APTLD 74 Members Meeting
.au Registry Transformation Project

Tashkent, Uzbekistan
20-21 September 2018
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Background - Timeline

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- **Tender**
  - June 2001
  - Oct 2008
  - Dec 2012

- **Negotiation**
  - Nov 2004
  - Nov 2005
  - Dec 2017

- **EOI**
  - Dec 2018

- **Registry Transition**
  - 1 July 2018

- **Competition Model Advisory Panel**
  - June 2001

- **Registry Competition Review Panel**
  - Nov 2004

- **Industry Competition Advisory Panel**
  - Oct 2008

- **Industry Advisory Panel**
  - Dec 2012

- **Ausregistry Agreement**
  - 2002-2006
  - 2006-2010
  - 2010-2014
  - 2014-2018

- **Afilias Agreement**
  - 2018-2022
Background – Registry Fee changes

All fees for two years and ex GST

Background

- Competition model was reviewed by the 2012 Industry Advisory Panel
- 2001 Competition model retained
- Initiate renegotiations with Ausregistry
  - At that time most potential responders to a tender were focused on ICANN’s new gTLD program
  - Expected that new gTLD program would result in additional potential registry operators and it would take 2-3 years for the market to evolve and for new registry operators to establish market experience and track-record
  - Resulted in current agreement with Ausregistry – 2014 – 2018 (4th term)
- auDA should undertake a formal RFT process once the renegotiated registry agreement expires.
- The recommendations from the Advisory Panel relating to the registry were approved by the auDA Board in Feb 2013
Background 2016/2017

- .au registry had not been through a market exercise since 2005, and AusRegistry/Neustar had been the registry operator since 2002
- The AusRegistry/Neustar agreement had an expiry date of 30 June 2018
- auDA Board resolved to undertake a restricted tender exercise starting with a scoping exercise, sourcing expert advice
  - Consistent with the 2012 Advisory Panel recommendations approved by the auDA Board in Feb 2013
- Registry Transformation Project commenced in May 2017
Registry Transformation Project Goals

a) Clear and effective separation between policy and operations

b) Maintain and further enhance trust with the Australian Government and the Australian community

c) Maintain operational stability and utility of the .au ccTLD

d) Becoming a world leader in managing security, confidentiality, integrity and availability of .au registry data

e) Supporting longer term goal to be an Emergency Back-end Registry Operator (EBERO) for other gTLDs or ccTLDs

f) Supporting a data science and data analytics capability in relation to the registry data
Committees

• Registrar Liaison Committee
  • All registrars invited to participate
  • Focus on registrar and technical requirements

• Tender Process Committee
  • Dr Stephen Arnott (Aust Gov’t), Dr Liz Williams (ISG), Jay Daley (.nz), Nigel Phair (Uni. Canberra)
  • Advice on the tender process – EOI and RFT approach, and evaluation criteria

• Tender Evaluation Committee
  • Teams led by partners: Jeff Schmidt (JAS Global), Charlie Offer (Ernst & Young), Colin Egan (PPB Advisory), Cameron Whittfield (PwC Legal)
  • Carried out evaluations of EOI respondents and RFT respondents

• Probity Advisor
  • Adrian Gibby (KPMG)

19/09/2018
Request for Expression of Interest
Expression of Interest process

• The Request for Expressions of Interest (REOI) was the initial scoping exercise to:
  • define parameters of the subsequent restricted tender process
  • assess potential suppliers and options
• Call for Expression of Interest – 29 May 2017
• Expression of Interest closed – 26 June 2017
EOI Evaluation Criteria

• Financial
  • Value for money – financial and non-financial
  • Whole-of-life costs

• Technical and Operational
  • Ability to meet technical specs
  • Flexibility – ability to update software and continue to innovate
  • Similar experience and performance history

• Security
  • ability to support security, confidentiality, integrity and availability capabilities

• Ability to meet and deliver on the registry transformation project goals
EOI Respondents

• 15 responses

• 2 DNS offers

• 1 business analytics offer

• 5 large and experienced gTLD and ccTLD operators (>10m names each)
  • Well resourced with significant migration experience

• 3 experienced gTLD and ccTLD operators (>1 m names each)
  • Very flexible, smaller and more complex gTLDs and ccTLDs

• 2 new gTLD market entrants
  • Modern, high quality software but limited experience

• 2 small software development teams
  • Local Staff with 15 years experience in domain names – build using open source software, public cloud services and recruit staff to operate
Request for Tender process

• Draft Technical Specification published for comment – 26 August 2017
  • Summary of changes to Technical Specification published 21 September 2017
• Request for Tender (RFT) issued – 1 September 2017
• RFT closed – 3 October 2017
Value for Money

• Achieving **value for money** is the core rule of the Australian Government Procurement Rules

• Requires consideration of the financial and non-financial costs and benefits

• Non-Financial – 65% weighting

• Financial – 35% weighting
Non-Financial criteria

• Technical and Operation Capability (35%)
• Project Goals (10%)
• Risk management (10%)
• Financial Capability (10%)
RFT Respondents

• 9 Respondents

• All strong technically and operating at significant scale

• All proposing to set up primary and secondary platforms in Australia that are geographically separated

• All proposing to set up a team in Australia

• Operate 9 of the top 20 TLDs representing over 43 million names
Afilias selected

- Highest score for non-financial criteria around technical and operational capability
- Close to average price for financial criteria
- Overall best value for money
Transition between Registry Operators
Transition progress

• Largest ever migration of a TLD – 3.1 million names
• 6 month process
• Test environments for registrars delivered in March (phase 1) and April (Phase 2) 2018
• Went live with services using data from Neustar Asia Pacific – DNS name services and WHOIS services in May 2018
• Transition completed 1 July 2018 on schedule
Transition Approach

• Focussed on International and Australian best practice standards with respect to the transition of a major IT service provider

• Particular focus on risk management and security

• Extensive testing from Feb 2018 to June 2018
  • auDA testing team
  • Registrar testing
  • Independent security penetration testing of each system
    • test and production
Relevant international standards

- ISO 31000 – Risk management
- ISO 27000 – Information Security Management Systems
- ISO 22301 – Business Continuity Management Systems
- ISO 20000 – Service Management
- ITIL Service Operation – 2011 edition
Relevant Australian Security standards

- Australian Signals Directorate – Essential Eight
  - Application Whitelisting
  - Patch applications
  - Configure Microsoft Office macro stings
  - User application hardening
  - Restrict Administrative privileges
  - Patch Operating Systems
  - Multi-factor authentication
  - Daily backups

- Australian Gov’t Information Security Manual (ISM) – Protected level
Independent audits

• Multiple independent reviews of security prior to transition
  • Ernst & Young - risk assurance – weekly review
  • Pivot Point Security – appointed by Afilias for penetration testing
  • Foresight IT Consulting – appointed by the Aust. Government to do an independent review of security processes for transition
  • Australian Government security agencies (ASD, ASIO, ACSC) did their own separate review of security
  • Regular meetings with the auDA Board’s Security and Risk Committee
Crisis Management

• Crisis management plan developed with input from Afilias, auDA, and Australian Government security agencies

• Multiple crisis scenario exercises run with the participation of Afilias, auDA, and Australian Government security agencies, with auDA Board observers
Smooth transition

• Transition completed within a 24 hour period starting Saturday 30 June and completing early in the morning on Sunday 1 July

• DNS services progressively transitioned over a 3 month period with zero downtime

• Ausregistry/Neustar completed all transition tasks ahead of schedule on 30 June 2018

• auDA and Afiliias team worked together in Melbourne on testing production systems before go-live

• Afiliias technical team worked from Toronto

• Registrars immediately resumed operations on 1 July 2018
Outcomes
Key outcomes

• Lower registry fee – 10% drop in wholesale prices for registrars
• Registry Data to remain in Australia
• DNS services in all Australian capital cities
  • Perth, Adelaide, Melbourne, Hobart, Canberra, Sydney, Brisbane, Darwin
• Pro-active security monitoring – daily inspection of new names
• Extensive data collection for advanced data analytics to move to proactive compliance management and development of business information for registrars
• Focus on improved security and performance