42nd CISP Meeting

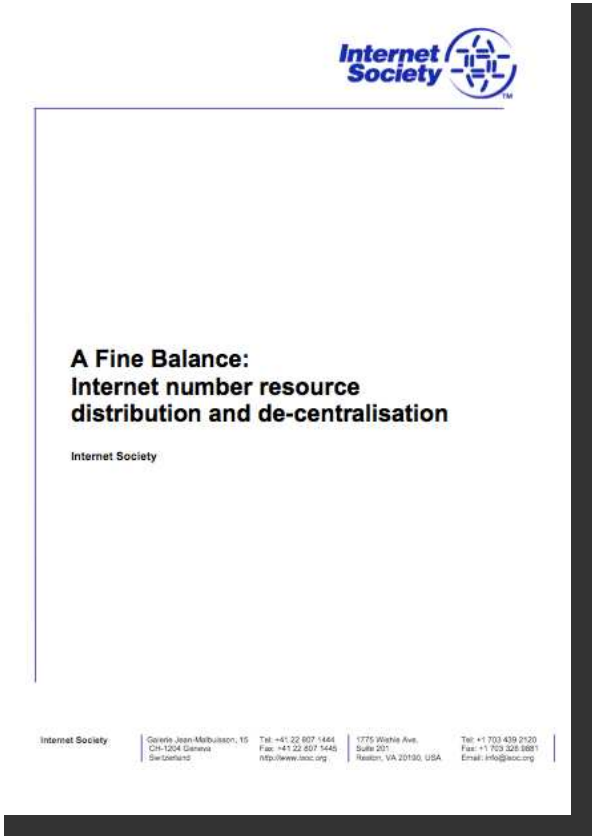
Some relevant ISOC activities

Mat Ford
ISOC Standards & Technology

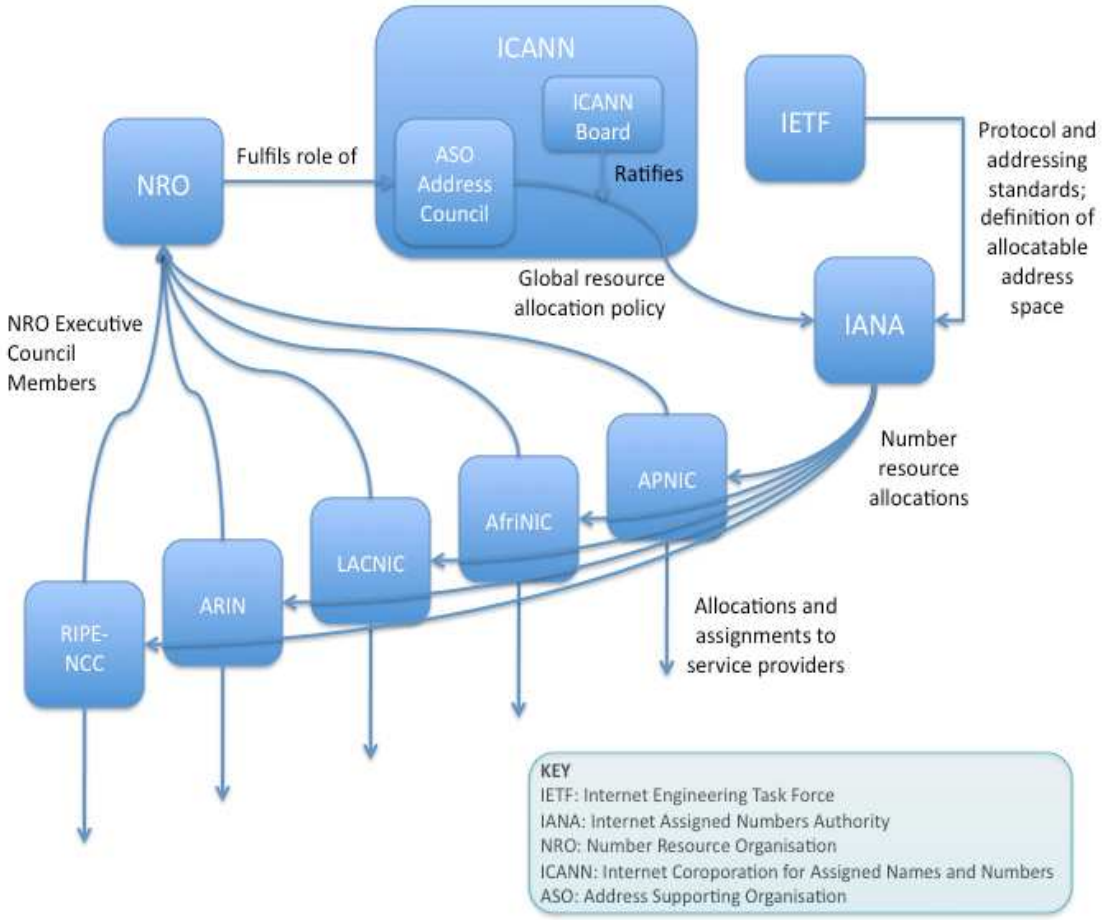
Internet Society
InternetSociety.org

A Fine Balance: Internet number resource distribution and de-centralisation

- Intended audience
  - Anyone interested in
    - History of number resource distribution
    - Current practice
    - Considerations to bear in mind when contemplating amendments
- Internet number resources
  - IP addresses, AS numbers
- Motivations for decentralisation to 5 RIRs
- Experience of APNIC in particular with additional levels of decentralisation
  - Fragmentation of address space
  - Policy dilution and confusion



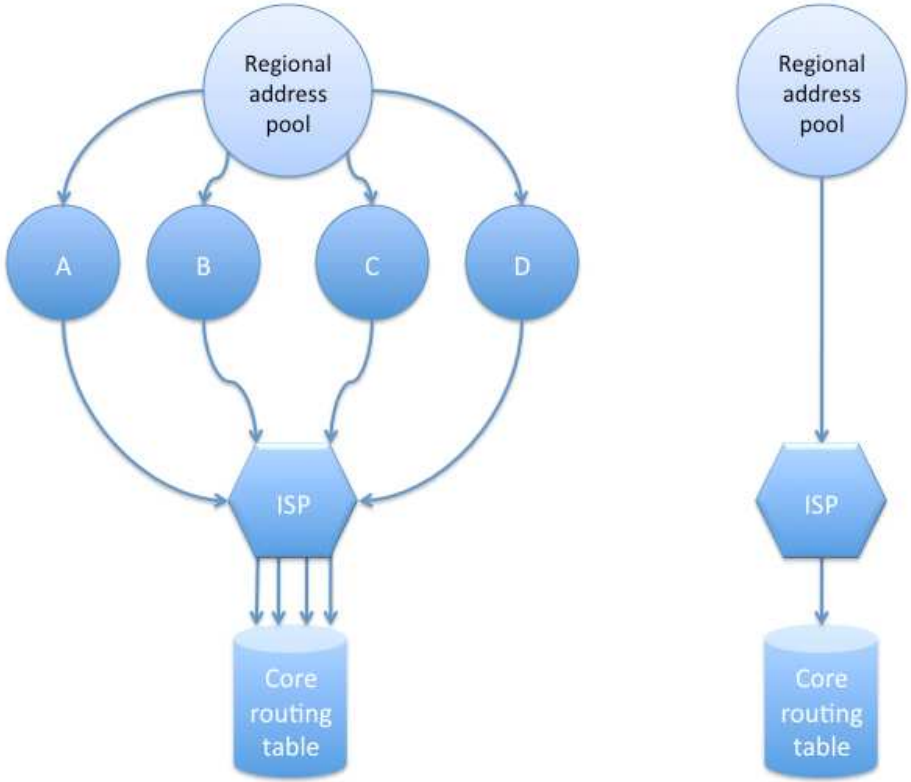
Number resource distribution organisational relationships



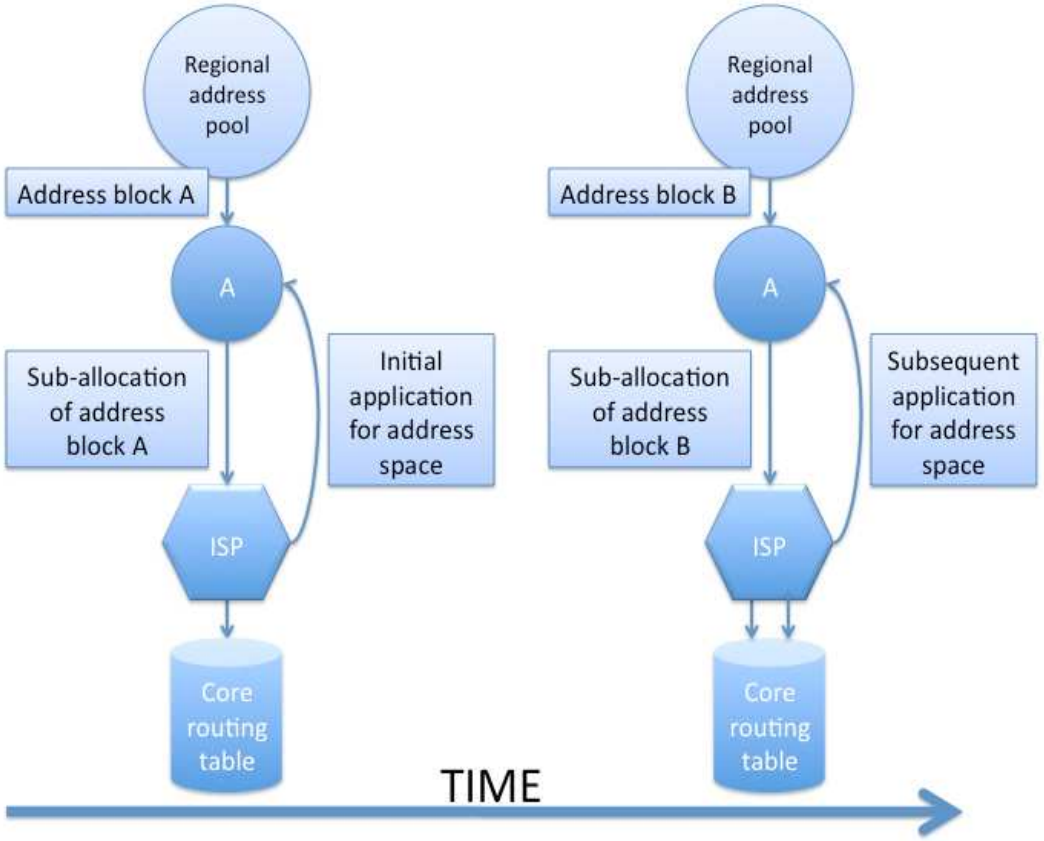
A Fine Balance: Internet number resource distribution and de-centralisation

- Allocation function and policy have evolved over time
- Regional devolution is not an end in itself
- Careful balance and *co-ordination* required to ensure
  - Aggregation
  - Conservation
  - Registration
- Resource distribution isn't 'fire-and-forget'
  - Administrative machinery and ongoing maintenance
  - Maintenance critically informed by operational experience

De-centralisation increases pressure on the routing function



De-centralisation causes de-aggregation over time

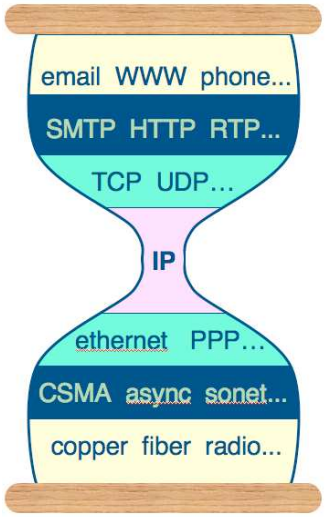


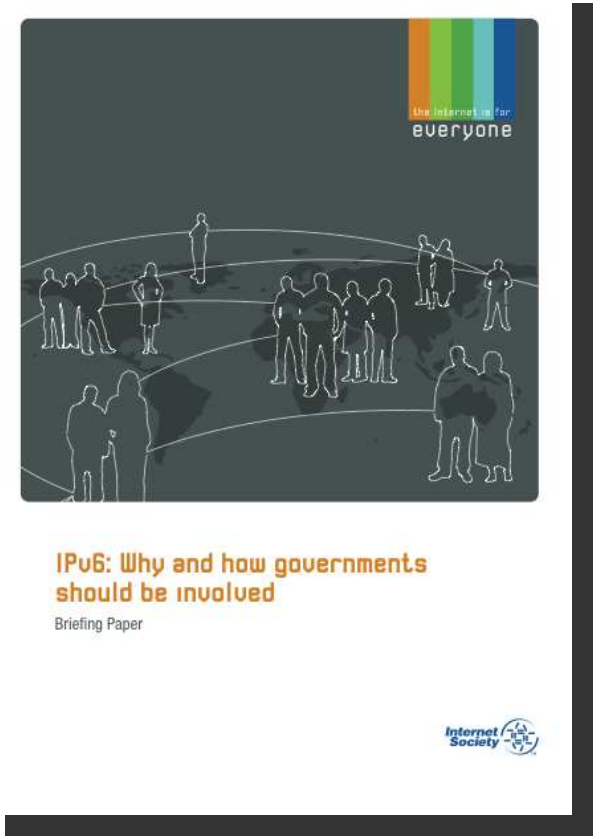
A Fine Balance: Internet number resource distribution and de-centralisation

- Bi-directional commitment between resource distributors and resource users
- Resource distribution is essentially an operational engineering function that requires careful co-ordination and consensus building to succeed
- Network operators incentivised to partner with operationally knowledgeable organisations
- ISPs will choose not to interconnect with operators that disregard this reality
- Proposals to either centralise or further de-centralise the resource distribution function need very careful consideration

IPv6: Why and how governments should be involved

- Seamless addressing at the network layer is *as important as universal broadband provision*
- Ensure the future stability and viability of the Internet





IPv6: Why and how governments should be involved

- Governments have a role to play in
  - Working with private sector to increase education and awareness
  - Communicating the importance of IPv6 adoption and seamless global addressing
    - Business continuity
    - National economies
    - E-services
  - Leading by example
- OECD has started to explore recommendations for Governments in DSTI/ICCP/(2007)20
  - These recommendations are still pertinent today.

References

- A Fine Balance: Internet number resource distribution and de-centralisation
  - http://www.isoc.org/pubpolpillar/docs/address-allocation_200906.pdf

- IPv6: Making room for the next billion Internet users
  - http://isoc.org/ipv6/

- Economic considerations in the management of IPv4 and in the deployment of IPv6
  - http://www.oecd.org/dataoecd/7/1/40605942.pdf

the Internet is for everyone

InternetSociety.org

info@InternetSociety.org

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