

31 August 2020

Response to ABCB Consultation Regulatory Impact Statement

Proposal to include minimum accessibility standards for housing in the NCC

Summary

Rights & Inclusion Australia (R&IA) supports the national Building Ministers Forum (BMF) and the Australian Building Codes Board (ABCB) for progressing proposed inclusion of housing accessibility in the 2022 NCC.

R&IA has extensive involvement in the development and implementation of access standards and legislation in Australia – and in the drafting, adoption and ratification of the United Nations *Convention on the Rights of Persons with Disabilities* (CRPD). Further information is available at our website. Access legislation has developed progressively in Australia – and now provides equitable access requirements for most aspects of public domains, built environments, transportation, and information. The missing element is accessible housing.

The ABCB Consultation Regulatory Impact Statement (Consultation RIS) considers 6 Options and the stated objective is – *To ensure that new housing is designed to meet the needs of the community, including older Australians and others with mobility limitations*

This is a major opportunity to progress comprehensive access legislation in Australia and in accordance with CRPD obligations and as recommended by the Australian Network for Universal Housing Design (ANUHD), the objective should refer to **all** housing.

The development and distribution of the Consultation RIS, however, was far from ideal when it comes to facilitating a genuine dialogue with the constituencies set to be most impacted by regulation. The quality of the RIS consultation document and the limited time available resulted is a less than satisfactory result.

The COVID 19 pandemic has resulted in homes becoming workplaces for many people, and this ongoing change in lifestyle and technology further supports the need for safe and equitable housing.



R&IA supports the initiatives and related actions of ANUHD in progressing this important process towards more accessible housing in Australia.

R&IA also supports the analysis and recommendations of the Dalton Carter, 18 August 2020 Report, prepared for the Melbourne Disability Institute, University of Melbourne, and the Summer Foundation.

Relevant Dalton Carter Report extracts include (Summary page 11) – We conclude that the economic credentials for all options considered by the CIE are considerably stronger than those presented in their report. While the CIE favoured continuation of a voluntary code, we conclude that a social benefit code analysis based on our four key recommendations would underpin the case for adding a regulation to the national building code for all new Class 1a and Class 2 buildings.

Indeed, in Table 11 (page 23), we demonstrate that there is a strong case to suggest that the benefit- cost ratio for Option 1 is greater than 2.0, or considerably higher than the base case estimate of 0.77, even when a discount rate of 7 per cent is applied.

Further, we note that encouraging a match between the stock of accessible housing and those with accessible housing needs is central to the calculation of net benefit and therefore suggest that a combination of options could be highly desirable. In particular, combining Option 5 (a subsidy program to encourage availability of accessible rental properties) with Option 1 (Silver standard) and Option 2 (Gold standard) should be assessed.

The Dalton Carter and ANUHD tables below illustrate these important comments.

Options 2 and 3 best meet the RIS objective – and R&IA recommends NCC 2022 initial adoption of a **modified Option 2**, on the basis that ABCB progresses national consultations to further develop and enhance NCC housing accessibility legislation.

Michael Fox R&IA director For and on behalf of the directors and members of R&IA.



Commentary

Consultation RIS

The Consultation RIS (RIS) states that – The BMF agreed the analysis will take into consideration the relevant policy objectives such as the National Disability Strategy (NDS), enabling ageing in place, reducing social exclusion and any reduction in providing specialist accommodation.

The nature of the 'problem (or issue)' is based on 2018 ABS estimates of 3m Australians 'with a mobility limitation due to disability' increasing to 'around 5.75 million people over the next 40 years, due to population growth and the effects of an ageing population'.

The RIS then considers – Housing that is inaccessible for people with mobility limitations can impose various costs on those people and their families and the community more broadly.

To meet the needs of 'members of the community with mobility impairments', the RIS considers housing should be

- easy to enter (and leave)
- easy to navigate in and around
- capable of easy and cost-effective adaptation
- responsive to the changing needs of home occupants

R&IA supports this approach, particularly the mainstream accessible housing benefits to 'people with mobility limitations....and their families and the community more broadly'.

To consider how accessibility could be improved, the RIS provides 7 options, namely status quo, Options 1 to 3 accessibility to Class 1 and 2 buildings, and partial or voluntary Options 4 to 6.

This R&IA submission relates to Options 1 to 3 as the only options that are considered to respond to the BMF brief and RIS objective.

R&IA does not support the draft NCC Variation Options as 'one step access' will render houses inaccessible.

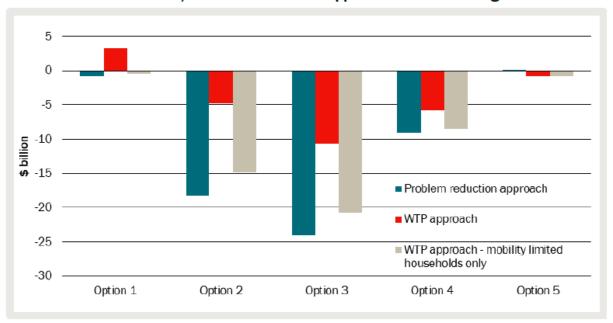


Cost Benefit Analysis

The Consultation RIS details two different approaches for undertaking cost-benefit analyses: a 'problem reduction approach' and a 'willingness to pay approach'. In both instances the focus is on quantitative analysis.

RIS table 2 considers various estimated costs and benefits of these Options – and notes that WTP (willingness to pay) provides net benefits by adoption of Option 1.

2 Estimated net benefits/costs under various approaches to measuring the benefits



The estimated net benefits and cost are illustrated in table 3 and the RIS notes

We estimate that Option 1 (Silver) is likely to have a small net cost. Sensitivity analysis shows that this Option would broadly 'break-even' if either construction costs or space impacts were over-stated by \$538 per dwelling. However, the costs of Option 2 (Gold) and Option 3 (Gold+) would significantly outweigh the benefits under all scenarios tested. A more targeted approach to addressing specific problems (i.e. subsidies to increase the supply of accessible private rental properties) would still be relatively costly, but would also broadly 'break even'.



3 Estimated net benefit/cost - "problem reduction" approach

	Option 1	Option 2	Option 3	Option 4	Option 5
	\$ million				
Benefits					
Reduced falls	45.68	51.69	54.52	15.13	154.27
Reduced time in hospital/transition care	186.88	211.45	223.04	61.89	631.05
Reduced costs associated with loneliness	154.76	175.11	184.71	51.26	522.59
Reduced home modifications costs	477.67	540.49	570.10	158.20	1 613.01
Reduced carer-related costs	557.17	630.43	664.98	184.53	1 881.44
Reduced incidence of moving	22.88	25.89	27.31	7.58	77.27
Reduced premature/inappropriate entry into aged care	209.54	237.09	250.09	69.40	707.58
Societal benefits	1 031.33	1 106.60	1 106.60	326.25	1 900.96
Total benefits	2 685.92	2 978.76	3 081.34	874.24	7 488.17
Costs					
Construction costs	-1 866.72	-12 384.81	-15 904.40	-3 602.32	0.00
Opportunity cost of space	-1 571.81	-8 831.55	-11 162.57	-6 541.11	0.00
Industry re-training costs	- 28.47	- 28.47	- 28.47	- 28.47	0.00
Subsidy	0.00	0.00	0.00	0.00	-7 455.55
Total costs	-3 467.00	-21 244.83	-27 095.43	-10 171.90	-7 455.55
Net benefit/costs	- 781.09	-18 266.07	-24 014.09	-9 297.66	32.62

Accordingly, R&IA recommends NCC 2022 incorporation of the modifications set out in this submission, on the basis that ABCB continues national consultations to progressively develop and enhance the housing accessibility legislation.



The BMF agreed that – the analysis will take into consideration the relevant policy objectives such as the National Disability Strategy (NDS), enabling ageing in place, reducing social exclusion and any reduction in providing specialist accommodation.

Table 3 addresses some of these aspects. However additional and related qualitative and quantitative benefits include

- Safe, equitable, accessible and dignified housing for all Australians
- Visibility for people with mobility limitations, their families and the community
- Ageing in place to reduce the need for privatised aged care, community dislocation and specialist accommodation
- COVID 19 and ongoing change in lifestyle and technology resulting in the need for safe and equitable housing as workplaces
- Consistent national standards for accessible building components
- Demographic changes to an older less mobile population
- Positive accessible housing and environments terminology

The RIS suggests that under a 'central approach' – most of the benefits are only realised when people who require accessible housing occupy the newly built accessible homes (there may also be some benefits from enabling family and friends with accessibility needs to visit) ... but however ... The realised benefits increase over time as the share of accessible dwellings in the stock increases.

The alternative 'WTP approach' resulted from surveys – using 'choice modelling' questions that offered hypothetical choices between homes with differing accessibility features and rents.

Accordingly – The WTP approach generally places a higher value on accessible housing than the problem reduction approach. Option 1 (Silver) is estimated to deliver a net benefit, while the other options are estimated to deliver a net cost.



The RIS estimates that 'Australians with a mobility-related disability' will increase from current ABS estimate of 2.9 million to around 4.7 million over the next 40 years. (page 2)

The RIS states the objective is 'to ensure that housing is designed to meet the needs of the community, including older Australians and others with a mobility-related disability' (page 3).

However the RIS further considers that in relation to the aggregate benefits, 'after the 10-year regulatory period, benefits in the last year of the regulatory period are then held constant for a further 30 years, reflecting the flow of benefits over the life of the building.' (page 99).

Accordingly, the CIE RIS and the engaged quantity surveyors Donald Cant Watts Corke (DCWC) appear to base the costings on a 10-year regulatory period for *people who require accessible housing*.

This is a significant understatement of the basis, requirements and benefits of accessible housing as outlined above.

The Dalton Carter Report clearly sets out the case and 'considerably stronger' benefits of adding a regulation to the national building code for all new Class 1a and Class 2 buildings.



Dalton Carter (page 9)

Table ES5 Benefit-cost ratios adjusted for lower discount rates

Univariate analysis	Option 1 Silver	Discour Option 2 Gold	nted at 3% p.a Option 3 Gold +	. (approx.) Option 4	Option 5 Subsidy	
WTP Base case benefit-cost ratios in CIE report	0.85	0.30	0.24	0.17	0.89	
Add capital value of space to benefits	1.50	0.68	0.64	0.89	1.22	
Benefits overlap 75%	1.44	0.39	0.31	0.23	1.42	
Benefits overlap 50%	1.94	0.61	0.48	0.35	1.61	
Benefits overlap 25%	2.44	0.83	0.65	0.47	1.81	
No overlap of benefits	2.94	1.05	0.83	0.60	2.00	
Multivariate Analysis [benefits from tables 7.2 & 7.3] + [Capital value of space]						
Base case benefits	1.50	0.68	0.64	0.89	1.22	
Benefits overlap 75%+Cap value	1.99	0.90	0.81	1.01	1.42	
Benefits overlap 50%+Cap value	2.49	1.12	0.98	1.13	1.61	
Benefits overlap 25%+Cap value	2.99	1.34	1.16	1.26	1.81	
No overlap of benefits + Cap value	3.49	1.56	1.33	1.38	2.00	

Table Notes: As the CIE economic model revealing the time profile of costs and benefits was not made available for review, the estimate of the impact of reducing the discount rate required assumptions that make these estimates an approximation only. Nevertheless, we demonstrate in Section 3 that our estimations are fit for purpose.

ANUHD (page 8)

Table 1 below shows the results if the four problems are addressed. (A ratio greater than 1.0 means the benefits are greater than the costs.)

Table 1. Benefit/cost ratios in the CIE Report and after adjustment using Dalton /Carter Assumptions

		Option 1	Option 2	Option 3	Option 4	Option 5
1.	Base case benefit -cost ratios in CIE report in RIS	0.77	0.14	0.11	0.09	1.00
2.	Adjust for symmetry in cost and benefits using the 'willingness to pay' approach (25% overlap to allow for building modification being reflected in both approaches)	2.00	0.68	0.54	0.39	1.48
3.	Symmetry applied to WTO approach (25% overlap), plus add capital value of space to benefit side	2.46	1.10	0.95	1.03	1.48
4.	Add in effect of 3% discount rate to row 3	2.99	1.34	1.16	1.26	1.81



Context

Australian Standards & access legislation

Access legislation in Australia began in 1968 with Australian Standard CA52, and 1980s consultations and research resulted in preparation of the first Standards Australia version of AS1428.

Following introduction of the 1992 Disability Discrimination Act (DDA), and extensive government consultations, AS1428 was divided into several parts with AS1428.1 adopted into national building legislation in 1993 as mandatory access legislation for new public buildings.

In 1993 Sydney was awarded the 2000 Olympic & Paralympic Games and the accessible housing response was preparation and publication of the Standards Australia AS4299 Adaptable Housing in 1995.

AS1428.1 was revised in 2001 and following preparation and adoption of the APS (Access to Premises Standard), AS1428.1-2009 was incorporated into the NCC in 2011.

The APS aligns the NCC and Australian Standards with the DDA.

AS4299 has been adopted by many government agencies and further accessible housing measures include the voluntary Livable Housing Australia (LHA) guidelines and NSW SEPP 65 requirements.

This progressive approach provides the precedent for introduction of housing accessibility legislation in the NCC.

International and National legislation

Australia ratified the CRPD in 2008 and ratified the CRPD Optional Protocol in 2009.

CRPD Article 1 states – The purpose of the present Convention is to promote, protect and ensure the full and equal enjoyment of all human rights and fundamental freedoms by all persons with disabilities, and to promote respect for their inherent dignity.



CRPD Article 9 requires access to – Buildings, roads, transportation, and other indoor and outdoor facilities, including schools, **housing**, medical facilities and workplaces;

CRPD Article 35 requires – Each State Party shall submit to the Committee, through the Secretary-General of the United Nations, a comprehensive report on measures taken to give effect to its obligations under the present Convention and on the progress made in that regard, within two years after the entry into force of the present Convention for the State Party concerned.

CRPD Article 36 requires – Each report shall be considered by the Committee, which shall make such suggestions and general recommendations on the report as it may consider appropriate and shall forward these to the State Party concerned. The State Party may respond with any information it chooses to the Committee. The Committee may request further information from States Parties relevant to the implementation of the present Convention.

CRPD Optional Protocol Article 1 requires – A State Party to the present Protocol ("State Party") recognizes the competence of the Committee on the Rights of Persons with Disabilities ("the Committee") to receive and consider communications from or on behalf of individuals or groups of individuals subject to its jurisdiction who claim to be victims of a violation by that State Party of the provisions of the Convention.

The 2010 to 2020 National Disability Strategy (NDS), Outcome area 1 – Inclusive and accessible communities, recommends

- Increased participation of people with disability, their families, and carers in the social, cultural, religious, recreational, and sporting life of the community.
- Improved accessibility of the built and natural environment through planning and regulatory systems, maximising participation of all community members.
- Improved provision of accessible and well-designed housing with choice for people with disability about where they live.
- A transport system that is accessible for the whole community.
- Communication and information systems that are accessible, reliable, and responsive to the needs of people with disability, their families, and carers.

Government ratification of the CRPD, CRPD Protocol and NDS endorses more accessible housing in Australia.



Wheelchair research

Australian access standards are based on extensive anthropometric data, field testing and research. This includes initial research by John Bailes in 1983, subsequent research by Barry Seeger, Rod Hunter and others in Australia together with extensive Standards Australia, US and UK research and studies.

In December 2014 David Caple & Associates completed ABCB commissioned Research on spatial dimensions for occupied manual and powered wheelchairs project.

The primary purpose of this review relates to a report from the enquiry into Draft Disability Access to Premises – Buildings (Standards) by the House of Representatives Standing Committee on Legal & Constitutional Affairs (June 2009). Included in recommendations from the report was the following:

"The Committee recommends that the Australian Government provide funding for new research, to be completed within 12 months of the tabling of this report, into wheelchair sizes and the dimensions of building features necessary to accommodate them. The results and the issue of 90th percentile dimensions should be returned to this Committee for consideration at that time." (Recommendation 13).

The research report generally endorses AS1428.1-2009 and recommends further research into dimensions for 180° turning circles and landings, lifts, hand basins, shower recesses, and seating spaces in auditoriums.

The findings include 2014 wheelchair widths of 765mm to 828mm as following table.

Current AS 1428.1	90 th percentile of the 21 manual chairs in sample	90 th percentile of the 31 powered chairs in sample	90 th percentile of the combined sample	90 th percentile of the adjusted combination
1300mm length by 800mm width	992mm by 736mm	1373mm by 729mm	1343mm by 733mm	1216mm by 734mm
Widest width	828mm	765mm	813mm	813mm



The following Table 1 International Research found that minimum accessible door width requirements are 813mm to 900mm.

Door widths Measurement	IDEA (US) and other US	Inclusive mobility (UK)	AS 1428.1-2009	Canada	Best Practice (CHRC)*	Human Scale
Preferred	No data	1200mm	No data	No data	No data	915mm
Minimum	815mm	900mm	850mm	810mm	850mm	813mm

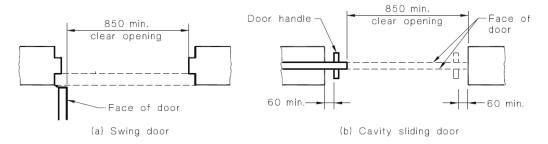
The report states that – Regardless of the data collection method, sample size or measures taken, the principles of accessibility required remain the same; to ensure people who use wheelchairs or mobility aids are able to independently, functionally and equitably access the community, as would anyone else without a disability

57 AS 1428.1—2009

13.2 Clear opening of doorways

The minimum clear opening of a doorway on a continuous accessible path of travel shall be 850 mm when measured from the face of the opened door to the doorstop, as shown in Figure 30. Where double doors are used, the 850 mm minimum clear opening shall apply to the active leaf.

NOTE: For door controls, see Clause 13.5.



Standards Australia, national and international research, endorses AS1428.1-2009 adoption of minimum 850mm clear doorways for accessible environments.



Proposed NCC changes

The ABCB 2020 Accessible Housing: Drafting of proposed NCC changes – Outlines proposed changes to the text of the National Construction Code (NCC), which may be implemented if governments decide to proceed with regulation for a minimum standard for accessibility in new housing.

The proposed changes affect NCC Class 1a buildings and sole-occupancy units in Class 2 buildings. The Overview Table summarises the NCC elements proposed in relation to Options 1, 2 and 3.

Overview Table

ELEMENT	OPTION 1 (Based on LHDG Silver)	OPTION 2 (Based on LHDG Gold)	OPTION 3 (Based on LHDG Gold + part of Platinum)
At least one step-free entrance door	√1	√1	√1
Wider internal doors and corridors	✓	✓	✓
Toilet on ground level (or entry level)	✓	✓	✓
Bathroom and shower design for easy access	✓	✓	✓
Bathroom and toilet walls able to support grab rails	✓	✓	✓
Step-free path from street/garage to dwelling entry ²	✓	✓	✓
Stairways designed to reduce likelihood of injury	√3	√4	√4
Kitchen space to support ease of movement/adaptation		✓	✓
Laundry space to support ease of movement/adaptation		✓	✓
Space on ground/entry level suitable for a bedroom		✓	✓
Light switches at easy to reach heights		✓	✓
Door hardware at easy to reach heights		✓	✓
Minimum circulation spaces for kitchen, laundry, bathroom			✓
Maximum sill heights for windows			✓

R&IA considers that Overview Table Option 1 **elements** are a reasonable basis for initial introduction of accessible housing into the NCC.



R&IA provides the following commentary on the specific proposed NCC changes

1 Dwelling Access

The proposed Objective, Functional Statement and Performance Requirement are considered reasonable – except that R&IA does not support the one step P2.5.3 Dwelling Access option.

The proposed Deemed to Satisfy Provisions (DTS) are considered reasonable – except that R&IA does not support one step balcony access or one step access path as variation option G7.2, 3.9.3.2(b)(i) etc.

The proposed DTS accessible parking provisions G7.4 etc requires – *A minimum unobstructed space of 3200mm wide x 5400mm long.*

This reduced width cannot be supported as available research, and existing NCC and other legislation, requires either an AS4299 3800mm wide space or AS2890.6 required 2400mm wide accessible parking space and adjacent 2400 wide shared space.

2 Dwelling entrance

The proposed Objective, Functional Statement and Performance Requirement are considered reasonable.

The proposed DTS entrance door provisions include – *A minimum clear opening width of 800mm*. R&IA cannot support this reduced door provision for the following reasons

- Non-compliance with existing AS1428.1-2009 requirement for an 850mm clear door opening and circulation space, applicable to NCC Class 2 to 9 buildings
- Functional issues as outlined in the above Wheelchair Research comments
- ❖ Double standards with 800mm and 850mm doors in the same legislation

Dwelling entrance doors should provide minimum 850mm clear openings and circulation space complying with AS1428.1-2009.



3 Internal doors and corridors

The proposed Objective, Functional Statement and Performance Requirement are considered reasonable.

The proposed DTS provisions require a 1m wide corridor and this is supported by R&IA.

However, the proposed DTS provisions also include 800mm doors and a maximum 25mm threshold – between abutting surfaces, provided the lip is rounded or bevelled.

R&IA does not support the 800mm door, as outlined above, but supports 850mm clear internal doors and circulation space in accordance with AS1428.1-2009.

The maximum 25mm threshold is non-compliant with existing AS1428.1-2009 requirement, applicable to NCC Class 2 to 9 buildings. This threshold height would render many environments inaccessible.

4 Toilet

The proposed Objective, Functional Statement and Performance Requirement are considered reasonable – subject to a definition or rewording of 'easy access' and review the need for FP2.7 etc space or other means to enable an unconscious occupant to be removed from the compartment.

DTS provisions include extensive new and unsubstantiated toilet layouts, dimensions etc – and should be deleted and replaced by reference to AS1428.1-2009 or AS4299.

5 Shower

DTS provisions include extensive new and unsubstantiated shower layouts, dimensions etc – and should be deleted and replaced by reference to AS1428.1-2009 or AS4299.

6 Reinforcement of toilet and shower walls

DTS provisions include extensive new and unsubstantiated layouts, dimensions etc – and should be deleted and replaced by reference to AS1428.1-2009 or AS4299.



7 Internal stairways

The proposed Objective, Functional Statement, Performance Requirement and DTS provisions are considered reasonable.

8 Kitchen space

Not applicable to RIS Option 1 elements.

9 Laundry space

Not applicable to RIS Option 1 elements.

10 Ground bedroom space

Not applicable to RIS Option 1 elements.

11 Light switches & power points

Not applicable to RIS Option 1 elements.

Light switches and power points are included existing AS1428.1-2009 requirements, applicable to NCC Class 2 to 9 buildings

12 Door furniture

Not applicable to RIS Option 1 elements.

13 Window sills

Not applicable to RIS Option 1 elements.



Conclusions

Adoption of R&IA recommended and modified NCC 2022 accessible housing legislation will deliver an optimum set of benefits to all members of the community and

- Recognise the broad social benefit and 'wellbeing contribution' to the community
- Recognise the broad economic benefits to the community
- Optimise long term financial benefit to governments servicing the aged, health and disability sectors
- Minimise confusion and errors between Class 1 and Classes 2 to 9 building implementation requirements
- Benefit the building industry with consistent accessibility requirements for Class 1 to Class 9 buildings

Recommendations

Options 2 and 3 best meet the RIS objective – and R&IA recommends NCC 2022 initial adoption of a **modified Option 2** and RIS including

- RIS additional benefits as set out in Cost Benefit Analysis above
- Accessible parking minimum 3800mm wide complying with AS4299
- Minimum 850mm clear entry doors complying with AS1428.1-2009
- Minimum 850mm clear internal doors complying with AS41428.1-2009
- Toilets, showers and reinforced walls complying with AS4299 and AS1428.1-2009

These recommendations are on the basis that ABCB continues national consultations to progressively develop and enhance the NCC housing accessibility legislation.