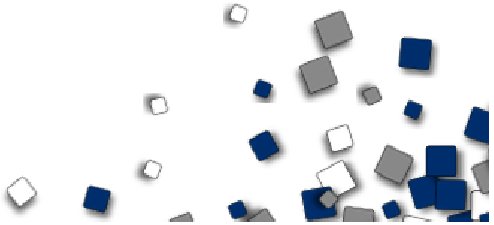
IPv6 Operations and Transitional Issues

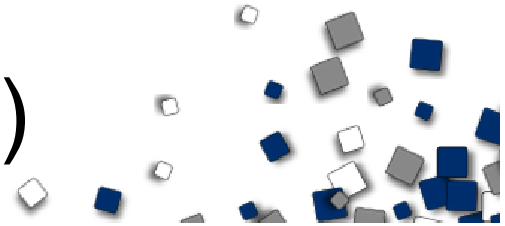
Moderator: Danny McPherson



Panelists

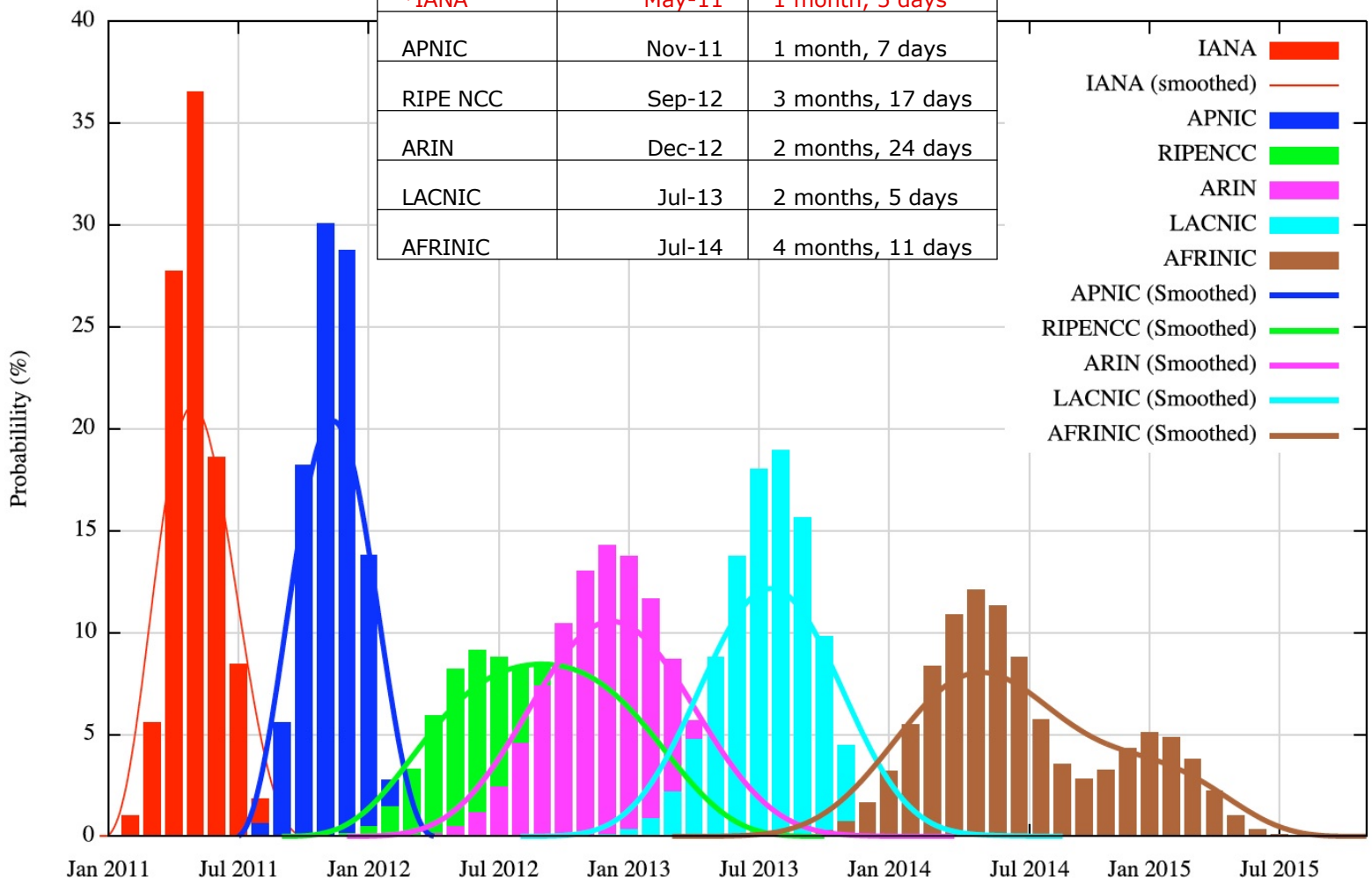
- John Brzozowski (Comcast)
- Matsuzaki Yoshinobu (IIJ)
- Ms. Huiling Zhao (China Telecom BRI)
- Bill Huang (China Mobile)
- Xiaodong Lee (CNNIC)
- Jari Arko (Ericson)

- Bonus track: Tina Tsou (Huawei)



Numbers Exhaustion Probability v. Date

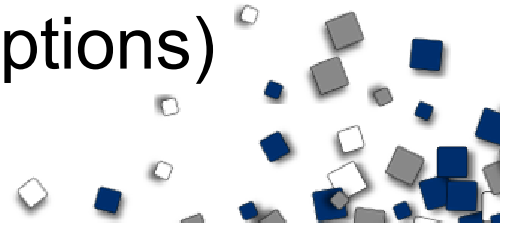
	EXHAUSTION DATE	
RIR	**MEAN**	**STDDEV**
*IANA	May-11	1 month, 5 days
APNIC	Nov-11	1 month, 7 days
RIPE NCC	Sep-12	3 months, 17 days
ARIN	Dec-12	2 months, 24 days
LACNIC	Jul-13	2 months, 5 days
AFRINIC	Jul-14	4 months, 11 days



Source: Geoff Huston (APNIC)

IPv6 Related Work in the IETF

- Basics: the specifications for IPv6 – Done!
- Maintenance – 6MAN, V6OPS
  - Bug fixes, minor extensions, operational guidance
  - Very similar to what we do with IPv4
- Addressing new deployment requirements
  - Ongoing!
- New features
  - Usually IP-version agnostic
  - (There are exceptions such as ROLL options)
  - Sometimes related to feature parity



Deployment & Transition Work

- Shifting focus from basics to co-existence and specific deployment scenarios
- But most of the deployment effort is practical – vendors, providers, planning, configuration
- Past and current IETF work
  - Dual stack (RFC 4213) still typical deployment model
  - Tunnels still needed (mesh, 6rd, … – SOFTWIRE)
  - Keeping IPv4 alive while at the same time enabling IPv6-only provider networks (ds-lite – SOFTWIRE)_
  - Enabling networks to use IPv6 before all other networks use it as well (nat64 – BEHAVE)
  - Deployment guidelines (V6OPS, operator forums, ...)_