RIPE-554

The history of RIPE-554
and the changes since RIPE-501

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RIPE-501/554 - Why and how?

- Started in Slovenia
  - by asking the government why they don't require IPv6 when buying equipment
- From Go6 to RIPE IPv6 working group
  - now a successful globally recognized procurement document
- Translated in many languages

RIPE-501/554 - WHY AND HOW?

- Removes a first speedbump in IPv6 deployment process
- Governments and enterprises are actually using it
- "You must require IPv6 and here is a recommendation on how to ask for it"

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VENDOR SUPPORT

- Enterprises and governments ask for the features listed in RIPE-501
- Everyone ask for the same features
- Vendors changed their roadmap to comply with RIPE-501
- http://tinyurl.com/vendor-pos:
  "The document lists a coherent set of IPv6 features that are likely to help the industry deploy IPv6 at a faster pace."

After RIPE-501

- Always room for improvement
  - Cover more types of devices
  - Better explanation and guidance
  - Remove unnecessary complications
  - Update to latest RFCs and 3GPP references
  - Other improvements

COVER MORE TYPES OF DEVICES

- RIPE-501:
  - Hosts
  - Consumer-grade Layer 2 switches
  - Enterprise/service provider Layer 2 switches
  - Firewalls, IDP systems
  - Routers and L3 switches
  - Requirements for system integrator
- Added in RIPE-554:
  - CPEs
  - Load Balancer
  - Mobile nodes
  - Software

BETTER EXPLANATION AND GUIDANCE

- Introduction
- Guide on how to use the document
- Proposed generic text for the tender initiator
- Definitions list
- Etc...

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Remove unnecessary complications

- RIPE-501 gave three different options on how to comply
- RIPE-554 has *one* way to comply

Update to latest RFCs

- Use RFC 6434 (IPv6 Node Requirements)
- Deprecation of Type 0 Routing Header is now mandatory
- Update IPsec to 'IPsec + IKEv2'
- IPsec support changed from MUST to SHOULD

IPsec, mandatory or not?

- Definitions
  - MUST = Mandatory
  - SHOULD ≠ Optional
- Final consensus:
  - IPsec is listed under optional, with explicit mention that organisations that need IPsec should make it mandatory
- RIPE-554 is a template, adjust to suit your needs!

Other improvements

- Make things that depend on IPv4 conditional:
  - 'If support for tunneling and dual-stack is required...'
- IPv6 Host-to-router load sharing (RFC 4311)
- Default router preference and more-specific routes (RFC 4191)

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RIPE-554

- RIPE-554 is going to be used as the initial template for the European Commission to develop a **Generic EU IPv6 Profile**

IPv6 initial allocation size

/29 available to all LIRs

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WHY DID WE NEED A CHANGE?

- Original reason:
  - Extra address space useful for transitional things
- Additional benefits:
  - For LIRs that need multiple /32s for separate networks
- Proposal written by Mark Townsley, Jordi Palet Martinez and Jan Žorž

What it used to be

- 5.1.2. Initial allocation size
  - Organisations that meet the initial allocation criteria are eligible to receive an initial allocation of /32.

What it is now

- 5.1.2. Initial allocation size
  - Organisations that meet the initial allocation criteria are eligible to receive an initial allocation of /32. **For allocations up to /29 no additional documentation is necessary.**

Questions?

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