Exhibit 4

M. R.

REGULATION IMPACT STATEMENT

Proposal to Formulate Disability (Access to Premises – Buildings) Standards and Amend the Access Provisions of the Building Code of Australia (RIS2008-02)

October 2008

This Regulation Impact Statement has been prepared in accordance with the requirements of Best Practice Regulation: A Guide for Ministerial Councils and National Standard Setting Bodies, endorsed by the Council of Australian Governments (2007).

The General Manager

Australian Building Codes Board

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Summary

It is proposed to adopt a revised Building Code of Australia (BCA) which will incorporate the technical provisions of the proposed Disability (Access to Premises - Buildings) Standards, herein known as the *Premises Standard*, to be formulated under the Disability Discrimination Act 1992 (DDA). The revised BCA would include changes in respect of publicly accessible buildings that would make those buildings more accessible to people with a disability. While the BCA currently includes a range of access-related requirements, incorporation of the proposed Premises Standard would substantially expand the range of access issues addressed in the BCA, as well as increasing the stringency of a number of existing measures.

The technical provisions of the Premises Standard would be adopted under the provisions for Disability Standards under the DDA. The DDA provides that the Attorney-General may formulate Disability Standards in relation to a number of subject areas, including, in relation to 'access to or use of premises by persons with a disability'. Standards are adopted under the DDA in order to codify the general duty not to discriminate against persons with disabilities, imposed by the DDA, in a range of specific contexts. It is unlawful to contravene a Disability Standard. Compliance with a Standard constitutes a defence to any complaint of discrimination relating to the subject area covered by that Standard that might be brought under the DDA. By aligning the requirements of the DDA in relation to premises and the BCA, building designers and building owners will benefit from substantially improved certainty as to their compliance with the DDA. That is, it is intended that any new or upgraded building that conforms to the requirements of the BCA would also be compliant with the DDA.

Major provisions of the proposed Premises Standard include requirements for:

- accessible entrances,
- accessible sanitary facilities,
- provision of lift access to upper storeys,
- provision of passing and turning spaces in building corridors,
- improving provision of wheelchair seating spaces and hearing augmentation devices in auditoria,
- provision of access to swimming pools with a perimeter of over 40 m in length, and
- the adoption of a new edition of Australian Standard AS 1428.1 (Design for access and mobility – General requirements for access – New building work).

Australian Standard AS 1428.1 *Design for Access and Mobility* (*General requirements for access - New building work*) includes spatial dimensions relating to the 90th percentile wheelchair dimensions in lieu of 80th percentile dimensions in critical areas including accessible sanitary facilities, doorways and associated circulation spaces and on accessways where there is a turn of more than 60°.

As noted, standards formulated under the DDA can be regarded as simply codifying existing requirements not to discriminate. Thus, in a conceptual sense, neither the standard nor the equivalent amendment to the BCA can be regarded as creating new legal obligations beyond those currently imposed. In this sense, it can be argued that no additional compliance costs can be attributed to the Premises Standard. However, it is widely accepted that current compliance with existing obligations under the DDA is at low levels, both due to uncertainty as to the specific nature of compliance obligations and due to the complaints-based nature of the enforcement arrangements under the DDA.

Thus, in practical terms, both the anticipated benefits and the expected costs associated with the proposed Premises Standard are expected to be substantial. While substantive estimates of these benefits and costs have been developed, attention must be drawn to the quantified benefits in relation to increased workforce participation and reduced living costs. Though these estimates draw from the best available sources, there are considerable uncertainties associated with them and they appear somewhat compromised by overseas empirical evidence. To ensure transparency of the assumptions made in this area, we have tested these figures for sensitivity at both optimistic and pessimistic scenarios (refer chapter 10).

It should also be recognised that many of the benefits that will be associated with the proposal are intangible in nature and are, therefore, not included among these quantitative estimates (refer discussion of intangibles in chapter 7). Of particular importance in this regard is the expected substantial reduction in the extent of the social exclusion currently experienced by people with a disability because of barriers they face in accessing premises and, more positively, the substantially increased capacity for participation in society of people with a disability. These benefits will be of significance both to people with a disability and to the general population.

Moreover, it is also important to acknowledge the substantial policy linkages that exist between the proposed Premises Standard and other actions being taken to create accessible environments more generally. These include the formulation of a number of other standards under the DDA, covering areas such as education and public transport. They also include other policy initiatives aimed at enhancing the employment participation of people with a disability and those attempting to reduce the incidence of institutionalisation.

The quantifiable benefits associated with the adoption of the proposed Standard are expected to equal approximately $1 billion per annum in a "steady state" (that is, after the full implementation of the Standard). Annual costs are expected to total approximately $620 million.

In aggregate terms, the Present Value (PV) of the expected benefits over 30 years is estimated at $11.4 ($7.3[1]) billion, while the costs are estimated to total $9.3 ($6.9) billion over the same period. Thus, the adoption of the currently proposed Premises Standard is expected to result in a positive Net Present Value (NPV) of almost $2.1 ($0.4) billion over a 30 year time horizon.

Table S1: Comparison of proposed Premises Standard at 4% and 7% discount rate

	4% discount rate*	7% discount rate
Benefits (PV over 30 years)	$11.4 billion	$7.3 billion
Costs (PV over 30 years)	$9.3 billion	$6.9 billion
Net Present Value	+$2.1 billion	+$0.4 billion
Benefit/cost ratio	1.23:1	1.05:1

** as used in the original draft RIS*

These benefit and cost estimates are substantially different from those presented in the draft Regulation Impact Statement (RIS) prepared in relation to the original Premises Standard proposal. While the estimated annual benefits have declined by a relatively small amount, the estimated annual costs are little more than one third of the $1.8 billion estimated in respect of the original Premises Standard proposal. This reflects the fact that significant changes have been made to the initial proposal with the objective of substantially improving its cost effectiveness. In particular, concerns about the likely impact of the Standard on certain types of smaller buildings have been addressed through the provision of certain exemptions.

[1] The draft RIS employed a 4% real discount rate to determine the Net Present Value of future costs and benefits. Therefore, to allow for a proper comparison and consistency between the draft and final proposals, we have again used a rate of 4%. We note that the Victorian Competition and Efficiency Commission recommend a rate of 3.5% (*Guidance Note on Discounting*, VCEC Melbourne 2007). However, the Commonwealth Office of Best Practice Regulation recommends a 7% real discount rate. For this reason, both figures are shown throughout this RIS with the 7% rate shown in brackets.

Table S2, below, compares the benefits and costs of the 2004 draft Standard with the currently proposed Premises Standard (Option 1) and the application of the proposed Premises Standard solely to new buildings (Option 2). The analysis of Option 2 contained in this RIS assumes that buildings undergoing upgrade work will be required by the Premises Standard to comply with the current BCA access provisions and in doing so will be compliant with the DDA.

Comparison of the current Premises Standard proposal with the 2004 draft proposal, discussed in the 2004 draft RIS, indicates that the current proposal is substantially more cost effective. This is indicated by the fact that it has a benefit cost ratio of 1.23:1 (1.05:1), compared with 0.49:1 for the original proposal. Moreover, the PV of the benefits of the current proposal ($11.4 billion) ($7.3 billion at 7%) is reduced from the estimated benefits of original proposal ($13.0 billion).

Option 2 (new buildings only) demonstrates substantially higher cost effectiveness than Option 1. This is because, in general, it is less expensive to undertake construction work on a new building than it is to retrofit an existing building. This is demonstrated by the fact that this implies a net benefit/cost ratio of 2.6:1 (2.36:1), compared with 1.23:1 (1.05:1) for the current proposal. The PV of this alternative is also substantially higher, totaling $4.6 ($2.8) billion over 30 years, compared with $2.1 billion ($0.4) over 30 years for the current proposal.

However, Option 2 would involve a substantially slower rate of improvement in the degree of accessibility of the built environment. It is arguable that the need for timely action to improve the accessibility of the built environment is sufficiently pressing to require that the proposed Standard be adopted, notwithstanding that it is less cost effective than this alternative. In addition, the proposed Standard generates a net benefit even without reference to the substantial unquantifiable benefits that the Premises Standard entails.

Table S2: Comparison of proposed Premises Standard and identified feasible alternatives

	Option 1 (Proposed standard)	**Option 2 (New buildings only)**	**2004 Draft proposal**
Benefits (PV over 30 years)	$11.4 billion *$7.3 billion*	$7.6 billion *$4.9 billion*	$13.0 billion
Costs (PV over 30 years)	$9.3 billion *$6.9 billion*	$2.9 billion *$2.1 billion*	$26.3 billion
Net Present Value	+$2.1 billion *+$0.4 billion*	+$4.7 billion *+$2.8 billion*	-$13.3 billion
Benefit/cost ratio	1.23:1 *1.05:1*	2.62: 1 *2.36:1*	0.49:1

Note: Non italicised text assumes real discount rate of 4%, italicised text assumes a rate of 7%.

The proposed Premises Standard (Option 1) has also been subjected to sensitivity testing in relation to a range of key parameters. These include the adoption of more optimistic and more pessimistic benefit scenarios, the adoption of more optimistic and more pessimistic assumptions with regard to the amount of lost Net Lettable Area, and the adoption of a higher discount rate. The results of the benefit/cost analysis showed themselves to be robust, in the sense that the benefit cost ratio remained greater than 1:1 in the majority of the scenarios tested.

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1. Introduction

The Building Code of Australia (BCA) is a comprehensive statement of the technical requirements for the design and construction of buildings. It sets standards for the performance of buildings in terms of health, safety, amenity and sustainability. The BCA is referenced in all State and Territory building legislation and applies to building work on new and existing buildings. The BCA also contains specific provisions in relation to the use of buildings by people with a disability, including requirements for access to and within buildings and provision of appropriate sanitary facilities.

The issue of the accessibility of buildings for people with a disability is also regulated by the Australian Government's *Disability Discrimination Act 1992 (DDA).* The DDA provides that it is unlawful to discriminate against people with a disability in a wide range of contexts, including in the provision of employment, education, access to premises, the provision of transport, goods, services and facilities, and the provision of accommodation. Section 23 of the DDA deals specifically with access to premises. It provides that it is unlawful to discriminate against a person with a disability in relation to provision of access to premises other than where providing the required access would cause "unjustifiable hardship" (UJH).

Section 23 is general in its scope, rather than detailed, specific and prescriptive in its requirements[2]. There is a concern in industry that this leaves room for considerable uncertainty as to the specific compliance obligations the DDA imposes, which, in turn, may lead to inadequate levels of overall compliance with the requirements of the DDA. Moreover, the existence of two regulatory instruments in relation to access to premises clearly gives rise to the risk of potential non-compliance with all obligations. For example, compliance with the current provisions of the BCA is not necessarily sufficient to ensure compliance with the DDA.

The proposed regulatory changes attempt to address both of these issues. The main mechanism adopted is to ensure that detailed technical requirements for compliance with the access to premises aspects of the DDA are formulated, which will ensure compliance with the DDA, and that these are reflected in the requirements of the BCA. The purpose of this Regulation Impact Statement (RIS) is to assess the costs and benefits of the proposed Disability (Access to Premises - Buildings) Standard - known hereafter as the 'Premises Standard' - to

[2] However, the Australian Human Rights Commission (formerly the Human Rights and Equal Opportunity Commission) has issued Advisory Notes, which are intended to provide guidance in relation to the possible requirements of particular sections of the DDA, rather than forming part of the regulatory structure, *per se*.

be formulated under the DDA. The Premises Standard contains both detailed technical requirements and the necessary framework provisions setting out their status under the DDA and specifying their application in practice. The BCA will be amended to adopt identical technical requirements.

This co-operative approach to reforming the existing legislative requirements therefore aims to achieve improved transparency and predictability in relation to legislative requirements for providing access to premises. It also aims to substantially improve the current level of compliance with the general duty to provide access to premises currently imposed under the DDA and to ensure that compliance with building legislation will provide a high level of confidence that DDA requirements are being met.

Given this context, it is arguable that the proposed changes, while substantially amending the relevant parts of the BCA, do not create any new compliance obligations that do not already exist under the DDA's general duties provisions. Indeed, it has been suggested by some stakeholders that, by codifying a particular set of requirements and establishing that compliance with them will be taken as compliance with both DDA and BCA obligations, the current exercise could even reduce the "reach" of the currently provided general duties under the DDA, rather than imposing new obligations. This would be so to the extent that the technical provisions to be contained in the Premises Standard (and the amended BCA) were less extensive than might be held by a court to be required under Section 23 for provision of access to premises in proceedings brought under the DDA.

In terms of this conceptual viewpoint, it follows that no additional compliance costs beyond existing legal obligations under the DDA can reasonably be attributed to the proposed Premises Standard. It is widely considered that compliance with the DDA is at low levels, both due to uncertainty as to the specific nature of compliance obligations and due to the complaints-based nature of the enforcement arrangements under the DDA. Thus, in practical terms, both the expected benefits and the expected costs associated with the proposed Premises Standard are expected to be substantial.

A draft RIS in respect of the original Premises Standard proposal was released for public consultation in February 2004. Substantial stakeholder comment was received, and significant work has subsequently been undertaken to further refine and develop the draft proposal. This final RIS explains in detail the changes that have been made to the 2004 draft Premises Standard and provides a detailed cost benefit analysis of the modified Premises Standard.

The analytical approach taken in this RIS is consistent with that adopted in the 2004 draft RIS. The RIS also allows for a detailed comparison to be made between the 2004 draft Premises Standard proposal and the modified Premises Standard proposal.

2. Objectives

The proposed Premises Standard would be formulated by the Attorney-General under the authority of the DDA, as noted above. The objectives of the DDA are to:

(a) eliminate, as far as possible, discrimination against persons on the grounds of disability in the areas of:

(i) work, accommodation, education, public transport, access to premises, clubs and sport; and

(ii) the provision of goods, facilities, services and land; and

(iii) existing laws; and

(iv) the administration of Australian laws and programs; and

(b) ensure, as far as practicable, that persons with a disability have the same rights to equality before the law as the rest of the community; and

(c) promote recognition and acceptance within the community of the principle that persons with disabilities have the same fundamental rights as the rest of the community[3].

Within this general context, the specific objectives of the proposed Premises Standard are:

(a) to ensure that reasonably achievable, equitable and cost-effective access to buildings, and facilities and services within buildings, is provided for people with disabilities; and

(b) to give certainty to building certifiers, building developers and building managers that, if access to buildings is provided in accordance with these Standards, the provision of access, to the extent covered by these Standards, will not be unlawful under the Act.

Recognising the relationship between the DDA and the BCA, the following additional objective can be identified:

- Enhancing the consistency and transparency of legislation by aligning BCA requirements with the DDA.

[3] Disability Discrimination Act 1992, Section 3.

Given that the technical provisions of the Premises Standard and the BCA would be identical, the identified objective of Section D of the BCA should also be noted. This is to:

(a) provide people with safe, equitable and dignified access to -

  (A) a building; and

  (B) the services and facilities within a building; and

(b) safeguard occupants from illness or injury while evacuating in an emergency.

3. Background

The DDA was passed in 1992 and came into effect in March 1993. As noted, it proscribes discrimination against persons with disabilities in the provision of access to premises, although it is a defence to a complaint of discrimination if it is established that providing such access would cause unjustifiable hardship in practice. However, no more detailed legislative or regulatory guidance exists as to the specific steps that must be taken to ensure compliance with these general duties in relation to access to premises. Instead, the main source of guidance as to the practical import of the DDA requirements has been a series of "Advisory Notes" issued by the Australian Human Rights Commission (AHRC), formerly known as the Human Rights and Equal Opportunity Commission. In the case of access to premises, the Advisory Notes refer to the BCA, to proposed changes to the BCA and to various relevant Australian Standards. However, as their name suggests, they are intended to be advisory in nature, and have no formal legal effect.

Concern as to the lack of certainty regarding practical compliance obligations under the DDA led to amendments to Section 31 of the DDA, which came into effect in April 2000, to allow the Australian Government's Attorney-General to formulate Disability Standards in relation to Access to Premises[4]. Contravention of any Disability Standards formulated under the DDA is unlawful under Section 32 of the DDA. Section 34 of the DDA effectively provides that compliance with a relevant Disability Standard is sufficient to satisfy the DDA duty not to discriminate in relation to the subject area covered by the Standard.

This RIS assesses the draft Premises Standard. The formulation of such a Disability Standard would have the effect of specifying and codifying the duty to avoid discrimination, imposed under the DDA, to the extent that it relates to access to premises. This would make the regulatory requirements more transparent in practice and thus improve certainty for stakeholders. It is thereby expected to improve effective compliance with the DDA in relation to access to premises. It should be noted that similar Disability Standards have been developed or are under development in relation to other major areas of application of the DDA, with the same underlying purpose.

As noted previously, it is proposed to amend the BCA to ensure that the BCA technical provisions mirror those contained in the Premises Standard. This is intended to ensure, as far as possible, that compliance with the BCA will also satisfy DDA obligations. Although complaints with respect to access to premises may still be lodged under the DDA, compliance with the Standard would be a complete defence to any such complaint. In this respect, the Premises Standard

[4] See Disability Discrimination Act 1992, Section 31.

is also intended to provide greater confidence to builders, developers and property owners that they will not face lawsuits that may entail additional expenditure. The current proposals are the result of a request from the Australian Government to the Australian Building Codes Board (ABCB) to develop proposals to change the BCA to enable it to form the basis of the proposed Premises Standard.

As a result of this request, the ABCB established its Building Access Policy Committee (BAPC) to:

- assist industry, regulators and service providers to achieve equitable, cost effective access to buildings, for people with disabilities;
- make recommendations to the ABCB of amendments to the BCA which will ensure that it is consistent with the objectives of the DDA and is sufficient to be adopted as part of a Premises Standard; and
- pursue this objective in consultation with industry, the community, the Australian, State, Territory and Local governments.

As with all BCA requirements, enforcement occurs through State and Territory legislation which references the BCA as the relevant technical standard. To ensure a consistent approach to the implementation of the access requirements, particularly in areas where expert interpretation and judgement is required, a *Protocol for Administering Building Access* has also been developed. The purpose of the Protocol is to describe a model that States and Territories can use in establishing a process for determining access requirements at the level of specific buildings. That is, it would guide the practical implementation of the access related requirements of the BCA. The Protocol covers any access-related matter where:

- An alternative solution[5] is proposed to be adopted to meet the BCA performance requirements;
- Modifications or exceptions are sought, with regard to building work on existing buildings; or
- The Building Control Authority is vested with discretion to require the upgrading of a building – for example where there is a change of use or classification, upgrade orders, or where significant or extensive building work is being carried out warranting the upgrading of access to areas beyond that proposed for the new work.

The Protocol is the subject of a separate impact assessment process and will not be discussed further in this RIS. For present purposes, it should simply be noted that the principles of the model described in the Protocol have been agreed in relation to these provisions to ensure their consistent and appropriate application.

[5] This is a means of compliance with the Performance Requirements of the BCA using a method other than the prescriptive Deemed-to-Satisfy provisions contained in the BCA.

4. Nature and extent of the problem

The proposed Premises Standard will address three key problems:

- the current potential for substantial inconsistencies between compliance obligations under the BCA and the DDA;
- the current uncertainty and lack of transparency as to the specific requirements of the DDA in particular cases; and
- the likely negative impact of these problems on practical compliance with existing DDA obligations.

The need to ensure that access provisions are clearly specified, consistent and widely understood is substantial. Access requirements apply in essence to all building types other than private dwellings. Australian Bureau of Statistics (ABS) and Victorian Building Commission (VBC) data show that the value of all new non-residential building approved during 2002 was around $15 billion[6] with a further $8 billion in alterations and extensions (refer Appendix A for a discussion regarding the use of the 2002 data). This provides a general indication of the value of the economic activity that is potentially affected by the access requirements. More specifically, the cost estimates contained in this RIS indicate that the specific expenditures required to implement existing access requirements are themselves often substantial. Thus, it is essential to ensure that there is a clear understanding of legislative obligations so that these costs are not unnecessarily increased.

From the viewpoint of disability groups, the potential costs due to a relatively low level of compliance with DDA requirements are clearly at least equally substantial. Large numbers of people are affected by access to premises issues: e.g. 1997 estimates indicate that 10.5% of the population has a mobility disability, while 2.9% use a mobility aid[7]. The access requirements also relate to other groups of people with a disability such as those with hearing or vision disabilities.

Poor compliance is almost inevitably a result of poorly-specified legislative requirements and requirements that rely on a mechanism based on individual complaints in order to identify and address issues of non-compliance. In addition, it can be noted that the intent of the DDA requirements is to address the problems faced by groups that face significant barriers to equality in society. Thus, non-compliance has important distributional consequences. Given the above, the extent of the problem is clearly substantial and sufficient to justify a significant regulatory response.

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[6] ABS Cat 8731.0 Building Approvals.

[7] *RIS for the amendment of the Building Code of Australia (BCA 96) provisions for access and facilities for people with a disability* (ABCB, Canberra, 1998).

5. Description of the proposed regulations

5.1. Overview

This section provides a general description of the Premises Standard and, in relation to the technical provisions themselves, highlights the main differences between the proposed provisions and the existing BCA access requirements. This is the basis for the analysis of incremental benefits and costs conducted in the following sections. Given that the BCA is currently the only legislative source of detailed technical requirements in relation to building accessibility, comparison with the existing BCA requirements provides the best basis for assessing the likely incremental costs and benefits of the proposed Standard.

In this context, it should be noted that the BCA is a performance-based document which specifies regulatory obligations in a four part hierarchy of:

- Objectives;
- Functional Statements;
- Performance Requirements; and
- Building Solutions (Deemed-to-Satisfy (DTS) provisions and Alternative Solutions).

The following identification of changes is essentially focused on the DTS provisions, for two reasons. First, this enables the clearest understanding of the likely practical impact of the changes. Second, experience suggests that the DTS provisions are widely used in practice. Thus, they constitute the most reliable means of interpreting the Performance Requirements set out in the BCA. The identification of changes effectively compares the existing BCA requirements with the proposed Premises Standard/revised BCA requirements.

This chapter also highlights the changes that have been made to the 2004 draft Premises Standard proposal in response to stakeholder comments received after the publication of the draft RIS and the further analysis and discussions that have been undertaken since that time.

5.2. Description of specific requirements

5.2.0 Upgrading existing buildings

Where triggered by a development application or building approval.

When a building owner makes a development or building application, this would trigger responsibility for providing access under the Premises Standards for the owner. However, such responsibility would not arise for the owner in respect of applications made by tenants of the building.

In the case of a tenant, where the Premises Standard is triggered through a development or building approval, the tenant is limited to providing access to within the affected tenant's leased portion of the building as per the requirements of the Premises Standard. This would be required with or without a path of travel from the front entrance of the building to the tenant's entrance, depending on whether or not the front entrance of the building was subject to the development, or building, application from the tenant. If the tenant has responsibility for sanitary facilities, these too would be required to be upgraded by the tenant.

The owner would be responsible for providing access if the owner instigates work on the floor which is being upgraded. This would include providing a path of travel from the site entrance to the new work, as well as upgrades to the building core (i.e. lifts, and toilets on the floors being upgraded). Upgrading sanitary facilities to be accessible would be an owner's responsibility during such upgrades.

Where a floor has an existing accessible toilet compliant with 80th percentile dimensions (i.e. AS1428.1 (2001)), further upgrade of that toilet to the 90th percentile is not required. However, where otherwise required, an owner (or tenant) would still need to provide one accessible toilet per floor and (where a floor has more than one bank of toilets), an accessible toilet at not less than 50% of those banks.

Change from the 2004 draft proposal[8]

The 2004 draft proposal required that the entire building be made accessible if it underwent extensive building work. For example, a program where the new building work, plus the work carried out over the previous 3 years, affected more than 50% of the volume of the building is considered as one "extensive" refurbishment.

An inaccessible existing building being extended was also required to be made accessible, for example, where the extension is greater than the existing building (thus exceeding 50% of the total volume of the completed building) and the addition is being integrated into the existing building.

Where building work in an existing inaccessible building is considered significant building work, but not extensive building work, the 2004 draft proposal required that access be provided to the area of the new work and to any essential facilities associated with the new work. For example, any toilets, communal laundries or cafeteria that serves the area of the new work.

[8] The 2004 draft proposal is that which was analysed in the draft RIS published in February 2004.

5.2.1. Inclusion of Class 1b buildings

Access requirements are to apply for the first time to Class 1b buildings. Class 1b buildings are smaller boarding houses, cabins, guest houses, hostels and the like. Access will be required where 4 or more dwellings are provided on one allotment for the purposes of short-term holiday accommodation. Access will also be required to Class 1b buildings that provide 4 or more bedrooms for commercial accommodation purposes such as bed and breakfast type accommodation. Class 1b buildings that are below the threshold are not covered by the Premises Standard and will remain subject to the general complaints provisions of the DDA.

Change from the 2004 draft proposal

The threshold for the application of the requirements of the Standard was three or more bedrooms/dwellings, with Class 1b buildings below this threshold not subject to any requirement for accessibility but being protected from a successful complaint under the DDA.

5.2.2. Class 2 buildings

Access to and within Class 2 buildings and associated facilities will not be regulated by the Premises Standard. Class 2 buildings will continue to be covered by the general complaints provisions of the DDA.

Change from the 2004 draft proposal

Access to certain common areas and features of Class 2 buildings and associated facilities was included in the original proposal.

5.2.3. Class 3 buildings

The ratio of rooms to be made accessible for people with a disability will be increased in Class 3 buildings. Class 3 buildings are residential buildings including backpackers' accommodation, hotels/motels, accommodation for the aged etc.

The effects of the change would be slight in most cases, but different "breakpoints" in the table which sets out the requirements mean that there will be a moderate impact in some cases. For example, a 15 unit facility would require two accessible units, rather than one at present, but a 40 unit facility would continue to require two accessible units as is currently the case.

No change from the 2004 draft proposal

5.2.4. Class 5, 6, 7b, and 8 buildings

These classes include offices, shops, premises in which goods or services are offered for sale (including dining facilities and the like) or in which goods are stored. Access requirements are to be extended to include all levels within each of these classes of buildings. The current accessibility requirements for these classes of buildings are limited to the entrance level and to those levels to which a lift or ramp is provided.

Change from the 2004 draft proposal

An exemption has been included for storeys (not including the entrance storey) in buildings of 3 storeys or less, which have a floor area for each storey excluding the entrance storey of not more than 200m^2. This concession exempts parts of 'small buildings' from the Access Code requirements.

5.2.5 Threshold ramps

No restrictions will be placed on the use and location of threshold ramps, beyond those already contained in the current BCA and AS 1428.1 provisions for the construction of threshold ramps. However, maximum height and gradient have been reduced.

Change from the 2004 draft proposal

The original proposal included two options for consideration during the public consultation period. These options were:

Option 1. *That threshold ramps not be permitted as a means to provide access.*

Option 2. *That thresholds ramps only be allowed at external entrances with dimensions and gradients reduced from those currently allowed.*

5.2.6. Number of accessible entrances

Access is to be provided to 50% of entrances including the principal pedestrian entrance, and where a building has a floor area greater than 500m^2 a pedestrian entrance that is not accessible must not be located more than 50 metres from an accessible entrance. By contrast, existing BCA requirements are limited to providing access through the principal pedestrian entrance.

Change from the 2004 draft proposal

The original proposal required access to be provided to and within all entrances other than those entrances serving areas not required to be accessible. In buildings with small floor areas (i.e., <500m^2) a concession for only 50% of entrances to be accessible was included.

5.2.7. Passing and Turning spaces

Passing spaces must be provided at 20 metre intervals on parts of an accessway where there is no direct line of sight. Turning spaces must be provided within 2m of the end of accessways where it is not possible to continue travelling along the accessway, and at maximum 20 metre intervals along the accessway. Passing and turning spaces must comply with AS 1428.1 and a passing space may serve as a turning space. The BCA currently does not include any provisions with respect to passing and turning spaces.

Change from the 2004 draft proposal

The original proposal included two options for consideration during the public consultation period. These options were:

Option 1. That a passing and turning space be provided every 9 metres.

Option 2. That a passing and turning space be provided every 20 metres.

The option of 20 metre intervals has been adopted, but in respect of passing spaces, only where a direct line of sight is not available.

5.2.8. Exemptions

Clause D3.4, specifying exemptions, has the effect (vis-à-vis the current Clause D3.4. "concessions") of specifying in detail, those areas to which provision of access would be "inappropriate because of the particular purpose for which the area is used". It also effectively deletes the existing concession that only 30% of a restaurant, bar etc. is required to be accessible.

Change from the 2004 draft proposal

Refer earlier discussion regarding exemptions for access to small buildings.

5.2.9. Car parking

The number of accessible car parking spaces to be provided in clinics and day surgeries will be doubled from current requirements.

No Change from the 2004 draft proposal

5.2.10. Hearing Augmentation

The requirements for hearing augmentation have been extended to cover more areas within buildings and the provisions are more prescriptive in terms of which forms of hearing augmentation may be used. Receivers, sufficient to cater for 4% of the total number of occupants are required.

Change from the 2004 draft proposal

Under the original proposal, receivers were required for approximately 2% of the total number of occupants. The increase to 4% aligns more closely with international Standards.

5.2.11. Wheelchair seating spaces in auditoria

The number of accessible wheelchair spaces to be provided is to be increased. Minimum requirements for the grouping of wheelchairs are also to be provided. Current BCA provisions do not require grouped seating to be provided or wheelchair access to a range of locations within an auditorium.

No Change from the 2004 draft proposal

5.2.12. Ramps

A height limitation (3.5 metres) will be introduced on the use of ramps for access to and into buildings. The minimum landing length of ramps will be 1200mm unless a change in direction is required.

Change from the 2004 draft proposal

The original proposal would have increased all landing lengths to 1500mm.

5.2.13. Glazing

Specific safety requirements for glazing installed on an access way are to be implemented for the first time.

No Change from the 2004 draft proposal

5.2.14. Lifts

Substantial additional prescription on the uses (and limits to use of) different lifting devices has been included. In particular, specifications on swimming pool lifts were added, since certain swimming pools are to be required to be accessible for the first time.

Lift floor plates accommodating the 80th percentile (current BCA) wheelchair size will be permitted in buildings with lifts that travel no more than 12m. Lifts travelling more than 12m are required to accommodate the 90th percentile wheelchair size. Constant pressure devices and key locks will be permitted.

Existing lifts in existing buildings which accommodate the 80th percentile wheelchair size will not be required to upgrade to lifts which accommodate the 90th percentile wheelchair size.

Lift access is not required to the upper level of a car park building if there are no accessible car spaces on that level.

Change from the 2004 draft proposal

Under the 2004 draft proposal, all lifts were required to comply with the 90th percentile dimensions and constant pressure devices to operate lifts were not permitted.

5.2.15. Sanitary facilities

Sanitary facilities for people with ambulant disabilities for each sex are proposed to be required at each bank of toilets where two or more toilets are provided. The current requirement for these toilets apply only to Class 10a buildings and the required ratios are less stringent.

In Class 3, 5, 6, 7, 8 and 9 buildings, it is proposed that all sanitary facilities for people with a disability be required to be unisex and that they be provided on every storey that contains sanitary compartments, and at not less than 50% of the banks of toilets where more than 1 bank is provided on a storey. The proposed requirement will effectively increase the number of accessible sanitary facilities that need to be provided.

Change from the 2004 draft proposal

Accessible facilities will now not be required in common areas of Class 2 buildings as the Premises Standard will not apply to Class 2 buildings.

For Class 5, 6, 7, 8, and 9 buildings, the 2004 draft proposal required unisex accessible sanitary facilities at every bank of toilets, rather than only at 50% of those banks.

5.2.16. Swimming pools

Access requirements for entry into swimming pools for people with a disability will be introduced for the first time and will apply to swimming pools with a perimeter greater than 40m and that are associated with a building required to be accessible. Various options for pool entry are described[9], depending on the size of the swimming pool.

Change from the 2004 draft proposal

The 2004 draft proposal would have required access to be provided to all swimming pools associated with a building required to be accessible regardless of the size of the pool.

[9] Note that pools associated with a sole occupancy unit are not required to be accessible.

5.2.17. Accessible links between buildings

The requirement for provision of accessible links between buildings is extended to include buildings on different allotments that are linked for the purposes of associating those buildings.

No Change from the 2004 draft proposal

5.2.18. AS 1428.1 Design for access and mobility – General requirements for access – New building work

A new edition of this Australian Standard is to be adopted, incorporating the following key changes from current requirements:

- The 90th percentile spatial dimensions will be adopted in relation to specific locations, including new unisex accessible sanitary facilities, new lifts travelling more than 12 metres, doorways and associated circulation spaces and on accessways at locations where there is a turn of more than 60 degrees. Other dimensions will remain at the current 80th percentile.
- The configuration of passing and turning spaces will be detailed to complement the requirements of the Premises Standard.
- Visual indicators will be required on glazing along an accessway.
- Step and threshold ramp configurations will be revised to make them safer for people who use wheelchairs.

Change from the 2004 draft proposal

The 2004 draft proposal applied the 90th percentile dimensions in all contexts.

5.2.19. AS 1428.4 Design for access and mobility – Tactile ground surface indicators for the orientation of people with visual impairment

A new edition of this Australian Standard is to be adopted. There are no significant changes proposed to this Standard but the location of information has been rearranged to enable a single section to be referenced which is applicable to the design and construction of buildings.

No Change from the 2004 draft proposal

5.2.20. AS 2890.1 Parking facilities – Off-street car parking

A new edition of this Australian Standard is to be adopted, incorporating new configurations for car parks.

No Change from the 2004 draft proposal

5.2.21. Decision criteria for specific elements of the Premises Standard

The above discussion of the specific provisions of the proposed Standard indicates that there are several areas in which partial or total exemptions from general requirements have been adopted. These exemptions have, indeed, become more numerous in the course of moving from the original proposal to the currently proposed Standard. In addition, a range of judgements have had to be made as to the appropriate degree of access to be provided. For example, the original proposal that all building entrances be accessible was modified such that it is currently proposed that only 50% of building entrances will be required to be made accessible.

Decision-making has been informed by the following factors:

- Feedback received through the public comment process;
- thresholds of acceptable cost effectiveness (e.g. for small versus large buildings); and
- practical implications for building ownership and use (e.g. for security, lift installation, threshold points).

In general, decisions made have sought to identify the most appropriate balance of costs and benefits in relation to individual provisions. Clearly, however, such judgements must be made qualitatively in most cases and there will necessarily always be room for disagreement on particular issues.

Building upgrade "trigger"

The 2004 draft proposal included a requirement that, where more than 50% of the floor area or volume of a building was upgraded within a three-year period, the requirements of the Premises Standard would need to be adopted in respect of the whole of the building. The modified Premises Standard proposal no longer includes this requirement. As a result, the costs of applying the proposed Standard in respect of major building upgrade works has been reduced when compared with the 2004 draft proposal.

6. Identification of feasible alternatives

The objectives of the proposed Premises Standard, as outlined earlier, are to provide access to buildings for people with a disability in a reasonably achievable, equitable and cost-effective way and to provide certainty to building developers and managers that compliance with building regulations will achieve compliance with the DDA. The identification of feasible alternative means of achieving the objectives, other than the proposed Premises Standard, can be conducted at the following levels:

- The possible alternatives in terms of specific technical requirements for inclusion in the Premises Standard. There are a potentially infinite number of possible combinations of specific provisions. It is evidently not feasible to assess and compare the benefits and costs of each such combination individually. Thus, consideration of alternatives at this level must be based on review of the policy approach adopted in order to clarify the basis on which the specific proposals contained in the proposed Premises Standard were arrived at, in preference to alternative combinations of provisions. The approach taken is to demonstrate the comparative policy approach taken to developing the Standard, and to highlight the areas of most substantial benefits and costs.
- Consideration of specific alternative formulations of the Standard. Two feasible alternatives identified during the course of policy development in connection with the proposed Premises Standard are to adopt the Standard without moving to the new variant of AS 1428.1 – thus avoiding the costs and benefits of moving to larger spatial dimensions – and adoption of the Premises Standard without harmonisation with the BCA.
- Consideration of the application of the Standard solely to new buildings.

Consideration of the broader range of policy measures that might achieve the underlying goal of improving the position in society of people with disabilities. Here, the key alternatives considered are market-based. It should be noted, however, that such an approach is largely rendered infeasible by the current context of the existence of the DDA and its general access to premises provision and the need to harmonise the DDA with the building law as far as possible. However, it is considered necessary to include discussion of market-based approaches in order to allow a broader appreciation of the general policy context within which the DDA and the proposed Premises Standard operate.

The following sections of the RIS analyse the proposed Premises Standard and the range of alternatives identified at each of the levels noted above. The analysis considers the ability of each option to achieve the identified objectives. Sections 7 and 8 analyse the benefits and the costs successively of the proposed Premises Standard. Section 9 analyses the benefits and costs of the above range of alternatives. Section 10 compares the benefits and costs of each alternative and discusses the reasons for preferring the proposed Premises Standard to the identified alternatives.

7. Expected benefits

The analysis of the expected benefits of the proposed Premises Standard contained in this RIS is, to a substantial degree, qualitative. This is an inevitable result of the specific nature of the matters included in the Premises Standard and the substantial difficulties involved in estimating the value placed by various people with a disability on the gains they are expected to receive, in a range of different contexts. Review of other available RIS type documents[10] in relation to access to premises confirms that very little substantial progress has been made in developing quantified estimates of the benefits associated with improved access to premises.

Further, attention should be drawn to the quantified benefits in relation to increased workforce participation and reduced living costs. Though these estimates draw from the best available sources, there are considerable uncertainties associated with them and they appear somewhat compromised by overseas empirical evidence. To ensure transparency of the assumptions made in this area, we have tested these figures for sensitivity at both optimistic and pessimistic scenarios (refer chapter 10).

However, problems with the quantification of benefits do not suggest that those benefits are small or unimportant. Quantitative material on the costs of disability – and, by implication, the benefits available by reducing those costs and disadvantages – is therefore included in the second part of this benefits section. The purpose of this material is to provide an indication of the potential benefits in this area and thereby provide the reader with a basis for "scaling" the benefits likely to be obtained from the Premises Standard.

7.1. General – conceptual issues

Codification vs existing DDA duties

As with the cost section below, a conceptual issue arises in relation to the benefits given the current legislative context. This is that the proposed changes, while substantially amending the relevant parts of the BCA, arguably do not

[10] See, for example, *RIS for the amendment of the Building Code of Australia (BCA 96) provisions for access and facilities for people with a disability* (ABCB, Canberra, 1998) and *Access to Goods, Services and Facilities: Regulatory Impact Statement – the Government's assessment of the costs and benefits of introducing the later rights in Part III of the Disability Discrimination Act 1995* (Department for Education and Employment, London. Also *The Building Regulations 2000: Proposals for Amending Part M Access to and use of buildings – Regulatory Impact Statement.* (Office of the Deputy Prime Minister, London, 2002).

create any new compliance obligations from those that already exist under the DDA's general duties provisions. Indeed, it has been argued that by codifying a particular set of requirements and establishing that compliance with them will be taken as compliance with both DDA and BCA obligations, the current exercise could even reduce the "reach" of the currently provided general duties under the DDA, rather than imposing new obligations.

This would be so to the extent that the technical provisions to be contained in the Premises Standard (and the amended BCA) were less extensive than might be found to exist as a result of the existing general duties by the Australian court system in proceedings under the DDA.

However, while this is a theoretical possibility, it must be weighed against the practical impact of the proposed codification on effective compliance rates. While it is clearly not possible to collect objective data, anecdotal evidence indicates that, in practice, the degree of compliance with the general duties of the DDA in relation to premises is low. While the AHRC has published Advisory Notes on Access to Premises, they do not have any legal status. Thus, they are not written in terms that establish specific requirements and, for the most part, lack even specific recommendations at the level of different building uses. Moreover, the extent of complaints activity in this area has been low (see below), indicating that there may have been limited direct incentives, to date, for building owners and designers to ensure they are in compliance.

Given these factors, it can be predicted that the establishment of a detailed codification of the DDA's general duty of non-discrimination in the premises context will have an important impact in improving compliance. To the extent that this is so, there are likely to be important effective benefits for people with a disability, vis-à-vis the present situation.

7.2. Transaction cost reductions

Following from the above, a fundamental benefit likely to arise from codification of the DDA duties as they relate to premises is a reduction in the transaction costs associated with ensuring and enforcing compliance. Two major considerations must be weighed in this regard:

First, the establishment of the practical extent of the DDA duties currently relies largely on the complaints mechanisms that are established under the DDA. That is, an individual must bring a complaint that a case of discrimination has occurred. Alternatively, a "representative" complaint may be made by an organisation or individual on behalf of a "class" of persons with particular disabilities. This is an inherently slow and costly way of determining the nature and extent of the general duties established in the DDA as they apply to premises and, indeed, to particular types of premises.

In fact, there have been relatively few such complaints that have passed through the processes set out under the DDA to date, despite the fact that the DDA has now been in operation for more than a decade. Data from the AHRC indicates that an average of 45 complaints per annum have been received in relation to access to premises issues in each of the last four years, with no obvious trend toward increased use of the complaints mechanism being visible over this time. Thus, this mechanism has apparently had little impact in terms of defining and establishing the effective requirements under the DDA.

Secondly, advice from a number of sources suggests that the fact that a Premises Standard is under development may itself have had an impact in reducing the incidents of complaints regarding access to premises. That is, some potential complainants may have delayed taking action due to the expectation that detailed requirements on access will be legislated in the near future. This suggests that complaints activity would be somewhat higher if the development of the Premises Standard was not proceeding. The extent to which this would be the case is necessarily difficult to assess. However, it should be noted that the continuation of the existing complaints-based system would probably involve a higher level of complaints activity than has been observed to date.

Despite the relatively flexible approaches taken to resolving complaints under the DDA, the costs involved in resolving complaints are necessarily substantial. For example, advice to the AHRC from specialist legal firms operating in this area suggests that costs for one party alone are likely to be of the order of:

- $5,000 - $10,000 for an AHRC conciliation process; and
- $30,000 - $40,000 for a Federal Magistrates Court hearing, typically lasting two days[11].

Moreover, if existing processes were to continue, it is likely that a relatively high level of complaints activity would be maintained over time, since experience suggests that relatively few complaints have substantial “precedent setting” or flow-on effects, even where successfully resolved. Thus, the transaction costs involved in maintaining the existing complaints based approach to the DDA requirements would be likely to persist at a high level over the medium to long term.

7.3. Effectiveness of the complaints mechanism

In addition to the considerable transaction costs involved in the current DDA processes for establishing specific access requirements, a number of features of the process restrict its effectiveness in clearly establishing the specific

[11] Consultations with HREOC (now AHRC) officials, 10 July, 2003.

requirements on building owners in relation to providing access, and in ensuring that such access is provided. In the first place, complaints settled under the AHRC conciliation process, which is the first step in the process specified under the DDA, may often be subject to confidentiality requirements.

To the extent that this occurs, there is little possibility of a "precedent setting" effect operating in practice with respect to these cases[12]. Thus, the resolution of what access requirements effectively exist in a particular case may have no larger impact on ensuring that access is provided in other, similar circumstances. A related point is that the generally limited resources of complainants mean that relatively few complaints will be carried through from the AHRC conciliation processes to the court system, due to economic constraints on the complainants.

Second, the DDA specifically states that non-compliance with its provisions (whilst unlawful) does not constitute an offence[13], except in certain limited cases that are set out specifically in the DDA. This means that there are very limited compliance incentives under the DDA.

Third, the above features of the DDA processes have the effect of generating substantial uncertainty for people with a disability and building owners and building operators. The limited effectiveness of the complaints based process in establishing consistent access Standards means that people with a disability have little certainty as to the type and standard of access-related facilities they will find in buildings, while building owners and operators face uncertainty in relation to their compliance obligations and the possibility of complaints being lodged against them.

Fourth, an individual complaints based mechanism for establishing and enforcing access Standards is systemically likely to be under-used and, consequently, to be inefficient. This is because the expected costs to individual complainants are very often likely to be, substantially, in excess of the expected benefits derived as a result of a complaint being made. Thus, in many cases, people with a disability will not launch complaints in response to an experience of discrimination in relation to access to premises. This systemic factor is likely to mean that the DDA's existing complaints mechanism will always represent an ineffective means of ensuring access to premises[14].

The proposed Premises Standard would address all of these effectiveness issues. The fundamental benefit of the Premises Standard will be that a very high level of compliance with the DDA will be ensured. Non-compliance with BCA

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[12] Precedent setting can occur to a minor extent due to the fact that AHRC routinely publishes summaries of the facts of conciliated outcomes for public awareness purposes.

[13] Division 4 of the Disability Discrimination Act (Sections 41-44) deals with offences.

[14] For more on this issue, see Interim Submission of Dr Jack Frisch: Productivity Commission inquiry into the Disability Discrimination Act. www.pc.gov.au.

access provisions is effectively prevented through the operation of the building approvals process. Thus, the result of mirroring the technical requirements of the Premises Standard in the BCA can be expected to achieve virtually 100% compliance with its Standards as they apply to both new buildings and to substantial upgrades of existing buildings.

As a consequence, there will be substantially increased certainty for people with a disability, building owners and occupiers. For people with a disability, the benefit of full compliance with BCA requirements is that they can be certain that new and upgraded buildings will meet the specific access and facilities requirements that are mandated in the Premises Standard/revised BCA. Moreover, because specific requirements are mandated, they will have increased certainty about the degree of access that will be provided.

For building owners, the benefit is that compliance with the Premises Standard/revised BCA will provide them with a high level of assurance that they will not be the subject of a successful complaint under the DDA and that they will therefore not risk being required to retro-fit changes to their buildings. By extension, a potential source of dispute between clients and various building professionals (designers, builders, etc) is also substantially reduced.

7.4. Overview of the benefits

This section identifies and discusses the specific benefits that would arise from the adoption of the Premises Standard. That is, it considers the specific proposed changes in access requirements and analyses the nature and extent of the benefits that are likely to be derived as a result. The requirements of the Premises Standard are assessed against the background of the existing BCA access requirements, since the BCA is currently the only source of specific access requirements – and of requirements that are fully enforced through the building approvals process.

The benefits identified can be divided into three broad categories. These are:

- extensions to the coverage of access requirements;
- quantitative increases in access requirements; and
- qualitative increases in access requirements.

The main changes are discussed, in turn, in this section.

7.4.1. Extensions to the coverage of access requirements

The coverage of access requirements under the BCA will be extended in two main areas. These are Class 1b buildings used for short-term holiday accommodation and swimming pools. The expected benefits of each are:

Class 1b buildings used for short-term holiday accommodation.

A Class 1b building is currently defined in the BCA (in part) as *"a boarding house, guest house, hostel or the like with a total floor area not exceeding 300m^2 and in which not more than 12 persons would ordinarily be resident".* Thus, the effect is to extend access requirements to small scale holiday accommodation facilities[15]. When triggered, access would need to be provided to at least one bedroom, plus facilities in common areas used by guests.

The extension of the access requirements can be expected to increase significantly the range of holiday accommodation (and, by extension, accommodation available during other forms of travel) available to persons with disabilities. The impact of this change may be quite substantial, since a considerable proportion of holiday accommodation in many areas would fit the above definition of a Class 1b building.

Moreover, since many such accommodation options would tend to be relatively modestly priced, the improved access to this sector may be particularly important given the low average levels of income found among people with a disability (discussed further in section 7.5.2). That is, the effect of the change may be particularly important in expanding low-priced accommodation options for people with a disability. That said, the revised proposal for the Premises Standard not to apply to Class 1b buildings with less than four rooms available for rent by the public, will reduce somewhat the rate of dissemination of accessibility in this area, and will remove the protection from a successful complaint under the DDA for these smaller establishments.

Swimming pools

Access is to be provided to, and into, all swimming pools associated with a building required to be accessible for use by the public which has a perimeter of 40 metres or more. This means access into swimming pools can vary, with different acceptable options being specified, including ramps and lifting devices.

[15] However, access requirements would not apply to building upgrade activity in respect of Class 1b buildings unless the building would have four or more rooms available for rent by the public.

The provision of access to public swimming pools has the potential to substantially increase leisure options for people with a disability. In addition, the access provisions may indirectly broaden the availability of more structured exercise and/or rehabilitation programs to people with a disability. Thus, this extension of access requirements is likely to yield quite substantial benefits.

7.4.2. Quantitative extensions of access requirements

This section considers changes to the BCA in which an existing access requirement is increased in a quantitative manner only. The main provisions of this kind are increases in the following: the proportion of rooms to be accessible in Class 3 buildings; the number of accessible building entrances (all classes); the number of accessible parking spaces in clinics and day surgeries; the numbers of wheelchair seating spaces in auditoria; provision of ambulant sanitary facilities; and provision of accessible sanitary facilities generally.

Increased proportion of accessible rooms – Class 3 buildings

As pointed out in Section 5.4., the effective changes proposed for Class 3 buildings are limited in most cases, in terms of their impact on individual premises. On the other hand, the changes will be applicable to a substantial number of premises of various types. Thus, the changes will provide small improvements in the availability of a wide range of both permanent and holiday accommodation to people with a disability.

The expected benefits of these changes are considered to be moderate in size.

Increased accessible building entrances

Access is to be provided to 50% of entrances, including the principal pedestrian entrance. Where a building has a floor area greater than 500m^2 a pedestrian entrance that is not accessible must not be located more than 50 metres from an accessible entrance. By contrast, existing BCA requirements are limited to providing access through the principal pedestrian entrance.

In practice, the effect of the change is likely to increase the convenience of access to buildings for people with a disability, rather than improving access *per se*. This is because the existing requirement provides effective access to all areas required to be accessible. In some cases, the effect of the change may be substantial in terms of providing access with *dignity* – a specified objective of the DDA provisions. This is because a requirement for 50% of entrances, including the principal pedestrian entrance, to be accessible will reduce the possibility that people with a disability will not be able to use the same entrance as friends and associates.

The benefit associated with this change can therefore be expected to be moderate in size.

Increases in the number of accessible parking spaces in clinics and day surgeries

The effect of this change will be to approximately double the number of accessible (wide bay) parking spaces required in clinics and day surgeries, to a ratio of around 1:50. This means that requirements for these facilities will be made consistent with those applying to outpatient areas of hospitals, to reflect the view of disability groups that such clinics are used in practice as generic outpatient treatment facilities.

The expected benefit of this change is that users of wheelchairs and large mobility aids will gain easier access to these facilities. While the proposed ratio of wide bay spaces, at 2%, substantially exceeds the proportion of users of wide bay spaces (estimated at 0.6% in the 1998 RIS), the proposed change is based on anecdotal evidence of a lack of effective access. This may reflect a higher rate of usage of these facilities by people with a disability than the general population.

The benefits associated with this proposed change can be expected to be minor in size.

Increased numbers of wheelchair seating spaces in auditoria

Current provisions do not require grouped seating to be provided or wheelchair access to a range of positions within an auditorium. Under the proposed changes, the number of accessible wheelchair spaces to be provided will be increased and minimum requirements for the grouping of wheelchairs would also be specified.

The change in the required number of wheelchair spaces is substantial in effect. For small auditoria (fewer than 800 seats) wheelchair spaces would be required to comprise 2% of the total. For medium sized auditoria (800 – 10,000 seats) this would be approximately 1% of the total, while for large auditoria (over 10,000 seats) it would be 0.5% of the total (for capacity exceeding 10,000 seats). This compares with a general requirement that 0.5% of seating be wheelchair spaces at present. Thus, substantial increases in numbers of wheelchair spaces will affect small and medium sized auditoria in particular.

These changes appear to provide substantially increased opportunities for wheelchair users to attend events at auditoria (e.g. concerts, seminars, etc). However, it must be noted that the existing requirement for 0.5% of seating to

comprise wheelchair spaces is broadly consistent with the estimated proportion of wheelchair users in society[16], whereas the proposed provision at rates of 1 – 2% substantially exceeds this proportion. Moreover, it is probable that other access problems, such as transport access difficulties and the low average income levels of people with a disability, may mean that effective demand for auditorium seating is lower among wheelchair users than the population-wide average.

This is likely to mean that the effective benefit of the proposed increase in wheelchair spaces will be small in practice, and may be felt largely in circumstances where there is excess demand for particular events (i.e. "sellouts"). However, the issue of wheelchair numbers must also be considered in the context of the "grouping" requirements that are proposed to be adopted for the first time.

The proposed changes include requirements for medium and larger auditoria, where a combination of single spaces, groups of two spaces and groups of larger numbers (but not more than five) spaces be provided, with their distribution throughout the auditorium being representative of the seating types that are generally available (including pricing). These requirements are intended to ensure that wheelchair users' needs for access in different contexts (i.e. alone, in groups with other wheelchair users, in company with non-wheelchair using companions, etc) are met and that they have access to a range of seating options and prices.

These are important benefits that are not assured by the present requirements. However, provision of this range of wheelchair accessible options is only feasible if there are a sufficiently large number of total wheelchair spaces. Thus, an increase in the proportion of wheelchair spaces is likely to be necessary to allow these additional benefits of greater variety of seating options to be attained in practice.

The benefits associated with these changes are considered to be moderate in size.

Increased provision of ambulant sanitary facilities

Ambulant sanitary facilities for each sex are proposed to be required at each bank of toilets where two or more toilets are provided at that bank. The current requirements for ambulant provisions apply only to Class 10a buildings – essentially, to stand-alone toilet blocks, such as in public parks, caravan parks

[16] According to ABS4430.0 (2004), there are 130,000 wheelchair users in Australia, equal to approximately 0.64% of the population. However, 53,200 of this group (equal to 0.26% of the population) live in private accommodation (i.e. in non-institutional settings).

or camping grounds. Moreover, the ratios are not as stringent as those proposed.

Toilets for people with ambulant disabilities differ from wheelchair accessible toilets in areas such as circulation space, seat pan height and handrail requirements. It is expected that the provision of suitable toilets for this group may have significant benefits since the size of the affected group is extremely large – indeed much larger than the number of wheelchair users. According to the ABS (ABS4430.0 (2004)), 512,400 people use a mobility aid, while only 130,000 of these use a wheelchair. Thus, provision of facilities specifically designed for the needs of this larger group would have potentially large benefits.

Increased provision of accessible sanitary facilities

In Class 3, 5, 6, 7, 8 and 9 buildings, it is proposed that all accessible sanitary facilities be required to be unisex and that they be provided on each floor where toilets are provided and at not less than 50% of the banks of toilets where more than one bank is provided on a floor. This can be expected to substantially increase the provision of such facilities, as current requirements are simply that facilities be provided at a ratio of not less than 1 for each 100 required standard facilities.

This change is likely to have substantial convenience benefits for wheelchair users, particularly in relation to the ability to locate and have access to toilet facilities. An important implication of this change is that wheelchair users are less likely to face the current likelihood of having to travel some distance, perhaps from one floor to another distant floor of a building, to find accessible sanitary facilities.

The benefits associated with this change are therefore considered to be substantial.

7.4.3. Qualitative extensions of access requirements

Considered under this heading are changes to the BCA in which an existing access requirement is increased in qualitative terms i.e. proposals that would enhance the *type* of access provided, rather than the quantity of an accessible facility. The main provisions under this heading are extension of access within Class 5, 6, 7b and 8 buildings, provision of passing and turning spaces for wheelchairs, hearing augmentation, limitations on use of ramps, glazing requirements, lifting devices, some sanitary facilities provisions and changes to relevant Australian Standards.

Extension of access within Class 5, 6, 7b and 8 buildings

Access requirements are proposed to be extended to include all levels within each of these classes of building (these are offices, shops, restaurants, bars, cafes, wholesale premises and factories). The current accessibility requirements for these classes of buildings are limited to the entrance level and those levels served by lifts or ramps.

This change would have the effect of substantially expanding the extent of access to buildings within these classes. Key areas in which this would yield important benefits are:

- Increased leisure opportunities by making a wider range of restaurants, bars, cafes etc accessible; and
- Improved employment opportunities, by making work places more accessible.

The major areas in which the proposed changes would have an effect would be in relation to smaller (usually two or three storey) "walk up" buildings that would not, for the most part, currently be designed with lifts or ramps. However, there are exemptions for access to the upper levels of certain small buildings. Access would not need to be provided to upper levels of a two or three storey building if the individual floor areas of the upper floors is less than 200m^2. This exemption was not part of the original proposal and has been added in recognition of the potential for disproportionate cost impacts to be incurred in these small buildings, principally as a result of providing access to upper levels.

This change implies that the expected benefits associated with these provisions of the Standard will be somewhat smaller than initially estimated. Nonetheless, there will be substantial benefits arising from the improved accessibility of upper levels of Class 5 – 8 buildings. Thus, the size of the benefits associated with this provision is considered to be moderate to substantial.

Provision of passing and turning spaces for wheelchairs

The provision of passing and turning spaces for wheelchairs in buildings is a new inclusion in the BCA. This requirement will apply to all buildings to which access is required (see Clause D3.3 & AS 1428.1). Passing spaces must be provided at maximum 20 metre intervals wherever a line of sight is not available along an accessway and turning spaces at 20 metre intervals. Turning spaces must also be provided within two metres of the end of an accessway if it is not possible to continue travel along the accessway. Passing/turning spaces would need to be provided whenever an accessway was less than 1800mm wide. A passing space can be used as a turning space.

The provision of passing spaces provides important benefits of convenience, safety and dignity by ensuring that wheelchair users are not required to reverse for substantial distances in the event of meeting another wheelchair user or another vehicle (trolley etc) on a path of travel.

It is expected that the need for such passing spaces would be met in practice as a result of other BCA requirements, as well as general "good design" criteria – for example, long unbroken corridors are generally avoided as being wastes of space. Thus, there was some question as to whether a specific regulatory requirement was needed in this respect.

In this context, the key benefit that is expected to derive from this provision is that it provides certainty that appropriate facilities will be provided in all cases. However, given that the provision will apply to a wide range of buildings, the probable impact can be assessed as moderate in size.

Hearing augmentation

The current requirements for hearing augmentation are to be extended to cover more areas within buildings and to prescribe more precisely what forms of hearing augmentation may be used.

The proposed expansions in minimum requirements – in terms of areas covered – are relatively modest in scope. In particular, they have the effect of removing an existing exemption for small auditoria and other meeting rooms (having an area of less than 100m^2) and of requiring that all parts of an auditorium (and associated rooms in a Class 9b building provided with an amplification system) to be so equipped, whereas only 15% of the floor area of such auditoria are currently required to be equipped with augmentation systems.

In relation to the additional prescription, the key addition is prescription of the number of receivers that must be made available in respect of systems requiring them.

The benefit of the increased scope of the hearing augmentation requirement will be that persons with hearing disabilities will be certain of being able to use all parts of the relevant buildings, with smaller buildings, in particular, becoming accessible, as well as smaller spaces within larger structures. The additional prescription of the number of receivers should ensure that there is adequate provision made for all who require hearing augmentation in all reasonably foreseeable circumstances.

According to ABS statistics, 531,400 people, or more than 2.5% of the population, use some form of hearing aid[17]. Thus, the proportion of people affected by this change is considerable. Given the incremental nature of the changes proposed, the estimated benefits are considered to be moderate in size.

Limitations on use of ramps

It is proposed to limit the use of ramps to a maximum height (i.e. rise) of 3.5 metres. There are currently no height limitations in relation to the use of ramps. The change has been made as a result of concerns voiced by the disability sector in relation to the inability for people in wheelchairs to travel a ramp that serves a height greater than 3.5 metres due to fatigue problems. The height limit of 3.5 metres was chosen as a reasonable compromise that would still allow a ramp to serve one floor within a building, while addressing the issue of practicability in relation to fatigue.

The expected benefit of this change is that wheelchair users and other people with restricted mobility are less likely to find their effective access to buildings restricted due to the use of ramps in infeasible circumstances. Instead, where ramps may currently be used for rises of more than 3.5 metres, lifting devices would now need to be employed.

Glazing requirements

Visual safety requirements for glazing installed on accessways are to be extended. Glazing must comply with AS1288 (Glass in buildings – Selection and installation) and frameless or fully glazed doors etc. must be marked in order to make them clearly visible.

These changes can be expected to improve safety in the use of access paths by reducing the risk of accidents and reducing the probability of injury should an accident occur. No data is currently available on the extent of such accidents that would provide a basis for considering the likely benefits of this change quantitatively.

A second benefit relates to the requirements that the presence of glass doors be made more apparent, particularly to people with vision impairments. This may result in important benefits in terms of dignity and convenience, as well as having safety implications.

[17] See ABS4430.0 (2004), Table 13.

Lifting devices

Substantial additional prescription is proposed in relation to the uses, and limits to use of, different lifting devices (Clause E3.6, Tables E3.6(a) and (b)). For example, limitations on stairway lifts include requirements that they must not be used:

- in a building accommodating more than 100 persons;
- in “high traffic public use areas” (e.g. cinema, auditorium); or
- to connect more than two floors.

The benefit of this prescription must be seen in terms of the purpose of the DTS elements of the BCA, of which they form part. The DTS provisions are intended to provide direction and certainty to those who must comply with the BCA. Thus, the inclusion of additional prescription helps to achieve this underlying purpose of the DTS requirements more effectively. That is, the additional prescription will help achieve a higher level of effective compliance with the Performance Requirements of the Premises Standard/ revised BCA. At the same time, by specifying contexts in which lower cost solutions *can* be employed, this prescription may lower costs by providing designers with assurance that certain lower cost solutions are in conformity with the Performance Requirements.

The size of this benefit is considered to be moderate in size.

Changes to relevant Australian Standards

It is proposed to adopt updated editions of AS 1428.1, AS 1428.4 and AS 2890.1 in the Premises Standard. The key changes that would thereby be made, and the expected benefits associated with them, are as follows:

AS 1428.1 Design for access and mobility: General requirements for access-New building work

The new edition will adopt 90th percentile spatial dimensions for certain areas. Thus, these dimensional requirements would be based on the 90th percentile wheelchair and user dimensions, rather than the current 80th percentile. This will have the benefit of ensuring that a larger proportion of wheelchair users are effectively accommodated by spatial design requirements implemented via AS 1428.1. It will also mean that many users of smaller wheelchairs will experience greater ease of access due to the additional space that will be provided in various contexts.

However, whereas the draft Premises Standard proposed to apply the 90th percentile dimensions throughout, the revised proposal would apply the 90th percentile dimensions only in the following situations:

- in accessible unisex sanitary facilities (toilets);
- at doorways and circulation spaces to doorways; and
- where there is a change in direction on an accessway of more than 60 degrees.

This change will somewhat reduce the size of the benefits that will be derived vis-à-vis the original proposal, however, the larger 90th percentile dimensions will still be required for most critical circumstances.

Although proposed in the consultation draft of the Premises Standard, the location of step ramps will not be restricted although their gradients and lengths will be reduced making them safer for people to use.

Passing and turning spaces will be required where long narrow accessways form part of the building design. The provision of passing and turning spaces will prevent people in wheelchairs having to travel in reverse.

It will be possible to use bench tops in lieu of shelves in accessible sanitary facilities, thus providing greater design flexibility.

Visual indicators will be required on glazing along an accessway making them safer for a person who is blind or vision impaired.

AS 1428.4 Design for access and mobility: Tactile ground surface indicators for orientation of people with vision impairment.

AS 1428.4 will be reformatted so that all Premises Standard matters are covered in a single section.

Further information will be provided on how to conduct luminance contrast testing.

AS 2890.1 Parking facilities: Off-street parking

The new Standard will reconfigure the required dimensions for accessible parking spaces, thus improving the ease of use associated with them. Changes to the Standard will allow for alternative configurations of parking spaces, increasing design flexibility.

The benefits from these changes are expected to be moderate in scope.

7.5. The benefits in context

7.5.1. Size of the affected group

Incidence of disability

Section 6.4 discussed the benefits expected to result from each of the main specific requirements to be adopted as part of the Premises Standard, comparing them to existing BCA provisions to provide a meaningful incremental analysis. This section considers the benefits of the proposed Standard in more aggregative terms and places these in the context of the current position of people with a disability within society.

As noted previously, the number of potential beneficiaries of the proposed Premises Standard is both large and rising. The proportion of the population reporting some form of disability reached 20% in 2003[18], an increase of over 50% in little more than two decades. Table 1 highlights this broad trend, showing the total number of people who reported that they were living with a disability over the period 1981 to 2003.

Table 1: Numbers and proportion of the population living with disabilities

	1981	**1988**	**1993**	**1998**	**2003**
Numbers (000s)	1,942	2,543	2,921	3,504	3,958
Per cent	13.2	15.5	16.6	18.8	20.0

Source: ABS 4430 (Sept 2004), ABS 4303 (2003).

Advocates of improving the accessibility of the built environment frequently cite the ageing of the general population and the observation of higher rates of disability in older age cohorts as implying substantial further increases in disability rates in coming decades. ABS notes that the most recent rises in disability rates (i.e. between the 1998 and 2003 surveys) were entirely accounted

[18] This data is self reported. That is, people are asked to indicate whether they have a disability. It is probable that some of the observed increase in the proportion of the population with a disability reflects an increased willingness to self-identify as having a disability in recent years, perhaps due to social attitudes having become less negative. However, a more widely cited view is that the bulk of the change relates to the ageing of the population.

for by changes in the age profile of the population over the period[19], suggesting that this is likely to be the main source of future increases in disability rates.

The ABS does not calculate projected future disability rates[20]. However, Western Australian government estimates suggest that further rises in these rates will occur, albeit at a modest rate. An expected disability rate of 23% in 2021 is estimated, with the proportion of the population having profound core activity restrictions expected to rise from 5.6% to 6.6% over the same period[21].

Key beneficiaries

The 20% of the population currently experiencing a disability represents around four million people. However, this total includes all types of disability, including those deriving from a range of psychiatric conditions, heart and lung disease and the like. Clearly, people with some disabilities are unlikely to benefit directly and substantially from improved accessibility of publicly accessible buildings. Thus, a more detailed understanding of the range of beneficiaries is required.

Sections 5 and 6 of this RIS indicate that the majority of the Premises Standard is concerned with achieving improved access for persons with a mobility disability, while a smaller number of provisions are also concerned with improving access for people with vision or hearing impairment. Thus, the main beneficiaries of the Standard will be this subset of the overall number of people with a disability.

According to Census data[22], the proportion of people reporting mobility disabilities is currently around 10.5% of the population. In addition, 4% of people have a hearing impairment, while 1.6% have a vision impairment. This suggests that up to 16% of the population – almost one person in six, or 3.2 million people – may reap some benefit from the proposed Standard. Moreover, this group is, to some extent, a "floating" population. That is, since not all disabilities are permanent in nature, it is necessarily the case that a larger proportion of the population than this will suffer from one of these types of disability at some time in their lives. Thus, the proportion of people that may benefit from the Premises

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[19] Ibid. After controlling for age profile changes, all disabilities rate declined from 20.1 to 20.0%, while the rate of profound or severe core activity limitation declined from 6.4 to 6.3%.

[20] Telephone conversation with ABS contact officer, 31 August 2005.

[21] Annual Report 2001-02. Disability Services Commission, Government of Western Australia. See Section 8.0 "Trends and Issues".
http://www.dsc.wa.gov.au/dsc/content/2002annual_report/content/trends_issues/page02.asp

[22] Census disability data relates to people who state that they have a disability with an actual or expected duration of six months or longer at the time of the Census. It should be noted, also, that categories of disability are not necessarily mutually exclusive.

Standard at some stage in their lives may be larger than the 16% indicated above.

While the numbers of people likely to gain some benefit from the Standard are large, it is clear that the primary beneficiaries will constitute smaller groups.

With regard to measures aimed at those with mobility disabilities, it is clear that those who use mobility aids – including wheelchairs, walking frames, walking sticks, crutches etc – will be most affected. This group constitutes 2.5% of the population, or about one quarter of those reporting a mobility disability. Table 2 below summarises the number of users of different mobility aids and provides comparative data for 1998 and 2003. All data are derived from the ABS Disability, Ageing and Carers Survey.

Table 2: Users of mobility aids 2003 (1998)

	000s	**Per cent**
Crutches/walking stick	265.2 (265)	1.3 (1.4)
Walking frame	179.3 (103)	0.9 (0.6)
Wheelchair	130.0 (143)	0.7 (0.8)
Total	**512.4**[23]	**2.5**

Source: ABS 4430 (September 2004, April 1999)

Table 2 indicates that approximately 512,000 people, or 2.5% of the Australian population, are users of mobility aids and can be expected to benefit substantially from improvements to the accessibility of public buildings. The size of this group appears to have increased more quickly than the population as a whole in recent years, though the direction of movement varies with different aids, suggesting the possibility of some volatility in the data.

In addition, a further 2.0% of the population use hearing aids, while 0.3% use reading or writing aids. These groups are likely to benefit from those aspects of the Premises Standard that relate to hearing and vision impediments.

A further group that can also be expected to benefit substantially is that of primary carers to people with a disability. The implementation of the Premises Standard can be expected to reduce demands on this group, in some cases significantly. It is also possible that these reduced demands would have benefits in terms of enhancements in their ability to participate in the labour force. This issue is discussed further in Section 7.6.1.

[23] Total is less than the sum of the individual numbers because some people use more than one kind of aid.

7.5.2. Economic and social situation of the affected group – distributional benefits of the proposed Premises Standard

A second important contextual issue is that of the current economic circumstances of the group of people with a disability that are likely to benefit from the proposed Premises Standard. There is substantial data to indicate the current level of disadvantage experienced by people with a disability.

Some important considerations are:

- The employment rate among people with a disability is substantially lower than that of the population as a whole. For example, Frisch[24] points out that the 80,000 wheelchair users in the community between 15 and 65 years old have a workforce participation rate of only 38% compared with a rate of 76.9% for those without disabilities.
- As a result of both this lower employment rate and the difficulties faced by people with a disability in the workforce, the average income of people with a disability is also substantially below the average for the general population.
- The lower average income of people with a disability is compounded by their experience of substantially higher living costs. For example, Frisch[25] reports data estimating the additional living costs incurred by people with substantial musculo-skeletal disabilities at up to $25,000 annually.

These factors indicate that there is a substantial distributional argument in favour of measures to enhance the accessibility of buildings. That is, regardless of whether there is a net benefit in strict economic terms associated with the proposed improvements to access to buildings, the Premises Standard would amount to a considerable transfer toward a significantly disadvantaged group in society.

Recognition of the desirability of policy action to improve the integration of people with a disability into society is reflected in a wide range of legislative actions taken in industrialized countries, particularly during the 1980s and 1990s. Moves to improve building accessibility have been central to this policy and legislative response and such measures are now widespread in Western countries, as discussed in Section 9, below. The concepts of integration, or "inclusion" are multi-faceted and include participation in employment, leisure activities, cultural and sporting activities. Improving building accessibility is a policy measure that is likely to achieve benefits across the full range of these dimensions of integration,

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[24] *The Benefits of Accessible Buildings and Transport: An Economist's Approach*, Dr Jack Frisch.
[25] *Towards a Disability Allowance.* Dr Jack Frisch. Disability Council of Australia, June 2001, see especially pp 17-21.

or inclusion. In the Australian context, it can be noted that the proposed Standard constitutes only one of a range of current Federal government policy initiatives aiming to better integrate people with a disability into the economy and society as a whole.

7.6. Economic benefits of more accessible buildings

7.6.1. Increased employment participation

As noted above, the benefits of greater social inclusion that are expected to flow from improved building accessibility span several dimensions. However, to the extent that these benefits accrue in the employment context, they will have a direct market value that is, at least theoretically, measurable in practice. As indicated in the previous section, the rate of employment for people with a disability is substantially below that of people without disabilities. Further indicators of the disadvantage experienced by people with a disability are contained in the *Commonwealth Disability Services Census 2001*[26]. The Census shows that:

- The Commonwealth Disability Services Pension was the primary source of income of 61% of people with a disability who are users of Department of Family and Community Services (FACS) employment services. For a further 7% of this group, the Newstart or Youth Allowance was the primary source of income;
- By contrast, paid employment was the main source of income for only 22% of this group; and
- Of the employed members of this group, only 11.3% earned more than $400 per week, while more than 50% earned less than $100 per week.

This data indicates that there are substantial potential gains from policies that can increase the participation of people with a disability in the workforce, both in terms of increasing the rate of participation and in terms of increasing the effective ability to participate of those who are in employment.

Building access issues constitute an extremely important barrier to accessing employment for people with a disability, although other substantial problems also exist. According to Frisch[27] these include discrimination, limited accessibility of transport options and factors associated with the disability that may reduce a

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[26] *Commonwealth Disability Services Census 2001*. Department of Family and Community Services, Canberra, 2001.

[27] Op Cit., p 11.

person's productivity in some or all occupations. The means by which building access issues can lead to reduced income are in some cases immediately obvious, but are in other cases less apparent. In the former category is the possibility that the inaccessibility of a building will mean that a person is physically unable to carry out the tasks of the job and will either not apply for it or not be given it. Some of the less apparent factors have been identified by Frisch[28] as including

> *"…fewer seamless networking and communication opportunities with work colleagues and clients and a consequently lower likelihood of promotion because of inaccessible building design…it means wasting time negotiating and planning access…etc"*

Thus, improving building access may lead to both increased employment opportunities and increased opportunities for advancement within the workplace consistent with a person's underlying talents. The existence of other causes for the observed lower employment rates and income among people with a disability – noted above – means that even achieving "fully accessible" buildings would not be able to fully address this issue. However, it is apparent that building access issues are significant factors explaining these employment and income gaps, while the substantial size of the gaps in question between the experience of people with a disability and those of the general population mean that there is room for substantial gains to be made by addressing the underlying factors.

The likely gains from increased workforce participation due to the implementation of the Premises Standard are inevitably extremely difficult to estimate, given the high degree of uncertainty as to the effectiveness of the Standard in achieving this impact. Frisch has derived an indicative estimate of the potential benefits of increasing the participation of wheelchair users in the workforce. He shows that if the number of wheelchair users participating in the workforce were to rise by 12,000 to 53% (i.e. still considerably below the non-wheelchair user levels), then even on highly conservative assumptions about remuneration levels, this would mean an increase of $300 million per annum in income levels[29]. The effects of such a shift can be considered from a number of viewpoints, as follows:

- From the viewpoint of society as a whole, the benefit is equal to $300 million, which is the amount by which national GDP would be increased annually.
- From the viewpoint of the individual wheelchair user, the income gain would be equal to the difference between their net wage income (plus any benefits that remained payable) and their current benefit income.

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[28] Ibid.

[29] *The Benefits of Accessible Buildings and Transport: An Economist's Approach*, Dr Jack Frisch, p2. The $300 million figure assumes average productivity for the additional wheelchair using workers of $25,000 per annum, approximately $10,000 per annum below that of the workforce as a whole.

- From the government's perspective, the budget would reap expenditure savings equal to the reduced allowances payable to the 12,000 newly employed persons, while there would also be revenue gains equal to the tax payable on the wage incomes of this group.

Frisch also cites a number of potential additional benefits associated with improved building accessibility. People with vision and hearing impairments and people with ambulant disabilities also have lower than average workforce participation rates and are also likely to benefit from improved access to buildings, as provided under the proposed Premises Standard. This further increases the number of potential beneficiaries and, consequently, the likely economic benefits of improved access. Moreover, family members and voluntary carers of people with a disability also experience lost productivity and lower workforce participation. Thus, benefits may also be expected to accrue to this group from improved building access.

Empirical evidence

There are sound theoretical reasons for predicting that improved building accessibility would enhance the employment participation of people with a disability. However, it must be acknowledged that analyses undertaken of previous legislative attempts to improve access to employment do not provide strong empirical backing for this proposition. A number of analysis have been undertaken on the Americans with Disabilities Act (ADA), passed in 1990. The ADA was fundamentally geared to redressing the discrimination that people with a disability experience with regard to their employment opportunities – an area that can also be said to be the main focus of interest (at least with regard to complaints to the AHRC) of the Australian DDA, and therefore of interest to this anaysis.

Unfortunately, a rigorous review of the outcomes by Schwochau and Blanck[30] indicates that the ADA appears to have failed in its aims to increase employment levels among people with a disability. Deleire, writing in the Cato Institute journal, *Regulation*, compared the employment rates of men with and without disabilities in the periods 1985 - 90 and 1991 - 1995 and estimated that the employment rate of men with disabilities had dropped by 7.8%, relative to that of men without disabilities, between these two periods. This relative fall was observed in all age groups, employment categories and disability classes, though it was found to be least pronounced among those with more education, those with a physical disability and older age groups[31].

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[30] Scwochau S and Blanck P. D., *The economics of the Americans with Disabilities Act. Part III: does the ADA disable the disabled?*, Berkley Journal of Employment and Labor Law vol 21 2000 p. 271-313.

[31] Thomas DeLeire*, The Unintended Consequences of the Americans with Disabilities Act,* Regulation, Vol. 23 N. 1 http://www.cato.org/pubs/regulation/regv23n1/deleire.pdf. In 1997,

The most authoritative estimate, that of the National Organization on Disability/Harris[32], indicated that 29% of individuals with disabilities were employed in the 1998 survey compared with 31% in 1994 and 34% in 1986. However, disaggregation of the data showed substantial variability within sub-groups, with some age groups – especially older women – showing increased employment levels relative to their able-bodied counterparts.

The above data implies that the ADA has had little or no effect in improving employment levels among people with a disability and has even been associated with apparent declines in such employment. It is difficult to explain the mechanism by which the ADA might result in lower levels of employment among people with a disability. The requirement for more accessible new buildings means, even without retro-fitting, the stock of more convenient accommodation increases year by year, so that the potential benefits of the legislation should also be rising on a continuing basis.

There are several possible explanations for the observation of no improvement in the employment participation of people with disabilities following the adoption of the ADA. First, while guidelines have been developed to operationalise the Act's requirements in relation to premises (similarly to those currently published by the AHRC under the DDA), very few States have adopted these.

It is also possible that the ADA may have had limited effect due to its inability to address on-going reluctance on the part of employers to hire people who, once hired, may require special and costly facilities in workplaces that would not otherwise be required. Such an effect could exist even if employers were only subjectively of the view that such economic disincentives existed.

Equally, it is possible that the observed outcome is purely driven by supply of people with a disability seeking work. There is some evidence that a large number of US working age people with a disability do not seek work because their options were only low paying jobs. Indeed, in one study, 80% of those without jobs cited this as the reason[33]. The fact that the minimum wage in Australia is high relative to average wages would diminish that disincentive in this country and so might mean that the observed effect of improvements in access would be greater than shown in these US studies. On the other hand, Australia's relatively high minimum wage would result in fewer jobs being made available for the more marginal person interested in becoming employed. This effect might

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DeLaire was awarded a PhD from Stanford for his thesis on Wage and Employment Effects of the Americans with Disabilities Act.

[32] Chartbook on Work and Disability, National Institute on Disability and Rehabilitation, http://www.infouse.com/disabilitydata/workdisability_2_9.html

[33] See Schwochau and Blanck, op cit., p. 284.

also be intensified for those with disabilities where employment carries additional costs to the employer.

In sum, this section has argued that people with a disability experience substantially lower employment and income levels than the general population and that improving building accessibility has the potential to yield substantial economic gains by addressing these employment and income gaps. While these estimates draw from the best available sources, there are considerable uncertainties associated with them and available empirical data does not provide substantial evidence of equivalent legislation having achieved these effects in the United States (US). However, there may be a number of reasons that are specific to the US context that could account for these observations. It seems clear that a carefully integrated policy environment is a necessary condition for maximising the potential benefits, in terms of improved employment participation, of improved accessibility of buildings.

In light of the US data discussed above, the Frisch suggestion of a doubling in employment rates for users of wheelchairs would seem to be unduly optimistic. For the purposes of a "base case" scenario, an increase of 50% over the existing participation rate is assumed. Using Frisch's remaining assumptions, this implies benefits to the economy of $150 million per annum. The Frisch estimate of a 100% increase in participation is used as an upper bound scenario, while the lower bound scenario is based on a zero increase, as seen in the United States. To ensure transparency of the assumptions made in this area, we have tested these figures for sensitivity at both optimistic and pessimistic scenarios (refer chapter 10).

Employment participation of primary carers

Improved accessibility of buildings can also be expected to improve the employment participation of primary carers of people with a disability, albeit indirectly. In this context, the expectation is that demands on such carers will be reduced because of the improved access to buildings enjoyed by people with a disability. This may then increase the time that carers have available to engage in other paid employment.

The Productivity Commission, in its Report on the Disability Discrimination Act argued that:

> *"…greater employment of people with disabilities might be accompanied by greater workforce participation by primary carers. In 1998, the labour force participation rate of primary carers was 59.2 percent, compared with 80.1 percent for people without a disability (ABS 1999b). This difference also suggests that carers also face significant barriers in employment due to the constraints on their time from caring for persons with disabilities and*

possibly to discrimination. To the extent that the DDA allows greater employment of people with disabilities, that effect might be compounded by increased employment of carers as well".

Thus, it can be anticipated that any substantial impact on employment participation by people with a disability as a result of the Premises Standard, as suggested above, will be accompanied by other positive impacts on employment. It is beyond the scope of the current analysis, however, to attempt to quantify any such impacts.

7.6.2. Willingness to pay approach

A second perspective on the potential economic benefits of the Premises Standard relies on the economic concept of community "willingness to pay". This is a widely-used evaluation technique of welfare economics which asks how much people would be willing to pay to avoid a particular problem or achieve a particular outcome – in this case accessible buildings – if they were fully informed of both the probability of their requiring an accessible environment and the costs of an inaccessible environment.

Box 1: Willingness to pay – methodological considerations

Substantial criticisms of "willingness to pay" approaches to economic valuation have been made. These are largely based on the construction of many "willingness to pay" studies, in which respondents are asked their willingness to pay in hypothetical circumstances that are often highly artificial in their construction. The criticisms generally emphasise that respondents have little or no incentive in such circumstances to report accurately their willingness to pay. As a result, highly artificial and often inflated estimates can result.

The material included in this section of the RIS is not based on this form of "willingness to pay" valuation. Instead, the potential benefit estimates calculated are derived on a probabilistic basis and represent the sums that a rational, fully informed individual *ought* to be willing to pay in the particular context. Thus, they are not prone to the subjectivity and potential distortions noted above.

Frisch[34] postulates a "willingness to pay" based valuation that is built on the notion of people "insuring" against the hardships of an accessible environment, were they to acquire a disability. This is based on the formula for a risk neutral individual of:

Willingness to pay = probability of loss x value of the loss.

[34] *The Benefits of Accessible Buildings and Transport*. Dr Jack Frisch, pp 1-2.

Given the observation that 0.5% of the population currently use wheelchairs, this is taken as the probability of an individual requiring an accessible environment at some stage of their lives. The average value of the loss experienced due to a disability is estimated at 40% of income, with half of this loss being due to inaccessible environments. Thus, the loss due to an inaccessible environment is estimated at 20% of income.

This implies that the average person should be willing to pay 0.1% of their income annually to ensure an accessible environment. Frisch estimates a population of 17 million and an average income of $30,000 and thus derives an aggregate "willingness to pay" valuation for an accessible environment of $510 million per year.

An alternative estimate could be derived by applying the 0.1% "willingness to pay" figure to annual GDP for Australia as a whole. This yields an annual aggregate willingness to pay of approximately $720 million[35].

Frisch also identifies two factors which suggest the actual willingness to pay would be somewhat higher than these figures suggest. These are that:

- The probability adopted of needing an accessible environment (of 0.5%) is very conservative, given that, for example, 4% of the population cannot use public transport because of their disability. The 0.5% figure, being based on wheelchair users, does not take account of access issues for people with ambulant disabilities or hearing or vision impairments.
- The calculation ignores any amounts people would be willing to pay for altruistic reasons – i.e. to prevent friends, family and others experiencing an inaccessible environment.

In constructing a base case scenario, two substantial changes are made to the Frisch estimates above. First, it is considered that the extent to which building access issues (in relation to publicly accessible buildings) contribute to the incremental cost of living with a disability, is likely to be substantially less than 50% of the total. Thus, a figure of 25% is substituted in respect of wheelchair users.

Second, it is considered that basing estimation of the benefits of improved building accessibility only on the gains to wheelchair users is too restrictive, as Frisch himself suggests. The figure of 4% of persons who cannot use public transport as a result of their disability is considered a better estimate of the number of people likely to experience these cost reductions to a significant degree. However, as has been indicated elsewhere in this RIS, wheelchair users

[35] Based on extrapolation of March quarter 2003 GDP total of $179.4 billion. See ABS Cat. 5206.0.

are likely to obtain substantially larger benefits than other groups from the implementation of the Premises Standard. In recognition of this, it is estimated that the reduction in the costs of living with a disability experienced by the remaining 3.5% of the population will be equal to 10% of the average total cost figure cited by Frisch.

Thus, in the base case, each wheelchair user would obtain cost reductions of 10% of assumed income, or $3,000 per annum, while the remaining affected group would obtain cost reductions of 4% of assumed income, or $1,200 per annum. The total benefits in this base case are thus equal to $969 million per annum[36].

Frisch characterizes these figures as "willingness to pay" figures, but they might better be understood as being cost savings that would be experienced by people with a disability in the event that better access Standards are adopted. Thus, they are additional to the benefits discussed in the previous section, which are based on increased income.

A true "willingness to pay" figure would need to account both for the fact that people are generally risk averse and for the probability that people would be willing to pay additional amounts for altruistic reasons, as noted by Frisch. These additional elements are estimated to increase the value of the benefits by 20% - giving a total benefit of $1,163 million, and are adopted as the "upper bound" scenario. The lower bound scenario is given by Frisch's original estimate of $510 million per annum.

7.6.3. Adjusting the benefit estimates to account for changes to the proposal

The above benefit estimates were used as the basis for assessment of the draft Premises Standard proposal, analysed in the February 2004 draft RIS. They continue to be used as the basis for benefit estimation in relation to the current proposal. However, the significant changes made to the original proposal require consequent change to be made to the estimation of benefits, as follows:

[36] The adoption of the Premises Standard may not completely eliminate the additional costs incurred by people with disabilities in using publicly accessible buildings, although the Standard has been designed to address all significant access issues. Similarly, the attribution of 25% of the additional costs of living with a disability to factors associated with the use of publicly accessible buildings represents only an imprecise estimate. The benefit estimates presented here should be understood in these terms.

Effect on benefits of changed substantive requirements

As discussed in section 5, above, the revised Premises Standard incorporates a number of reductions in the stringency of specific requirements as well as providing partial exemptions from compliance with the Standard for small buildings in classes 5, 6, 7b and 8.

As shown in Table 3, below, two-storey shops and offices accounted for approximately $950 million worth of construction expenditure in 2002. No detailed breakdown is available as to the value of two-storey warehouses and factories constructed during the same period. However, small two-storey factories and warehouses are considered unlikely to add substantially to this figure. Thus, slightly more than $1 billion per annum of construction activity would potentially be affected by the exemption provisions incorporated into the revised Standard. This is equivalent to around 5% of total construction expenditure. In addition, other less substantial exemptions that have been adopted in the revised standard include exemption for swimming pools with perimeters less than 40m and exemption for holiday accommodation premises providing fewer than four rooms for hire (previously, fewer than three rooms).

As well as these exemptions, significant reductions in the stringency of aspects of the Premises Standard have been made in relation to restrictions on the use of threshold ramps, the required number of accessible entrances, the provision of turning and passing spaces, the dimensions of lifts and the extent to which 90th percentile wheelchair dimensions will be adopted. As noted elsewhere, these changes have been deliberately made in a way that attempts to minimise any resulting loss of access. However, some loss of access will inevitably occur, as will loss of convenience and dignity for some building users with disability.

Given the aggregative nature of the benefit estimates employed in this RIS, it is clearly not possible to calculate directly the impact of the changes made in formulating the revised standard on the initial estimates of total quantifiable benefits. Rather, a qualitative judgment has had to be made by assessing the perceived importance of the above changes, relative to the scope of the Premises Standard as a whole.

It is considered that the changes made are relatively modest in these terms and, consequently, the global effect of the changes made to the Standard is estimated as being equal to a 20% reduction in the total benefits that it would deliver when fully implemented.

7.6.4. Other economic benefits

An additional source of benefits identified by several access experts is a reduction in accidents and, therefore, costs associated with health care and lost production. For example, Ratzka states:

"The reasoning is that accessible environments are also safe environments (see Wrightson and Pope). Examples are ramps rather than steps, elevators instead of staircases. According to the World Health Organization "accidents cause more deaths than any single illness except cancer and cardiovascular disease" (quoted in Ratzka 1984). The number of accidents due to stairs and the associated costs to society can be and has been estimated (see for example Ratzka 1984)"[37].

These safety-related benefits would accrue both to people with a disability and to the general population. Generally usable quantitative estimates of these benefits have not been identified in the course of preparing this RIS. However, an indicative sense of their potential importance can be obtained from the Ratzka paper cited above[38]. Ratzka considers the potential costs and benefits associated with installing lifts in low rise (3 or 4 storey) apartment buildings in Stockholm, Sweden. He converts his total benefit estimates into equivalent rental values. That is, a given annual benefit is expressed in terms of the equivalent impact on the notional rental value (per square metre) of an apartment. Implicitly, this adopts the same "willingness to pay" logic as that of Frisch, cited previously. Ratzka has calculated how much additional rent a rational tenant should be willing to pay annually in exchange for the additional values conferred by the presence of a lift.

On this basis, he identifies benefits based on the potential for reducing or eliminating the costs contained in Table 3, below:

Table 3: Costs incurred due to the absence of elevators[39].

Cost item	Size of cost
Staircase accidents	1.40 to 2.40 *SEK/m^2 /yr
Nursing home and old age home care Accessible housing and community-based services (whose costs are included here) such as 24-hour emergency call	15.60 to 32.40 SEK/m^2 /yr

[37] *A brief survey of studies on costs and benefits of non-handicapping environments*. Adolf Ratzka. Presentation at the International Congress on Accessibility, Rio de Janeiro, Brazil, June 1994

[38] The Cost of Disabling Environments: A Cost Revenue Analysis of Installing Elevators in Old Houses. Report of the International Expert Seminar: Building Concept for the Handicapped Stockholm, Sweden, April 10-12, 1984. Ratzka, A. 1984.

[39] The estimates are based on the present and future population mix in multi-family tenant housing in Stockholm's older suburbs, and on the assumption that elevators are installed in each building upon renovation - regardless of whether people with a disability live there or not.

system, personal assistance for 7 to 35 hours/week, periodic visits by district nurse enable many elderly and disabled to avoid the move to institutional care.	
Personal assistance (home help etc.) The need for these services is decreased by accessible housing.	4.50 to 6.90 SEK/m^2 /yr
In addition, elevators are an amenity valued also by non-disabled tenants.	4.80 to 7.70 SEK/m^2 /yr
Total	26.90 to 49.40 SEK/m^2/yr
*Note: A SEK is a Swedish Kroner	

These costs incurred due to the absence of elevators are equivalent to about half of the annual amortized costs that would be incurred by installing elevators. While the residential context in Australia is clearly very different from that in Sweden, where three and four floor walk-up apartments are quite common, the above provides a general indication of some of the broader benefits that can be derived from improving building accessibility.

As well as the benefits in terms of accidents and injuries avoided by all members of society, noted above, AHRC argues that additional gains due to the Premises Standard's adoption would be likely to include the following:

- Reductions in property damage arising from manoeuvring heavy items up stairs;
- Convenience benefits for families with small children (e.g. in relation to use of prams etc);
- Potential increases in economic activity due to wider availability of accessible services such as restaurants and shops; and
- Potential increases in tourism activity due to wider availability of accessible facilities and attractions.

The quantification of such benefits is clearly not feasible within the current context. However, all of these factors constitute plausible sources of additional benefits deriving from the adoption of the Premises Standard.

8. Expected Costs

8.1. Methodology

The issue of whether the proposed Premises Standard can be said to create new legislative obligations – beyond those already contained in the DDA – was considered in Section 7, above. It was concluded that, while there may be no *formal* increase in legislative obligations, the actual extent of compliance can be expected to increase substantially as a result of the adoption of the proposed Premises Standard and, in particular, the integration of its technical elements into the BCA. Given this, the assessment of costs has been carried out on the basis of a comparison of the requirements contained in the proposed Premises Standard with the current BCA requirements. Where there are no specific access related provisions in the current BCA, standard building practice (as estimated by an expert quantity surveyor who formed part of the RIS project team) was taken as the base-line for incremental cost estimation.

A detailed discussion of the costing methodology employed is included in Appendix A. In broad terms, costs have been estimated by applying the requirements of the Premises Standard to a set of 45 case study buildings, developed by the RIS Steering Committee[40]. The number of cases examined has increased in comparison to the 2004 RIS in order to more closely examine the effect of the small buildings concession. As the Premises Standard proposal no longer applies to Class 2 buildings, these case studies have been removed. The case studies relating to small swimming pools have also been removed due to the proposed change no longer applying to small pools.

The cost implications of each individual provision were estimated by an expert quantity surveyor. The total costs for each case study building were then mapped against ABS and Victorian building activity data to obtain estimates of aggregate annual cost impacts. This methodology therefore allows both the cost impacts on individual building types and cost impacts on the economy as a whole to be determined.

8.2. Estimated costs: New buildings

Appendix B sets out the basic estimates made of the cost of each of the main specific building upgrade items required to implement the Premises Standard, and is accompanied by methodological notes explaining the approach taken to using these cost items. Appendix C also sets out the disaggregated estimates of

[40] The RIS Steering Committee was established under the auspices of the Building Access Policy Committee (BAPC). Membership of the BAPC includes broad representation from the property, industry, government and disability sectors.

the total incremental costs generated for each building case study, consistent with the methodology described above.

Appendix B shows that the major individual cost items that would be required for compliance with the Premises Standard relate to:

- the installation of additional or improved lifts and ramps;
- more accessible entrances;
- additional space requirements in several contexts (e.g. passing and turning space in corridors); and
- additional or modified sanitary facilities.

Appendix C shows what combinations of these individual items would be needed in order to ensure that each of the 21 case studies of indicative new building types would comply with the Premises Standard. That is, Appendix C indicates the additional construction costs that would be incurred in building each of these representative building types to the standard required by the Premises Standard, rather than to existing BCA requirements. Appendix C also includes an estimated "generic construction cost" for each of the case study buildings included. This is an estimate of the current average construction cost for a building of the type represented by the case study. Using this generic construction cost estimate, the incremental cost calculations contained in the matrix are converted into proportionate cost increases.

Table 4, below, summarises the results contained in Appendix C in relation to new buildings. Table 4 shows that there remains a wide variation in the relative costs of compliance with the Premises Standard (i.e. the cost of compliance as a proportion of overall building costs). However, the extent of this variation in relative costs of compliance has been reduced significantly due to the changes made to the original Premises Standard proposal.

Under the original proposal, the incremental costs for new buildings range from a relatively trivial 0.1% in the case of large horizontal shopping centres, to 63% for small two-storey offices.

A more detailed review of the results for the 21 case studies shows that the proportionate cost increases were:

- Less than 1% in 8 case studies;
- Between 1 – 2% in 6 case studies;
- Between 2% and 4% in 2 case studies; and
- Between 5% and 7% in 5 case studies.

Under the current, modified, Premises Standard proposal these costs have been reduced substantially. The largest proportionate cost increase for any case study relating to new buildings is now 6.2%, while only 7 of 21 case studies would now see an incremental cost increase of more than 2% as a result of the application of the Standard. Table 4 includes three new case studies. These relate to two-storey office buildings, two-storey restaurants and two-storey warehouses. Inclusion of the three new 'small buildings' case studies allows the comparison to be made between buildings that would fall below the proposed exemption threshold and those that would not.

It remains the case that the larger the building and the fewer storeys, the lower are the proportionate costs of compliance with the Premises Standard. The case study buildings where the construction cost increases are largest are single storey holiday accommodation buildings, two-storey offices, two-storey school buildings, and two-storey restaurants that fall outside the exemption. Overall, the impact of the revised Standard on the new building case studies can be summarised as follows:

- less than 1% in 8 case studies;
- between 1% and 3% in 8 case studies;
- between 3% and 5% in 4 case studies; and
- More than 5% in 1 case study.

The provision of lifts in small buildings where they would not have previously been required remains a substantial cost driver in some case studies. However, the estimated cost of these lifts is now lower than was estimated in relation to the draft Premises Standard proposal ($100,000 vs $160,000)[41]. This reflects subsequent modifications made to the specific technical requirements in relation to these lifts. In a number of case studies the provision of substantial numbers of additional accessible sanitary facilities also constitutes a significant cost driver.

[41] The provision of exemptions from the requirement to make upper storeys accessible for small Class 5, 6, 7b, and 8 buildings has reduced the degree of uncertainty in estimation of the costs of these lift requirements. It is now assumed that, in the case of buildings that are unable to qualify for the exemption, and therefore require a lift to be installed, a full lift will be required rather than any of the other options set out in table E3.6.

Table 4: Estimated costs of implementing Premises Standard in new buildings: 21 case study buildings

	Single storey – holiday accomm.	2 storey – hotel/motel – no lift	3+ storey 200 room – hotel – with lift	3+ storey 350 room – hotel – with lifts	2 storey – office – dwelling size (with exemption)	2 storey – office – dwelling size (without exemption)	7 storey – office	20 storey – office (av. floor plate of 900m^2)	Large horizontal spread – shopping centre	2 storey - restaurant(s) (with exemption)
Class:	1b	3	3	3	5	5	5	5	6	6
Generic Building Cost ($,000)	$165	$3,750	$26,000	$112,000	$330	$1,860	$16,500	$47,520	$93,500	$550
Regulations' Costs ($)	$7,600	$17,700	$100,000	$158,700	$13,500	$115,250	$222,550	$577,500	$63,700	$15,100
Proportional Increase	*4.6%*	*0.5%*	*0.4%*	*0.1%*	*4.1%*	*6.2%*	*1.3%*	*1.2%*	*0.1%*	*2.7%*

	2 storey - restaurant (without exemption)	7 storey - carpark	2 storey – storage / warehouse (with exemption)	2 storey – storage / warehouse (with exemption)	Single storey – lab/factory –500m^2	3 storey – hospital building	500 seat – theatre	1200 seat – theatre	2 storey – school building	Single storey – community hall	10 000-15 000 seat – stadium
Class:	6	7a	7b	7b	8	9a	9b	9b	9b	9b	9b
Generic Building Cost ($,000)	$3,000	$6,300	$4,250	$5,100	$1,900	$6,600	$4,800	$15,000	$3,300	$1,300	$7,500
Regulations' Costs ($)	$130,600	$27,500	$27,900	$144,900	$21,650	$92,900	$57,400	$116,600	$155,100	$22,900	$522,900
Proportional Increase	*4.4%*	*0.4%*	*0.7%*	*2.8%*	*1.1%*	*1.4%*	*1.2%*	*0.8%*	*4.7%*	*1.8%*	*0.3%*

8.3. Estimated costs: Existing Buildings

Appendix C also provides a detailed costing matrix in respect of 24 case studies dealing with the costs of upgrading existing buildings. Tables 5 and 6, below, summarise the results of Appendix C. Unsurprisingly, the proportionate cost impacts of implementing the Premises Standard are, in many cases, substantially greater in relation to upgrades of existing buildings than in relation to new buildings. This is consistent with findings in other countries that have implemented similar requirements and demonstrates that, in general, it is less expensive to undertake construction work on a new building than it is to retrofit an existing building.

However, in common with the above findings in respect of new buildings, the modifications made to the draft Premises Standard proposal have had the effect of significantly reducing the estimated proportionate cost increases for the great majority of case studies.

Analysis of the original draft Premises Standard proposal showed that for 18 case studies relating to full upgrades of existing buildings the proportionate cost increases involved in applying the Premises Standard were:

- Less than 5% of the upgrade cost in 10 case studies;
- Between 5% and 10% in 3 case studies;
- Between 20% and 50% in five case studies;
- More than 50% in three case studies.

By contrast, the final Premises Standard proposal implies the following estimated cost increases:

- less than 2% in eight case studies;
- between 2% and 5% in five case studies;
- between 5% and 10% in five case studies;
- between 10% and 20% in four case studies; and
- more than 20% in two case studies.

Table 5 includes two new case studies. These relate to two storey office buildings and two storey restaurants. Inclusion of the two new case studies allows the comparison to be made between buildings that would fall below the proposed exemption threshold and those that would not. In addition, two case studies have been deleted from the analysis. These related to the 10m lap pool and spa pool, which fall under the 40m perimeter threshold.

As with the new case studies presented in the previous section, the cost implications are generally smaller for larger buildings and for buildings with fewer storeys. The case studies showing the largest proportionate cost increases in relation to full upgrades are single-storey holiday accommodation (32.9%), two-storey restaurant (20.9%), and two-storey bed-and-breakfast accommodation (17.3%). The smallest increases are for large shopping centres (0.4%), and 1200 seat theatres (1.0%).

A further 6 case studies, presented in Table 6, demonstrate the costs of applying the Premises Standard where buildings undergo partial upgrades. Among this group the highest proportionate cost increase was 9.6% in the case of a seven-storey office building with lifts upgrading one floor. The remaining case studies show cost increases below 8.3%, with 3 case studies falling below 1%.

The main cost drivers, in the cases in which the proportionate cost impacts of the Premises Standard are largest, are broadly similar to those identified in relation to new buildings. For two-storey offices and restaurants that do not benefit from the exemption for smaller buildings, the installation of a lift is easily the largest single cost item. In relation to single-storey holiday accommodation, the major cost items are accessible sanitary facilities and wider doorways. For small single-storey shops, the main costs are for provision of ramps and wider doorways.

As with new buildings, the impacts of the proposed Premises Standard in relation to alterations and additions fall disproportionately on smaller buildings. Again, this reflects the fact that the extent of most of the requirements of the proposed Standard increases less than proportionately with the size and cost of the building. Overall however, the modifications made to the draft Premises Standard proposal have substantially reduced the incidence of very large proportionate cost increases among the case study buildings analysed.

Table 5: Incremental costs of applying the Premises Standard to existing buildings: Full upgrades

FULL UPGRADE	Single storey – holiday accommodation	2 storey – B & B	2 storey – hotel/motel – no lift	3+ storey 200 room – hotel – with lift	3+ storey 350 room – hotel – with lifts	2 storey – office – dwelling size (with exemption)	2 storey – office – dwelling size (without exemption)	7 storey – office	20 storey – office (av. floor plate of 900m^2)	Small single storey – shop
Class:	1b	1b	3	3	3	5	5	5	5	6
Upgrade Generic Building Cost ($,000)	$45	$75	$1,100	$7,000	$10,000	$110	$660	$7,500	$20,000	$35
Regulatory Cost ($)	$14,800	$13,000	$16,500	$95,200	$127,200	$6,250	$112,500	$233,300	$592,300	$2,500
Proportional Increase	32.9%	17.3%	1.5%	1.4%	1.3%	5.7%	17.0%	3.1%	3.0%	7.1%

	Large horizontal spread – shopping centre	2 storey – restaurant(s) (with exemption)	2 storey – restaurant(s) (without exemption)	500 seat – theatre	1200 seat – theatre	2 storey – school building	Single storey – community hall	50m swimming pool - 6 lane
Class:	6	6	6	9b	9b	9b	9b	10b
Generic Building Cost ($,000)	$30,000	$165	$500	$2,200	$6,600	$1,100	$450	$220
Regulatory cost ($)	$57,300	$4,250	$104,250	$23,400	$64,700	$148,200	19,900	$30,000
Proportional Increase	0.2%	2.6%	20.9%	1.1%	1.0%	13.5%	4.4%	13.6%

Table 6: Incremental costs of applying the Premises Standard to existing buildings: Partial upgrades

PARTIAL UPGRADE	2 storey – office – dwelling size (half one floor)	7 storey – office (one floor)	20 storey – office (av. floor plate of 900m^2) (three floors)	Large horizontal spread – shopping centre (10% floor area)	3 storey – hospital building (10% floor area)	40,000 seat – stadium (10% floor area)
Class:	5	5	5	6	9a	9b
Generic Building Cost ($,000)	$45	$1,100	$3,000	$4,500	$8,500	$22,000
Cost of Upgrade ($)	$3,750	$105,600	$207,100	$18,300	$21,000	$86,100
Proportional Increase	8.3%	9.6%	6.9%	0.4%	0.2%	0.4%

8.4. Estimated costs: Aggregate estimates of direct costs

The preceding sections have estimated the incremental costs of the Premises Standard at the level of individual new buildings and upgrades to existing buildings. This has been done on the basis of a set of 45 "case study" buildings, chosen as being representative of the range of buildings being constructed and upgraded across Australia. This has allowed the specific effects of the Premises Standard to be identified in a range of particular contexts. However, it is also necessary to estimate the aggregate impact of the Premises Standard on national building costs.

As outlined in detail in Appendix A, this aggregate cost has been estimated by combining the cost data for individual "case study" buildings, discussed above, with building activity statistics obtained from both the ABS and the Victorian Building Commission (VBC). The VBC data is used in combination with that of ABS as it is more detailed and comprehensive than that of either ABS or other jurisdictions. Of necessity, it is implicitly assumed that the breakdown of building activity found in the Victorian data is typical of the rest of Australia. Adopting this assumption allows more detailed estimates of costs to be made than would be achievable solely using published ABS data.

Table 7, below, is based on ABS data that shows that new building approvals (excluding houses) totalled nearly $23 billion in calendar 2002[42]. Using the VBC data noted above, this total is broken down into categories that are consistent with the above set of case studies. Refer Appendix A for a discussion on why 2002 data has been retained as the basis for the analysis. These reasons include consistency and comparability with the 2004 draft proposal as well as the need to use average, or representative data. The 2002 building data is considered to be reflective of the average level of activity across the building cycle.

[42] The data is taken from building approvals and not the value of buildings completed in the year. More precise figures covering the value of completed work could be developed if reliable data was available for a number of years. This would involve apportioning each year's approvals into the same and successive years' work. However, unless there was a consistent trend of increasing value of building approvals banked up for work, (and this would mean a steady increase in the value of building work in progress) using a single year snapshot is an adequate indicator of aggregate value.

Table 7: Value of new building approvals in Australia – Calendar 2002 ($ m)

					Regulation Costs ($M)		Regulation Cost Increase	
Building Type	**Total**	**Sub-totals**	**New building**	**Alterations & Additions**	**New building**	**Alterations & Additions**	**New**	**Alterations & Additions**
Flats units and Apts	$6,801.1							
* 1/2 stories		$378.4	$318	$61				
* 3 stories		$729.6	$613	$117				
* 4+ stories		$5,692.9	$4,782	$911				
Hotels and Motels	$594.0				$1	$2	0.3%	0.8%
* single-storey		$422.0	$232	$190				
* double-storey		$113.0	$62	$51				
* multi-storey		$59.0	$33	$27				
Shops	$2,643.0				$1	$45	0.1%	3.8%
* single-storey		$2,009.0	$1,105	$904				
* two-storey		$211.0	$116	$95				
* multi-story		$423.0	$233	$190				
Factories	$828.0		$596	$232	$7	$10	1.1%	4.4%
Offices	$4,095.0				$103	$83	3.6%	6.7%
* single storey ground floor		$2,211.3	$1548	$663				
* ground plus first floor		$737.1	$516	$221				
* medium rise (7 stories)		$491.0	$344	$147				
* high rise		$655.0	$459	$197				
Other businesses	$2,077.0		$1,059	$1,018	$12	$62	1.1%	6.1%
Education	$1,959.0		$999	$960	$12	$69	1.2%	7.2%
Religious	$101.0		$52	$49				
Health	$1,405.0		$759	$646	$11	$1	1.4%	0.2%
Entertainment/recreation	$965.0		$492	$473	$6	$16	1.2%	3.4%
Misc	$1,312.0		$669	$643	$7	$24	1.1%	3.8%
Total	**$22,780**		**$14,986**	**$7794**	**$159**	**$312**	**1.1%**	**4.0%**

Sources: 1. *ABS 8731.0*
2. *Victorian Building Commission*

Table 7 shows that the total value of building approvals, of $22.8 billion is comprised of approximately $15 billion in approvals for new buildings and $7.8 billion of approvals for alterations and additions to existing buildings. Thus, the total value of building work comprises approximately two thirds new building and one third refurbishments, alterations and additions.

This break-down of the value of building approvals into estimates of new building and extensions and alterations is needed in order to determine the aggregate cost impact of the Premises Standard since the proportionate cost impacts of the Standard would be, in many cases, substantially different for new buildings vs alterations and additions. In general, the design constraints imposed by the need to work within an existing building structure mean that the costs of upgrading a building to comply with the Premises Standard are usually higher than the incremental costs of incorporating the Standard's requirements in a new building design.

In interpreting Table 7, it is important to remember that the cost estimates which it contains refer to the "steady state" situation in which the Premises Standard has been fully implemented. As noted above, this "steady state" situation will not arise until 16 years after the adoption of the proposed Standard.

8.4.1. New buildings

The estimates of the aggregate increase in the costs of new buildings that are offered in Table 7 were developed by assigning the 21 case studies to an available break down of commercial buildings. The procedure is imperfect but gives a reasonably accurate picture of the aggregate costs of particular categories of building just as the case studies give reasonably accurate cost estimates of individual building types. In net present value terms, aggregate costs for new buildings are estimated at $2 billion at a 7% discount rate and $2.7 billion at a 4% discount rate. Other costs (loss of space and maintenance) were $2.3 billion and $3.2 billion at the 7% and 4% rates respectively were estimated for the new and alterations and additions.

For new buildings as a whole, additional building costs of $159 million per annum are estimated to be incurred, equal to a 1.1% increase in aggregate building costs. This cost increase represents a very substantial reduction of over 75% on the estimated incremental construction costs for new buildings of $694 million per annum (4.6% of total costs) arrived at in respect of the original Premises Standard proposal.

As Table 4 shows, the largest proportionate cost increases were for smaller buildings where the costs of lifts and space modifications could not be spread across a large building area.

8.4.2. Alterations and additions

The estimates of the aggregate increase in the costs of renovations and additions to existing buildings were developed by assigning the 24 case studies relating to partial and full refurbishments to an available break down of commercial buildings. The procedure is equivalent to that followed with regard to new buildings (see previous section). The estimated incremental cost of applying the Premises Standard to building upgrades is $312 million. This represents an incremental cost increase of 4.0%. In proportionate terms this is twice as large as the estimated impact of the Standard on new buildings.

In net present value terms the costs are estimated at $2.6 billion at a 7% discount rate and $3.2 billion at a 4% discount rate. Alterations and additions would have a share in the other costs identified with new buildings above.

This estimated cost once again represents a substantial reduction on the figure of $955 million estimated in respect of the original draft Premises Standard proposal (which constituted a 12.3% increase in aggregate construction costs).

The largest single contributor to the $312 million incremental cost of the Standard in relation to building upgrade works is office buildings. This building class accounts for $83 million, or approximately one quarter of the total. A further $62 million in incremental costs arise from educational buildings (Class 9b), while $45 million of incremental costs relate to upgrades of shops. In the case of both offices and shops, the largest proportion of the incremental costs arises from smaller buildings.

8.4.3. The impact of "unjustifiable hardship" provisions

In considering the costs in relation to upgrades of existing buildings, it is important to weigh the effect of Section 23(b) of the DDA, which provides an exemption from the general duty not to discriminate in providing access to premises to the extent that providing access would cause "unjustifiable hardship". The unjustifiable hardship (UJH) exemption is designed to prevent the DDA requirements having the effect of imposing costs that are out of all proportion to the gains likely and would cause substantial hardship to those required to comply. The UJH provisions apply to both building upgrade works and to new buildings although, in practice, it is expected that the provisions will be used relatively rarely in relation to new buildings[43].

The term "unjustifiable hardship" is not defined in the DDA, although Section 11 sets out a range of matters to be taken into account in determining whether UJH would result in a particular case. Similarly, in giving expression to the

[43] The original proposal would have applied the UJH provisions solely to building upgrade works.

DDA requirements within the BCA, Part 4, 4.1(4)(a) of the modified Premises Standard provides that in determining whether compliance ... would impose unjustifiable hardship … all relevant circumstances are to be taken into account including:

(i) any loss of occupiable or rentable area that is reasonably likely to result from compliance with the requirement;

(ii) the cost that would be incurred in upgrading ancillary features in relation to the overall cost of developing the new part; and

(iii) the resources reasonably available to the person.

Also to be taken into account are the extent to which the building is intended to be used by the public, whether it serves significant cultural, religious, artistic, sporting and educational needs of the community and the extent to which alternative access is available to people with a disability. The unjustifiable hardship provision is also relevant to the degree that there is a heritage value that might be compromised or that there are topographical restrictions[44]. The extent to which building work involves the use of public funds is also a relevant consideration, although this is, by definition, not a concern for regulation of business and private individuals.

Since the release of the 2004 draft proposal, further guidance material has been included in the Premises Standard to assist with the consideration of UJH. This change is intended to provide additional clarity and predictability in interpretation, rather to change substantively the nature of the tests to be applied.

The application of the UJH provisions is to be undertaken on a case by case basis, taking account of individual circumstances. As well, it must be noted that the decisions made will be taken by a variety of individuals and bodies. A building certifier would be able to make judgements regarding UJH exemptions. However, where a certifier does not wish to do so, an opinion could be sought from the building administration in the relevant State or Territory, or a panel constituted for this purpose by it. It is anticipated that each State and Territory will adopt a Protocol – developed as a model by ABCB – to guide the application of the UJH provisions. The model contained in this Protocol facilitates the establishment of an expert Access Panel to provide an opinion on the application of UJH exemptions on request[45].

Given these factors, and the fact that there is relatively little experience to date with the application of the UJH provisions of the DDA in the access to premises context, the practical impact they would have in reducing the effective costs of the Premises Standard in relation to new and existing buildings is difficult to estimate. However, it is apparent from the discussion of

[44] This would allay fears of a repetition of a notorious US case concerning an eating establishment, the difficult access to which was an attraction.

[45] The Access Protocol has been the subject of a separate impact analysis process. For detail, please contact ABCB.

the cost impacts in relation to individual case study buildings that the cost impacts are substantially higher for two-storey office buildings and shops than for most other categories, while the extent of building activity in relation to these building types is also high.

It is expected that the UJH provisions will be utilised predominantly for existing buildings undergoing alteration or addition. However, the modifications made to the 2004 draft proposal imply that substantially less use of the UJH provisions will need to be made than was estimated in the draft RIS in relation to the 2004 draft proposal, owing to the proposed exemption of 'small' buildings i.e. those buildings up to 3 storeys with a floor space (excluding the entrance level) of not more than 200m² per storey.

It was noted in the draft RIS that court decisions applying similar hardship provisions in the United States context have tended to regard any increase in costs greater than about 20% as being unjustifiable. Whereas there were nine case studies under the 2004 draft proposal in respect of which the expected cost increase exceeded this threshold, this is no longer the case. As indicated in tables 4, 5 and 6, above, there are now only two case studies in respect of which the estimated cost of the Standard would exceed this threshold. Moreover the largest percentage cost increase is now only 32.9% whereas, under the 2004 draft proposal, the largest percentage cost increase was more than 140%.

Consequently, it is necessary to reduce substantially the estimate made in the draft RIS of the likely effect of the UJH provisions. The draft RIS suggested that the operation of these provisions in practice would be likely to reduce the notional cost of compliance in respect of building upgrade work by around $155 million per annum. Given the very substantial reductions in the proportionate cost impacts of the Standard that have been made because of the proposed small building exemption, it now appears likely that the impact of the UJH provisions may be as little as 15% of this size. That is, for present purposes it is estimated that the operation of the UJH provisions will reduce the notional cost of compliance for building upgrades by only $20 million per annum[46].

8.4.4. The impact of "owner/tenant" issue

As noted in chapter 5.2, tenants will only be required to make accessible the affected area that falls within the tenant's lease, while owners will be required to make accessible the areas in which the work is being undertaken including

[46] This conclusion has been reached notwithstanding that the modified Standard would now apply the UJH provisions to new buildings. This reflects the fact that, in practice, it is expected to be only in very rare instances that UJH provisions will be used with respect to new buildings, given that the starting point for such buildings is, by definition, a "clean sheet" design and that this provides substantially greater opportunity to accommodate access requirements at a reasonable and proportionate cost.

the path of travel to the new work. Refer to Table 8 for an assessment of the impacts.

We note that each cost item has been analysed and allocated to the owner if it is predominantly related to public areas. This provides a slightly conservative estimate of owner costs as some costs, such as those for accessible toilets, will have an element of public area cost in them, but are predominantly related to the individual tenancies.

Table 8: Impact of "owner/tenant" upgrade delineation

Class/Type	Impact on owner	Impact on tenant	Discussion
Class 1b: B&Bs and small accommodation facilities	None	None	It is assumed there are no "tenants".
Class 3: Hotels (medium and large)	None	None	While a small proportion of these have strata-titled rooms with lease-backs from owners, none of these “small-investor owners” will be conducting upgrade activity.
Class 5: Offices	For 2 storey offices – None. For 7 & 20 storey offices: some costs (refer Discussion)	None (for 2 storey offices)	For the two "partial" upgrade case studies, the proportions of the costs that become “owner costs” are 84.5% and 95.5%. For the two "full" upgrade case studies, the proportions of the costs that become “owner costs” are 46.2% and 56.5%. Refer footnote[47]
Class 6: Shops	80% of	Borne only	The vast majority of costs relating

[47] This implies there will be significant cost reductions in this regard if owners are not required to undertake these upgrades of public areas when a tenant upgrades.

We have assumed that 50% of upgrades in these categories are tenant upgrades and that costs are reduced by 90% in the case of partial upgrades and 51.3% in the case of full upgrades due to the public area elements not having to be completed. The difference in annual aggregate costs is $7 million.

This aspect of the impact of the proposed change is modeled by delaying these costs (i.e. the $7 million per annum estimated above) being incurred by 50% of the assumed renovation cycle.

and restaurants	restaurant and virtually 100% of shopping centre costs	by "anchor tenants" whose leased space is large enough to contain sanitary facilities.	to mall-type shopping centres relate to public spaces and, hence, become owner responsibilities. 2 storey restaurant costs are largely owner responsibilities, since the lift is the key item here.
Class 8: Factories	None.	None.	These buildings do not appear to be affected by the change.
Class 9: Hospitals/theatres /schools/stadiums /community halls	None	None	These buildings do not appear to be affected by the change
Class 10: Swimming pools	None	None	These buildings do not appear to be affected by the change.

8.4.5. Other direct costs – loss of usable space

The preceding sections have estimated the additional building costs that would result from the adoption of the Premises Standard. Additional costs would also be incurred as a result of the loss of useable space that arises from the need to devote additional space to larger circulation spaces, larger numbers of accessible sanitary facilities and the like. These costs of lost usable space were estimated in the draft RIS to average around 1.7% of what would otherwise constitute Net Lettable Area (NLA) for new buildings and 4% in existing buildings. The differential impact is, as with other cost items discussed, a result of the fact that changes can more easily and efficiently be accommodated where an entirely new design is being undertaken than where alterations to an existing building are proposed.

The costs of the additional space requirements for new buildings have been included in the previously stated estimate of $156 million per annum in additional construction costs. This reflects a methodological approach in which it is effectively assumed that additional building area is added to offset the space using impacts of the Standard and yield an outcome in which a given “target” of lettable space is provided. Submissions received in response to the draft RIS pointed out that this response would not always be practicable. However, this remains an appropriate means of costing the impact of the Standard on the lettable area of buildings, from a conceptual viewpoint.

The costs of lost NLA in relation to existing buildings are not included in the above calculations. This asymmetric treatment of these costs is made inevitable by the fact that it is likely to be impractical, in most cases, to add to

the size of an existing building in order to offset the lost usable space. Consequently, the costs of lost usable space in renovated buildings must be added to the above cost figures.

As indicated, it was estimated in the draft RIS that the loss of usable space will average 4% in respect of existing buildings, although the actual loss of space will vary quite substantially between different building types[48]. These can be considered to be equivalent to a loss of 4% in the capital value of the buildings in question[49]. For the purposes of estimation, the value of building upgrade activity undertaken (estimated as $7.8 billion in 2002) is used to represent the capital value of the resulting building works. Thus, the estimated production of 4% in this capital value is equivalent to an additional cost of $312 million. Conceptually, this cost of $312 million is equal to the loss in value of buildings upgraded in the given year, considered over the full life cycle of that building upgrade work. Thus, the cost of $312 million would be incurred in each year.

The revisions made to the draft Standard also require that this estimate of the value of lost NLA be revisited. Most of the space-using requirements of the originally proposed Standard have been modified in such a way as to substantially reduce the likely loss of lettable area. However, it must also be noted that several submissions made in response to the draft RIS argued strongly that this initial estimate of NLA was too low.

Clearly, any estimates of the size of this cost of item will be extremely imprecise. However, based on comparison of the provisions of the current Premises Standard proposal and those of the initial proposal, the best available expert advice is that a reduction of 50% in the original estimate appears to be justified. Thus, a revised estimate of 2% of lost NLA, applying to building upgrade works, has been adopted for present purposes. This is equivalent to a cost of $156 million per annum.

8.4.6. Summary of direct cost impacts

The preceding sections have identified probable building cost increases due to the implementation of the Premises Standard of $620 million annually[50]. This comprises incremental costs in respect of new building works of $159 million, incremental costs in respect of building upgrades of $305 million and costs of lost NLA in respect of building upgrade works of a further $156

[48] This variability necessarily means that there is considerable imprecision attached to the estimated costs of lost space, as applied to existing buildings. The 4% figure represents a professional quantity surveyor's judgement as to the likely average impact, taking into account the profile of renovation and alteration activity.

[49] Note that this refers only to those parts of a building that are subject to upgrade works. That is, if 2 floors of a 20 storey building are upgraded, the loss in NLA will be 4% of the area contained by those two floors. The following calculations are based on this approach.

[50] Note that this is the "steady state" cost, which only comes into effect from year 15. This cost also excludes maintenance costs, which are discussed below.

million. In proportionate terms, these costs are equivalent to an increase of 1.1% in construction costs for new buildings and 4.0% in construction costs for building upgrade works. Net present value costs are as follows:

Table 9: NPV Cost of Proposals ($billion)

	7% discount rate	4% discount rate
New buildings	2	2.7
Alterations and additions	2.6	3.2.
Loss of space and misc	2.3	3.2
Total	6.9	9.1

Loss of space and other costs could be allocated to the new and alterations category pro rata.

These costs clearly remain substantial. However, they represent a very significant reduction in the estimated costs of the original Premises Standard proposal. Those costs totalled approximately $1.8 billion annually, comprising $694 million in cost increases in relation to new buildings, $800 million of cost increases in relation to building upgrade works and $312 million in respect of the cost of NLA in relation to building upgrades. These costs represented a 4.6% increase in construction costs for new buildings and a 14.3% increase in construction costs for building upgrades.

These substantial reductions in the expected cost of applying the Premises Standard arise from the inclusion of important exemption provisions in relation to some small buildings and a range of reductions in the degree of stringency of specific provisions.

As noted in the draft RIS, costs in relation to new buildings would be reduced to the extent that current practice is to provide a greater degree of access than the existing BCA requirements – whether because of concern to ensure compliance with the DDA or for other reasons.

A number of important qualifications must be made in relation to these estimates. In particular, the problems encountered in translating the categories used in building data collections to the case study structure mean that some approximations have been made and introduce elements of uncertainty.

An additional direct cost is that related to the maintenance of lifts and other machinery required to be installed. These costs were not quantified in the draft RIS. However, quantitative estimates of maintenance costs in respect of both lifts and hearing augmentation devices have been included in the current analysis. These estimates relate only to additional equipment that would be installed as a result of the application of the Premises Standard, and do not include maintenance costs for lifts that would in any event be installed.

These estimated maintenance costs rise from $3 million in year 2 to $58 million in year 30. The steadily increasing pattern of these costs reflects the application of the Standard to a steadily increasing proportion of the building stock.

8.5. Indirect cost impacts

The above discussion of costs relates only to the direct costs of applying the Premises Standard. It effectively assumes that the cost increases that flow from the adoption of the Premises Standard would have no effect on people's behaviour – that is, that people would continue to make the same choices that they currently make about the type, size and number of buildings to be erected, altered, extended and upgraded. However, this will clearly not be the case, in particular in those areas in which substantial cost impacts are felt. These changes in behaviour give rise to a range of indirect cost impacts, which are discussed in this section.

8.5.1. Substitution effects

Substitution effects would be of a number of types, as follows:

- There would be changes in the types of buildings constructed. For example, it remains likely that there will be significant declines in construction of small office and shop buildings: these would become considerably more expensive, notwithstanding the substantial impact of the revisions made to the proposed Premises Standard in reducing cost impacts in these areas. To the extent that construction of small offices and shops declines, the construction of larger office buildings and mall-type shopping and retail facilities, as well as other building options would be expected to be favoured instead[51].
- Changes in the balance of building expenditures between new building and renovation activity. New buildings will be favoured, since renovation/upgrading of existing buildings will be relatively more expensive in most cases.
- There would be an overall reduction in building activity, since the cost of building, relative to other expenditures, has risen. Such an impact is unlikely to be directly observable in practice, given the range of factors that affect overall building activity and the observed volatility of building activity levels over time. It would, however, remain real. Again, however, the changes made to the draft Premises Standard will have the effect of significantly reducing the size of this impact.

[51] As with the aggregate effect on building activity discussed below, this impact of the Premises Standard may not be directly observable – both because numerous factors affect building activity and because there are longer-term market trends and other government policies at work which affect the trends in demand in these areas over time.

The existence of these impacts is considered as certain, in terms of the laws of economics, requiring only that the demand for a product tends to decline as its price rises (i.e. that it is a "normal" good). However, the size of the impact in practice depends on the elasticity of demand – i.e. on how sensitive demand for a product is to price changes. As noted below, estimates of the elasticity of demand for commercial buildings have not been found in the course of preparing this RIS. Hence, there must be considerable uncertainty as to the size of these effects. Nonetheless, Section 8.5.3 argues that even small reductions in demand would have important flow through effects on the economy as a whole. The following section discusses the mechanisms by which these impacts occur.

8.5.2. Effects of Increased Costs of Buildings

In order to clarify the economic dynamics that will determine the longer-term impact of the regulations, the following section is presented in two parts. The first focuses specifically on the effects on new buildings versus existing (unrenovated) stock and shows the basic effects of changes in relative prices. The second section takes a further step by adding consideration of the different price impacts of the Premises Standard on new buildings and renovations/alterations.

1. *If the regulations were only to affect new buildings*

New buildings are only a small proportion of the total stock of buildings in any one year; hence their increased costs will have only a minor initial effect on overall prices.
The new buildings themselves, other than those in the pipeline at the time of the decision that increased their costs, will be priced to recover their costs. However, the more abundant existing stock of buildings necessarily limits the prices that can be charged successfully for new buildings. This inevitably means that some new buildings will not be built.

Existing buildings will see a reduced level of competition and their rental values will rise over a period (to the benefit of the owners and to the cost of renters). As the rental rise approaches the pre-regulation "steady state", new building work will resume a level of activity similar to that previously experienced, albeit somewhat lower as the increased costs will have led to a small permanent reduction in commercial building demand.

All rents are likely to rise proportionately with the cost impact on new replacement buildings. For older premises that are, by definition less suitable than the newest buildings, this will incorporate a normal rental discount. Nonetheless, owners of existing buildings will benefit from a windfall gain as rentals reflect the higher costs of new buildings. For their part, building users will have permanently increased rental costs reflecting the increased building costs.

Because there are different impacts on different types of building, the pattern of outcomes will vary. If there is a substantial price-induced reduction in

demand for smaller buildings incorporating lifts and other high cost modifications this could be offset somewhat by increased demand for larger buildings in which the cost of these features can be spread more widely, resulting in lower proportionate cost increases.

In addition, some required changes could considerably reduce the usefulness of certain types of buildings. For example:

- re-designing and relocating lifts will mean that the integrated marketing value of certain buildings e.g. department stores, is likely to be diminished;
- the requirement to re-engineer pools in hotels in order to provide access may cause some hotels to abandon these facilities or to reduce their size (below the 40 metre perimeter threshold for application of the access requirements) with adverse impacts upon the hotels' ability to meet consumer demand; and
- construction of buildings on undulating land would make the required provision of accessible entrances difficult or even impossible in some cases. This is likely to bring costs to the building owners and result in the likely outcome of fewer entrances in general, especially in hilly areas like Sydney, resulting in major impacts on general street use.

Due to the prevalence of certain types of buildings, e.g. two-storey offices/shops with offices, substantially raising their costs through the regulations will have a marked affect on urban geography. In turn, this will bring implications for land values, public transport and service delivery that require further analysis.

2. *Where the regulations affect existing, as well as new buildings*

The Premises Standard's requirement for access to be provided where buildings are upgraded will lead to an accelerated rate of scrapping of the building stock, since the relative price of renovated buildings will rise in relation to the price of new buildings. At the same time, existing buildings are likely to remain in use in an unrenovated state for longer. There are clearly important welfare losses involved in having buildings used in ways that are less than optimal because changing their use would trigger a need to undertake costly or space reducing renovations that provide inadequate revenues to justify the expenditure incurred. Similarly, there are welfare losses involved in maintaining use of existing premises rather than building new, more suitable premises, the costs of which have been boosted by regulatory requirements beyond a point at which the savings are not commensurate with the additional costs.

Particularly over the medium to longer term, the higher costs of buildings (resulting from the fact that costs for both new and renovated buildings have increased) is likely to reduce the demand for building space, thus offsetting some of the rental price increases identified and reducing the demand for new buildings. In essence, requiring new and existing buildings to meet the new regulatory requirements simultaneously will compress the timing of the cost effects that would be felt if the regulations applied only to new buildings.

8.6. Cost offsets

The above discussion of costs can be seen as assuming, implicitly, that owners and users of buildings generally do not obtain any offsetting benefits from the provision of accessibility requirements. That is, it is implicitly assumed that benefits accrue only to people with disabilities who use these buildings.

In practice, this will not be the case. It is true that many of the items specified in the Premises Standard would have a limited, if any, value to people without a disability. Accessible sanitary facilities might be cited as an example of this. However, other provisions will clearly have wider benefits. Increased provision of accessible entrances, larger lift plates and other related provisions can be expected to improve circulation within the building for all users, whether they have a disability or not. These benefits might be particularly significant in the context of deliveries, moving furniture and office equipment, and so forth.

To the extent that these offsets exist they should, conceptually, be included among the benefits of the Premises Standard. This RIS discusses the benefits of the Premises Standard for people who do not have disabilities in qualitative terms because it has not been possible to quantify these benefits. The existence of these benefits is again noted here in order to ensure that they are taken into account by the reader. We note, however, that comments received in response to the draft RIS indicated that stakeholders differed widely in their perceptions of the size and importance of these benefits.

8.7. Summarizing Economic Costs

Combining the direct and indirect costs of the proposed Premises Standard brings increased economy-wide costs estimated at around $620 million per annum. As noted above, this total cost comprises:

- $159 million in annual cost increases in respect of new buildings;
- $305 million in annual cost increases in respect of building upgrades; and,
- a further $156 million in annual costs of the lost NLA, again relating to building upgrade works.

As well, the broader impacts of these regulatory proposals include:

- a transfer between parties, in this case revenues dedicated to specific uses that are transferred from the community in general to people with a disability; and
- distortions that the cost impost brings in terms of loss of “welfare” stemming from expenditure being diverted away from the goods and services that become relatively more expensive.

It is the second facet that is the true economic cost of a regulatory intervention. However, measuring this is difficult because elasticities of demand (the response of users to higher prices) are difficult to estimate. Estimates of demand elasticities for commercial buildings could not be found, possibly because such measures are more commonly applied to consumer goods.

The economy-wide effects are often measured by general equilibrium models of the economy such as those of Monash University, Access Economics and that originally developed by the Australian Treasury (the Murphy Model). One application of such models was commissioned by the Property Council of Australia to assess the case for removing stamp duty on property transfers[52]. The report, undertaken by Access Economics, found the economy-wide costs of stamp duty on conveyancing (which it modelled as a gain from reducing stamp duty) was greater than any other imposts it measured. The cost – resulting from distortions in demand and supply, and hence economic activity - of a tax on non-residential property was estimated to be equal to 60% of the revenue raised by the tax. This was found to be twice the cost in economic distortions of a tax raising the same revenue from residential property or from gambling.

This large economy-wide effect of property taxes is due to the fact that property is fundamental to a wide range of income-generation activity. The taxes tend to bring distortions to almost all goods and services and, even when set at seemingly low levels, can have important impacts. The adverse effects of such property and investment taxes are the main reason why governments try to avoid property taxes and were a major motivation behind the GST, accompanying which was a phasing out of certain property taxes and taxes on property transactions.

This implies that the costs of the economic distortions resulting from the implementation of the Premises Standard are likely to be relatively high. For example, if the 60% estimate cited above is applied to the estimated annual cost of the proposed Standard of $620 million, it would imply an additional "second-round" cost of $372 million. However, while the impact of the Standard is arguably conceptually equivalent to a property tax, it is far from clear that the above estimate can reasonably be applied to develop a quantitative estimate of the likely second-round costs. One significant difference is that, as the previous analysis has shown, the effective "rate" will be highly variable between different types of buildings and, in fact, is not easily predictable *ex ante.*

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[52] Access Economics, *The Economic Case For Removing Stamp Duty on Commercial Property Transfers: A Quantitative Analysis for New South Wales and Australia*, February 2003:

http://www.propertyoz.com.au/nsw/advoc/subs/Access%20Economics%20Stamp%20Duty%20Report.pdf

It may be that any distortions will be greater in relation to private expenditures than in relation to Government expenditures, since Governments can be considered to be less cost-sensitive in some respects. However, it is apparent that governments are increasingly using buildings that are rented from the private sector, rather than commissioning purpose built buildings themselves. This suggests that the distorting effects discussed above may be substantial in both areas.

The existence of these distortions means that the adoption of the Premises Standard would have potentially important impacts on the ambulant population. For example, while Section 7, above, has indicated that employment benefits for people with a disability would be expected to flow from the adoption of the Premises Standard, it can also be expected that there would be some offsetting employment losses among the population in general. These losses would be the result of the increase in the cost of buildings, combined with the role of buildings as a substantial productive input in a wide range of industries and the limited ability of businesses to substitute away from the use of buildings.

As with any increase in the price of a productive input, one result will be a reduction in the demand for complementary inputs. To the extent that labour is a complement to buildings in productive processes, negative impacts on employment can be expected to result. As well, the increase in the price of buildings reduces real income and, as a result, reduces demand generally.

The size of these negative impacts on employment may be increased by the fact that, as noted elsewhere, the cost impacts of the proposed Premises Standard are proportionately largest in relation to smaller buildings. This suggests that small businesses will be most affected, while small businesses are generally more labour intensive than the economy - wide average.

An additional likely effect of this disproportionate impact on smaller buildings is that the pattern of building is likely to change in ways that may have broader significance in a number of areas. An area of significance is the incremental cost impacts identified in relation to small shops and offices. These cost increases, while substantially smaller than under the original Premises Standard proposal, remain much larger than the impacts estimated in relation to large shopping centres and office blocks. The conjunction of these observations suggests that the modified Premises Standard could reinforce the long-term shift away from local, “strip” shopping centres, toward large shopping, office and mall complexes to some degree.

Such a shift could be expected to have a variety of social and economic impacts, analysis of which is beyond the scope of this RIS. However, one important potential impact of such a shift is that people with a disability would be likely to be disadvantaged by it, to the extent that such malls were less accessible to them from the point of view of transport availability.

8.8. Costs to the public sector

As substantial owners, builders and renovators of non-residential buildings, government at Federal, State/Territory and local levels will incur a substantial proportion of the costs estimated to result from the implementation of the proposed Premises Standard. This section provides estimates of those costs, although substantial uncertainties exist which limit the degree of confidence with which these estimates can be put forward.

Table 10, below, provides a breakdown of the total value of non-residential building approvals by sector for financial years 2001-2005.

Table 10: Value of non-residential building approvals by sector

Year	Private	Public	Total	Public as % of total
2001-02	$16.8bn	$4.0bn	$20.8bn	19.2%
2002-03	$23.2bn	$3.7bn	$26.9bn	13.7%
2003-04	$22.7bn	$4.1bn	$26.8bn	15.3%
2004-05	$24.6bn	$4.5bn	$29.1bn	15.5%
Average			**$25.9bn**	**15.9%**

Source: ABS 8731.0 - Building approvals, Australia

Table 10 shows that, over the four years, the public sector has, on average, been responsible for 15.9% of the value of total non-residential building approvals. This aggregate percentage figure can be used as the basis for developing very broad estimates of the likely costs to the public sector of implementing the proposed Premises Standard.

If it is assumed that the proportionate cost increases associated with new buildings completed by the public sector (and building upgrade work completed by the public sector) are equivalent to those estimated for the economy as a whole, then the figure of 15.9% can be applied to the estimated annual cost associated with the implementation of the Premises Standard of $620 million. This suggests that the annual cost to governments of implementing the proposed Premises Standard could be around $98.6 million.

However, there are two substantial difficulties with this estimate. Firstly, the estimate implicitly assumes that the profile of building types approved for construction by the public sector is equivalent to that approved for construction by the private sector. This will clearly not be the case in practice. A more sophisticated estimate can be attempted by considering the proportion of public sector building activity to total building activity in a more detailed fashion.

Table 11, below, provides an estimate derived on this basis. The approach taken is to build up partial cost estimates for each building use type. This is done by determining the percentage of total building activity in respect of an individual building use type that is accounted for by the public sector and

applying this percentage to the total incremental cost of the Premises Standard for that building use type. This method is followed for each of those building use types in respect of which the above analysis has shown that the proposed Premises Standard would have a substantial cost impact. In respect of the remaining proportion of the costs of implementing the proposed Premises Standard, the figure of 15.9% is adopted.

Table 11: Major cost impacts for government (annual basis)

Building Use	**Total cost impact**	**Public sector % of total activity[53]**	**Public sector cost impact**
Education	$81m	68.3%	$55.3m
Offices	$186m	11.2%	$20.8m
Health	$12m	70.8%	$8.5m
Shops	$46m	1.4%	$0.6m
All other	$146m	15.9% (assumed)	$23.2m
Sub-total	*$471m*	*21.3%*	*$100.3m*
Plus lost NLA	$156m	21.3%	$33.2m
Less UJH	$20m	21.3%	-$4.62m
Total	**$647m**	**21.6%**	**$139.8m**

Table 11 shows that, using these assumptions, the estimated cost to government increases to $139.8 million, compared with the previous estimate of $105.3 million. Given that specific estimates of the proportion of public sector building activity within total building activity have been identified in respect of most of the major contributors to the estimated total cost of implementing the Premises Standard, this more detailed estimate is considered likely to be more accurate than that given above.

Table 11 suggests that the public sector will bear approximately 21.6% of the total cost of implementing the Premises Standard. If this percentage is applied to the estimated NPV of the costs of implementing the Premises Standard over 30 years, of $9.3 ($6.9) billion, an estimate of the NPV of the costs to the public sector over this period of $2.0 ($1.49) billion results. Such a figure is problematic, however, because the above calculations do not distinguish between the very different implications of the Standard for new buildings and building upgrade works across different building use types. That is, with respect to flats and apartments, as well as offices, the costs of the Standard are approximately evenly distributed between new building works and building upgrade works. By comparison, with respect to educational buildings, the great majority of the costs associated with the Standard related to building upgrade works. Unless these differences are accounted for, the above estimates must be seen as being subject to a significant degree of error.

[53] Based on data for 2000-01 - see ABS8731.0. This represents the most recent period for which a detailed breakdown is published. Note, however, that the total value of non-residential building activity for this period ($12.8bn) is very similar to the equivalent figures for 2002-03 ($13.7bn) and 2003-04 ($12.9bn).

An additional factor suggests that the above may underestimate the true cost to the public sector in one important respect. As table 11 indicates, the public sector is directly responsible for only 11.2% of total office construction. This is clearly an underestimate, given that the public sector workforce represents around 16% of the total workforce. The difference is accounted for by the substantial propensity of the governments to rent office space from private landlords. Data from the Australian Procurement and Construction Council (APCC) illustrate the relative proportions of building area owned by State and Territory governments, and occupied by them, on a leasehold basis. Table 12, below, summarises this data.

Table 12: Building area occupied by State/Territory Governments (m^2)

	CBD	Other Metro	Regional	Total
Owned	**697,976 (37.8%)**	**389,466 (35.8%)**	**223,167 (26.0%)**	**1,310,609 (34.6%)**
Leased	**1,146,395 (62.2%)**	**699,218 (64.2%)**	**636,569 (74.0%)**	**2,482,182 (65.4%)**
Total	**1,844,371**	**1,088,684**	**859,736**	**3,792,791**

Source: Australian Procurement and Construction Council

Table 12 shows that State and Territory governments occupy a total of 3.8 million square metres of building area and that 2.5 million square metres, or approximately two thirds of this total, is leased. Thus, the above estimates of costs to the public sector associated with the adoption of the Premises Standard are substantially less than the whole of the likely cost to governments. The estimates presented above are based solely on the expected cost increases associated with government building and renovation activity. However, increases in the cost of construction and renovation activity will necessarily flow through to increases in rental costs.

For the current purposes it will be assumed that the adoption of the Premises Standard will not lead to any long-term reduction in the rental rate of return to building owners. This implies that a given percentage increase in construction/renovation costs will yield an equal percentage increase in rental prices. The aggregate cost data presented above shows annual increases in the costs of construction and renovation activity associated with the standard estimated at $620 million. This is equivalent to an increase of 2.7% on the base year value of building and construction activity of $22.8 billion.

Further data from APCC show that total rental payments in respect of this leased property were $689.9 million in the 2004-05 financial year. As noted above, however, the APCC data relates only to State and Territory governments. Other ABS data shows that State and Territory governments account for only 73.6% of total public sector employment[54]. Given this, the total rental figure of $689.9 million cited above must be inflated by a factor of

[54] See *Wage and Salary Earners, Public Sector, Australia.* ABS 6248.0, June 2003.

(1/0.736 = 1.36) in order to arrive at an estimate of the total rental paid in respect of leased buildings by the Federal, State/Territory and local governments. This yields a total rental figure of $937.4 million.

Applying the above estimate of the 2.7% rental increase to this total yields an estimated "steady state" increase in annual rental payments by governments of $25.3 million. This can be added to the above estimate of increased construction/renovation costs of $139 .8 million per annum to yield a revised estimate of the total annual cost to government of $165 million.

Box 2: Cyclical impacts

A final difficulty, when seeking to estimate the costs to government of the proposed Premises Standard, is that the proportion of the value of total building attributable to the government vary substantially at different stages of the building cycle. For example, Table 9 shows a variation in the percentage of total building approvals accounted for by the public sector of 5.5% between 2001-02 and 2002-03. Further review of the table indicated that the level of public sector building approvals is relatively constant from year to year, while the level of private sector building approvals is considerably more variable. This is unsurprising given that public sector decision-making is largely unaffected by the cyclical factors that affect private sector building activity.

To the extent that the calendar year 2002 building activity data used as the basis for the above cost estimates reflect a “typical” year’s building activity, the estimates made of the cost likely to be incurred by the public sector may be appropriate. However, if the 2002 building activity data represents a year of above-average building activity, it is likely that the result would be that the above calculations effectively underestimate the costs to government of the proposed Premises Standard.

Conclusion

The above estimates suggest that the cost to Australian governments of implementing the proposed Premises Standard will be around a quarter of the total estimated cost (i.e. $165m/$620m = 26.6% of the estimated annual cost). This is equivalent to costs having a NPV of $2.3 at a 4% discount rate and $1.7 billion at a 7% discount rate over 30 years. Such costs are clearly substantial in absolute terms, albeit they remain relatively small within the context of overall budgetary expenditures by Australian governments. A substantial proportion of the identified costs is likely to be concentrated in a few portfolio areas, suggesting the need for attention to be given to the likely necessity of compensating for these impacts through the budget process. As Table 11, above, shows the largest single impact is likely to be found in the education sector. More broadly, it is apparent that costs on the scale identified must be funded either through tax increases or offsetting reductions in other expenditure.

8.9. Business Compliance Costs

Businesses who comply with regulation incur certain compliance costs under existing arrangements. The Council of Australian Government (COAG) Guide *Best Practice Regulation* requires consideration of any additional (incremental) compliance burden incurred by businesses when complying with new or amended regulations. Quantification of compliance costs using the Business Cost Calculator (BCC) is required for proposals that are likely to impose medium or significant compliance costs on business. The BCC provides a tool for identifying the administrative and paperwork costs incurred by business in meeting government regulatory requirements. We consider below the potential extent of any additional compliance costs under the proposed changes to disability access provisions.

Assessment of additional compliance costs

We considered the compliance costs areas identified by the BCC against owners, tenants, architects/designers, builders and building certifiers. The proposed changes to the disability access provisions are likely to impose business compliance costs in two areas:

Firstly, through the costs to building practitioners and owners, familiarising and educating themselves with the proposed changes. However, these compliance costs are considered to be within the normal education and training requirements for practitioner's continuing professional development. Furthermore, with the exception of pool builders who, in certain situations, may need to acquire new skills associated with providing access to pools, the educational costs for affected practitioners relate to updating existing skills, not acquiring new skills. Therefore, the educational cost associated with compliance with the new provisions is likely to impose a low compliance cost.

Secondly, in existing buildings being brought up to the standard, disability access consultants may be employed more frequently than is currently the case, in order to use Alternative Solutions to meet the Performance Requirements of the BCA. One example of this is regarding assessing space limitations of the existing building. However, given that there is no formal requirement to employ an access consultant, this cannot be considered a prescribed compliance cost.

Further, the new provisions may provide a compliance cost reduction (benefit) for practitioners in terms of publication and documentation, by providing certainty of requirements under the Disability Discrimination Act 1992 (DDA). For example, building designers may currently employ disability access consultants to ensure they meet the intent of the DDA, however, with the new, clear provisions that codify the intent of the DDA, building designers may be able to fulfil the requirements independently, thereby reducing costs.

Given that the costs considered above are either low or voluntary, it was considered that use of the BCC was not required to assess such costs. Based on the assessment above, the changes to disability access provisions are likely to impose low compliance costs on businesses.

9. Analysis of alternatives

This section identifies and analyses alternatives to the proposed Premises Standard from four separate perspectives. First, it considers the question of alternatives at the micro-level. That is, it considers the issues surrounding the development of the specific provisions contained in the Premises Standard and the process of arriving at these outcomes in a comparative policy context. Second, it considers macro-level alternatives to the general policy approach of adopting a Premises Standard that is harmonised between the DDA and BCA. Third, it considers alternatives in terms of the application of the Premises Standard. Fourth, it considers the nature and likely impacts of market-based means of achieving improved access to premises for people with a disability. This four part approach is necessary in order to document fully the comparative policy analysis undertaken as part of the development of the current proposal and to place the proposed Premises Standard within the broader context of possible policy initiatives to achieve its underlying objectives.

9.1. Alternatives to specific Premises Standard provisions

When considered at the micro-level, it is apparent that there is an infinite number of potential alternative formulations of the Premises Standard. It is clearly not feasible to identify and assess each such combination of detailed provisions separately. Consequently, this section describes the process by which the specific technical provisions of the proposed Premises Standard were developed, in order to highlight the robust nature of this process and the fact that it was founded on comparative policy analysis of the kind that underlies the RIS process.

The development of recommendations for the specific requirements for access to premises that are to be adopted in the BCA and, under the DDA as the Premises Standard, is the responsibility of an ABCB committee called the Building Access Policy Committee (BAPC). The BAPC was formed specifically to recommend changes to the BCA, to consult widely with industry and the community, and to provide advice to the ABCB on access-related issues.

The membership of the BAPC includes broad representation from the property, industry, government and disability sectors. The Committee's members are:

- A representative of the ABCB Board (Chair);
- The General Manager of the Board;
- The Disability Discrimination Commissioner;
- Three representatives of the DDA Standards Project;
- Representatives of the State and Territory Governments; and
- Representatives from the following bodies:

- the Property Council of Australia;
- the Australian Local Government Association;
- the Attorney-General's Department;
- the Department of Industry, Tourism and Resources (now the Department of Innovation, Industry, Science and Research);
- the Australian Construction Industry Forum;
- the Australian Institute of Building Surveyors;
- Standards Australia (observer status); plus,
- a representative from both the design professions and public sector property management.

An expert Technical Working Group (TWG) was appointed by BAPC to undertake the detailed development of the technical provisions of the Premises Standard. The TWG has a membership that broadly reflects that of the BAPC. The process by which the TWG has arrived at the proposed technical provisions has been extensive and has included the identification and evaluation of options in respect of each area of regulation covered in the Premises Standard. The technical recommendations of the TWG were put to BAPC for their consideration for inclusion in the Premises Standard.

In each case, discussion centred on issues including the nature of the evidence as to the access problem being addressed, the identification of different means of addressing these issues and the costs of so doing. Clearly, the TWG has not been in a position to conduct formal benefit/cost analysis at the level of individual access provisions. Even were resource constraints not to have prevented such a course, the interdependence of the different access issues addressed in the Premises Standard militate against the practicality of a “clause by clause” approach to such an analysis. However, the operating methods of the TWG have been based around an appreciation of the need for a comparative policy approach and the need to consider trade-offs in an attempt to maximise efficiency and practicality.

Thus, the specific form of the proposed Premises Standard has been determined by the application of a comparative policy approach which seeks to weigh benefits and costs and identify the most appropriate regulatory solution, as is required by the logic of the RIS process generally. In this context, it should be noted that a RIS Steering Committee was also formed under the auspices of BAPC. Thus, the development of the Premises Standard has been integrated with the RIS development process, ensuring as far as possible that the process of developing the specific standards has been cognisant of the requirements of the RIS process as established via the COAG principles and guidelines.

In addition, as noted in previous sections, the currently proposed Premises Standard varies significantly in some respects from that of the original proposal. These changes reflect the feedback received from stakeholders during the consultation process and the analysis of that feedback by ABCB

and BAPC. Significant additional analytical work was undertaken to identify specific changes to the initial proposal that would best address cost and practicality concerns raised while ensuring that the maximum possible benefits continued to be preserved. Thus, the analysis of alternatives has continued to be informed by the application of comparative benefit/cost analysis and has resulted in a significantly modified proposal.

9.2. Alternatives to adoption of a Premises Standard harmonised with the BCA

This section identifies and assesses two specific alternatives to the proposed Premises Standard, within the context of using a codification of the DDA to achieve improved access to premises for people with a disability:

- adopt the Premises Standard under the DDA without modification of the BCA to achieve harmonisation; and
- adopt the Premises Standard as proposed, but without the proposed changes to the referencing of a revised version of AS 1428.1.

9.2.1. Adoption of the Premises Standard without modification of the BCA

The current regulatory proposal involves an explicit harmonisation of the requirements of the BCA and the DDA in respect of access to premises. A feasible alternative for consideration is that of adopting the modified Premises Standard under the DDA without amending the BCA to achieve this harmonisation between the DDA and the building legislative requirements. The expected benefits and costs of this alternative are as follows:

Expected benefits of the alternative

The harmonisation process involves a number of complexities and difficulties that would be avoided under this alternative. Firstly, the DDA is Commonwealth legislation, while the BCA is, in practice, State/Territory based regulation. That is, responsibility for building control rests with State and Territory Governments, which have agreed to harmonise building regulatory requirements. Specifically, they have jointly agreed to adopt the BCA in State and Territory legislation as the basic document containing technical requirements for buildings. Thus, uniformity of technical requirements for buildings is achieved, subject to limited State/Territory-based variations and additions.

Changes to the BCA must therefore be agreed by the Building Codes Committee and the Board, both of which include representatives of the eight States and Territories. This means that any future changes to the Premises Standard would also need to be agreed by the eight States and Territories through the Committee process. Failure to obtain this agreement would mean that the harmonisation between the BCA and the Premises Standard would be lost.

Following from this, it can be expected that the proposed harmonisation would somewhat reduce the potential degree of responsiveness of the Premises Standard over time as circumstances change and the need to make amendments arise. This is a generic cost of regulatory harmonisation processes.

Thus, the alternative of developing and maintaining the Premises Standard in isolation from the BCA can be expected to yield greater regulatory flexibility and responsiveness and thus enhance the effectiveness of the Premises Standard in ensuring access to premises over time. As well, there would necessarily be resource savings, flowing from the fact that there would be no need to negotiate and agree on harmonised technical provisions and implementation and enforcement processes under this alternative. The size of this benefit in practice is necessarily difficult to estimate. It is likely that the Premises Standard would be amended relatively infrequently, although it is envisaged that it is to be reviewed at least five-yearly (see below). To the extent that this is so, any benefits from avoiding the need to revisit the harmonisation process will also occur infrequently. Thus, they may not loom particularly large in the longer-term sense.

A second substantive benefit associated with this alternative relates to the scope of the Premises Standard. The BCA deals only with matters relating to building "fabric", whereas the matters that could potentially be included in the Premises Standard are broader in scope. By implication, the effort to harmonise the BCA and the Premises Standard tends to work against the inclusion of these broader provisions in the Premises Standard. Thus, adoption of the alternative, with no harmonisation of the Premises Standard and the BCA, may provide greater scope for the inclusion of additional material in the Premises Standard that would more effectively codify the DDA's general duties in relation to the provision of access and so improve the effective degree of access provided. There could also be efficiency gains in this regard, since there may be instances in which a "non-building solution" would constitute the most efficient and effective means of dealing with an access issue.

It is not possible in the current context to provide any quantification of these expected benefits of the alternative. The size of the resource savings and potential efficiency gains due to non-harmonisation will be proportionate to the extent and frequency with which it is expected changes to the Premises Standard would be required over time. As noted above, there is reason to believe that these changes would be relatively infrequent, and so this benefit of the alternative would be relatively small.

Similarly, the potential gain from the adoption of non-building solutions in the Standard must rest on judgements as to the scope for their use in practice and their desirability relative to possible building solutions.

Expected costs of the alternative

The main expected costs of the alternative relate to the potential loss of certainty involved in having different requirements under the BCA and the Premises Standard. The BCA is intended to constitute a single, comprehensive source of technical requirements in relation to buildings. This role would be compromised substantially to the extent that it differed from the requirements established in the Premises Standard. Thus, building owners and building designers could not be sure of being in full compliance with the law simply by ensuring that their designs and building conformed with the BCA. Instead, they would need to be cognisant of two separately developed pieces of legislation and would, potentially, have to reconcile quite different and possibly contradictory requirements.

To this extent, the alternative could be judged as failing to address a major objective of the Premises Standard, which is to provide certainty and consistency for affected parties regarding compliance with the requirements of the DDA.

The lack of certainty and of co-ordination implied by this alternative would be likely to have the effect that the actual level of compliance achieved with the underlying DDA duties would be lower under this alternative than would be achieved under the proposed approach.

The problems of uncertainty do not relate only to building owners and building designers. People with a disability would also be less certain as to the standards of access they would encounter in buildings as a result of the above factors.

Finally, it can be expected that there would be a reduced level of compliance under this alternative, because the Premises Standard would not be subject to the existing building regulatory enforcement system. Non-compliance with the Premises Standard under this scenario would, instead, continue to be responded to via the existing complaint mechanisms available under the DDA.

9.2.2. Adopting the Premises Standard with equivalent BCA amendment, but without changing the referencing of AS 1428.1-2001.

A second potential alternative would involve adopting the proposed approach to harmonising the Premises Standard and BCA, but doing so without changing the current referencing of AS 1428.1.

The current BCA references the 2001 edition of Australian Standard AS 1428.1. The spatial dimensions in the standard are based on 80th percentile dimensions for wheelchairs. That is, it sets out accessibility provisions based on the 80th percentile wheelchair dimensions.

By contrast, the proposed Premises Standard and amended BCA would adopt the 90th percentile dimensions in key areas (specifically unisex accessible sanitary facilities, doorways and associated circulation spaces and on

accessways at locations where there is a turn of more than 60 degrees) while retaining the 80th percentile dimensions in the remaining areas.

This approach has been adopted in order to improve the effective degree of access provided in the most cost effective manner possible. It is for this reason that the original proposal, to adopt the 90th percentile dimensions in all areas, has been modified. Given this change to the Premises Standard proposal there is now only a limited difference between the proposed Standard and this alternative.

Expected benefits and costs of the alternative

The main benefit of the alternative is that the costs that would be involved in adopting the 90th percentile dimensions in relation to new buildings and alterations to existing buildings would be avoided. By contrast, the main cost of the alternative is that users of larger wheelchairs (i.e. those with dimensions between the 80th and 90th percentiles) would not achieve the degree of enhanced access to premises that adoption of the 90th percentile dimensions in key areas of the building would allow.

The only substantive cost item identified in respect of the adoption of the proposed revised edition of the Australian Standard was the additional space requirement involved in adopting the 90th percentile dimensions. Thus, the benefit of not adopting this edition of the Standard arises from cost savings in this area.

Review of the costings of the case study buildings (see matrix at Appendix C) completed on the basis of the initial Premises Standard proposal indicates that the expected cost of implementing the proposed revised edition of AS 1428.1 in respect of new buildings varied from a minimum of $1,500, for a 500 seat theatre, a single storey community hall or single storey holiday accommodation, to a maximum of $45,000 for a 350 room hotel. In percentage terms, this was equal to a maximum of 1.0% of costs for the single storey holiday accommodation, and a minimum of 0.04% for a 350 room hotel. No equivalent calculations were possible in respect of building upgrades.

No detailed estimation of the aggregate costs of the adoption of the proposed revised AS 1428.1 was able to be undertaken. However, review of the above indicative costs in relation to the total costs of implementing the Premises Standard suggests that, overall, continuing to use AS 1428.1 (2001) would have reduced the costs associated with the initially proposed Premises Standard/BCA changes by around 3 – 4%. Given the uncertainties noted in relation to overall costings, it may be that this is in the vicinity of $40-$60 million per annum.

The cost savings associated with the adoption of this alternative would now be much smaller than were estimated above. Overall, the estimated impact of the proposed Premises Standard in terms of lost NLA is now half that associated with the initial Premises Standard proposal. Given this, it is likely that the cost savings associated with adopting this alternative (i.e. retention of

the 80th percentile dimensions, as per the 2001 edition of the Standard) would be around half of the $40-$60 million per annum estimated above. That is, the likely savings may be of the order of $20-$30 million per annum.

The costs of retaining the 80th percentile dimensions are extremely difficult to calculate, due to the lack of available data on the size distribution of wheelchairs. That is, references to the 80th and 90th percentile wheelchair in this context do not relate to the number of wheelchairs in use. Rather, they relate to wheelchair designs. The consequence of this is that it is not possible to say how many wheelchair users have wheelchairs that are larger than the 80th percentile wheelchair design. In turn, this means that it is impossible to estimate how many wheelchair users would derive significant benefits from the move from 80th to 90th percentile dimensions.

Intuitively, it seems likely that wheelchair users would be aware of this dimensional issue and that the great majority would therefore respond by choosing wheelchairs that were within the 80th percentile design dimensions. However, it is also likely that people with more severe disabilities may need to use larger wheelchairs and have no real opportunity to substitute smaller ones. If this is true, then it is people with the most severe disabilities who would benefit from the shift to the 90th percentile dimensions. Thus, were this option adopted and the 90th percentile dimensions not employed, the benefits would be largely foregone by this group.

In addition, the 90th percentile dimensions would bring lesser benefits to wheelchair users who are currently able to navigate buildings constructed in accordance with the 80th percentile standard. For this group, the benefits foregone are those of easier and more convenient access than is currently possible, due to the increased space dimensions. A subset of this group – those whose wheelchairs are near the 80th percentile limit – may forego a substantial benefit.

Other users of mobility aids would also forego benefits if the 90th percentile dimensions were not adopted in the identified areas, since this group can also be expected to obtain easier access to buildings given the larger dimensions contained in the proposed revised version of AS 1428.1.

Finally, additional benefits sought via adoption of the new edition of AS 1428.1 include improved clarity and ease of interpretation of the various requirements of the Standard, with consequent gains in terms of the ease of use and enforcement of the Standard. These benefits would be foregone under this alternative.

9.3. Alternatives relating to the scope and implementation of the proposed Premises Standard

The above discusses specific alternative options within the framework of the Premises Standard and options in terms of the relationship of the Premises Standard to other policy instruments. A third level of alternatives that have been considered in the course of finalising the Premises Standard proposal

relates to the application of the Standard. These alternatives are discussed below.

9.3.1. Option 2: Apply the Premises Standard to new buildings only

The Standard is currently proposed to be applied both to new buildings and to new building work in existing buildings. However, as the preceding sections have established, the relative cost of applying the provisions of the Standard to building upgrade work is significantly higher than the cost of applying the Standard to new buildings. Given this, it is clear that cost-effectiveness would be improved were the Standard to be applied to new buildings only, with the current access provisions contained in the BCA continuing to apply to building upgrade work.

On the other hand, this option would entail substantial additional administrative complexities. Because new and existing buildings are treated differently, the complexity of the Premises Standard and supporting documents would be increased. Practitioners would need to be familiar with separate sets of requirements and determining whether a building complies with the Premises Standard would be harder. As a consequence, it would be expected that there would be greater administration and enforcement costs, compared with the option of treating all buildings the same. Government would incur a substantive proportion of such costs. There would also be increased complexity for building product manufacturers in producing and supplying different products for new and existing buildings, resulting in lost efficiencies.

As stated above, the analysis of this option contained in this RIS assumes that buildings undergoing upgrade work will be required by the Premises Standard to comply with the current BCA access provisions and in doing so will be compliant with the DDA. Consequently, potential costs to building owners and operators of litigation due to 'non-compliance' with the DDA have not been included in the analysis.

Expected benefits of the alternative

The requirements of the Standard are to be applied equally to both new and upgraded buildings. Given this, it can reasonably be assumed that the benefits of the Standard will be similar for the two types of building work. The building activity data employed for this RIS (refer Table 7) indicate that approximately 66% of building activity relates to new buildings, while 34% relates to building upgrade work. Given this breakdown, it is assumed that the application of the Standard to new buildings only reduces the benefits of the current proposal (i.e. its application to all building work) by around 34%.

Modelling of this change shows that the benefits of this alternative would be approximately $43 million in year 1, rising to $656 million in year 15 and thereafter. The present value (PV) of the benefits over 30 years would be $4.7 ($2.8) billion.

In qualitative terms, it should be noted that this alternative would see the rate of dissemination of accessible buildings reduced by around one third, by comparison with the proposed Standard. This would substantially slow the achievement of a more accessible built environment, which is particularly significant given the long life spans of buildings. The proposed Standard will therefore achieve a fully accessible environment only after several decades.

Expected costs of the alternative

The costs of this alternative are substantially lower than is the case with the proposed Standard. The annual incremental cost of applying the Standard to new buildings only, is $159 million. Additional maintenance expenditures in respect of new lifts and hearing augmentation devices must also be added. These costs rise steadily from $0.24 million in year 2 to $22 million in year 30. The PV of the costs of this alternative is equal to $4.7 ($2.8) billion over 30 years.

However, it was noted above that this option would involve significantly greater administrative costs. These have not been able to be quantified, but must be taken into account when weighing this alternative.

Comparison of benefits and costs

Table 13 compares the benefits and costs of this alternative.

Table 13: Benefits and costs of applying the Standard to new buildings only (Option 2)

	4% Discount Rate	7% Discount Rate
Benefits (PV over 30 years)	$7.6 billion	$4.9 billion
Costs (PV over 30 years)	$2.9 billion	$2.1 billion
Net Present Value	+$4.7 billion	+$2.8 billion
Benefit/cost ratio	2.62: 1	2.36:1

Table 13 shows that using a 4% discount rate the total benefits are reduced by 33% over the proposed Standard, but that the NPV, at $4.7 billion is $2.6 billion higher than under the proposed Standard. Similarly, the benefit/cost ratio is substantially higher than under the proposed Standard, at 2.62: 1.

Using a 7% discount rate the total benefits are again reduced by 33% over the proposed Standard, but the NPV, at $2.8 billion is $2.4 billion higher than under the proposed Standard. The benefit/cost ratio also remains higher at 2.36:1.

These results reflect the fact that this option is more cost-effective than the application of the Standard to both new buildings and upgrades, but that in aggregate terms, its ability to achieve the benefits of more accessible buildings is diminished significantly.

9.4. Market-based alternatives

The alternatives discussed above constitute variants on the regulatory proposal of using a Premises Standard to further codify the general duties set out under the DDA. A final alternative can also be identified, which differs substantially in approach, being based on a more market-based approach to ensuring access for people with a disability. It should be noted at the outset that such an approach is largely rendered infeasible by the current context of the existence of the DDA and its general access to premises provision and the need to harmonise the DDA with the building law as far as possible. For this reason, the following analysis of market-based alternatives contains less detail than that undertaken in relation to the proposed Premises Standard. However, it is considered necessary to include discussion of market-based approaches in order to allow a broader appreciation of the general policy context within which the DDA and the proposed Premises Standard operate.

The argument for a market-based approach was put strongly in the context of the adoption of the US ADA which, as was noted previously, addresses many of the same issues as the DDA. An early critic of the ADA was the eminent legal scholar Richard Epstein[55], who took the view that regulatory intervention in favour of people with a disability was misplaced and costly. He argued for:

- Allowing a true market to operate under which disabled persons would underbid the true value of their employment services as a way of offsetting their accommodation costs;
- Provision of state supplied incentives like vouchers for spreading the costs through general taxation; and
- Allowing specific handicapped centres to be developed which would reduce costs.

This approach has understandably attracted considerable criticism. However, Epstein was pointing to the efficiency losses society incurs as a result of regulatory interventions and applying what has become a conventional approach to cost minimisation. Many[56] have criticized Epstein because he adopts an approach which might be labelled “economic rationalist”.

Epstein was, however, pursuing the logic of the behaviour exhibited by “economic man”, whereby a cost increment forced on an employer will result in the employer taking countervailing actions to avoid the imposition of the costs. Such activities are central to business operations and the pursuit of efficiency. The need to undertake profitable activities (or even to remain in business) motivates employers to seek to defray or avoid cost impositions.

Moreover, unless the costs are distributed evenly, selectively imposing a cost on some employers only will cause those employers to suffer their own

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[55] Richard A Epstein, *Forbidden ground: the case against employment discrimination laws* (1992).

[56] See for example Stein MA, *Labor markets, rationality and workers with disabilities*, Berkley Journal of Employment and Labor Law, Vol 21, No. 1 (2000) p314-334.

discrimination. Epstein's premise is that the costs cannot be evenly spread except by the use of general taxation, since not everything can be captured within the regulatory net, and certainly not captured in a way that avoids uneven costs across different activities.

Proponents of regulatory activity point to several countervailing factors:

- Prejudice against people with a disability far exceeds any additional costs that their employment might bring and positive discrimination will reduce that prejudice to the benefit of those with disabilities and the community in general;
- There are major benefits in ensuring a comprehensive assimilation of all people within general society and avoiding ghetto-isation; and
- There is overwhelming support for measures that positively discriminate in favour of people with a disability. For example, the US ADA was passed with one of the largest majorities any such bill has achieved and passed by a Republican dominated legislature.

These arguments reflect those put earlier in this RIS when discussing the objectives of the regulations. They encapsulate the tensions between the additional costs inherent in a regulatory measure and the benefits the regulation may bring.

It may reasonably be argued, in the current context, that the existence of the DDA means that the broad legislative direction for addressing these issues has already been set down. To this extent, the adoption of a more market-based approach, such as that advocated by Epstein, can be considered to be outside the range of feasible alternatives to the adoption of a Premises Standard as a specific instrument under the DDA. However, the above discussion serves to indicate the broader context of policy choice within which the adoption of the Premises Standard, as well as other Access Standards under DDA, must take place.

10. Conclusion: Comparing expected benefits and costs

As has been made apparent throughout this RIS, the task of comparing the benefits and costs associated with the proposed Premises Standard and determining whether, and to what extent, there would be a net benefit associated with its adoption is a difficult one. These difficulties arise from:

- The fact that a number of important benefits cannot readily be quantified, much less expressed in dollar terms;
- The fact that there are substantial uncertainties in relation to the quantification of a number of the major cost items;
- The legislative context, which poses conceptual questions as to the extent to which the requirements of the Premises Standard create new regulatory burdens, rather than simply constituting a codification of existing legislative obligations contained in the DDA; and
- The need to give appropriate weighting to distributional considerations and the associated intangible benefits associated with the Standard.

In light of these difficulties, the approach taken in this section is to draw together the discussion of benefits and costs, indicate the relative magnitude of these where possible and draw conclusions as to the likely overall impact of the proposed Standard where possible. In addition, the merits of the specific alternatives identified and analysed in Sections 9.2 and 9.3 are discussed relative to those of the Standard and the results of sensitivity testing undertaken are presented and discussed.

10.1. Cost summary

While the costs associated with the proposed Standard remain substantial, they are significantly lower than the compliance costs estimated in the draft RIS in respect of the Premises Standard proposal. Table 14 summarises the changes between the costs of the Standard as originally proposed in 2004 and those implied by the currently proposed Standard.

Table 14: Comparison of expected cost impacts – original vs modified proposal

	Original Proposal*	**Modified proposal**
Annual costs (new bldgs)	$696m	$159m
Annual costs (bldg upgrades)	$800m	$312m
Lost NLA (bldg upgrades)	$312m	$156m
Present value of costs (30yrs)	$26.3bn	$9.3bn

* As reported in the 2004 Draft RIS.

In relation to new construction, the estimated annual incremental costs have been reduced from around $700 million to $159 million. In proportionate terms this represents a reduction in the incremental construction costs from 4.6% to 1.1%.

In relation to building upgrade works, the annual incremental costs associated with the Standard have been reduced from approximately $800 million to $312 million. This represents a reduction in proportionate incremental costs from 10.3% to 4.0%.

Anticipated additional costs due to losses in NLA have also been halved from $312 million per annum to $156 million per annum.

These cost reductions arise in part from reductions in the stringency of particular requirements, however, the major part of the cost reductions arise from the adoption of certain exemption provisions in respect of small buildings. These changes in the proposed Standard have reduced the maximum impact on any individual building type, as assessed through the case study analysis. One very important consequence of this is that it is now expected that the unjustifiable hardship provisions of the DDA will be infrequently used in practice. A second, closely linked, consequence is that the degree of probable substitution between different types of buildings will be substantially less than was suggested in the draft RIS.

The above figures represent best quantitative estimates of these costs, although the methodological summary, presented in Appendix A indicates that a number of factors will tend to reduce the actual costs to some degree. These factors are:

- The extent to which Alternative Solutions can meet the Premises Standard requirements at lower cost than the DTS solutions used in the above estimations;
- The extent to which offsetting benefits, in terms of improved building quality for users other than the target group, exist; and
- The extent to which current compliance with the DDA reduces the size of the compliance task consequent to the introduction of the Premises Standard[57].

In sum, the aggregate costs of the proposed Premises Standard remain substantial in relation to new buildings and very substantial in relation to alterations and additions to existing buildings. However, the expected annual costs associated with the Standard have, overall, been reduced by approximately 65% when compared with the original Premises Standard proposal.

In macro-economic terms, the Premises Standard would be expected to have a modest negative effect on demand for new building activity and a somewhat

[57] To the extent that this last factor is relevant, it must be noted that it involves a reduction in the expected benefits of the Premises Standard, as well as a reduction in its costs.

larger negative effect on demand for renovations. Some switching of demand from building upgrade activity to new building activity could potentially offset the former effect. There would be some negative impact on the overall level of building activity (i.e. incorporating new and renovated buildings). This, in turn, can be expected to lead to indirect negative impacts on employment in the wider economy. This is the result of the fact that the price of a widely used productive input – buildings – will have increased significantly. Such an input price increase will necessarily reduce demand for complementary inputs, which would include labour in many or most industries. Moreover, the increase in the cost of buildings reduces real income overall, thus reducing demand in general.

10.2. Benefit summary

The discussion of expected benefits has documented the specific contexts in which benefits would be expected to be obtained and discussed the importance of these benefits in qualitative terms. It has also established the disadvantage currently experienced by the intended beneficiaries of the Standard, in terms of income levels, access to employment and access to leisure and social activities. Thus, it has been shown that there would be a strong distributional benefit due to the adoption of the proposed Premises Standard, while noting the considerable uncertainties associated with these estimates. To ensure transparency of the assumptions made in this area, we have tested these figures for sensitivity at both optimistic and pessimistic scenarios later in this chapter.

A range of other unquantifiable benefits have also been identified and discussed. These include benefits for elderly people who are not classified as having a disability but who would gain easier and more convenient access to buildings due to the implementation of the Premises Standard. Important benefits also exist for carers of people with a disability. Carers are likely to be less heavily relied upon by people with a disability due to the proposed improvements in access to premises. This will bring a range of consequent benefits including a likely increase in the currently low employment rates experienced by primary carers. As well, moving to the Premises Standard is likely to reduce substantially the transaction costs involved in using the current DDA complaints mechanism to enforce access requirements. These reductions can be considered both in relation to the existing level of use of these mechanisms and in relation to the expected future use of them were the Premises Standard not to be adopted.

An additional factor leading the quantified benefit estimates below to tend toward under-estimating the true benefits of the Premises Standard, is the continuing trend toward increases in the proportion of people with a disability in the general population. The ageing of the population and other factors means that the number of beneficiaries of the Premises Standard is likely to be significantly larger in future years than the current numbers used as the basis of the quantitative estimates below. As well, there has been no attempt to quantify the potential benefits for ambulant groups likely to flow from the adoption of the Premises Standard.

For all of these reasons, the quantitative benefit estimates should be considered as only one part – albeit a very important one – of the total benefit that would be associated with the adoption of the Standard.

Two major types of benefit have been estimated in quantitative terms. Firstly, it can be expected that the Standard would have an important impact in increasing the participation in the workplace of people with mobility disabilities in particular, and to a lesser extent people with hearing and vision impairments. No reliable estimates of the size of these impacts can be gained, and limited available *ex post* data from the United States casts some doubt on the efficacy of programs such as the Premises Standard in this regard. We have based our estimates of the plausible gains in this area on those derived by Frisch. However, given the doubt cast on the achievability of these benefits by the United States experience, we have reduced by 50% the estimate initially derived using Frisch's methodology.

Secondly, the expected impact of the Premises Standard in reducing the additional living costs currently experienced by people with a disability has been estimated in quantitative terms. Data derived from Frisch's "insurance based" methodology (but using adjusted assumptions, discussed above) suggest that overall benefits of the order of at $969 million per annum may be attainable from the removal of access barriers.

Adjusting benefits to account for the changes to the 2004 draft Premises Standard proposal

As noted in Chapter 7, a significant number of reductions in stringency have been made since the original Premises Standard proposal, but these have been carefully designed so that the changes in almost all cases reduce convenience and dignity to a degree, while preserving access *per se*. As well, exemptions for smaller buildings have been created. The overall impact of these changes is estimated as being equal to a 20% reduction in the total benefits that the Standard would deliver when fully implemented, when compared with the proposal that was the subject of the draft RIS. This 20% reduction must be applied to all the benefit estimates discussed above.

The Premises Standard – and the other Disability Standards that have been or may be developed under the DDA – should also be seen as representing an integrated or holistic approach to addressing the need to ensure the integration of people with a disability into the community as far as possible. This is clearly an intangible benefit of considerable importance – a fact recognized in the establishment of very broad duties on a range of individuals – including building owners and managers – in the DDA at the time of its drafting and passage in 1992.

The current moves to codify these duties via formulation of a range of Access Standards under the DDA reflects concern that, after over a decade of operation of the DDA, more must be done in order to ensure that the benefits that the DDA sought to bring are actually achieved in practice.

In addition, Section 6 has indicated that the adoption of the Premises Standard is likely to yield important benefits in terms of reduced transaction costs and increased certainty and consistency for building owners and managers, people with a disability and other stakeholders. In particular, it will largely supplant the existing complaints-based system of resolving concerns in relation to the provision of access, which places a substantial onus on complainants and very often fails in translating decisions on access in particular cases into wider compliance outcomes.

10.3. Comparison of benefits and costs of the proposed Premises Standard

The fact that both the estimated benefits and costs of implementing the Premises Standard are extremely substantial reflects the considerable non-compliance with the general duties of the DDA that persists even after more then a decade of enforcement of its individual complaints mechanism. This is contextually fundamental for the consideration of the overall merits of the proposed Standard.

The annual values of the quantifiable benefits and costs have been discussed above. However, these values reflect a steady state and do not take into account the fundamental issue of the different timing of the benefits and costs. An analysis of the long-term impact of the Premises Standard must consider these differences in timing. In particular, the following timing issues have to be taken into account:

- The costs identified in respect of new buildings will be incurred from year one and will remain substantially unaltered over the life of the Standard;
- The costs identified in respect of building upgrades will increase over a 15 year period. These costs will be incurred annually for the length of the "renovation cycle", here estimated as being 15 years[58]; and
- Benefits will initially be small but will rise progressively as the proportion of the building stock that has been built, or upgraded, in accordance with the Standard increases. Only when the renovation cycle is complete will the stock of buildings have been made substantially accessible.

In order to account for these differences in the timing of the benefits and costs a Net Present Value analysis is employed. For indicative purposes, NPVs

[58] The commercial (cf. technical) life of non-residential buildings is assumed to be in the range of 40-50 years. It has been estimated that a building will be renovated at around 15 year intervals within this lifespan. Moreover, this estimate is broadly consistent with the data on annual building expenditure, viz: If it is assumed that new building activity adds around 2.5% to the existing stock per annum (i.e. broadly equivalent to an average 40 year life for a building), the implicit value of the stock is 40 x $15bn = $600bn. If roughly $8bn p.a. is spent and the whole stock is renovated over 15 years, this suggests renovation expenditure of $120bn, or about 20% of the capital value [or, effectively, the real replacement value] of the stock. This appears to be broadly realistic as an estimate of the amounts owners are likely to be prepared to spend on building upgrades.

have been calculated over a 30 year time horizon. As noted above, it is assumed that the "renovation cycle" is 15 years. The base case benefit/cost analysis uses a real discount rate of 4%. The chosen value of 4% is toward the lower end of the range of plausible values for this social opportunity cost and has primarily been chosen to ensure consistency and comparability with the draft RIS. Further, the long-term nature of the analysis suggests the need to ensure that long delayed benefits are not consigned to near irrelevance by the operation of discounting. We note that the Victorian Competition and Efficiency Commission (VCEC) recommend a rate of 3.5% (*Guidance Note on Discounting*, VCEC Melbourne 2007).

Notwithstanding these factors, we note that the Commonwealth Office of Best Practice Regulation (OBPR) currently recommend a 7% real discount rate. For this reason, both figures are shown throughout this RIS with the 7% rate shown in brackets, providing a sensitivity analysis on the original rate. Additionally, further sensitivity testing, based on an alternative real interest rate of 11% is conducted in the following section.

Table 15, below, summarises the results of the benefit cost analysis of the Premises Standard proposal.

Table 15: Summary of benefits and costs of proposed Premises Standard[59]

Annual Benefits	**@ 4% rate**	**@ 7 % rate**	**@ 11% rate**
Increased employment participation	$150 million p.a.	$150 million p.a.	$150 million p.a.
Reduced Living costs	$910 million p.a.	$910 million p.a.	$910 million p.a.
Total	$1,060 million p.a.	$1,060 million p.a.	$1,060 million p.a.
Annual Costs			
New Buildings	$159 million p.a.	$159 million p.a.	$159 million p.a.
Building upgrades	$292 million p.a.[60]	$292 million p.a.[61]	$292 million p.a.[62]
Lost NLA (building upgrades)	$156 million p.a.	$156 million p.a.	$156 million p.a.
Total	$607 million p.a.	$607 million p.a.	$607 million p.a.
Present Value of Benefits (30 yrs)	$11.4 billion	$7.3 billion	$4.5 billion
Present Value of	$9.3 billion	$6.9 billion	$5.5 billion

[59] All annual figures contained in this table constitute "steady state" estimates – i.e. they reflect the situation after the full implementation of the Standard. In the case of the benefit estimates, they reflect the situation after the completion of the assumed 15 year renovation cycle and thus relate to a situation in which all buildings have been made accessible to the extent required by the Standard, at least in relation to building upgrade works.

[60] Gross cost estimate of $312 million less reduction in cost of $20 million due to the operation of unjustifiable hardship provisions.

[61] Gross cost estimate of $312 million less reduction in cost of $20 million due to the operation of unjustifiable hardship provisions.

[62] Gross cost estimate of $312 million less reduction in cost of $20 million due to the operation of unjustifiable hardship provisions.

Costs (30 years)			
Net Present Value	$2.1 billion	$0.4 billion	-$1.0 billion
Benefit/cost Ratio	1.23:1	1.05:1	0.82:1

Note: 11 % rate is discussed at 10.4

Table 15 shows that the modified Premises Standard proposal would impose costs with a Present Value of $9.3 ($6.9) billion over 30 years. The PV of the quantifiable benefits of the Standard would be $11.4 ($7.3) billion over the same period, leading to a NPV of $2.1 ($0.4) billion over 30 years. The proposal therefore has a benefit/cost ratio of 1.23:1 (1.05:1). That is, there would be $1.23 ($1.05) of benefits for each dollar of costs imposed by the Standard.

However, it must be noted that these calculations are based solely on the quantified benefits of the proposed Premises Standard. As discussed above, there are substantial unquantified benefits also associated with the proposed Standard. These benefits, while unquantified, nonetheless constitute a significant part of the overall rationale for the adoption of the Standard. Thus, the above table cannot be seen as providing a full summary of the impacts of the Standard.

10.4. Sensitivity analyses

Where significant uncertainties surround key values or assumptions used in benefit cost analysis, it is necessary to undertake sensitivity testing in order to verify the robustness of the analytical results. Sensitivity testing must be undertaken with regard to those variables that have the greatest potential impact on the outcome of the analysis and those which demonstrate the greatest degree of uncertainty, or about which there are the most highly contested views. Several sensitivity analyses have been carried out in relation to the proposed Premises Standard. The basis for choosing these variables for testing, and the alternative values adopted are discussed below, as well as the results of substituting these alternative values.

10.4.1. Varying the discount rate

As with the majority of regulatory proposals, a greater proportion of the expected costs of the proposed Premises Standard occur in the earlier years after implementation, while more of the benefits are delayed toward the later years. Any project or regulation that demonstrates this pattern; that is, of costs preceding benefits in relative terms, will also show higher net present value outcomes at lower discount rates and vice versa.

As noted earlier, the base case benefit cost analysis uses a real discount rate of 4%, with the OBPR-approved 7% rate shown in brackets throughout this RIS, The use of the 7% rate has the added effect of providing a sensitivity analysis on the original rate. Additionally, further sensitivity testing is undertaken based on an alternative real interest rate of 11%. This rate is considered to be toward the upper end of plausible discount rates.

We note that adopting a 7% real discount rate inevitably decreases the present value of both the benefits and costs accruing as a result of the adoption of the Premises Standard. However, the benefits are decreased by a larger amount than the costs, due to the fact that a larger proportion of them are expected to occur further into the future.

At a 7% real discount rate, the present value of the benefits is $7.3 billion, while the present value of the costs is $6.9 billion. The net present value is $0.4 billion and the benefits/cost ratio is 1.05:1.

Adoption of a 7% real discount rate for the base case analysis will have the impact of substantially lowering the NPV of the proposal (i.e. $0.4 billion rather than $1.9 billion). The benefits/cost ratio will also be somewhat reduced, from 1.24:1 to 1.05:1.

At an 11% real discount rate, the present value of the benefits is reduced to $4.5 billion while the present value of the costs is $5.5 billion. Thus, the NPV of the standard under this scenario is $1.0 billion with a benefit/cost ratio of 0.82:1.

As noted earlier, the OBPR recommend a discount rate of 7%, while the only other OBPR-equivalent organisation that specifically recommends a particular discount rate to be used for base case regulations (VCEC) recommends a rate of 3.5%. Thus, the 4% discount rate scenario should, at least arguably, be given more or less equal weight to the 7% discount rate scenario. The 11% discount rate scenario is slightly outside the range of discount rates on recommended internationally in the context of the conduct of regulatory impact analysis and, as a result, this scenario should be given a relatively limited weight.

It can also be noted that the outcomes of the benefit/cost analysis are not unduly sensitive to even quite large changes in the discount rate used. As demonstrated above, changing the discount rate from 4% to 11% reduces the benefit/cost ratio by only a relatively small amount: i.e. from 1.23:1 to 0.82:1.

It can therefore be concluded that the impact of the proposed Standard is not particularly sensitive to the discount rate employed. To the extent that the benefit cost ratio is reduced when a high discount rate is adopted, reflects the fact that a higher proportion of the costs associated with the Standard are incurred in earlier years, whereas proportionately more of the benefits are obtained in later years.

10.4.2. Other Sensitivity Analyses

Additional sensitivities have been run on different discount rates:

The first pair of these sensitivity tests looks at the impact of changes in the assumed quantity of lost net lettable area (NLA) in existing buildings that are upgraded in accordance with the proposed standard. The first of these tests

double the base case estimate, from 2% to 4%, while the second halves this estimate, to 1%.

The present value outcomes are shown to be relatively sensitive to changes in this variable. Doubling the NLA to 4% yields a negative NPV of $0.5 ($1.6) billion and a benefit/cost ratio of 0.95:1 (0.82:1). On the other hand, halving the NLA to 1% yields a positive NPV of $3.5 ($1.3) billion and a benefit/cost ratio of 1.44:1 (1.21:1).

The second pair of sensitivity analyses vary the base case assumption regarding the impact of the proposed standard in increasing the workforce participation rate of people with disabilities and their carers. The first of these two sensitivities assumes that there will be a zero increase in this participation rate, while the latter assumes double the increase in the participation rate, compared with the base case.

The benefits/cost outcome is found to be moderately sensitive to changes in this variable: assuming a zero increase in the participation rate, the proposed standard will have a small negative NPV of $0.6 billion and a benefit/cost ratio of 0.91:1. Doubling the expected base case increase in the participation rate yields a positive NPV outcome of $1.3 billion and a benefit/cost ratio of 1.19:1.

The third pair of sensitivity tests undertaken measure the impact of changes in the assumed effectiveness of the premises standard in decreasing the cost of living for people with disabilities. As would be expected, given that this is the largest benefit identified in relation to the Standard, the results are extremely sensitive to changes in this assumption.

The lower bound estimate used is that put forward by Frisch. It should be noted that the base case figure used in the RIS, while substantially higher ($910 million vs $510 million), was developed by applying a number of adjustment factors to this original Frisch estimate. Substituting the lower bound estimate into the analysis yields a negative NPV of $2.4 billion and a benefit/cost ratio of 0.66:1.

The upper bound estimate used is a $1,163 million. This is based on an escalation of 20% in the base case figure for reasons explained in section 7.6.2 of the 2006 RIS. Adopting this estimate yields an NPV of $2.1 billion and a benefit/cost ratio of 1.30:1.

10.4.3. Adopting optimistic benefit assumptions

The draft RIS included an optimistic scenario in which base case costs were combined with higher benefit estimates. Changes were made to both elements of the quantifiable benefits identified. In relation to the expected increases in the participation rate of people with disabilities, the optimistic scenario adopted Frisch's assumptions without change, whereas the base case benefit estimate had halved Frisch’s estimate of the size of this increase in participation rate.

In relation to the expected reductions in the costs of living with a disability, the base case estimate is increased by 20%. This adjustment allows for the fact that people are, on the whole, risk averse rather than risk neutral, as is assumed in the base case. It also allows for the probability that people would have some additional willingness to pay in respect of Premises Standard provisions for altruistic reasons.

This sensitivity analysis has been repeated, however, with both benefit estimates adjusted downward by 10%. This is consistent with the view taken that the modifications made to the draft Premises Standard proposal would have an effect of approximately this magnitude.

The results of this sensitivity analysis are costs of $6.9 billion and benefits of $10 billion yielding an NPV of $3.1 billion. The benefit cost ratio is equal to 1.45:1.

10.4.4. Adopting pessimistic benefit assumptions

The draft RIS also analysed a scenario based on the pessimistic benefit assumptions. In this scenario it is assumed that there are no benefits in terms of increases in the employment participation rate of people with disabilities, consistent with the observed experience of the United States after the passage of the Americans with Disabilities Act. In addition, Frisch's original assumptions in relation to reductions in the cost of living with a disability are adopted without change. These are based on a narrower assessment of the range of beneficiaries of the Standard's provisions.

Repeating this scenario, and applying 10% reduction results in costs of $6.9 billion and benefits of $3.5 billion yielding an NPV of -$3.4 billion. The benefit cost ratio is equal to 0.51:1.

10.4.5. Alternative "loss of NLA" assumptions

The issue of the likely size of losses in NLA resulting from the adoption of the Premises Standard proved highly controversial in the context of the draft RIS. On the one hand, industry groups argued that the likely losses would substantially exceed the 4% estimated in the draft RIS. On the other, disability sector groups argued that the adoption of good design principles would reduce these losses to a level substantially below that estimated.
As noted above, the base case estimate of the size of these losses in NLA has been halved to 2%. This reflects the removal or reduction in stringency of many space-using requirements. However, given the range of views on this subject, two alternative estimates of the size of the lost NLA are considered here. The first is a larger reduction in the estimated size of the lost NLA to 1%. The second involves retention of the original estimate of a 4% reduction in NLA.

In the first of these scenarios, reducing the estimated loss of NLA to 1% has the effect of reducing the PV of the costs associated with the Premises Standard from $9.3 ($6.9) billion to $7.9 ($6.0) billion over 30 years. As the PV of the benefits would remain unchanged at $11.4 ($7.3) billion, this implies

that the PV of adopting the Standard would, under this scenario, be equal to $3.5 ($1.3) billion. The benefit cost ratio would rise to 1.44:1 (1.21:1).

In the second of these scenarios, involving increasing the estimated loss of NLA to 4%, the PV of the costs associated with the Standard increases from $9.3 ($6.9) billion over 30 years to $11.9 ($8 9) billion over 30 years. Given that the PV of the benefits would remain unchanged at $11.4 ($7.3) billion, the NPV of the implementation of the Premises Standard would be $0.5 billion and the benefit cost ratio would be 0.95:1 (0.82:1).

10.4.6 Summarising the results of the sensitivity testing

Table 16: Summary of results of sensitivity testing

	PV of benefits	PV of costs	NPV	Benefit/cost ratio
Base case with 4% discount rate	$11.4 billion	$9.3 billion	$2.1 billion	1.23: 1
Base case with 7% discount rate	$7.3 billion	$6.9 billion	$0.4 billion	1.05:1
Base case with 11% discount rate	$4.5 billion	$5.5 billion	-$1 billion	0.82:1
Optimistic benefit assumptions	$10 billion	$6.9 billion	$3.1 billion	1.45:1
Pessimistic benefit assumptions	$3.5 billion	$6.9 billion	- $3.4 billion	0.51:1
1% loss of NLA with 4% discount rate	$11.4 billion	$7.9 billion	$3.5 billion	1.44:1
1% loss of NLA with 7% discount rate	$7.3 billion	$6.0 billion	$1.3 billion	1.21:1
4% loss of NLA with 4% discount rate	$11.4 billion	$11.9 billion	$-0.5 billion	0.95:1
4% loss of NLA with 7% discount rate	$7.3 billion	$8.9 billion	$-1.6 billion	0.82:1

Table 16 demonstrates that the results of the sensitivity testing undertaken, although somewhat varied, suggest that a relatively high level of confidence in the outcome of the quantified benefit cost analysis is justified. It is acknowledged that the pessimistic benefit analysis shows a negative NPV however this is a worst case scenario whereby there are no economic benefits to the proposal. Moreover, it must again be emphasised that a substantial part of the rationale for the adoption of the Premises Standard relates to benefits which, while extremely important, have not been able to be quantified as part of the current analysis.

10.5. Comparison of the proposed Premises Standard and identified alternatives

The draft RIS identified and assessed two specific alternatives to the proposed regulatory approach of adopting a Premises Standard that is harmonised with the BCA. This final RIS also identifies and assesses another specific alternative in relation to the application of the proposed Premises Standard.

The alternatives identified and analysed in Section 9.2 have been assessed predominantly in a qualitative manner. However, it is clear that the benefits and costs would be of a broadly similar order of magnitude to those implied by the Premises Standard.

Alternative 2 is extremely similar to the current regulatory proposal and varies only in that it would continue to reference the 2001 edition of AS 1428.1, rather than adopting 90th percentile dimensions in certain key areas, as per the proposed Premises Standard. It was estimated that the cost savings associated with this alternative would be small, probably being of the order of $20 - $30 million per annum. On the other hand, this alternative would be likely to substantially reduce accessibility standards for significant numbers of wheelchair users, particularly those with the most severe disabilities. Thus, this alternative is considered to be less preferred than the adoption of the proposed Premises Standard.

Alternative 1 would involve adopting the proposed Premises Standard under the DDA but not undertaking any efforts to align the building regulatory structure with the DDA through amendment of the BCA. The main advantages of this approach would be that the processes involved in amending and updating the Standard over time would be simpler and more flexible and that the Standard could more easily incorporate matters beyond the ambit of the BCA. However, the costs of this alternative are such that considerable room for uncertainty as to compliance with the DDA would persist and consequently it is likely that actual compliance levels would be lower than if the Premises Standard and the BCA were aligned.

On balance, it is considered that the proposed adoption of the Premises Standard, including changes to AS 1428.1 90th percentile dimensions in key areas and incorporating equivalent amendments to the BCA would have net benefits that are likely to be greater than those of the two alternatives identified and analysed. In this context, it is noted that the proposed Premises Standard is consistent in its essentials, with legislative measures being taken in a number of other Western countries aimed at reducing barriers to participation, achieving greater integration of people with a disability into society generally, and ensuring better access to employment, cultural, social and leisure opportunities.

The other alternative considered is the application of the Standard only to new buildings (Option 2). Table 17 summarises the relative impacts of this alternative and the proposed Standard in quantitative terms.

Table 17: Comparison of proposed Standard and alternative in relation to the application of the Standard

	Proposed Standard	**Option 2 (New buildings only)**
PV of Benefits (30yrs)	$11.4 billion *$7.3 billion*	$7.6 billion *$4.9 billion*
PV of Cost (30 yrs)	$9.3 billion *$6.9 billion*	$2.9 billion *$2.1 billion*
NPV (30 yrs)	+$2.1 billion *+$0.4 billion*	+$4.7 billion *+$2.8 billion*
Benefit/cost ratio	1.23:1 *1.05:1*	2.62: 1 *2.36:1*

Option 2 (applying the Premises Standard only to new buildings) has the highest NPV of all the options considered, at approximately $4.7 ($2.8) billion over 30 years. It is also the most cost-effective alternative, with a benefit cost ratio of 2.62:1 (2.36:1). However, this alternative would involve a substantially slower rate of improvement in the degree of accessibility of the built environment. It is arguable that the need for timely action to improve the accessibility of the built environment is sufficiently pressing to require that the proposed Standard be adopted, notwithstanding that it is less cost effective than this alternative. In addition, the proposed Standard generates a positive NPV even without reference to the substantial unquantifiable benefits that the Premises Standard entails.

11. Consultation

The development of the draft Premises Standard proposal was an inclusive process to which all stakeholder groups have been able to contribute. The involvement of these stakeholders has continued in the process of refining the draft Premises Standard proposal and developing it into its current form.

In February 2004, the public consultation draft of the Premises Standard and the draft RIS were released for a three month comment period. In addition, awareness sessions were conducted in all States and Territories on the draft Premises Standard, draft RIS and associated documents.

A total of 274 submissions on the Premises Standard, and 77 submissions on the RIS, were received. Table 18 summarises the sources of the submissions received.

Table 18: Summary of submissions received in response to the draft Premises Standard and the draft Regulation Impact Statement:

	Premises Standard		**RIS**	
Sector	Number of submissions	Percentage of total	Number of submissions	Percentage of total
Disability sector	105	38%	18	23%
Industry	84	31%	31	40%
Government	50	18%	13	17%
Individuals	35	13%	15	20%
Total	**274***	**100%**	**77***	**100%**

* Some respondents made submissions on both documents.

Since the completion of the initial public consultation period, the following additional consultation has been undertaken:

- Targeted consultation in late 2004 with organisations that submitted significant comment during the public consultation period; and
- Consultation with Government Departments responsible for the other disability standards under the DDA.

All public comment received during the consultation phase was considered by the BAPC and changes to the proposal were made accordingly.

Further, additional consideration of the proposal was undertaken in 2008 by Government agencies, industry and the disability sector (Disability Access Reference Group).

11.1. Overview of public comment received

In broad terms the submissions received from the disability sector express strong support for the proposed Premises Standard, while those received from industry favour the implementation of a Premises Standard in general terms, but believed that the proposal advanced was unduly onerous and must be replaced by one which is both less demanding in absolute terms and provides a longer compliance period.

Within this framework, substantial reservations were expressed regarding the benefit/cost analysis contained in the draft RIS. The disability sector submissions generally argued that the discussion of benefits was inadequate in its scope, while also tending to believe that design changes and other responses to the changed regulatory environment would reduce the costs below the levels estimated. The industry submissions, by contrast, argue in many cases that the RIS costings constitute under-estimates. The industry submissions also question the size of the benefits that would be attained, particularly those that are quantified.

A more fundamental point of difference evident between the submissions from different sectors is that industry tends to argue that the benefits sought via the Premises Standard are effectively “amenity benefits”, while the disability sector sees them as being far more fundamental, both in terms of their importance to people with disabilities and to society as a whole. This difference in perspective clearly informs their relative views as to the appropriate extent of Premises Standard provisions.

As well, there are differing views of the current “state of play” under the DDA. The disability sector tends to argue that the general non-discrimination requirement established under the DDA means that it is currently necessary to ensure that all new buildings are fully accessible and that a high level of access is provided in renovated buildings. Consequently, they argue that the codification of a Premises Standard to a compromise standard effectively provides derogations from the existing rights of people with disabilities and that this is acceptable only because of the greater certainty and effective compliance that can thereby be achieved.

By contrast, the industry submissions focus on the low level of effective access currently provided. In this view, even a Premises Standard that is substantially less far-reaching than the current proposal entails substantial gains for people with disabilities. Moreover, industry focuses on the unjustifiable hardship exemptions provided under the DDA to argue that the current proposals risk going further than the DDA, to the substantial disadvantage of industry and consumers more generally.

While the draft RIS’ analysis of benefits and costs was quite heavily criticised, the submissions contained little that would assist in improving the quantitative

analysis. Substantial work was undertaken by one respondent, who provides alternative costings for each of the case studies analysed in the RIS and derives an alternative global estimate of quantified costs that is around 120% higher than the RIS estimates. Unfortunately, this analysis is not sufficiently transparent to allow a detailed comparison and reconciliation of the two sets of cost estimates. Targeted follow-up, requesting additional information to allow for a detailed analysis of these alternative costings did not yield usable information.

Similarly, there were few opportunities for carrying forward the RIS analysis of benefits. Many of the claimed exclusions from the benefit analysis were, in fact, already contained in the draft RIS, albeit that they may not have the prominence in the discussion that some submissions believe that they merit. More importantly, there have been no references to other literature that provides a basis for taking the quantitative analysis of benefits further than has been the case. Neither has there been any substantive questioning of the estimates currently contained in the draft RIS.

In addition to the above impediments to further improving the RIS' benefit/cost analysis, the polarisation of stakeholder views, as well as the nature of the views expressed, suggests substantial doubt as to whether such additional analysis would yield major gains in terms of increased acceptance of the RIS conclusions by stakeholders.

11.2. Key elements of the Standard in respect of which comment was received and responses to comments

The following sets out those aspects of the proposed Standard that were cited as being of particular concern in submissions received, together with the responses made to those concerns. The specific issues that were the subject of the most extensive comments from stakeholders were the following:

- Accessible Class 1b holiday accommodation;
- 80th vs 90th percentile dimensions;
- Small buildings;
- Number of accessible motel rooms;
- Access to upper levels;
- Building entrances;
- Lift sizes and features; and
- Ratio of and location of sanitary facilities.

Class 1b holiday accommodation

The proposals contain access requirements for Class 1b holiday accommodation (including caravan/tourist parks, bed and breakfasts (B&Bs), cabins and home stays) for the first time. In recognition of the preponderance of small businesses involved, and the low-turnover nature of much of this

accommodation, a “threshold” was proposed of three units or bedrooms available for hire.

The draft RIS found that there would be very substantial cost increases (more than 40%) for two of three case studies analysed in respect of Class 1b buildings.

Comment received

One industry respondent argued that the cost increases involved would be substantially higher again. A high level of concern was expressed in submissions about the impacts of the proposals on small business operators and the tourism industry. Tourism organisations and operators were of the view that Class 1b buildings should not be required to be accessible at all, particularly B&B accommodation, due to the problems associated with converting a Class 1a to a Class 1b building. The view was expressed that the proposed requirements would create an anti-competitive environment by restricting new entrants to the market due to the cost of providing accessible facilities. Some respondents questioned why wheelchair accessible cabins need to be provided at a ratio of 5% when less than 1% of the population use a wheelchair.

Some disability sector respondents were of the view that there should be no exemption threshold for this sector, while a number of industry respondents proposed an alternative for B&B-type establishments whereby the requirements should only apply to properties with 5 or more bedrooms for rent, in order to delineate B&B/home-stay establishments from purpose-built boarding houses and guesthouses.

Response to comment

The threshold for application of the requirements of the Standard has been increased from three to four rooms available for rent. This was considered the most appropriate means of distinguishing significant businesses from B&B/home-stay type establishments. Revisions to the case studies also led to the conclusion that cost impacts would generally be below those initially estimated due to different assumptions adopted as to means of compliance.

80th vs 90th percentile dimensions

The current BCA access provisions determine spatial dimensions on the basis of the 80th percentile wheelchair dimensions. The proposed Standard increased spatial dimensions to 90th percentile values in critical areas, to make features and facilities available to a larger number of wheelchair users.

Comment received

The move from 80th to 90th percentile dimensions was generally supported by the disability sector, however, some respondents believed that greater inclusiveness should be required, e.g. 95th percentile, and some questioned

the validity of the 90th percentile dimensions being used. Respondents who supported remaining with the 80th percentile dimensions were generally of the view that insufficient justification had been given for the change and no evidence was available to suggest that 80th percentile dimensions meant that buildings were inaccessible or that features such as accessible sanitary were not able to be used.

The move to 90th percentile dimensions was seen as particularly problematic for existing buildings with complying features such as accessible doorways, lifts, sanitary facilities and the like, which would be rendered unsuitable under the proposals and may need to be replaced during future renovations. The move to 90th percentile dimensions is problematic for existing buildings undergoing refurbishment, particularly in respect of constrained features such as toilets and lifts.

Response to comment

The revised Standard adopts a combination of 80th and 90th percentile dimensions in an attempt to provide the best possible balance between enhanced access and cost-minimisation. To this end, the requirement for 90th percentile dimensions has been confined to those areas in which enhanced access has been identified by the disability sector as being most important, notably unisex accessible sanitary facilities, doorways and associated circulation spaces and on accessways at locations where there is a turn of more than 60 degrees.

Small buildings

The 2004 draft proposal included requirements for the upper floors of most buildings to be made accessible. The draft RIS identified the fact that the costs of providing such access would be particularly high in relation to smaller buildings, which are more likely to be owned or occupied by the small business sector.

Comment received

The effect of the proposals on small buildings attracted a significant number of comments. Some respondents suggested that buildings under a certain size (suggested thresholds ranging from 500 m^2 to 4000 m^2) should be exempted from any upper floor access requirements in order to avoid disproportionate cost impacts being incurred.

The New Zealand regulations, where lifts are not required in buildings that are two storey where the upper floor area is less than 400m^2, or three storey where the combined area of the upper floors is less than 500 m^2, were also cited. These regulations do however require access to the upper floors of such buildings where they are intended for use as banks, government offices or agencies, hospital or healthcare services, public libraries, etc.

Others suggested that one option to make small buildings as accessible as possible while keeping costs down, would be to make them accessible for

ambulant people with a mobility disability, for the blind and vision impaired and for the deaf or hearing impaired (where appropriate), but not for wheelchair users.

Some respondents believed the requirement to make 100% of the floor area in restaurants accessible is too onerous, given that the current requirements only apply to 30% of the floor area. Many restaurants are established by a change of use in an existing building and, as a result, are subject to limitations on how the restaurant can be configured. Only a specific proportion of the floor area should be required to be accessible.

Response to comment

The comments received confirmed the results of the draft RIS case study analysis, which indicated that disproportionately large costs would be incurred in providing access in many small building contexts. As a result, the proposed Standard has been modified to provide an exemption for buildings of 3 storeys or less, which have a floor area for each storey of not more than 200m^2 (not including the entrance storey). This concession effectively exempts the upper levels of such buildings from the access requirements.

Number of accessible hotel/motel rooms

The BCA currently requires accessible hotel/motel rooms (Class 3) to be provided at a reducing percentage rate of total rooms, with the percentage ranging from 5% for small hotels/motels to around 3% for large hotels/motels. The draft Premises Standard retained the "sliding rate" structure, but increased the percentage ranging to 10% for small motels, reducing to around 4% for large hotels/motels.

Comment received

Some disability sector respondents argued that a minimum of 10% of all motel rooms should be accessible. On the other hand, a hotel and motel industry organisation submitted the results of a survey across 19 different hotels which revealed that the number of rooms currently provided had never been filled in any of the respondent hotels. Based on this information, the hotel and motel industry have questioned whether there is a demonstrated need to increase the ratio of accessible rooms.

The hotel and motel industry reported that, what is seen by customers as the 'hospital type environment' of accessible rooms, is the largest source of guest complaints. Room rates are often lowered for these rooms. A number of submissions suggested that hotel/motel rooms should be required to be adaptable rather than accessible.

Response to comment

No change has been made to the initial proposal. The case study analysis indicated that the costs involved in making additional rooms accessible were relatively small and were considered to be commensurate with the benefits sought.

Building entrances

The current BCA only requires the principal pedestrian entrance to be accessible. The original Premises Standard proposed that all pedestrian entrances in buildings greater than 500 m^2 be accessible and not less than 50% of pedestrian entrances in buildings up to 500 m^2 be accessible.

Comment received

Some respondents argued that the exclusion of the impact of extreme site conditions meant that the RIS estimates of the costs of this requirement were substantially lower than would actually be the case. Many respondents believed that there would be significant problems in trying to make all entrances accessible for buildings on difficult sites or for existing buildings being refurbished. The cost to small building owners of making additional entrances accessible was also considered to be unreasonable.

It was held that, in Sydney, Hobart and to a lesser extent Brisbane and Melbourne, many of the larger hotels have multiple entrances and exits, some of which are historical, leading out onto back lanes and alleys. These lanes and alleys are unlikely to be accessible to people with ambulatory disabilities so making the entrances accessible will not assist in improving access. Similarly, entrances served by street footpaths with gradients greater than 1:14 should not have to be accessible.

Some respondents suggested that the 50% rule should be applied to all buildings and not just those under the 500m^2 limitation, noting that the building will still be accessible if this occurs. It was noted that the entrances to the Brisbane Convention Centre, which had been modified following a complaint of discrimination, would not comply with the draft Premises Standard proposals in respect of accessible entrances.

Response to comment

The draft Standard has been modified to require that only 50% of entrances (including the principal entrance) must be accessible, provided that a non-accessible entrance must not be located more than 50m from an accessible entrance (where a building has an area of more than 500m2).

Lift sizes and features

The draft Premises Standard proposed to recognise a number of lifting devices as being suitable for use by people with a disability, in addition to the traditional commercial-type lift. This move recognised that, with an increase in the types of buildings and areas within buildings required to be accessible, lifting devices that were more cost effective would be needed. The draft Premises Standard also specified a number of enhancements required to make lifting devices more suitable for use by people with a disability, and required that lifts be sized to accommodate 90th percentile wheelchair dimensions.

As noted in previous sections, the draft RIS assessed the cost impact of the provision of lifts as being very substantial, particularly for small buildings (eg. 84% of the total cost increase attributable to the Standard for a two storey office was attributable to the installation of a lift).

The draft RIS also notes the uncertainty attached to the costing of passenger lifts due to proposed limitations on the use of more cost effective lifts. However, even if the cheaper lifts were permissible, the cost impost remains substantial.

The draft RIS expressed the view that the prescription of lift sizes and features would afford those complying with the BCA some certainty and perhaps more affordable options in some cases.

Comment received

AS 1735.16 lifts (automatically controlled, restricted use) were not included as an option in the proposals, but a number of respondents suggested that this type of lift should be an option. AS 1735.16 lifts provided in 2 or 3 level buildings can be manufactured and installed to meet present BCA access requirements for approximately 50% of the cost of an AS 1735 Part 2 or 3 lift. The typical cost of an AS 1735.16 lifts is $90,000-$100,000, compared with $180,000-$200,000 for the commercial type lifts. Apart from commercial lifts, AS 1735.16 lifts have played a greater part than any other lift in providing public and private access for people with a disability.

Some respondents also pointed out that the correct size for lift floor dimensions to equate to 90th percentile is 1400mm x 1600mm and not 1400 x 1700 mm as stated in the draft proposal. The proposal to prohibit the use of a constant pressure device for Part 7, 8, 14 & 15 type lifts was strongly resisted by the lift industry on safety grounds.

Some respondents questioned the ability to incorporate more cost effective stair lifts in small commercial buildings. If rendered infeasible and higher cost lifts were included in the analysis, the costs for these provisions would increase substantially. Other respondents believe that the cost of increasing the size of lift shafts in existing buildings should be included in the analysis. The inclusion of such costs would also significantly increase the cost of these provisions in all existing buildings.

Most commercial lifts are imported or consist of a high level of imported components. As a consequence, it was reported that Australian-only sizes and features will have a large impact on the industry's ability to source product.

Response to comment

The original proposal has been varied to allow lift floor plates accommodating the 80th percentile (current BCA) wheelchair size to be used in buildings with lifts that travel no more than 12 m (i.e. 2 and 3 storey buildings). Constant pressure devices and key locks will also be permitted.

A further change is that existing lifts in existing buildings which accommodate the 80th percentile wheelchair size will not be required to upgrade to lifts which accommodate the 90th percentile wheelchair size.

Lift access is not required to the upper levels of car park buildings if there are no accessible car spaces on those levels.

Ratio of and location of accessible sanitary facilities

The BCA currently determines requirements for provision of accessible sanitary facilities simply as a percentage of the total number of facilities required for the building, without specifying their location. The draft Premises Standard proposed that accessible sanitary facilities be provided at each location where male and female sanitary facilities are provided.

Comment received

Many respondents expressed the view that the number of accessible toilets should be based on a ratio aligned with the number of persons with a disability. The provision of accessible toilets at each bank will result in a ratio significantly greater than required to serve the percentage of the population who need them. Whilst accessible sanitary facilities can be used by all building occupants, some disability sector respondents requested that the use of accessible sanitary facilities combined with other uses, such as baby change rooms, be prohibited to ensure they are available for those that truly need an accessible facility.

The current ability for a unisex accessible sanitary facility to be counted once for each sex has a cost-moderating effect. However, consideration was given as to whether this provision is sustainable in the context of a much greater proportion of unisex facilities being provided. For example, it is likely that unisex facilities will entirely replace single sex facilities in some buildings and whilst there are efficiency-in-use gains because either sex can use the facility, these gains will be heavily outweighed by the halving of the total number of facilities provided. If counting unisex sanitary facilities once for each sex is not sustainable, the costs will be significantly more than estimated.

Response to comment

Limited change has been made to the original proposal. In Class 5, 6, 7, 8, and 9 buildings, unisex accessible sanitary facilities will now be required on every storey that contains sanitary compartments, and at not less than 50% of the banks of toilets where more than 1 bank is provided on a storey. This will have the effect of reducing the required provision of sanitary facilities in very large buildings.

Impact on emergency egress

The draft Premises Standard does not impose any new provisions with relation to emergency egress. However, one consultation comment received argued that one impact of the Standard would be to exacerbate some existing concerns in relation to emergency egress from buildings.

Comment received

The issue of emergency egress was mentioned by one industry body in consultation comments received in response to the draft RIS:

> *"… this objective, while aiming to get disabled people into more buildings and into more areas of buildings, creates an issue for building owners and building managers with respect to effective solutions at present for evacuating people with disabilities in the event of an emergency. This proposal is regulating to put those who have disabilities in areas that could risk death or injury in the event of an emergency."*

Response to comment

The respondent correctly identifies the issue of providing adequate emergency egress for people with a disability. This issue has been recognised at least since the inclusion of the first provisions relating to access for people with disabilities in the BCA several years ago. It is expected that this issue will continue to be the subject of policy action in the future. However, it should be noted that the proposal does not impose any new provisions in relation to emergency egress. The proposal does not hinder emergency egress, nor does it alter the likely cost and/or difficulty of providing emergency egress.

Moreover, in practice, the regulated building design and construction features are often supported by procedures such as:

- Fire management plans;
- Warden and/or fire brigade assistance;
- Buddy systems; and
- Staged evacuation procedures.

All of these constitute means by which effective emergency egress arrangements can be identified and facilitated. The proposal does not alter the risk, in the event of an emergency, faced by people with a disability. Whilst the number of people with a disability in a building may increase, existing emergency egress arrangements can apply regardless.

Disability Access Reference Group

The Disability Access Reference Group (DARG) was established in late 2007 to inform Ministers on a number of unresolved issues relating to the proposed Premises Standard.

Membership of the DARG included the Attorney-General's Department; the Department of Innovation, Industry, Science and Research; the ABCB; the Australian Human Rights Commission (formerly the Human Rights and Equal Opportunity Commission); and representatives from industry and the disability community.

The DARG reached agreement on most of the issues referred to it and made several recommendations on the issues that had previously not been agreed by stakeholders. The recommendations affect not only the content and implementation of the Premises Standard, but also the BCA and its administration by the States and Territories.

The DARG delivered its final report to Ministers in June 2008.

12. Statement of compliance with National Competition Policy

The National Competition Policy Agreements set out specific requirements with regard to all new legislation adopted by jurisdictions that are party to the agreements. Clause 5(1) of the Competition Principles Agreement sets out the basic principle that must be applied to both existing legislation, under the legislative review process, and to proposed legislation:

> *The guiding principle is that legislation (including Acts, enactments, Ordinances or Regulations) should not restrict competition unless it can be demonstrated that:*
>
> *(a) The benefits of the restriction to the community as a whole outweigh the costs; and*
>
> *(b) The objectives of the regulation can only be achieved by restricting competition.*

Clause 5(5) provides a specific obligation on parties to the agreement with regard to newly proposed legislation:

> *Each party will require proposals for new legislation that restricts competition to be accompanied by evidence that the restriction is consistent with the principle set out in sub-clause (1).*[63]

Therefore, all RISs must include a section providing evidence that the proposed regulatory instrument is consistent with these National Competition Policy obligations.

One arguable impact of the proposed Premises Standard in relation to competition is that, by increasing the construction cost of new buildings, they provide a degree of competitive advantage to existing buildings (which are not captured by the requirements unless they are being upgraded). However, the size of this impact is relatively small, as indicated by the percentage cost estimates provided above, while the objectives of the regulation, insofar as they relate to the need to codify the existing DDA duties and achieve consistency between the DDA and the building law, cannot be achieved in any other manner which does not restrict competition. Moreover, this RIS argues that there is a net public benefit associated with the proposed Premises Standard, provided intangible as well as tangible impacts are properly weighed. Crucially, the proposed Premises Standard would have no adverse impact on competition within the building industry as a whole, although it would, necessarily, affect the relative prices of different building types. Therefore, the proposed Premises Standard is considered to be fully compliant with the National Competition Policy.

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[63] *Competition Principles Agreement*, Clause 5. 1995. See: www.ncc.gov.au

Glossary

ABCB	Australian Building Codes Board
ABS	Australian Bureau of Statistics
ADA	Americans with Disabilities Act
AHRC	Australian Human Rights Commission
AS	Australian Standards
APCC	Australian Procurement and Construction Council
BAPC	Building Access Policy Committee
BCA	Building Code of Australia
DDA	Disability Discrimination Act
DTS	Deemed-to-Satisfy
NLA	Net Lettable Area
NPV	Net Present Value
OBPR	Office of Best Practice Regulation
PV	Present Value
RIS	Regulation Impact Statement
TWG	Technical Working Group
UJH	Unjustifiable Hardship
US	United States
VBC	Victorian Building Commission

Appendix A: Description of RIS Costing Methodology

In determining standards, the BCA incorporates a hierarchy of regulatory provisions, commencing with an explicit statement of objectives and then becoming increasingly specific in terms of the implementation of that objective in practice. A set of detailed, prescriptive DTS requirements is provided at the base of this hierarchy, with the purpose of providing certainty that designs that conform to these provisions will conform with the regulatory requirements.

This overall approach reflects the fact that widely recognised regulatory best practice is to specify performance standards which allow those who must comply with regulation maximum flexibility in meeting the underlying regulatory standard. A particular benefit of performance based regulation is that it does not lock in a particular means of meeting a standard when technology and accepted practice may offer lower cost or more appropriate approaches in the future.

The use of DTS provisions reflects the need in many regulatory contexts to provide clear guidance as to specific actions that would be held to satisfy the performance standards. Such guidance assists in allowing regulatory certainty to be maintained, by eliminating the need for small business and other groups with relatively limited resources, in particular, to interpret the performance standards in order to determine the specific regulatory compliance requirements that apply to them.

In this context, compliance with the DTS specification represents, by definition, the upper bound limit of the range of possible compliance costs attached to the performance based regulatory standard. This is because those who must comply remain free to offer an alternative approach which may be less expensive in their particular circumstances.

The DTS provisions of the BCA – which are also contained in the Premises Standard – necessarily forms the basis of the cost analysis to be undertaken for this proposal. This is a normal practice in estimating the costs of performance based regulation, since the DTS provisions provide the only detailed basis on which to construct cost estimates. While other options may offer lower costs in particular cases, these different means of complying cannot be inferred in advance of the adoption of the regulations.

Thus, it must be noted at the outset that the cost estimates made, based on the DTS requirements, will necessarily tend to be over-estimates of the true costs that will be incurred, to some degree. The extent of any such over-estimation in practice is determined by the frequency with which alternative, less costly, solutions are developed to reach compliance with the performance requirements.

In employing this approach, the costs are treated as non-compensable. That is, no offsetting (economic) gains are allocated to them. This is a necessary simplifying assumption. Although the gains would not measure up to the builder/customer's estimate of the costs (or regulation would normally be

unnecessary) some gains to parties other than people with a disability can be expected to result from implementation of the Premises Standard. These would derive from better design, improved flow, better facilities for people with children or those with only a slight disability and so on. These gains are not quantified in the RIS.

A third assumption is that buildings are currently built only to the standard required by the BCA. That is, it is assumed that building designers are not varying their designs to take account of the general DDA obligations that already exist in respect of access to premises, other than where the BCA creates specific requirements. Again, this is a necessary simplifying assumption, given that adequate information on the extent to which buildings are already incorporating higher standards of access is not available.

Again, the effect of this simplifying assumption will be to over-estimate the costs of compliance with the Premises Standard to some degree. This will occur to the degree that the standards are simply codifying existing practice. There is an increased likelihood of this to the degree that the industry regards the current non-specific requirements under the DDA as standards to be met[64]. Clearly, some facilities are abiding by a higher standard in some areas, e.g. "wheelchair" friendliness, and promoting themselves as such for commercial and other reasons.

However, discussions with property industry stakeholders have not supported the notion that there is currently a widespread "voluntary" adoption of the higher standards where significant cost penalties are involved. They argue that commercially the case for doing so is weak in view of the small percentage of people with a disability needing the services provided in exchange for these additional costs. If this view accurately represents existing practice, the extent of any over-estimation of the costs of the Premises Standard resulting from this simplifying assumption will be small.

Use of Case Studies to Illuminate Cost Implications

Accurately modelling the specific impacts of the Premises Standard would require an almost infinite number of permutations to be costed. As this is clearly infeasible, the approach taken to cost estimation has been developed based on necessarily-stylised "standard buildings", for which the costs of applying the Premises Standard are estimated. The task involved identifying "case studies" in respect of both new and altered/refurbished buildings. The development of case studies was undertaken by the RIS Steering Committee appointed by the Building Access Policy Committee.

A total of 46 case studies were developed. These case studies were then reviewed by the RIS consultants and, in particular, the expert quantity

[64] Similarly, such existing compliance will tend to reduce the potential benefits associated with the adoption of the Premises Standard.

surveyors included on the team[65] to ensure that they were appropriate and representative of building activity overall.

For new buildings, twenty different case studies were identified. These were designed to offer insights into the most common types of buildings and also to assess cost for some buildings that are less common but which might provide particular problems and thereby enrich the study.

The new buildings included: (BCA Classification in brackets)

- holiday accommodation – single storey (1b)
- accommodation – no lift – 3 storey (2)**
- accommodation – with lift – 7 storey (2)**
- hotel/motel – no lift – 2 storey (3)
- hotel – with lift – 3+ storey 200 room (3)
- hotel – with lifts – 3+ storey 350 room (3)
- office – dwelling size – 2 storey (5)*
- office – 7 storey (5)
- office – (av. floor plate of 900m^2) 20 storey (5)
- shopping centre – large horizontal spread (6)
- restaurant(s) – 2 storey (6)*
- carpark – 7 storey (7a)
- storage / warehouse – 2 storey (7b)*
- lab / factory – 500m2 – single storey (8)
- hospital building – 3 storey (9a)
- theatre – 500 seat (9b)
- theatre – 1200 seat (9b)
- school building – 2 storey (9b)
- community hall – single storey (9b)
- stadium – 10 000-15 000 seat (9b)

* Additional case studies have been included to reflect the impact of the exemption for small 2-3 storey buildings, by allowing a comparison to be made between buildings that would fall below the exemption threshold and those that would not.

For existing buildings the assessment involved estimation of the costs associated with 18 “full” and 8 “partial” upgrades. The case studies therefore comprised: (BCA classification in brackets)

[65] The Rawlinsons Group: In particular, Mr Steven O’Neill and Mr Ian Jamieson.

- Full Upgrade
    - holiday accommodation – single storey (1b)
    - bed and breakfast - 2 storey (1b)
    - hotel / motel – no lift – 2 storey (3)
    - hotel – with lift – 3+ storey 200 room (3)
    - hotel – with lifts – 3+ storey, 350 room (3)
    - office – dwelling size – 2 storey (5)*
    - office – 7 storey (5)
    - office (av. floor plate of 900m^2) – 20 storey (5)
    - shop – small single storey (6)
    - shopping centre – large horizontal spread (6)
    - restaurant(s) – 2 storey (6)*
    - theatre – 500 seat (9b)
    - theatre – 1200 seat (9b)
    - school building – 2 storey (9b)
    - community hall – single storey (9b)
    - 10m lap pool (10b)**
    - 50m swimming pool - 6 lane (10b)
    - Spa pool (10b)**

* Additional case studies have been included to reflect the impact of the exemption for small 2-3 storey buildings, by allowing a comparison to be made between buildings that would fall below the exemption threshold and those that would not.

** These case studies have been excluded from the final RIS.

- Partial Upgrade
    - accommodation – no lift (common areas) – 3 storey (2)**
    - accommodation – with lift (common areas) – 7 storey (2)**
    - office – dwelling size (half one floor) – 2 storey (5)
    - office (one floor) – 7 storey (5)
    - office (av. floor plate of 900m2) (three floors) – 20 storey (5)
    - hospital building – 3 storey (10% floor area) (9a)
    - shopping centre – large horizontal spread (10% floor area) (9b)
    - stadium – 40 000 seat (10% floor area) (9b)

Estimating costs for each case study

The analysis of the cost impacts of each case study comprised three steps. First, the requirements of the Premises Standard with respect to the specific building type set out in the case study were determined and compared with the current BCA requirements. Where no specific BCA requirements could be identified, standard industry practice was used as a baseline. Comparison of the Premises Standard and the existing requirements yielded a list of specific additional requirements in each case.

The second step involved determining the cost of each of these additional requirements. This was done with reference to standard construction cost manuals[66] and, where required, was estimated via the expert knowledge of the quantity surveyors involved in the project. Standard construction cost estimates for Melbourne were used as the basis for estimation[67]. The estimated value of each of the major cost items is reproduced in Appendix B.

Third, the cost of each of the individual requirements for each case study was summed to obtain the aggregate cost estimate for that case study. Additional details on the methodology applied in costing the case studies are contained in Appendix B. In particular, it should be noted that the analysis assumes existing buildings being upgraded comply with current BCA requirements. While this will not be the case in many circumstances, it is necessary to abstract from the costs implicit in bringing buildings up to current BCA standard in the context of renovation activity, in order to ensure that only the costs directly attributable to the Premises Standard are estimated for the present purposes[68].

Finally, an indicative construction cost for each of the case study buildings has been estimated. This allows the cost of applying the Premises Standard to be expressed in proportionate terms in each case. That is, a percentage cost increase associated with applying the Premises Standard is provided for each case study. The purpose of this step is twofold. First, it provides an improved indication of the relative importance of the costs incurred. Second,

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[66] See *Rawlinsons Australian Construction Handbook* - edition 21, 2003.

[67] As noted in section 5, above, the original Premises Standard proposal included a requirement that, where more than 50% of the floor area of a building was being upgraded within a three year period, the entire floor area of the building would need to be made compliant with the Standard. Removal of this "trigger" from the modified Premises Standard proposal has contributed to the reduction in the expected costs of applying the Standard in relation to full building upgrades.

[68] It has been suggested that, in circumstances in which work is also required to upgrade buildings to current BCA compliance, the costs of going further – to reach compliance with the Premises Standard – would be less than estimated via this method. This may be the case where specific items are already required under BCA but are required to be provided at a higher level under the Standard (e.g. door widening to differing standards). However, in circumstances where the Standard imposes a new requirement not covered by BCA at present, no such cost reduction is likely to arise. This analysis has necessarily been unable to address any potential cost reductions of this type in quantitative terms. However, the potential for this to occur appears to be very limited, as most of the requirements of the Standard are additional measures, rather than increases in the stringency of existing measures.

it provides the basis on which aggregate cost estimates are derived, as discussed below.

Obtaining Data on Economy-Wide Building Costs

National aggregate cost estimates were derived by taking detailed permit data from ABS and Victorian Building Commission (VBC) and allocating the total value of these permits to categories broadly consistent with the types of building chosen on the case studies. By necessity, a large number of attribution assumptions based on VBC data sit behind the allocations. The proportionate cost increases for the case studies were then applied to the permit values to determine national estimates for each category, which were then summed to an economy wide estimate.

Estimation of the economy-wide costs of adopting the Premises Standard is rendered difficult by data inadequacies. In particular, the official ABS building activity data includes only broad categories of building type that do not conform closely with the BCA building classifications or the matrix of case studies discussed above. The ABS data divides building activity into the following categories[69]:

- Other non-residential (i.e. flats and apartments);
- Hotels, Motels;
- Shops;
- Factories;
- Offices;
- Other business premises;
- Educational;
- Religious;
- Health;
- Entertainment and Recreational; and
- Miscellaneous.

It is clear that a potentially vast diversity of buildings would be found within each of these categories, particularly with respect to the size and the number of storeys of the buildings.

Given these data issues, the ABS data was supplemented by analysis of equivalent, but more detailed data provided by the VBC. It is possible to use the VBC data to gain some insights into the relative significance of some of the sub-categories and to assist in providing a more reliable estimate of the economy-wide effect of the proposals. However there were limits to the extent to which ABS data could be assigned to the more analytically useful

[69] Note – domestic building, which comprises Class 1 buildings (houses) is excluded here.

VBC classes. There was also considerably greater difficulty in developing a concordance between the different sub-classes of buildings developed for costing purposes and the official data on building costs.

Given these factors, there is necessarily a substantial degree of imprecision in the aggregate (economy-wide) estimates contained in the RIS.

Adjusting benefit and cost estimates to account for price movements since the publication of the draft RIS

The following work was undertaken to adjust the benefit and cost estimates made in the draft RIS to update them to better reflect current dollar terms:

- ***Benefit*** estimates have been adjusted by applying a CPI based adjustment of 4.25% to all quantified benefit estimates. The choice of the CPI as an index for adjusting this data reflects the fact that the substantial majority of the quantified benefits identified accrued in terms of reduced costs of living. That is, they derived from a reduced need to purchase goods or services to assist in living with a disability from day to day. It follows that the general rate of price inflation for goods and services over the intervening period should be adopted.
- ***Cost*** estimates have been revised by quantity surveyors Turner and Townsend Rawlinsons based on their standard industry costing reference. This has meant that some costs have increased by as much as 10%, although some others have changed by significantly smaller amounts. It should also be noted that significant changes made to parts of the Standard have made numerous cost recalculations necessary. As well, stakeholder feedback and further consideration of the likely practical impact of the Standard on various case study buildings have led to additional changes.

Developing long-run cost and benefit estimates

NPV estimates have been developed based on a 30 year time horizon. However, the year by year cost (and benefit) data on which these PV calculations are based reflect current year estimates. That is, no estimated growth rates have been included in respect of either the value of total annual building activity or the value of the benefits received by people with disabilities as a result of the implementation of the proposed Standard.

This clearly represents a methodological simplification. It has been adopted for several reasons. One reason is that the $22.8 billion figure used for the annual value of building expenditures was considered likely to represent an “above trend” value. This being so, the projection of an estimated growth trend onto this value would be misleading.

Second, ABS does not produce projections of future disability rates, which would be needed in order to produce benefit estimates on an equivalent basis.

Moreover, adding growth rates for benefits and costs would have substantially complicated an already complex analysis. It was not clear that this additional complexity would have yielded any real enhancements in the likely accuracy of the estimates used, given the necessarily substantial degree of uncertainty that would attach to the values used.

However, it can be speculated that the overall impact of applying growth rates to both sides of the analysis is more likely to increase both net benefits and the benefit/cost ratio than the converse. If disability rates rise over the life of the Standard, as is commonly predicted, the proportion of the populace benefiting from the given expenditures on accessibility rises and the benefits will almost certainly rise more quickly than the costs.

In sum, the exclusion of growth rates from the NPV analysis implies that these estimates will under-estimate the true PV of both the benefits and costs of the standard. This under-estimate will be quite substantial, given the 30 year time horizon used. However, the expected benefits are likely to be under-estimated by a larger amount than will be the costs. Thus, it can be speculated that the inclusion of growth rates would increase both the NPV of the Standard and the benefit/cost ratio attached to it.

Use of 2002 building activity data

Building activity data for 2002 constituted the most recent available data in 2003 when regulatory impact analysis work on the proposed Premises Standard was commenced. The draft RIS on the 2004 draft proposal was published in February 2004.

In developing the final RIS, it was necessary to determine whether to continue to base the analysis on the 2002 building activity data or to update this to the latest available building activity data (2007 at the time of writing). The 2002 data has been retained as the basis for the analysis for a number of reasons, discussed below:

First, this approach maximises the degree of comparability between the draft RIS and the final RIS, thus allowing the reader to develop a better understanding of the impact of the various changes made to the proposed Standard.

Second, the most accurate understanding of the long-term impacts of the proposed Premises Standard will be obtained if the data from which the cost estimates are derived reflects an average, or representative year. That is, costs are best modelled against a level of building activity that is reflective of the likely average over the period during which the standard will be implemented.

Building activity levels in recent years cannot be said to fit this criterion. Rather, building activity has been running at extremely high levels. Thus, adopting the 2007 data and effectively extrapolating this forward over the projected life of the Standard would have the impact of substantially overestimating the likely cost impact. The inappropriateness of using current

data is further illustrated when the current global financial crisis is taken into consideration, as this is predicted to result in a slow-down correction of activity in the commercial building sector over the next few years. By contrast, it is considered that the 2002 building data is more reflective of the average level of activity across the whole building cycle.

Finally, it should be noted that, consistent with the decision to continue to use the 2002 building activity data, the data and assumptions used in benefit estimation have also remained unchanged from the draft RIS. This ensures that consistency is retained with regard to both sides of the analysis.

Appendix B: Cost estimates – individual building upgrade items

General Notes

(1) The costs are based on an assessment of the impact of moving from the minimum requirements of the existing BCA to those of the Draft Access Code for Buildings October 2008.

(2) The costs adopted are based on construction costs for the Melbourne area. Costings are generally drawn from *Rawlinsons Australian Construction Handbook* (Edition 23, 2005).

(3) Costs do not generally allow for cases in which current building design makes allowances for the Disability Discrimination Act. To the extent that such allowance is currently made, this will tend to reduce the incremental costs of adopting the Premises Standard, while also reducing the benefits.

(4) Costs for new buildings include allowance for the cost of building additional area to provide additional floor space for turning and passing spaces, accessible sanitary facilities, wheelchair seating spaces and the like. This allowance has been made by estimating the additional space required on a "no other changes" basis. However, some stakeholders argue that the required space can often be provided with little or no addition to net building size, through adoption of more efficient building design. It is acknowledged that, for some building types and locations, site and planning constraints could mean that the additional required space could not be built and that the net result would be a reduction in lettable area. However, the cost implications of this outcome are conceptually similar to those of building additional space.

(5) For upgrade case studies, it has been assumed that it would generally be impractical to build such additional floor space. The requirements would instead be provided by alterations to internal wall layouts, which would be likely to result in some loss of lettable area. The analysis assumes a 2% loss of Net Lettable Area on average for upgraded buildings.

(6) Major specific assumptions employed in generating the cost estimates are set out below. Where the use of these necessary assumptions is likely to under or over-estimate costs systematically, the direction of these biases (and their likely importance) is indicated in parentheses.

(7) All cost estimates, assumptions and exclusions contained in the draft RIS have been reviewed. The exercise was undertaken to verify that the information presented regarding costs is accurate and appropriate. As a result, some revisions have been made in this final RIS.

Assumptions

- Buildings to be upgraded comply with current BCA requirements. To the extent that larger costs are incurred due to upgrades of non-compliant buildings, these are not conceptually attributable to the Access Code.
- The required accessible sole-occupancy units in 2-storey hotel/motel buildings and rooms/facilities in 2-storey B&B's could be provided on the ground level, as representative of the standard unit in the building.
- New hotels and major office buildings built with entrances at grade.
- Large shopping centres would not be affected by lift or circulation requirements, as such features would normally be provided.
- Costs related to revised requirements for car parking spaces are those associated with line marking and installation of bollards. No additional space is required by the proposal, except in day surgery or clinic carparks containing 50 or more car spaces. [This will slightly underestimate costs, however it is expected these specific instances will, in practice, be rare.]
- Class 10b costs relate to swimming pools (with a perimeter of 40m or more) only and exclude related buildings or enclosures.
- The cost of provision of additional wheelchair seating spaces in Class 9b buildings is based on additional floor area only and that access to such spaces would be able to be provided at no additional cost.
- Extra costs for provision of accessible sanitary facilities in lieu of standard facilities in upgrade case studies assume that the standard facility is provided as part of proposed upgrade works.
- Extension of hearing augmentation to large stadia is based on a simple extension of a radio transmission system.

Exclusions

- Impact of extreme site conditions such as level changes. While there will be some cases in which the requirements will be very difficult to accommodate as a result of site conditions, it is not possible to estimate the aggregate impact of such costs[70].
- Links between buildings (all case studies have been treated as single buildings). Clearly, such links where they exist would involve some additional costs and may not be feasible in some circumstances.
- Regional costs. No information has been found to suggest that Australia-wide costs diverge substantially from the Victorian-based costs used in the estimations contained in the RIS. Nor is there any information to suggest particularly substantial cost variations in any specific regional centre(s).

[70] Such issues may be especially important in hilly areas of CBDs where the provision of increased entrances suitable for persons with a disability could be impracticable and the attempt to do so (or the alternative of closing off existing entrances to remove the need to have additional facilities) can adversely effect circulation within the area, thereby reducing its value.

- Design and documentation fees. These costs are implicitly included within aggregate costs.
- GST. This is a transfer, rather than an economic cost.

STANDARD RATES ADOPTED FOR CASE STUDIES

Item	***$ / EACH***
Accessway Requirements - Ramps	
Typical Ramps to entries, including landings, kerbs, handrails and tactile paving (Base rates):	
Ramps to Class 1b (new)	$2,200
Ramps to Class 1b (upgrade)	$2,000
Ramps to Class 5,6,7b,8 (new)	$6,000
Accessway Requirements - General	
Doorway widths - extra over cost of standard door for wider door leaf and frame on accessways (new building)	$100
Doorway widths - remove standard door and replace with wider door leaf and frame on accessways (upgrade - class 1b)	$900
Doorway widths - remove standard door and replace with wider door leaf and frame on accessways (upgrade - class 3)	$1,500
Doorway widths - remove standard door and replace with wider door leaf and frame on accessways (upgrade - class 5,6,7b,8)	$1,250
Markings to full height glazing on accessways (per accessway)	$400
Allowance for additional 1 m2 (average) circulation area per passing / turning space	$1,250
Tactile directional signs	$200
Accessible sanitary facilities	
Extra Over Standard bathroom / toilet:	
Accessible sanitary facilities to class 1b - new build (including provision of additional floor space)	$4,800
Accessible sanitary facilities to class 1b - upgrade	$6,500
Accessible sanitary facilities to class 3,5,6,7b,8 - new build (including provision of additional floor space)	$6,000
Accessible sanitary facilities to class 3 - upgrade	$8,500

Item	*$ / EACH*
Full cost, including structure, finishes, services, fixtures and fittings	
Additional accessible sanitary facility - new build	$15,500
Additional accessible sanitary facility with shower - new build	$19,700
Full cost, including alterations, finishes, services, fixtures and fittings	
Additional accessible sanitary facility - upgrade	$13,400
Additional accessible sanitary facility with shower - upgrade	$15,800
Extra Over Standard Sanitary Compartment:	
Extra for sanitary compartments suitable for ambulant disabilities - new build (including provision of additional floor space)	$2,500
Extra for sanitary compartments suitable for ambulant disabilities - upgrade	$1,500
Wheelchair seating spaces in auditoria	
Allowance for additional floor area requirement per seat	$2,400
Lifts	
Extra over standard lift for 90th percentile car size	$5,000
Extra over standard lift for additional accessibility features	$6,000
Retrofit accessibility features to existing lift	$16,000
Lift in two storey buildings, where not currently provided	$100,000
AS 1428	
Allowance for additional space requirements in accessible sanitary facilities (per location)	$1,200
Allowance for additional space requirements in circulation areas (per location)	$1,000

BASE CONSTRUCTION COST ("GENERIC BUILDING" COST) METHODOLOGY

Class	Case Study Building	Comments	Base cost calculation / basis	Base cost adopted
NEW BUILDINGS				
1b	Single storey – holiday accommodation	Class 1b <300m^2, <12 persons; assume single unit	Average allowance	$165,000
3	2 storey – hotel/motel – no lift	assume 50 rooms - accessible units by max 1 No.	50 rooms @ $75k	$3,750,000
3	3+ storey 200 room – hotel – with lift		200 rooms @ $130k	$26,000,000
3	3+ storey 350 room – hotel – with lifts		350 rooms @ $320k	$112,000,000
5	2 storey – office – dwelling size (with exemption)	assume 200m^2	200m^2 @ $1650/m^2	$330,000
5	2 storey – office – dwelling size (without exemption)	assume 1200m^2	1200m^2 @ $1550/m^2	$1,860,000
5	7 storey – office	assume 1200m^2 per floor	8,400m2 @ $1980/m^2	$16,500,000
5	20 storey – office (av. floor plate of 900m^2)		18,000m^2 @ $2,640/m^2	$47,520,000
6	Large horizontal spread – shopping centre	assume 2No. toilet blocks	2003 project 50,000m2, constr cost $85m +10%	$93,500,000
6	2 storey – restaurant(s) (with exemption)	assume 200m^2	200m^2 @ $2750/m^2	$550,000
6	2 storey – restaurant(s) (without exemption)	assume 1200m^2	1200m^2 @ $2500/m^2	$3,000,000
7a	7 storey – carpark	assume 1200m^2 per level	8,400m^2 @ $750/m^2	$6,300,000
7b	2 storey – storage / warehouse (with exemption)	assume 5000m^2	5,000m^2 @ $850/m^2	$4,250,000
7b	2 storey – storage / warehouse (without exemption)	assume 6000m^2	6000m^2 @ $850/m^2	$5,100,000
8	Single storey – lab / factory – 500m^2		500m^2 @ $3,800/m^2	$1,900,000
9a	3 storey – hospital building	assume 2000m^2	2,000m^2 @ $3,300/m^2	$6,600,000

Class	Case Study Building	Comments	Base cost calculation / basis	Base cost adopted
9b	500 seat – theatre		$9,600/seat	$4,800,000
9b	1200 seat – theatre		$12,500/seat	$15,000,000
9b	2 storey – school building	assume 2,000m^2	2,000m^2 @ $1,650/m^2	$3,300,000
9b	Single storey – community hall	assume 40 x 25m = 1,000m^2	1,000m^2 @ $1,300/m^2	$1,300,000
9b	10 000-15 000 seat – stadium		$10,000/seat	$150,000,000
BUILDING UPGRADES				
1b	Single storey – holiday accom'n	Full Upgrade	Average allowance	$45,000
1b	2 storey – B & B	Full Upgrade (change of use from 1a)	Average allowance	$75,000
3	2 storey – hotel/motel – no lift	Full Upgrade	Average allowance	$1,100,000
3	3+ storey 200 room – hotel – with lift	Full Upgrade	Average allowance	$7,000,000
3	3+ storey 350 room – hotel – with lifts	Full Upgrade	Average allowance	$10,000,000
5	2 storey – office – dwelling size (with exemption)	Partial Upgrade (half one floor only)	Average allowance	$45,000
5	2 storey – office – dwelling size (with exemption)	Full Upgrade	assume 200m^2 @ $550	$110,000
5	2 storey – office – dwelling size (without exemption)	Full Upgrade	assume 1200m^2 @ $550	$660,000
5	7 storey – office	Partial Upgrade (one floor only)	assume 1 x 1200m^2 @ $900	$1,100,000
5	7 storey – office	Full Upgrade	assume 7 x 1200m^2 @ $900	$7,500,000
5	20 storey – office (av. floor plate of 900m^2)	Partial Upgrade (three floors only)	assume 3 x 900m^2 @ $1,100	$3,000,000
5	20 storey – office (av. floor plate of 900m^2)	Full Upgrade	assume 20 x 900m^2 @ $1,100	$20,000,000
6	Small single storey – shop	Full Upgrade	Average allowance	$35,000
6	Large horizontal spread – shopping centre	Partial Upgrade (10% floor area)	assume 5,000m^2@ $900	$4,500,000

Class	Case Study Building	Comments	Base cost calculation / basis	Base cost adopted
6	Large horizontal spread – shopping centre	Full Upgrade	50,000m^2 @ $600	$30,000,000
6	2 storey – restaurant(s) (with exemption)	Full Upgrade	Average allowance	$165,000
6	2 storey restaurant(s) (without exemption)	Full Upgrade	Average allowance	$500,000
9a	3 storey – hospital building	Partial Upgrade (10% floor area)	Average allowance	$8,500,000
9b	500 seat – theatre	Full Upgrade	Average allowance	$2,200,000
9b	1200 seat – theatre	Full Upgrade	Average allowance	$6,600,000
9b	2 storey – school building	Full Upgrade	2000m^2 @ $550/$m^2$	$1,100,000
9b	Single storey – community hall	Full Upgrade	1000m^2 @ $450/$m^2$	$450,000
9b	40 000 seat – stadium	Partial Upgrade (10% floor area)	Average allowance	$22,000,000
10b	50m swimming pool - 6 lane	Full Upgrade	Average allowance	$220,000

Appendix C: Matrix of building case studies