could prove to be unnecessarily distracting to efforts to ensure all households are ready.

Newspoll recommended a change to the conversion concept that kept the existing concept at its core but slightly changed how that concept was measured and also added to the concept so that we had a revised definition that was both a little broader and measured more accurately.

The Taskforce accepted Newspoll's recommendations and agreed that the revised conversion rate represented a more accurate and useful published measure of "digital readiness".

A2.2 Revised measure of conversion

The revised definition and measurement of "conversion" was:

A household was defined as "converted" if at least the main television set meets one of the following three criteria:

1. Has a digital tuner in the TV or in a set top box or similar other device attached to it, such as a personal video recorder or Mystar set top box, through which the TV picture is viewed.
2. Has a VAST set top box attached to it.
3. Has a Subscription TV set top box attached to it that provides all the free-to-air standard definition digital channels as part of any subscription service.

*Note that criterion 3 mainly refers to all Foxtel and Optus subscribers in Sydney, Melbourne and Brisbane and Foxtel subscribers in Adelaide and Perth who get their service through cable rather than satellite.

This definition added VAST and subscription TV as conversion options:

- Adding VAST was not in dispute, merely a necessary updating of the definition. It did not have a major impact on conversion rates at the time of introduction due to the relatively low number of households and the specific geographic locations affected.

- Adding subscription TV was more about accepting that many households with, for example, an analog TV and Foxtel in Sydney, Melbourne or Brisbane, consider that Foxtel is a set-top-box that enables them to watch digital TV (they consider themselves to be digitally ready). For these households, the switching off of the analog signal was not going to have any direct impact on them and their viewing choices.

The other change is how Newspoll measured if a household's main TV set had an integrated digital tuner:

- This was done by asking if their main set has digital tuner and if they can watch ABC2. If they answered "yes" to both these questions then they were digitally ready with a digital TV.
- Under the revised measure, those who said "no" or "don't know" to the question regarding whether their main TV set has a digital tuner, was considered digitally ready if they say they could watch each of ABC2, GO and 7TWO on their main set independent of any pay TV equipment they may have.

A2.3 Impact of revised measure of conversion

The revised definition increased the official conversion rate from 82 per cent to 87 per cent (excluding the Foxtel option) and to 92 per cent (including the Foxtel option).

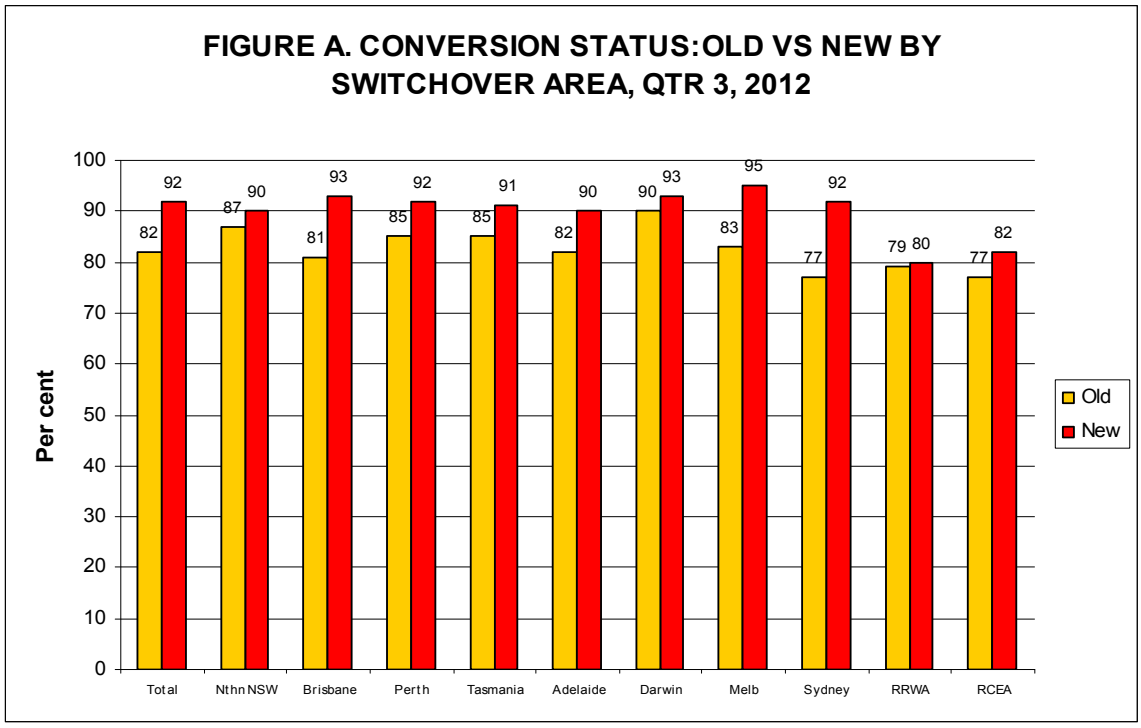
The components of the revised conversion rate were:

- Current conversion rate (82 per cent) plus
- Watching digital channels (each of ABC2, GO! and 7TWO)/ no pay TV (four per cent) plus
- Watching digital channels (each of ABC2, GO! and 7TWO)/not reliant on their pay TV (one per cent) plus
- Have VAST (zero per cent) plus
- Have Foxtel and live in Sydney, Melbourne or Brisbane (five per cent).

(a) Switchover areas

The revised definition increased conversion rates across all switchover areas with the largest increases in Sydney, Melbourne and Brisbane due to the impact of Foxtel (Figure A).

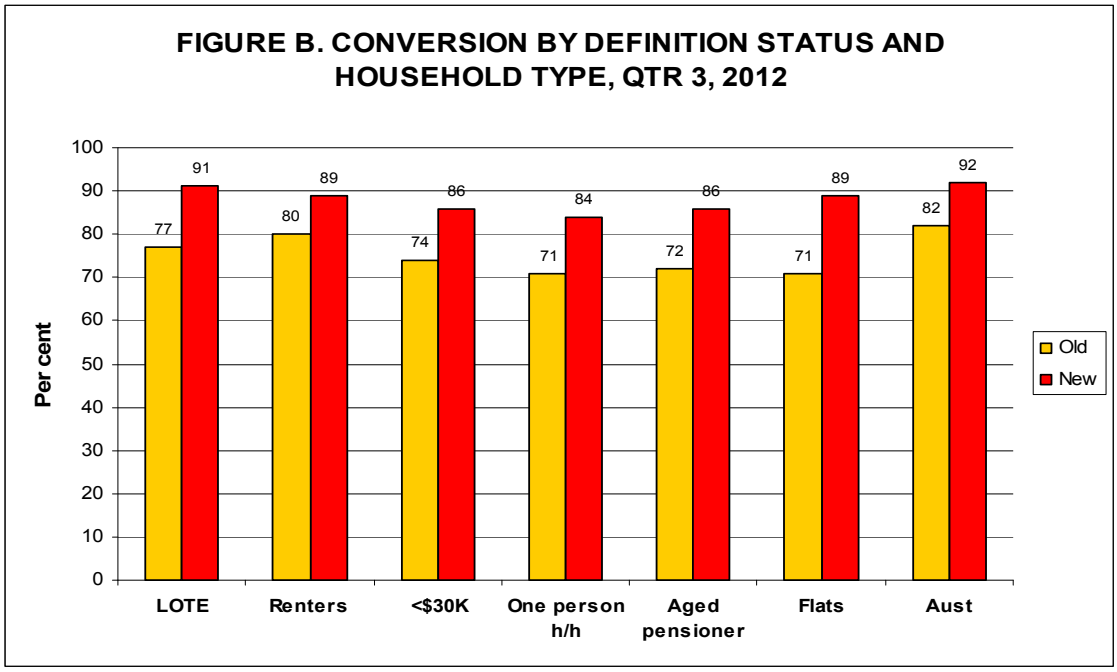
Figure A. Conversion status: Old versus new by switchover area, quarter 3, 2012



(b) Household types

The revised definition increased conversion rate across different household groups and while the pattern remained much the same, the relative differences between groups was reduced (Figure B).

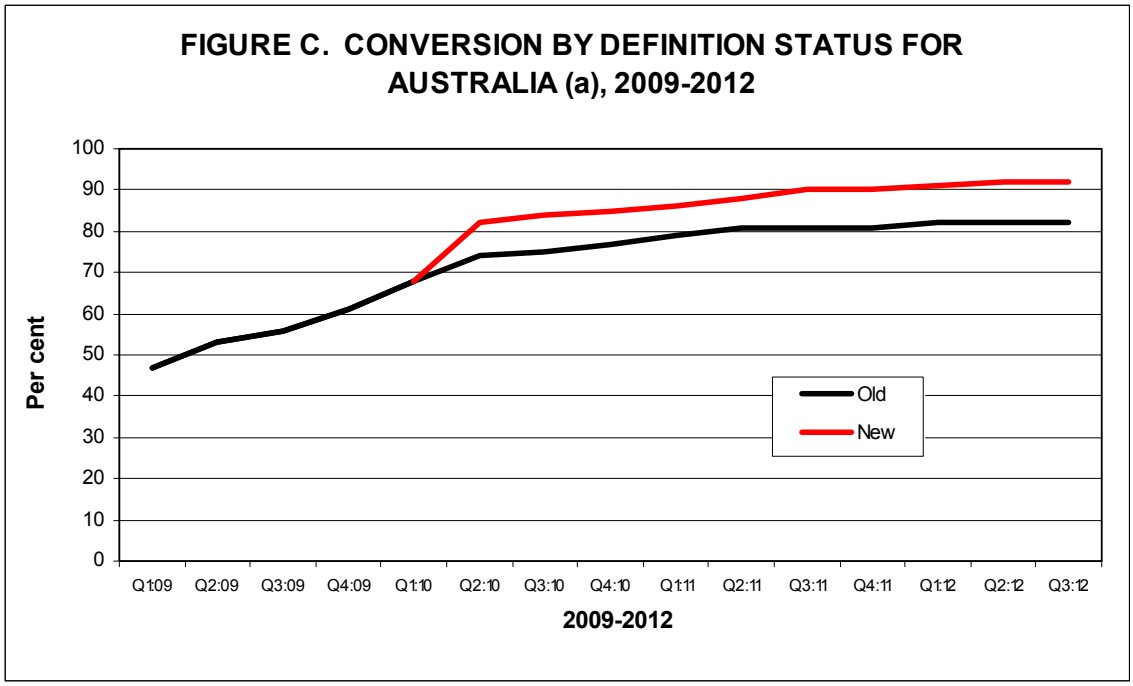
Figure B. Conversion by definition status and household type, quarter 3, 2012



(c) Time series

The revised definition was "backcast" to Quarter 2, 2010 (see Figure C). Prior to that, questions were not asked about what digital channels households could watch other than ABC2 (mainly because there were none available nationally other than ABC and SBS).

Figure C. Conversion by definition status for Australia (a), 2009-2012



(d) "Know what to do" variable

The "know what to do" variable was also impacted by the revised conversion definition given that it was based on the converted concept.

In Quarter 3, 2012, the revised conversion measure increased the proportion of households that knew how to convert a TV set to receive digital television from 84 per cent to 94 per cent. The impact over time is shown in Figure D.

Figure D. Know what to do by definition status for Australia (a), 2009-2012