

auDA REGISTRY COMPETITION REVIEW PANEL

FINAL REPORT TO auDA BOARD

November 2004

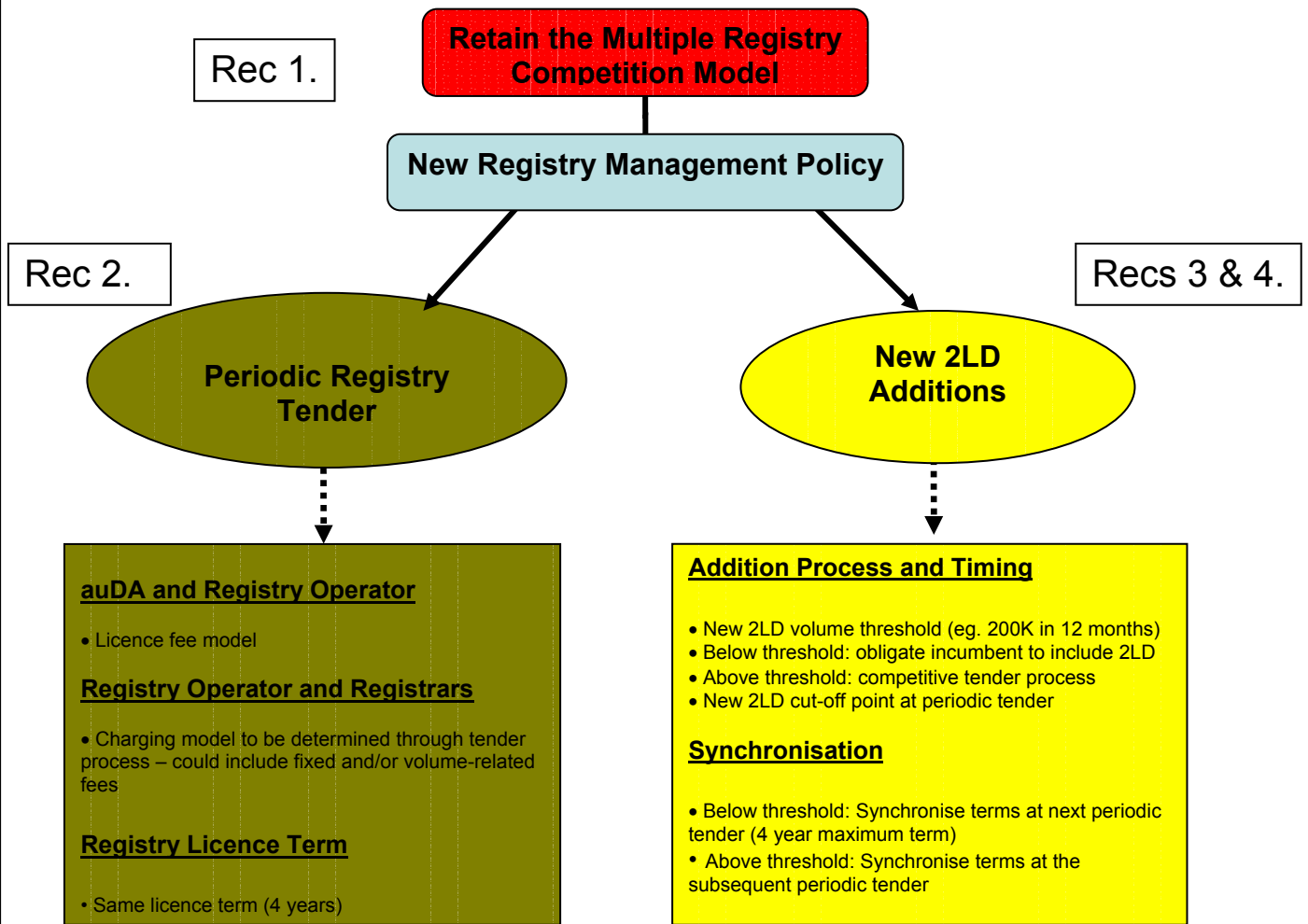
Executive Summary

The Panel's recommendations to the auDA Board are summarised below for ease of reference, however the Panel urges readers to consider each recommendation in conjunction with the explanatory text provided in the body of the report.

The Panel recommends that:

1. The current competition model that allows for multiple 2LD registry operators should be retained.
2. The current periodic open tender process for provision of registry services for existing 2LDs should be retained, including the following features:
 - a) an annual registry licence fee payable to auDA, calculated on the number of domain names registered in each 2LD;
 - b) a charging model for registrars to be proposed by the winning tenderer, which may include a fixed and/or volume-related component;
 - c) a licence term of four years.
3. auDA should adopt the following process for determining the provision of registry services for a new 2LD:
 - a) auDA should determine a threshold of projected volume of registrations for a new 2LD. The Panel suggests a threshold of 200,000 domain names within the first 12 months of operation.
 - b) The new 2LD selection panel should advise the auDA Board whether it considers the new 2LD to be below or above the threshold.
 - c) If the new 2LD is estimated to be below the threshold, then the incumbent registry operator should be required to run the new 2LD under the terms of the registry licence agreement (post 2006).
 - d) If the new 2LD is estimated to be above the threshold, then provision of registry services should be contestable through a competitive tender process.
 - e) The start of the periodic registry tender process should be the cut-off point for introducing new 2LDs within the term of the current registry licence agreement.
4. auDA should synchronise the new 2LD registry licence term with the registry licence term for existing 2LDs, as follows:
 - a) If the incumbent registry operator is required to run the new 2LD (refer to Recommendation 3c), then the new 2LD registry licence term should be set to expire at the next periodic tender.
 - b) If the new 2LD is awarded to either the incumbent registry operator or a new registry operator through a competitive tender process (refer to Recommendation 3d), then the new 2LD registry licence term should be set to expire at the subsequent periodic tender.

The diagram below illustrates the Panel's recommendations within a contextual framework.



1. Background

Registry Competition Review Panel

1.1 In July 2004 the auDA Board established the Registry Competition Review Panel to:

- review auDA's competition model as it applies to the provision of .au 2LD registry services; and
- provide recommendations to the auDA Board about what changes (if any) should be made to the competition model.

1.2 The Panel was tasked with considering the following matters:

- what are the objectives of competition at the 2LD registry level;
- whether the multiple registries model should be retained, or whether there should be a single registry for all .au 2LDs;
- the process by which auDA should appoint the registry operator(s);
- the revenue model under which registry services should be provided; and
- how to accommodate the introduction of new 2LDs.

1.3 The following issues did not form part of the Panel's Terms of Reference:

- Review of the current registry technical specification. auDA will review the registry technical specification at a later date.
- Consideration of whether auDA itself should provide registry services. The auDA Board has confirmed its commitment to maintaining a clear separation of policy and operations.

1.4 The Panel's Terms of Reference and a list of Panel members are available on the auDA website at <http://www.auda.org.au/rcrp/rcrp-index/>.

Panel Proceedings, July - October 2004

1.5 The auDA Board appointed David Thompson as Chair of the Panel in June 2004. Following a public call for nominations, 12 people were appointed to the Panel representing a range of interests and stakeholders.

1.6 The Panel held three meetings, on 12 August, 24 August and 30 September 2004, supplemented by two teleconferences and discussion on the Panel mail list. There was a high rate of participation by Panel members.

1.7 The Panel released its First Consultation Report on 3 September 2004 for a three week public consultation period. The report outlined the Panel's preliminary views on a range of issues and options in relation to the provision of 2LD registry services in the .au domain space. The Panel received four public submissions in response to the First Consultation Report.

1.8 The Panel released its Second Consultation Report on 14 October 2004 for a two week public consultation period. The report contained the Panel's draft recommendations to the auDA Board. The Panel received no public submissions.

1.9 All Panel papers, minutes and public submissions are available on the auDA website at <http://www.auda.org.au/rcrp/rcrp-index/>.

2. Background Issues

2.1 The Panel took the following background issues into account when determining its recommendations.

2001 Registry Tender Process

2.2 In October 2001 auDA released an RFT for provision of registry services in five open 2LDs (asn.au, com.au, id.au, net.au, org.au) and two closed 2LDs (edu.au, gov.au). RFT documents are archived on the auDA website at <http://www.auda.org.au/news-archive/comp-registry/>.

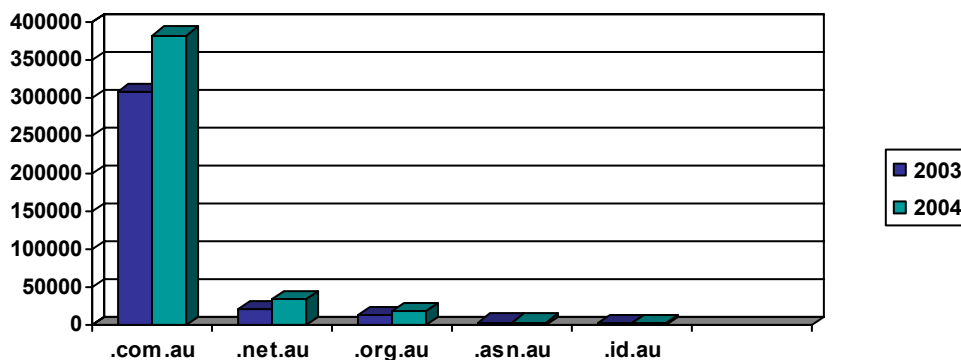
2.3 Respondents were invited to tender for all, some or one of the 2LD registries. Eight tender responses were received, six for all 2LDs and two for com.au. Due to the need to achieve full coverage of all 2LDs, the two tenders for com.au were not considered by the evaluation panel.

2.4 In December 2001 auDA awarded a four year licence to AusRegistry Pty Ltd to operate the five open 2LDs. The licence term commenced on 1 July 2002 and expires on 30 June 2006. The licence was subsequently extended to include the two closed 2LDs, with the same expiry date of 30 June 2006.

2.5 The Panel notes that at the time the RFT was released, com.au was the largest 2LD by an order of magnitude; in October 2001 there were approximately 230,000 com.au domains compared with approximately 28,000 domains in the other open 2LDs combined. It is likely that respondents would have made a judgement that it was not commercially viable to operate a registry under the minimum standards of the tender for the remaining open 2LDs without com.au.

2.6 Latest domain registration figures show that although there has been growth in the other 2LDs, com.au is still the largest 2LD and is continuing to grow at a healthy rate; in June 2004 there were approximately 380,000 com.au domains compared with approximately 60,000 domains in the other open 2LDs combined. The Panel concludes that the economics of registry operations in 2001 are still applicable today and are likely to remain so, at least in the medium term.

Table 2A: .au Domain Registration Trends by 2LD



Source: <http://www.auda.org.au/ausregistry/reports>

Introduction of New 2LDs

2.7 In 2002-2003 auDA decided to create eight new community geographic 2LDs (eg. nsw.au, vic.au, etc), and to re-activate the dormant conf.au 2LD.

2.8 Under the current competition model, auDA is required to conduct an open and competitive tender process for provision of registry services for the new/re-activated 2LDs. This raises some practical challenges for auDA:

- Current market structure. As noted above, the experience of the 2001 tender process indicates that running a registry for a 2LD or 2LDs with the potential for only a few thousand existing registrations over the term of the registry licence agreement is unlikely to be a commercially attractive proposition. The potential number of registrations in a 2LD is determined by a combination of factors including market demand, degree of marketing of the 2LD and the policy rules in effect for that 2LD. For example, the policy rules for the community geographic 2LDs will limit the collective number of possible registrations to approximately 20,000.
- Multiple registry licence terms. Awarding a new registry licence for new 2LDs at any time through the incumbent's licence for existing 2LDs would result in multiple registry licence terms running out of phase. This has two disadvantages: 1) there is no opportunity to maximise economic efficiency by bundling new 2LDs with existing 2LDs, and 2) auDA is required to fund and resource registry tender processes on a rolling basis, as opposed to conducting a single tender process periodically.

3. Competition Model

Recommendation 1:
The current competition model that allows for multiple 2LD registry operators should be retained.

3.1 Competition at the 2LD registry level can occur in at least two ways:

- Periodic - where 2LD registry services are contested through an open tender process at regular intervals (eg. every four years). Periodic competition can occur regardless of whether there is a single 2LD registry or multiple 2LD registries.
- Continuous - where multiple 2LD registry operators compete against each other, both at the time of the periodic tender process, and also throughout their licence terms in order to drive down costs and simultaneously improve registry performance. Continuous competition is only possible where there are multiple 2LD registries.

Refer to Appendix 2 for a discussion of the advantages and disadvantages of the single and multiple registry models.

3.2 The Panel's view is that the overriding objective of competition at the 2LD registry level, whether periodic or continuous (or both), is to attain the greatest economic efficiency in the provision of 2LD registry services. This can be measured in a competitive registry market in terms of the price charged by the registry operator for a particular service at a particular service level.

3.3 Having regard to the background issues described in section 2 of the report, the Panel acknowledges that optimum economic efficiency within the current 2LD market structure may be best achieved by a single registry in the short run. However, the Panel believes that in the long run optimum economic efficiency may well be achieved through multiple 2LD registries, with continuous competition leading to improvements in price and service throughout the licence term and not just at the periodic tender process.

3.4 Therefore, the Panel recommends that the current competition model that allows for multiple 2LD registry operators should be retained. The Panel recognises that whilst the current market structure prevails, the most likely manifestation of the model is a single registry with competition occurring at the periodic tender process. Accordingly, the Panel is not suggesting that auDA should actively pursue or facilitate the appointment of multiple 2LD registry operators; the choice of a single or multiple registry operators would depend on which is the best available economic outcome at the time of the tender process. The Panel is simply asserting that the model should allow for multiple 2LD registry operators when long run market maturity may result in this scenario delivering optimum economic efficiency. In summary, the Panel believes that keeping the multiple registry model maximises the options for auDA and the industry going forward.

4. Periodic Registry Tender Process

Recommendation 2:

The current periodic open tender process for provision of registry services for existing 2LDs should be retained, including the following features:

- a) an annual registry licence fee payable to auDA, calculated on the number of domain names registered in each 2LD;**
- b) a charging model for registrars to be proposed by the winning tenderer, which may include a fixed and/or volume-related component;**
- c) a licence term of four years.**

4.1 The Panel supports the current periodic open tender process as the best way of achieving economic efficiency in the provision of 2LD registry services. The Panel's view is that it may be useful for auDA to conduct an EOI prior to a full tender process in order to gauge market interest and avoid the problem of matching tender responses to requirements. The Panel suggests that auDA seek its own advice about the relative cost benefits of an EOI prior to full tender.

Relationship between auDA and the registry operator

4.2 Under the current licence agreement between auDA and AusRegistry, AusRegistry pays an annual registry licence fee to auDA calculated according to the number of domain names registered in each 2LD. The Panel believes that the licence fee model provides transparency and certainty for both auDA and the registry operator, and therefore recommends that it be retained.

Relationship between the registry operator and registrars

4.3 The Panel recommends that tender respondents be invited to propose a charging model between the registry operator and registrars (as occurred in the 2001 tender process). Whilst the most common charging model involves a combination of fixed and

volume-related fees, the Panel believes it would be short-sighted to limit any other potentially innovative models that market participants may put forward in the future.

Registry licence term

4.4 The current registry licence term is only mid-way through the first cycle and it is therefore difficult to make an assessment of its market impact at this time. Accordingly, the Panel recommends that the current licence term of four years be retained. The Panel's view is that a shorter licence term would create significant barriers to entry for prospective new operators, while a longer licence term runs the risk of the incumbent registry operator making above economic profits.

4.5 The Panel recommends an exception to the four year registry licence term in the case of a new 2LD that is awarded pursuant to a competitive tender process - refer to sections 5 and 6 of the report.

5. New 2LD Addition Process and Timing

Recommendation 3:

auDA should adopt the following process for determining the provision of registry services for a new 2LD:

- a) auDA should determine a threshold of projected volume of registrations for a new 2LD. The Panel suggests a threshold of 200,000 domain names within the first 12 months of operation.**
- b) The new 2LD selection panel should advise the auDA Board whether it considers the new 2LD to be below or above the threshold.**
- c) If the new 2LD is estimated to be below the threshold, then the incumbent registry operator should be required to run the new 2LD under the terms of the registry licence agreement (post 2006).**
- d) If the new 2LD is estimated to be above the threshold, then provision of registry services should be contestable through a competitive tender process.**
- e) The start of the periodic registry tender process should be the cut-off point for introducing new 2LDs within the term of the current registry licence agreement.**

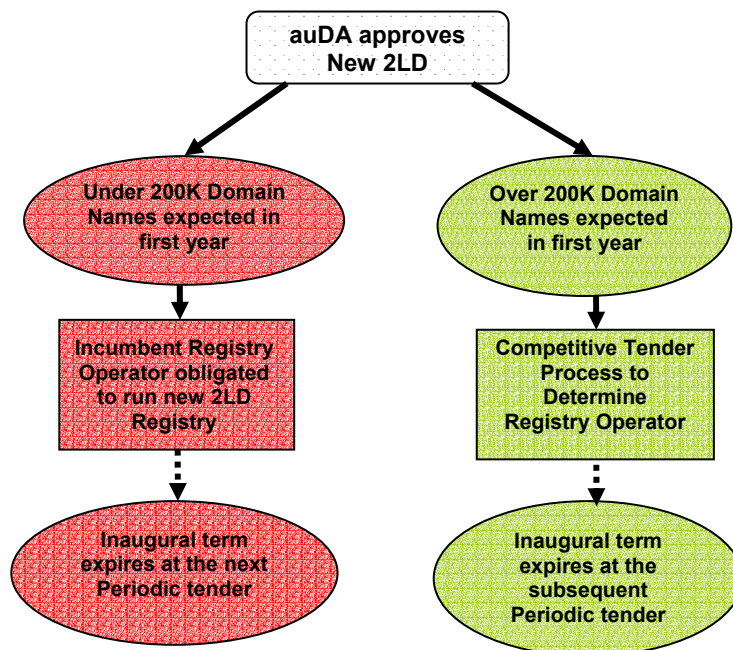
New 2LD Addition Process

5.1 The difficulties that have occurred under the current competition model in relation to new 2LD registry services are explained in section 2 of the report. The Panel is aware of the need to ensure that the process used to add new 2LDs to the .au domain is cost effective and practical from an implementation perspective, but does not close off the 2LD registry market to a new entrant under the right economic circumstances. The Panel recommends that auDA should adopt the following process (also illustrated in Diagram 5A):

- 5.1.1 auDA should determine a threshold of projected volume of registrations for a new 2LD. Based on the experience of the 2001 registry tender, the Panel suggests that a projected volume of 200,000 domain names within the first 12 months of operation would indicate that the new 2LD is commercially viable on its own (ie. roughly equivalent to com.au in 2001). Refer to Appendix 3 for further detail.

- 5.1.2 The Panel notes that auDA's process for approving new 2LDs involves independent evaluation of new 2LD proposals by an advisory panel. The Panel suggests that the new 2LD evaluation report should include an assessment of whether the new 2LD is likely to be below or above the threshold.
- 5.1.3 If the new 2LD is considered to be below the threshold, then the Panel believes that it would not be cost effective for auDA to conduct a competitive tender process for provision of registry services. The simplest and most efficient approach would be for the incumbent registry operator to be required to operate the new 2LD under the terms of its existing licence agreement with auDA (ie. using the same technical specification and charging model). The Panel notes that the next registry licence agreement (post 2006) will need to include appropriate provisions to enable this to occur.
- 5.1.4 If the new 2LD is considered to be above the threshold, then the Panel believes that there would most likely be sufficient scale to justify a competitive tender process to determine registry operations. The Panel notes that there are two possible outcomes of a tender process: 1) the new 2LD is awarded to the incumbent registry operator, or 2) the new 2LD is awarded to a new registry operator. As with the periodic tender process, the Panel believes that it may be useful to hold an EOI prior to a full tender process, and suggests that auDA seek its own advice about the relative cost benefits.

Diagram 5A: New 2LD Addition Process



5.2 The Panel's rationale for recommending the above process is to ensure that small 2LD additions are dealt with in the most economically efficient fashion, while larger 2LD additions that may substantively change the nature and scale of the .au namespace are referred to the market to determine optimum outcomes. The projected volume threshold is intended to be a practical aid in determining the *process* for selecting a new

2LD registry operator, it is not intended to dictate the outcome. It is not the Panel's intention to mandate multiple registry operators in the event that a new 2LD is considered to be above the threshold. As noted in paragraph 5.1.4, one of the possible outcomes of the tender process is that the new 2LD is awarded to the incumbent registry operator, thereby maintaining a single registry for all 2LDs.

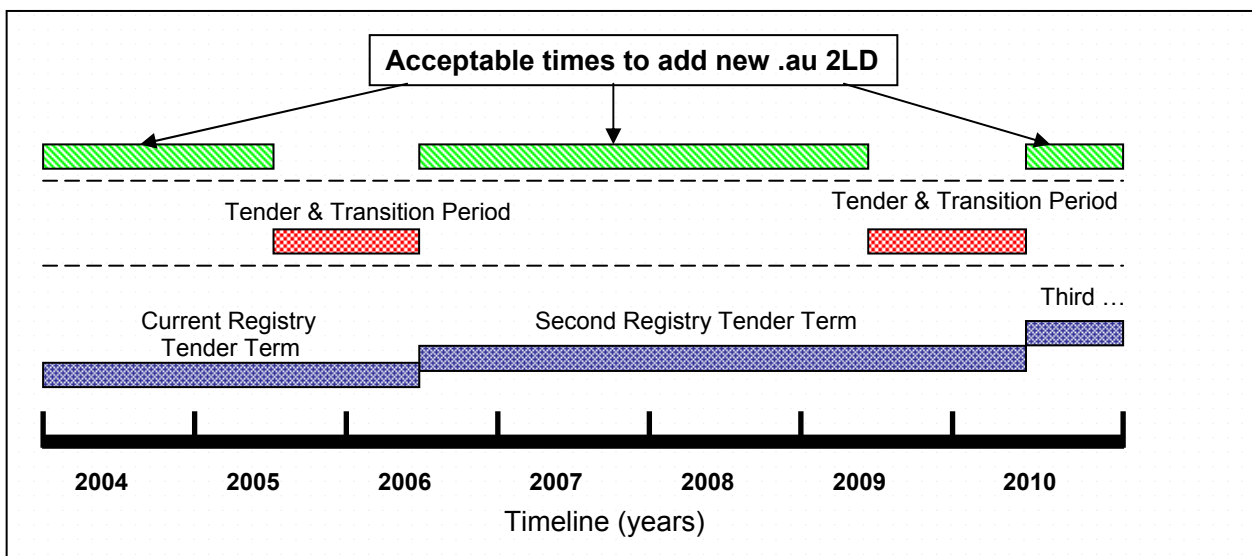
5.3 The Panel recognises that the recommended new 2LD addition process may give rise to some implementation challenges, for example, in the future event that there is more than one incumbent registry operator that could operate a 2LD under the threshold (refer to paragraph 5.1.3). This report does not attempt to identify and address all the possible consequences of adding a new 2LD to the .au domain. The Panel's view is that most (if not all) implementation issues can be dealt with by auDA via contractual arrangements with the relevant registry operator(s).

New 2LD Addition Timing

5.4 Where the incumbent registry operator is required to run the new 2LD (refer to paragraph 5.1.3), the Panel considers that it would be unreasonable to expect it to take on a new 2LD within 12 months of the expiration of its current licence term. Where provision of new 2LD registry services is contestable (refer to paragraph 5.1.4), the Panel notes that it would be costly and inefficient for auDA to conduct the new 2LD tender process immediately after it has conducted the periodic registry tender process.

5.5 The Panel therefore recommends that there be a cut-off point for the addition of new 2LDs. As it is likely that auDA would conduct the periodic registry tender approximately 12 months prior to the expiration of the incumbent registry operator's licence term, the Panel believes that the periodic tender and subsequent transition period forms a logical moratorium. This is illustrated in Diagram 5B below.

Diagram 5B: Timing of Potential New 2LD Additions



Note: "Tender and Transition Period" refers to the tender process and the transition to a new registry licence.

6. Synchronisation of Existing and New 2LD Registry Licence Terms

Recommendation 4:

auDA should synchronise the new 2LD registry licence term with the registry licence term for existing 2LDs, as follows:

a) If the incumbent registry operator is required to run the new 2LD (refer to Recommendation 3c), then the new 2LD registry licence term should be set to expire at the next periodic tender.

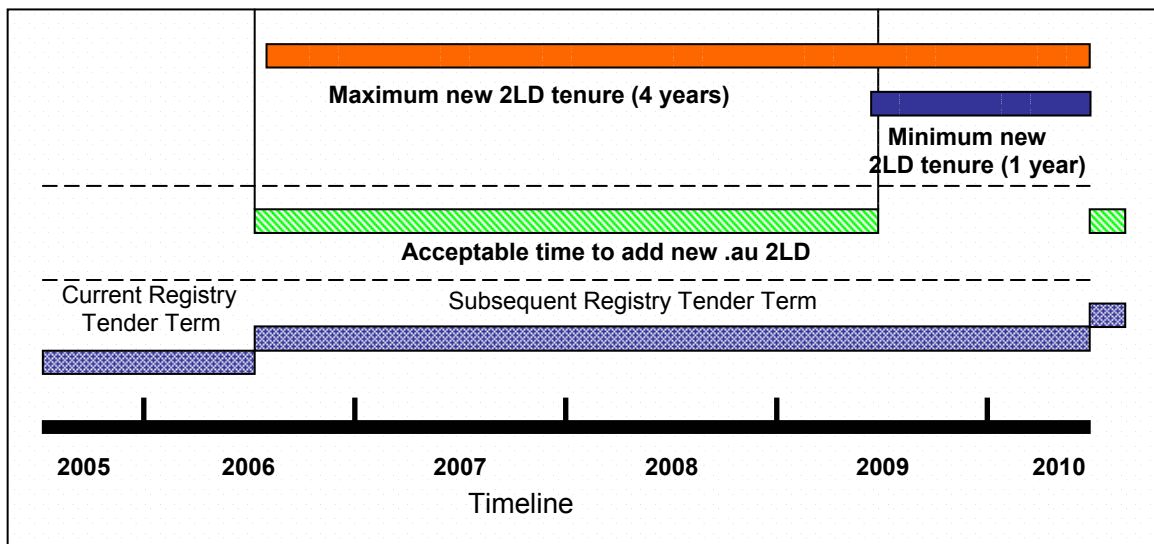
b) If the new 2LD is awarded to either the incumbent registry operator or a new registry operator through a competitive tender process (refer to Recommendation 3d), then the new 2LD registry licence term should be set to expire at the subsequent periodic tender.

6.1 Given the current market environment and the administrative overhead and costs of running frequent tender processes, the Panel supports synchronisation of registry licence terms for all 2LDs at this time. This allows auDA to bundle small 2LDs with larger 2LDs in order to maximise economic efficiency.

6.2 Depending on the outcome of the new 2LD addition process described in section 5 of the report, the Panel recommends that auDA synchronise the new 2LD registry licence term with the registry licence term for existing 2LDs in one of the following ways:

6.2.1 If the new 2LD is therefore added to the incumbent registry (refer to paragraph 5.1.3), the new 2LD registry licence term should be set to expire at the next periodic tender (ie. at the same time as the incumbent's licence term for existing 2LDs). This is illustrated in Diagram 6A below.

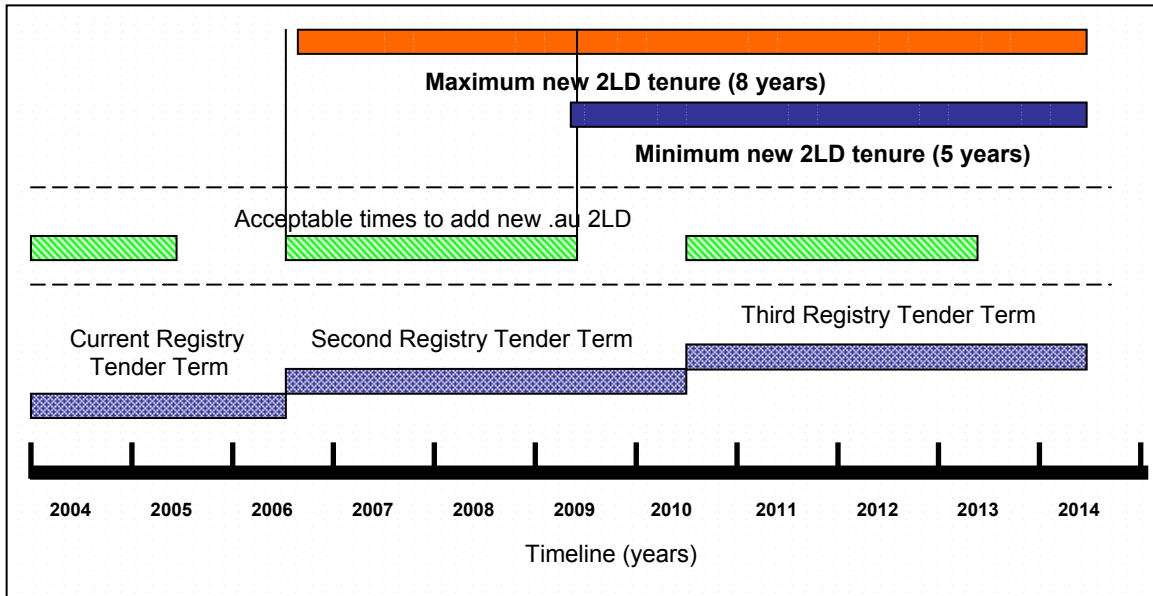
Diagram 6A: Maximum and Minimum Tenure of an Inaugural New 2LD Added to Incumbent Registry



6.2.2 If the new 2LD is awarded pursuant to a competitive tender process (refer to paragraph 5.1.4), the new 2LD registry licence term should be set to expire at the subsequent periodic tender for existing 2LDs. This is illustrated in Diagram 6B below. For example, if auDA awarded a new 2LD registry licence on 1 January

2005, the term would run until the end of the next licence term for existing 2LDs (eg. 30 June 2010). Under this option the maximum licence term for a new 2LD would be eight years (assuming a fixed registry licence term of four years). The Panel notes that a new 2LD is likely to require significant start-up cost and therefore a longer licence period is justified to allow cost recovery. In addition, a longer licence period may attract a higher number of tender respondents than a shorter licence period.

Diagram 6B: Maximum and Minimum Tenure of an Inaugural New 2LD Awarded by Competitive Tender



6.3 Having stated a preference for synchronisation of registry licence terms for all 2LDs within the current market environment, the Panel notes that this position may need to be reviewed in light of future market developments.

GLOSSARY OF TERMS

<i>Term</i>	<i>Definition</i>
auDA	.au Domain Administration Ltd
2LD	Second level domain, ie. a name at the second level of the .au domain name hierarchy (eg. com.au)
Closed 2LD	A 2LD that is for the exclusive use of a particular community of interest (eg. gov.au)
Open 2LD	A 2LD that is basically open to all users subject to eligibility criteria (eg. com.au)
ccTLD	Country Code Top Level Domain (eg. .au, .uk)
gTLD	Generic (or Global) Top Level Domain (eg. .com, .biz)
DNS	Domain Name System
Economic Profit	Revenue minus expenses and cost of capital, in a competitive market
EOI	Expression of Interest
IP	Internet Protocol
Long Run	The future time period during which supply and demand are not determinable.
Registrar	An entity that registers domain names for registrants and is accredited by auDA
Registry Operator	An entity that provides registry services for a 2LD and is licensed by auDA
Incumbent Registry Operator	The registry operator appointed by auDA in 2001 (currently provides service for com.au, net.au, org.au, asn.au, id.au, gov.au, edu.au).
RFT	Request for Tender
Short Run	The future time period during which supply and demand are relatively fixed.
WHOIS	Public interface to the domain name registry database
www	World Wide Web

ANALYSIS OF SINGLE AND MULTIPLE REGISTRY MODELS

The Panel has identified the following advantages and disadvantages of single and multiple registry models, as requested by the auDA Board.

Multiple Registry – Advantages	Multiple Registry – Disadvantages
Continuous registry service provision. For example, when one registry operator is performing maintenance on systems, or where a registry operator fails completely (eg. become insolvent).	Potential for different operating protocols and standards. auDA can minimise this with a standard minimum technical specification, although there is the possibility of minor differences which could add costs to a registrar choosing to offer services with multiple registries.
A wider pool of operational knowledge and experience. Registry operators are able to assist each other, auDA and registrars with solutions to common technical problems.	Multiple contractual and billing relationships. auDA would be required to maintain regulatory oversight of additional industry participants. Registrars would need to maintain billing relationships with multiple registries, and may need to get separate legal advice on different legal agreements.
More choice for registrars in terms of service provision. Registrars may elect to provide the 2LD services of a particular registry operator on the basis of better service and support.	Difficulty of launching new 2LDs. Some registrars may not offer new 2LDs if the incremental cost of interfacing to a new registry does not match the possible returns from offering an additional 2LD.
An environment of constant competition, as distinct from periodic competition at the end of a registry licence term, which is likely to result in system improvement benefits during the registry tender cycle.	
Registries with services targeted for specific market segments, which may in turn serve registrars targeted at those segments. For example 2LDs based on telephone numbers could be targeted at telecommunications operators.	

Single Registry – Advantages	Single Registry – Disadvantages
No duplication of infrastructure.	Registry services are likely to be provided at the lowest common denominator, and there may not be sufficient incentive for innovation.
Greater economies of scale for certain market scenarios.	It is difficult from a competition policy perspective to justify a single registry

	monopoly when there are currently 3 registries operating in the .au domain, and 15 of 20 accredited registrars offer services across multiple TLD registries.
Periodic tender and new 2LD addition processes are simpler	May not offer the most efficient economic outcome in certain long run market scenarios.
Easier for registrants to access and update multiple domain records across multiple 2LDs, and transfer domains between registrars.	

AN EXPLORATION OF SELECTED ECONOMIC EFFECTS OF MULTIPLE OPERATORS

In this section, selected simple non-empirical economic models are explored for given new 2LD scenarios that might occur in the future with a view to ascertaining a suitable indicative new 2LD threshold.

Scenario One

Assume a new 2LD achieves a total registration volume of 20,000 names over 2 years. Also assume the current registry operator for com.au/net.au/org.au has a contractual price of \$30 per 2 year registration, and can charge that price for offering a new 2LD under the contract.

If a more competitive registry operator were to charge \$20 for a 2 year registration, the net saving to the industry might be in the order of \$200,000. For a registrar holding 5% market share, this might translate to a saving of \$10,000. A saving of \$10,000 would not likely justify the costs for that registrar of working with multiple registries operators.

Scenario Two

Assume a new 2LD achieves a total registration volume of 200,000 names over 2 years. Examples could include 2LDs based on telephone numbers, postal address codes, geographic coordinates, and barcodes.

Also assume the current operator for com.au/net.au/org.au has a contractual price of \$30 per 2 year registration, and can charge that price for offering a new 2LD under the contract. If a competitive registry operator were to charge \$20 for a 2 year registration, the net saving to the industry might be of the order of \$2,000,000. For a registrar holding 5% market share, this might translate to a saving of \$100,000. This saving of \$100,000 might justify the costs for that registrar of working with multiple registry operators.

Scenario Three

Assume a new 2LD achieves a total registration volume of 200,000 names over 2 years. Also assume the price per 2 year registration is \$30 and a competitive registry operator provides a 6 month cancellation policy, where a full refund is provided if a name is cancelled in the first 6 months.

Further assume a fraud rate of 5% (eg. where a registrant cancels a payment on their credit card). This might save the registrar industry a total of \$300,000. A registrar with a 5% market share might save \$15,000.

Scenario Four

Assume a new 2LD achieves a total registration volume of 200,000 names over 2 years. Also assume the price per 2 year registration is \$30 and there is requirement to carry out some verification and authentication of the registrant, and assume this function is centrally automated by a competitive registry operator (which is able to get significant economies of scale).

Further assume the cost of doing this for a typical registrar is \$10 per name. This might save the registrar industry around \$2,000,000 and would save a registrar with 5% market share around \$100,000.

Summary of Implications

As can be seen from the above simple scenarios, multiple registries are unlikely to realise net benefits below say 200,000 names for a new 2LD.

For a new 2LD with names approaching 1,000,000 names, the benefits are more likely to start to become noticeable for a registrar operating with around 1% market share.