



**ABCB**

# **Accessible Housing**

Options Paper

**September 2018**

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## Introduction

The *Accessible Housing Options Paper* ('Options Paper') has been developed by the Australian Building Codes Board (ABCB) to provide a preliminary menu of options and costings on the possible inclusion of a minimum accessibility standard for housing in the National Construction Code (NCC).

The ABCB is a Council of Australian Governments (COAG) standards writing body that is responsible for the development of the NCC. The ABCB is a joint initiative of all three levels of government in Australia. It was established by an Inter-government agreement (IGA) that was first signed by the Commonwealth, States and Territories on 1 March 1994, and has been updated from time to time since. The ABCB is also a regulatory reform vehicle for COAG, and reports to the Australian Government Minister and State and Territory Ministers responsible for building and plumbing regulatory matters, also known as the Building Ministers' Forum (BMF).

The NCC provides the minimum necessary requirements for safety and health, amenity and accessibility, and sustainability in the design, construction, performance and livability of new buildings (and new building work in existing buildings) throughout Australia. It is a uniform set of technical provisions for building work and plumbing and drainage installations throughout Australia whilst allowing for variations in geological or geographic conditions, such as climate.

Accessible housing is any housing that includes features that enable use by people either with a disability or transitioning through their life stages. Other similar (but not identical) terms include 'visitable', 'adaptable', 'livable' and 'universal'. For simplicity, the term 'accessible' will be used generically throughout this Options Paper.

As with any other potential change to the NCC, a minimum accessibility standard for housing must be underpinned by a rigorously tested rationale, be effective and proportional to the issue, and must generate a net societal benefit. This is made clear by the ABCB's IGA<sup>1</sup>, as well as the COAG Principles for Best Practice Regulation.<sup>2</sup>

In this respect it is important to note that the initiation of this work is not a commitment to change the NCC, but rather a commitment to undertake a thorough process to determine if changes to the NCC are warranted, and if so, to what extent.

This Options Paper has been developed to seek broader community and industry input and refine the details of the objectives, options and terminology that will be considered in a formal Regulation Impact Statement (RIS). Information on how to participate and what will happen to the submission you provide can be found in the section titled 'Consultation'.

<sup>1</sup> *An Agreement between the Governments of the Commonwealth of Australia, the States and the Territories to continue in existence and provide for the operation of the Australian Building Codes Board (ABCB IGA)*, 2017.

<sup>2</sup> Council of Australian Governments (COAG), *Best Practice Regulation: A Guide for Ministerial Councils and National Standard Setting Bodies*, October 2007.

## Background

In response to a proposal from the BMF in 2017,<sup>3</sup> the Prime Minister, the Hon Malcolm Turnbull MP, wrote to COAG First Ministers seeking agreement for the ABCB to undertake a Regulation Impact Assessment (RIA) on the costs and benefits of applying a minimum accessibility standard to all new residential dwellings in Australia. All COAG First Ministers responded supporting the preparation of an RIA.

In October 2017, the BMF agreed that a national RIA would be undertaken by the ABCB, in consultation with Disability Ministers through the Disability Reform Council (DRC), regarding accessible housing. It was also agreed that the RIA would examine the Livable Housing Design Guidelines' (LHDG) Silver and Gold level specifications as possible options for a minimum accessibility standard; use a sensitivity approach; and be informed by appropriate case studies.<sup>4</sup>

The DRC provides a forum for member Governments to discuss matters of mutual interest and progress key national reforms in disability policy including the *National Disability Strategy 2010-2020* (NDS).<sup>5</sup>

The NDS was developed by the Commonwealth, State and Territory Governments under the auspices of COAG. The NDS sets out a ten year national plan for improving life for Australians with disability, their families and carers. It covers, among other things, policy towards achieving an inclusive and accessible physical environment, including in buildings and housing.<sup>6</sup>

<sup>3</sup> Building Ministers Forum (BMF), *Communique*, 21 April 2017.

<sup>4</sup> Building Ministers Forum (BMF), *Communique*, 6 October 2017.

<sup>5</sup> Department of Social Services (Commonwealth), *Disability Reform Council*. Online: <https://www.dss.gov.au/our-responsibilities/disability-and-carers/programmes-services/government-international/disability-reform-council>. Accessed January 2018.

<sup>6</sup> Council of Australian Governments (COAG), *National Disability Strategy 2010-2020*, February 2011, p 8.

## Current Situation

For Class 1a buildings (houses, townhouses, row houses, etc) the NCC does not set any accessibility requirements. For Class 2 buildings (apartment buildings), the NCC requires an accessible path of travel to the door of each individual apartment on at least one floor, as well as to and within at least one of each type of room or space provided as part of the common areas of the building. Also, where a ramp or passenger lift is installed, the accessible path of travel must reach the entrance door of each apartment and any common areas, served by the lift or ramp. However, there are no accessibility requirements applicable to the internal parts of individual apartments within a Class 2 building.

At a State/Territory level, regulations for accessible housing exist in four jurisdictions: the Australian Capital Territory (ACT), New South Wales (NSW), South Australia (SA) and Victoria. NSW and Victoria apply their requirements through state-specific measures, for example apartment design guidelines that are applied under planning laws.<sup>7 8</sup> The ACT's requirements are based on AS 4299<sup>9</sup> and are also applied through planning regulation, but to 'multi-unit developments' that may include Class 1a or Class 2 buildings. SA mandates compliance with AS 1428.1<sup>10</sup> for houses and apartments, but this is also only to a proportion of houses (1 in 20) or apartments in any new development of 20 or more.

For public housing, NSW, Queensland, SA, Tasmania and WA specify accessibility features in a proportion of the housing they provide. The ACT, NT and Victoria apply accessibility requirements to all government-commissioned housing. Most housing authorities use the LHDG Silver or Gold level specifications, except for the ACT which also adopts AS 4299, SA which uses AS 1428.1 and WA, which has not adopted a specific standard.<sup>11</sup>

At a Commonwealth level, the National Disability Insurance Scheme (NDIS) provides housing support to its participants through funding modifications to their own home or private rental property, and on a case-by-case basis in social housing.<sup>12</sup> As at 30 September 2017, there were 112,785 participants in the NDIS,<sup>13</sup> although the proportion of this group that accessed support for home modifications and the nature of the modifications provided is not known. NDIS-funded modifications are designed to meet individual client needs rather than comply with a specific technical standard.

<sup>7</sup> Department of Planning and the Environment (NSW), *Apartment Design Guide*, July 2015.

<sup>8</sup> Department of Environment, Land, Water and Planning (Vic), *Apartment Design Guidelines for Victoria*, 2017.

<sup>9</sup> AS 4299 means *Australian Standard 4299 Adaptable Housing*, 1995.

<sup>10</sup> AS 1428.1 means *Australian Standard 1428 Design for Access and Mobility Part 1: General Requirements for Access—New Building Work*, 2009.

<sup>11</sup> This information on State/Territory requirements is taken from advice provided by the State and Territory Building Ministers to the Australian Network for Universal Housing Design (ANUHD) in 2017. Copies of this correspondence are available on the ANUHD's website, see:

<https://anuhd.org/2017/09/12/achievements-by-states-and-territories/>. States/Territories have since provided updates to this information, which have been incorporated where appropriate.

<sup>12</sup> National Disability Insurance Scheme (NDIS), *Mainstream Interface – Housing*, factsheet, N.D.

<sup>13</sup> COAG Disability Reform Council, *Communique*, 20 November 2017.

## National Disability Strategy

In relation to housing, the NDS in 2010 included the following commitments:

*Improved accessibility in social housing is being achieved through the incorporation of universal design elements in more than 15,000 new public and community housing dwellings which are being built under the social housing component of the Nation Building—Economic Stimulus Plan. Funding provided through the Social Housing Initiative will support the inclusion of six specified universal design features in these dwellings that will provide improved access to people who have limited mobility. Of these, more than 5,000 dwellings will also achieve an even higher level of adaptability through compliance with the Australian Standard for Adaptable Housing Class C.<sup>14</sup>*

*The Australian Government is working with representatives from all levels of government, key stakeholders from the disability, ageing and community support sectors and the residential building and property industry on the National Dialogue on Universal Housing Design to ensure that housing is designed and developed to be more accessible and adaptable. An aspirational target that all new homes will be of agreed universal design standards by 2020 has been set, with interim targets and earlier completion dates to be determined.<sup>15</sup>*

Evidence tended to a recent Senate Inquiry suggests that under the current voluntary approach, which is based on the LHDG, this target is unlikely to be met.<sup>16</sup>

## Livable Housing Design Guidelines

The LHDG are maintained and updated by Livable Housing Australia (LHA). LHA is a partnership between community and consumer groups, government and industry, which champions the mainstream adoption of livable housing design principles in all new homes built in Australia through voluntary means.<sup>17</sup>

The intent of the design principles of the LHDG is to provide homes that are easier and safer to use for all occupants, including people with a disability, the aged, people with temporary injuries and families with young children.<sup>18</sup> According to the LHDG, a home designed using its principles is easy to enter, easy to navigate in and around, capable of easy and cost-effective adaptation and responsive to the changing needs of home occupants.

<sup>14</sup> Council of Australian Governments (COAG), *National Disability Strategy 2010-2020*, February 2011. p 34. Note: the Australian Standard referred to in the quote is AS 4299.

<sup>15</sup> *Ibid.*

<sup>16</sup> Australian Senate Community Affairs References Committee, *Delivery of outcomes under the National Disability Strategy 2010-2020 to build inclusive and accessible communities*, Inquiry Report, November 2017, [3.26, 3.27] pp 33-34.

<sup>17</sup> Livable Housing Australia, *Livable Housing Design Guidelines*, 4th edition, 2017, p 2.

<sup>18</sup> *Ibid.* p 8.

The LHDG sets out three levels of specification: Silver, Gold and Platinum. To date, four editions of the LHDG have been published, the latest in 2017. The requirements of the LHDG across the four editions have remained essentially the same with one additional element related to stairways being added.<sup>19</sup> This additional element was added in the fourth edition.

## 2016 Proposal for Change

In 2016, the ABCB received a Proposal-for-Change (PFC) seeking amendment of the NCC to include accessibility standards for housing. The PFC was jointly submitted by the Australian Network for Universal Housing Design (ANUHD) and Rights & Inclusion Australia (R&IA) (hereafter 'proponents'). A copy of the PFC is available on the ANUHD website.<sup>20</sup>

The proponents put forward two arguments, reproduced below, in support of their PFC:

- a. *The inability of the housing industry to respond to the National Dialogue agreement in 2010 and the subsequent COAG commitment within the National Disability Strategy; and*
- b. *Inconsistency across Australia in what is considered to be accessibility in housing.*<sup>21</sup>

At the time, the ABCB considered the PFC to be a public policy issue that warranted consideration at a ministerial level. This has since occurred and is described in the 'Background' section on this paper. The PFC process, on the other hand, is intended for dealing with technical issues rather than matters of public policy.

As also noted earlier, the NDS 'commitment' referred to by the proponents (argument a.) was in fact an 'aspirational target' not a binding commitment, nor was it a commitment to introduce regulation if the target could not be met through non-regulatory means.

The issue of 'inconsistency' (argument b.) is something that could be addressed through the NCC given its role in promoting nationally consistent regulation, however, inconsistency alone is not a sufficient reason to introduce new regulation.

## Access to Premises Standards

Section 23 of the *Disability Discrimination Act 1992* (Cwlth), known as the DDA, covers access to premises and makes it unlawful to discriminate against a person with a disability in relation to access to, or use of, premises. Section 31(1) of the DDA provides for the Minister

<sup>19</sup> This requirement is Element 7 – Internal Stairways, which adopts the NCC for Silver Level, and adds provisions for minimum width, slip resistance and position against loadbearing walls at the Gold and Platinum Levels. See: *Livable Housing Design Guidelines*, above n 17, pp 42-43.

<sup>20</sup> See: <https://aduhdblog.files.wordpress.com/2016/05/accessibility-in-housing-abcb-proposal-with-insets.pdf> (accessed May 2018).

<sup>21</sup> Australian Network for Universal Housing Design (ANUHD) and Rights & Inclusion Australia (R&IA), *Proposal For Change – National Construction Code Series – Accessibility in Housing*, 2016, p 11.

responsible for the DDA to make disability standards as a way of codifying the general non-discrimination requirements of the relevant sections of the DDA.<sup>22</sup>

The *Disability (Access to Premises—Buildings) Standards 2010* were formulated following requests for improved certainty under the DDA in satisfying its objectives for non-discriminatory access to premises. The NCC provisions for access for people with a disability have been aligned with the technical requirements of the Access to Premises Standards.<sup>23</sup>

Private housing, however, is not covered by the DDA and therefore is not addressed by the Access to Premises Standards.

<sup>22</sup> Australian Human Rights Commission, *Guideline on the Application of the Premises Standards*, version 2, 2013, [A.2] p 6.

<sup>23</sup> ABCB, *Guide to the NCC 2016 Volume One*, Section D – Access and Egress, 2016.

## Identifying the Problem

This section will articulate how the nature and extent of the problem needs to be identified, having regard to available evidence. In identifying and defining the problem there are a number of threshold issues that need to be considered. These are discussed below.

It should be noted that this discussion of the problem is not definitive, rather its purpose is to stimulate discussion and feedback that will assist in gathering sufficient evidence of a problem to include in a Regulation Impact Statement (RIS).

A 2010 RIS commissioned by the Victorian Department of Planning and Community Development (DPCD) on a proposal to include accessibility standards in the Victorian Appendix to the Building Code of Australia (BCA), will be used as a starting point. It described the problem as follows:

*DPCD estimates that approximately 96% of new homes built in Victoria lack [visitability and adaptability] features. The omission of visitability and adaptability features is felt most sharply among people with a disability or some other form of mobility limitation. However, it can be felt by many people when their needs change. For example, their needs may change when raising small children, using crutches while recovering from an injury, or welcoming ageing parents. The whole community is affected by the reductions in quality, safety, and liveability that arise when visitability and adaptability features are not included in new housing.<sup>24</sup>*

On the basis of more recent estimates provided by LHA, which indicate that less than 5% of housing is being built to LHDG Silver level specifications or above,<sup>25</sup> it could reasonably be assumed that the figures used in the Victorian RIS (quoted above) are still accurate and are applicable nationally. However, these estimates do not take into account home modifications funded by the NDIS or other government programs, self-funded modifications, or the extent to which some homeowners/occupiers are able to adapt their homes to their needs without making any changes to the building itself. As such, these estimates are not necessarily a reliable indicator of the extent of accessible housing availability or underlying unmet demand for accessibility features in housing.

This is a significant threshold issue against which any potential solution would be measured. It appears the extent that accessibility features are currently provided in housing is influenced by individual choices of those who design and supply the national housing stock rather than an aversion to their widespread adoption or a collective failure to consider future needs.

<sup>24</sup> Regulatory Impact Solutions, *Visitable and Adaptable Features in Housing – Regulatory Impact Statement*, prepared for the Victorian Department of Planning and Community Development, 2010, p 21.

<sup>25</sup> LHA, cited in *Proposal For Change – National Construction Code Series – Accessibility in Housing*, above n 21. Note: This estimate is current to 2014. See also: *Delivery of outcomes under the National Disability Strategy 2010-2020 to build inclusive and accessible communities*, above n 16.

Previous examinations of this issue<sup>26</sup> suggest a wide variance in motivations of participants. Homeowners may (rationally) weigh their future accessibility needs against other preferences and delay adjustment to a future point. Investors and builders may view it as the role of government or social housing to fund adjustment and meet latent demand in the market.

Less tangible issues, such as the extent people with disability are not able to live or work in a community of their choice, are likely to be influenced by more recent schemes such as the NDIS. Market failure is, therefore, not uniform or well understood and requires further examination under contemporary policy settings focused on consumer preferences and the externalities associated with private decisions.<sup>27</sup>

## ANUHD Survey

In relation to demand for accessible housing, ANUHD, who submitted the 2016 PFC discussed earlier, ran an online survey from November 2017 to February 2018 inviting individuals to share their opinions on housing accessibility issues. The survey, which was open to the public, attracted 1,329 responses mainly from homeowners/occupants who felt they or a friend or relative needed more accessible housing to live in or to enable visiting friends and family. The online survey was publicised by ANUHD contacting its supporters and through the ABCB providing a link on its website as a way to reach the construction industry.

A full report of the survey's findings, which were independently analysed by Griffith University, is available on the ANUHD website.<sup>28</sup> Some key findings are discussed below.

- The survey indicated strong support among participants for improving the accessibility of housing, primarily through regulation (70% support) along with improved education and awareness (50% support).<sup>29</sup> This, however, may be influenced by the fact that just over 22% of respondents identified themselves as 'advocates'.<sup>30</sup>
- Around 68% reported experiencing difficulty in finding 'livable' housing; 32% reported no difficulty (noting that it is unclear what portion of that 32% were actually looking for 'livable' housing). 'Livable' housing was defined as housing that 'meets diverse needs', 'is affordable' and 'is in a suitable location' — therefore a broader scope than just the physical characteristics of the dwelling structure.<sup>31</sup>
- Regarding the extent of the problem, the survey found that '[s]ome participants (6%) described building or modifying their home, or a desire to do so, to secure a suitable place

<sup>26</sup> Jaguar Consulting, *Accessible Housing in Australia – A Research Report*, Final Report, February 2006 (unpublished), [2.5.1] pp 40-42; *Visible and Adaptable Features in Housing – Regulatory Impact Statement*, above n 24, pp 22-25.

<sup>27</sup> The term 'market failure' is sometimes misunderstood to indicate a failure of markets to deliver a desirable social or equity goal. See: *Best Practice Regulation: A Guide for Ministerial Councils and National Standard Setting Bodies*, above n 2, p 10.

<sup>28</sup> ANUHD, *Report on the Survey on the provision of Livable Housing Design: the costs and benefits to Australian Society*, May 2018, published on the ANUHD website: [https://aduhdblog.files.wordpress.com/2018/05/anuhd\\_survey\\_report-final.pdf](https://aduhdblog.files.wordpress.com/2018/05/anuhd_survey_report-final.pdf).

<sup>29</sup> *Ibid.* p 1.

<sup>30</sup> *Ibid.* p 10.

<sup>31</sup> *Ibid.* p 18.

to live. Other participants felt that building, buying or modifying a suitable house was unaffordable (3%), or had experienced difficulty finding appropriate housing (8%)'.<sup>32</sup>

Research undertaken in the USA suggests that there is a 60% probability that a newly built single-family detached unit will house at least one person with a disability (defined as mobility impairments) during its expected lifetime. If visitors are taken into account, the figure rises to 91%.<sup>33</sup> It is understood that there is no similar data available specific to Australia, or for apartment buildings.

Therefore, it will be critical for a future RIS, in considering the introduction of an accessibility standard for housing in the NCC, to be able to articulate the level of unmet demand for accessibility features.

<sup>32</sup> *Ibid.* p 12.

<sup>33</sup> S Smith, S Rayer and E Smith, 'Aging and Disability: Implications for the Housing Industry and Housing Policy in the United States', *Journal of the American Planning Association*, 74(3), 2008, pp 289-305.

## Objective

This section provides a discussion on the objective of setting a minimum accessibility standard for housing. This is important because the definition of the objective will influence the proposed level of specification and the extent to which it should be applied. These considerations have significant implications for options, benefits and costs in the context of the NCC as a minimum necessary regulatory code as set out in the ABCB's IGA.

Importantly, the IGA requires the ABCB to:

*[E]nsure that, in determining any change to the code and the level of requirements:*

- A. there is a rigorously tested rationale;*
- B. the proposals are effective and proportional to the issues being addressed such that the code will generate benefits to society greater than the costs (that is, net benefits);*
- C. there is no regulatory or non-regulatory alternative that would generate higher net benefits; and*
- D. the competitive effects of the code have been considered; and the code is no more restrictive than necessary in the public interest.<sup>34</sup>*

If the objective of setting an accessibility standard is so that people have access to housing with a minimum level of accessibility features necessary, across a greater choice of accommodation options, the following considerations will be relevant:

- (1) That a clear definition of 'accessibility' is agreed upon at an early stage. That is, does accessible housing mean housing that is accessible primarily to those with limited mobility, or should it also cater to those with other impairments, such as hearing or vision impairments?
- (2) That any specification adopted addresses accessibility features that are essential, not just desirable or best practice, to meet that agreed definition.
- (3) That such a specification is applied in a way that achieves a positive cost-benefit to home buyers and the community.

There are many different definitions of accessibility in use across government, the building industry, community housing providers, and the general public. Therefore, in attempting to determine appropriate accessibility features for consideration to be included in the NCC, a decision must be made on the extent of accessibility to be addressed — whether this is primarily related to mobility or encompasses a broader scope of accessibility issues.

<sup>34</sup> ABCB IGA, above n 1, [6.1.b] p 12.

On the basis of the BMF direction that the LHDG Silver and Gold level specifications should be considered as two possible options for a minimum accessibility standard,<sup>35</sup> addressing mobility-related issues is the primary objective.

The level of specification for an accessibility standard is discussed in detail under the section 'Options for NCC Amendment', while the extent of application of such a standard will be influenced by the objectives of the proposal. The practical considerations are discussed under the section 'Application'.

The aim of these two sections is to describe the relationship between objectives and options, and stimulate discussion towards identifying a building accessibility standard that covers what is essential and is applied to an extent that is adequate to achieve the objective.

Unlike commercial building accessibility, the objective does not focus on avoiding discrimination. Private housing is not covered by the DDA and, as such, there is not a general right of access to private homes in the way that such a right exists for public buildings under the DDA.

<sup>35</sup> Building Ministers Forum (BMF), *Communique*, 6 October 2017.

## An Accessibility Standard for Housing

This section outlines the scope and policy parameters for a proposed accessibility standard for housing. The Scope section defines 'housing' for the purposes of the Options Paper. The Policy Parameters section explains the objectives of the proposal, along with the policy considerations that will be used in assessing the merits of each option.

### Scope

This Options Paper will consider the application of a minimum building standard for accessibility to the following types of construction:

- Single dwellings — such as detached houses, row houses, townhouses, villa units and the like. These are referred to in the NCC as Class 1a buildings.
- Multi-storey residential apartments — referred to in the NCC as Class 2 sole occupancy units in multi storey buildings.<sup>36</sup>

Other types of building that may also be used for accommodation are excluded from the scope of the Options Paper because they are either already subject to accessibility requirements under the NCC (e.g. Class 1b accommodation buildings, hotels, aged care buildings), or are intended only for a specific occupancy such as staff or caretaker's dwellings. This scope was agreed to by the BMF in April 2018.<sup>37</sup>

Changes to the NCC for accessible housing would not apply to any part of a Class 2 building that is already covered by the Access to Premises Standards (as described under 'Current Situation').

### Policy Parameters

As agreed by the BMF,<sup>38</sup> the policy parameters to be used for this analysis on the potential inclusion of a minimum necessary accessibility standard for all new housing in the NCC will be the following:

- Safety and health; amenity and accessibility; and sustainability as the primary objectives of the NCC.
- NCC technical requirements will be the minimum necessary to achieve these objectives.
- The analysis will also take into consideration other relevant policy objectives, such as the National Disability Strategy, enabling ageing in place, reducing social exclusion and reducing the costs of providing specialist accommodation.
- The NCC requirements will be capable of being applied to all new dwellings, variations in costings for which will be tested through the Regulation Impact Analysis (RIA) (note: the concept of a quota is a planning construct not regulated through the NCC). Variations in application will also be tested through the analysis.

<sup>36</sup> Definitions of each of the NCC building classifications referred to above are in Appendix B.

<sup>37</sup> Building Ministers Forum, *Communique*, 27 April 2018.

<sup>38</sup> *Ibid.*

## **Assessment of Costs and Benefits**

The costs of each possible option will be estimated with the expertise of a qualified Quantity Surveyor. Preliminary costings have been developed for the purposes of this Options Paper. Detailed costings will be undertaken as part of the RIS process having regard to any relevant information elicited through responses to this paper.

The primary benefits from an increase in accessible housing are avoided costs of adapting housing for future occupants. These benefits will accumulate over the very long term and are difficult to predict and quantify without formal assessment. The benefits may be highly sensitive to the chosen discount rate. A central discount rate of 7% will be used with outcomes also tested using a 3% and 11% rate, in line with Office of Best Practice Regulation (OBPR) requirements.

Consideration of the benefits of accessible housing will also take into account social benefits, such as reducing social isolation, ability to age in the community, independent living and averted pressure on specialist housing. Detailed assessment of potential benefits will also be undertaken as part of the RIS process.

## Possible Options for NCC Amendment

This section provides an overview of possible options for amending the NCC to set a minimum accessibility standard for housing.

The BMF has agreed that consideration must be given to the LHDG Silver and Gold level specifications as potential minimum options while also leaving some flexibility for other possible options to be identified and considered.

One of the key purposes of the Options Paper is to stimulate discussion and feedback, which will assist in identifying and developing feasible, practical and effective options for consideration as part of the RIS.

A preliminary list of possible options for NCC amendment has been developed. These options are numbered as follows:

- Option 1 – LHDG Silver Level (5 Elements).
- Option 2 – LHDG Silver Level (7 Elements).
- Option 3 – LHDG Gold Level (12 Elements).

**Note:** This list is not intended to be definitive or to in any way limit the range of possible options to be considered.

Some advocates for a regulated accessibility standard for housing argue that the LHDG Gold level specification is the 'minimum'<sup>39</sup> and that it should be applied to all new housing.<sup>40</sup> However, it is possible that such an approach may not be proportional to the identified problem. Under the COAG Principles, any proposed solution must be efficient and effective.<sup>41</sup> That is, they must be proportional to the nature and extent of the identified problem. Therefore, the more stringent the specification and the more broadly it is applied, the more significant the nature and extent of the problem must be for such an approach to be considered 'proportional'.

## Performance-Based Approach

The NCC is a performance-based code. A performance-based code provides flexibility to meet the Performance Requirements through using the Deemed-to-Satisfy (DtS) Provisions or by developing Performance Solutions based on existing or new and innovative products, systems and designs.

The LHDG is drafted in a performance-based format. It is founded on a series of 'Performance Statements' that are, in effect, Performance Requirements. These statements are supported by a series of technical specifications that act as the 'DtS Provisions'.

The Performance Requirements are the only mandatory requirements of the NCC. Accordingly, these will be the focus of the discussion for each option. (Performance

<sup>39</sup> ANUHD Website, see: <https://anuhd.org/> (accessed May 2018).

<sup>40</sup> ANUHD and R&IA, *Position Statement*, May 2016, p 1.

<sup>41</sup> *Best Practice Regulation: A Guide for Ministerial Councils and National Standard Setting Bodies*, above n 2, p 4.

Requirements also need to be expressed in terms that are quantifiable — this is discussed in the next section of the Options Paper.)

The wording for each 'Performance Requirement' is taken directly from the Performance Statements in the LHDG. These are the same for all three options; the difference between each option is in the number of 'Performance Requirements' that are included.

**Note:** Detail regarding technical specifications for each option are set out within the LHDG (fourth edition, 2017). These technical provisions are not replicated in this paper because, at this stage, they are a secondary consideration. The primary consideration is which Performance Requirements should apply as this is a matter of public policy that will govern the scope and content of any future technical provisions.

For a copy of the LHDG, see: [www.livablehousingaustralia.org.au](http://www.livablehousingaustralia.org.au).

## Option 1

Option 1 is based on the LHDG Silver Level, but includes only the following five Performance Requirements:

- (1) At least one level (step-free) entrance into the dwelling to enable home occupants to easily enter and exit the dwelling.
- (2) Internal doors and corridors that facilitate comfortable and unimpeded movement between spaces.
- (3) The ground (or entry) level has a toilet to support easy access for home occupants and visitors.
- (4) The bathroom and shower is designed for easy and independent access for all home occupants.
- (5) Bathroom and toilet walls are built to enable grabrails to be safely and economically installed (immediately or in the future).

## Discussion

Option 1 addresses, at design and construction stage, the five requirements of the LHDG that would be most difficult to incorporate retrospectively.

Performance Requirement 1 ensures that the entry door has sufficient clear opening width and does not incorporate a step-up (threshold) that could be difficult to modify post-construction.

Performance Requirement 2 is designed to avoid the need to relocate internal walls that may be structural and costly to reconfigure if occupants need to increase the circulation space within their home, including doorways.

Performance Requirements 3 to 5 provide toilet and bathroom spaces that are more accessible, while also minimising the need for relocation or modification of toilet and bathroom spaces that can impact upon the location of internal walls, as well as waterproofing measures

and plumbing and drainage installations that can be difficult to re-configure once they are in place.

Option 1 does not include a step-free path of travel from the property boundary or parking space to the dwelling entry. For Class 1a dwellings, this is because such a feature is external to the building, which means that in most cases it can be added later without needing to alter the building itself. Also, for Class 1a dwellings, it is possible that requiring a step free path to the entry would significantly restrict the construction of dwellings with a framed sub-floor space as opposed to slab on ground. Furthermore, it may require an excessive amount of ramping to be provided, which may not be feasible on smaller or very steep allotments. If this feature was included in the NCC, it may need to be provided with concessions for sites where compliance is impractical or unreasonably difficult to achieve.

For Class 2 buildings, omitting the step-free path of travel requirement is consistent with the current NCC which, although it requires an accessible path of travel to at least one floor containing apartments, and all floors served by a lift, does not extend to parking areas or require the provision of accessible parking spaces. While it could be argued that this approach might result in accessible apartments with non-accessible parking spaces, the same can occur under the current NCC. This has not been an issue because where a lift is provided it usually also serves the car parking areas, not just the residential floors of the building. Where a lift is not provided, under the current NCC, an accessible path of travel would still be required to at least one floor of apartments and any common areas.

It is also worth noting that the NCC does not require any parking spaces to be provided for residential buildings (Class 1a or 2) because the provision of resident parking is a planning matter. If car parking is required through the planning process, then depending on the nature of its structure, the NCC will likely specify the minimum requirements for its construction if it is part of the building.

Lastly, it is not clear that requiring a step-free path from the property boundary/parking space is consistent with other parts of the LHDG, which do allow steps to be used within a dwelling provided there is a toilet on the ground or entry level and, for Gold Level only, a bedroom space on the ground or entry level.

Option 1 also does not cover internal stairways because, as is the case for LHDG Silver Level, compliance with the existing requirements of the NCC is considered acceptable according to the current LHDG.

## **Option 2**

Option 2 includes all seven elements of the LHDG Silver Level.

According to the LHDG, the Silver Level 'focusses on the key structural and spatial elements that are critical to ensure future flexibility and adaptability of the home'.

If applied, Option 2 would include the following seven Performance Requirements (five of which are also in Option 1):

- (1) A safe, continuous, step-free pathway from the street entrance and/or parking area to a dwelling entrance that is level (Note: this does not apply for blocks steeper than 1:14.)

- (2) At least one level (step-free) entrance into the dwelling to enable home occupants to easily enter and exit the dwelling.
- (3) Internal doors and corridors that facilitate comfortable and unimpeded movement between spaces.
- (4) The ground (or entry) level has a toilet to support easy access for home occupants and visitors.
- (5) The bathroom and shower is designed for easy and independent access for all home occupants.
- (6) Bathroom and toilet walls are built to enable grabrails to be safely and economically installed (immediately or in the future).
- (7) Where installed, stairways are designed to reduce the likelihood of injury and also enable a safe pathway. (Note: For Silver Level, this does not add to existing NCC requirements.)

## Discussion

Option 2 includes a requirement for a step-free path of travel to the dwelling entry (Performance Requirement 1) as well as a requirement that stairways are designed to reduce the likelihood of injury (Performance Requirement 7). These are omitted from Option 1, although, according to the LHDG, the latter of these is covered by the existing NCC. As is noted in the previous section, Performance Requirement 1 may have implications for the construction of houses with a higher floor level due to the amount of ramping required to avoid using steps.

For Class 2 buildings with car parks, the step-free path of travel requirement would need to be extended to apply from an allocated parking space (if provided) as well as from the building entry at street level, to each unit. Under the specifications provided in the LHDG, this also means the application of minimum dimensions of 3.3 m x 5.4 m, as well as gradient and slip resistance requirements, to each parking space allocated to an apartment that is required to meet the Silver Level accessibility standard.

## Option 3

Option 3 incorporates all twelve elements of the LHDG Gold Level, which is the second of three specification levels set out in the LHDG. (The third is Platinum Level, however, that is outside the scope of this Options Paper.)

According to the LHDG, the Gold Level 'provides for more generous dimensions for most of the core livable housing design elements and introduces additional elements in areas such as the kitchen and bedroom'.

If applied, Option 3 would include the following twelve Performance Requirements:

- (1) A safe, continuous, step-free pathway from the street entrance and/or parking area to a dwelling entrance that is level.
- (2) At least one level (step-free) entrance into the dwelling to enable home occupants to easily enter and exit the dwelling.

- (3) Internal doors and corridors that facilitate comfortable and unimpeded movement between spaces.
- (4) The ground (or entry) level has a toilet to support easy access for home occupants and visitors.
- (5) The bathroom and shower is designed for easy and independent access for all home occupants.
- (6) Bathroom and toilet walls are built to enable grabrails to be safely and economically installed (immediately or in the future).
- (7) Where installed, stairways are designed to reduce the likelihood of injury and also enable a safe pathway.
- (8) The kitchen space is designed to support ease of movement between fixed benches and to support easy adaptation.
- (9) The laundry space is designed to support ease of movement between fixed benches and to support easy adaptation.
- (10) There is a space on the ground (or entry) level that can be used as a bedroom.
- (11) Light switches are located at heights that are easy to reach for all home occupants.
- (12) Occupants are able to easily and independently open and close doors.

## **Discussion**

Performance Requirements 8 to 12 apply only to Option 3, whereas 1 to 7 are also covered by Option 2, and 2 to 6 are also included in Option 1. For Performance Requirement 7 (stairways), the Gold Level includes provisions that are additional to those already provided in the NCC in relation to the minimum width, configuration and location of the stairway.

Performance Requirements 8 to 12 cover several areas that are currently not dealt with in the NCC. These include:

- Kitchen design (Performance Requirement 8) – the current NCC only requires that a kitchen is provided; it does not specify any aspect of its design.
- Laundry design (Performance Requirement 9) – the current NCC only requires that laundry facilities are provided; it does not specify any aspect of their design. For Class 2 buildings, the NCC allows common laundries to be provided as an alternative to one in each apartment. In these cases, the laundry would be considered a common area and would already be captured by the existing accessibility requirements.
- Room sizes (Performance Requirement 10) – the current NCC only applies to ceiling heights; it does not set minimum sizes for rooms, nor specify the provision or location of bedrooms.
- Position of light switches (Performance Requirement 11) – this is not covered by the NCC.
- Design and location of door furniture (Performance Requirement 12) – this is not covered by the NCC for dwellings (other than in relation to doors forming part of a pool fence).

## Quantification

As noted earlier, the NCC is a performance-based code. A performance-based code provides flexibility to meet the Performance Requirements through using the DtS Provisions or by developing Performance Solutions. Performance Solutions can be used to meet any Performance Requirement of the NCC, including those that concern accessibility.

However, unquantified, qualitative Performance Requirements can pose a barrier to the use of performance. This is because when Performance Requirements are expressed in subjective terms it becomes difficult to verify when they have been met (other than by comparison to the DtS Provisions). To address this, the ABCB has prioritised quantifying all of the NCC's Performance Requirements and/or developing quantified Verification Methods (VMs) to improve productivity and building outcomes.

In general, quantification is achieved either by expressing the Performance Requirement in measurable terms that avoid the need for subjective judgement or by developing VMs. VMs are a test, inspection, calculation or other method that can be used to determine if a Performance Solution has met the relevant Performance Requirement(s). While the Performance Requirements are mandatory, the use of a VM is optional. Using a VM is just one way to demonstrate that a Performance Requirement has been met. VMs are generally outlined within the NCC itself, however, other methods can also be used with the agreement of the relevant regulatory authority.

Should the NCC be amended to set an accessibility standard for housing, this would necessitate the inclusion of potentially several entirely new Performance Requirements into the NCC. Accordingly, such Performance Requirements will need to be expressed in quantified terms, as described above. This may mean that regardless of which option is adopted, the wording of the relevant Performance Requirements (as provided in the LHDG) may have to be modified to remove subjective terms, for example:

- 'comfortable and unimpeded movement'
- 'easy and independent access'
- 'safely and economically' installed (regarding grabrails)
- 'reduce the likelihood of injury'
- 'easy to reach'

Quantifying these subjective phrases would not change the policy intent, but would make future Performance Requirements for housing accessibility more easily understood and, therefore, more likely to be applied correctly. This would help ensure their effectiveness and improve outcomes for home occupants.

## Application

This section discusses some of the practical considerations that may arise if a minimum accessibility standard for housing is applied to 100% of new dwellings. Such a discussion is important given that the extent of the application of an accessibility standard needs to be reasonable (i.e. to avoid unintended consequences) and will have a significant bearing on costs and benefits.

The discussion is split into two parts; the first addresses considerations relevant to Class 1a buildings (houses), while the second addresses considerations relevant to Class 2 buildings (apartments). A third part raises the issue that planning controls, which apply to land subdivision and housing designs, may have implications for the application of a housing accessibility standard through the NCC.

Also, it should be noted that the NCC is drafted on the basis that its provisions are not retrospective and, in general, are only applied to new buildings. The application of the NCC to extensions, alterations and renovations to existing dwellings is a matter determined by individual jurisdictions under their building regulatory systems.

Given that the NCC is applied by State/Territory building regulations, another possible option for applying an accessibility standard would be for the standard to be set within the NCC, but applied only where specifically nominated for all or a proportion of new dwellings by a State/Territory or Local Government. This would achieve a consistent technical standard, but with a more targeted application. However, such an approach would also be less likely to achieve national consistency, in terms of the availability of accessible housing.

### Class 1a Buildings (Houses)

Class 1a buildings include detached houses, as well as attached dwellings such as terraces, row houses, villa units and townhouses, so long as they are not situated on top of or underneath another dwelling.

It is outside the scope of the NCC to set quotas to apply to any specific standards for Class 1a buildings, even for multi-dwelling developments where all dwellings are constructed at the same time as part of the same development to the same minimum requirements. Accordingly, an accessibility standard would need to apply equally to all individual Class 1a buildings, unless quotas are set by governments through planning controls. There are also site constraints and design parameters, such as gradients, which as is the case with the LHDG, may need to be included as thresholds that exclude some developments from their application. This gives rise to some practical considerations, which are explored below:

- If a step-free path is required from the property boundary/parking space (as per LHDG Silver/Gold), this may be difficult to achieve on steep allotments due to the amount of ramping that may be required. The LHDG currently includes an exemption from this requirement for allotments with a gradient steeper than 1:14.
- Even on allotments that are not steeper than 1:14, there may be cases where there is insufficient space between an entry door and the property boundary or parking space to allow for construction of a ramp (i.e. step free entry path).

- Also, as noted earlier (discussion of Option 1), it is possible that requiring a step free path to the entry would restrict the construction of dwellings with a framed sub-floor space as opposed to slab-on-ground, for example in flood-prone areas or common elevated housing designs, such as those in tropical climates (e.g. 'Queenslander' style homes).
- For dwellings of two or more storeys on narrow allotments, there may be insufficient space to provide a toilet or a bedroom space (Gold Level only) on the ground/entry level, or meet minimum requirements for the width of doors and internal corridors. For example, terrace or row housing can be permitted in many jurisdictions on sites with a narrow frontage with built-to-boundary (side and front) construction.
- Requiring a toilet on the ground/entry level may preclude the construction of dwellings where only a garage is provided on that level and all habitable rooms are on the upper level/s.

## **Class 2 Buildings (Apartments)**

Class 2 buildings are apartment buildings, including each individual apartment as well as any common areas within the building. If an accessibility standard were applied to all individual apartments, as opposed to a proportion or 'quota' of apartments, then this could give rise to the following practical considerations:

- If the step-free path requirement was applied to all apartments in smaller buildings (e.g. three-storey 'walk-up' buildings), this may require such buildings to be provided with a lift, which could add significantly to construction and ongoing maintenance costs.
- If the step-free path requirement was applied between each apartment and its allocated parking space (where provided), this may add to the need for ramps or lifts in buildings where the carpark is not otherwise served by a lift (e.g. where it is external to the building).
- Increasing the size of internal doorways, hallways and bathrooms would likely mean corresponding loss of space from other parts of dwellings, unless the footprint of the building overall were increased to allow for the extra floor space.

Note, the NCC already includes some accessibility provisions for common areas in Class 2 buildings, these are described under 'Current Situation'.

## **Site Constraints**

In considering the most appropriate application of any minimum necessary accessibility standard for housing (based on any of the Options discussed earlier), it will be necessary to gain a better understanding of the site constraints and design limitations that may exist in current land subdivision and dwelling design standards that operate under local planning regulations.

## Preliminary Costings—New Buildings

This section is based on the advice of quantity surveyors Donald Cant Watts Corke (DCWC), who were contracted by the ABCB to estimate the potential additional construction costs associated with the adoption of and compliance with the LHDG Silver and Gold level specifications (Options 2 and 3), applied as part of constructing a new Class 1a house or Class 2 apartment building.

DCWC were asked to prepare estimates for Class 1a and Class 2 buildings, based on the alternative Silver and Gold specifications defined in the LHDG. Given the very broad range of housing designs and individual site limitations and constraints, it was inappropriate to attempt to represent the impacts of compliance with the LHDG on every possible case<sup>42</sup> with a single impact scenario. Instead, the costings represent an estimate of the typical 'weighted average impact cost' per dwelling.

The 'weighted average impact cost' represents a range of scenarios that have been selected and assessed on the basis of identifying a typical 'high', 'medium' and 'low' cost impact for each of Options 1, 2 and 3.

- The 'Low' impact scenario represents house/apartment designs that would require little or no change to comply with the proposed requirements because they already incorporate the design elements.
- The 'Medium' impact scenario represents house/apartment designs that would require moderate changes to comply with the proposed requirements.
- The 'High' impact scenario represents house/apartment designs that would require significant changes to comply with the proposed requirements.

The purpose of this approach is to reflect that, in some cases, the additional cost of compliance with the LHDG would be low where certain accessibility features are already provided as part of standard practice; medium where such features only require moderate changes to standard practice; and high where such features would require a substantial change to standard practice. The low, medium and high cost scenarios are then weighted according to DCWC's estimate of the proportion of the market that each represents.

**Note:** Detailed explanation of the Low, Medium and High impact scenarios is provided in Appendix A.

The weighted average impact cost for Option 1 was derived by the ABCB using the information provided by DCWC. This was done by subtracting the costs related to items not included in the Option 1 specification from the costs provided by DCWC related to the Silver Level specification (Option 2).

These cost estimates do not include additional temporary transition costs; rather, they are based on the sustained, ongoing capital cost of compliance following a phase of initial adoption and adaptation of existing practices.

<sup>42</sup> A 'case' being a particular combination of building class and specification level.

Cost impacts were estimated on the basis of:

- (i) products/materials;
- (ii) labour/design costs; and
- (iii) the value of each square metre (or part thereof) that would be lost to other uses as a result of compliance with the LHDG.

Items (i) and (ii) comprise the basic components of a quantity survey. Item (iii) has been included in recognition that required extra floor space has a value that must be factored into any cost calculation. This value exists regardless of whether the required floor space is obtained by expanding the building footprint or by reducing the size of adjacent rooms.

The cost base for item (iii), above, was the per square metre construction cost of the extra floor area required to achieve compliance. For example, if one extra square metre of bathroom space is required, then that space is valued on the basis of the cost of building one square metre of bathroom. This approach provides a way of consistently valuing floor space, independent of the potential sale value of that space, which could vary significantly between locations because of differences in local property values.

It is important to stress that these are preliminary costs and do not form part of any regulatory impact assessment at this stage.

**Table 1: Cost impact for new buildings**

<b>Option (Scenario: Low, Medium or High impact)</b>	<b>Class 1a house (\$)</b>	<b>Class 2 apartment (\$)</b>
Option 1 (Low Impact)	75	110
Option 1 (Medium Impact)	2,181	2,892
Option 1 (High Impact)	8,027	7,411
Option 1 ( <b>Weighted Average</b> )	<b>2,966</b>	<b>2,950</b>
Option 2 (Low Impact)	75	110
Option 2 (Medium Impact)	3,360	43,622
Option 2 (High Impact)	11,093	34,491
Option 2 ( <b>Weighted Average</b> )	<b>4,169</b>	<b>11,276</b>
Option 3 (Low Impact)	75	110
Option 3 (Medium Impact)	10,754	16,863
Option 3 (High Impact)	48,422	55,255
Option 3 ( <b>Weighted Average</b> )	<b>20,710</b>	<b>28,766</b>

**Notes to Table 1:**

1. These costs have been calculated based on compliance with the technical DtS specifications given in the LHDG for each applicable Performance Statement.
2. Preliminaries, margin and contingency costs which appear in the DCWC report have been excluded from the values shown in the tables above.

3. Cost estimates given in the table are for the entire dwelling (for Class 2 buildings, this means each individual apartment).
4. Cost estimates may vary for between locations.
5. For further information on how the cost estimates in Table 1 are calculated, see Appendix A.

## Preliminary Costings—Retrofitting

This section has also been prepared on the basis of advice provided by the quantity surveyors, DCWC. Its purpose is to provide the potential costs of retrofitting an existing building to comply with Option 1, or the LHDG Silver or Gold level specifications (Options 2 and 3). These costs have been included so as to provide an indicative cost comparison between future retrofitting of a building constructed today and new builds that include accessible housing features, as per the previous section.

The preliminary costings presented in this section are based on similar assumptions, inclusions and exclusions as those in the previous section. This makes them comparable to the above cost estimates for each building class and scenario.

However, while these costs represent the difference between new-builds and retrofits for the purpose of compliance with the LHDG, it does not necessarily follow that they represent the costs currently borne by people seeking to improve the accessibility of their existing home.

If housing accessibility was regulated through the NCC, any person constructing a new home would need to include all of the features required by the NCC. Whereas a person improving their existing home, under the current situation, would do so as the need arises and only include the features they consider necessary. This may be more or less than what is specified by the LHDG.

As for the previous section, it is important to stress that these are preliminary costs and do not form part of any regulatory impact assessment at this stage.

**Table 2: Cost impact for retrofitting existing buildings**

<b>Option (Scenario: Low, Medium or High impact)</b>	<b>Class 1a house (\$)</b>	<b>Class 2 apartment (\$)</b>
Option 1 (Low Impact)	75	110
Option 1 (Medium Impact)	32,592	33,370
Option 1 (High Impact)	186,312	170,855
Option 1 ( <b>Weighted Average</b> )	<b>76,828</b>	<b>91,716</b>
Option 2 (Low Impact)	75	110
Option 2 (Medium Impact)	41,568	38,320
Option 2 (High Impact)	214,296	249,305
Option 2 ( <b>Weighted Average</b> )	<b>87,246</b>	<b>115,905</b>
Option 3 (Low Impact)	75	110
Option 3 (Medium Impact)	65,443	52,430
Option 3 (High Impact)	501,497	473,070
Option 3 ( <b>Weighted Average</b> )	<b>214,629</b>	<b>205,917</b>

The Notes to Table 2 are the same as those for Table 1.

## Consultation

The primary purpose of this Options Paper is consultation. Its role is to provide a basis for discussion of issues, objectives and policy options, and to elicit stakeholder responses that contribute toward the development of possible solutions that are feasible and have some level of stakeholder support.

Meaningful consultation promotes trust between industry, the community and government. Transparency allows stakeholders to see and judge the quality of government actions and regulatory decisions. It also provides an opportunity to participate in developing policy solutions and encourages broad ownership of solutions.

Early consultation is instrumental to the technical amendment processes of the NCC and on broader regulatory reform matters. Consultation assists in the ABCB's role as the regulatory 'gatekeeper', which includes considering alternatives to regulation, such as education and awareness raising activities.

This section outlines the consultation process that will occur in relation to this Options Paper, and the ways in which you can participate and have your say.

## National Consultation Forums

The ABCB will be holding a consultation forum in each capital city. These forums, to be held in mid to late October, will provide an opportunity for stakeholders to have their say on accessible housing in-person, and have questions answered directly by representatives of the ABCB.

These forums will be free to attend, although booking is essential.

Date, venue and booking details are on the ABCB website. If you have any questions about the forums, please email: [nccawareness@abcb.gov.au](mailto:nccawareness@abcb.gov.au) or call 1300 134 631.

## Written Responses

The ABCB will be accepting written responses to the Options Paper. Consultation questions have been provided at Appendix D. These questions are optional and do not need to be answered for your response to be accepted.

Your response may address the consultation questions and/or any other aspect of the Options Paper about which you feel you would like to comment.

## Response Guidelines

The response guidelines listed below are intended to ensure that responses are able to be accepted and given due consideration:

- If you would like your response (or part thereof) to be treated as confidential, please mark it accordingly. While responses will not be published, they may be cited or quoted in later documents such as an outcomes report or RIS if not marked as confidential.
- Multiple, identical responses (i.e. campaign letters) will be considered as one single response only.

- For security reasons, responses containing links to documents held in cloud-based document sharing services (Google Drive, Dropbox etc.) cannot be accepted.

## How to submit your response

Responses may be emailed to: [nccawareness@abcb.gov.au](mailto:nccawareness@abcb.gov.au) (with the subject line 'Accessible Housing'). Please send response as an attachment to the email, either as a Word or PDF file.

Alternatively, responses may be posted to:

Accessible Housing  
Australian Building Codes Board  
GPO Box 2013  
Canberra ACT 2601.

The due date for responses is close of business (AEST) on **30 November, 2018**.

*Late submissions will not be accepted without prior arrangement.*

## Questions

If you have any questions regarding any aspect of the Options Paper or how to respond, please email [nccawareness@abcb.gov.au](mailto:nccawareness@abcb.gov.au), or call 1300 134 631.

## Privacy

The ABCB is bound by the Australian Privacy Principles in the Privacy Act 1988 (the Privacy Act), which regulates how agencies collect, use, disclose and store personal information, including sensitive information, and how individuals may access and correct records containing their personal information.

The ABCB respects the right to privacy under the Privacy Act and complies with Privacy Act requirements in relation to the collection and management of personal information.

Further information regarding the ABCB's privacy policy is available through the ABCB website at: <http://www.abcb.gov.au/Footer/Privacy>.

## Next Steps

This section outlines what will occur following the completion of consultation on this Options Paper. This is set out in three steps; an outcomes report, a RIS and, pending the outcome of the RIS process, the possible inclusion of draft changes to the NCC in the NCC 2022 public comment draft. Each of these steps is explained below.

### Outcomes Report

Following the closing date for written submissions, the ABCB will collate the information received into an Outcomes Report. The Outcomes Report will be made public. Its purpose will be to document the ABCB's understanding of key issues raised by stakeholders that may impact upon the development of the RIS (see below).

The Outcomes Report will also be provided to the BMF and the Disability Reform Council Ministers for their consideration prior to the commencement of the RIS.

It is anticipated that the Outcomes Report will be released in early 2019.

### Regulation Impact Statement (RIS)

Each major proposal to amend the NCC is assessed in the form of a RIS. The ABCB prepares a Consultation RIS for comment by interested parties, with the information gathered during consultation incorporated into a Final RIS for decision by the ABCB. As agreed by the BMF, the RIS will use a sensitivity approach and be informed by appropriate case studies and other relevant information gathered by the ABCB, including in response to this paper.<sup>43</sup>

#### Consultation RIS

A Consultation RIS is prepared in accordance with COAG best practice regulation requirements for the purpose of consulting with interested parties. It incorporates all formal elements of a RIS, including a full cost-benefit analysis. Interested parties are invited to comment on any aspect of the Consultation RIS. For example, interested parties could provide comment on whether the description of the problem captures the essence of the issues or to suggest other options that are viable that can address the problem. Interested parties are encouraged to comment on the impacts of the options – both the costs and the benefits – and how the regulatory proposal will work in practice. Comments on the Consultation RIS will assist in preparation of a Final RIS for decision-makers.

Each Consultation RIS is assessed by the Office of Best Practice Regulation (OBPR) and assessed for compliance with the COAG requirements for best practice regulation.

The content of a Consultation RIS does not reflect a final decision of the ABCB Board in relation to the matter that is the subject of the RIS.

#### Final RIS

The ABCB will review all comments received on the Consultation RIS and incorporate stakeholder information and data into the regulatory analysis, as appropriate. The RIS will be

<sup>43</sup> Building Ministers Forum (BMF), *Communique*, 6 October 2017.

forwarded to the ABCB Board as an input into its decision-making on whether any changes should be made to the NCC.

### **NCC Public Comment Draft**

Pending the outcome of the RIS process, draft technical changes to the NCC to include housing accessibility requirements would be exposed for public comment as part of the NCC 2022 public comment draft.

Under the three-yearly amendment cycle that applies to the NCC, the 2022 edition would be the first available opportunity to expose any draft technical changes to the NCC for public comment.

It is expected that the NCC 2022 public comment draft will open for comment in the first half of 2021.

Responses to the public comment draft will be considered by the ABCB's Building Codes Committee (BCC) as appropriate. The role of this committee is to provide expert advice on technical matters; it is not a decision-making body.

Following BCC consideration, the proposed text of the NCC is provided to the ABCB Board for sign-off. When this occurs, the text is finalised and prepared for publication.

It is anticipated that the 2022 edition of the NCC will take effect in each State and Territory on 1 May, 2022.

The BMF and the Disability Reform Council Ministers will be involved in the progress of these steps as appropriate.
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## Appendix A – Weighted Average Cost Scenarios

The scenarios and scenario weightings used in the 'Preliminary Costings' sections are based on the tables given in this Appendix. The weightings applied to each of the High, Medium and Low impact scenarios are based on the expert judgement of the quantity surveyor (DCWC) based on their experience of the construction industry.

Only the LHDG Silver and Gold Levels (Options 2 and 3) are included here; for the Option 1 it is assumed that the scenario weighting would be the same as for the Silver Level.

A list of the Performance Requirements (referred to in the LHDG as 'Design Elements') applicable under the Silver and Gold Levels has been included above each table for easy reference when reading the table.

### Performance Requirements – LHDG Silver Level

- (1) A safe, continuous, step-free pathway from the street entrance and/or parking area to a dwelling entrance that is level (Note: this does not apply for blocks steeper than 1:14.)
- (2) At least one level (step-free) entrance into the dwelling to enable home occupants to easily enter and exit the dwelling.
- (3) Internal doors and corridors that facilitate comfortable and unimpeded movement between spaces.
- (4) The ground (or entry) level has a toilet to support easy access for home occupants and visitors.
- (5) The bathroom and shower is designed for easy and independent access for all home occupants.
- (6) Bathroom and toilet walls are built to enable grabrails to be safely and economically installed (immediately or in the future).
- (7) Where installed, stairways are designed to reduce the likelihood of injury and also enable a safe pathway. (Note: For Silver Level, this does not add to existing NCC requirements.)

**Table A1 – New Class 1a Dwellings (Silver Level)**

Performance Requirement	Low Impact (% of dwellings)	Medium Impact (% of dwellings)	High Impact (% of Dwellings)
(1)	25	55	20
(2)	20	40	40
(3)	10	60	30
(4)	10	85	5
(5)	10	60	30
(6)	5	95	0
(7)	95	0	5

**Table A2 – Retrofitted Class 1a Dwellings (Silver Level)**

Performance Requirement	Low Impact (% of dwellings)	Medium Impact (% of dwellings)	High Impact (% of Dwellings)
(1)	25	55	20
(2)	20	40	40
(3)	10	60	30
(4)	10	65	25
(5)	10	60	30
(6)	5	0	95
(7)	95	0	5

**Table A3 – New Class 2 Apartments (Silver Level)**

Performance Requirement	Low Impact (% of dwellings)	Medium Impact (% of dwellings)	High Impact (% of Dwellings)
(1)	30	40	30
(2)	30	0	70
(3)	30	20	50
(4)	30	65	5
(5)	30	60	10
(6)	30	0	70
(7)	90	0	10

**Table A4 – Retrofitted Class 2 Apartments (Silver Level)**

Performance Requirement	Low Impact (% of dwellings)	Medium Impact (% of dwellings)	High Impact (% of Dwellings)
(1)	30	40	30
(2)	30	0	70
(3)	30	20	50
(4)	30	25	45
(5)	30	60	10
(6)	30	0	70
(7)	90	0	10

### **Performance Requirements – LHDG Gold Level**

- (1) A safe, continuous, step-free pathway from the street entrance and/or parking area to a dwelling entrance that is level.
- (2) At least one level (step-free) entrance into the dwelling to enable home occupants to easily enter and exit the dwelling.
- (3) Internal doors and corridors that facilitate comfortable and unimpeded movement between spaces.

- (4) The ground (or entry) level has a toilet to support easy access for home occupants and visitors.
- (5) The bathroom and shower is designed for easy and independent access for all home occupants.
- (6) Bathroom and toilet walls are built to enable grabrails to be safely and economically installed (immediately or in the future).
- (7) Where installed, stairways are designed to reduce the likelihood of injury and also enable a safe pathway.
- (8) The kitchen space is designed to support ease of movement between fixed benches and to support easy adaptation.
- (9) The laundry space is designed to support ease of movement between fixed benches and to support easy adaptation.
- (10) There is a space on the ground (or entry) level that can be used as a bedroom.
- (11) Light switches are located at heights that are easy to reach for all home occupants.
- (12) Occupants are able to easily and independently open and close doors.

**Table A5 – New Class 1a Dwellings (Gold Level)**

<b>Performance Requirement</b>	<b>Low Impact (% of dwellings)</b>	<b>Medium Impact (% of dwellings)</b>	<b>High Impact (% of Dwellings)</b>
(1)	25	55	20
(2)	20	40	40
(3)	10	60	30
(4)	10	85	5
(5)	10	60	30
(6)	5	0	95
(7)	10	35	55
(8)	20	30	50
(9)	20	30	50
(10)	80	0	20

**Table A6 – Retrofitted Class 1a Dwellings (Gold Level)**

Performance Requirement	Low Impact (% of dwellings)	Medium Impact (% of dwellings)	High Impact (% of Dwellings)
(1)	25	55	20
(2)	20	40	40
(3)	10	60	30
(4)	10	65	25
(5)	10	60	30
(6)	5	0	95
(7)	10	35	55
(8)	20	30	50
(9)	20	30	50
(10)	80	0	20

**Table A7 – New Class 2 Apartments (Gold Level)**

Performance Requirement	Low Impact (% of dwellings)	Medium Impact (% of dwellings)	High Impact (% of Dwellings)
(1)	20	30	50
(2)	10	0	90
(3)	10	30	60
(4)	20	75	5
(5)	20	70	10
(6)	20	0	80
(7)	60	30	10
(8)	30	20	50
(9)	20	10	70
(10)	90	0	10

**Table A8 – Retrofitted Class 2 Apartments (Gold Level)**

Performance Requirement	Low Impact (% of dwellings)	Medium Impact (% of dwellings)	High Impact (% of Dwellings)
(1)	20	30	50
(2)	10	0	90
(3)	10	30	60
(4)	20	25	55
(5)	20	70	10
(6)	20	0	80
(7)	60	30	10
(8)	30	20	50
(9)	20	10	70
(10)	90	0	10

## Calculation Method for Tables 1 and 2

Tables 1 and 2 set out cost estimates according to a low, medium, high, and weighted average cost impact scenarios. This section provides additional explanatory information on how these cost estimates are derived, based on the report provided by DCWC.

The DCWC report provides fully itemised cost estimates in Appendix 2 of the report, which are arranged as follows:

- Class 1a dwellings
  - LHDG Silver Standard
    - Design Elements (1-7)
      - Scenarios (Low, Medium, High)
  - LHDG Gold Standard
    - Design Elements (1-12)
      - Scenarios (Low, Medium, High)
- Class 2 dwellings
  - LHDG Silver Standard
    - Design Elements (1-7)
      - Scenarios (Low, Medium, High)
  - LHDG Gold Standard
    - Design Elements (1-12)
      - Scenarios (Low, Medium, High)

## Appendix B – Building Classifications

This appendix provides information on relevant NCC building classifications. Building classifications are used in the NCC to assist in determining which of the NCC's requirements are applicable to particular types of buildings.

The NCC defines Class 1 and Class 2 buildings as follows (extracted from NCC 2016):

**Class 1:** One or more buildings which in association constitute—

- (a) **Class 1a** — a single dwelling being —
  - (i) a detached house; or
  - (ii) one of a group of two or more attached dwellings, each being a building, separated by a fire-resisting wall, including a row house, terrace house, town house or villa unit; or
- (b) **Class 1b** —
  - (i) a boarding house, guest house, hostel or the like—
    - (A) with a total area of all floors not exceeding 300 m<sup>2</sup> measured over the enclosing walls of the Class 1b; and
    - (B) in which not more than 12 persons would ordinarily be resident; or
  - (ii) 4 or more single dwellings located on one allotment and used for short-term holiday accommodation,

which are not located above or below another dwelling or another Class of building other than a private garage.

( Note: Class 1b buildings are outside the scope of the proposal. )

**Class 2:** a building containing 2 or more sole occupancy units each being a separate dwelling.

The term 'sole occupancy unit', in this context, means a room or other part of a building for occupation by one or joint owner, lessee, tenant, or other occupier to the exclusion of any other owner, lessee, tenant, or other occupier.<sup>44</sup>

<sup>44</sup> NCC 2016 Volume One, cl A1.1—Sole Occupancy Unit.

## Appendix C – Acronyms and Abbreviations

The following acronyms and abbreviations are used throughout the Options Paper:

**ABCB**, means Australian Building Codes Board.

**above n**, followed by a number, is used in the footnotes to direct the reader to an earlier footnote, generally for the purpose of locating the full details of a source cited.

**ACT**, means Australian Capital Territory.

**ANUHD**, means Australian Network on Universal Housing Design.

**BCC**, means Building Codes Committee.

**BMF**, means Building Ministers' Forum.

**COAG**, means Council of Australian Governments.

**Cwlth.**, means Commonwealth.

**DCWC**, means Donald Cant Watts Corke (quantity surveyors).

**DDA**, means *Disability Discrimination Act 1992* (Cwlth.)

**DPCD**, means Department of Planning and Community Development (Victoria).

**DRC**, means Disability Reform Council.

**DtS**, means Deemed-to-Satisfy (Provision).

**Ibid.**, used in the footnotes, means 'in the same place' (L *'ibidem'*). It is used to refer to a source cited in the footnote above.

**IGA**, means Inter-governmental Agreement.

**LHA**, means Livable Housing Australia.

**LHDG**, means Livable Housing Design Guidelines.

**NCC**, means National Construction Code.

**NDIS**, means National Disability Insurance Scheme.

**NDS**, means National Disability Strategy.

**NSW**, means New South Wales.

**NT**, means Northern Territory.

**OBPR**, means Office of Best Practice Regulation.

**Options Paper**, means the ABCB Accessible Housing Options Paper (this document).

**PCC**, means Plumbing Code Committee.

**PFC**, means Proposal-for-Change.

**Qld.**, means Queensland.

**R&IA**, means Rights & Inclusion Australia.

**RIA**, means Regulation Impact Assessment. An RIS is one component of the RIA process.

**RIS**, means Regulation Impact Statement.

*(Acronyms and Abbreviations, continued)*

**SA**, means South Australia.

**Tas.**, means Tasmania.

**Vic.**, means Victoria.

**VM**, means Verification Method.

## Consultation Questions

This appendix sets out a series of consultation questions that are intended to stimulate discussion and guide responses to this Options Paper.

For an editable version of this form, please download the Microsoft Word version from the ABCB website.

### Your details

Note: You do not need to provide this information, however doing so will enable us to contact you if we need to seek clarification or further information regarding your response.

**Name:** *Click here to enter text.*

**State / Territory:** *Click here to enter text.*

**Telephone number:** *Click here to enter text.*

**Email or postal address:** *Click here to enter text.*

---

### General Questions

1. Are you participating in this consultation as an individual or on behalf of an organisation or business (tick one as appropriate)?

Individual

Organisation

Business

*If you have ticked 'business' or 'organisation' above, please skip to question 8.*

---

2. Which of the following best describes your living arrangements (tick one as appropriate)?

Living in private rental

Living in public housing

Owner occupier

Living with friend or family

Living in specialist housing

---

3. Are you living with a disability (tick one as appropriate)?

Yes

No

Prefer not to say

---

4. Are you a carer of someone living with disability (tick one as appropriate)?

Yes

No

Prefer not to say

---

5. If you answered 'Yes' to questions 3 or 4, does your disability or that of the person you care for require the home to have accessibility features (tick one as appropriate)?

Yes

No

Prefer not to say

---

6. If you answered 'Yes' to question 5, what features were required (tick each that is applicable)?

A ramp or safe pathway to the front door or other entrance

A step-free entrance to the home

Wider internal doors and corridors

An accessible toilet or bathroom on the ground floor or entrance level

A bathroom and shower that is easier to access

Grabrails installed in bathroom and toilet

Safer internal stairways and paths

More space in and around the kitchen

More space in and around the laundry

Bedroom on the ground (or entry) level

Light switches installed at heights that are easy to reach

Doors that are easier to open and close

Other (please specify) *Click here to enter text.*

---

7. If you answered ‘Yes’ to question 5, when were the accessibility features included (tick one as appropriate)?

- During construction of the home
- Added after the home was built
- Some features were original and some were added later.
- Will be added in the future
- Unable to add these features (please specify why) *Click here to enter text.*

*Note: only answer questions 8 to 10 if you are responding on behalf of a business or organisation.*

8. Which of the following best describes your organisation or business (tick one as appropriate)?

- Developer
- Building / Construction
- Architect / Designer
- Disability or accessible housing advocate
- Government
- Other (please specify) *Click here to enter text.*

9. If developer, builder, designer or architect, approximately what percentage of your clients request accessibility features (in the past 12 months)?

Client Group	Estimated percentage (%)
Owner occupiers	<i>Click here to enter text.</i>
Investors	<i>Click here to enter text.</i>
Other (please specify)	<i>Click here to enter text.</i>

10. If Developer, builder, designer or architect, what are the most requested accessibility features from your clients?

*Click here to enter text.*

## Questions about the Objective

Note: the objective is discussed on pages 13-14.

11. The Objective is that people have access to housing with a minimum level of accessibility features necessary, across a greater choice of accommodation options. Do you agree with the Objective? If you do not agree with the Objective, please provide reasons and possible alternatives.

*Click here to enter text.*

---

12. The 'Objective' section of the Options Paper described three considerations as relevant to the setting of an accessibility standard. To what extent do you agree or disagree that each of these considerations is relevant

*Tick one box in each row in the table below, where '1' means 'strongly disagree' and '5' means 'strongly agree'.*

Statement	1	2	3	4	5
That a clear definition of 'accessibility' is agreed upon at an early stage.	<input type="checkbox"/>				
That any specification adopted addresses accessibility features that are essential, not just desirable or best practice, to meet that agreed definition.	<input type="checkbox"/>				
That such a specification is applied in a way that achieves a positive cost benefit to home buyers and the community.	<input type="checkbox"/>				

---

13. What other considerations do you consider relevant to the Objective (if any)?

*Click here to enter text.*

---

14. The Building Ministers' Forum (BMF) has provided direction that the Liveable Housing Design Guidelines (LHDG) Silver and Gold Levels be considered as the basis for a minimum accessibility standard. To what extent do you agree or disagree that the LHDG are appropriate to meet the Objective?

*Tick one box in the table below, where '1' means 'strongly disagree' and '5' means 'strongly agree'.*

Statement	1	2	3	4	5
The LHDG are appropriate to meet the Objective.	<input type="checkbox"/>				

---

15. What other options might meet the Objective more effectively or efficiently?

*Click here to enter text.*

---

16. To what extent do you agree or disagree that the primary focus should be on addressing mobility-related issues?

*Tick one box in the table below, where '1' means 'strongly disagree' and '5' means 'strongly agree'.*

Statement	1	2	3	4	5
The primary focus should be on addressing mobility-related issues.	<input type="checkbox"/>				

---

17. What issues other than mobility should be in-scope (if any)?

*Click here to enter text.*

---

## Questions about the Options

Note: some possible options for an accessibility standard for housing are discussed in the section titled '**Possible Options for NCC Amendment**'.

18. The Options Paper described three possible options for National Construction Code (NCC) amendment. Which of these, if any, is your preferred option as a minimum standard for new residential housing (tick one as appropriate)?

- Option 1 – LHDG Silver Level (5 Elements)
  - Option 2 – LHDG Silver Level (7 Elements)
  - Option 3 – LHDG Gold Level (12 Elements)
  - Other (please specify): *Click here to enter text.*
  - No change to the NCC
- 

19. Please expand on the reason for your answer to question 18.

*Click here to enter text.*

---

20. The Options Paper discussed 12 Performance Requirements from the LHDG. Please indicate whether you agree or disagree that these requirements should be the minimum standard for all new residential housing?

*Tick one box in each row of the table below, where '1' means 'strongly disagree' and '5' means 'strongly agree'.*

Performance Requirement	1	2	3	4	5
A safe, continuous, step-free pathway from the street entrance and/or parking area to a dwelling entrance that is level.	<input type="checkbox"/>				
At least one level (step-free) entrance into the dwelling to enable home occupants to easily enter and exit the dwelling.	<input type="checkbox"/>				
Internal doors and corridors that facilitate comfortable and unimpeded movement between spaces.	<input type="checkbox"/>				
The ground (or entry) level has a toilet to support easy access for home occupants and visitors.	<input type="checkbox"/>				
The bathroom and shower is designed for easy and independent access for all home occupants.	<input type="checkbox"/>				
Bathroom and toilet walls are built to enable grabrails to be safely and economically installed (immediately or in the future).	<input type="checkbox"/>				
Where installed, stairways are designed to reduce the likelihood of injury and also enable a safe pathway.	<input type="checkbox"/>				
The kitchen space is designed to support ease of movement between fixed benches and to support easy adaptation.	<input type="checkbox"/>				
The laundry space is designed to support ease of movement between fixed benches and to support easy adaptation.	<input type="checkbox"/>				
There is a space on the ground (or entry) level that can be used as a bedroom.	<input type="checkbox"/>				
Light switches are located at heights that are easy to reach for all home occupants.	<input type="checkbox"/>				
Occupants are able to easily and independently open and close doors.	<input type="checkbox"/>				

---

21. What other Performance Requirements should be considered (if any)?

*Click here to enter text.*

---

22: To what proportion of Class 1 (houses) and Class 2 (apartments) buildings should these features apply?

*Tick one box in each row of the table below.*

<b>Building Class</b>	<b>None</b>	<b>Some</b>	<b>Half</b>	<b>Most</b>	<b>All</b>
Class 1a buildings (houses)	<input type="checkbox"/>				
Class 2 buildings (apartments)	<input type="checkbox"/>				

23. To what extent do you agree or disagree that the NCC should be modified to include minimum standards for accessible housing?

*Tick one box in each row of the table below, where '1' means 'strongly disagree' and '5' means 'strongly agree'.*

<b>Statement</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
The primary focus should be on addressing mobility-related issues.	<input type="checkbox"/>				

## Questions about the Potential Benefits of Accessible Housing

These questions are about the potential benefits of setting a minimum accessibility standard for housing.

24. Please refer to your response at questions 20 and 21. If your response to that question was implemented, to what extent do you agree or disagree that the following benefits would be realised?

*Tick one box in each row of the table below, where '1' means 'strongly disagree' and '5' means 'strongly agree'.*

<b>Potential Benefit</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
Avoiding later costs of adaptation for occupants	<input type="checkbox"/>				
Reduced social isolation / increased 'visitability'	<input type="checkbox"/>				
Ability to stay / age in home and community longer	<input type="checkbox"/>				
Delayed / reduced use of specialist housing	<input type="checkbox"/>				
A greater choice of accommodation options	<input type="checkbox"/>				

25. What other benefits, if any, would be realised from an increase in accessible housing?

*Click here to enter text.*

26. Over what time period would each of these benefits be realised?

*Tick one box in each row of the table below.*

Potential Benefit	Short term (1-10 years)	Medium term (11-20 years)	Long term (more than 20 years)	Never
Avoiding later costs of adaptation for occupants	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Reduced social isolation / increased 'visitability'	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ability to stay / age in home and community longer	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Delayed / reduced use of specialist housing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A greater choice of accommodation options	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

27. What factors may influence whether these benefits are realised?

*Click here to enter text.*

## Question about the Preliminary Costings

These questions are about the preliminary cost estimates for accessible housing. These estimates are detail in the section titled 'Preliminary Costings—New Buildings'.

28. Overall, in your opinion, how much do you agree or disagree that with the statements below?

*Tick one box in each row of the table below, where '1' means 'strongly disagree' and '5' means 'strongly agree'.*

Statement	1	2	3	4	5
The methodology for estimating costs is appropriate	<input type="checkbox"/>				
The estimated costs for each option are accurate	<input type="checkbox"/>				

---

29. Please expand on your responses to question 28?

*Click here to enter text.*

---

30. What factors may influence if these costs will be realised?

*Click here to enter text.*

---

31. For each of the three Options, to what extent do you agree or disagree that the benefits of requiring an accessible housing standard outweigh the additional costs?

<b>Option</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
Option 1 – LHDG Silver Level (5 Elements).	<input type="checkbox"/>				
Option 2 – LHDG Silver Level (7 Elements).	<input type="checkbox"/>				
Option 3 – LHDG Gold Level (12 Elements).	<input type="checkbox"/>				

End of consultation questions.