

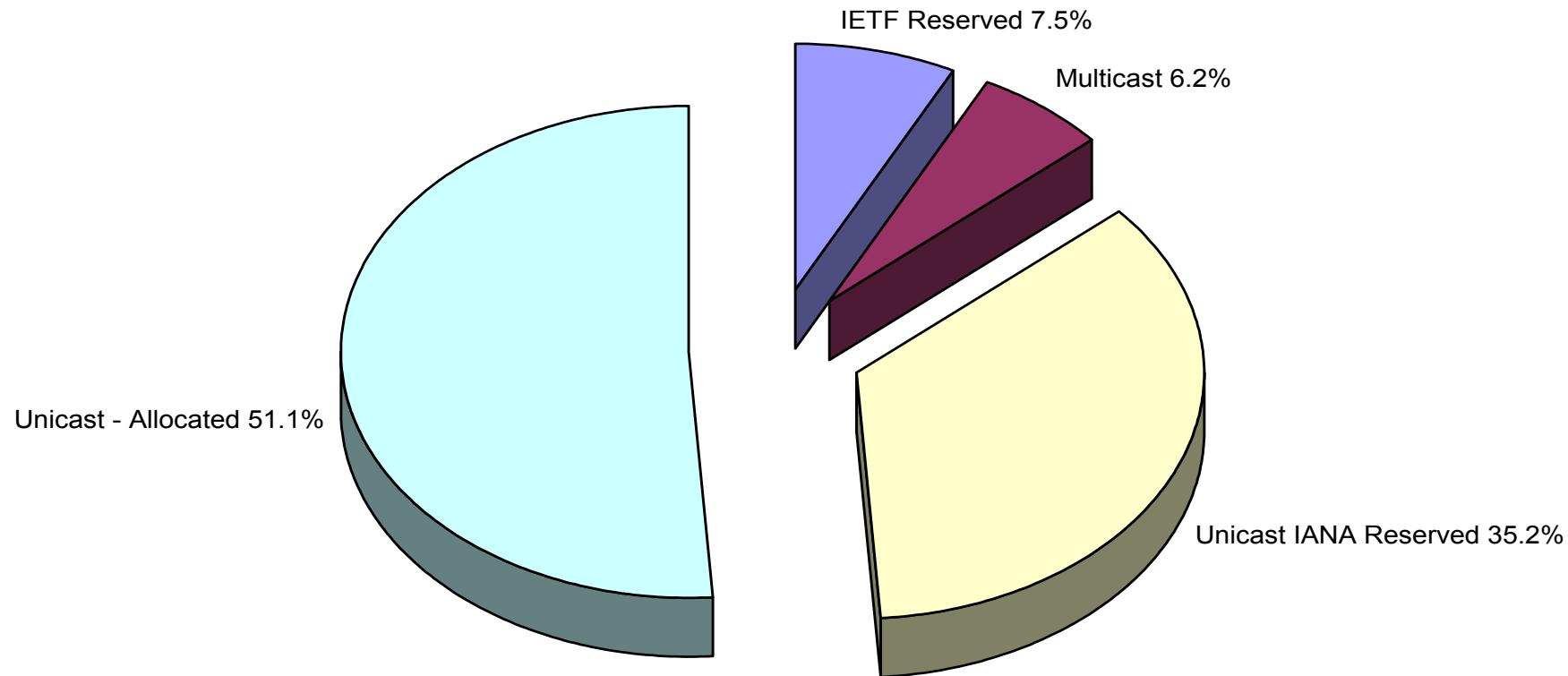
IPv6 Address Allocation and Assignment

Axel Pawlik

Outline

- Allocation Statistics
- Getting IPv6 Addresses

IANA – Current Status IPv4

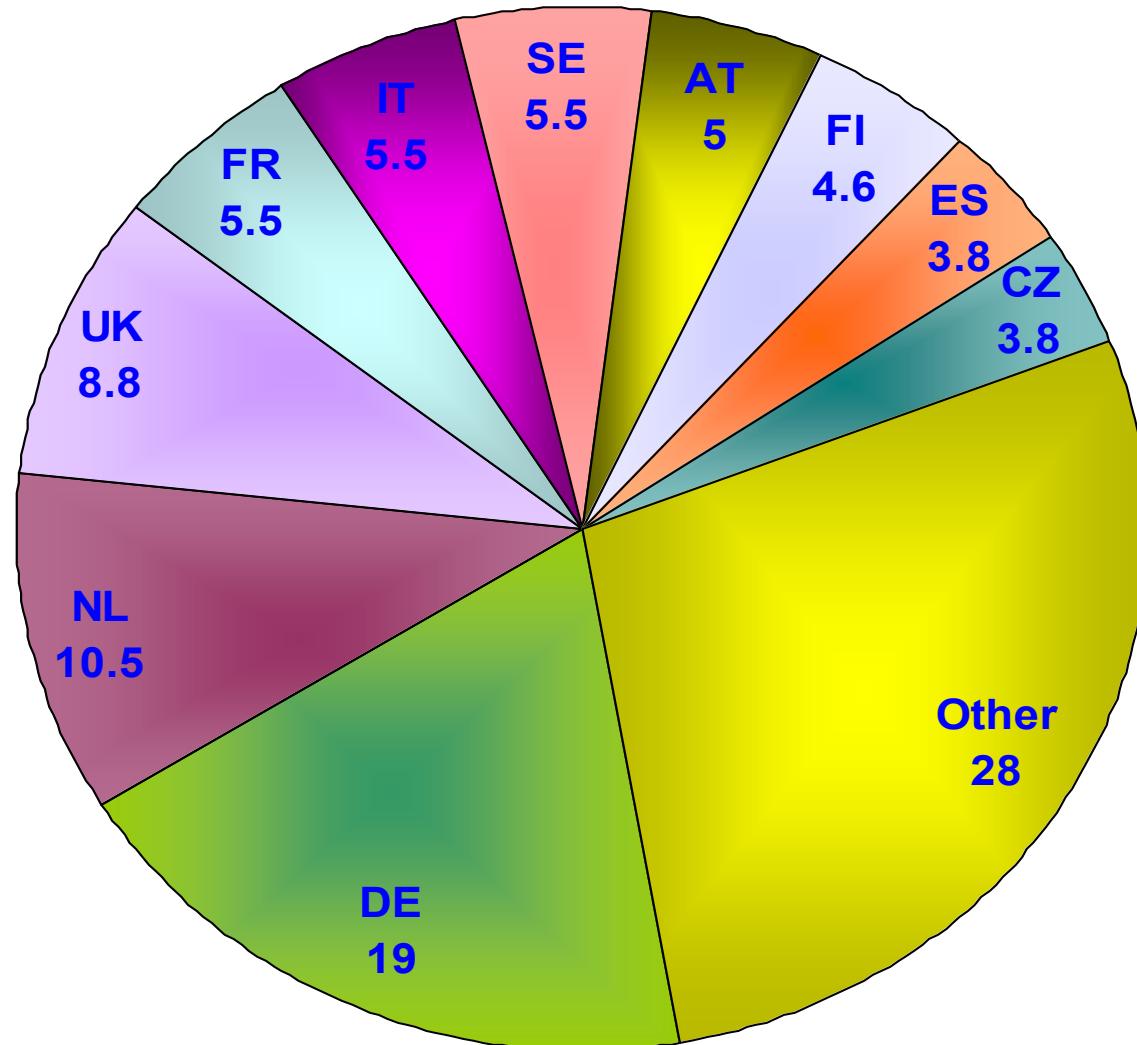


IPv6 Allocation by RIRs

- APNIC
 - 114 allocations
 - Shortest prefix /30
- ARIN
 - 81 allocations
- LACNIC
 - 9 allocations
- RIPE NCC
 - 254 allocations
 - Shortest prefix /31
- Total
 - 452 allocations

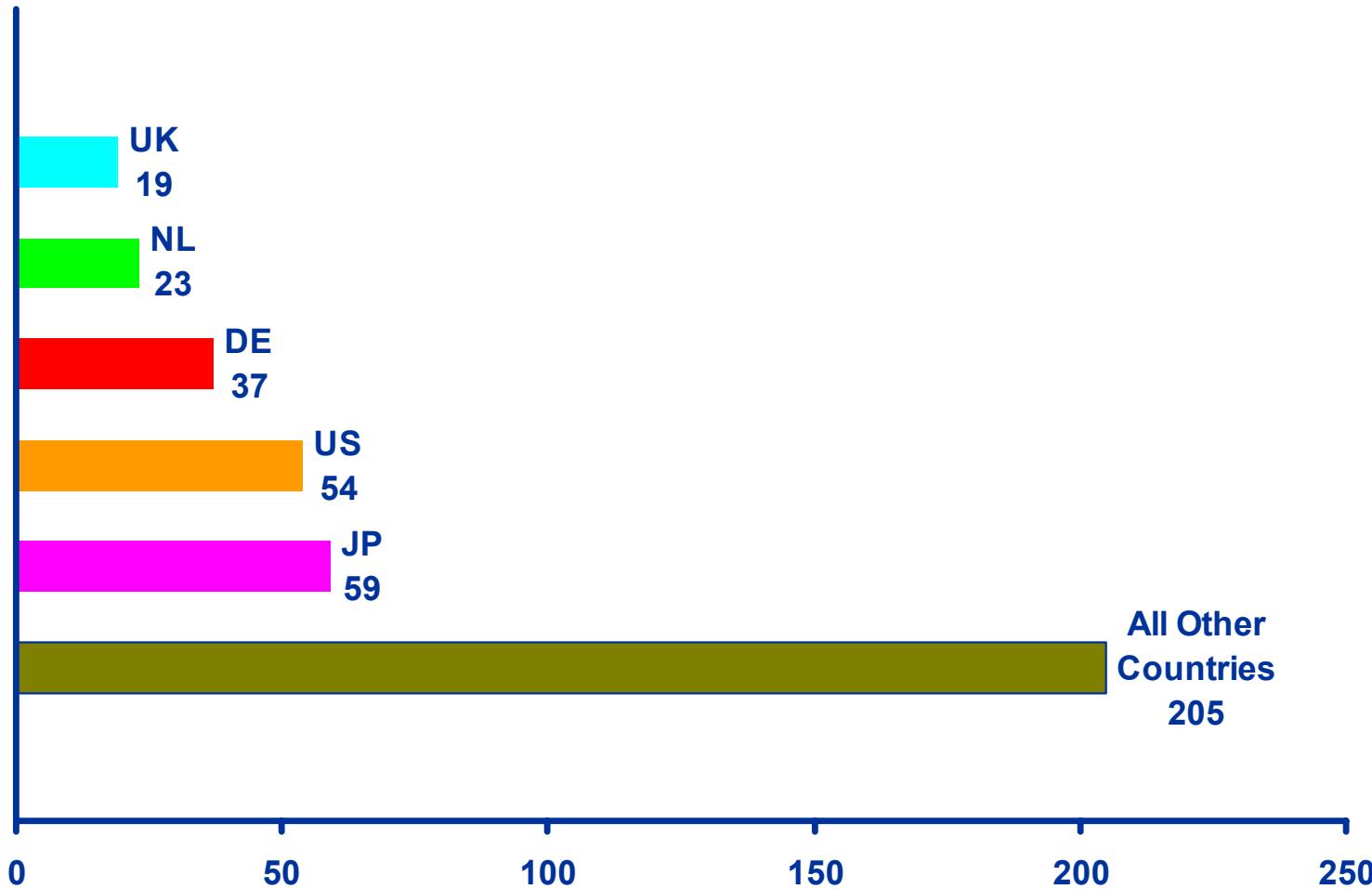
IPv6 Distribution by Country

RIPE NCC service region



IPv6 Distribution by Country

Global



IPv6 Policy Developments

Policy status

- Common IPv6 policy agreed May 2002
 - Regional variations
- Policy changes under discussion
 - RIPE Region policy list
address-policy-wg@ripe.net
 - Global IPv6 policy discussion list
global-v6@lists.apnic.net

Allocation Principles

- Conservation
 - Less important than with IPv4
- Aggregation
 - Routing table size
- Registration
 - Uniqueness important
 - Responsibility for network operations
 - Privacy concerns
- Address space not considered property

IPv6 space available from...

- An LIR or ISP
- From the RIPE NCC
- "6to4" space
 - (2002::/16) transition mechanism
- 6bone
 - (3FFE::/16) test bed network
 - Experimental, not for production networks
 - Operating until June 2006

References

- Common policy document

<http://www.ripe.net/ripe/docs/ipv6policy.html>

- IPv4 Lifetime Projections

<http://potaroo.net/2003-08/ale.html>

- IPv6 RIPE Documents

<http://www.ripe.net/ripe/docs/ipv6.html>

- RIR Allocation Statistics

<http://www.aso.icann.org/rirs/stats/>

Questions & Answers



<http://www.ripe.net/presentations>