REPORT TO .AU DOMAIN ADMINISTRATION LTD MARCH 2019

# DIRECT REGISTRATION IN AUSTRALIA

COST-BENEFIT ANALYSIS





ACIL ALLEN CONSULTING PTY LTD ABN 68 102 652 148

LEVEL NINE 60 COLLINS STREET MELBOURNE VIC 3000 AUSTRALIA T+61 3 8650 6000 F+61 3 9654 6363

LEVEL ONE 50 PITT STREET SYDNEY NSW 2000 AUSTRALIA T+61 2 8272 5100 F+61 2 9247 2455

LEVEL FIFTEEN 127 CREEK STREET BRISBANE QLD 4000 AUSTRALIA T+61 7 3009 8700 F+61 7 3009 8799

LEVEL ONE 15 LONDON CIRCUIT CANBERRA ACT 2600 AUSTRALIA T+61 2 6103 8200 F+61 2 6103 8233

LEVEL TWELVE, BGC CENTRE 28 THE ESPLANADE PERTH WA 6000 AUSTRALIA T+61 8 9449 9600 F+61 8 9322 3955

167 FLINDERS STREET ADELAIDE SA 5000 AUSTRALIA T +61 8 8122 4965

ACILALLEN.COM.AU

SUGGESTED CITATION FOR THIS REPORT

ACIL ALLEN CONSULTING (2019), DIRECT REGISTRATION IN AUSTRALIA: COST-BENEFIT ANALYSIS, REPORT TO AUDA, MELBOURNE, MARCH.

RELIANCE AND DISCLAIMER THE PROFESSIONAL ANALYSIS AND ADVICE IN THIS REPORT HAS BEEN PREPARED BY ACIL ALLEN CONSULTING FOR THE EXCLUSIVE USE OF THE PARTY OR PARTIES TO WHOM IT IS ADDRESSED (THE ADDRESSEE) AND FOR THE PURPOSES SPECIFIED IN IT. THIS REPORT IS SUPPLIED IN GOOD FAITH AND REFLECTS THE KNOWLEDGE, EXPERTISE AND EXPERIENCE OF THE CONSULTANTS INVOLVED. THE REPORT MUST NOT BE PUBLISHED, QUOTED OR DISSEMINATED TO ANY OTHER PARTY WITHOUT ACIL ALLEN CONSULTING'S PRIOR WRITTEN CONSENT. ACIL ALLEN CONSULTING ACCEPTS NO RESPONSIBILITY WHATSOEVER FOR ANY LOSS OCCASIONED BY ANY PERSON ACTING OR REFRAINING FROM ACTION AS A RESULT OF RELIANCE ON THE REPORT, OTHER THAN THE ADDRESSEE.

IN CONDUCTING THE ANALYSIS IN THIS REPORT ACIL ALLEN CONSULTING HAS ENDEAVOURED TO USE WHAT IT CONSIDERS IS THE BEST INFORMATION AVAILABLE AT THE DATE OF PUBLICATION, INCLUDING INFORMATION SUPPLIED BY THE ADDRESSEE. ACIL ALLEN CONSULTING HAS RELIED UPON THE INFORMATION PROVIDED BY THE ADDRESSEE AND HAS NOT SOUGHT TO VERIFY THE ACCURACY OF THE INFORMATION SUPPLIED. UNLESS STATED OTHERWISE, ACIL ALLEN CONSULTING DOES NOT WARRANT THE ACCURACY OF ANY FORECAST OR PROJECTION IN THE REPORT. ALTHOUGH ACIL ALLEN CONSULTING EXERCISES REASONABLE CARE WHEN MAKING FORECASTS OR PROJECTIONS, FACTORS IN THE PROCESS, SUCH AS FUTURE MARKET BEHAVIOUR, ARE INHERENTLY UNCERTAIN AND CANNOT BE FORECAST OR PROJECTED RELIABLY.

ACIL ALLEN CONSULTING SHALL NOT BE LIABLE IN RESPECT OF ANY CLAIM ARISING OUT OF THE FAILURE OF A CLIENT INVESTMENT TO PERFORM TO THE ADVANTAGE OF THE CLIENT OR TO THE ADVANTAGE OF THE CLIENT TO THE DEGREE SUGGESTED OR ASSUMED IN ANY ADVICE OR FORECAST GIVEN BY ACIL ALLEN CONSULTING.

© ACIL ALLEN CONSULTING 2019

## CONTENTS

## EXECUTIVE SUMMARY

	_		
	-	-	

	INTRODUCTION	1
1.1	Background and context	1
1.2	Study objective and scope	1
1.3	Study approach	3
1.4	Report structure	4
	จ	
	<u></u>	
	COSTS OF DIRECT REGISTRATION	5
2.1	Overview	5
2.2	Initial costs of direct registration	5
2.3	Likely increase in domain names	5
2.4	Adoption scenarios	8
2.5	Other potential costs of direct registration	13
	9	
	9	
	POTENTIAL BENEFITS OF DIRECT REGISTRATION	14
3.1	Typology of benefits	14
3.2	Enhancing growth of internet shopping in Australia	16
3.3	Social benefits	17

## 4

1

	COST-BENEFIT ANALYSIS RESULTS	18
4.1	Breakeven / threshold analysis	18
4.2	Sensitivity analysis	19
4.3	Conclusion	19

## FIGURES

FIGURE ES 1	INCREMETNAL COSTS OF DIRECT REGISTRATION IN	
	AUSTRALIA, 2018/19 TO 2027/28 (\$M)	II
FIGURE ES 2	PROJECTED VALUE OF INTERNET SHOPPING IN	
	AUSTRALIA IN BASE CASE, 2018-19 TO 2027-28 (\$M)	III
FIGURE 2.1	DOMAIN NAMES IN AUSTRALIA BY EXTENSION,	
	JUNE 2018	6
FIGURE 2.2	TOTAL DOMAIN NAMES IN AUSTRALIA, JUNE 2009 TO	
	JUNE 2018	6
FIGURE 2.3	DOMIAN NAMES IN NEW ZEALAND, JAN 2014 TO JAN	
	2019	7
FIGURE 2.4	TOTAL .UK DOMAINS SINCE INTRODUCTION OF	
	SECOND LEVEL DOMAINS IN JUNE 2014	7
FIGURE 2.5	SECOND- AND THIRD-LEVEL DOMAINS AS	
	PROPORTION OF TOTAL DOMAINS IN BASE CASE -	
	LOWER ADOPTION OF DIRECT REGISTRATION	
	SCENARIO, 2018/19 TO 2027/28	8

## C O N T E N T S

FIGURE 2.6	TOTAL NUMBER OF DOMAIN NAMES IN BASE CASE	
	AND WITH DIRECT REGISTRATION – LOWER ADOPTION	
	OF DIRECT REGISTRATION SCENARIO, 2018/19 TO	9
FIGURE 2.7	2027/28 PROJECTED NUMBER OF SECOND- AND THIRD-LEVEL	9
FIGURE 2.1	DOMAIN NAMES WITH DIRECT REGISTRATION –	
	LOWER ADOPTION OF DIRECT REGISTRATION	
	SCENARIO, 2018/19 TO 2027/28	10
FIGURE 2.8	RESOURCE COST OF DIRECT REGISTRATION – LOWER	10
HOORE 2.0	ADOPTION OF DIRECT REGISTRATION SCENARIO.	
	2018/19 TO 2027/28	10
FIGURE 2.9	SECOND- AND THIRD-LEVEL DOMAINS AS	
	PROPORTION OF TOTAL DOMAINS IN BASE CASE -	
	HIGHER ADOPTION OF DIRECT REGISTRATION	
	SCENARIO, 2018/19 TO 2027/28	11
FIGURE 2.10	TOTAL NUMBER OF DOMAIN NAMES IN BASE CASE	
	AND WITH DIRECT REGISTRATION - HIGHER ADOPTION	
	OF DIRECT REGISTRATION SCENARIO, 2018/19 TO	
	2027/28	12
FIGURE 2.11	PROJECTED NUMBER OF SECOND- AND THIRD-LEVEL	
	DOMAIN NAMES WITH DIRECT REGISTRATION -	
	HIGHER ADOPTION DIRECT REGISTRATION SCENARIO,	40
	2018/19 TO 2027/28	12
FIGURE 2.12	RESOURCE COST OF DIRECT REGISTRATION – HIGHER	
	ADOPTION OF DIRECT REGISTRATION SCENARIO, 2018/19 TO 2027/28	13
FIGURE 3.1	INTERNET SHOPPING VALUE IN AUSTRALIA BY	15
HOULE J.I	STATE/TERRITORY, 2018/19	16
FIGURE 3.2	INTERNET SHOPPING IN AUSTRALIA – KEY PRODUCT	10
	CATEGORIES	17
FIGURE 3.3	PROJECTED VALUE OF INTERNET SHOPPING IN	
	AUSTRALIA IN BASE CASE, 2018/19 TO 2027/28 (\$M)	17



ACIL Allen Consulting was commissioned by .au Domain Administration Ltd (auDA) to undertake a cost-benefit analysis of direct registration in Australia.

#### Methodology overview

ACIL Allen's cost-benefit analysis of direct registration assesses the resource costs of direct registration against its potential benefits in terms of its ability to induce an increase in the value of internet shopping in Australia.

As the magnitude of the economic impacts of direct registration is uncertain, a breakeven / threshold analysis is undertaken to estimate the minimum additional growth in internet shopping that is required for direct registration to generate net benefits for the broader Australian community.

It is important to remember that a cost-benefit analysis quantifies the net economic benefits of a policy change to the broader Australian community, rather than the net benefits to narrower entities such as the government, auDA, registrars or registrants (that is, businesses).

#### Costs

For the cost-benefit analysis, it is assumed that auDA will spend \$1 million in 2018-19 and \$1 million in 2019-20 to market and promote direct registration. It is assumed that the resource cost of each domain name is \$10 per year, and is the same for third-level domain names (such as .com.au, .net.au, .org.au and .gov.au) and second-level domain names (.au).

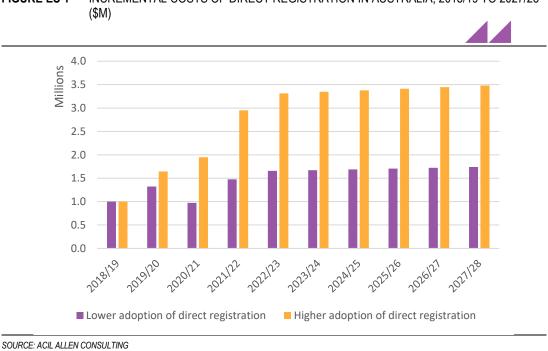
In mid-2018, there were a total of 3,151,616 domain names in Australia. It is assumed that total domain names will grow by 1 per cent a year in the Base Case (that is, without direct registration), based on an analysis of historical growth rates.

There is considerable uncertainty as to the magnitude of likely adoption of direct registration in Australia. For this cost-benefits analysis, two scenarios relating to the extent of adoption of direct registration in Australia over a 10-year period were examined: a lower (10 per cent) adoption scenario and a higher (20 per cent) adoption scenario.

In the lower adoption of direct registration scenario, the proportion of third-level domains is assumed to decline by 1 per cent a year between 2018/19 and 2023/24 before remaining constant at 95 per cent thereafter. The proportion of .au domains to total domains in the Base Case is assumed to be 0 per cent in 2018-19, 2 per cent in 2019-20, 5 per cent in 2020-21, 7.5 per cent in 2021-22, 9 per cent in 2022-23 and 10 per cent thereafter (in line with a classic S-shaped Gompertz adoption curve). Under these assumptions, from 2023-24 onwards, total domain names are 5 per cent higher with direct registration compared with the Base Case.

In the higher adoption of direct registration scenario, the proportion of third-level domains is assumed to decline by 2 per cent a year between 2018/19 and 2023/24 before remaining constant at 90 per cent thereafter. The proportion of au domains to total domains in the Base Case is assumed to be 0 per cent in 2018-19, 4 per cent in 2019-20, 10 per cent in 2020-21, 15 per cent in 2021-22, 18 per cent in 2022-23 and 20 per cent thereafter. Under these assumptions, from 2023-24 onwards, total domain names are 10 per cent higher with direct registration compared with the Base Case.

The incremental costs of direct registration in Australia under the two adoption scenarios are shown in Figure ES 1.



#### **FIGURE ES 1** INCREMENTAL COSTS OF DIRECT REGISTRATION IN AUSTRALIA, 2018/19 TO 2027/28

#### **Benefits**

One of the key benefits of direct registration is its potential ability to enhance growth in the value of internet shopping (B2C e-commerce) in Australia, by encouraging Australians to spend more on Australian shopping websites (which affords them protection via Australia's privacy and consumer protection laws) and relatively less on overseas shopping websites.

The internet shopping industry comprises industry retailers operating websites or mobile apps that enable consumers to purchase a range of products such as apparel, computers, recorded music, electronic goods, general merchandise and groceries. Industry participants are either pure-play online retailers or bricks-and-mortar stores with an online presence. The industry does not include the sale of goods or services by agents that do not take ownership of the goods and services, or the sale of goods by individuals.

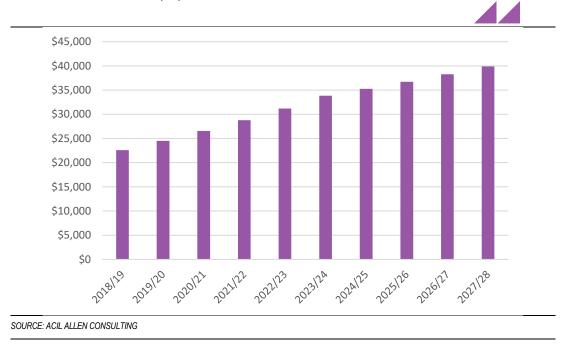
According to IBISWorld, the value of internet shopping in Australia is expected to be \$22.6 billion in 2018-19. In that year, the profit from internet shopping is expected to be \$721.6 million (that is, a profit margin of 3.19 per cent).<sup>1</sup> IBISWorld forecasts growth in the value of internet shopping in Australia to be 8.4 per cent per annum between 2019 and 2024 (compared with an average of 13.2 per cent per annum between 2014 and 2019). For the cost-benefit analysis, it is assumed that the growth rate in the Base Case then halves to 4.2 per cent per year after 2024.

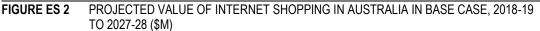
In seeking and examining tangible economic data that relate to the use of internet domain names and where historical trend data is available, the value of internet shopping was identified as being most relevant to this study. It also establishes a lower bound estimate of the benefits of direct registration,

<sup>&</sup>lt;sup>1</sup> IBISWorld (2018), Online Shopping in Australia, IBIS World Industry Report X0004, August.

as there are potentially other benefits that have not been able to be quantified or monetised due to the lack of robust data.

The projected growth in the value of internet shopping in Australia in the Base Case is shown in **Figure ES 2**. The value is expected to grow from \$22.6 billion in 2018-19 to \$39.9 billion in 2027-28. In that period, profits are expected to grow from \$721.6 million to \$1.273 billion.





#### Assessment of benefits versus costs

ACIL Allen's economic analysis shows that, under a 7 per cent real discount rate and over a 10-year time horizon, in order to offset the resource costs of direct registration, the value of internet shopping in Australia would have to **grow by at least an additional 0.036 per cent a year** (on top of the 8.4 cent growth per year between 2018-19 and 2023-24 and 4.2 per cent growth per year thereafter in the Base Case) in the lower adoption of direct registration scenario. For example, in 2020-21 the value of internet shopping in Australia would have to grow by at least 8.436 per cent.

Under the higher adoption of direct registration scenario, the value of internet shopping in Australia would have to grow by at least **an additional 0.065 per cent a year** on top of the growth rate in the Base Case.

This threshold / break-even analysis suggests that direct registration would generate net benefits to the broader Australian community if it can induce a relatively modest uptick in the growth of internet shopping via Australian websites.

#### Conclusion

ACIL Allen's economic analysis indicates that a very small lift in e-commerce will more than outweigh the costs of direct registration. An uplift should be possible by making it easier for Australian organisations and individuals to obtain a domain name in .au, and encouraging internet users in both Australia and overseas to interact with those with a .au domain name via email and websites.

The economy will benefit from an increase in online purchasing from those with an Australian presence, as well as social benefits from interacting with Australian organisations and individuals online. Consumers that interact with a party with an Australian presence will also benefit from the additional protections under Australian consumer law and Australian privacy law.



ACIL Allen Consulting was commissioned by .au Domain Administration Ltd (auDA)'s 2017 Policy Review Panel to undertake a cost-benefit analysis of direct registration in Australia. Under direct registration, Australian individuals, businesses and other organisations will be able to register domain names directly before the dot au (for example BusinessName.au). The dot au space will be additional to the existing spaces such as .com.au, .edu.au and .gov.au, which will be retained.

## 1.1 Background and context

auDA is the administrator of, and industry self-regulatory body for, the .au country-code Top Level Domain (ccTLD) name space.

In 2015, the Names Policy Review Panel convened by the auDA Board recommended that Australians should be able to register domain names directly under .au. That is, domain names will be permitted to be registered directly before the dot au. The dot au space will be additional to the existing spaces such as .com.au, .edu.au and .gov.au, which will be retained.

In April 2016, the Board approved the Panel's recommendation that .au should be opened up to direct registrations, and instructed auDA staff to prepare an implementation plan, which should include the policy rules for direct registrations.

In 2017, auDA issued several publications relating to direct registration. In March of that year, auDA published the results of qualitative research with members and other stakeholders on perceptions associated with the introduction of direct registrations. This was followed by the publication of further results of qualitative and quantitative insights into direct registration in May 2017. In November 2017, auDA published the results of an analysis by Deloitte Access Economics on the contribution .au makes to the economy and future growth scenarios, including the introduction of direct registration.

In September 2017, the auDA Board established the Policy Review Panel (PRP) chaired by John Swinson to make recommendations on the development and implementation of direct registration. With the work of the PRP well advanced, it commissioned this cost-benefit analysis of the possible introduction of direct registration of domain names in Australia.

## 1.2 Study objective and scope

The purpose of this study is to assess the potential benefits of introducing direct registration in Australia against the initial and ongoing costs of direct registration. It seeks not to examine individual commercial issues but to evaluate the whole-of-economy impact of the policy proposal.

The scope of this study encompasses the following:

 Estimate the potential growth in the domain space in Australia as a result of direct registration against the base case of business as usual

- Comparison of domain name space growth internationally as a result of direct registration and extrapolating growth in the domestic context
- Any other recommendations regarding maximising the economic benefits of direct registration
- Assess direct and indirect costs to existing registrants due to the introduction of direct registration
- Assess the potential impact to Australian digital consumers as a result of an increase in use of the non-regulated domain name spaces by Australian organisations and individuals that are operated outside the legal jurisdiction of Australia.

This cost-benefit analysis will form the basis of an Impact Statement (IS) that will be modelled on the Regulation Impact Statement required as part of *The Australian Government Guide to Regulation* (see **Box 1.1**). In particular the cost-benefit analysis should determine the likely net benefit associated with the introduction of direct registration, and follow the Australian Government's *Guidance Note on Cost-Benefit Analysis* and the *Victorian Guide to Regulation: cost benefit analysis*.

#### BOX 1.1 KEY ELEMENTS OF A REGULATION IMPACT STATEMENT



The Australian Government requires that every government policy option must be carefully assessed, its likely impact costed and a range of viable alternatives considered in a transparent and accountable way against the default position of no new regulation.

As a result, every policy proposal designed to introduce or abolish regulation must be accompanied by an Australian Government Regulation Impact Statement, or RIS. The RIS must be developed early in the policy-making process.

The RIS is a tool designed to encourage rigour, innovation and better policy outcomes from the beginning. It seeks to answer seven key questions:

- 1. What is the problem one is seeking to solve?
  - The problem and the objective of the policy needs to be explained simply and clearly
- 2. Why is government action needed?
  - Is it a genuine priority? Is it government's job? Is the problem serious enough to justify government intervention? Will intervention work?
- 3. What policy options are being considered?
  - The problem must be analysed from every angle so that a viable, low-impact alternative is not overlooked
- 4. What is the likely net benefit of each option?
  - Policy interventions often come at a cost. The RIS requires assessing the benefit of the proposed intervention against the burden it imposes, ideally through a rigorous cost-benefit analysis.
  - If that burden is greater than the benefit, alternatives should be looked at or the need to intervene at all needs to be reconsidered
- 5. Who will be consulted about these options and how will they be consulted?
  - The RIS encourages the policy-maker to walk in the shoes of the people, business decision makers and community groups affected by the policy proposal
- 6. What is the best option from those are being considered?
  - The RIS will help make clear whether the decision-making processes are robust enough to cope with scrutiny
  - The public needs to know what has been decided; why and on what information and arguments the decision was based
- 7. How will the chosen option be implemented and evaluated?
  - The RIS process ensures adequate and timely consideration is given to the real-world problems of making the policy work, and that its effectiveness and ongoing relevance will be tested.

A cost-benefit analysis is generally undertaken to address Question 4 in the RIS.

SOURCE: THE AUSTRALIAN GOVERNMENT GUIDE TO REGULATION

#### 1.3 Study approach

#### 1.3.1 Document review

In preparation for the development of the cost-benefit analysis, ACIL Allen reviewed papers and reports pertaining to direct registration, including the following:

- 2015 Names Policy Panel, Final Report to the auDA Board, December 2015
- 18 April 2016 auDA Board Meeting Minutes, item 8
- Perceptions of implementation policy for open domain name registrations, March 2017
- Awareness and perceptions of direct registration, qualitative and quantitative insights, May 2017
- Economic analysis of the .au domain range, 2017, Deloitte Access Economics, November 2017
- 2017 Policy Review Panel Background Information
- The Australian Government Guide to Regulation
- Australian Government Guidance Note, Cost-Benefit Analysis
- Victorian Guide to Regulation, Toolkit 2: Cost-Benefit analysis
- Impacts of second level domain registration (SLDR) in the .uk domain space, prepared by London Economics
- Registration of Domain names at Second level of .ZA.

#### 1.3.2 Cost-benefit analysis methodology

The process of systematically evaluating and assessing the costs and benefits of a policy proposal is known as cost-benefit analysis. Cost-benefit analysis makes it possible to determine whether a proposal has a net benefit, that is whether the benefits outweigh the costs and to compare alternative proposals to identify which one has the greatest net benefit.

The cost-benefit analysis should be consistent with a proportional approach. Key steps involved in undertaking a cost-benefit analysis are:

- identifying groups that will be affected
- identifying and assessing costs and benefits from options being considered for addressing the problem
- consideration of other issues, such as discounting of future costs and benefits
- selecting and applying appropriate decision criteria to assess the relative effectiveness of or to rank options.

ACIL Allen's cost-benefit analysis of direct registration assesses the resource costs of direct registration against its potential benefits in terms of its ability to induce an increase in the value of internet shopping in Australia.

In seeking and examining tangible economic data that relate to the use of internet domain names and where historical trend data is available, the value of internet shopping was identified as being most relevant to this study. It also establishes a lower bound estimate of the benefits of direct registration, as there are potentially other benefits that have not been able to be quantified or monetised due to the lack of robust data. The methods employed for estimating the costs and benefits of direct registration are explained in Chapters 2 and 3 respectively.

As the magnitude of the economic impacts of direct registration is uncertain, a breakeven / threshold analysis is undertaken to estimate the minimum additional growth in internet shopping that is required for direct registration to generate net benefits for the broader Australian community.

It is important to remember that a cost-benefit analysis quantifies the net economic benefits of a policy change to the broader Australian community rather than the net benefits to narrower entities such as the government, auDA, registrars or registrants (that is, businesses).

## 1.4 Report structure

This report is structured as follows:

- Chapter 2 assesses the costs associated with direct registration in Australia
- Chapter 3 assesses the potential benefits of direct registration in Australia
- Chapter 4 presents the key results of the cost-benefit analysis of direct registration and the main conclusion of the study.



This chapter analyses the costs associated with direct registration in Australia.

## 2.1 Overview

The costs of introducing direct registration in Australia include:

- Resource impacts of implementation
- auDA marketing and promotion of direct registration
- Initial costs to businesses of changing/additional registrations
- Ongoing cost to businesses of additional registrations.

Direct registration will result in one-off launch costs, as introducing direct registration will require technical changes by the registry and registrars. However, the cost of these technical changes are expected to be relatively small. In addition, there will be costs associated with promoting and informing internet users about direct registration. There may also be costs associated with running an ongoing conflicted names process.<sup>2</sup>

## 2.2 Initial costs of direct registration

For the cost-benefit analysis, it is assumed that auDA will spend \$1 million in 2018-19 and \$1 million in 2019-20 to market and promote direct registration. It is assumed that the resource cost of each domain name is \$10 per year, and is the same for third-level domain names (such as .com.au, .net.au, .org.au and .gov.au) and second-level domain names (.au).

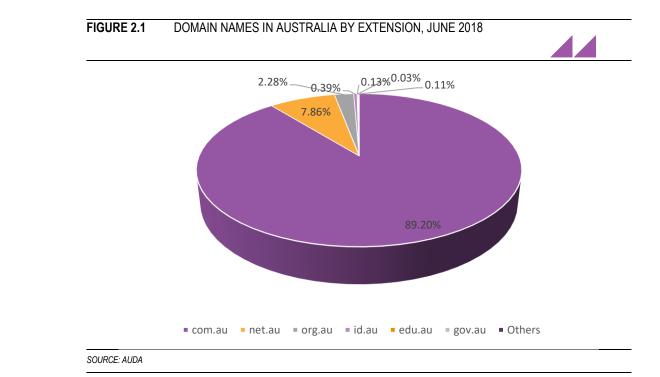
Businesses which register the direct domain that matches their third-level domain will bear the cost of registering an additional domain. These businesses might choose to do so only out of a desire to protect their brand-identity or avoid confusion with their third level domain.

### 2.3 Likely increase in domain names

#### 2.3.1 Current number of domain names

In mid-2018, there were a total of 3,151,616 domain names in Australia. As can be seen in **Figure 2.1**, by far the most common domain extension was .com.au (89.2 per cent), followed by .net.au (7.8 per cent) and .org.au (2.3 per cent).

<sup>&</sup>lt;sup>2</sup> Deloitte Access Economics (2017), Economic analysis of the .au domain range, report commissioned by auDA.



For the cost-benefit analysis, it is assumed that total domain names will grow by 1 per cent a year in the Base Case (that is, without direct registration), based on an analysis of historical growth rates (which has declined from 24.1 per cent in 2009-10 to 1.3 per cent in 2017-18 – see **Figure 2.2**).

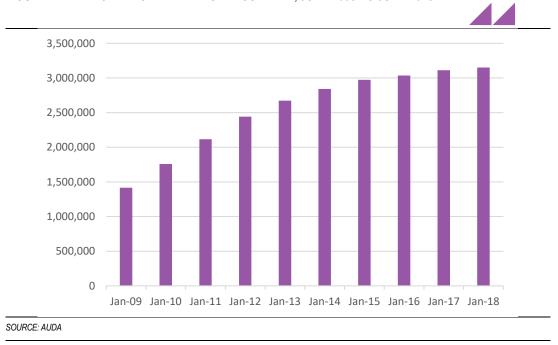
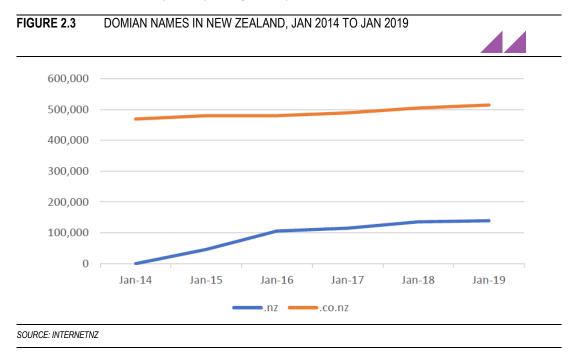


FIGURE 2.2 TOTAL DOMAIN NAMES IN AUSTRALIA, JUNE 2009 TO JUNE 2018

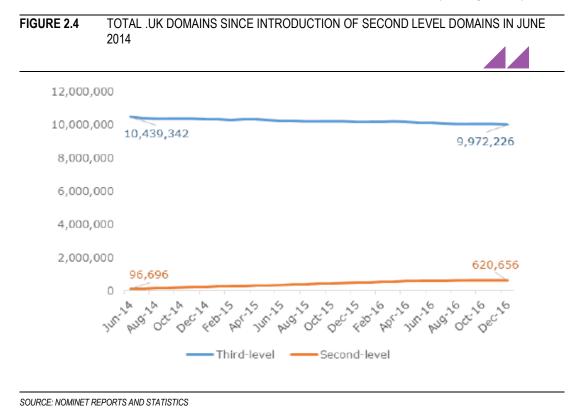
With direct registration, the total number of domain names is expected to be greater than that under the Base Case. This is because some businesses with existing third-level domain names will choose to register .au domain name(s) as well. Other businesses may choose to switch from existing third-level domain names to a .au domain name. New businesses may choose to register .au domain names whereas they would have registered third-level domain names in the Base Case.

#### 2.3.2 Overseas experience

There is considerable uncertainty as to the magnitude of the likely adoption of direct registration in Australia. In New Zealand, following the implementation of direct registration, .nz domain names as a proportion of .nz and .co.nz domain names rose from 8.8 per cent in January 2015 to 18.1 per cent in January 2016 and 19.0 per cent in January 2017, before plateauing at 21.2 per cent in January 2018 and 21.3 per cent in January 2019 (see **Figure 2.3**).



In the UK, second-level domains were introduced in June 2014. By December 2016, the proportion of second-level domains to the total number of domains had risen to 5.9 per cent (see **Figure 2.4**).



DIRECT REGISTRATION IN AUSTRALIA COST-BENEFIT ANALYSIS

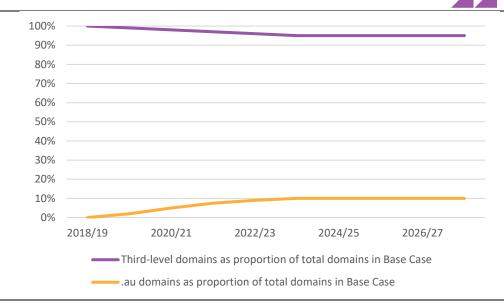
#### 2.4 Adoption scenarios

For this cost-benefits analysis, two scenarios relating to the extent of adoption of direct registration in Australia over a 10-year period were examined:: a lower (10 per cent) adoption scenario and a higher (20 per cent) adoption scenario.

#### 2.4.1 Lower adoption of direct registration scenario

In this scenario, the assumed proportion of second- and third-level domain names in the case with direct registration to total domain names in the Base Case is shown in **Figure 2.5**.





SOURCE: ACIL ALLEN CONSULTING

The proportion of third-level domains is assumed to decline by 1 per cent a year between 2018/19 and 2023/24 before remaining constant at 95 per cent thereafter. The proportion of .au domains to total domains in the Base Case is assumed to be 0 per cent in 2018/19, 2 per cent in 2019/20, 5 per cent in 2020/21, 7.5 per cent in 2021/22, 9 per cent in 2022/23 and 10 per cent thereafter (in line with a classic S-shaped Gompertz adoption curve – see **Box 2.1**). Under these assumptions, from 2023/24 onwards, total domain names are 5 per cent higher with direct registration compared with the Base Case.

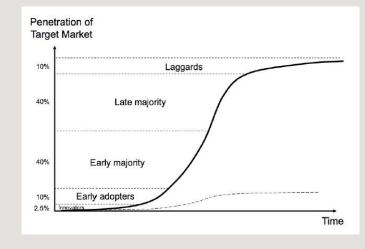
BOX 2.1 DIFFUSION OF INNOVATION

The adoption of direct registration is likely to follow the S-shape (Gompertz curve) that is characteristic of markets undergoing a process of innovation:

Initial take-up will be driven by a select group of website owners, who can make use of the added choice
presented by a second-level ".au" address in their overall communication strategy.

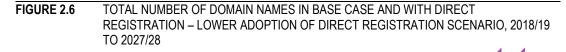
 The success of the websites in the new domain is likely to erode the familiarity advantage of the incumbent domains over time.

— Once familiarity reaches a tipping point, the advantage of third-level domains in the eyes of users disappears (the trust advantage is extended to the entire .au domain), leaving only brand differentiation as a determinant of domain choice.



SOURCE: LONDON ECONOMICS, IMPACTS OF SECOND LEVEL DOMAIN REGISTRATION (SLDR) IN THE .UK DOMAIN SPACE

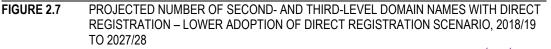
The total number of domains in the Base Case and with direct registration between 2018/19 and 2027/28 under the lower adoption of direct registration scenario is shown in **Figure 2.6**.

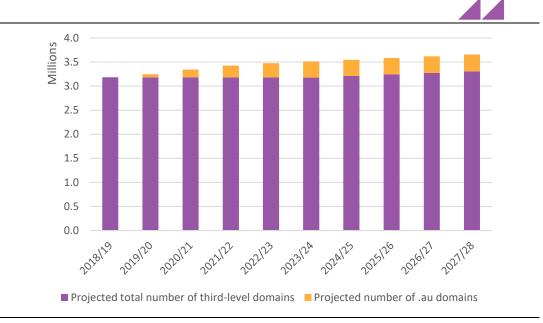




SOURCE: ACIL ALLEN CONSULTING

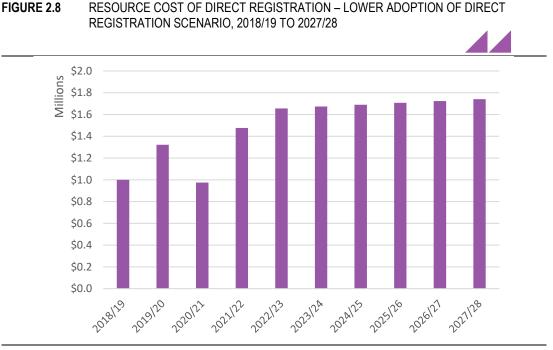
The projected number of second- and third-level domain names with direct registration between 2018/19 and 2027/28 under the lower adoption of direct registration scenario is shown in **Figure 2.7**.





SOURCE: ACIL ALLEN CONSULTING

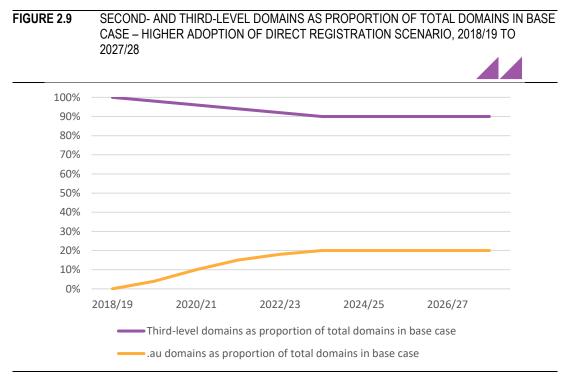
Taking into account the initial marketing and promotion costs and the incremental costs of additional registrations, the resource costs associated with direct registration in the lower adoption of direct registration scenario is shown in **Figure 2.8**.



SOURCE: ACIL ALLEN CONSULTING

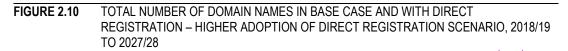
#### 2.4.2 Higher adoption of direct registration scenario

In this scenario, the assumed proportion of second- and third-level domain names in the case with direct registration to total domain names in the Base Case is shown in **Figure 2.9**. The proportion of third-level domains is assumed to decline by 2 per cent a year between 2018/19 and 2023/24 before remaining constant at 90 per cent thereafter. The proportion of .au domains to total domains in the Base Case is assumed to be 0 per cent in 2018/19, 4 per cent in 2019/20, 10 per cent in 2020/21, 15 per cent in 2021/22, 18 per cent in 2022/23 and 20 per cent thereafter. Under these assumptions, from 2023-24 onwards, total domain names are 10 per cent higher with direct registration compared with the Base Case.



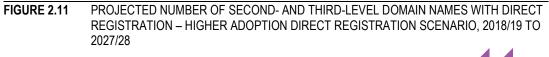
SOURCE: ACIL ALLEN CONSULTING

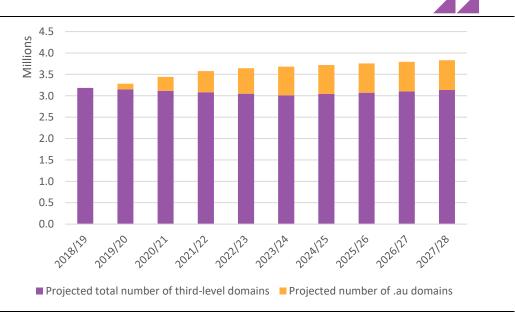
The total number of domains in the Base Case and with direct registration between 2018/19 and 2027/28 under the higher adoption of direct registration scenario is shown in **Figure 2.10**.





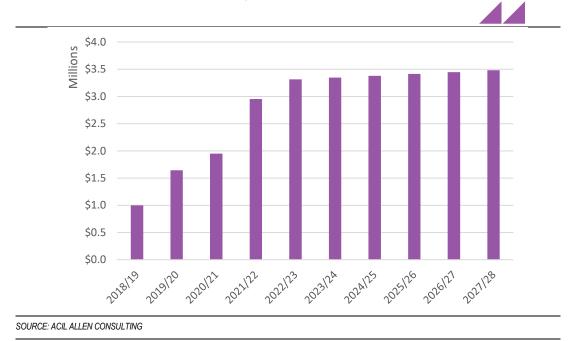
The projected number of second- and third-level domain names with direct registration between 2018/19 and 2027/28 under the higher adoption of direct registration scenario is shown in **Figure 2.11**.





SOURCE: ACIL ALLEN CONSULTING

Taking into account the initial marketing and promotion costs and the incremental costs of additional registrations, the resource costs associated with direct registration in the higher adoption of direct registration scenario is shown in **Figure 2.12**.



#### FIGURE 2.12 RESOURCE COST OF DIRECT REGISTRATION – HIGHER ADOPTION OF DIRECT REGISTRATION SCENARIO, 2018/19 TO 2027/28

### 2.5 Other potential costs of direct registration

In the cost-benefit analysis, ACIL Allen has assessed the net resource costs of direct registration to the overall Australian economy.

It is possible that the introduction of direct registration might result in a decrease in the value of some domain names currently held by domain name investors, due to the introduction of greater choice for domain name buyers (leading to a reduction in the scarcity of domain names).

It is thus possible that there might be a loss of perceived value in some names held by domain name investors, but this will also result in lower acquisition costs for Australian businesses that purchase such names on the secondary market.

It should be noted that .com.au names cannot be sold to businesses outside of Australia. Consequently, any changes in pricing in the secondary market will happen within the Australian economy. So while a seller within Australia may obtain a lower price, a buyer will be conferred a corresponding economic benefit from the lower price for that particular domain name. The changes should net out from a broader economic perspective.



This chapter discusses the potential benefits of direct registration in Australia.

## 3.1 Typology of benefits

#### 3.1.1 Shorter domain names

Direct registration allows for shorter, more visually appealing domain names. Shorter names are in general easier to remember and quicker to type into URL bars. They are advantageous in situations where space may be limited such as Twitter or advertising billboards.<sup>3</sup>

#### 3.1.2 Expanded eligibility

Currently most domain name licences are registered within .com.au. To be eligible, the registrant typically needs to have an established company with an Australian Company Number (ACN) number or have an Australian Business Number (ABN) if they are a sole trader.

There is evidence from domain name suppliers that approximately 30 per cent of potential registrants drop out of the purchasing process when they do not have an ACN or ABN available to register a .com.au domain name.

Those that are not eligible for a .com.au domain name currently are more likely to purchase domains names outside of Australia – such as .com and .co that are operated out of North America – or use social media (e.g. Facebook or Instagram) that are also operated out of North America, and benefit the US economy at the expense of the Australian economy.

It is estimated that approximately half of the domain names in Australia are registered in .com, which dilutes the messaging that those with a .au domain name have an Australian presence. Registered name holders (registrants) for .au domain names are protected under Australian law with respect to consumer protection as well as privacy protection.

The eligibility rules for a .au domain name will include any legal person with an Australian presence. This will range from companies to non-profit associations to educational institutions to individuals. The net effect is likely to be growth in the use of .au for consumers to recognise a domain name holder with an Australian presence, and therefore consumers are more likely to transact in a way that benefits the Australian economy. Consumers that interact with a party with an Australian presence are then also protected under Australian consumer law and Australian privacy law.

14

<sup>&</sup>lt;sup>3</sup> Deloitte Access Economics (2017), *Economic analysis of the .au domain range*, report commissioned by auDA

#### 3.1.3 Increased choice

Another cited benefit of direct registration is that it would open up more choice of domain names for registrants. It gives businesses and individuals who own and operate websites as a marketing and sales tool a further avenue, if they wish to take it, for portraying their brand identity online. For many who choose to take this route it may not have a transformative effect, but nevertheless could provide additional tangible branding benefits for them. For some who take this route, both new and existing businesses, it could give them a strong competitive edge that transforms their business. As a consequence, these Australian businesses may attain increased revenues and profits from business-to-business (B2B) and business-to-consumer (B2C) internet commerce as well as offline sales, compared with the base case.

#### 3.1.4 Branding effects

Consumers may also benefit directly from these improved branding effects. A clear brand identity can act as a signal of product quality for consumers – companies who have invested in brands that have a reputation for high quality are less likely to supply low quality products, since this would undermine the value of their investment in the brand. Strong brands can also increase consumer awareness and strengthen product differentiation.

However, the number of new domains will be limited by defensive registrations. Businesses may feel pressure to obtain the direct domain that matches their third-level domain to avoid confusion. Such defensive registration will increase the costs for businesses, but may be of limited value to those businesses if the domain is simply used to redirect to their .com.au domain.

#### 3.1.5 Alignment with international practice

Many major ccTLDs (particularly in Europe) allow direct registration at the second level, including .de, .cn, .uk, .nl, .ru, .ca and .fr. Recently .uk and .nz have moved from exclusively registering at the third level to allowing direct registrations at the second level. Moving to direct regulation would put .au in line with the general international practice.

#### 3.1.6 Other potential benefits

London Economics' report to Nominet, *Impacts of second level domain registration (SLDR) in the .uk domain space*, identified a number of potential benefits to businesses from second-level domain registration:

- better brand signalling (firm-level benefit)
- continuing relevance of .uk namespace (external benefit)
- increased registry competition.

These benefits are most closely associated with website owners (registrants) but there are also potential consequential benefits to registrars - from increases in net revenues that may result from any growth in the .uk domain space and website use in the UK (compared with the status quo scenario where SLDR is not introduced).

The London Economics report also suggests that second-level domain registration would have external benefits for the whole UK domain space. As new websites proliferate, the product characteristics of the whole domain (trust, UK association) are reinforced and expanded, thereby strengthening the .uk domain in the face of unprecedented competition, while giving ".uk" a head start by transferring some of the trust/familiarity aspects of the third-level domains to ".uk" in return.

If implemented, direct registration will be the most significant development for the .au name space in Australia since 2002. With more than three million .au domains currently registered, the introduction of direct registration will strengthen .au as the preferred name space for Australians to use for their services on the internet, while creating new opportunities for all users of the .au domain space globally.

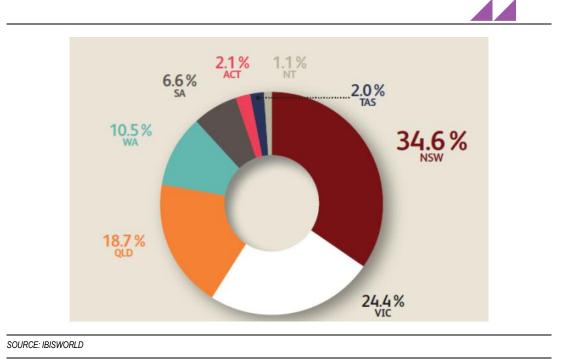
In addition, direct registration will allow start-up businesses to obtain a .au domain name, whereas registering a .com.au domain name requires an ABN or ACN.

## 3.2 Enhancing growth of internet shopping in Australia

One of the key benefits of direct registration is its potential ability to enhance growth in the value of internet shopping (B2C e-commerce) in Australia, by encouraging Australians to spend more on Australian shopping websites (which affords them protection via Australia's privacy and consumer protection laws) and relatively less on overseas shopping websites.

The internet shopping industry comprises industry retailers operating websites or mobile apps that enable consumers to purchase a range of products such as apparel, computers, recorded music, electronic goods, general merchandise and groceries. Industry participants are either pure-play online retailers or bricks-and-mortar stores with an online presence. The industry does not include the sale of goods or services by agents that do not take ownership of the goods and services, or the sale of goods by individuals.

According to IBISWorld, the value of internet shopping in Australia is expected to be \$22.6 billion in 2018/19 (see **Figure 3.1** for a breakdown by state/territory). In that year, the profit from internet shopping is expected to be \$721.6 million (that is, a profit margin of 3.19 per cent).<sup>4</sup>



#### FIGURE 3.1 INTERNET SHOPPING VALUE IN AUSTRALIA BY STATE/TERRITORY, 2018/19

The breakdown of internet shopping in Australia in 2018/19 by key product categories is shown in **Figure 3.2**.

IBISWorld forecasts growth in the value of internet shopping in Australia to be 8.4 per cent per annum between 2019 and 2024 (compared with an average of 13.2 per cent per annum between 2014 and 2019). For the cost-benefit analysis, it is assumed that the growth rate in the Base Case then halves to 4.2 per cent per year after 2024.

<sup>&</sup>lt;sup>4</sup> IBISWorld (2018), Online Shopping in Australia, IBIS World Industry Report X0004, August.

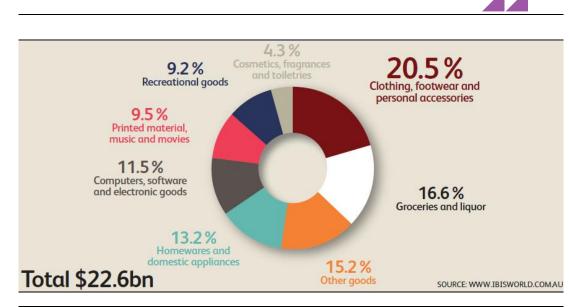
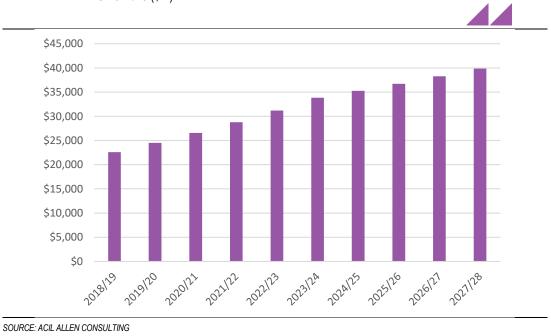
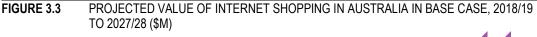


FIGURE 3.2 INTERNET SHOPPING IN AUSTRALIA – KEY PRODUCT CATEGORIES

SOURCE: IBISWORLD

The projected growth in the value of internet shopping in Australia in the Base Case is shown in **Figure 3.3**. The value is expected to grow from \$22.6 billion in 2018/19 to \$39.9 billion in 2027/28.





## 3.3 Social benefits

In addition to the economic benefits of direct registration, social benefits may also arise or flow from its implementation. This might be particularly significant for personal/individual websites that hitherto did not qualify for existing spaces such as .com.au or .org.au. These social benefits are not quantified or monetised in the cost-benefit analysis.



This chapter presents the key results of the cost-benefit analysis.

## 4.1 Breakeven / threshold analysis

As explained previously, the magnitude of the economic impacts of direct registration is uncertain. A breakeven / threshold analysis (BEA) was thus undertaken to estimate the minimum additional growth in internet shopping that is required for direct registration to generate net benefits for the broader Australian community.

As noted in the *Victorian Guide to Regulation*, BEA can be used by estimating the required benefits of a policy option needed to offset its estimated costs.<sup>5</sup> In conducting a BEA, policy-makers make judgements regarding the degree to which a policy option could be expected to deliver such benefits. These judgements should be based on practical experiences with similar policy proposals (e.g. in other jurisdictions) or other objective data.

This technique involves dividing the costs of the option by the monetised value of a 'unit' of benefit in order to identify the minimum amount (or units) of benefits required to be achieved for the option to break even. By estimating the minimum benefits required, this approach allows a judgement to be made about the likelihood of those benefits actually being achieved.

ACIL Allen's economic analysis shows that, under a 7 per cent real discount rate and over a 10-year time horizon, in order to offset the resource costs of direct registration, the value of internet shopping in Australia would have to **grow by at least an additional 0.036 per cent a year** (on top of the 8.4 cent growth per year between 2018/19 and 2023/24 and 4.2 per cent growth per year thereafter in the Base Case) in the lower adoption of direct registration scenario. For example, in 2020/21 the value of internet shopping in Australia would have to grow by at least 8.436 per cent.

Under the higher adoption of direct registration scenario, the value of internet shopping in Australia would have to grow by at least **an additional 0.065 per cent a year** on top of the growth rate in the Base Case.

This threshold / break-even analysis suggests that direct registration would generate net benefits to the broader Australian community if it can induce a relatively modest uptick in the growth of internet shopping via Australian websites.

<sup>&</sup>lt;sup>5</sup> Government of Victoria, 2011, Victorian Guide to Regulation, Department of Treasury and Finance, Melbourne

#### 4.2 Sensitivity analysis

Sensitivity analysis has been undertaken to test the robustness of the cost-benefit analysis results to changes in key parameter values and assumptions.

#### 4.2.1 Real discount rate

In the central case of the cost-benefit analysis, a real discount rate of 7 per cent was used. If a 4 per cent real discount rate is used, the threshold additional growth in the value of internet shopping that is needed to offset the costs of direct registration is 0.034 per cent per annum in the low adoption of direct registration scenario and 0.062 per cent per annum in the high adoption of direct registration scenario.

If a 10 per cent real discount rate is used, the corresponding thresholds are 0.038 per cent per annum and 0.068 per cent per annum respectively.

#### 4.2.2 Resource cost per domain name

In the central case of the cost-benefit analysis, it is assumed that the resource cost of registering a domain name in Australia is \$10 per year. If the resource cost is \$7 per year, the threshold additional growth in the value of internet shopping that is needed to offset the costs of direct registration is 0.027 per cent per annum in the low adoption of direct registration scenario and 0.045 per cent per annum in the high adoption of direct registration,

If the resource cost per domain name is \$13 per year, the corresponding thresholds are 0.047 per cent per annum and 0.068 per cent per annum respectively.

#### 4.2.3 Annual growth in domain names in Base Case

In the central case of the cost-benefit analysis, it is assumed that the total number of domain names will grow by 1 per cent a year in the Base Case. If the annual growth rate is 0.5 per cent, the threshold additional growth in the value of internet shopping that is needed to offset the costs of direct registration is 0.035 per cent per annum in the low adoption of direct registration scenario and 0.063 per cent per annum in the high adoption of direct registration scenario,

If the annual growth in total domain names in the Base Case is 1.5 per cent, the corresponding thresholds are 0.037 per cent per annum and 0.067 per cent per annum respectively.

#### 4.3 Conclusion

ACIL Allen's economic analysis indicates that a very small lift in e-commerce will more than outweigh the costs of direct registration.

An uplift should be possible by making it easier for Australian organisations and individuals to obtain a domain name in .au, and encouraging internet users in both Australia and overseas to interact with those with a .au domain name via email and websites.

The economy will benefit from an increase in online purchasing from those with an Australian presence, as well as social benefits from interacting with Australian organisations and individuals online. Consumers that interact with a party with an Australian presence will also benefit from the additional protections under Australian consumer law and Australian privacy law.

ACIL ALLEN CONSULTING PTY LTD ABN 68 102 652 148

ACILALLEN.COM.AU

#### ABOUT ACIL ALLEN CONSULTING

ACIL ALLEN CONSULTING IS THE LARGEST INDEPENDENT, AUSTRALIAN OWNED ECONOMIC AND PUBLIC POLICY CONSULTANCY.

WE SPECIALISE IN THE USE OF APPLIED ECONOMICS AND ECONOMETRICS WITH EMPHASIS ON THE ANALYSIS, DEVELOPMENT AND EVALUATION OF POLICY, STRATEGY AND PROGRAMS.

OUR REPUTATION FOR QUALITY RESEARCH, CREDIBLE ANALYSIS AND INNOVATIVE ADVICE HAS BEEN DEVELOPED OVER A PERIOD OF MORE THAN THIRTY YEARS.

