

# **Institutional Life-Cycles in ccTLD Governance: Lessons from the case of .au**

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Presentation to the *Governance of the Domain  
Name System and the Future Internet: Legal,  
Economic and Political Challenges Conference*

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# Overview

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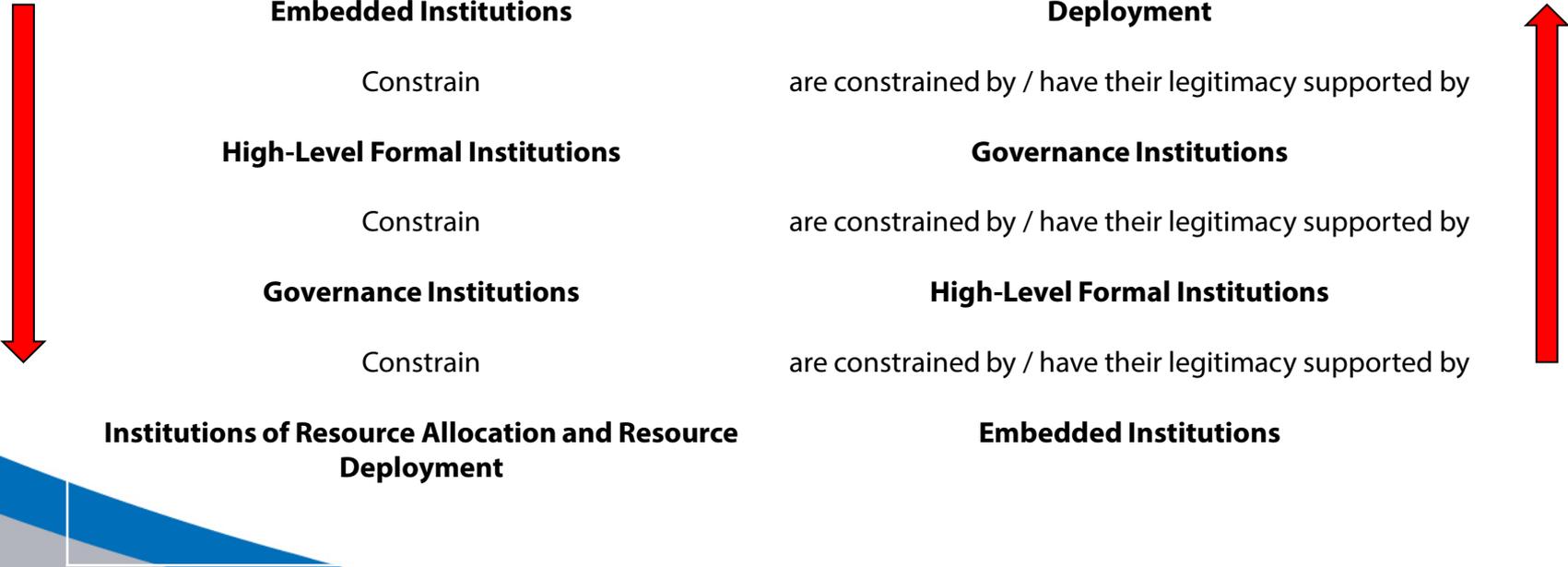
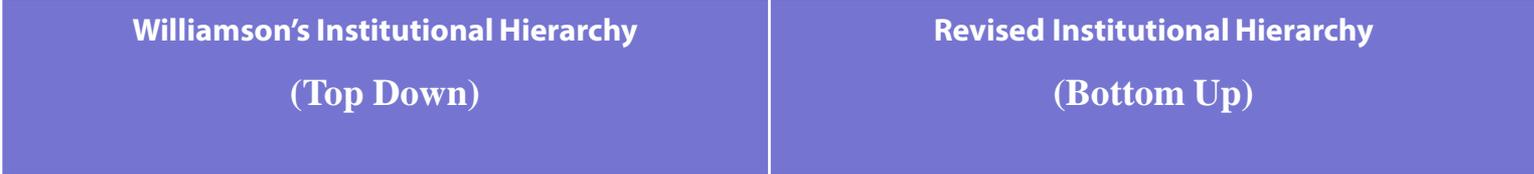
# New Institutional Economics Theory (NIE)

- Meta-theory which integrates insights from the disciplines of law, politics, economics, sociology, history
- Four Nobel-Prizes have been awarded to contributors to this approach: Ronald Coase, Douglass North, Oliver Williamson and Elinor Ostrom
- NIE relaxes several of the (criticised) assumptions of neoclassical Law and Economics – notably it recognises bounded rationality and information asymmetry
- Can be situated with the institutionalist wing of the school of New Legal Realism

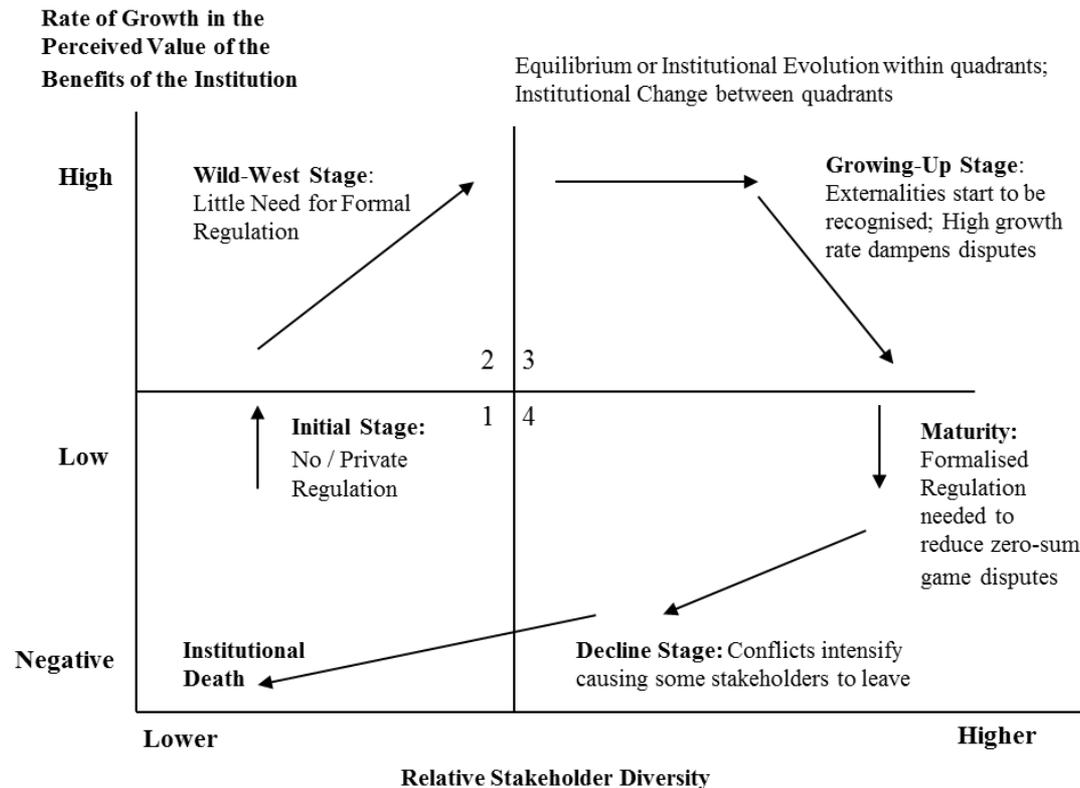
# NIE Basics

- Institutions are “human created constraints on behaviour”
- The Institutional Environment
- Perceived Legitimacy and Stakeholder Strategies can lead to:
  - an institutional equilibrium (sustaining the status quo)
  - Institutional evolution (gradual, orderly transition)
  - Institutional change (sudden, disruptive change & dominant stakeholder/s supplanted)

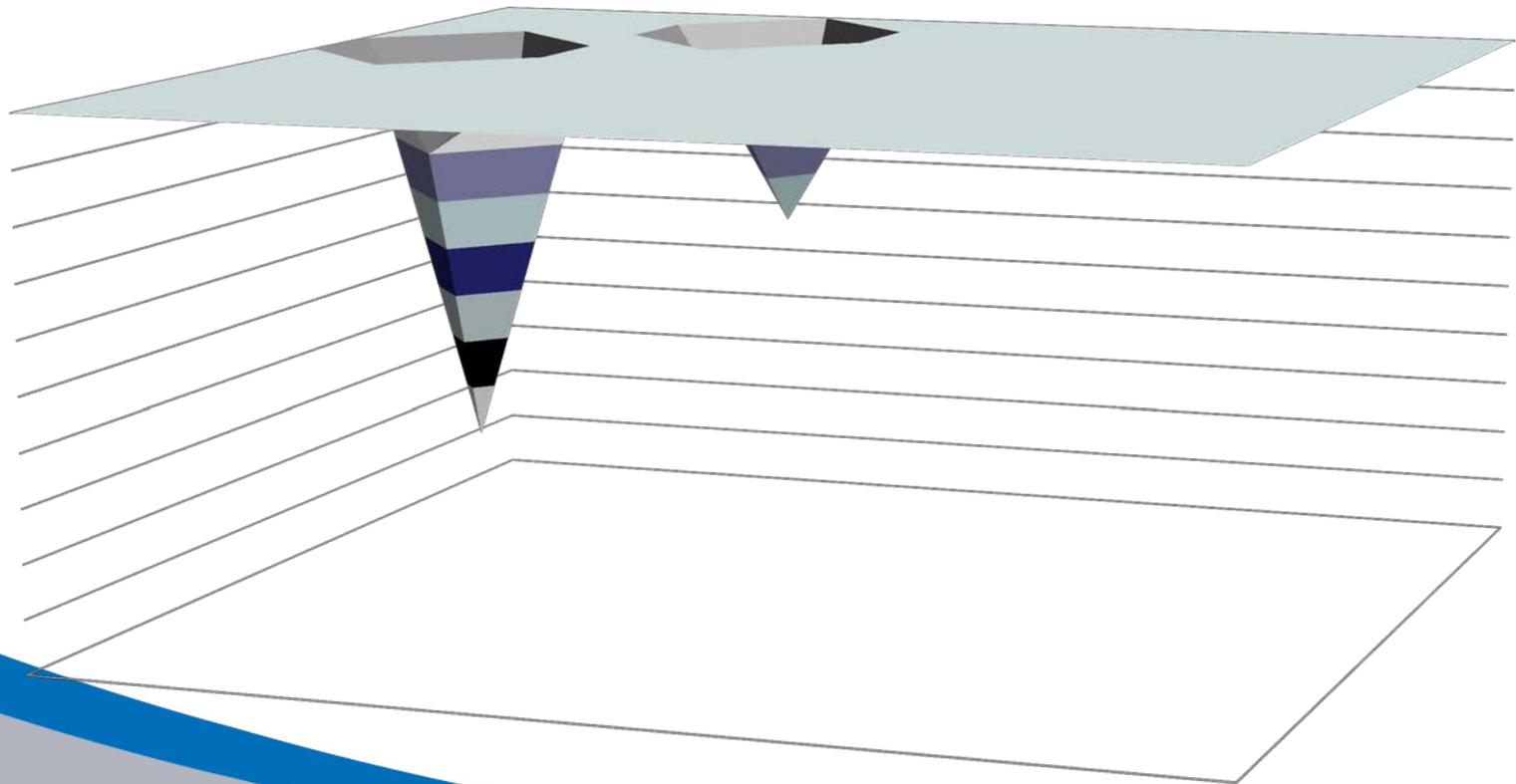
# A Revised Institutional Hierarchy



# Proposed Institutional Life-Cycle Model (basic version)



# Perceived Legitimacy of an Institution and a proposed alternative institution (on the z-axis of the Institutional Life-Cycle)



# Analysis of the Early History of the DNS Root

- Arguably, some unwritten ccTLD delegations may be implied-in-fact contracts regulated by Californian law
- Jon Postel was likely acting as an agent of the USC-ISI when delegating the right to manage ccTLDs
- Fortunately, Californian law has many relevant precedents – courtesy of Hollywood:
  - See: *Desny v Wilder* (1956) and numerous subsequent decisions, including:
    - *Donahue v Ziv Productions* (1966);
    - *Fink v Goodson-Todman* (1970);
    - *Forest Park Pictures v Universal Television* (2012)

# The 4th ccTLD Delegation - .au

- **1985:** .us (to Postel himself) and .uk were the first ccTLDs delegated
- **1986:** .il and .au were the third and fourth ccTLDs delegated respectively
- Robert Elz responded to an announcement posted by Jon Postel seeking applicants
- At the time of this delegation, RFC 973 regulated TLDs – RFC1591 was still 8 years away

# Institutional Formation in .au

- In 1986, Elz created several 2LDs under the .au ccTLD and outsourced their management to a variety of different people, including:
  - Warwick Jackson (.com.au)
  - Geoff Huston (.gov.au and .edu.au)
  - himself (.org.au)
- Institutional Equilibrium for about 6-7 years in Quadrant 1 of the Life-Cycle due to low rate of growth in perceived benefits and low stakeholder diversity
- If other competing network design proposals for the Internet had succeeded, then the Elz-managed .au ccTLD may have stayed in this equilibrium (accident of history)

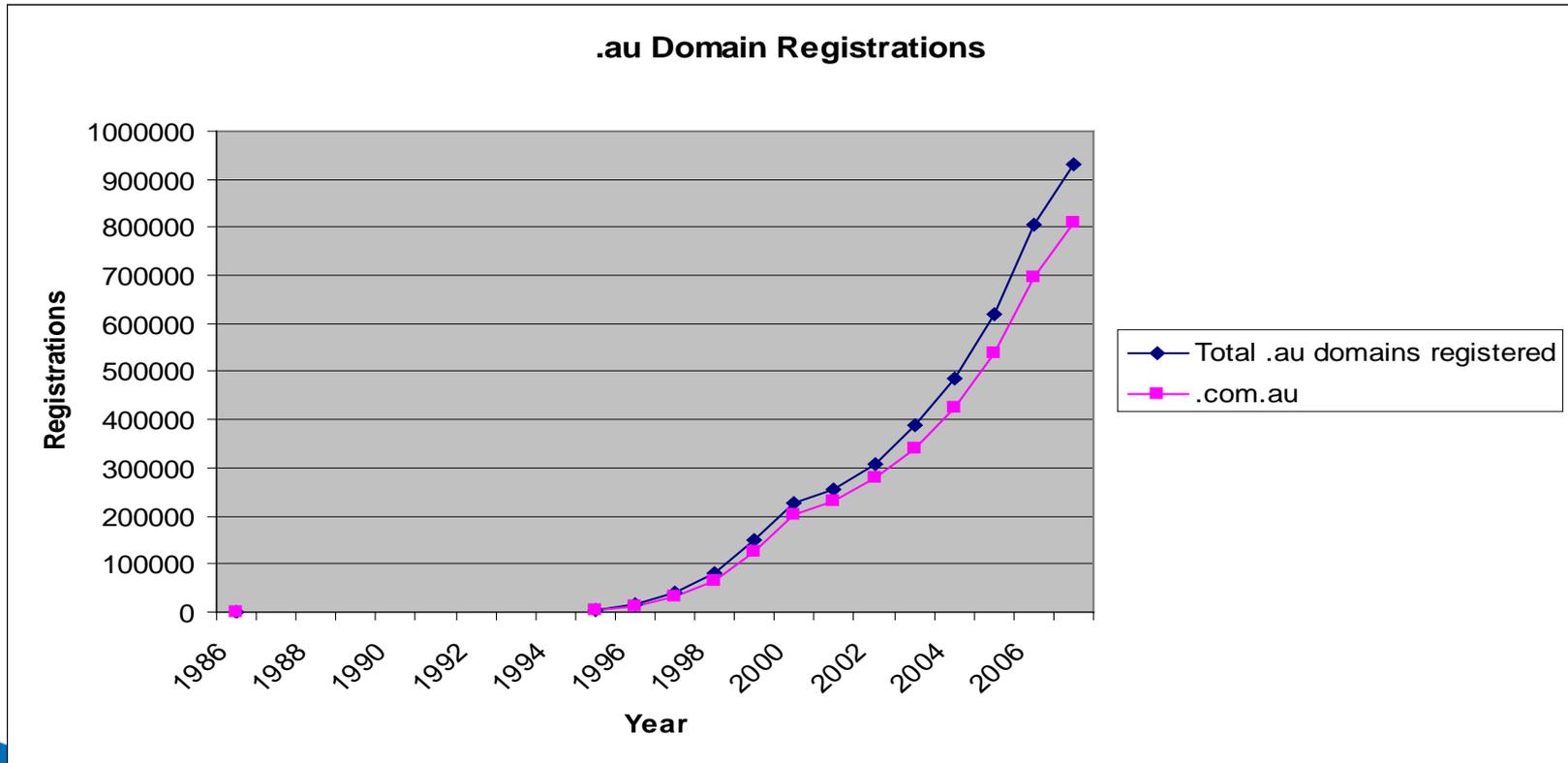
# Institutional Formation in 2LDs

- **1986 – 1994:** the .au 2LD manager established policies for their respective domains, without controversy, for example: *.com.au*
  - Warwick Jackson decided that each business could only have one domain (not one for each brand)
  - As the Australian Trade Mark office's database was not searchable online at the time, Trade Marks were not a sufficient basis for registration
  - Dictionary terms or generic words were not permitted
  - Some notable slipups: News Corp was able to register *news.com.au*

# Failed Attempts at Institutional Change

- **1994:** Australian Internet Registry (AIR)
  - Geoff Huston proposed a new body that would control distribution of a block of IP addresses which had been allocated to Australia
  - Poorly timed and implemented: press leak whilst Huston was on holidays led to a frenzied reaction by other stakeholders
- **1996-98:** Australian Domain Name Administration (ADNA)
  - First attempt to replace Elz as .au ccTLD manager
  - Stakeholders unable to agree on an alternative, lacked sufficient financial resources, policy development and consensus-building skills
  - No government involvement in ADNA

# Growth in demand for .au domains, particularly in the com.au 2LD



# Institutional Evolution

- **1995:** Warwick Jackson hands back to Robert Elz the right to manage the com.au 2LD
- **1996:** backlog of applications to register free com.au and org.au domains leads to a front-page article in the Australian Financial Review criticising Elz and his employer, the University of Melbourne
- Under pressure from his employer, Elz responds by granting a de facto monopoly in the form of a 5-yr licence to process .com.au applications to a subsidiary of his employer, MelbourneIT Pty Ltd
- **1997:** Melbourne IT introduced a \$125/2yr registration fee for com.au
- **1999:** Soaring demand during the dot-com boom enriches MelbourneIT, so the University of Melbourne floats it on the Australian Stock Exchange
- The Computer Science Department (where Elz worked) of the University receives none of the float proceeds. Float was under-priced delivering far more profit to the preferred clients of the advisory firms than to the University

# Domestic Efforts towards Re-delegation

- **1999-**: When ADNA failed, the Australian government intervened
  - National Office of the Information Economy CEO Paul Twomey heavily involved to coordinate stakeholders
  - New body formed from ADNA's demise: auDA
  - NOIE provided auDA with \$100 000 in cash, seconded a policy officer and defined the criteria that auDA had to satisfy in order to gain government support for a re-delegation
  - Co-regulatory structure: amendment to the Telecommunications Act to give the Australian government the power to intervene and give instructions if .au manager failed

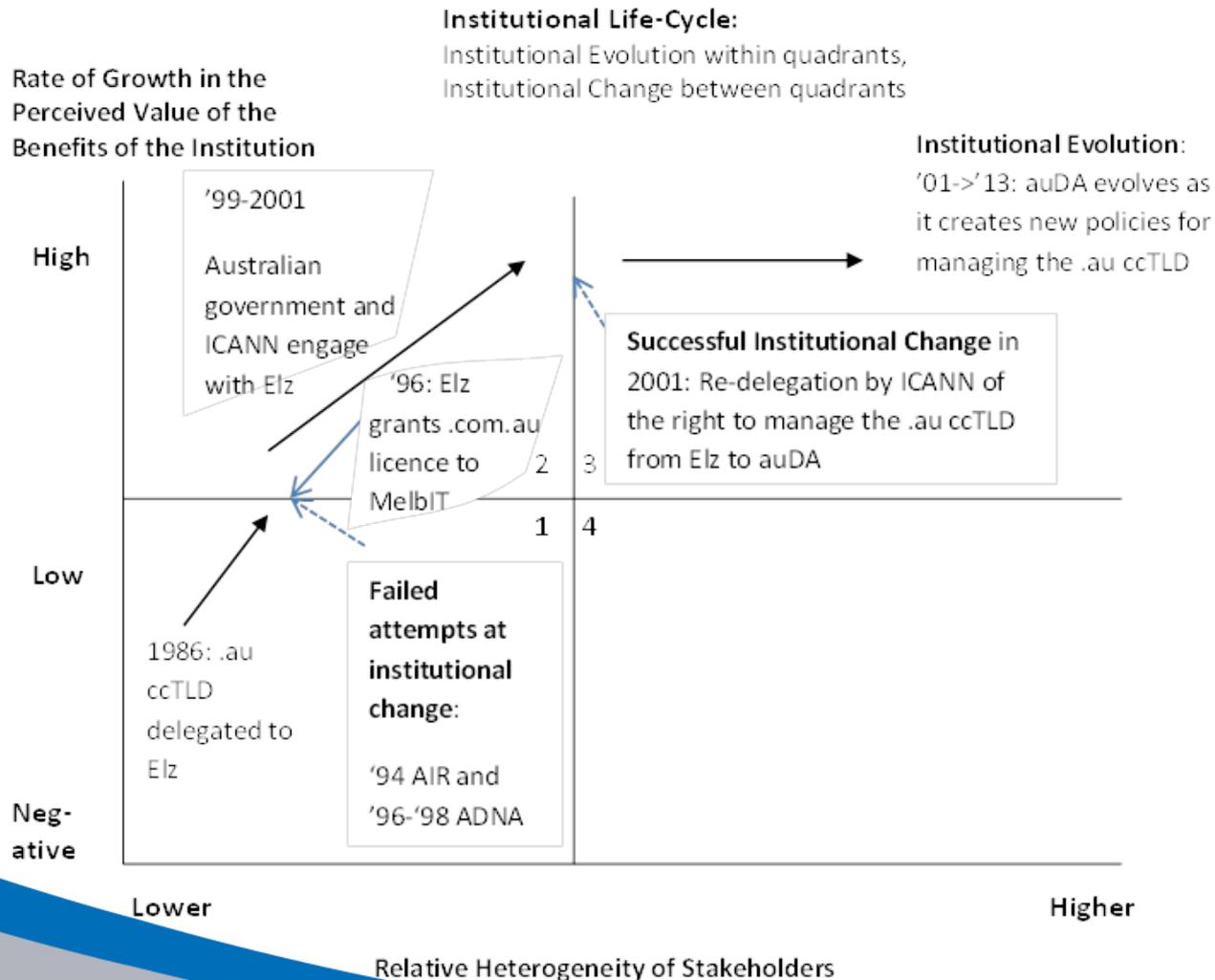
# International Efforts Towards Re-delegation

- Paul Twomey of NOIE was the founding chair of ICANN's Government Advisory Committee (GAC)
- Australia, Britain and French governments faced issues with remote territory ccTLDs
- Used GAC to develop a Policy on ccTLD re-delegation that declared ccTLDs to be "national resources" and government viewpoint weighted higher
- **2001:** IANA then applied this Policy to re-delegate the right to manage the .au ccTLD from Elz to auDA at the request of the Australian government – over Elz's objections

# Successful Attempt at Institutional Change

- Several factors influenced auDA's success in achieving institutional change:
  - Elz's institutional legitimacy weakened through perceived "ongoing crisis"
  - Greater resources available, including decisive support from Australian government
  - Alliance with Australian government: more diverse stakeholders involved
  - Forum-shifting strategy – from purely domestic into the international domain name regulatory system
  - ICANN's GAC re-wrote the rules for ccTLD re-delegation, so as to make the role of government more powerful

# Interpreting this Regulatory History of .au



# Conclusion

- The events that occurred in the history of the .au ccTLD were not random or unstructured
- The Institutional Life-Cycle model provides a useful tool through which to understand and critique events in the regulatory history of the .au ccTLD
- Understanding an institution's history is vital for stakeholders who seek to engage with that institution going forward
- Institutional analysis can assist stakeholders to better understand why there might be pressure for evolution / change and how to devise strategies to promote / defend against those events

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