

2022 REVIEW OF THE DISABILITY STANDARDS FOR ACCESSIBLE PUBLIC TRANSPORT 2002

(SUBMISSION ON DISCUSSION PAPER—2022 REVIEW OF THE
DISABILITY STANDARDS FOR ACCESSIBLE PUBLIC
TRANSPORT 2002)



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INFORMATION ABOUT THE INSTITUTE

- The Australian Institute of Architects (Institute) is the peak body for the architectural profession in Australia. It is an independent, national member organisation with 14,000 members across Australia and overseas.
- The Institute's vision is: *Everyone benefits from good architecture.*
- The Institute's purpose is: *To demonstrate the value of architecture and support the profession.*
- At the time of this submission the National President is Stuart Tanner FRAIA and the Chief Executive Officer is Cameron Bruhn Hon. FRAIA.

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About the cover photo

The Australian Institute of Architects' 2022 Sir Zelman Cowen Award for Public Architecture Bundanon. Kerstin Thompson Architects. Traditional Land Owners: The Wodi Wodi and the Yuin peoples of the Dharawal country. Photographer: Rory Gardiner.

For further information visit: <https://www.architecture.com.au/awards/2022-awards/2022-act-architecture-awards-winners/the-sir-zelman-cowen-award-for-public-architecture-bundanon>

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1 INTRODUCTION

The Australian Institute of Architects (the Institute) welcomes the opportunity to provide its recommendations to the review of the Disability Standards for Accessible Public Transport 2002 (DSAPT) made under the Disability Discrimination Act 1992 (DDA)

This submission has been prepared by the Institute's National Policy and Advocacy Team with the expert advice of the National Enabling Architecture Committee.

1.1 Background

The Institute has advocated for many years to both federal and individual states and territories governments on issues of accessibility. In the federal arena this includes more recent submissions to reviews of the Access to Premises Standards¹, and accessibility provisions within Volumes 1 and 2 and the Livable Housing Design Standards (LHDS) of the National Construction Code (NCC) 2022 Public Comment Draft².

The Institute has also advocated for more strategic approaches to measuring accessibility as part of liveability in the National Cities Performance Framework³ as well as government investment in the retrofitting of buildings to improve accessibility^{4,5,6}

The Disability Standards for Accessible Public Transport 2002 are understood to be national standards that were aimed to be implemented within a 30-year schedule of target dates set out in Schedule 1 from December 2007 to December 2032. What remains now with regard to the original standards are the full application of standards applicable to trains and trams by December 2032.

In more than two decades since 2002, when the DSAPT were created, two important changes have occurred. The first has been the increasing recognition of disabilities or different abilities that were not as well recognised 21 years ago when the DSAPT were first formulated including the type of neurodiversity associated with autism spectrum disorders. For example, the Australian Bureau of Statistics Survey of Disability Ageing and Carers particularly noted in 2018 that,

the 2018 SDAC estimated there were 205,200 people with autism, 25.1% more than the number estimated in the 2015 SDAC (164,000).⁷

¹ https://www.architecture.com.au/wp-content/uploads/Australian-Institute-of-Architects-Submission-to-DISER-on-DDA-Access-to-Premises_May_2021_FINAL.pdf

² https://www.architecture.com.au/wp-content/uploads/Australian-Institute-of-Architects-NCC_Public_Comment_Draft_Response_Sheet_ABCB_NCC-2022_FINAL.pdf

³ https://www.architecture.com.au/wp-content/uploads/Australian-Institute-of-Architects-Submission-to-DITRDC-on-NCPF_FINAL_February_2021.pdf

⁴ See Recommendation 6.4 in https://www.architecture.com.au/wp-content/uploads/Institute-of-Architects-2021-Federal-Pre-budget-submission_VFINAL_20210129B.pdf

⁵ See Recommendation 9 in https://www.architecture.com.au/wp-content/uploads/Australian-Institute-of-Architects-2022-Federal-Pre-budget-Submission_FINAL_20220121.pdf

⁶ See Recommendations 5 and 5.1 in https://www.architecture.com.au/wp-content/uploads/Aust_Inst_Architects_Federal_Budget_Submission_2023-24_FINAL-1.pdf

⁷ <https://www.abs.gov.au/statistics/health/disability/disability-ageing-and-carers-australia-summary-findings/2018#autism-in-australia>

The ABS also notes that changes to the American Psychiatric Associations Diagnostic and Statistical Manual of Mental Disorders 5th Editions (DSM-5) released in 2013 have likely influenced reported autism rates.

What has also changed in this time has been the exponential development and access to digital information platforms and devices afforded through 3G, 4G and 5G networks and the almost ubiquitous adoption of “smartphone” devices since the mid-2000s .

It is with particular reference to this context that recommendations are made in this submission to update the DSAPT to reflect the awareness of the diversity of disabilities that many Australians live with and the enabling technologies to assist people.

The profession of Architecture and the allied profession of Accessibility Consultant practitioners see an important role, when designing public transport infrastructure, to design into buildings these technologies which provide assistance and aid the independence of people living a diverse range of conditions.

2 IMPROVING DESIGN STANDARDS OF PUBLIC TRANSPORT FACILITIES

2.1 Specific technological enhancements to public transport facilities

The following are specific technological enhancements that the Institute proposes to be adopted into new or revised standards together with a further consideration of measures to manage limitations and risks .

2.1.1 Smartphone enabled hearing augmentation at airports, train stations and other transport hubs.

This technology can use Bluetooth or Wi-Fi technology to transmit to smartphone devices where users have downloaded an app. Some systems may convert voice to text. We note that the Victorian Schools Building Authority (VSBA) have set out requirements for hearing augmentation and sound field systems in their Building Quality Standards Handbook (BQSH) – School Construction and Design Standards⁸.

2.1.2 Accessible touch screens for visually impaired people.

There is public recognition of the problem of touchscreen devices that no longer have tactile buttons. Automated teller machines (ATMs) provide 3.5mm headphone sockets for users to connect a headphones/ear buds and use audio navigation of the screen. There are emerging technologies and research in this field⁹ which suggest that the matter of a standard may be something that could be developed through an expert panel of Standards Australia and funded by the Australian Government.

⁸ See sub-section 5.10.12 in the handbook downloadable from

<https://www2.education.vic.gov.au/pal/bqsh-school-construction-design-standards/policy>

⁹ See for example Codick, Elizabeth, "Evaluation of the Accessibility of Touchscreens for Individuals who are Blind or have Low Vision: Where to go from here" (2022). Thesis. Rochester Institute of Technology. Accessed from: <https://scholarworks.rit.edu/cgi/viewcontent.cgi?article=12321&context=theses>

2.1.3 Way-finding technologies to permit navigation within an around transport facilities.

These may use Bluetooth, Wi-Fi or geomagnetic location technologies. An example is BindiMaps¹⁰ used in a number of public and commercial locations across Australia (its mention here does not constitute a specific endorsement by the Institute and is simply an example).

2.1.4 Managing limitations and risks with technologies.

As beneficial as the technologies might be, there can be limitations and risks which are required to be managed.

One limitation is that not all people with disabilities will have up to date smart phones capable of running the required applications of the type suggested in 2.1.1. This would require retaining systems comprising technology such as magnetic induction system (hearing loops)

One risk with smart screens in a public setting, is that audible outputs delivered via a loudspeaker, could compromise security or privacy as other people in close proximity may hear access codes or other sensitive information. Measures to mitigate these risks may include providing audio only via a physically connected headphone (via a 3.5mm headphone phone jack) such as used for automated teller machines. Another measure is to use soundproof booths or shells to enable privacy.

2.2 Quiet spaces

Quiet spaces or rooms should be available for people who may prone to distress, disorientation or discomfort through high levels of noise and/or visual stimulus. This may include people who:

- are neuro-diverse and live with an autism spectrum disorder,
- have an acquired brain injury (including from cerebro-vascular accident, or 'stroke')
- have hearing deficits,
- live with anxiety or post-traumatic stress disorder, or
- live with dementia

2.3 International Disability Signage

We note that Section 9.10 of the DSAPT require the international symbol of accessibility to be displayed and that Section 16.1 of the DSAPT references AS1428.1 (1993) Clause 14.2, *Form of the international symbol*. Clause 14.2(a) refers to “a stylised figure in a wheelchair and plain square background”.

The Institute wishes to advise that the International Union of Architects ran a design competition in 2022 to create a new symbol with the winning entry¹¹ created by Ukrainian architect Maksym Holovko. It now remains for international and Australian standards organisations to consider adoption of the standard. Section 16.1 may warrant re-wording so that the applicable standard reflects potential changes to AS1428.1 regarding the international symbol.

¹⁰ See: <https://bindimaps.com/supported-locations/>

¹¹ See: <https://www.uia-architectes.org/en/competition/international-accessibility-symbol-design-competition/>

2.4 Consistency within standards.

The DSAPT references AS1428.2 in a number of provisions which are inconsistent with the Premises Standards, AS1428.1, the National Construction Code and best practice. This needs to change to ensure currency and consistency is maintained at all times.

2.5 Currency of Information.

Australian Standards ME64 committee are in the process of updating AS1428.2 to be AS1428.6 which is expected to be released for comment in late 2023. Similar to the matter identified for the international symbol of accessibility A flexible mechanism is require in the DSAPT to adopt new and revised standards between five yearly reviews.

2.6 Impact of overcrowding

Peak periods result in overcrowding of public transport and this will only intensify as population in our cities increase. This creates additional difficulties for people with disabilities such as people in wheelchairs who need extra space to move around and people with vision impairment who will be disadvantaged if shore lines and tactile ground surface indicators (TGSi) are not easily found or free to use. This will only increase discrimination and some recognition and resolution of this needs to be included in DSAPT.

3 CONCLUSION

The Institute wishes to be kept informed on progress of the review and any changes and would be pleased to assist any working group to update and define details.
