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Managing the Australian Government's Transition to IPv6

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How did we start the process?

- 2006: Chief Information Officer Committee (CIOC) requested AGIMO develop IPv6 Transition Strategy.
- April 2007: Established IPv6 Reference Group.
- December 2007: CIOC endorsed Transition Strategy.
- January 2008: Community of Expertise (CoE) established to assist agencies and consider whole-of-government issues,



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What has happened in 2008?

- Strategy disseminated widely.
- CoE met regularly.
- ISPs and Telcos surveyed.
- Agencies surveyed.
- Increased media attention.



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Lessons Learned

- Sense of urgency needs to be maintained.
- Seek regular updates.
- Industry and Government need to cooperate better.
- It is not as easy as it sounds.



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Revised Strategy

Goal: To more closely align with the implementation timelines of industry.

Why ?

- 2009 -11 is when ISPs and Telcos are looking to ramp up their IPv6 capability.
- Revised Strategy allows agencies to take advantage of this timing and industry developments.



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Revised Strategy - Continued

How?

- Redefinition of milestones.
- Increased focus on achievement of milestones.
- Agency agreement.
- Increased regular reporting.



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What has underpinned the revised strategy?

- Maintaining interoperability.
- Maintaining security.
- Leveraging agency ICT refresh cycles.
- Working with industry.
- A planned, controlled, and fiscally responsible approach.



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Key elements of the revised strategy

- Three Stages of the Strategy:
 1. Preparation.
 2. Transition.
 3. Implementation.
- Timing is now more closely aligned with industry upgrades.
- More practical milestones.
- Quarterly reporting.
- Consolidated reports.



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Implementation of the Revised strategy

- Preparation stage completed by end 2009:
No change to existing strategy.
- Transition stage completed by end 2011:
Brought forward from end 2012.
- Target for IPv6 implementation by end 2012:
Brought forward from 2013-2015.



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Preparation stage

To be completed end 2009

Major activities/milestones:

- Procurement Policy review;
- Stocktake of current ICT infrastructure;
- Stocktake of critical applications; and
- Possible installation of IPv6 capable equipment.



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Transition stage

From start 2010 to end 2011

- Major activities/milestones:
 - Upgrade of ICT hardware;
 - Upgrade of critical applications;
 - Upgrade of operating systems;
 - Upgrade of ICT gateways; and
 - Network security certified.



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Implementation stage

From start 2011 to end 2012

- Major activities/milestones:
 - Confirmation of agency readiness;
 - Finalise whole-of-government implementation approach and schedule;
 - Notification to agencies to enable IPv6-capability; and
 - Report on completion of Strategy.



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Governance

- Chief Information Officer Committee responsible.
- Community of Expertise to guide and assist.
- Agencies responsible for implementation locally.



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Observations

- Standards need to be agreed.
- Skills/ training needs to be ramped up.
- Stocktake and reporting tools need to be available.
- Management tools need to be available.
- Address Portability needs to be discussed.
- IPv6 messages need to be clear and consistent.
- Scenarios need to be developed.
- Opportunity for the industry to work more collaboratively.



Scenarios and Solutions?

- Traveller in Asia tries to log onto an Australia based tourism resource website using IPv6 internet café. What happens?
- A business in China tries to view an Australian company website, Chinese company is IPv6 – Australian company is IPv4. What happens?
- Australian business sends information update to customers, some of whom are with IPv6 ISPs. What happens?
- Australian business tries to send information to counterpart in Asia. The Australian business is IPv4 – Asian counterpart is IPv6. What happens?



QUESTIONS?