



# IPv6 in Australia

Tony Hill



Internet Society of Australia  
IPv6 Special Interest Group  
IPv6 Forum Downunder  
[www.isoc-au.org.au](http://www.isoc-au.org.au)

# Tony Hill

- ISOC-AU President – 2001 ongoing
- National ICT Industry Alliance  
– Chair 2005-07
- Australasian Research Management Society  
- President 2007
- Capital Hill Consulting Pty Ltd  
– founder 1999 ongoing
- IPv6 Now Pty Ltd – founder 2007 ongoing

# Mike Biber

- IPv6 Forum Downunder President  
– 2001 ongoing
- AARnet IPv6 Working Group  
– Chair 2005-06
- Asia Pacific Networx Pty Ltd – CEO  
– 1992 - 2007
- Gibson Quai – AAS Pty Ltd  
– Senior Consultant 2007 ongoing

# Australian IPv6 Timeline

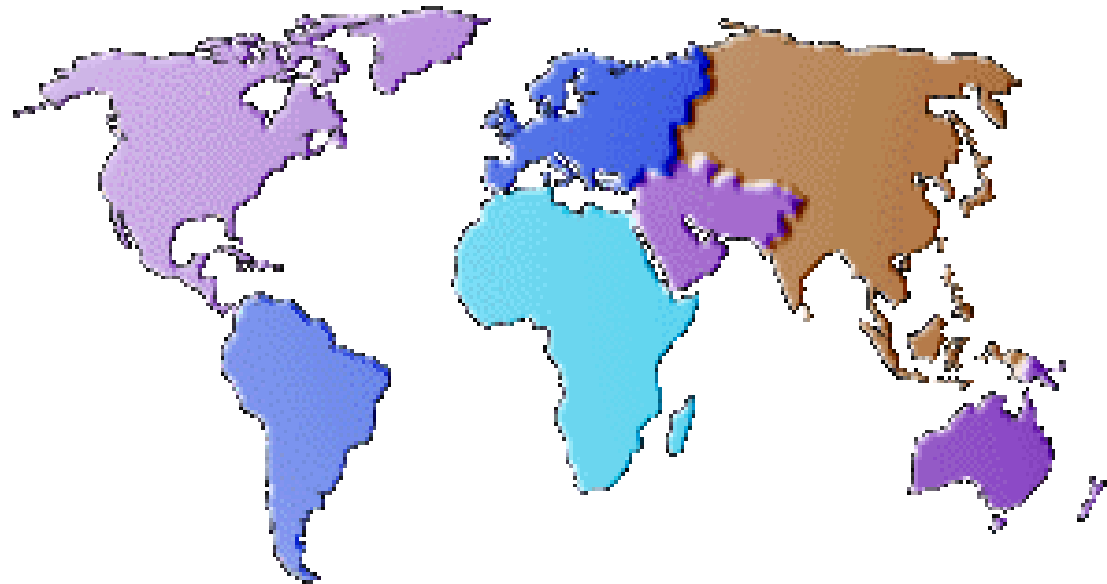
- **pre 2005** – low level interest, ISOC-AU watching brief, AARNet operations, GRANGENET
- **2005** –  
ISOC-AU IPv6 Special Interest Group  
National ICT Industry Alliance endorsement  
Australian IPv6 Summit  
IPv6 for e-Business (Aust Government \$)
- **2007** – IPv6Now established, Aust Govt Transition
- **2008** – IPv6Now powers StudentNet – 3rd largest education IPv6 network in world
- **2009** –  
VIC6 testnet established, Internode IPv6 over ADSL

# Key Australian Strategies

- Central coordination: ISOC-AU SIG jointly with IPv6 Forum
- Industry first:  
National ICT Industry Alliance - 25 members
- Aust Government next – initial funding
- Australian awareness – IPv6 Summit
- Practical balanced information:  
IPv6 for e-Business, [ipv6.org.au](http://ipv6.org.au)
- Practical demonstration: VIC6, [vic6.net](http://vic6.net)

# Why should Australia be interested in IPv6?

- Trading and strategic reasons
  - Japan
  - Korea
  - China
  - USA
  - Europe
  - India



# IPv6 in Australia

- Building management
- Sensor networks
- Supply chains
- Emergency services
- Consumer electronics
- Automotive industry
- Education collaboration services
- Internet users end-to-end

# Who is already engaged with IPv6?

- ISOC-AU IPv6 Special Interest Group joint with IPv6 Forum
  - Australian IPv6 Summit
  - IPv6 for e-Business
- Lead sectors in Australia
  - Research & Education, Defence, Government
  - Victorian government study & testnet
- National ICT Industry Alliance from 2005
- Australian Government support from 2005

# What is happening with IPv6 in Australia?

- IPv6 Info – IPv6 for e-Business
  - [www.ipv6.org.au](http://www.ipv6.org.au)
- IPv6 Summits
  - Next 17-19 Nov 2008
- ISOC-AU IPv6 Special Interest Group
  - IPv6 Oz Tech list
- Service Providers
- Carriers & ISPs



The screenshot shows the homepage of the 'IPv6 for e-Business' website. The header features the title 'IPv6 for e-Business' in blue and red, with the Australian Government logo and 'Department of Communications, Information Technology and the Arts' on the right. A navigation bar includes links for Home, Background, Mapping, Enabling, Awareness, Infrastructure, Standards, and Contact. The main content area is divided into three columns. The left column lists partner logos: ISOC-AU, .auDA, AEEMA, ADIESA, and Builders Net. The middle column has a heading 'Internet Protocol v6 is on the way!' followed by a paragraph about IPv6's potential and a bulleted list of benefits: almost unlimited IP addresses, built-in security protocols, simpler address administration, widespread mobility support, and Quality-of-Service capabilities. Below this is a link to 'Click here for more about the basics of IPv6'. The right column has a heading 'Please help us by completing the Australian IPv6 Readiness Survey' and a sub-heading 'IPv6 Standards', with text mentioning the Internet Engineering Task Force and a link to 'IETF IPv6 working groups and documents'. At the bottom right, there is a 'Useful Sites' section listing 'The IPv6 Forum', '606.net Community Portal', 'The IPv6 Portal', 'IPv6DISS', and 'IPv6 Forum Downunder'.

# Australia's opportunities with IPv6?

- “Wait & see”...waiting for IPv4 exhaustion...



# Innovation and IPv6?

...OR...

- Develop IPv6 in new larger networks
  - Our new networks should have IPv6  
eg: FTTx, laptops in schools
  - IPv6 should be considered for **all** new infrastructure
- Use IPv6 as “Platform for Innovation”
  - Creating new business opportunities:  
ICT, other sectors

# What do we need to do?

- Learn & develop skills
- Transition planning
- Infrastructure projects
- Supportive government policies
  
- ...and start to use IPv6 in your own networks

# and now a word from our sponsors!

If you object to commercial messages,  
cover your eyes now:

This presentation is brought to you by the letters  
**I**, **P** and **V** and the number **6**

...as well as IPv6Now Pty Ltd





# Business Areas

All you need to get started in IPv6Now:

## PLANNING

- Strategic Analysis
- Transition Planning
- International alliances
- Joint product development

## IMPLEMENTATION

- Training
- Operations
- Services
- Product supply and integration



# IPv6Now Major Implementations

- **VIC6** – industry testnet for IPv6
  - up to four core nodes: Ballarat, Bundoora
  - industry nodes: Centre for Health Innovation, Centre for Eye Research Australia
  - virtual access via IPv6Now tunnels
- **StudentNet** – 7K school students in NSW
- **Freenet6** – 1 of 3 nodes worldwide, 5K users
  - gogoNet: [gogonet.gogo6.com](http://gogonet.gogo6.com)
- **Try6** – free, single IPv6 address tunnels

# Key References

- [www.ipv6.org.au](http://www.ipv6.org.au)
- [www.ipv6.org.au/summit](http://www.ipv6.org.au/summit)
- [www.ipv6now.com.au](http://www.ipv6now.com.au)
- [www.vic6.net](http://www.vic6.net)



# Questions?



- Internet Society of Australia

- [www.isoc-au.org.au](http://www.isoc-au.org.au)
- [president@isoc-au.org.au](mailto:president@isoc-au.org.au)



- IPv6 Forum

- [www.ipv6forum.org.au](http://www.ipv6forum.org.au)
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