Assessment Criteria for IPv6 Initial Allocation Size

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Motivation

- ## Current IPv6 Addressing Policy provider-oriented
  - RIPE-246 from year 2002
  - Qualification for allocations larger than /29 not possible for organziations/companies

- ## Requirements of private organisations differ
  - Internal (routing) structure
  - Segmentation in geography, location type, function,…
  - Nibble boundaries

- ## Logical structure more important than efficient usage of address space

Large public IPv6 address space

- ■ ULA are no alternative
  - ● Avoidance of NAT
  - ● /48 prefix for every location
  - ● Required for individual public routing

- ■ RIPE NCC: Documentation and proof of usage
  - ● Not to share internal structures to the community
  - ● Only small parts of IPv6 range will be public
  - ● Largest part in private use (like 10.0.0.0/8 in IPv4)

Goal for policy change

- <u>Modification of IPv6 addressing policy</u>
  vs.

- <u>Exception for large organizations</u>

- Small number of companies and organizations with requirements for /28 and larger

- Reasonable arguments to be defined

- Examples:
  - Number of /48 locations
  - Hierarchy level