



## Daylight saving time

Daylight saving time in Australia has a long and chequered history.

This is largely because the responsibility for the setting of time zones has remained with state and territory authorities. Commonwealth power over weights and measures in the Constitution extends to the measurement of time, but whether it has power to legislate about time zones is not free from doubt.<sup>1</sup>

This long and chequered history is also because there are many people who feel strongly on the issue.

### Time zones

#### World

World time is measured in relation to Coordinated Universal Time (UTC).<sup>2</sup> Using UTC as local time worldwide would have the disadvantage that 12 o'clock at any place on the globe would not occur at around the time the sun is at its high point in the sky at that place.

To avoid this problem the world is divided into time zones. Over the oceans time zones are equally spaced and 15 degrees of longitude apart. This makes 24 one-hour time zones totalling the full 360 degree circumference of the world.

Over land masses, political, administrative and geographic considerations have changed this ideal 15 degree geometry. In Australia this means that with one minor exception the borders of time zones follow state and territory boundaries.<sup>3</sup>

#### Australia

Australia has three time zones. These are called Eastern Standard Time (EST), Central Standard Time (CST) and Western Standard Time (WST)—sometimes called Western

Australian Time. These zones are sometimes referred to as AEST, ACST and AWST respectively where the prefix refers to Australia. These time zones were set up by colonial legislatures in the mid to late 1890s.<sup>4</sup>

EST is 10 hours ahead of UTC. In winter it applies to NSW—except in Broken Hill<sup>5</sup> which is on CST, Victoria, Queensland, Tasmania and the ACT. Lord Howe Island is administratively part of NSW, but has standard time 10 hours 30 minutes ahead of UTC.<sup>6</sup>

CST is 9 hours 30 minutes ahead of UTC. CST applies throughout South Australia, the Northern Territory and Broken Hill in NSW.<sup>7</sup>

WST is 8 hours ahead of UTC and applies throughout Western Australia.

#### External territories

Australia has other time zones that are associated with the external territories under its control. The Cocos (Keeling) Islands are 6 hours and 30 minutes ahead of UTC; Christmas Island is 7 hours ahead of UTC; and Norfolk Island is 11 hours 30 minutes ahead of UTC.

Australia's four Antarctic bases have their times determined more for convenience of contact with the Australian Antarctic Division of the Department of Environment and Heritage in Hobart than their geographic location. Mawson is 6 hours ahead of UTC; Davis is 7 hours ahead of UTC; Casey is 8 hours ahead of UTC; and Macquarie Island is 10 hours ahead of UTC. The territories of Heard Island and McDonald Islands; the Coral Sea Islands; and Ashmore and Cartier

Islands are usually uninhabited and do not have times set for them.

### Daylight saving time

Daylight saving is the name for the process of putting clocks forward by one hour during summer to extend the hours of daylight available at the end of the normal working day. It was introduced across Australia in 1917 as a wartime fuel saving measure, but was abandoned the same year in the face of public opposition. It was introduced across Australia again in 1942 under National Security Regulations and in the summers of 1942–43 and 1943–44. Western Australia which had made strong representations was exempt from daylight saving in 1943–44.<sup>8</sup>

There was no daylight saving time in Australia after the Second World War until Tasmania—excluding King Island—introduced it in 1967–68.<sup>9</sup> NSW, Victoria, Queensland, South Australia and the ACT adopted daylight saving time in 1971.<sup>10</sup>

Queensland abandoned daylight saving time in 1972, did not reintroduce it again until 1989 and abandoned it again following a referendum in 1992. In 2006 a Queensland parliament E-Petition in favour of the introduction of daylight saving time was signed by 62 232 people; a parallel E-Petition against the introduction of daylight saving time was signed by 7516 people.<sup>11</sup> In response to the petitions, the then acting Premier, Anna Bligh, in rejecting any change noted that she was 'unaware of any current workable model for state-wide daylight saving that would be supported by a majority of

Queenslanders'.<sup>12</sup> Premier Peter Beattie has 'hired a research company to gauge public support' and promised to consider a referendum if 'researchers found a majority' in favour.<sup>13</sup>

Western Australia adopted daylight saving time in 1974, but abandoned it following a referendum in 1975. It then reintroduced it in 1983–84, only to abandon it again following a referendum during 1984.

A referendum in 1992 sealed the fate of daylight saving time in Western Australia until the question resurfaced during 2006. On 24 October 2006, the Premier of Western Australia, Alan Carpenter indicated his support for a three-year trial of daylight saving time in Western Australia beginning on the first Sunday in summer, 3 December 2006.<sup>14</sup> This, coupled with the decision by both sides of politics to support a free vote led to a 37–14 vote in the Legislative Assembly in favour of the daylight saving time trial. A subsequent vote of the Legislative Council passed the trial with a vote of 21–10. A referendum on the future of daylight saving in Western Australia will be held in 2009 after the three-year trial has been completed.

### Australian time zones 2006–07 Times in advance of UTC

State or territory	Date ranges				
	To 1.10.2006	1.10.2006 29.10.2006	29.10.2006 3.12.2006	3.12.2006 25.3.2007	From 25.3.2007
New South Wales	10:00	10:00	11:00	11:00	10:00
Victoria	10:00	10:00	11:00	11:00	10:00
Queensland	10:00	10:00	10:00	10:00	10:00
South Australia	9:30	9:30	10:30	10:30	9:30
Western Australia	8:00	8:00	08:00	09:00	08:00
Tasmania	10:00	11:00	11:00	11:00	10:00
Northern Territory	9:30	09:30	9:30	09:30	9:30
Australian Capital Territory	10:00	10:00	11:00	11:00	10:00
Norfolk Island	11:30	11:30	11:30	11:30	11:30
Casey	8:00	8:00	8:00	8:00	8:00
Davis	7:00	7:00	7:00	7:00	7:00
Mawson	6:00	6:00	6:00	6:00	6:00
Macquarie Island	10:00	11:00	11:00	11:00	10:00
Cocos (Keeling) Islands	6:30	6:30	6:30	6:30	6:30
Christmas Island	7:00	7:00	7:00	7:00	7:00

### Referenda

As indicated above, the issue of daylight saving time has generated so much heat over the years that several states have conducted referenda to determine the views of electors.

The following table shows results of recent daylight saving time referenda.<sup>15</sup>

Referendum	For (%)	Against (%)
<b><u>New South Wales</u></b>		
1.5.76	68.42	31.58
<b><u>Queensland</u></b>		
22.2.92	45.50	54.50
<b><u>South Australia</u></b>		
6.11.82	71.62	28.38
<b><u>Western Australia</u></b>		
8.3.75	46.34	53.66
7.4.84	45.65	54.35
4.4.92	46.86	53.14

### Summer 2006–07

For the 2006–07 summer NSW, Victoria, South Australia and the ACT all have daylight saving time running from 0200 Sunday 29 October 2006 to Sunday 25 March 2007. Lord Howe Island clocks are moved forward half an hour during daylight saving time in NSW to make them operate on the same time as NSW during the summer period.

Tasmania has daylight saving time from 0200 Sunday 1 October 2006 to Sunday 25 March 2007.

Macquarie Island also observes daylight saving time in line with Tasmania.

Western Australia is on daylight saving time from 0200 Sunday 3 December 2006 to Sunday 25 March 2007.

Queensland, the Northern Territory, Norfolk Island, Christmas Island, the Cocos (Keeling) Islands and the three Antarctic bases Casey, Davis and Mawson do not observe daylight saving time.<sup>16</sup>

The table below shows for 2006–07, Australian time zones and how they relate to UTC.

The ready reckoner overleaf shows times in Australian states and territories during the summer of 2006–07.

Daylight saving time ceases in all states and territories at 0200 standard local time on Sunday 25 March 2007; this means that at 0300 daylight saving time on that date, clocks are moved back to 0200 standard time. There are moves within the Council of Australian Governments to synchronise the start and finish dates for daylight saving time in the future.

2006-07 DAYLIGHT SAVING TIME READY RECKONER

To calculate any time in the states and territories in the left columns adjust by the amount shown in the table

Your state or territory	Your state or territory				
	NSW, Vic, Qld, ACT	SA, NT	WA	Tas	NT
<b>1.10.2006 to 29.10.2006</b>					
New South Wales	0:00	0:30	2:00	-1:00	1:30
Victoria	0:00	0:30	2:00	-1:00	1:30
Queensland	0:00	0:30	2:00	-1:00	0:30
South Australia	-0:30	0:00	1:30	-1:30	1:00
Western Australia	-2:00	-1:30	0:00	-3:00	-0:30
Tasmania	1:00	1:30	3:00	0:00	1:30
Northern Territory	-0:30	0:00	1:30	-1:30	0:00
Australian Capital Territory	0:00	0:30	2:00	-1:00	1:30
Norfolk Island	1:30	2:00	3:30	0:30	2:00
Casey	-2:00	-1:30	0:00	-3:00	-1:30
Davis	-3:00	-2:30	-1:00	-4:00	-2:30
Mawson	-4:00	-3:30	-2:00	-5:00	-3:30
Macquarie Island	0:00	1:30	3:00	0:00	1:30
Cocos (Keeling) Islands	-3:30	-3:00	-1:30	-4:30	-3:00
Christmas Island	-3:00	-2:30	-1:00	-4:00	-2:30

  

Your state or territory	Your state or territory				
	NSW, Vic, Tas, ACT	Qld	SA, NT	WA	NT
<b>3.12.2006 to 25.3.2007</b>					
New South Wales	0:00	1:00	0:30	2:00	1:30
Victoria	0:00	1:00	0:30	2:00	1:30
Queensland	-1:00	0:00	-0:30	1:00	0:30
South Australia	-0:30	0:30	0:00	1:30	1:00
Western Australia	-2:00	-1:00	-1:30	0:00	-0:30
Tasmania	0:00	1:00	0:30	2:00	1:30
Northern Territory	-1:30	-0:30	-1:00	0:30	0:00
Australian Capital Territory	0:00	1:00	0:30	2:00	1:30
Norfolk Island	0:30	1:30	1:00	2:30	2:00
Casey	-3:00	-2:00	-2:30	-1:00	-1:30
Davis	-4:00	-3:00	-3:30	-2:00	-2:30
Mawson	-5:00	-4:00	-4:30	-3:00	-3:30
Macquarie Island	0:00	1:00	0:30	2:00	1:30
Cocos (Keeling) Islands	-4:30	-3:30	-4:00	-2:30	-3:00
Christmas Island	-4:00	-3:00	-3:30	-2:00	-2:30

Your state or territory	Your state or territory				
	NSW, Vic, Tas, ACT	Qld, Tas, ACT	SA, NT	WA	NT
<b>29.10.2006 to 3.12.2006</b>					
New South Wales	0:00	0:00	0:30	3:00	1:30
Victoria	0:00	0:00	0:30	3:00	1:30
Queensland	-1:00	0:00	-0:30	2:00	0:30
South Australia	-0:30	0:30	0:00	2:30	1:00
Western Australia	-3:00	-2:00	-2:30	0:00	-1:30
Tasmania	0:00	1:00	0:30	3:00	1:30
Northern Territory	-1:30	-0:30	-1:00	1:30	0:00
Australian Capital Territory	0:00	1:00	0:30	3:00	1:30
Norfolk Island	0:30	1:30	1:00	3:30	2:00
Casey	-3:00	-2:00	-2:30	0:00	-1:30
Davis	-4:00	-3:00	-3:30	-1:00	-2:30
Mawson	-5:00	-4:00	-4:30	-2:00	-3:30
Macquarie Island	0:00	1:00	0:30	3:00	1:30
Cocos (Keeling) Islands	-4:30	-3:30	-4:00	-1:30	-3:00
Christmas Island	-4:00	-3:00	-3:30	-1:00	-2:30

  

Your state or territory	Your state or territory				
	NSW, Vic, Tas, ACT	Qld, Tas, ACT	SA, NT	WA	NT
<b>From 25.3.2007</b>					
New South Wales	0:00	0:00	0:30	2:00	1:30
Victoria	0:00	0:00	0:30	2:00	1:30
Queensland	0:00	0:00	0:30	2:00	2:00
South Australia	-0:30	0:00	0:00	1:30	1:30
Western Australia	-2:00	-1:30	-1:30	0:00	0:00
Tasmania	0:00	0:30	0:30	2:00	2:00
Northern Territory	-0:30	-0:30	0:00	1:30	1:30
Australian Capital Territory	0:00	0:00	0:30	2:00	2:00
Norfolk Island	1:30	2:00	2:00	3:30	3:30
Casey	-2:00	-1:30	-1:30	0:00	-1:30
Davis	-3:00	-2:30	-2:30	-1:00	-2:30
Mawson	-4:00	-3:30	-3:30	-2:00	-3:30
Macquarie Island	0:00	0:00	0:30	2:00	2:00
Cocos (Keeling) Islands	-3:30	-3:30	-3:00	-1:30	-1:30
Christmas Island	-3:00	-3:00	-2:30	-1:00	-1:00

1. Section 51(xv) of the Constitution says '[t]he Parliament shall, subject to this Constitution, have power to make laws for the peace, order, and good government of the Commonwealth with respect to ... weights and measures'.
2. 'In 1970 the Coordinated Universal Time system was devised by an international advisory group of technical experts within the International Telecommunication Union (ITU). The ITU felt it was best to designate a single abbreviation for use in all languages in order to minimize confusion. Since unanimous agreement could not be achieved on using either the English word order, CUT, or the French word order, TUC, the acronym UTC was chosen as a compromise'. US National Institute of Standards and Technology, <<http://tf.nist.gov/general/misc.htm>>, accessed 8 November 2006. The Australian version of UTC is known as UTC(AUS); it is maintained by the National Measurement Institute. See *Time*, NMI Fact Sheet. <<http://www.measurement.gov.au/assets/documents/nmiinternet/NMI0720051222141503%2Epdf>>, accessed 15 November 2006. Note that UTC has replaced Greenwich Mean Time (GMT) for the purposes of civil time.
3. The minor exception is Broken Hill on which there is more following. There are also some local unofficial variations for those people living in the south-east corner of Western Australia along the Eyre Highway between South Australia and Western Australia. In towns such as Eucla, the time is set at UTC plus 8 hours and 45 minutes, viz. half way between South Australian and Western Australian times. It is unofficially known as Western Central Standard Time. <[http://en.wikipedia.org/wiki/Time\\_in\\_Australia](http://en.wikipedia.org/wiki/Time_in_Australia)>, accessed 10 November 2006.
4. Jan Todd, *For good measure—the making of Australia's measurement system*, Allen & Unwin, Crows Nest, 2004, pp. 28–29. Note that all states standardised their time zones from the beginning of February 1895; at that time South Australian time was set half way between the east and west coasts. Following legislation, South Australia changed its standard time to 30 minutes closer to the east coast in 1898.
5. Strictly this refers to the County of Yancowinna.
6. Times for Broken Hill and Lord Howe Island, as well as NSW, are set out in the *NSW Standard Time Act 1987*.
7. Legislatively Broken Hill time is defined by the NSW Act; this time coincides with CST.
8. Commonwealth Bureau of Census and Statistics, *Official year book of the Commonwealth of Australia*, no. 36, 1944–1945, p. 1119.
9. <[http://www.bom.gov.au/climate/averages/tables/dst\\_times.shtml](http://www.bom.gov.au/climate/averages/tables/dst_times.shtml)>, accessed 8 November 2006.
10. During daylight saving time, Australian Eastern Standard Time (AEST) becomes Australian Eastern Daylight Time (AEDT) and Australian Central Standard Time (ACST) becomes Australian Central Daylight Time (ACDT). <<http://www.australia.gov.au/about-australia-13time>>, accessed 6 November 2006.
11. E-Petitions are at <<http://www.parliament.qld.gov.au/view/EPetitions%5FQLD/ClosedEPetitions.aspx?LIndex=2>>. The two E-Petitions referred to here are numbered 553–05 and 571–05 respectively. Accessed 15 November 2006.
12. Anna Bligh MP, acting Premier, <<http://www.parliament.qld.gov.au/view/EPetitions%5FQLD/responses/571-05.pdf>>, 20 May 2006, accessed 15 November 2006.
13. Mark Ludlow, 'Not until the cows come home, maybe not even then', *Australian Financial Review*, 28 October 2006, p. 3.
14. Amanda O'Brien, 'West to clock on for daylight saving after Carpenter backs trial', *The Australian*, 25 October 2006, p. 4.
15. For NSW see <[http://www.lawlink.nsw.gov.au/lawlink/Corporate/ll\\_agdinfo.nsf/pages/community\\_relations\\_daylight\\_saving](http://www.lawlink.nsw.gov.au/lawlink/Corporate/ll_agdinfo.nsf/pages/community_relations_daylight_saving)>; for Queensland see <<http://www.ecq.qld.gov.au/data/portal/00000005/content/74832001045105224609.pdf>>; for South Australia see <[http://www.seo.sa.gov.au/apps/uploadedFiles/news/92/referendum\\_details.pdf](http://www.seo.sa.gov.au/apps/uploadedFiles/news/92/referendum_details.pdf)>; and for Western Australia see 'Big WA vote against daylight saving', *The Australian*, 26 March 1975, WA State Electoral Department, *Statistics relating to the referendum held 7 April 1984*, 1984, and <[http://www.parliament.wa.gov.au/hansard/hans35.nsf/\(Lookup+by+Page\)/20060111068005?opendocument](http://www.parliament.wa.gov.au/hansard/hans35.nsf/(Lookup+by+Page)/20060111068005?opendocument)>. Web sites all accessed 20 November 2006.
16. Information about the Antarctic bases from <<http://www.aad.gov.au/default.asp?casid=6213>>, accessed 10 November 2006; and by personal communication.

**Greg Baker**  
**Statistics and Mapping**  
**Section**  
**Parliamentary Library**

*Except to the extent of the uses permitted under the Copyright Act 1968, no part of this publication may be reproduced or transmitted in any form or by any means including information storage and retrieval systems, without the prior written consent of the Department of Parliamentary Services, other than by senators and members of the Australian Parliament in the course of their official duties.*

*This brief has been prepared to support the work of the Australian Parliament using information available at the time of production. The views expressed do not reflect an official position of the Parliamentary Library, nor do they constitute professional legal opinion.*

© Commonwealth of Australia 2006