



Australian Government

Department of Communications and the Arts

Review of the .au Domain Administration

April 2018



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Executive summary

Context

On 19 October 2017, the Minister for Communications, Senator the Hon Mitch Fifield, announced a review of Australia's management of the .au domain (the Review). The not-for-profit .au Domain Administration (auDA) oversees the operation and management framework of the .au domain of the internet. auDA is endorsed by the Australian Government as the appropriate entity to administer Australia's country code Top-Level Domain (ccTLD)—the .au domain—on behalf of Australian internet users.

The digital landscape has changed significantly since auDA was endorsed by the Australian Government in 2000. The internet has become all-pervasive and a critical enabler of the digital economy. The .au namespace plays an important role in supporting the digital economy, allowing entities and organisations to register domain names. As of late September 2017, over 3 million .au domain names had been registered in Australia.

While internet usage continues to grow, the overall communications environment is changing. Australians are accessing the internet in different ways and cyber security threats are increasingly prevalent. Future trends may have an impact on the domain space and it is important Australia has an effective .au administrator that is able to ensure the ongoing availability of .au domains while navigating future uncertainty.

auDA's governance arrangements have not changed significantly since it was first established, with its structure and approach to governance set at a point in time when the internet and the domain industry was still in its infancy. The Review has found that reforms to auDA's governance arrangements are necessary if the company is to perform effectively and meet the needs of Australia's internet community.

In undertaking the Review, the Department has reflected on three principles:

- The Australian Government is committed to strengthening multi-stakeholder mechanisms for internet governance, noting the diversity of auDA's stakeholders.
- The .au namespace is a public asset given its increasing importance to the daily lives of Australians and should be governed with community interests in mind.
- auDA has a monopoly position in administering the .au namespace and should be subject to stringent oversight requirements.

Importantly, the review acknowledges that auDA has overseen a significant ramp up in the number of domain names and has introduced many important policy and security initiatives. auDA has contributed to .au being seen globally as a secure and trusted namespace.

Findings and recommendations

The central finding of the Review is the current management and governance framework for auDA is no longer fit-for-purpose and that reform is necessary if the company is to perform effectively and meet the needs of Australia's internet community.

In particular, the current membership model, and its relationship to corporate governance, is impeding auDA's decision making and is contributing to ongoing organisational instability.

The membership class structure is not reflective of Australia's internet community nor auDA's stakeholders. The current process where the majority of directors are appointed from the membership does not support effective governance outcomes.

Further, directors can be elected to the board with little regard to the skills required to effectively govern a modern domain administrator. Directors are also not required to meet probity, security or conflict of interest checks.

Ultimately, current governance and management framework arrangements are not satisfactory given the importance of the .au namespace to the Australian community.

In considering stakeholder feedback and better practice guidelines, the Review identifies a range of reforms to improve stakeholder engagement, transparency and accountability, and mechanisms to promote trust and confidence in the .au domain name.

The Review considers that significant and urgent reforms are necessary to ensure that the .au namespace is administered in line with community and the Australian Government's expectations. To achieve this, the Review has made recommendations focusing on:

- clarifying the role of the .au domain administrator to ensure its activities are aligned with its responsibilities
- reforming the management framework to support improved transparency, consultation and accountability by providing greater guidance on performance and reporting requirements
- supporting effective stakeholder engagement and better representation of the Australian internet community, by acknowledging the .au DNS as a public asset and the multi-stakeholder approach to internet governance
- outlining the role and expectations of the Australian Government
- fostering greater trust and confidence in the .au namespace by enhancing security best practice and coordination of DNS administration.

Recommendations are summarised at [Appendix A](#).

Implementation

Reforming auDA will be a substantial process. Changes to its governance and membership arrangements involves significant constitutional reform, which requires the support of the membership base. The extent to which the membership supports reform is unclear.

The Review proposes two options to implement recommendations. The first option would see the Minister for Communications issuing revised terms of endorsement to auDA supported by an implementation plan with clearly identified milestones for reform. This plan would see a clear pathway for reform in place by three months, significant progress by 12 months, and the full reform package implemented within 24 months.

Alternatively, the Government could consider issuing an expression of interest to assess whether an alternative provider is able to perform the .au domain administration function in line with the revised terms of endorsement. This option may identify a viable alternative provider for the administration of the .au namespace mitigating the risk that constitutional reform of auDA cannot be achieved.

The stability, resilience and security of the .au namespace is paramount to the Government. The review recommends that auDA be given the opportunity to conduct the necessary reforms. However, the Government is committed to implementation of timely reform and will take action to ensure that Australia's domain name is administered effectively and in the interest of all Australians. This includes transitioning the delegation for management of .au to another provider if auDA is unable to achieve necessary outcomes.

1. Introduction

1.1 Background

On 19 October 2017, the Minister for Communications, Senator the Hon Mitch Fifield, announced a review of Australia's management of the .au domain (the Review). The not-for-profit .au Domain Administration (auDA) oversees the operation and management framework of the .au domain of the internet. auDA is endorsed by the Australian Government as the appropriate entity to administer Australia's country code Top-Level Domain (ccTLD)—the .au domain—on behalf of Australian internet users.

The terms of the Australian Government's endorsement of auDA were established in 2000-01. Since that time the digital landscape has changed significantly. This Review seeks to understand whether the management arrangements for the .au domain are fit-for-purpose or whether alternative models should be considered.

Consistent with the terms of reference announced by the Minister, the Review examines:

- the most appropriate framework for the management of the .au top level domain
- how to ensure that Government and community expectations inform auDA's operation and decision making
- mitigation strategies to address future risks to the security and stability of .au.

Full terms of reference are available on the Department's website at www.communications.gov.au/documents/terms-reference-review-au-domain-administration.

1.2 Approach

The Review has been undertaken by the Department of Communications and the Arts (the Department). In addressing the terms of reference, the Review has conducted desktop research, considered comparable international organisations, and conducted interviews with a range of relevant stakeholders, including:

- past and present auDA Board members
- past and present auDA employees, including members of the senior management team
- Government officials
- industry participants, and
- international domain managers.

In keeping with the Australian Government's commitment to the multi-stakeholder approach to internet governance, the Review involved public consultation seeking industry and community views, including:

- On 16 November 2017, the Review released a public discussion paper, with written submissions sought by 18 December 2017. Submissions received have been published on the Department's website at www.communications.gov.au/have-your-say/review-australias-au-domain-management. A list of submissions is provided at [Appendix E](#).
- On 12 December 2017, the Review hosted a workshop-style meeting in Sydney with representatives from Internet Australia and academia.
- On 14 December 2017, the Review hosted a town hall-style public meeting in Melbourne with participation by auDA members and other interested parties and stakeholders.

Research and stakeholder consultation has informed the development of an evidence base from which recommendations and findings are presented. In turn, recommendations and findings are used to inform the implementation options for Government consideration.

Through the public consultation process, a number of the submissions focused on specific auDA initiatives, namely the Registry Transformation Project and Direct Registration. These initiatives are outside of the scope of the Review.

1.3 Structure of this Review

The Review report is structured as follows:

- Chapter 1 provides an introduction to the Review.
- Chapter 2 provides background and contextual information relevant to the Review.
- Chapter 3 presents findings and recommendations relevant to the terms of reference.
- Chapter 4 discusses implementation options for Government consideration.

2. Background and context

2.1 .au and the Domain Name System

.au is an important part of how the internet operates in Australia. It is part of the Domain Name System (DNS), the mechanism by which internet users are able to find website addresses. Computers and other devices interact over the internet through a series of numbers called an Internet Protocol (IP) address. The DNS associates an IP address with its corresponding domain name.

In the .au namespace the registration of a domain name is identified at different levels. '.au' is known as the Country Code Top Level Domain or ccTLD. An internet address ending in .au has been registered in Australia and is part of the .au domain namespace.

Within the .au domain, there are several different second-level domains (2LDs). Each serves a specific type of enterprise or purpose and is categorised as open or closed.

Table 1—Second-level domain categories

2LD category	Description
Open	<p>These 2LDs are known as 'open' because they are open to the general public, subject to eligibility criteria:</p> <ul style="list-style-type: none"> • asn.au: for incorporated associations, political parties, trade unions, sporting and special interest clubs • com.au: for commercial entities, such as companies (with an Australian Company Number as registered through the Australian Investment and Securities Commission) and businesses (registered with state governments) • net.au: for commercial entities, such as companies (with ACN as registered through ASIC), and businesses (registered with state governments) • id.au: for individuals who are Australian citizens or residents • org.au: for charities and non-profit organisations
Closed	<p>These 2LDs are known as 'closed' because they are closed to the general public, and only available to entities within a defined sector:</p> <ul style="list-style-type: none"> • edu.au: for educational institutions registered at Federal or state level • gov.au: for Federal, state and local government bodies • csiro.au: for the sole use of the Commonwealth Science and Industry Research Organisation (CSIRO). This domain is managed by the CSIRO.

Source: Adapted from auDA, accessed 7 February 2018, [au Domains](#).

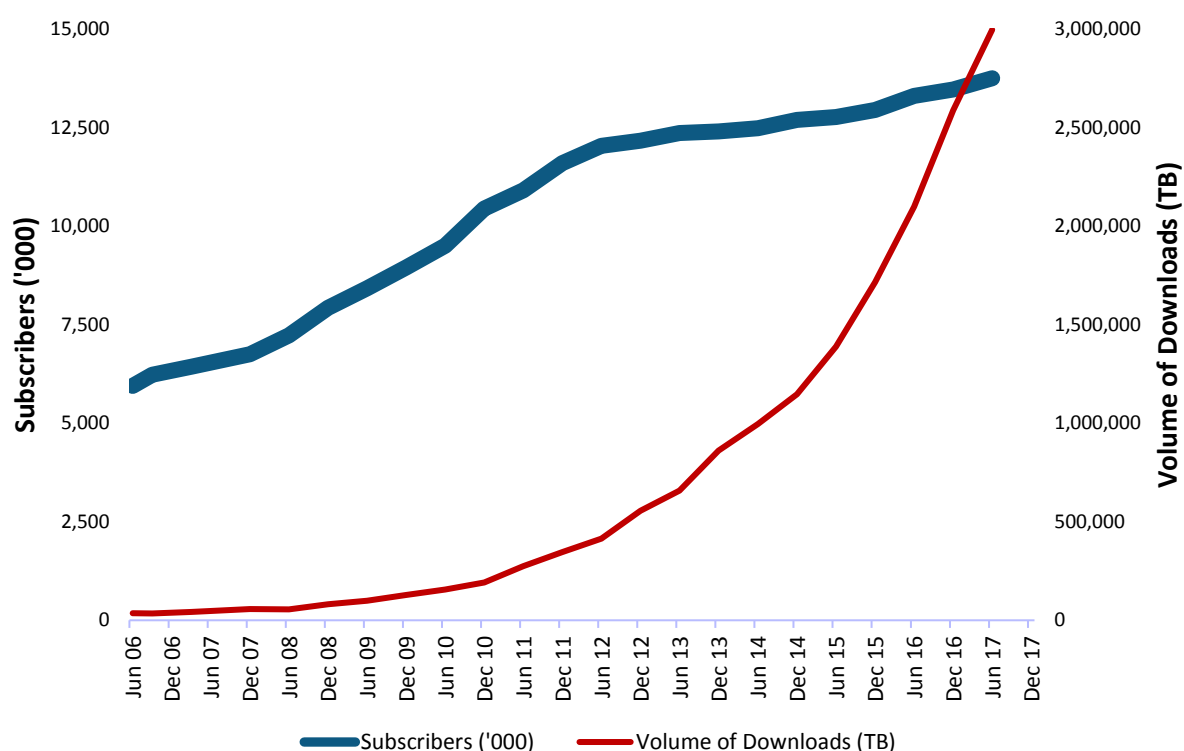
Internationally, the Internet Corporation for Assigned Names and Numbers (ICANN) is the not-for-profit organisation responsible for coordinating the maintenance and procedures that underpin the DNS.

2.2 Trends and developments

Since auDA was first established, the internet has become integral in business and to individuals. Australians use the internet daily to socialise, watch or listen to a variety of media, conduct research and to do business. As indicated in the figure below, at the end of June 2017 there were 13.7 million internet subscribers in Australia (mostly fixed-line and mobile wireless broadband services—excluding mobile phones), who in the previous quarter downloaded 3 million terabytes of data (a 43 per cent increase on the June 2016 quarter).

There were a further 26.3 million mobile phone subscribers, most of whom are able to access the internet.

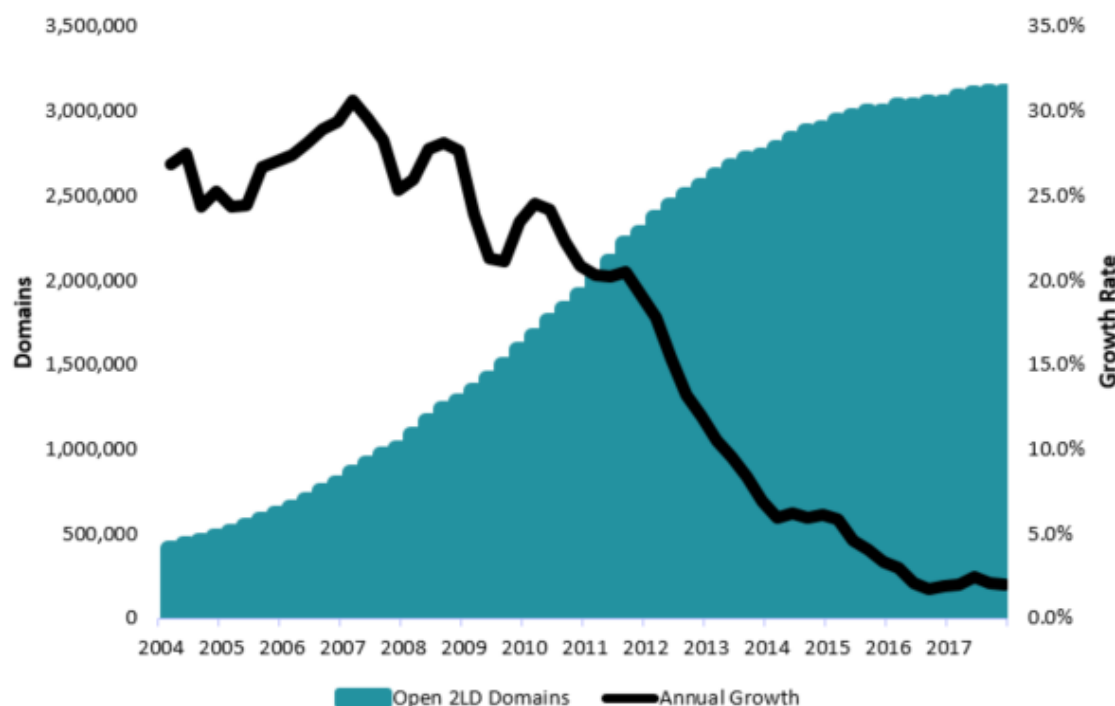
Figure 1—Number of subscribers and volume of downloads, 2006 to 2017



Source: Australian Bureau of Statistics, 2006-2017, [8153.0—Internet Activity \(various releases\)](#).

The increase in internet users has seen a corresponding increase in the number of domain registrations. Following a period of sustained growth over the last decade, over 3.1 million domain names were registered in Australia as at 30 September 2017.

Figure 2—Number of domains and the annual growth rate, 2004 to 2017



Source: AusRegistry, 2004-2017, [EOM Reports for General Release \(various releases\)](#).

The DNS environment has evolved since ICANN delegated management of the .au ccTLD to auDA in 2001. There is significantly more choice available to Australian individuals, organisations and businesses considering registering a website. In the past there were only a handful of publicly available generic TLDs—.com, .net and .org—however, this number has expanded and there are now some 1,200 generic TLDs.

The global market for domains is significant and the .au namespace has performed well. In 2017, .au ranked as the ninth largest ccTLD by number of reported domain names.¹ However, since 2016, the growth in new domain registrations has been trending down globally.² This and other indicators suggest that, while the internet is increasingly central to the delivery or support of many services, there are challenges ahead for the domain environment.

For example, the growing use of social media platforms as an alternative means for consumers to access content and services, rather than company websites, is emerging as a challenge. The rise of mobile phone usage has influenced this trend, as users often access online material via apps instead of navigating to websites using a browser. According to the Australian Communications and Media Authority (ACMA), eight in ten Australians now use a mobile phone multiple times a day to go online.³ Dedicated apps, predictive search engines and large platforms, such as Amazon and Facebook acting as aggregation sites, are also developments which potentially affect the utility of individual domains.

¹ Verisign, 2017, [Domain Name Industry Brief: Volume 14—Issue 3—September 2017](#), p.3.

² Council of European National Top-Level Domain Registries (CENTR), 2017, [DomainWire: TLD Market Report Q3 2017 \(Edition 21\)](#), p.2.

³ Australian Communications and Media Authority (ACMA), [Communications report 2016-17](#), p.16.

Additionally, as the level of reliance on the internet increases, the impact of malicious activity has also risen. Cyber attacks in Australia are increasing, with the overall threat environment changing in terms of the scale, sophistication and severity of incidents; there are increasingly more diverse and innovative attempts to compromise government and private sector networks.⁴ A secure and stable DNS is central to efforts to resist these incidents.

Overall, these trends underscore the importance to Australian of having an effective .au administrator able to ensure the ongoing availability of .au domains while navigating future uncertainty.

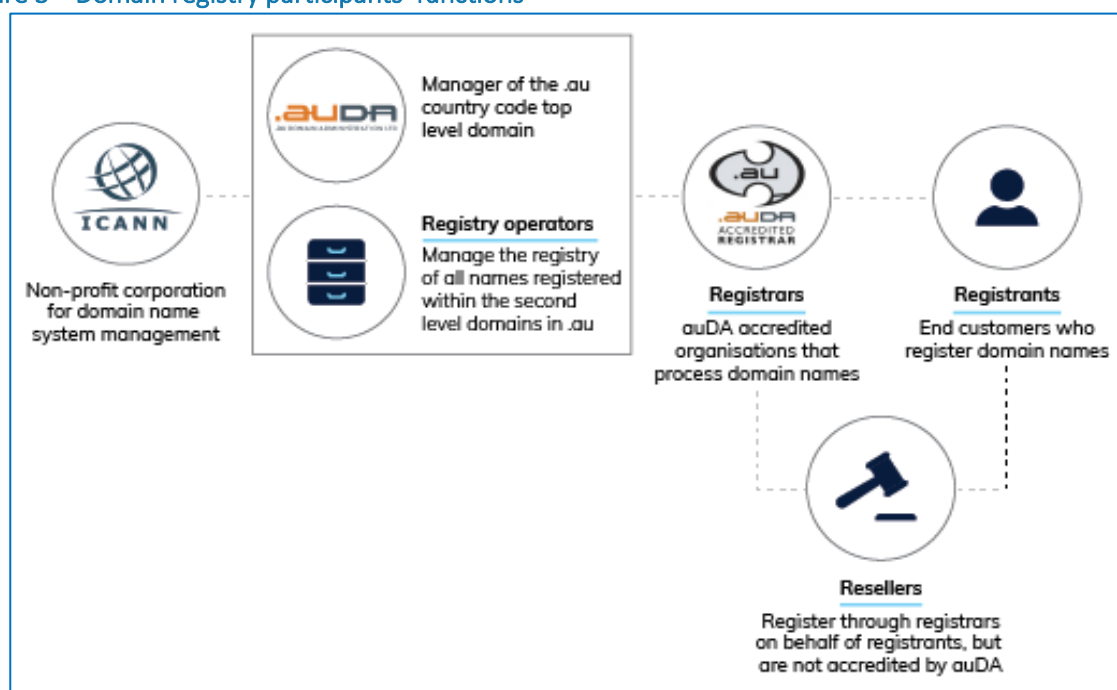
2.3 auDA history and structure

The .au ccTLD for Australia was first registered in 1986 and its administration was delegated to Robert Elz, a network programmer at Melbourne University. Mr Elz created the second level DNS structure for .au—including .com.au, .net.au, .org.au, .edu.au and .gov.au—and established policies for their use.

As the number of Australian websites grew, the .au domain administration became too great a task for one individual. To address this, steps were undertaken to streamline the process and create a competitive market in domain names for the Australian business sector. The Government agreed to support a member-based industry self-regulatory body to manage the .au domain, leading to the formal establishment of auDA in 1999. On 25 October 2001, ICANN and auDA entered into a ccTLD Sponsorship Agreement⁵ which delegated the .au domain to auDA.

As the manager of the .au ccTLD, auDA maintains the database of second level domains within .au and manages the .au top level domain name service. Registry services for second level domains are provided by a third party under contract with auDA, which wholesales names to Registrars and Resellers. The diagram below illustrates the main functions of the parties involved in the domain registry process.

Figure 3—Domain registry participants' functions



Source: ICANN, 2017, [Domain name registry process](#).

⁴ Australian Cyber Security Centre, 2017, [2017 threat report](#).

⁵ Internet Corporation for Assigned Names and Numbers (ICANN), 25 October 2001, [.au ccTLD Sponsorship Agreement](#).

2.4 Governance structure

auDA is a not for profit company limited by guarantee. It is subject to requirements under the *Corporations Act 2001*, including that it must operate in accordance with a constitution and prepare audited financial statements.

auDA operates a membership model, comprised of two membership classes:

- **Supply class members:** for domain name industry participants (registry operators, registrars and resellers)
- **Demand class members:** for domain name holders (registrants), internet users and the general public.

Members are entitled to vote for board members at the Annual General Meeting (AGM), meaning there is a link between the auDA membership and the organisation's corporate governance.

The auDA Board comprises four Supply class members, four Demand class members, the auDA CEO (as a non-voting member of the board), and up to three Independent Directors appointed by the Elected Directors. The board has established standing and advisory committees.

A number of governance arrangements and requirements, including voting arrangements and handling of special resolutions are set out in auDA's Constitution. To change the Constitution, auDA's members are required to pass a special resolution with a yes vote of 75 per cent in each member class.

[Appendix C](#) provides a summary of auDA's current governance and membership structure.

2.5 Terms of endorsement and reserve powers

The Government's expectations of auDA for the management of .au were set out in 2000–01 by the then Minister for Communications in a number of letters.⁶ They include that auDA should:

- operate within the provisions of its company constitution
- recognise that the internet naming system is a public resource
- operate as a fully self-funding and not-for-profit organisation
- be inclusive of and accountable to all members of the Australian internet community
- adopt open, transparent and consultative processes
- promote competition, fair trading and provisions for consumer protection and support
- establish appropriate dispute resolution mechanisms, and
- represent Australian internet industry interests in the internet domain name system at national and international fora.

These conditions are often referred to as the Government's 'terms of endorsement'.

At the same time as endorsing auDA, the Government legislated to create reserve powers under the *Telecommunications Act 1997* (the Telco Act) and the *Australian Communications and Media Authority Act 2005* (the ACMA Act) to provide for intervention in the event that a self-regulatory body was unable to manage electronic addressing in an effective manner.

⁶ Richard Alston, December 2000, [Letter to Greg Watson](#) and Richard Alston, August 2001, [Letter to Stuart Lynn](#).

2.6 Recent developments

There have been a number of significant developments within auDA in recent years including restructuring of the board and staff, a number of governance reviews and the commissioning of a number of major change initiatives. These are highlighted in the following table.

Table 2—auDA recent developments

Issue	Description
Board and staff	<ul style="list-style-type: none"> • Towards the end of 2015, the long-time Chair of auDA, the Hon Tony Staley AO, was replaced by Stuart Benjamin, a Demand class director; this was a break from the tradition of appointing an Independent chair.⁷ • Subsequently, auDA's long serving CEO, Chris Disspain, was terminated by the board and replaced by Cameron Boardman.⁸ • During this period, a number of directors stepped down from auDA, with the result that the current board is comprised entirely of directors appointed since 2015. In this time, there has also been a high turnover of company staff.
Governance reviews	<ul style="list-style-type: none"> • auDA has commissioned at least two reviews of its governance structures by Westlake Consulting⁹ and Cameron Ralph (now Cameron Ralph Khoury).¹⁰ Both reviews proposed a range of reforms to auDA, including increased accountability and transparency, more stakeholder consultation and improved board selection processes. • Although the auDA Board accepted most of the recommendations arising from the reviews and some work was initiated, there is little evidence the problems identified by the consultants and the corresponding recommendations have been addressed.
Major initiatives— Direct Registration and the Registry Transformation Project	<ul style="list-style-type: none"> • In 2016 the auDA Board announced its decision to introduce direct registration of domain names.¹¹ • The board also commenced negotiations with AusRegistry about renewing its operating contract beyond 2018. Ultimately an open tender was called and the contract was awarded to Afilias Australia (a subsidiary of an Irish-registered company) in December 2017.¹²

In the first half of 2017, the board initiated a Code of Conduct for its members without input from its membership, imposing restrictions on behaviour as a condition of membership. It further determined it would remove board meeting minutes from the auDA website, stating that publishing them was 'not best practice governance'.¹³

In response, members triggered a special general meeting in July 2017. The Chair resigned immediately prior to the meeting. Following the meeting, publishing of minutes was restored and the board revoked

⁷ auDA, 9 December 2015, [auDA Board appoints new Chair](#).

⁸ auDA, 24 March 2016, [auDA CEO to depart after 16 years of service](#); and auDA, 1 August 2016, [auDA announces appointment of new CEO](#).

⁹ Westlake Consulting, November 2011, [Independent Review of the Governance of .au](#).

¹⁰ Cameron Ralph Navigator, October 2016, [auDA Board Review—Report for Governance Committee](#).

¹¹ auDA, 18 April 2016, [auDA to introduce direct registrations in .au](#).

¹² auDA, 18 December 2017, [Afilias Chosen to Supply .au Registry Services](#).

¹³ auDA, 2017, [auDA Board Minutes 22 May 2017](#).

the Code of Conduct, resolving to work in partnership with members to develop a new Code.¹⁴ A number of stakeholders have flagged that the quality of the minutes remains a point of contention for auDA members.

Taken together, these events point to a lack of stability and transparency, an organisation undergoing significant change, and an interventionist membership base concerned about the direction of the organisation.

¹⁴ auDA, 2017, [Board Communique Following Special General Meeting](#).

3. Findings and Recommendations

3.1 Guiding principles

Consideration has been given to the following principles in developing findings and recommendations:

- **The multi-stakeholder model of internet governance**—The internet is a collection of distributed and transnational networks and as such, its governance is an international issue. There are a diversity of stakeholders who have a role in the management of key internet resources including the private sector, technical community, civil society and governments. In this regard, the multi-stakeholder approach recognises that these stakeholders can contribute to the management of the internet while mitigating the potential for any group to exert influence over the internet's future.¹⁵
The Australian Government continues to advocate for the multi-stakeholder model and consistent with its International Cyber Engagement Strategy, is committed to strengthening domestic multi-stakeholder mechanisms for internet governance and cooperation.¹⁶
The Review has sought, within the context of the Terms of Reference, to identify settings that foster open and collaborative engagement with internet stakeholders.
- **The .au namespace is a public asset of vital importance**—With the growth of the digital economy, the .au namespace has become increasingly critical to the daily lives of Australians in supporting a range of economic and social activities.
The Australian Government supports industry self-regulation in the management of the .au ccTLD, but acknowledges, as a public asset, that this must be undertaken with respect to the public interest. To that end, auDA's terms of endorsement note that the DNS is a public resource and that its functions should be administered in an inclusive and accountable manner, i.e. in the public or common interest.
The Review has reflected on the role of auDA and the Government in ensuring the .au namespace is administered as an important public asset in the best interests of the Australian community.
- **The domain administrator operates as a monopoly provider**—As the administrator of the .au namespace, auDA commands a monopoly position for Australia's ccTLD. No alternative provider has been given a Government mandate to manage the top level country code. As a result, auDA is not subject to the normal market conditions faced by for-profit organisations operating in a competitive environment and, in many cases, does not face the same checks and balances imposed by market forces. As an example, a poorly governed organisation is likely to lose market share to its competitors if it demonstrates poor decision making. This provides a commercial incentive to develop and instil good governance practices to improve decision making. auDA, on the other hand, can demonstrate poor governance and decision making and still retain its market position. Typically, organisations with a monopoly position are subject to stringent regulatory requirements which is not the case with auDA.
The Review has reflected on how appropriate checks and balances can be established in the absence of market forces or regulation. This includes considering how the Government and the Department could provide an oversight function.

¹⁵ Australian Government, October 2017, [Australia's International Cyber Engagement Strategy](#), p.57–59.

¹⁶ Australian Government, October 2017, [Australia's International Cyber Engagement Strategy](#), p.60.

3.2 Purpose of the .au domain administrator

An important starting point for the Review is to understand the purpose of Australia's domain manager and how it should conduct its activities.

The terms of endorsement provided by the Government to auDA identify a number of specific expectations for the domain administrator. Further, auDA identifies core elements of its role in its 2016–17 Annual Report:

- developing and reviewing .au policies
- enabling and enforcing regulatory compliance
- maximising the security and technical stability of the .au space
- facilitating competition and consumer choice through the accreditation of .au registrars
- engaging and educating .au stakeholders and the broader community
- protecting consumer safeguards and providing effective dispute resolution mechanisms.

In some cases, auDA has expanded on these core elements. For example, the 2016–17 auDA Annual Report notes:¹⁷

'auDA operates under an industry self-regulatory model and [is] strongly committed to the multi-stakeholder approach to internet governance. Stakeholders from both the supply and demand side of the Australian internet community are represented at the highest levels of our corporate governance structure and are consulted in the development and refinement of all of auDA's policies.'

And

'... au is just one element of the internet's vast international policy and management network. As such, we play an active role in representing the interests of .au in relevant fora, such as the Internet Corporation for Assigned Names and Numbers (ICANN), the Internet Governance Forum (IGF), and the Internet Engineering Task Force (IETF).'

Submissions largely agreed that auDA's stated purpose remains relevant and that the terms of endorsement set out appropriate guiding principles (although many stakeholders raised concerns with the implementation of the terms of endorsement, which is discussed later in the report).

Several submissions noted that in providing an administrative, operational and policy role for the ccTLD, auDA's roles and responsibilities remain consistent with the overarching policies and mechanisms for the international DNS.¹⁸

Following an assessment of public submissions and stakeholder discussions, the Review considers that auDA's purpose remains relevant and appropriate. This is discussed further under 'Expectations and role of the Government'. The Review also considers that it remains appropriate that there should continue to be an Australian Government-endorsed body dedicated to the management of the .au domain namespace which operates under an ICANN sponsorship agreement.

The Review considers there are two issues that relate to auDA's purpose that require specific examination: the potential to classify the .au namespace as critical infrastructure, and auDA's ability to sustainably fund future operations.

¹⁷ auDA, 2017, [Annual Report 2016–17](#), p.5.

¹⁸ Submissions to the review of Australia's .au domain management: [Australian Communications Consumer Action Network \(ACCAN\)](#), p.5; and [Paul Szyndler](#), p.3.

a. Critical infrastructure

Several submissions reflected that the .au namespace could be considered as critical infrastructure.¹⁹ In particular, auDA notes that ‘... as cyber security threats intensify against Australian citizens and businesses, the Commonwealth Government is reviewing what is critical infrastructure in the context of access to Australian web properties ...’.

As described on the Attorney-General’s website, critical infrastructure provides services that are essential for everyday life including communications. A disruption to critical infrastructure could have a range of serious implications for business, government and the community.²⁰

Telecommunications is one of eight critical infrastructure sectors identified by the Government in its Critical Infrastructure Resilience Strategy.²¹ As such, auDA is part of the critical infrastructure sector.

In practice, this highlights the importance of auDA implementing best practice security measures, including the formation of necessary strategic partnerships.

While a part of the critical infrastructure sector, this does not alter auDA’s role and purpose (as discussed in section 3.2 above) nor should it impede organisational transparency.

Ultimately, the Review considers maximising the security and technical stability of the .au space remains an appropriate articulation of auDA’s role in the immediate future.

Security and stability is discussed in more detail under the section ‘Trust and confidence in .au’.

Recommendation:

1. While auDA has an ongoing role in the security and stability of the .au space including as part of the critical infrastructure sector, this should not in the foreseeable future alter auDA’s role and purpose.

b. Ability to sustainably fund future operations

In its submission, auDA notes that the changing domain environment is a significant challenge, including that revenues could realistically be expected to decline, placing commercial pressure on the .au domain namespace.²² ACCAN also noted that the commercial return on domain names may well decline with technology change.²³

This gives rise to concerns regarding the ability for auDA to operate as a fully self-funding organisation, given that future revenue growth may taper. If auDA expected it could no longer be self-funding through the revenues derived from meeting the core elements of its role, consideration could be given to different commercial responses, including pricing changes or diversification strategies, as seen with a number of international domain administrators. For example, the Review notes that Nominet in the UK, SIDN in the Netherlands and Denic in Germany operate on a not-for-profit basis but undertake some commercial or competitive services, including cyber security, registry and registrar services.²⁴

In the Australian context, the .au namespace and the DNS will remain an important part of internet operations in the foreseeable future, even if domain registrations decline in the coming years. As a public asset, the Review considers that the .au namespace should be run for the benefit of the

¹⁹ auDA, 2017, [Submission to the review of Australia’s .au domain management](#), p.6.

²⁰ Attorney-General’s Department, 2018, Critical infrastructure resilience.

²¹ Australian Government, Critical Infrastructure Resilience Strategy: Plan, p.3

²² auDA, 2017, [Submission to the review of Australia’s .au domain management](#), p.6.

²³ ACCAN, 2017 [Submission to the review of Australia’s .au domain management](#), p.7.

²⁴ See [Appendix D](#).

community and not to maximise profit. In this regard, the Review finds that auDA should continue to operate as a not-for-profit entity.

It is important that the core role of managing the .au namespace remains a central focus for the domain administrator. The development of any commercial strategies aimed at enhancing sustainability should not distract from the terms of endorsement or the core elements of auDA's role.

Recommendations:

2. That auDA continue to operate as a not-for-profit entity and does not seek to maximise profit.
3. Consideration of commercial strategies relevant to the sustainability of the domain administrator should not detract from the domain administrator's core function as described in the terms of endorsement and core purpose.

3.3 Management framework

auDA's current terms of endorsement specifically note a number of requirements around the governance of the .au domain namespace, particularly in relation to its operation as a company, the internet naming system as a public resource, and its accountability to members and the Australian internet community. It is, therefore, appropriate to examine what are good governance practices and whether auDA's current management framework meets these practices.

Good governance practices are important as they ensure the administration of the .au ccTLD is built upon a solid foundation. Good governance refers to the procedures for decision-making based on best practice and implementing the necessary actions to give effect to them in order to contribute to an organisation's strategic objectives.

a. Strategic objectives

In any organisation, strategic objectives should be clearly articulated. An effective, functional board should be able to communicate to stakeholders an organisation's purpose and vision, its authority and remit, and have policies setting these out clearly. According to the Australian Institute of Company Directors (AICD), it is critical for an organisation to define the reason for its existence.²⁵ In defining strategic objectives, an organisation should state what it does and for whom; how it intends to achieve its goals; and how it will measure and report on its successes (or indeed, its failures).

auDA's Strategic Plan 2015–18 states its mission as follows:²⁶

'To continue to administer and develop .au in a stable and secure environment for the benefit of all Australians.'

The Strategic Plan 2015–18 also sets out four priorities:

1. Maintaining a robust regulatory environment
2. Strengthening the security and stability of the .au space
3. Enhancing stakeholder relationships and promoting the value of .au to the wider community
4. Developing our people and improving our processes.

²⁵ Australian Institute of Company Directors (AICD), 2013, [Good Governance Principles and Guidelines for Not-for-Profit Organisations](#), p.23–24.

²⁶ auDA, 2015, [auDA Strategic Plan 2015–18](#), p.2

The Review considers that developing and publishing a Strategic Plan is consistent with good governance practices and should be maintained. Importantly, there should be clear ‘line of sight’ between auDA’s strategic outlook, its core purpose and its terms of endorsement.

In terms of measuring performance against its Strategic Plan, the Review notes that while auDA provides some reporting via its Annual Report, there is no clear, publicly available articulation of how it measures success or failure. Further, aside from the Annual Report, there does not appear to be a regular forum where auDA presents structured guidance on how it has performed against its strategic objectives and priorities.

The Review considers that enhancing auDA’s reporting requirements against its strategic objectives, including establishing key performance indicators (KPIs), would strengthen auDA’s management framework and provide greater visibility of performance.

Recommendations:

4. That auDA provide an annual Strategic Plan covering at least a four-year-period and with the Strategic Plan reflecting company purpose and terms of endorsement. The auDA Board and management should present progress against the organisation’s purpose and its strategic objectives at auDA’s Annual General Meeting and in its Annual Report.
5. That auDA develop a KPI framework to:
 - a. measure its performance against its stated objectives in its terms of endorsement
 - b. report against in its Annual Report and at its Annual General Meeting.
6. As part of its Strategic Plan, that auDA outline how it intends to discharge its functions as a not-for-profit company and report on its effectiveness in its Annual Report and at its Annual General Meeting.

b. Establishing an effective board

The composition of an organisation’s board is key to its effectiveness. There is a delicate balance in forming and maintaining a board that comprises the necessary corporate skills, technical expertise and industry knowledge to make informed decisions that consider the interests of stakeholders and that contribute to an organisation’s strategic objectives.

The AICD highlights the following considerations in ensuring optimal board composition:

Table 3—Issues in ensuring optimal board composition

Issue	Description
Size of the board	<ul style="list-style-type: none"> Board size is a driver of board dynamics, including decision making, handling differing opinions, formation of factions etc.
Balance	<ul style="list-style-type: none"> Balance refers to the mix of executive, non-executive and Independent Directors to allow for a greater diversity in skills and experience and the representation of perspectives on the board.
Terms of office	<ul style="list-style-type: none"> Terms of office can encourage board renewal, but should be balanced with ensuring the board retains corporate knowledge
Use of board committees	<ul style="list-style-type: none"> Committees can assist in sharing the board’s workload to enable better use of the board’s time.

Source: Australian Institute of Company Directors, 2016, [Improving Board effectiveness](#).

Central to the composition of the board is the process by which directors are appointed. A rigorous, transparent process can support the appointment of appropriately skilled individuals who can underpin and deliver a company's objectives.

Since its formation, auDA's Board has reflected the structure of its membership, with directors appointed from the Supply and Demand classes. auDA's current board is relatively large—12 in number, which includes the CEO as a non-voting board member. There are differing views on what number comprises an effective board. Under section 201A of the *Corporations Act 2001*, there are statutory minimums but no maximum number.²⁷ Under the auDA Constitution, the Board must comprise four persons elected by the Supply class members and four persons elected by Demand class members. Additionally, there are (not more than) three Independent Directors appointed by the elected Supply and Demand Directors for terms not exceeding two years.

The Review considers that the number of directors matters less than the directors' effectiveness in contributing to auDA's strategic objectives. However, the Review would not expect the Board's size would grow beyond its current number. A large board can be unwieldy and it can be harder to ensure good governance. Its size should be determined by the skills required.

c. Board structure and composition

Board structure

auDA's Board structure has increasingly been a focal point for the company and members. auDA has, on a number of occasions, either commissioned or attempted to commence independent reviews on its governance arrangements, notably Westlake Consulting in 2011, and Cameron Ralph Khoury in 2015 and 2016. These reviews all made recommendations around refreshing the Board's composition.

The Review notes a number of concerns raised by auDA directors and by stakeholders about the effectiveness of the current Board arrangements, including Board composition, appointments, stability, and the suitability of candidates to undertake the duties of their positions. A significant number of submissions noted that current Board arrangements are not optimal, leading to the formation of a Board that has gaps in its representation, including gender diversity, multi-state representation, and omitting specific segments of the industry and community.²⁸ The following table summarises issues identified in submissions:

²⁷ AICD, 2016, [Number of directors—board size](#).

²⁸ Submissions to the review of Australia's .au domain management: [Internet Australia](#), p.1–3; [ACCAN](#), p.8; [Education Services Australia](#), p.4; [edu.au Domain Administration Committee \(eDAC\)](#), p.4; and [Scott Long](#), p.16.

Table 4—Issues raised by submissions regarding auDA Board arrangements

Issue	Description
Potential for board stacking	<ul style="list-style-type: none"> There were claims the Constitution allowed for ‘board stacking’ and was potentially open to abuse given there is no restriction under the Constitution to prevent members to move from one class to another.
Relevance of Supply and Demand class membership definitions	<ul style="list-style-type: none"> Submissions noted that while the different classes of membership was relevant when auDA was established, they are far less relevant now. ACCAN stated an approach could be instead to have ‘industry representatives’ balanced against ‘end users’. Internet Australia questioned the current make up, independence and representativeness of the auDA Board, noting there were no members that represent domain name users (registrants, businesses and Internet users). Education Services Australia also noted that the Supply and Demand classes do not ‘always properly capture the participants in the .au space’.
Independent Directors	<ul style="list-style-type: none"> Independent Directors are in the minority and need support of elected members to effect change. Some submissions suggested more Independent Directors are required to provide corporate experience and to counter issues where inexperienced members are appointed. Their independence was questioned given that they are selected by Supply and Demand Directors without independent nomination and selection. Increasing the number of Independent Directors was recommended by both the Westlake Consulting and Cameron Ralph Khoury reports.
Membership classification	<ul style="list-style-type: none"> Some submissions noted that ‘Domainers’—buyers and sellers of domain names—belonged in the Supply class but were classed as Demand. Other submissions said the Supply and Demand classes were represented on the Board by four directors apiece, giving the smaller Supply class greater representation on the Board.

Source: Submissions to the review.²⁹

The issue of Board stacking is of particular concern. This would suggest a manipulation of process to place directors on the Board to act in the interest of a particular membership faction, rather than in the interests of the organisation as a whole or the Australian internet community.

Ultimately, the Review finds the classes of auDA Directors are outdated and open to potential misuse. Directors selected for their industry background, expertise and experience are likely to provide greater board cohesion and support effective governance practices. Therefore, the Review considers that

²⁹ Submissions to the review of Australia’s .au domain management: [ACCAN](#), p.8; [Internet Australia](#), p.3; [ESA](#), p.3; [Paul Szyndler](#), p.6; [John Selby](#), p.6 and p.9; [Scott Long](#), p.10; and [Paul Shaw](#), p.1.

auDA's Board should be comprised of a majority of Independent Directors. This will require a change to the auDA Constitution regarding director selection and representation (see Recommendation 7).

Board appointments

Stakeholders consistently stated that additional assurances are required to prevent the stacking of the Board and to ensure Board members are suitably qualified and sufficiently representative of the industry and its stakeholders. A number of submissions recommended the establishment of an independent nomination committee to identify and put forward suitable candidates.³⁰ This approach is currently used by ICANN which established a 'NomCom' (nomination committee) to work independently of ICANN's Board and, given its focus as a public benefit corporation, act in the interests of the global internet community.³¹

Elected Directors appoint Independent Directors as well as casual vacancies on the Board. Some submissions envisaged a nominations committee that would be comprised of members from auDA but to ensure its independence would also include stakeholders from outside this group such as from the broader business community, the telecommunications industry, consumer advocacy groups and the Commonwealth Government.³²

The Governance Institute of Australia emphasises that it is best practice for a company to create a skills matrix to identify '... the skills, knowledge, experience and capabilities desired of a board to enable it to meet both the current and future challenges of the entity.'³³

As previously noted, there is no minimum requirement to become a member of the Board aside from, for eight director positions, being from the Supply or Demand classes. auDA has no skills matrix to select Board members. This can inadvertently facilitate the appointment of directors who have limited or no previous board or corporate governance experience. This is further exacerbated by the low barriers for becoming a member and the relatively small and unrepresentative membership of auDA, which again can contribute to the risk of Board capture. The Review considers these circumstances and arrangements to be unsatisfactory.

A number of submissions highlighted that, overall, the Board has a number of deficiencies in terms of skills and capabilities, which arise from the existing governance arrangements. In this regard, some stakeholders submitted that favourable skills, experience and background should be mapped against those of individual Board members.³⁴

auDA directors also acknowledged in interviews that there are no probity checks for members nominating for director positions. It was noted by some directors that screening processes are undertaken for casual vacancies, but this was not the case for elected director positions. It is common practice for many boards to undertake due diligence assessments of candidates to promote effective governance.

The Review finds that Board appointments should be endorsed by a Nomination Committee, which includes representatives that are independent of auDA to help avoid the potential for manipulation and ensure optimal transparency in the appointment process.

³⁰ Submissions to the review of Australia's .au domain management: [ACCAN](#), p.8; [Internet Australia](#), p.3; [Maddocks Lawyers](#), p.7; and [Paul Szyndler](#), p.4 and p.8.

³¹ ICANN, 2013, [ICANN Nominating Committee](#).

³² ACCAN, 2017 [Submission to the review of Australia's .au domain management](#), p.8.

³³ Governance Institute of Australia, 2015, [Creating and disclosing a board skills matrix](#).

³⁴ Submission to the review of Australia's .au domain management: [ACCAN](#), p.8; and [Scott Long](#), p.18.

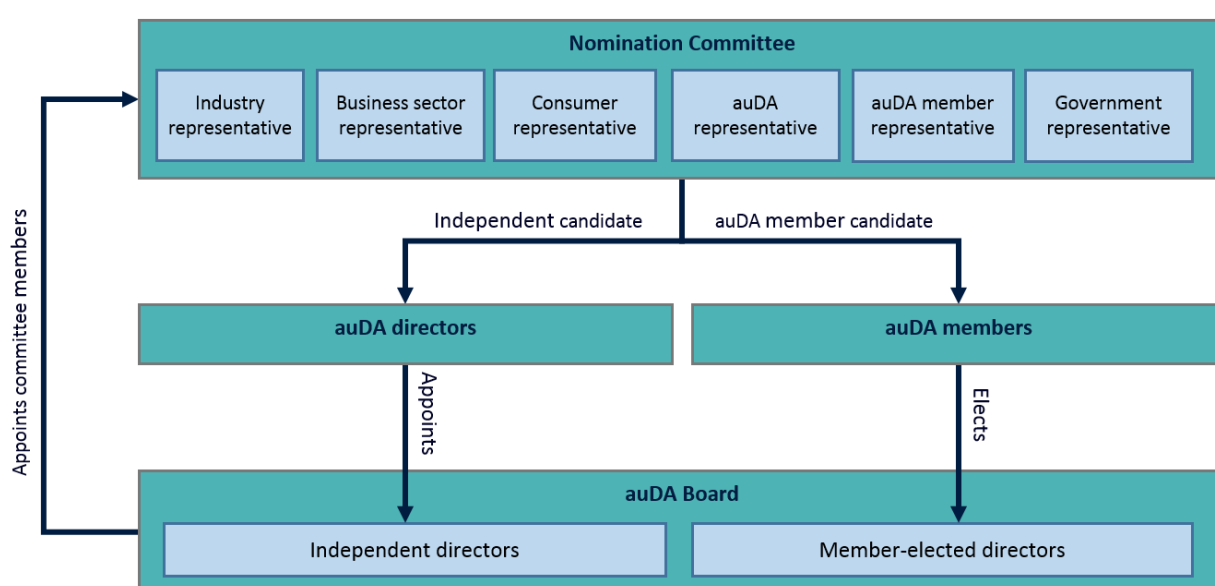
The committee should include a representative from auDA and an auDA member who can represent the views of members, in addition to representatives from industry, the broader internet community and Government. auDA's independent Chair will chair the Nomination Committee.

The Board would appoint members to the Nomination Committee, however the Review recommends that candidates for the inaugural Nomination Committee are selected by the Government in consultation with auDA.

The Nomination Committee would establish a skills matrix and also undertake probity and disclosure assessments to identify and shortlist suitable candidates for auDA's Board. Independent candidates would then be appointed by the Board and member candidates by auDA members.

The proposed structure, operations of the Nomination Committee and its relationship with auDA's members is illustrated in Figure 4.

Figure 4—Proposed structure of the Nomination Committee



Directors who are independent of auDA and suitably qualified in good governance practices and with industry experience will help ensure against misuse and Board stacking. The Review recommends that the first Board selected following the reform of auDA's governance arrangements should be appointed according to a skills mix identified by the Nomination Committee with shortlisted nominees agreed with the Department (see Recommendation 7).

Director selection

In terms of how directors are selected, a number of good governance guides state an effective board provides direction and adds value to an organisation. A board's composition should contain a mix of skills, background and industry experience in order to contribute to the organisation's strategic objectives. A board also plays an important role in shaping organisational culture. Figure 5 below identifies the core business skills and knowledge relevant to selecting directors:

Figure 5—Director selection criteria



Source: Adapted from Australian Institute of Company Directors, 2017, [Selecting a new director](#).

The AICD also notes a board's director requirements may change as an organisation evolves, while the ASX Corporate Governance Principles and Recommendations state an organisation should outline board and management roles and responsibilities. It suggests these roles and responsibilities could be set out in a charter or other document and published on an organisation's website. It could also be published in an annual report.

In May 2017 auDA commissioned Cameron Ralph Khoury to develop a board skills matrix and develop a Board Charter and Code of Conduct. The consultants were also commissioned to evaluate the Board, review the suite of Board policies, and reform the accountability and transparency framework. There is no indication that these were completed and/or adopted or if the membership was consulted about them.

The auDA Constitution (section 18.3) states the director requirements as:

- Directors need not be members
- Directors are elected as individuals
- Directors elected by the Demand class members must not, at all relevant times, be a Supply Related Person.

There are no other qualifications. For eight positions on the Board, the sole qualification is that they be elected by the Supply class or the Demand class. Unlike the Supply and Demand Director positions, Independent Director vacancies and casual vacancies are handled by the Board itself. There is a recruitment committee to assess and nominate candidates for vacant Independent Director positions. However, in the absence of an arrangement such as a Nomination Committee, or recruitment standards such as a board skills mix, there are concerns that recruitment of Independent Board members may not be optimised to meet the requirements of the organisation as a whole.

Elections for Supply and Demand Directors occur at auDA's annual general meeting (AGM), with two director positions from each class being contested. Elected Directors are subject to re-election (every two years).

There are no restrictions to the number of terms Elected or Independent Directors can serve.

While the Review acknowledges the current Board may be otherwise qualified due to industry and business experience, Board selection for eight director positions is firstly by consideration of the membership and it is unclear how candidates within the class are prioritised. The Review finds that auDA's director selection processes are unique and inconsistent with good governance practices (see Recommendation 7).

Board tenure

Length of tenure was also highlighted in a number of submissions as an area of concern, particularly the dichotomy between ensuring Board renewal and the potential loss of corporate knowledge and stability that this entails. Currently, every two years, four Board positions are open to re-election. This frequency of election cycles was cited by a number of submissions as representing a risk to the effective operation of the organisation.³⁵ On the other hand, too long a tenure can carry the risk of stagnancy.

Any changes to the Board management framework will also need to consider the optimal length and number of terms that directors can serve to ensure that collectively the Board has relevant skills to operate but is also able to mature with the industry it represents. In this regard, a number of submissions proposed that appointments be extended, but for limitations to be put in place on the number of terms.³⁶ This was also recommended in the Westlake Consulting report.

The Review finds that it is vital auDA Board appointments are regularly reviewed to ensure that the Board continues to have the appropriate skills and experience for the sector (see Recommendation 7).

Roles and responsibilities of the Board, Chair and management

The Review considers that clear guidance on the role of the Board and executive management team supports effective governance. However, there is limited information on the roles and responsibilities of the Board and management. For example, while auDA's Constitution does outline the structure of auDA's Board, it makes no mention of the respective roles of the Board, Chair or CEO. Clarity on the roles and responsibilities of the Board, both individually and collectively, is important as it sets expectations for the directors and also provides clarity around the internal governance of the company.

In relation to the Chair, the AICD highlights the importance of this position beyond presiding over board meetings. The Chair has a fundamental role in driving the effectiveness of the board by providing leadership to the board and in engaging with the CEO.³⁷ The AICD also notes that good governance practice in Australia recommends that the Chair be an Independent Director to ensure the Chair is free from conflicts of interest.³⁸

Traditionally, auDA's Chair has been an Independent Director. However, in late 2015 the Board appointed a director elected by the Demand class as Chair. Similarly, following the resignation of the Chair in August 2017, a director elected by the Supply class was appointed as interim Chair. The Review considers that the independence and role of the Chair should be specified. Providing such clarity may

³⁵ Submissions to the review of Australia's .au domain management: [Maddocks Lawyers](#), p.6; and [Council of Australasian University Directors of Information Technology \(CAUDIT\)](#), p.2.

³⁶ Submissions to the review of Australia's .au domain management: [ACCAN](#), p.8; [Maddocks Lawyers](#), p.6; and [CAUDIT](#), p.2

³⁷ AICD, 2013, [Good governance principles and guidance for not-for-profit organisations](#), p.21.

³⁸ AICD, 2016, [Director tools: Role of the chair](#), p.2.

reduce the future risk of the auDA membership seeking to remove a board Chair, as the Chair will be operating within a more clearly defined framework.

Likewise, in terms of transparency of internal governance, the Review also finds that there were no public documents outlining the role of the CEO. It was unclear as to the limitations of the CEO and how the position functioned alongside the Board. While the role and responsibilities of the CEO should be clarified, the Review also considers that the functions of this position should be reviewed, including the standards by which the CEO's performance is assessed.

As noted previously, Cameron Ralph Khoury was commissioned by auDA to develop a Board Charter. A Board Charter is an effective means for outlining policy on the respective roles, responsibilities and authorities of the board, the directors and the management team in setting the strategic direction of a company.³⁹ In articulating the roles and responsibilities of a company's board and management, a charter also provides a framework for assessing the performance of the board. The Charter should also describe the basis for appointment of the Chair position.

The Review considers that a Board Charter should be established to articulate the roles of the Board, the Chair and the CEO. In terms of transparency and accountability, the Review further considers that auDA should report annually and publicly to its stakeholders on the Board's performance against the requirements of this charter. This would enable the Board to also assess the effectiveness of its Board Charter annually.

d. Management framework—conclusions and recommendations

For auDA to effectively represent the entirety of its stakeholders it requires a board that has their confidence. Under the current arrangements, there is a material risk that the objectivity and evidence-based decision making of auDA's Board is compromised.

auDA's governance arrangements need to be reformed to ensure stakeholders are effectively represented by the Board, which in turn must possess the skills, experience and background to make decisions in the best interests of the broader Australian internet community. In undertaking these reforms, auDA's Board should also be reconstituted to ensure that all Board members have been appointed in accordance with these criteria. This should be undertaken within a 12 month period to enable the newly constituted Board to drive reform of the company.

The Review makes the following recommendations:

³⁹ AICD, 2016, [Director tools: Board Charter](#), p.2.

Recommendations:

7. That auDA reform its governance arrangements to ensure:
 - a. that the nomination of all Board positions is undertaken by a Nomination Committee comprised of representatives from industry, the business sector, consumers, an auDA member representative, and the Commonwealth, represented by the Department
 - i. in establishing the Nomination Committee, the auDA Board will undertake a consultative merit-based process to identify members, with a Department representative as a panellist, and the Department to select the committee members from this process
 - ii. the Nomination Committee will undertake probity and disclosure assessments and develop a skills matrix to ensure new directors have an appropriate mix of technical and corporate skills and industry experience
 - iii. the Nomination Committee will shortlist: member candidates to stand for election by members; and independent candidates to stand for election by the Board
 - iv. however, the first Board, following the reform of auDA's governance arrangements will be selected according to the skills mix identified by the Nomination Committee with shortlisted nominees agreed with the Department
 - b. length of terms directors can serve is capped at three years with directors appointed for no more than two consecutive terms
 - c. the Board is structured so that the majority of the Board is independent of auDA's membership
 - d. that within 12 months the Board is reconstituted to ensure all appointments meet this criteria.
8. That auDA establish a Board Charter:
 - a. to set out the respective roles and responsibilities of the Board, Chair and CEO
 - b. to set out the basis for appointment of the Chair
 - c. that requires the Board to report on an annual basis to stakeholders publicly on its performance against this charter.

3.4 Stakeholder engagement

The internet has become increasingly critical to economic and social activities. In this regard, the .au namespace is relevant to a diverse set of stakeholders, all of who have varied expectations on its administration and management. Based on submissions to the Review, auDA's stakeholders include:⁴⁰

- the Commonwealth Government
- auDA members, as a member-based organisation
- the DNS industry (including registries, registrars and resellers, Internet Service Providers)
- Registrants (large and small)
- the broader Australian internet community.

a. Transparency and consultation

A key concept for effective stakeholder engagement is to undertake transparent and consultative processes. Collectively, transparency and consultation builds confidence that the activities undertaken and decisions made by a company have considered stakeholder interests and concerns. Transparency also provides assurance that a company is accountable to its stakeholders. Transparency and consultation are also reflected in the current terms of endorsement, which in turn, reaffirms Australia's commitment to the multi-stakeholder model.

Submissions highlighted that transparency and consultation are areas on which auDA should improve.⁴¹ Some submissions and stakeholders noted that auDA had not effectively consulted its stakeholders on significant projects, such as the Registry Transformation Project and Direct Registration. While these projects are outside the scope of this Review, the concerns raised in submissions underscore the importance of effective consultation.

Previous reviews have made recommendations on improving the transparency of the company. The 2011 Westlake Consulting review proposed that auDA should develop and publish an accountability and transparency framework, noting that ICANN has established such a framework to uphold principles around stakeholder engagement, openness and accountability.⁴² While a draft framework was produced in 2012, the extent to which auDA has complied with this framework is unclear.

Overall, the Review considers that it would be beneficial for auDA to publish an accountability and transparency framework and report on its performance against this framework. This would also provide a tangible response to the transparency requirements articulated in the terms of endorsement.

Recommendation:

9. That auDA:
 - a. formalise its transparency and accountability framework, consistent with recommendations in the Westlake review
 - b. report annually on its performance against the framework in its Annual Report and at its Annual General Meeting.

⁴⁰ Submissions to the review of Australia's .au domain management: [ACCAN](#), p.8; [Scott Long](#), p.19; [Paul Szyndler](#), p.7; and [John Selby](#), p.7.

⁴¹ Submissions to the review of Australia's .au domain management: [ACCAN](#), p.10; [John Selby](#), p.9; and [Paul Szyndler](#), p.7–8.

⁴² ICANN, 2008, [ICANN accountability and transparency frameworks and principles](#).

b. auDA's membership

There are 303 registered members of auDA (at November 2017), 254 Demand class and 49 Supply class.⁴³ Membership of auDA currently gives members the right to vote in Board elections. Although Supply class members represent only 16 per cent of the membership, because each class has four directorships on the Board, their votes effectively carry more weight than Demand class members, and they stand a greater chance of being elected to the Board.

The historic division of members into two classes, which is set out in auDA's Constitution, was intended to provide a degree of balance on the Board between industry views and the broader community. However, submissions largely consider that these definitions are outdated or do not meet community expectations.⁴⁴ The membership definition also allows members and directors to change classes.

Unless there is a balance in the number of members from each class, this division can lead to one class exerting more influence given the equal representation on the Board. This and the flexibility in definitions can contribute to Board stacking.

Considering its Constitution, auDA is constrained by the extent to which it can verify or validate its members or to scrutinise whether a member meets the definition of the Supply or Demand class.

Overall, the Review considers that the definition of Supply and Demand is unclear, is not reflective of Australia's internet community, and is burdensome to administer. The Review considers the membership model could be simplified. A single member class would ensure that industry and interested stakeholders can still engage with auDA, but without the risk of one member class having undue influence over the other.

Alternatively, as discussed in auDA's submission to the review, consideration could be given to a membership model based on functional constituency.⁴⁵ Under this approach, the auDA membership structure would be revised based on membership classes, including Government, industry, consumer, registrar, etc. This model could provide a pathway for established organisations with pre-existing members to engage with auDA on issues concerning the .au namespace, potentially broadening auDA's membership base and increasing participation.

Under any approach, it would be important that membership guidelines discussing such issues as eligibility, participation in auDA fora and voting are made publicly available. It would also be important to ensure that anyone with an interest in the .au namespace was able to join.

Recommendation:

10. That auDA reforms its existing membership model by creating a single member class or a functional constituency model and that membership reform is non-discriminatory and supported with transparent membership guidelines.

⁴³ auDA, 8 November 2017, [Membership list](#).

⁴⁴ Submissions to the review of Australia's .au domain management: [Internet Australia](#), p.11; and [Maddocks Lawyers](#), p.7.

⁴⁵ Submission to the Review of Australia's .au domain management: [.au Domain Administration Limited](#), p.13

The membership may be seen as a key stakeholder group for auDA, however, as submissions noted, the current membership does not reflect the actual industry or community stakeholders. Concerns were raised that there is underrepresentation from the ICT sector, businesses reliant on .au and education representatives.⁴⁶

A number of submissions raised the issue of ‘Domainers’—businesses that trade in domain names likely to have value to corporate customers—that reside in the Demand class but whose interests would appear to be more aligned with the Supply class.⁴⁷

Feedback through the consultation process suggests that the membership should be expanded so it is more representative of the industry and community. For instance, some submissions proposed that auDA follow the Canadian model, where every domain registrant can opt-in to become a member at the point of registration.⁴⁸ This proposal was also discussed at auDA’s November 2017 AGM.

Further, a number of other ccTLD administrators are set up where members of executive bodies are independently appointed by government or according to a formula that draws on different sectors such as finance, health and retail; membership (where it exists) is represented via advisory panels or some similar arrangement.

The Review considers that more should be done to review and expand auDA’s membership base to ensure it better reflects Australia’s diverse and evolving internet community.

Recommendations:

11. That auDA diversify its member base in the short-term with a focus on extending membership to stakeholders that are underrepresented.
12. That auDA report annually on its initiatives for growing its membership, and their effectiveness at diversifying the membership in its Annual Report and at its Annual General Meeting.

Apart from the requirement for Supply class members to be industry participants, any individual or entity can join auDA. auDA’s open membership policy is intended to encourage a variety of public and private interests to engage with internet domain naming issues. However, the small membership pool and lack of an effective application process appears to permit irregularities to occur. At interview, some stakeholders noted that, for example, it is not uncommon for multiple members of the same family to be listed as members of auDA to form voting blocs.

The Review considers that the use of transparent criteria for assessing applications and a formalised and rigorous process for reviewing applications is required. This may include the automatic acceptance for membership after a fixed period to provide auDA with sufficient time to consider the application (while avoiding unnecessary delay in the process). Improvements to the rigour of the membership application process should not impede recommendations regarding growing the membership base.

Recommendation:

13. That auDA review its assessment process for new members, in conjunction with the implementation of Recommendations 10, 11 and 12.

⁴⁶ Submissions to the review of Australia’s .au domain management: [Internet Australia](#), pp.3–4; [Scott Long](#), p.22; and [Paul Szyndler](#), p.8.

⁴⁷ Submissions to the review of Australia’s .au domain management: [Internet Australia](#), p.3; [ACCAN](#), p.3; and [John Selby](#), p.6 and p.9.

⁴⁸ Submissions to the review of Australia’s .au domain management: [Internet Australia](#), p.4; and [Paul Szyndler](#), p.8

c. Expectations and role of the Government

The Government is a key stakeholder in the .au namespace in endorsing auDA. The terms of endorsement were set out to outline the Government's expectations for the administration of the .au ccTLD. These terms also provide guiding principles on the areas of focus for auDA (e.g. promoting competition, supporting consumers, participation at national and international fora) and on how it should operate (e.g. inclusion, accountability and as a not-for-profit organisation).

Despite the significant changes in the telecommunications landscape, stakeholders submitted that the terms of endorsement remain relevant.⁴⁹ However, submissions also emphasised that auDA's performance against these terms has not been satisfactory. In this regard, submissions proposed the emphasis should be on establishing mechanisms that provide assurance auDA is effectively meeting its obligations.⁵⁰

Some submissions also noted that the terms of endorsement do not articulate the relationship between the entities.⁵¹ An articulation of this relationship in the terms of endorsement would further enhance auDA's accountability to the Government and support broader transparency of the company.

The Council of Australasian University Directors of Information Technology submitted that in providing guiding principles, the Government needs to take a long-term strategic view as the needs of the sector and the DNS evolve.⁵² The terms of endorsement should be reviewed regularly to ensure that they, and therefore the administration of .au, remain fit-for-purpose.

The Review considers that the terms of endorsement is an appropriate mechanism for the Government in providing directions on its expectations of auDA and clarity in regards to the scope of its responsibilities. However, as noted by submissions, the content of the terms of endorsement and the process by which they are issued should be reformed to provide assurance that auDA is performing effectively against its obligations.

Recommendations:

14. That the Minister for Communications issue new terms of endorsement, setting out the Government's expectations for .au domain administration and that auDA respond by publishing a statement on how it will deliver on these expectations.
15. That the Government review these terms of endorsement within two years from when they are issued to ensure they remain fit-for-purpose, with reviews scheduled every three years going forward.

There were a range of views expressed by stakeholders on the type and level of involvement the Government should have in the operations of .au and auDA. Under current arrangements, the Department, representing the Government, sits as a non-voting observer at board meetings.

Stakeholders submitted that the Government could play a larger role in terms of the supervision of auDA. Consistent with the multi-stakeholder model, the Review finds that, to the greatest extent possible, the internet services sector should regulate itself, and should make decisions based on solid technical advice and in accordance with the interests of the wider community. Additionally, the Review

⁴⁹ Submissions to the review of Australia's .au domain management: [ACCAN](#), p.6; and [Paul Szyndler](#), p.3.

⁵⁰ Submissions to the review of Australia's .au domain management: [ACCAN](#), p.6; and [John Selby](#), p.4.

⁵¹ Submissions to the review of Australia's .au domain management: [ACCAN](#), p.6; and [Internet Australia](#), p.4–5.

⁵² CAUDIT, 2017, [Submission to the review of Australia's .au domain management](#), p2.

considers that there needs to be a greater oversight role for the Government to ensure auDA delivers on its purpose for the benefit of the Australian community, given its position as a monopoly provider.

Submissions highlighted that the Government should undertake more regular reviews to assess the company's performance.⁵³ Stakeholders submitted this may include annual reporting by auDA to Government on its performance against its stated objectives, key performance indicators, and on its financial performance. Some submissions also proposed that like Government Business Enterprises, auDA be required to comply with the same legislation including the *Public Governance, Performance and Accountability Act 2013* to support accountability and transparency.⁵⁴

Overall, the Review considers that the Government should play a more active role in overseeing auDA's performance. In particular, the Review considers there is a clear role for the Department to monitor progress in implementing reforms and other work priorities and to provide a level of assurance regarding auDA performance reporting.

Recommendation:

16. That the Department of Communications and the Arts adopts a more formal oversight role of auDA, including that:
 - a. auDA report quarterly to the Department on its implementation of reforms, work agenda and key work priorities
 - b. the Department conducts independent verification of some or all of auDA's reporting provided through its Annual Report, including those requirements identified as part of the review
 - c. a senior executive officer from the Department continue as a non-voting observer at auDA Board meetings and is present for all decisions taken by the board.
17. That the oversight role of the Department of Communications and the Arts is reviewed periodically by Government to ensure it is fit-for-purpose.

d. Engagement with the internet community

auDA has a role in engaging with the broader internet community. Its terms of endorsement require it to 'represent Australian internet industry interests in the internet domain name system at national and international fora'. auDA's Annual Report also describes its role as 'engaging and educating .au stakeholders and the broader community'.

However, stakeholders have consistently noted that auDA's engagement with the broader internet community needs to be improved. Some submissions highlighted that a number of stakeholder engagement activities auDA has undertaken in the past have been placed on hold or terminated with no further information provided on whether they will re-commence or be replaced. These are described in the following table.

⁵³ Submissions to the review of Australia's .au domain management: [ESA](#), p.6; [eDAC](#), p.3; and [CAUDIT](#), p.2.

⁵⁴ Submissions to the review of Australia's .au domain management: [eDAC](#), p.4; and [ESA](#), p.4.

Table 5—auDA initiatives

Issue	Description
Australian Internet Governance Forum (auIGF)	<ul style="list-style-type: none"> auDA established a domestic version of the Internet Governance Forum, which is a platform for the discussion of public policy issues relating to the internet.
Australia and New Zealand Internet Awards (ANZIAS)	<ul style="list-style-type: none"> This annual event, a collaboration between auDA and InternetNZ, aimed to recognise and promote innovation in the internet community.
auDA Foundation	<ul style="list-style-type: none"> This is a charitable trust, established to promote educational and research activities that aim to improve internet use for the benefit of the Australian community. Part of the revenue auDA received from registrations went towards the auDA Foundation.

Source: Submissions to the review.⁵⁵

The Review notes that auDA undertook an assessment of its community activities and as of 2017, has ceased the auIGF and the ANZIAS, and the auDA Foundation remains under review.

Given that the .au namespace is a public asset, the Review considers auDA needs to improve its engagement with the internet community and the Australian community more broadly. The outcomes of its review into its community activities needs to be completed and, in accordance with improved transparency, the findings should be published.

International engagement continues to be an important auDA function, such as fostering opportunities for collaboration on issues like cyber security. However, stakeholders and some submissions expressed concern that the organisation was not participating as fully or as effectively in this area as it has in the past.

The Review considers that auDA should continue its engagement with ICANN and other key international fora to ensure that Australian interests are represented at these meetings and to monitor trends and developments relevant to the effective administration of the .au namespace. Outcomes and lessons learned from these engagements should also be reported back publicly to the Australian internet community.

Recommendations:

18. That auDA develops a public stakeholder engagement strategy and implementation plan to articulate how it will engage with stakeholders in all levels of operation and decision making.
19. Through its Annual Report and at its Annual General Meeting, auDA should report on its performance against its stakeholder engagement strategy.
20. That auDA publish conclusions from its review on its community activities and publish an implementation plan on future community activities.
21. That auDA continue to engage with ICANN and other international bodies to represent Australian interests.
22. That auDA's stakeholder engagement strategy (Recommendation 17) include ICANN and other relevant international fora and bodies.
23. As part of its Strategic Plan (Recommendation 4), auDA publishes a forward-looking international travel schedule and describes in its Annual Report the effectiveness of its international activity.

⁵⁵ Submissions to the review of Australia's .au domain management: [Internet Australia](#), p.6; [Scott Long](#), p.7; [John Selby](#), p.8; and [Paul Szyndler](#), p.7.

e. Trust and confidence in .au

Confidence in the .au namespace is critical to the growth of Australia's economy. Business and social activity increasingly relies on the stability of the internet. Positively, the online Australian community continues to have strong confidence in the .au namespace and is rated as the most trusted and utilised domain extension by Australians.⁵⁶

However, as highlighted in the Australian Government's Cyber Security Strategy, cyber security incidents are increasing in frequency and severity which can have significant economic impacts. Losses from cyber security attacks are estimated to cost economies as much as 1 per cent of GDP annually; on this basis, cyber security incidents may cost Australia an estimated \$17 billion per year.⁵⁷

Security of the DNS is critical as the central piece of architecture for navigating the World Wide Web. From a ccTLD perspective, the integrity of the TLD is important, as a cyber attack on ccTLD name servers has the potential to disrupt access to online services.

ICANN does not have responsibility for the operational security throughout each level of the DNS as this is delegated to ccTLD administrators. In its sponsorship agreement auDA's obligations include ensuring the '... Delegated ccTLD [is] to be operated and maintained in a stable and secure manner.'⁵⁸ The importance of the security and stability of the .au namespace is also enshrined in auDA's Constitution, which states that one of its core activities is 'ensuring the continued operational stability of the domain name system in Australia.'⁵⁹

Notably, auDA has responsibility for setting policies for the operation of .au including ensuring the integrity of the ccTLD; however, registry services for second level domains are provided by a third party under contract with the company. The third party registry operator has a large role to play in the security of the .au namespace.

auDA has established a Board Committee on Security and Risk but no public information on the role of this group was identified. auDA also has a Security and Stability Advisory Committee, which has a focus on informing the company on matters relating to the security of the .au namespace; however, this committee is currently under review.⁶⁰ auDA has also introduced cyber security strategies including implementing the Domain Name System Security Extensions (DNSSEC)—which protects against attacks by digitally signing data to provide an assurance of its integrity—and introduced the Information Security Standard—to assist registrars to manage and improve the security and resiliency of their business, .au registrants and the .au DNS more broadly.

⁵⁶ AusRegistry, November 2017, [Behind the Dot](#), p.6–7.

⁵⁷ Australian Government, 2016, [Australia's Cyber Security Strategy](#), p.15.

⁵⁸ ICANN, 2001, [ccTLD Sponsorship Agreement \(.au\)](#).

⁵⁹ auDA, 2006, [Constitution of .au Domain Administration Ltd](#), section 3.2.

⁶⁰ auDA, accessed February 2018, [auDA Board](#).

Submissions noted a range of emerging issues that could affect the security and stability of the .au namespace:

Table 6—Emerging security and resilience issues

Issue	Description
Unauthorised business use (UBU)	<ul style="list-style-type: none"> Where an individual or entity uses a local business' identity and Australian Business Number to buy expired .au domain names. This approach may be used to undertake fraudulent activity.
DNS redirection	<ul style="list-style-type: none"> Occurs when the resolution of DNS queries is subverted for malicious purposes. The exhaustion of IPv4 addresses—the IETF has developed the IPv6 which have greater security built in, but this protocol has been slow to be implemented.
Internet of Things devices with low levels of security	<ul style="list-style-type: none"> The influx of these devices, which are allocated IP addresses, can be hijacked and used to launch cyber-attacks.

Source: Submissions to the review.⁶¹

f. Best practices for DNS administration

The Review has identified a number of sources for best practice information:

- The ICANN Security and Stability Advisory Committee (SSAC) advises on best practice for DNS technical administration and operation.⁶² It also undertakes threat assessments and risk analysis to identify security and stability threats to inform the ICANN community.
- The Internet Engineering Task Force (IETF) is an international community of network designers, operators, vendors and researchers focused on the operations of the internet.⁶³ The IETF also has a security area which is focused on security protocols.

In its responsibilities for top-level coordination and global internet policymaking, ICANN is an authoritative source for best practice on DNS administration. ACCAN's submission also noted that the SSAC and the IETF put forward advice on the technical management of the DNS.⁶⁴ The cross-engagement of these organisations, and their broader engagement with the wider internet community, enables the SSAC and the IETF to produce useful advice on current cyber security issues.

The level of auDA's engagement with ICANN and the IETF has been the subject of debate. Submissions have noted that engagement with ICANN, in particular, is important⁶⁵ but from meetings with stakeholders, it appears that auDA's participation in ICANN meetings has declined. This is despite the terms of endorsement requiring that auDA 'represent Australian internet industry interests in the internet domain name system at national and international fora.' (Further information on auDA's engagement with fora is discussed further in the section 'Engagement with the internet community'.)

The Review recommends auDA engage with the SSAC to ensure it is informed of international trends in security. Through its engagement with SSAC, it is expected auDA will be able to benefit from ICANN's linkages to the IETF.

⁶¹ Submissions to the review of Australia's .au domain management: [CAUDIT](#), pp.3–4; [Scott Long](#), p.12 and p.24; and [John Selby](#), p.9–10.

⁶² ICANN, 2002, [Security and Stability Advisory Committee](#).

⁶³ IETF, 2017, [Who we are](#).

⁶⁴ ACCAN, 2017, [Submission to the review of Australia's .au domain management](#), p.11.

⁶⁵ Submissions to the review of Australia's .au domain management: [John Selby](#), p.8; [Paul Szyndler](#), p.4; and [Scott Long](#), p.19–20.

Recommendation:

24. As part of its international engagement (Recommendations 21, 22 and 23), auDA engage with key international security fora including ICANN's Security and Stability Advisory Committee to ensure that it is kept updated on international security developments.

g. Developing an enterprise security strategy

The Review notes that auDA has been taking action to mitigate cyber security threats, specifically to enhance the security of the .au DNS infrastructure and registry. However, given auDA's own role in the administration of the .au ccTLD, the Review considers that auDA should ensure robust internal cyber security practices. It was noted by eDAC that while auDA has implemented security requirements for registrars, auDA's own security policies and strategies are unclear.⁶⁶

The Review finds the extent to which auDA manages its cyber security issues and how these inform its strategic objectives was ambiguous. For example, in its current Annual Report, auDA highlights that an internal security review was undertaken in late 2016 to assess the policies, procedures and practices of the company.⁶⁷ The report notes that the risk assessment proposed a number of recommendations which auDA stated it has accepted and will implement. Given the importance of the .au domain, the Government has a strong interest in the effect of implementing these activities.

Recommendations:

25. That auDA develop and implements an enterprise security strategy based on domestic and international best practice in consultation with all relevant stakeholders.
26. That auDA publishes a public facing version of its enterprise security strategy, having regard to relevant sensitivities.

As the .au namespace is a public asset, auDA should consider cyber security as an integral part of its core business. In this regard, the Review notes that auDA does not have a current enterprise level security strategy. Given that administration of the .au namespace is inherently tied to cyber security, auDA should develop its internal enterprise level security strategy in consultation with its stakeholders to articulate its role and that of the industry in supporting a secure and stable .au namespace.

The development of a security strategy would provide auDA with clarity on its security objectives, both in terms of its external and internal priorities. It would outline the milestones and expected outcomes of security activities, which can in turn be used as a reference point in assessing auDA performance.

h. Collaboration with the Australian Government

Given that the .au namespace is a public asset, the Government has a strong interest in the management of Australia's ccTLD, including its security and resilience. Current and former auDA Directors consistently stated that the organisation should work closely with the Australian Government, noting that the level of engagement, specifically in regards to security is not limited to the Department of Communications and the Arts. The following table outlines a number of Government agencies that have a role in supporting the security and stability of .au.

⁶⁶ eDAC, 2017, [Submission to the review of Australia's .au domain management](#), p.4.

⁶⁷ auDA, November 2017, [Annual Report 2016-17](#), p.12.

Table 7—Entities that play a role in the security and stability of .au

Entity	Description
Australian Cyber Security Centre (ACSC)	<ul style="list-style-type: none"> ACSC brings together the cyber security capabilities from across Government to improve collaboration with the private sector, state and territory governments, academia and international partners to combat cyber security incidents.
CERT Australia (Computer Emergency Response Team)	<ul style="list-style-type: none"> CERT Australia is the primary Government contact for Australian businesses to receive support and advice on responding to and mitigating cyber security incidents.
Australian Signals Directorate (ASD)	<ul style="list-style-type: none"> ASD publishes information on best practices approaches to cyber security for the operations of companies.
Australian Federal Police (AFP)	<ul style="list-style-type: none"> The AFP has a role in partnerships, and proactive and innovative policing.
Department of Home Affairs	<ul style="list-style-type: none"> The newly formed Department of Home Affairs will also have role given its responsibilities for developing cyber security policy and strategy to respond to cyber security threats and enable innovation and growth.

Source: Australian Government websites.

auDA's engagement with Government on security matters to date has been on an as-required basis. The Review considers that improving collaboration and information-sharing with relevant cyber security agencies will improve the robustness of .au.

In implementing Recommendation 17 to develop a stakeholder engagement strategy, auDA should consider the other Government agencies with whom it should be fostering greater collaboration. The Review considers that the Department of Communications and the Arts should help to facilitate the company's engagement with other agencies.

Recommendations:

27. As part of its stakeholder engagement plan (Recommendation 18), that auDA maps its relationship with Australian Government security agencies and the internet industry and community on security of the .au namespace.
28. That the Department of Communications and the Arts facilitate partnerships between auDA and relevant cyber security agencies.
29. As part of its quarterly reports to Government (Recommendation 16) that auDA report on its security activities.

4. Implementation options for Government consideration

The Review finds considerable scope for reform of auDA to ensure a management framework that effectively supports a modern and fit-for-purpose domain administrator.

In considering the implementation of the recommendations identified above, the Review considers there are two options available to Government:

- **Option 1: New terms of endorsement:** Issue new terms of endorsement to auDA along with a milestone-based implementation schedule and compliance regime, or
- **Option 2: Expression of interest:** Test the availability of an alternative provider via an expression of interest.

Option 1: New terms of endorsement

Under this option, the Minister for Communications issues auDA updated terms of endorsement, consistent with [Appendix B](#) which address the recommendations identified in this Review. The revised terms of endorsement would be provided to auDA along with a requirement for the company to provide a detailed implementation plan that sets out milestones for reform.

Within two years, the Government will review these terms to ensure they remain fit-for-purpose. During this period, auDA would have its performance assessed against the Review's recommendations to evaluate whether the company has made satisfactory progress in enhancing the management of the .au domain space.

The Review acknowledges that considerable changes are required for auDA to implement the recommendations. However, given the increasing reliance of businesses and the community on a stable DNS, it is important that the .au namespace is administered effectively and to the benefit all Australians.

The following table sets out key implementation activities under this option.

Table 8—Implementation activities

Activities	Description
Issuing new terms of endorsement	<ul style="list-style-type: none"> • New terms of endorsement formally articulate requirements flowing from the Review and provide auDA with the mandate to undertake necessary reforms.
Constitutional reform	<ul style="list-style-type: none"> • Amending auDA's Constitution is necessary to give effect to recommendations relating to its governance arrangements, membership classes and performance reporting. • New terms of endorsement and the articulation of auDA's roles and responsibilities should also help define auDA's purpose and activities in its Constitution.

Activities	Description
Selection of a new board	<ul style="list-style-type: none"> • In moving to new governance arrangements, the structure and positions on auDA's Board will also change. As recommended by the Review, the Board should be comprised of appropriately skilled directors with relevant experience who can represent the interests of the community. • An appointment process should be undertaken by a Nominations Committee to ensure that stakeholders have confidence that directors satisfy this criteria. • The transition to a new Board may need to be staggered. However, within 12 months all directors will be selected based on appropriate skills and experience. • Newly appointed directors would be expected to drive reform of the company, including the role, responsibilities and performance of the CEO.

Major milestones associated with the implementation plan are provided in the following table, including checkpoints at the 6, 12 and 18 month marks where Government will assess whether adequate progress has been made.

Table 9—Option 1: Implementation milestones

Milestone	Timeframe
auDA provides written response to Minister accepting new terms of endorsement.	Within 10 working days
auDA provides a written response setting out how it will implement the new terms of endorsement.	Within 1 month
auDA commences quarterly reporting to Government.	Within 3 months
auDA constitution reform is enabled to give effect to new terms of endorsement requirements.	Within 6 months
CHECKPOINT: auDA demonstrates significant progress in implementing reforms to the Department of Communications and the Arts.	6 month mark
auDA undertakes a selection process and appoints new directors via a Special General Meeting.	Within 12 months
auDA implements new reporting requirements detailed in terms of endorsement.	Within 12 months
CHECKPOINT: auDA demonstrates significant progress in implementing reforms to the Department of Communications and the Arts.	12 month mark
CHECKPOINT: auDA demonstrates significant progress in implementing reforms to the Department of Communications and the Arts.	18 month mark
auDA compliant with revised terms of endorsement.	Within 24 months
Government conducts follow up review.	Within 24 months

The Review considers that the major risk associated with this option is the extent of constitutional reform required to give effect to the revised terms of endorsement. auDA will need to develop a

comprehensive membership engagement strategy to mobilise and activate the membership base to support required reforms.

In the event that reform does not proceed in line with the milestones identified in Table 9, the Government should trigger option 2.

Option 2: Expression of Interest

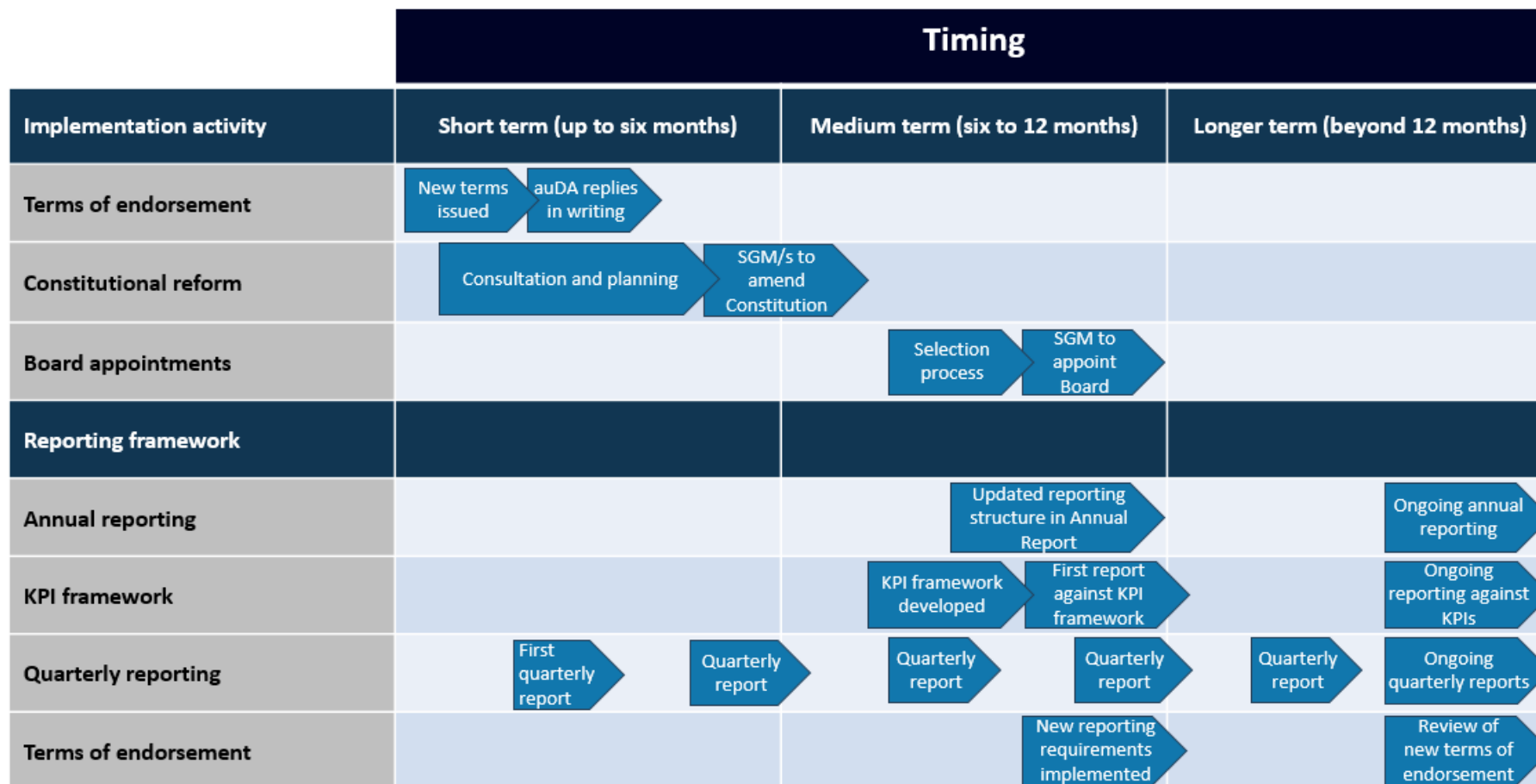
Under this approach, and subject to the approval of the Minister for Communications, the Department of Communications and the Arts would conduct an Expression of Interest process to identify parties interested in becoming the .au TLD administrator. Any party considering this role would need to demonstrate how they would address the terms of endorsement at [Appendix B](#).

Selecting another entity to manage the .au namespace creates transition risks. A new ccTLD administrator would require time to establish operations. Careful consideration would be required to ensure the continued operation of the registry provider and the impact on policy initiatives underway.

Ultimately, in the event that reform does not progress and an alternative provider cannot be found, the Review considers that the Government should engage with the Australian Competition and Consumer Commission and the ACMA to trigger reserve powers to transfer the ccTLD delegation to the Department of Communications and the Arts—in effect, dissolving auDA.

Figure 7 below provides a high-level implementation timeline.

Figure 7—Indicative timeline for auDA to implement reforms (based on the date of issue of new terms of endorsement)



Appendix A—Summary of recommendations

Purpose of the .au domain administrator

1. While auDA has an ongoing role in the security and stability of the .au space including as part of the critical infrastructure sector, this should not in the foreseeable future alter auDA's role and purpose.
2. That auDA continue to operate as a not-for-profit entity and does not seek to maximise profit.
3. Consideration of commercial strategies relevant to the sustainability of the domain administrator should not detract from the domain administrator's core function as described in the terms of endorsement and core purpose.

Management framework

4. That auDA provide an annual Strategic Plan covering at least a four-year-period and with the Strategic Plan reflecting company purpose and terms of endorsement. The auDA Board and management should present progress against the organisation's purpose and its strategic objectives at auDA's Annual General Meeting and in its Annual Report.
5. That auDA develop a KPI framework to:
 - a. measure its performance against its stated objectives in its terms of endorsement
 - b. report against in its Annual Report and at its Annual General Meeting.
6. As part of its Strategic Plan, that auDA outline how it intends to discharge its functions as a not-for-profit company and report on its effectiveness in its Annual Report and at its Annual General Meeting.

Transparency and consultation

7. That auDA reform its governance arrangements to ensure:
 - a. that the nomination of all Board positions is undertaken by a Nomination Committee comprised of representatives from industry, the business sector, consumers, an auDA member representative, and the Commonwealth, represented by the Department
 - i. in establishing the Nomination Committee, the auDA Board will undertake a consultative merit-based process to identify members, with a Department representative as a panellist, and the Department to select the committee members from this process
 - ii. the Nomination Committee will undertake probity and disclosure assessments and develop a skills matrix to ensure new directors have an appropriate mix of technical and corporate skills and industry experience
 - iii. the Nomination Committee will shortlist: member candidates to stand for election by members; and independent candidates to stand for election by the Board
 - iv. however, the first Board, following the reform of auDA's governance arrangements will be selected according to the skills mix identified by the Nomination Committee with shortlisted nominees agreed with the Department
 - b. length of terms directors can serve is capped at three years with directors appointed for no more than two consecutive terms



- c. the Board is structured so that the majority of the Board is independent of auDA's membership
 - d. that within 12 months the Board is reconstituted to ensure all appointments meet this criteria.
- 8. That auDA establish a Board Charter:
 - a. to set out the respective roles and responsibilities of the Board, Chair and CEO
 - b. to set out the basis for appointment of the Chair
 - c. that requires the Board to report on an annual basis to stakeholders publicly on its performance against this charter.
- 9. That auDA:
 - a. formalise its transparency and accountability framework, consistent with recommendations in the Westlake review
 - b. report annually on its performance against the framework in its Annual Report and at its Annual General Meeting.

Membership

- 10. That auDA reforms its existing membership model by creating a single member class or a functional constituency model and that membership reform is non-discriminatory and supported with transparent membership guidelines.
- 11. That auDA diversify its member base in the short-term with a focus on extending membership to stakeholders that are underrepresented.
- 12. That auDA report annually on its initiatives for growing its membership, and their effectiveness at diversifying the membership in its Annual Report and at its Annual General Meeting.
- 13. That auDA review its assessment process for new members, in conjunction with the implementation of Recommendations 10, 11 and 12.

Expectations and role of the Government

- 14. That the Minister for Communications issue new terms of endorsement, setting out the Government's expectations for .au domain administration and that auDA respond by publishing a statement on how it will deliver on these expectations.
- 15. That the Government review these terms of endorsement within two years from when they are issued to ensure they remain fit-for-purpose, with reviews scheduled every three years going forward.
- 16. That the Department of Communications and the Arts adopts a more formal oversight role of auDA, including that:
 - a. auDA report quarterly to the Department on its implementation of reforms, work agenda and key work priorities
 - b. the Department conducts independent verification of some or all of auDA's reporting provided through its Annual Report, including those requirements identified as part of the review



- c. a senior executive officer from the Department continue as a non-voting observer at auDA Board meetings and is present for all decisions taken by the Board.
17. That the oversight role of the Department of Communications and the Arts is reviewed periodically by Government to ensure it is fit-for-purpose.

Stakeholder engagement

18. That auDA develops a public stakeholder engagement strategy and implementation plan to articulate how it will engage with stakeholders in all levels of operation and decision making.
19. Through its Annual Report and at its Annual General Meeting, auDA should report on its performance against its stakeholder engagement strategy.
20. That auDA publish conclusions from its review on its community activities and publish an implementation plan on future community activities.
21. That auDA continue to engage with ICANN and other international bodies to represent Australian interests.
22. That auDA's stakeholder engagement strategy (Recommendation 18) include ICANN and other relevant international fora and bodies.
23. As part of its Strategic Plan (Recommendation 4), auDA publishes a forward-looking international travel schedule and describes in its Annual Report the effectiveness of its international activity.

Trust and confidence in .au

24. As part of its international engagement (Recommendations 21, 22 and 23), auDA engage with key international security fora including ICANN's Security and Stability Advisory Committee to ensure that it is kept updated on international security developments.
25. That auDA develop and implements an enterprise security strategy based on domestic and international best practice in consultation with all relevant stakeholders.
26. That auDA publishes a public facing version of its enterprise security strategy, having regard to relevant sensitivities.
27. As part of its stakeholder engagement plan (Recommendation 18), that auDA maps its relationship with Australian Government security agencies and the internet industry and community on security of the .au namespace.
28. That the Department of Communications and the Arts facilitate partnerships between auDA and relevant cyber security agencies.
29. As part of its quarterly reports to Government (Recommendation 16) that auDA report on its security activities.



Appendix B—New terms of endorsement

Preamble

Australia's country-code Top Level Domain (ccTLD) is an important resource, given the growing reliance of Australians on the .au namespace for economic and social activities. Noting there is a diversity of stakeholders in this namespace, the management of the .au domain must support multi-stakeholder engagement and be administered in the public interest.

Responsibility for the administration of .au is ultimately derived from, and is subject to, the authority of the Commonwealth. The Australian Government can delegate the responsibility for managing the .au namespace to an appropriate entity or organisation. However, endorsement from Government is contingent on the entity satisfying a number of conditions.

The Government provides the following terms of endorsement to auDA, as the .au domain administrator.

Core functions

The .au domain administrator will undertake the following core functions:

- ensure stable, secure and reliable operation of the .au domain space
- respond quickly to matters that compromise DNS security
- promote principles of competition, fair trading and consumer protection
- operate as a fully self-funding and not-for-profit organisation
- actively participate in national and international technical and policy namespace fora to ensure that Australia's interests are represented and to identify trends and developments relevant to the administration of the .au namespace
- establish appropriate dispute resolution mechanisms.

Emerging domain issues such as commercial opportunities should not detract from the domain administrator performing its core functions.

Conditional requirements

In undertaking these functions, the .au domain administrator will uphold the following requirements and conditions:

Effective governance arrangements for the .au namespace

Good governance practices provide the foundation for the effective management of the .au ccTLD. The .au domain administrator must implement a governance structure that supports effective decision-making and represents the interests of stakeholders in a transparent and accountable manner.

Conditions:

That the .au domain administrator has:

- a governance structure which includes the following characteristics:
 - an independent process that can provide assurances of the suitability of candidates considered for board appointments, such as a Nomination Committee
 - a board that has the collective mix of technical and corporate skills, and industry experience, to effectively administer the .au namespace



- a board that appoints a majority of directors who are independent of the organisation, including the Chair
- appointment terms that support ongoing board renewal
- a Board Charter that outlines the roles and responsibilities of the board, Chair and CEO and the basis for appointment of the Chair.

Facilitate effective stakeholder engagement

Noting that the .au namespace has a diversity of stakeholders, the .au domain administrator must engage and consult widely to ensure it can effectively represent the views of its stakeholders.

Conditions:

That the .au domain administrator:

- consults with stakeholders on deliberations and decisions that will impact on the Australian internet community
- develop a comprehensive stakeholder engagement plan, including how it will engage with key stakeholders such as industry, members of the community, Government and relevant international bodies and organisations
- consistent with this stakeholder engagement plan, participate in international fora and relevant community activities
- has a clearly defined membership structure that can represent the views of the Australian internet community
- initiate activities that engage the internet community and support the diversification of its member base
- establish an effective process for assessing and processing new members.

Support accountability and transparency

In managing a public asset, the .au domain administrator will be accountable to its stakeholders, including the Australian Government. Improved transparency and accountability is necessary to provide the assurance that the .au namespace is being managed consistent with Government and community expectations.

Conditions:

That the .au domain administrator has:

- an annual strategic plan that reflects these Terms of Endorsement and the company's purpose with reference to how it will discharge its functions as a not-for-profit entity
- a transparency and accountability framework
- an effective reporting framework which would include reporting through its Annual Report and at its Annual General Meeting on performance against:
 - these terms of endorsement, supported by a key performance indicator framework
 - board performance against its charter
 - its strategic plan
 - the transparency and accountability framework
 - stakeholder engagement activities including international and community activities and initiatives that aim to expand the member base.



Engagement with the Australian Government

In providing its endorsement for an entity to administer what is a public asset, the Government has a strong interest in the management of Australia's ccTLD.

Conditions:

That the .au domain administrator:

- provide quarterly updates on performance and work priorities to the Department
- acknowledge that the Government reserves the right to independently review auDA's reporting and reporting processes at any time
- ensure that a senior officer from the Department is included in all relevant auDA governance processes, including, but not limited to, non-voting observer status at board meetings for all decisions
- develop a strategy to enable an orderly transition to an alternative domain administrator in the event that endorsement is withdrawn by the Government.

Support trust and confidence in .au

Confidence in the .au namespace will be critical to the growth of Australia's economy. In addition to the Department of Communications and the Arts, there are a number of other Australian Government agencies that have a role in supporting the security and stability of .au.

Conditions:

That the .au domain administrator:

- engage with key international security fora to ensure it is aware of international security developments and best practice
- develop, maintain and, to the greatest extent possible, publish an enterprise security strategy which is informed by domestic and international best practice
- work with the Department of Communications and the Arts to facilitate partnerships between auDA and relevant cyber security agencies

Commencement of these terms of endorsement

In agreeing to the terms of endorsement, the .au domain administrator is required to respond in writing within three months, providing an implementation plan on how it will meet these terms. The Australian Government will conduct a review within two years to assess the performance of the .au domain administrator and consider whether these terms of endorsement remain fit-for-purpose.

Appendix C—Current auDA Governance structure

Board (including CEO)		
Supply Class Members	Demand Class Members	Independent Directors
Key Features <ul style="list-style-type: none"> Domain name industry participants. Registry operators, registrars and resellers. Four Supply class members on the current board. Entitled to vote for board members at the Annual General Meeting (AGM). 	Key Features <ul style="list-style-type: none"> Domain name holders. Internet users and general Public. Four Demand class members on the current board. Entitled to vote for board members at the Annual General Meeting (AGM). 	Key Features <ul style="list-style-type: none"> Appointed by the Elected Directors. Three Independent Directors on the current board. Entitled to vote for board members at the Annual General Meeting (AGM).

Board Committees				
Standing Committee	Standing Committee	Standing Committee	Advisory Committee	Advisory Committee
Governance Committee <ul style="list-style-type: none"> Provides oversight of auDA's governance processes and ensures they conform as far as practicable with generally accepted good practice in not-for-profit governance. Assists the board to enhance its performance. 	Security and Risk Committee <ul style="list-style-type: none"> Identifies and assesses strategic risks to auDA and the .au domain space. Provides oversight of auDA's strategic risk management. 	Recruitment Committee <ul style="list-style-type: none"> No details available on the role of this committee at the time of writing. 	Member Constitutional Advisory Committee <ul style="list-style-type: none"> Reviews and makes recommendations on potential reforms to ensure auDA's Constitution reflects the organisation's purpose and values. 	Security and Stability Advisory Committee <ul style="list-style-type: none"> Advises and informs auDA on all matters pertaining to the security and stability of the .au domain space.



Appendix D—International comparisons

ccTLD managers around the world follow a range of corporate and governance structures. There is no ‘ideal’ ccTLD management governance structure and each country may have different requirements of its manager.

IANA (Internet Assigned Numbers Authority) lists around 30 countries and dependent territories that have universities as their ccTLD manager (e.g. Fiji, Libya). Most of these tend to be smaller jurisdictions with limited registered domains. Government agencies manage ccTLDs in approximately 50 countries and dependent territories (e.g. Zimbabwe, South Korea). Agency management in these instances range from open and democratic through to more rigid and authoritarian. Approximately 20 ccTLDs are managed by telecommunications companies (e.g. Andorra, Chad). These are almost all small jurisdictions, with limited numbers of domains registered. In a number of countries and dependent territories, ccTLDs are managed by state-owned enterprises specifically constituted for that purpose (e.g. Norway, Singapore).

The structure and governance of ICANN is an important comparative tool when examining governance and structures of the different international organisations. ICANN is a non-profit organisation that focuses on managing IP numbers and the DNS root zone ensuring safe and secure databases. Where the organisations above are country specific, ICANN oversees the maintenance and coordination of the Internet in its entirety.

ICANN’s Board consists of a board-appointed President, eight member-elected directors, six directors from supporting organisations, and an ‘At-Large’ position filled by an individual from an ‘At-Large’ organisation (which represents individuals and internet user groups such as consumer rights groups or academic organisations etc.). ICANN’s primary roles are regulatory and policy focused which ICANN has stated as ‘helping preserve the operational stability of the Internet; to promote competition; to achieve broad representation of the global Internet community; and to develop policies appropriate to its mission through bottom-up, consensus-based processes’.⁶⁸

ICANN’s governance includes a number of advisory committees and supporting organisations. ICANN’s supporting organisations are (currently) the Generic Names Supporting Organisation (GNSO) the Country Code Names Supporting Organisation (ccNSO) and the Address Supporting Organization (ASO). ICANN also receives input from five committees in order to gauge the interests and needs of other possible stakeholders. These are the:

- **Government Advisory Committee (The GAC)**—The GAC is comprised of national governments’ appointed representatives, multi-national governmental organisations, treaty organisations, and distinct economies. The GAC provides advice on public policy issues, particularly where there is an intersection between ICANN’s policies/activities and national laws or international agreements.
- **At-Large Advisory Committee (ALAC)**—ALAC is the ICANN home for individual internet users or representative organisations. The committee is a subset of Regional At-Large Organisations, such as the Asia Pacific Regional At-Large Organisation. ALAC members are often involved in early ICANN policy development representing the views of their region.
- **Nominating Committee (NomCom)**—NomCom is an independent committee that selects eight of the ICANN Board directors as well as other positions within ICANN. See structure of [NomCom](#).
- **Root Server System Advisory Committee**—This committee responds to requests from the ICANN Board about technical issues. These include the operation of the root name server of the DNS,

⁶⁸ ICANN, 2017, [ICANN | Archives](#).



such as network connectivity, hardware capacity, operating systems and name server software versions, and the physical environment.

- **Security and Stability Advisory Committee (SSAC)**—The SSAC consists of industry and academic technical experts and internet root server operators, registrars and TLD registries. It provides advice to the ICANN Board on the security and integrity of the internet’s naming and address allocation systems. Note: Julie Hammer is listed on the ICANN website as being an auDA director and member of this committee. She is a former independent auDA director. The Review notes the ICANN information is out of date and assumes auDA currently has no representation on this committee.

There is further information about international engagement in the ‘Trust and Confidence in .au’ section of this report.

The following table summarises a number of country ccTLD organisations and how they are managed.

Table 10—International ccTLD organisations

	New Zealand (InternetNZ)	United Kingdom (Nominet)	Canada (CIRA)	Netherlands (SIDN)	Germany (Denic)
Role	<ul style="list-style-type: none"> Policy and Registry (regulatory functions by subsidiary .nz Domain Name Commission). 	<ul style="list-style-type: none"> Policy and Regulatory. 	<ul style="list-style-type: none"> Policy, Regulatory and Registry. 	<ul style="list-style-type: none"> Registry. 	<ul style="list-style-type: none"> Registry.
Undertakes commercial/competitive activity	<ul style="list-style-type: none"> No (non-profit). 	<ul style="list-style-type: none"> Yes (cyber security, consulting, R&D, registry services for other TLDs). 	<ul style="list-style-type: none"> Yes (cyber security, registry services) 	<ul style="list-style-type: none"> Yes (domain name surveillance, registry services, some for-profit activities by companies SIDN has acquired). 	<ul style="list-style-type: none"> Yes (registry services for other TLDs, registrar services for .de domains).
Board structure	<ul style="list-style-type: none"> Governed by a 'Council' rather than a board. 12 member-elected council members. 	<ul style="list-style-type: none"> 7 non-executive directors, including the chair, and three executive directors. 	<ul style="list-style-type: none"> 12 elected directors, 3 non-voting board advisors. 	<ul style="list-style-type: none"> Governed by a Supervisory Board which must have at least 6 members but no more than 9. 	<ul style="list-style-type: none"> Governed by a Supervisory Board which advises and monitors a 5-member Executive Board (2 full-time members, 2 honorary members).



	New Zealand (InternetNZ)	United Kingdom (Nominet)	Canada (CIRA)	Netherlands (SIDN)	Germany (Denic)
Appointment process	<ul style="list-style-type: none"> Council elected by membership. 	<ul style="list-style-type: none"> Members vote non-executive directors to board. 	<ul style="list-style-type: none"> Members vote for 12 directors from nomination committee slate or member slate. 	<ul style="list-style-type: none"> Supervisory Board appoints own members through a Selection and Appointments Committee. 	<ul style="list-style-type: none"> Votes for Supervisory Board members who oversee Executive Board.
Member Nos.	350	2500	15000	N/A	313
Member authority	<ul style="list-style-type: none"> Votes for all Council members. 	<ul style="list-style-type: none"> Votes for non-executive directors (five of nine board members). 	<ul style="list-style-type: none"> Votes for board candidates on the Member or Nomination Committee Slates. Nominate candidates to the Member Slate. 	<ul style="list-style-type: none"> N/A (Supervisory board appoints its own members through Selection and Appointments Committee). 	<ul style="list-style-type: none"> Voting for Supervisory Board members who oversee the Executive Board.
Committees & third parties	<ul style="list-style-type: none"> Audit and Risk Committee Grants Committee Maori Engagement Committee 	<ul style="list-style-type: none"> Audit and Governance Committee Code of Conduct Committee Investment Committee Nominations Committee Remuneration Committee 	<ul style="list-style-type: none"> Governance Committee Market Strategy Committee Community Investment Committee Nominations Committee 	<ul style="list-style-type: none"> Selection and Appointments Committee Security and Stability Committee Audit Committee 	<ul style="list-style-type: none"> Technical Advisory Council Legal Advisory Council



Appendix E—List of submissions

Public submissions to the Review were received from the following individuals and organisations:

- .au Domain Administration Limited
- Anonymous individual
- Australian Communications Consumer Action Network
- Council of Australasian University Directors of Information Technology
- David Bowles
- Derek Whitehead
- Dr John Selby
- edu.au Domain Administration Committee
- Education Services Australia
- Internet Australia
- Jim Stewart
- Paul Shaw
- Paul Szyndler
- Robert Gregory
- Scott Long.

An anonymous submission was accepted through the consultation process and published with the author's permission.

Submissions are accessible from the Department's website.