

auDA Competition Model Advisory Panel

Stage 3 Report for Public Consultation

Proposed Competition Model for the .au Domain Space

February 2001

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1. INTRODUCTION

1.1 Root of authority for .au

1.1.1 The global domain name system (DNS) is a single-rooted hierarchy of domain names developed by the Internet community and documented in Internet Engineering Task Force (IETF) standard Request for Comment (RFC) 1591. The root of the hierarchy is currently managed under the authority of the United States Department of Commerce (DoC), which has delegated most of the policy functions associated with the root of this hierarchy to the Internet Corporation for Assigned Names and Numbers (ICANN), a not-for-profit US-based corporation. The .au domain is one of over 200 country code top level domains (ccTLDs) at the top level of the hierarchy below the root "." in the global DNS. Most ccTLDs have been delegated by the Internet Assigned Numbers Authority (IANA) (note the functions of IANA are now performed by ICANN under contract to the DoC), to an individual who is responsible for managing the domain name policies and procedures for that ccTLD.

1.1.2 Robert Elz is the current delegate for .au. He created a number of .au second level domains (2LDs) and sub-delegated some of them to other individuals. There are some significant differences between the 2LDs, largely relating to their purpose and management. The term 'open' is commonly used to describe those 2LDs that are basically open to all users (asn.au, com.au, id.au, net.au and org.au), and 'closed' describes those 2LDs with defined communities of interest (csiro.au, edu.au, gov.au).

1.1.3 In 1999, a not-for-profit organisation called au Domain Administration Ltd (auDA) was established by the Australian Internet community with the goal of becoming the industry self-regulatory body for administering the .au ccTLD and its associated sub-domains, for the benefit of the Australian community. auDA has been formally endorsed by the Australian Government as the appropriate entity to hold the delegation of authority for administration of the .au domain space.¹ In November 1999, Robert Elz delegated to auDA full authority for the com.au 2LD; the other sub-delegations within .au remain in force. For the purposes of this report it is assumed that auDA will obtain such rights as are required to administer the .au domain.

1.1.4 In 2000, the Parliament amended the *Telecommunications Act 1997* and the *Australian Communications Authority (ACA) Act 1997* to give the ACA and the Australian Competition and Consumer Commission (ACCC) reserve powers in relation to electronic addressing (which includes domain name services) in Australia. The Government favours a self-regulatory approach to the management of domain names. The reserve powers are intended to provide appropriate methods of intervention in the event that self-regulation proves ineffective. Under the ACA Act, the Minister for Communications, Information Technology and the Arts may direct the ACA to assume responsibility for the .au domain. This power is intended to be used only in exceptional circumstances. Under the Telecommunications Act, if the ACA or ACCC considered that the .au domain was being managed in an unsatisfactory way (eg. not promoting adequate levels of competition or in relation to consumer protection matters), then the ACA could declare a "manager of electronic addressing" so that either the ACA or the ACCC could then issue legally binding directions to rectify these problems.

¹ See <http://www.ada.org.au/docs/govt-endorsed.html>

1.2 auDA Competition Model Advisory Panel

1.2.1 In September 2000, the auDA Board established the Competition Model Advisory Panel to investigate and recommend a model for the introduction of competition in domain name services in the .au domain space. The Panel's Terms of Reference and membership are at Appendices 1 and 2. Documents recording Panel activities to date are archived on the auDA website.² In December 2000, the Panel released its Stage 1 and 2 reports, which review the current domain name services markets in Australia and overseas.³

1.2.2 Running in parallel with this Panel is auDA's Name Policy Advisory Panel, established in June 2000 to review and recommend changes to domain name eligibility and allocation policies.⁴ The outcome of the Name Panel's work will have implications for the competition model, as noted in Section 4.3 of this report. There is common membership on each Panel, and the Chairs and common members meet periodically to discuss the developments and timing.

1.2.3 Both Panels recognise that an essential element of the domain name policy and service environment is an effective and robust dispute resolution framework. Disputes may arise in relation to policy and/or service, at all levels of the domain name registration process. auDA is currently examining options for dispute resolution procedures in the .au domain. The Name Panel's first and second public consultation reports also address some key elements of dispute resolution.

1.3 Competition policy and the DNS

1.3.1 The Panel's Terms of Reference require it to take into account competition and industry specific principles in developing the competition model. In particular, the competition principles outlined in the Terms of Reference include:

- fostering business efficiency, especially where this results in improved international competitiveness;
- industry rationalisation resulting in more efficient allocation of resources and in lower or contained unit production costs;
- promotion of industry costs saving resulting in contained or lower prices at all levels of the supply chain; and
- equality of access and a level playing field for all who want to participate in the market.

1.3.2 The industry specific principles referred to in the Terms of Reference include:

- the integrity of the .au top level domain and the consistency of .au domain names;
- non-contestable elements of the domain name process must be justified, and operated in an industry-neutral manner; and
- contestable elements of the domain name process must be commensurate with the long term stability of the DNS.

1.3.3 In its consideration of the competition model, the Panel has been careful to address the balance expressed in the Terms of Reference between the likely benefits

² See <http://www.ada.org.au/panel/competition>

³ See <http://www.ada.org.au/panel/competition/papers.html>

⁴ See <http://www.ada.org.au/panel/name>

from the promotion of competition and other public benefits which may justify modifications to competition policy in particular areas. This tension was also noted in the introductory comments of the National Competition Policy Review Committee (Hilmer Committee):

“Competition policy is not about the pursuit of competition per se. Rather, it seeks to facilitate effective competition to promote efficiency and economic growth while accommodating situations where competition does not achieve efficiency or conflicts with other social objectives. These accommodations are reflected in the content and breadth of application of pro-competitive policies as well as the sanctioning of anti-competitive arrangements on public benefit grounds.”⁵

1.3.4 In the broader context of competition reform, the Hilmer Committee outlined six particular elements of competition policy:

- ❑ limiting anti-competitive conduct of firms;
- ❑ reforming regulation which unjustifiably restricts competition;
- ❑ reforming the structure of public monopolies to facilitate competition;
- ❑ providing third party access to facilities that are essential to competition;
- ❑ restraining monopoly pricing behaviour; and
- ❑ fostering “competitive neutrality” between government and private businesses when they compete.⁶

1.3.5 Although the Panel’s consideration has addressed these elements, the nature of the task facing the Panel has focused particularly on issues raised by the first four. In the context of domain name administration, these issues can be expressed in four questions:

- ❑ What is an appropriate separation between regulatory (or policy-setting) functions and commercial activities, and how can the separation be efficiently implemented?
- ❑ Which (if any) stages of domain name administration should be reserved to a single provider (non-contestable) and to what extent is it necessary to provide mechanisms to ensure non-discriminatory access to these stages?
- ❑ To what extent are industry-specific safeguards against anti-competitive practices required?
- ❑ Where standards and self-regulatory rules are required to ensure the integrity of the .au domain and the delivery of public benefits, how can these be implemented without unnecessarily distorting competition?

1.3.6 The separation of regulatory and commercial functions is most relevant to the consideration of how the separation of responsibility for policy-setting for domain name registration and the commercial functions involved with actually registering domain names. These issues are addressed principally in the Panel’s comments in Section 4.2.

1.3.7 The extent to which certain elements of the supply chain should be non-contestable involves an assessment of whether certain parts of the chain of supply of the

⁵ Report by the Independent Committee of Inquiry into National Competition Policy, AGPS 1993, p.6.

⁶ The Government has played a limited role in the management and regulation of domain name registration; it is more appropriate in this case to refer to auDA.

domain name services exhibit “natural monopoly” characteristics and whether it is necessary to make arrangements to ensure access to these elements.

1.3.8 A third important element of national competition policy is the assessment of any proposed regulations (or in this case, self-regulation) against competition principles. The Panel notes guidelines published by the National Competition Council, although many are not relevant to the Panel's work. However, the Panel notes the guiding principle of regulatory reviews set out in the paper:

“... that legislation should not restrict competition unless it can be demonstrated that:

- 1. the benefits of the restriction to the community as a whole outweigh the costs; and*
- 2. the objectives of the legislation can only be achieved by restricting competition.”⁷*

1.3.9 The Panel acknowledges that the application of the principles involves matters of opinion and judgement as to the relative costs and benefits of different models. This is particularly so when applying the principles to areas characterised by rapid change and unpredictability such as the Internet. In such circumstances, an approach of preserving options would be appropriate.

1.3.10 The Panel has also been mindful of the relevant legislation designed to protect or promote competition, particularly the *Trade Practices Act 1974* and the *Telecommunications Act*. This report does not include an exhaustive analysis of these laws. However, the Panel is confident that the proposals it is developing will encourage behaviours consistent with the legislative framework.

The Panel invites comments on the issues raised in Section 1.3, including the factors which ought to be considered in making judgements about the relative costs, benefits and risks of different competition models in the domain name services market.

⁷ Available at <http://www.ncc.gov.au>

2. PUBLIC CONSULTATION PROCESS

2.1 The Panel encourages everyone with an interest in the Australian DNS to consider this report. People wishing to comment on the proposals, or any other matters, contained in this report should send a written submission to:

Ms Jo Lim
Secretariat
auDA Competition Model Advisory Panel

email: jo.lim@auda.org.au

fax: 03 9226 9499

postal: GPO Box 1545P, Melbourne VIC 3001

2.2 Electronic submissions are preferred. All submissions will be posted on the auDA website within two working days of receipt. Confidential information will not be accepted. The Panel is required to engage in public consultation and therefore all submissions will be made public.

2.3 The closing date for submissions is **Friday 16 March 2001**. The Panel will consider all submissions received and then revise and re-issue its report for a second round of consultation. This is expected to take place in May/June 2001.

3. EXECUTIVE SUMMARY

3.1 The Panel has identified five levels of activity in the domain name services industry – Policy Authority, Registry, Registrar, Reseller and Registrant – and has developed a number of proposals in relation to each level that, taken together, comprise a proposed competition model for the .au domain space.

3.2 The Panel invites public comment on the proposals outlined below.

POLICY AUTHORITY

Proposal 4.2:

- Policy-setting is non-contestable; only auDA will have authority for setting domain name policy for .au.***
- auDA may delegate its policy authority for a 2LD under .au to another body.***
- There should be a clear separation of policy and operations.***

REGISTRY

Proposal 4.3 A:

- There will be a single registry for .au, and single registries for each 2LD.***
- Provision of registry services (with the possible exception of the closed 2LDs) will be contestable, through a periodic tender process to be administered by auDA.***
- A registry operator may operate registries for more than one 2LD.***
- The 2LD registries will operate the authoritative nameserver, generate zone files and maintain public (WHOIS) information for their own 2LD.***
- The registries will provide customer service to the registrars.***
- Registry information will be published in a central data register, implemented either as a collection of links to registry data or by replicating the registry data in a central repository.***
- auDA will set minimum technical standards, data protocols, security and service level requirements for all registries.***
- A registry may not operate as a registrar unless there is a clear and effective separation of the two business operations.***

OR

Proposal 4.3 B:

- There will be a single registry for .au and all 2LDs under .au.***
- Provision of registry services may be contestable, through a tender process to be administered by auDA.***
- The registry will operate the authoritative nameserver, generate zone files and maintain public (WHOIS) information for the entire .au domain.***
- The registry will provide customer service to the registrars.***
- Registry information will be published in a central data register.***
- auDA will set minimum technical standards, data protocols, security and service level requirements for the registry.***
- The registry may not operate as a registrar unless there is a clear and effective separation of the two business operations.***

REGISTRAR**Proposal 4.4:**

- ❑ *Provision of registrar services will be contestable, through an accreditation process to be administered by auDA.*
- ❑ *Registrars will provide customer sales and support services either directly to registrants or through their resellers.*
- ❑ *Registrars will have rights of access to all 2LDs (with the possible exception of the closed 2LDs).*
- ❑ *auDA will impose minimum conditions on registrars, focused mainly on ensuring adequate consumer safeguards.*

RESELLER**Proposal 4.5:**

- ❑ *Registrars will be responsible for managing the behaviour of their resellers and will be ultimately responsible to the registrant.*
- ❑ *auDA should require registrars to include some minimum consumer safeguards in their reseller agreements.*

REGISTRANT**Proposal 4.6:**

- ❑ *auDA will ensure adequate consumer safeguards for registrants by subjecting registries and registrars to agreed technical standards, data protocols, security, service levels, escrow requirements etc.*

4. PROPOSED COMPETITION MODEL

4.1 Five levels of competitive activity

4.1.1 The Panel has identified five levels of activity in the domain name services industry:

1. Policy Authority – determines the domain name eligibility and allocation rules for a given domain
2. Registry – maintains master database for a level of the domain name hierarchy, provides the corresponding public information service and data for the authoritative DNS nameserver
3. Registrar – processes data on behalf of a registrant into a registry
4. Reseller – a service agent for a registrar
5. Registrant – encompasses domain name licence holders, domain name licence applicants and their agents.

4.1.2 The proposed competition model outlined in this report defines the functions and behaviours of each level of activity, and how the levels interact with each other. This is illustrated in the diagram at [Attachment A](#).

4.1.3 The Panel recognises that some functions and behaviours are variable at certain points in the proposed competition model. These have been identified most notably in relation to the registry level (section 4.3), where the model diverges into two options – a single registry on the one hand, or multiple registries on the other. The Panel acknowledges that there are detailed arguments that need to be considered in relation to each approach, and has therefore put them both forward for consideration together with discussion of some general principles. The Panel considers that, regardless of whether the model features a single registry or multiple registries, the other levels of activity (ie. Policy Authority, Registrar, Reseller and Registrant) will remain more or less the same.

4.2 Policy Authority

Proposal 4.2:

- Policy-setting is non-contestable; only auDA will have authority for setting domain name policy for .au.***
- auDA may delegate its policy authority for a 2LD under .au to another body.***
- There should be a clear separation of policy and operations.***

4.2.1 The Panel has worked from the assumption that auDA will be the sole body with authority and responsibility for setting domain name policy for the .au domain space. Similarly, it seems likely that auDA will have a policy monitoring and enforcement role, through its relationships with registry operator(s) and registrars. auDA's policy-setting processes must continue to be conducted in an open and consultative manner. One alternative option to the current representative arrangements would be to grant membership/voting rights to all domain name holders to ensure that auDA remains sufficiently representative and accountable to domain name holders as well as industry participants (similar to ICANN's At Large membership category, and the UK and Canadian models). It is fundamental that membership of auDA should remain open to all.

4.2.2 auDA's policy authority is fairly clear in the case of the open 2LDs. However, the administrators of the closed 2LDs (especially CSIRO) have indicated that they will probably insist on retaining some degree of policy autonomy. In some cases, it would be appropriate for auDA to delegate its policy authority to the relevant body for that 2LD (eg. in the case of gov.au, the relevant body is the Online Council of Commonwealth/State IT Ministers). It would be expected that, in delegating its policy authority, auDA would agree some minimum rules or boundaries that could only be varied by the delegated body through a public consultation process. Policy set by a delegated body would need to be considered and endorsed or ratified by auDA. auDA would be able to revoke its delegation if it considered that the delegated body was not performing its role properly (this is in line with the recent amendments to the Telecommunications Act). Should a currently closed 2LD seek to become open, then the competitive and consumer safeguards applicable to open 2LDs would apply.

4.2.3 The Panel believes that there is a need to distinguish between the policy-setting function and the policy checking function. It is important to maintain separation of policy and operations, mainly for dispute resolution purposes; for example, a registrant with a dispute about the way the policy has been interpreted and applied needs to have recourse to an independent process to avoid double jeopardy and conflict of interest on the correct interpretation of the policy and to ensure natural justice.

4.2.4 For this reason, it may be undesirable for auDA to also operate as a registry or registrar. The Panel notes that auDA has recently acquired ownership of the AUNIC database software, and has taken over responsibility for operating the AUNIC portal service that stores domain name registrations and provides a public information (WHOIS) service for most .au 2LDs. However, the Panel has considered the possibility that auDA could vest registry or registrar functions in a suitably ring-fenced sub-entity, if due process is respected and separation of policy and operations does, and is seen to, exist.

4.2.5 The Panel believes that this principle of separation of policy and operations should be applied even where auDA has delegated its policy authority to another body, as in the case of closed 2LDs. Even though the potential for dispute is perhaps less than in open 2LDs, auDA should encourage the administrators of closed 2LDs to maintain separation of policy and operations. In the event that a closed 2LD administrator decided to offer domain name registration to third parties outside its community of interest, then it should be required to separate its policy and registry functions, to maintain consistency of the principle asserted above.

4.2.6 The Panel has also addressed the issue of how to deal with complaints about the policy itself (eg. where the registrant accepts that the policy was applied correctly, but disagrees with the policy). One suggestion is that auDA should hold regular policy reviews, to consider any problems with current policy and provide a public forum for disgruntled registrants and others to express their views. The Panel acknowledges that monitoring and review of self-regulation are important to ensure that it is still relevant to addressing specific problems and improving market outcomes. Accordingly, reviews and annual reporting are appropriate mechanisms that also assist in providing measures of transparency and accountability. Reviews should be periodic, independent and the results made publicly available.

The Panel invites comments on the issues raised in Section 4.2.

4.3 Registry

4.3.1 As indicated in paragraph 4.1.3, the Panel is aware that there are basically two approaches at the registry level, and that both have desirable features that are worth exploring. One is outlined as Proposal 4.3 A, and features multiple contestable registries in the .au domain. The other is outlined as Proposal 4.3 B, and features a single registry which may or may not be contestable through a tender process.

4.3.2 The two models share some common elements; these have been extracted out in paragraphs 4.3.4 – 4.3.26. The issue of policy compliance checks has also been treated separately, due to the fact that neither model prescribes a point in the process where policy compliance checks must be performed; this will most likely depend on the nature of the policy, currently being reviewed by auDA's Name Policy Advisory Panel.

Registry function and services

4.3.4 A registry is a database for a particular level of hierarchy in the DNS, which contains all the domain names registered at that level, and associated public information. A DNS registry has a purpose similar to any other registry in that it registers the association of a particular domain object with an entity who is the current delegated authority for that object. Using the information in the database, the registry provides two key services to the Internet community.

4.3.5 The first service is a public information service (known as WHOIS) that provides contact information (in the form of organisation name, technical contact and administration contact) of the domain name licence holder corresponding to a particular domain name. The WHOIS service provides a level of traceability, transparency and accountability of domain name holders.

4.3.6 The second service is to maintain data for the authoritative nameserver for a particular level of hierarchy in the DNS. The nameserver uses a file called a "zone file" that contains a mapping between each domain name and the address of a computer (nameserver) that can resolve the domain name to a physical Internet address. When an Internet user types a domain name in the browser, the browser can contact the DNS nameserver to resolve the domain name to a physical Internet address. This DNS nameserver infrastructure must be maintained with a high degree of reliability to ensure the integrity of the .au namespace. The two main issues are availability (ie. the service must be available nearly all the time) and integrity (ie. the contents of the zone file must be accurate and up-to-date). To maintain high availability, secondary nameservers are used that contain a copy of the zone file stored in the authoritative nameserver. These secondary nameservers can be maintained by the registry (usually in separate locations) or by third parties. In addition, carriers and Internet service providers (ISPs) may also maintain a local copy of the zone file to ensure high performance, by avoiding the need to query the authoritative nameserver. The authoritative nameserver provides copies of the new zone file at regular intervals to secondary nameservers. It is important that changes to the zone file are propagated rapidly to ensure that inconsistencies are not created. There is also a need to authenticate in some way changes to the registry database to ensure that consumers cannot be re-directed to an unauthorised website when they enter a domain name into a browser. For the term of a domain name licence, a domain name licence holder can make changes to the location of a website

corresponding to a domain name at any time. This feature provides true portability of websites between ISPs.

4.3.7 It is also possible for a registry to perform policy compliance checks, however this is not an essential feature of a registry (see paragraphs 4.3.17 – 4.3.23).

4.3.8 For integrity reasons, it would not be desirable to have more than one registry for the top level of the .au domain name hierarchy. However, it is technically possible to have more than one registry operating below the .au top level, at the 2LD level. In fact, this is the current situation in the .au domain; the AUNIC registry stores domain name registrations in com.au, edu.au, gov.au, id.au and org.au, while asn.au, csiro.au and net.au each have their own registries. Note, however, that for the same reason outlined above, it would not be desirable to have more than one registry within each 2LD.

Cost and price

4.3.9 The overall cost structure of registry operations needs to be examined to consider whether the proposed competition model maximises public benefit. Basic registry functions are not complex computing tasks and have been operated at relatively low cost. For example, the annual cost of operating AUNIC, which maintains a simple database for most .au domain names and a WHOIS service, has been approximately \$25,000.⁸ It has been estimated that this cost would double if the registry was to include additional features and functionality (eg. enhanced security and reliability).

4.3.10 There are basically two ways to ensure that the prices that the registry charges for services to registrars bears some relation to costs:

- set price caps performance standards for services provided by a monopoly registry, based on an assessment of the 'true' cost of providing registry services; and/or
- competitive tendering of the provision of registry services on a periodic basis, every few years.

Both proposals described below put forward the option that an open tender be held periodically to award registry rights for a limited period of time. Within such an option, the Panel suggests that the tender pricing process should include both a fixed and a volume related component. For example, registry operators could be required to pay an annual licence fee plus a per domain name registration fee. The fee charged by the registry operator to registrars may be fixed, or may be adjusted for such factors as inflation (eg. consumer price index (CPI)), expected productivity gains (CPI - x, where x>0), risk adjustment, rate of return on registrar investment, and/or the number of domain names under management.

Technical standards, protocols and service levels

4.3.11 To ensure a basic level of interoperability and adequate consumer safeguards, the Panel proposes that auDA would be responsible for requirements definition, specification and quality assurance. It would set minimum technical standards, data protocols and service levels for the registry. For example, auDA could specify that the registry use the Registry/Registrar Protocol (RRP) (documented as IETF RFC 2832), currently used by Network Solutions Inc (NSI)/Verisign and its registrars at the generic

⁸ See the Panel's Stage 1 report for more information about the current role of AUNIC (<http://www.ada.org.au/panel/competition>)

top level domain (gTLD) level. The RRP comprises a set of basic commands that are used by registrars to update the registry database.⁹

4.3.12 The Panel is of the view that a registry should only be allowed to also operate as a registrar if competitive checks are put in place, most importantly a clear separation of the two business operations. This is in order to ensure that competing registrars have fair and equal access to the registry. The usual ring-fencing arrangements could be imposed (eg. no common staff, regular audits, etc), however other measures may be necessary to ensure competing registrars have access to registry services on an equivalent basis to the registry's own operations. These mechanisms should be based on existing access models (such as telecommunications) or on incentive based models which allow vertical integration once certain guarantees are in place. Alternatively, the "misuse of market power" provisions in the Trade Practices Act may be sufficient. Such arrangements may create additional costs by increasing the complexity of regulation and requirements of auditing.

Public access to registry data and data escrow

4.3.13 Registry domain name data is public information; it vests in the policy body and the individual domain name holder, never in the registry or registrar/reseller. A registry must contain, at least, information about the identity of the domain name object and the identity of the entity to whom authority of the domain name object has been delegated. The minimum amount of information that could be contained in a registry is the domain name, Internet Protocol (IP) address of the nameserver and details for the delegated authority (registrant) and the technical and administrative contacts.

4.3.14 Traditionally, domain name data has been fully accessible by the public, free of charge. The normative form of access is through an individual query and response protocol, the WHOIS protocol. Proposal 4.3 A and Proposal 4.3 B differ in the way registry data is stored, but both approaches would preserve the integrity and accessibility of the data. The Panel has raised the possibility that it may be appropriate to introduce a cost recovery mechanism (eg. for bulk access to the registry data under strict conditions of use, including banning email spamming).

4.3.15 Data escrow is essential, both for consumer protection and DNS integrity reasons. It also ensures that, at any registry tender rollover, all data required to reconstruct the DNS and maintain full and accurate records is available in a timely manner to the successful tenderer. Proposal 4.3A and Proposal 4.3 B differ in the way data escrow could be provided.

4.3.16 It has been suggested that auDA could maintain an independent database for individuals and organisations of contact information for individuals who are delegates, administrative and technical contacts for domain names. This information would be public domain information. Administration of this information by auDA would allow:

- effective contact with responsible individuals;
- protection of individual privacy; and
- cost recovery bulk access with suitable provisions such as prohibition on email spamming.

⁹ Note that the IETF has created a working group called *provreg* (Provisioning Registry Protocol) to develop new interactions between registry and registrar.

Policy compliance checks

4.3.17 The Panel considers that the most desirable basis for a competitive environment is to eliminate subjectivity in the application of policy compliance checks. Such an arrangement would provide a level playing field for all participants. In particular, it would avoid difficulties with registrar shopping to obtain “soft” policy compliance checking.

4.3.18 In the domain name registration process, a domain name can be checked for policy compliance by either the registrar or the registry. This is the case under either Proposal 4.3 A or Proposal 4.3 B. If the policy is able to be applied objectively (via manual or automatic processes), then it doesn't matter whether the policy compliance check takes place at registrar or registry level, because there is no subjectivity involved. If the registrar undertakes the policy compliance process then the registrar would submit only compliant objects to the registry. If the registry undertakes the policy compliance process then the registry would only accept compliant objects into the registry. Ideally, policy compliance checks would be as simple as possible to keep costs to a minimum.

4.3.19 Automation of policy checking could minimise cost. The onus for compliance checking could be placed on domain name registrants to attest to their own compliance with the policy for the relevant 2LD by simply marking the appropriate boxes on their application form for automatic checking. Dispute resolution procedures would come into play where false statements caused problems. In addition, auDA could perform spot-checks of policy compliance to ensure consistent application of the policy. This is analogous to the Australian Taxation Office primarily relying on self-assessment with audits of selected tax returns.

4.3.20 Placing responsibility for policy compliance checks on registrars gives them the latitude to manage the costs associated with the policy compliance process. The Panel notes that such a distributed policy compliance framework also admits the potential for more accurate cost allocation of policy compliance on new registrants, rather than structurally cross-subsidising the policy compliance cost from new to existing registrants (although it is possible that policy checks will need to be applied again at the time of domain name licence renewal).

4.3.21 However, as noted in paragraph 4.3.2, domain name policy in the .au domain is currently being reviewed by auDA's Name Policy Advisory Panel. Based on the output of this Panel so far, it is possible that domain name policy in .au will continue to require human scrutiny and subjectivity in some areas to allow flexible application. If human intervention is required, there could be a two tier arrangement with automation of basic policy and human scrutiny for more complex policy decisions. If this is the case, then significant difficulties arise in ensuring that multiple registrars apply the policy in a predictable and consistent manner, and there is a danger that registrars could exploit subjective policy rules to achieve competitive advantage. People interested in this aspect of competition implementation should consult the report of the Name Panel.¹⁰

4.3.22 Therefore, if the policy relies on human judgement, it would be desirable for policy compliance checks to be performed by the registry, to ensure policy consistency and integrity. Registrars could perform policy screening services for their registrants,

¹⁰ See <http://www.auda.org.au/panel/name/papers.html>

however the final check would be done at registry level. This is analogous to the current system for registering trade marks, where professionals (registrars) can advise clients (registrants) on an appropriate trade mark that they believe meets the legislative requirements, but a central body (registry) makes the final decision. However, if responsibility for manually operated policy compliance rests with the registry, then the cost of operating the registry increases in direct proportion to the cost of operating policy compliance checks. This is a cost which is then passed on to all registrars, and there is no ability for a registrar to use alternative, and possibly more efficient, business practices in an effort to reduce the cost of domain name registration to their customers. In other words, the enforcement of a single point of policy compliance reduces the potential positive impact of a competitive environment in reducing cost to end customers of the service.

4.3.23 Another option would be for auDA to establish an independent body to perform the policy compliance check function. The body could be comprised of representatives from the registry and registrar sectors of the industry, or members could be appointed by auDA for their professional expertise in policy interpretation. This would add an extra step in the domain name registration process, that would have cost and timing implications; however, it would remove the administrative burden from the registry and registrar and protect them from liability in the event of a dispute by a registrant.

New 2LDs

4.3.24 In order to provide greater choice for registrants and ease the pressure on some of the more popular 2LDs, the Panel believes it is likely that auDA will move to introduce a number of new 2LDs in the .au domain. New 2LDs could be selected by auDA in a number of ways. For example:

- ❑ auDA could hold a public consultation process to choose new 2LDs that best meet end-user needs, and then go to tender for registry services; or
- ❑ auDA could invite prospective registry operators to propose innovative new 2LDs and assume the business risk for their success.

4.3.25 The Panel has considered arguments that competition could be enhanced by creating multiple 2LDs with similar purposes (eg. multiple commercial 2LDs to compete with com.au, or multiple personal 2LDs to compete with id.au). Registrants could have more choice within the .au domain space, as they do today between com.au and .com, and will soon have between .com and .biz. On the other hand, the potentially high costs on registrants of substituting one 2LD for another one may have an inhibiting effect on competition (analogous to the costs in changing telephone number when moving from one telephone operator to another).

4.3.26 Ultimately, it will be auDA's responsibility to manage the introduction of new .au 2LDs in a way that best meets the public interest. The introduction of new 2LDs would be possible under either Proposal 4.3 A or Proposal 4.3 B.

Proposal 4.3 A:

- ❑ ***There will be a single registry for .au, and single registries for each 2LD.***
- ❑ ***Provision of registry services (with the possible exception of the closed 2LDs) will be contestable, through a periodic tender process to be administered by auDA.***
- ❑ ***A registry operator may operate registries for more than one 2LD.***

- ❑ ***The 2LD registries will operate the authoritative nameserver, generate zone files and maintain public (WHOIS) information for their own 2LD.***
- ❑ ***The registries will provide customer service to the registrars.***
- ❑ ***Registry information will be published in a central data register, implemented either as a collection of links to registry data or by replicating the registry data in a central repository.***
- ❑ ***auDA will set minimum technical standards, data protocols, security and service level requirements for all registries.***
- ❑ ***A registry may not operate as a registrar unless there is a clear and effective separation of the two business operations.***

4.3.27 Under Proposal 4.3 A, each 2LD would have its own registry, and provision of registry services would be tendered out by auDA. Registries would then compete for registrar business on the basis of cheaper wholesale pricing and better quality of service.

4.3.28 It is possible that one registry operator could perform registry services for more than one 2LD. For example, for public interest reasons, auDA could decide to cluster some 2LDs together, to ensure that small, not-for-profit 2LDs receive the same quality of service as the larger, more attractive 2LDs. It was suggested that this might be the best way to treat the free 2LDs (eg. asn.au, org.au), so that a registry operator that wanted to tender for com.au could be required to offer registry services to asn.au for little or no charge. However, this would not preclude registrars from charging for domain name registration services in those 2LDs. Equally, existing registrars for those 2LDs could continue to offer free registration services. The rights of existing registrars for these 2LDs would need to be respected if transfer of registry services was to be contemplated. Registry operators could also provide registry services for domains outside of .au, to provide economies of scale.

4.3.29 In tendering out 2LD registry services, auDA would need to consider market concentration. Because the merger provisions of the Trade Practices Act might not apply at the time of allocation by auDA, one option would be to seek input from the ACCC. As it does with spectrum auctions, the ACCC might be called on to advise whether particular bidders should be excluded from the tender process if their success in the tender would result in a substantial lessening of competition. Subsequent acquisitions of one registry by another would be subject to the general merger provision of the Trade Practices Act.

4.3.30 Under Proposal 4.3 A, a “.au” registry would maintain a public access vehicle for information about all the 2LDs, including any new 2LDs introduced into the .au domain space. If it was decided in future to move to a flat structure (ie. allow registration of domain names directly in .au, eg. bhp.au), then the .au registry would maintain the information for those registrations.

4.3.31 Underneath the .au registry, the single registries in each 2LD would maintain public access to registration information for domain name registrations in their own 2LD. The .au registry could act as a back up for the 2LD registries, but would not necessarily have to do so. The .au registry could also act as a single public entry point for public access protocols, such as WHOIS, either by replicating the data and supplying it locally,

or by a protocol modification of referring requests for information to the relevant 2LD registry.

4.3.32 The Panel notes that at the gTLD level, registry information is fragmented across multiple registrars with no minimum standards or data elements, so an end-user finds it very difficult to do a comprehensive search across the entire domain name space. The Panel suggests that the way to avoid this happening in a multiple registry/registrar environment in the .au domain space, would be for auDA to specify standards for public access to registry data, including standards for the content and format of data and standards for the protocols used to retrieve registry data. Compliance with those standards would be periodically audited. It would also be desirable for auDA to require some shadowing of data, to widen availability and improve load-share.

4.3.33 Under Proposal 4.3 A, there are two ways of providing data escrow (in addition to the standard approach of storing backup tapes of a database in a secure third party location):

- all data could be backed up by an independent central repository, such as the .au registry; or
- each registry could back up another registry (ie. Registry 1 holds data for Registry 2, Registry 2 holds data for Registry 3, Registry 3 holds data for Registry 1).

In either approach, a method of ensuring compliance is necessary (eg. independent auditing).

Pros of Proposal 4.3 A

- Proposal 4.3 A would lead to more innovation at the registry level, such as additional security, enhanced DNS services via the authoritative nameserver with additional information available per domain name entry (eg. digital certificates) or advanced WHOIS directory services, ensuring that all domain name holders in a particular 2LD have access to new functionality and/or service levels.
- Registry operators would also innovate in the interfaces and services offered to registrars. Registrars would have greater choice in terms of reliability, level of service, etc. These benefits would flow on to registrants, because competitive registries would have an incentive to market the benefits to potential registrants and build value in a particular 2LD brand.
- Although innovation is also possible at the registrar level, encouraging innovation at the registry level has more potential to provide uniformity and consistency for all domain name holders in a particular 2LD.
- In a competitive situation, it would be in the registry operator's interest to assist organisations to become registrars, through the provision of software for interfacing to the registry. Combined with the use of standardised or open international data protocols, this could lower the barriers to entry and enhance competition at the registrar level.
- Multiple registries could be required to load-share and shadow each other's operations, thus providing greater resilience and redundancy in the Australian DNS.

- ❑ Depending on the model auDA employs to select new 2LDs, organisations that wish to propose a new 2LD could have a choice of registry operator. For example, the legal profession could propose a lawyer.au 2LD and obtain proposals from registry operators as part of an overall proposal to auDA.
- ❑ In general, having multiple providers at the registry level will result in range of wholesale prices and service levels across 2LDs.
- ❑ The existence of multiple registry operators in Australia will ensure that the competitive tendering process for particular established 2LDs (eg. com.au) is stronger, based on an organisation's proven experience as a registry operator.
- ❑ At the international level, registry operators are competing to operate registries for various ccTLDs (eg. .tv, .la, etc) and new gTLDs (.biz, .name, etc), and to obtain registrars as their clients. A similar environment in Australia would assist Australian registry operators and registrars to compete internationally.
- ❑ The multiple registry model supports a mix of for-profit and not-for-profit registry operators.
- ❑ In the telecommunications industry, the introduction of competition in the provision of infrastructure has resulted in greater innovation at the infrastructure level (eg. fixed telephony over cable TV network) and lower prices. Much of the existing .au infrastructure that has been operated as not-for-profit under monopoly conditions has remained the same for years, with little response to industry and end-user needs. The parts of the infrastructure that have been operated commercially have seen a substantial increase in the numbers of domain name registrants.
- ❑ The operation of multiple registries might be considered analogous to the current situation where there are multiple operators for radio spectrum in Australia, that are able to use a range of technologies to provide slightly different services to a range of service providers and resellers.

Cons of Proposal 4.3 A

- ❑ Under Proposal 4.3 A, it is possible that effective competition would be limited because of poor substitutability of different 2LDs and the practical difficulties of changing from one 2LD to another where standards of service and pricing are not as good.
- ❑ Depending on the marketing efforts of registry operators, registrants may not necessarily appreciate the benefits of innovation at registry level, and therefore this level of competition may be limited in its application to end-users compared with service contestability directly at the registrar/reseller level.
- ❑ Under Proposal 4.3 A, multiple registries may present similar problems regarding consistent application of general .au policy, as discussed in relation to multiple registrars in paragraph 4.3.21 for policy within a 2LD.
- ❑ Proposal 4.3 A requires some level of centralised registry service, minimally through the maintenance of a central public access mechanism (see paragraph 4.3.30) or

through the maintenance of a complete registry (see paragraph 4.3.31), thus increasing the overall cost of operation.

- ❑ Under Proposal 4.3 A, registrars would have to develop separate procedures to interface to each registry, involving potentially different submission procedures and different data formats. Such additional costs could effectively constitute a barrier to entry to some registrars. There may also be the potential for the registry in a 2LD to tailor its interface so as to favour existing registrars and deny admittance to other potential registrars.
- ❑ Under Proposal 4.3 A, all existing registries would need to be convinced of the requirement to move to a standard data model and there would need to be a transition process to move to the new data structure.
- ❑ The data escrow approach where each registry backs up another registry may lead to much more complex administration of escrow.
- ❑ Moving to a “value based” model of multiple registries would make it difficult to move to a not-for-profit single registry model, should the benefits of the multiple registry approach fail to eventuate.
- ❑ Enabling contestability between multiple registries will not necessarily ensure that there is competition and lower costs in the provision of registry services in all 2LDs. In the event only one tender were received and awarded, any incentive for innovation may be absent at the registry level.

Proposal 4.3 B:

- ❑ ***There will be a single registry for .au and all 2LDs under .au.***
- ❑ ***Provision of registry services may be contestable, through a tender process to be administered by auDA.***
- ❑ ***The registry will operate the authoritative nameserver, generate zone files and maintain public (WHOIS) information for the entire .au domain.***
- ❑ ***The registry will provide customer service to registrars.***
- ❑ ***Registry information will be published in a central data register.***
- ❑ ***auDA will set minimum technical standards, data protocols, security and service level requirements for the registry.***
- ❑ ***The registry may not operate as a registrar unless there is a clear and effective separation of the two business operations.***

4.3.34 Proposal 4.3 B is based on the premise that there are sufficient public benefits flowing from a single registry arrangement to outweigh any anti-competitive effects. Under Proposal 4.3 B, there would be a single .au registry that would generate primary zone files and maintain public access to registration information for all domain names in the .au domain, including all 2LDs. As with the multiple registries model discussed under Proposal 4.3 A, operation of a single registry could be made contestable through a tender process to be administered by auDA. Alternatively, auDA could retain the registry function and/or delegate it to an industry owned and operated company to provide registry services in an equitable and collaborative manner. Regardless, auDA would retain responsibility for requirements definition, specification and quality assurance for the registry.

4.3.35 Under Proposal 4.3 B, the cost of the registry operation would be distributed equally between all registrants, allowing all registrants to have access to the same economies of scale of registry operation irrespective of the level of activity within the specific 2LD. All registry information would be maintained in the same registry; information could be standardised across all 2LDs, and therefore more easily accessible to the public.

4.3.36 The Panel notes that Proposal 4.3 B would require separation between registry and registrar function, as detailed in paragraph 4.3.8. If only one registry exists, then it would be very important to ensure that this organisation does not enjoy unfair advantages in the registrar market, relative to its competitors. This risk could be minimised by establishing an independent database, as suggested in paragraph 4.3.16.

4.3.37 Under Proposal 4.3 B, registrars could choose to provide services in multiple 2LDs. The operator of the registry would have identical registry interface processes with all registrars across all 2LDs, thus creating a level playing field in the registrar market.

Pros of Proposal 4.3 B

- ❑ Under Proposal 4.3 B, there is no duplication of infrastructure and greater economies of scale, and the competitive impetus to reduce costs, innovate and improve service still exists via the tender process.
- ❑ There may be cost savings and long-term benefits to end-users from the merging of multiple registries, especially in terms of consumer sovereignty (data protection, integrity, access to information, reliability and redress) from a single database model.
- ❑ Tender processes may be more easily conducted for a single registry, sparing the expense of a multitude of tenders, and the tender process can be organised to ensure adequate levels of services are provided to smaller, less commercial 2LDs.
- ❑ Under Proposal 4.3 B, there is no additional cost associated with multiple data repositories and ensuring a complete synchronisation of data. A single registry also provides comprehensive retrieval of registry data and allows searching across all 2LDs.
- ❑ A single registry makes it easier for users to update records across multiple 2LD domain object entries, and more easily supports domain name service portability and transferability between 2LDs, because all registration data is held by the one entity.
- ❑ If any future introduction of additional 2LDs in the .au domain is successful in providing choice for registrants then, under Proposal 4.3 B, a single registry may be more easily able to consistently apply any general .au eligibility and allocation policies requiring human scrutiny.
- ❑ The services provided by a single registry are likely to be at the lowest common denominator level (probably based on the current services provided in .au).

Cons of Proposal 4.3 B

- ❑ Given that there is not a single registry in the .au domain at present, from a competition policy perspective it would be difficult to justify creating a monopoly where one does not currently exist.
- ❑ A single registry model may not provide sufficient incentive to encourage innovation between tenders, as market forces are only applied every few years. Innovation in a single operator situation in most other industries has occurred over a much longer timeframe than when in a competitive situation. While this could be alleviated by more frequent tenders, this carries its own costs.

The Panel invites comments on the issues raised in Section 4.3, particularly the extent to which either Proposal 4.3 A or Proposal 4.3 B will deliver competition benefits to industry participants and end-users.

4.4 Registrars

Proposal 4.4:

- ❑ ***Provision of registrar services will be contestable, through an accreditation process to be administered by auDA.***
- ❑ ***Registrars will provide customer sales and support services either directly to registrants or through their resellers.***
- ❑ ***Registrars will have rights of access to all 2LDs (with the possible exception of the closed 2LDs).***
- ❑ ***auDA will impose minimum conditions on registrars, focused mainly on ensuring adequate consumer safeguards.***

4.4.1 Registrars provide customer sales and support services, including billing and renewals, and update the registry database to include new domain names and associated registry data, and manage modifications to data associated with existing domain names. As discussed at paragraphs 4.3.20 – 4.3.22, it is possible for registrars to perform policy compliance checks or policy compliance screening.

4.4.2 The Panel proposes that auDA would perform accreditation of registrars, for an accreditation fee. Criteria that prospective registrars would have to satisfy need to be further articulated by the Panel, but may include:

- ❑ managerial capability and financial capacity;
- ❑ a requisite level of technical capability and hardware;
- ❑ registry interface software;
- ❑ a billing system;
- ❑ data escrow;
- ❑ requirements for reseller arrangements; and
- ❑ sign on to the self-regulatory regime, including auDA's dispute resolution procedure.

4.4.3 The Panel recognises that the accreditation process must achieve a balance between on the one hand preserving the public interest in the DNS by ensuring a high quality of service, and on the other hand facilitating the entrance of new players by ensuring the barriers to entry are not too high.

4.4.4 The Panel notes the importance of providing adequate consumer safeguards at this level in the domain name services industry. It would be expected that auDA would impose some minimum conditions on accredited registrars, focused mainly on consumer protection issues, such as privacy, security, domain name portability, etc, but also dealing with the registry/registrar interface (discussed in section 4.3).

4.4.5 It may be appropriate to develop an industry code of practice, using a model such as the Australian Communications Industry Forum, to set standards for consumer protection covering such matters as minimum levels of disclosure, handling of registration fees paid in advance, transfer of registrants between registrars, handling of disputes between registrars and registrants and credit management.

4.4.6 Once accredited, a registrar would have rights of access to all 2LDs, whether provided by a single registry or by multiple registries (with the possible exception of the closed 2LDs, although there is no reason why a closed 2LD could not provide its domain names through multiple registrars). However, registrars would not necessarily choose to operate in all 2LDs.

4.4.7 Under Proposal 4.3 A, multiple registries would compete for registrar business, by offering cheaper wholesale prices, or value-added services. The Panel notes the danger that registries might attempt to engage in anti-competitive conduct such as exclusive dealing or third line forcing. This would be dealt with by the ACCC under the Trade Practices Act.

4.4.8 The Panel also notes that auDA may need to take action in the event that no registrars choose to operate in a particular 2LD, in terms of providing service to end-users who wish to register domain names in that 2LD. One option would be for auDA to give permission for the registry to act as a registrar for the particular 2LD.

The Panel invites comments on the issues raised in Section 4.4.

4.5 Resellers

Proposal 4.5:

- Registrars will be responsible for managing the behaviour of their resellers and will be ultimately responsible to the registrant.***
- auDA should require registrars to include some minimum consumer protection safeguards in their reseller agreements.***

4.5.1 Domain name resellers operate at an intermediate level between registrar and registrant. Currently, com.au is the only 2LD with resellers. The types of entities acting as domain name resellers range from law firms to ISPs.

4.5.2 The Panel proposes that auDA should not have a role in accrediting or otherwise regulating behaviour at the reseller level. Resellers would have a contractual relationship with registrars, and it would be up to the registrar to manage that relationship. As resellers are a point of contact between registrars and registrants, and do not have access to the registry interface, it is not necessary to require them to sign on to technical standards and data protocols.

4.5.3 However, the Panel believes that auDA should require registrars to include some minimum consumer safeguards in their reseller agreements (listed in paragraph 4.4.2 as a possible registrar accreditation criterion). auDA should have the ability to take appropriate disciplinary action against registrars whose resellers fail to meet agreed standards, and to ensure appropriate remedies and redress for registrants quickly. The Panel is conscious of the need to avoid the problems that have arisen through use of resellers of telecommunications services.

The Panel invites comments on Section 4.5, including whether resellers should be separately accredited by auDA.

4.6 Registrant

Proposal 4.6:

- auDA will ensure adequate consumer safeguards for registrants by subjecting registries and registrars to agreed technical standards, data protocols, security, service levels, escrow requirements etc.***

4.6.1 The Panel considers that the typical domain name registrant wants:

- certainty that the service purchased is genuine (accredited by a recognised national body);
- ability to choose his/her supplier;
- ability to choose the relevant 2LD;
- full disclosure of services being provided;
- full disclosure of all charges;
- satisfactory handling of pre-paid fees;
- knowledge that he/she can change supplier in a reasonable time (ie. full domain name portability);
- assured service levels (eg. quality, timeliness, consistency);
- access to a neutral, independent dispute process at reasonable cost;
- knowledge of his/her obligations regarding conditions of use, change of contact details, etc;
- knowledge that so long as conditions are met and relevant fees paid, he/she will be able to retain the domain name licence;
- clear understanding about the domain name licence and its condition of use;
- confirmation that the information provided is only used for the purposes of registering the domain name and retention in the registry as public information; and
- knowledge of the fall-back process if the supplier ceases to provide the service.

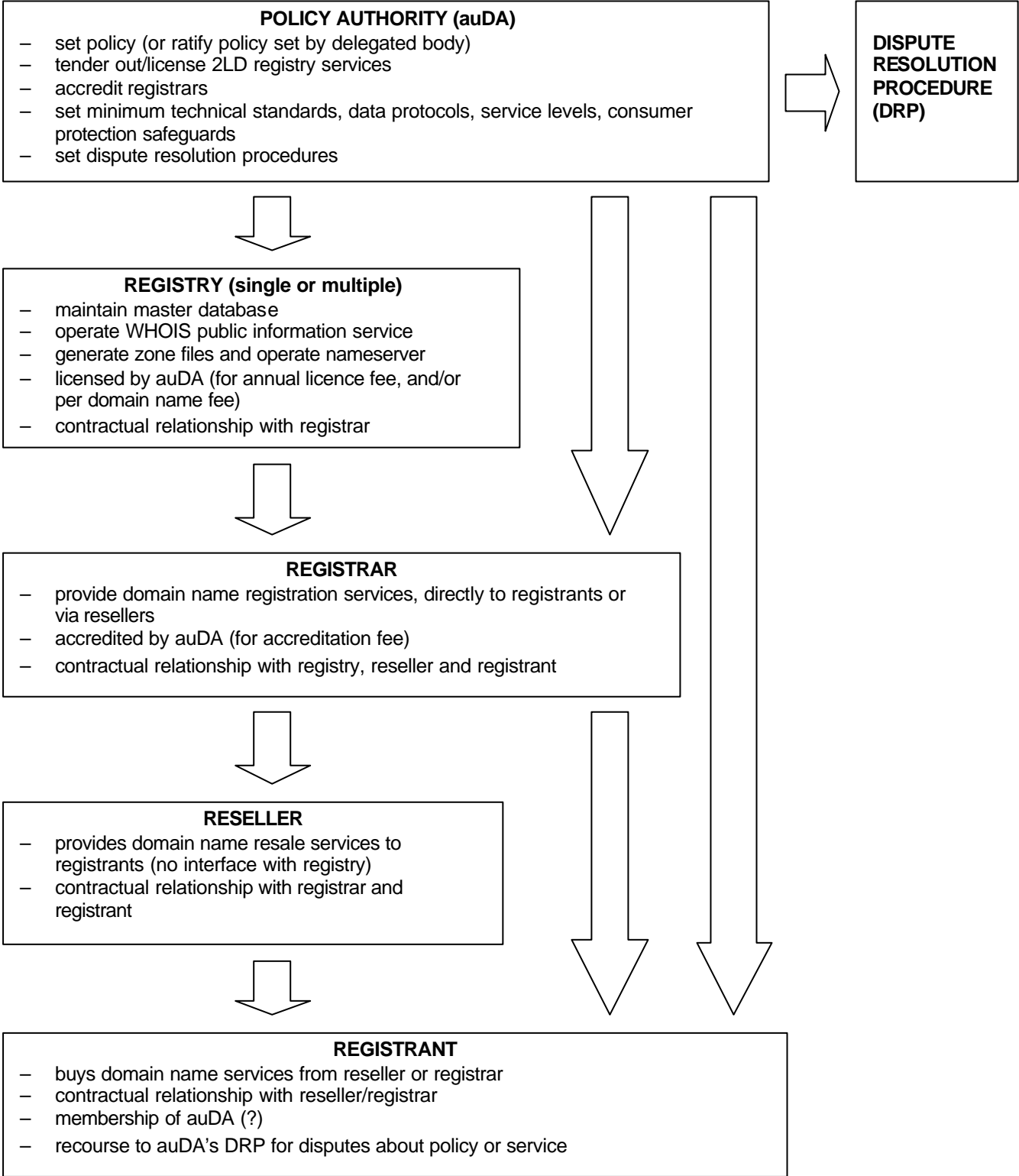
4.6.2 The Panel is fully cogniscent of the need to ensure that the model satisfies all the above criteria for domain name registrants. For example, it may be appropriate for auDA to initiate an industry code of practice to help assure consumer protection in the domain name services market.

4.6.3 The Panel recognises that, from a registrant perspective, an essential element of the domain name policy and service environment is an effective and robust complaints handling mechanism. This view is shared by the Name Panel. The importance of a “one stop shop” approach to complaints handling from a consumers’ perspective has also been noted. A multiple complaints handling environment can be inefficient, burdensome and frequently frustrating for consumers. The Panel notes that the

Telecommunications Industry Ombudsman dispute scheme has provided a free and timely forum for the redress of consumer complaints, in contrast to costly and time-consuming action in courts or consumer tribunals. The Panel recognises that customer complaint and dispute resolution procedures and mechanisms should be accessible, fair, accountable, efficient and effective.

The Panel invites comments on the issues raised in Section 4.6, in particular whether there are other matters that should be added to the list in paragraph 4.6.1

DIAGRAM OF PROPOSED COMPETITION MODEL



Competition Model

auDA Advisory Panel No. 2 Terms of Reference

Revision Date: 23 June 2000

This document is the Terms of Reference for the auDA Policy Advisory Panel Number 2, for the development of a Competition Model for the .au namespace.

1. Objective

auDA's objective is to develop the .au namespace in the interests of domain name users and the industry. A key component in delivering this objective is the implementation of competition in the provision of domain name services, to deliver the best result for:

- quality of service
- user choice
- lowest cost

2. Principles

In recommending the introduction of a particular competition model for the provision of .au domain name services, the Panel should take into account competition and industry specific principles.

General Competition Principles

- fostering business efficiency, especially where this results in improved international competitiveness
- industry rationalisation resulting in more efficient allocation of resources and in lower or contained unit production costs
- industrial harmony
- improvements in the quality and safety of goods and services and expansion of consumer choice
- supply of better information to consumers and business to enable informed choice in their dealings
- promotion of equitable dealings in the market
- promotion of industry cost savings resulting in contained or lower prices at all levels of the supply chain
- equality of access and a level playing field for all who want to participate in the market

Industry Specific principles:

- The integrity of the .au TLD is paramount, and the introduction of competition must not interfere with a consistent view of .au domain names.
- Regulation & administration of the .au namespace is undertaken on a cost-recovery not-for-profit basis.
- Non-contestable elements of the domain name process must be justified, and operated in an industry-neutral manner.

- Contestable elements of the domain name process, and the introduction of competition must be commensurate with long term stability of the DNS

3. Activity

This Advisory Panel will develop a Model to be used to introduce competition in the provision of domain name services in the .au namespace. The panel will review how registries, registrars, and users operate and interact, including but not limited to issues of:

- single/multiple registries
- location and content of registry / registrar data
- access, ownership and IP of registry data
- communication between registry and registrar, and between Users and registry / registrar
- security
- transfer of users between registrars, including registrars who cease to operate
- service levels - quality and timeliness
- licensing and accreditation of registry / registrar
- barriers to entry
- dispute resolution between various levels
- equality of access
- registry and registrar fees
- continuing funding model for auDA

4. Outcome

The panel's operations will have multiple stages, with a separate report from each stage:

Stage 1: Define existing environment and scope, including the domain name services provided by and used by entities

Stage 2: Review current practices worldwide in other domains

Stage 3: Recommend a competition model for .au

Stage 4. Provide a strategy for the implementation of the model

Stage 1 and 2 may run concurrently.

5. Duration

The estimated timeline for the panel is subject to change. The current estimate is:

Elapsed Time	Time	Activity
		auDA board to confirm Terms of Reference
2 weeks	2 weeks	Call for participants
4 weeks	2 weeks	auDA board to confirm participants
7 weeks	3 weeks	First meeting; confirm Panel operational procedures; start Stage 1 and Stage 2
11 weeks	4 weeks	Stage 1 Documentation Draft complete
15 weeks	8 weeks	Stage 2 Draft complete; start Stage 3
23 weeks	8 weeks	Stage 3 Draft complete; start first public consultation

		period
26 weeks	3 weeks	End first public consultation period; start Proposed report.
28 weeks	2 weeks	End Proposed report; start second public consultation period
30 weeks	2 weeks	End second public consultation period; start final Report
32 weeks	2 weeks	Complete final Stage 3 report; submit to auDA board
34 weeks	2 weeks	Stage 3 report approved by auDA board, commence Stage 4
38 weeks	4 weeks	Stage 4 complete
51 weeks	13 weeks	Implementation

6. Chair

The panel will have co-chairs; George Michaelson and another yet to be appointed.

7. Members

The panel should include representatives from all areas of the community including:

- Consumers
- General domain name users
- Registrars
- ISP & Web Hosting entities
- Government

Panel membership will be limited to 30. auDA will issue a general invitation via the auDA members and discussion lists to interested parties to participate in the panel.

8. Operations and budget

Members of the panel will determine their method of operation. auDA will provide email list server, web site including archived submissions provided to the panel, documentation of work, will arrange meeting venues, and provide teleconference support for meetings. auDA also plans to provide resources to enable a consultant to carry out a substantial part of Stage 2.

auDA Name Policy Advisory Panel

Co-Chairs

Mr David Lieberman
Special Counsel
Blake Dawson Waldron

Mr George Michaelson
Manager, Technical Services
DSTC Pty Ltd

Members

Mr Rob Anderson
Director
cheapglobaldomains.com

Mr Philip Argy
Senior Partner
Mallesons Stephen Jaques (representing the
Australian Computer Society)

Dr Evan Arthur
Assistant Secretary
Department of Education, Training and Youth Affairs

Ms Sonja Bernhardt
Director
Thoughtware Pty Ltd

Mr Larry Bloch
Chief Executive Officer
Net Registry

Mr Alan Chalmers
Numbering Team
Australian Communications Authority

Professor Eugene Clark
Pro Vice-Chancellor
University of Canberra

Mr Roberto Colanzi
Senior Research Officer
Victorian Automobile Chamber of Commerce

Mr Matthew Hall
Partner
Deacons Lawyers (representing the Australian
Information Industries Association)

Mr Matthew Healy
Telecommunications Analyst
Australian Competition and Consumer Commission

Mr Tony Hill
Executive Director
Internet Society of Australia

Mr David Howarth
Senior Associate
Corrs Chambers Westgarth

Mr Geoff Huston
Chief Scientist, Internet
Telstra

Ms Amanda James
National Business Manager
AAP Information Services Pty Ltd

Mr Ian Johnston
Policy Consultant
Small Enterprise Telecommunications Centre Ltd

Mr John Lindsay
Strategic Development Manager
Internode Systems Pty Ltd

Mr Peter McGrath
Chief Operating Officer
connect.com.au

Mr Bill O'Chee
Director
B2G.com.au Ltd

Mr Jonathon Potter
General Manager, IT Services
Commonwealth Scientific and Industrial Research
Organisation

Mr Andrew Robertson
Chief Executive Officer
Tradegate Australia Ltd

Mr Bruce Tonkin
Chief Technical Officer
Melbourne IT

Mr Andrew van der Stock
Senior Security Architect
E-Secure (representing the Systems Administrators'
Guild of Australia)

Ms Karina Warnest
Solicitor
Kelly & Co Lawyers

Mr Galen Townson
Western Australian Internet Association

Ms Pauline van Winsen
Consultant

Ms Tania Wickman
Internet Consultant

GLOSSARY

Term	Definition
ACA	Australian Communications Authority
ACCC	Australian Competition and Consumer Commission
auDA	au Domain Administration – the Australian body established by the Internet community to become the industry self-regulatory body for administering the .au ccTLD and its associated sub-domains, for the benefit of the Australian community
AUNIC	the database of domain name registrant contact details and WHOIS service for all .au domain names except those registered in asn.au, csiro.au and net.au.
TLD	Top Level Domain – a name at the top level of the global domain name hierarchy (eg. .com, .net, .uk)
ccTLD	country code Top Level Domain – in the global domain name hierarchy, all countries have been allocated their own top level country domain (eg. .au in Australia, .uk in the United Kingdom)
gTLD	generic Top Level Domain – names in the top level of the domain name hierarchy, other than the ccTLDs, where organisations can register directly (ie. .com, .net, .org, .edu, .gov, .mil)
2LD	Second Level Domain – a name at the second level of the domain name hierarchy (eg. microsoft.com, com.au, co.uk)
closed 2LD	a Second Level Domain that has a strictly limited community of interest (eg. csiro.au, edu.au, gov.au)
open 2LD	a Second Level Domain that is basically open to all users, subject to some eligibility criteria (eg. com.au, net.au, org.au)
data escrow	the practice of storing data in a secure, independent location for access by a third party under strictly limited circumstances (eg. if the custodian of the data goes out of business)
DoC domain name	US Government Department of Commerce provides a means for a user to access a device on the Internet by using an easy to remember text name rather than a numerical Internet address
domain name licence	the licence to use a domain name for a specified period of time
DNS	Domain Name System
IANA	Internet Assigned Numbers Authority
ICANN	International Corporation for Assigned Names and Numbers
IETF	Internet Engineering Task Force
IP address	Internet Protocol address (eg. 203.63.53.117)
ISP	Internet service provider
nameserver	provides a service to computers to resolve a domain name to a physical IP address

primary nameserver	provides the authoritative service for a particular level in the domain name hierarchy
secondary nameserver	provides some redundancy to the primary nameserver, so that if a computer is unable to reach the primary nameserver, it can query a secondary nameserver
registrant	encompasses domain name licence holders, domain name licence applicants and their agents
registrar	an organisation that processes data on behalf of the registrant into the registry
registry	a database for a particular level of hierarchy in the DNS that contains all the domain names registered at that level and associated public information
reseller	a service agent for a registrar
RFC	Request for Comment issued by the IETF – the basis for official Internet standards
RRP	Registry/Registrar Protocol, developed for the registry and registrars in the .com, .net and .org gTLDs and published by the IETF for information
WHOIS	a protocol used to provide a public information service in relation to domain name data
zone file	a file that contains a mapping between each domain name in a domain zone (eg. com.au) and the address of a computer that can resolve the domain name to a physical Internet address