IPv6 allocation policy change proposal

Let’s make it simpler

Sander, Gert and Jan, three random people from the community.

Nibble boundary

Keep it simple.

- LIRs that meet the initial allocation criteria are eligible to receive an initial allocation of /28.
  - We think that keeping the allocations on a nibble boundary is much simpler than the current way of allocating IPv6 space.
  - We would like to distribute comfortably enough space down the tree
- If LIR needs more space, next possible size is /24, /20, /16 and so on.
- RIPE NCC is reserving the space for possible later extensions of IPv6 allocations if need arise. In this case there might be reservations of /24 for each new /28 allocation.
- All current /32 or /29 allocations probably can’t be extended to /24 in case of additional allocation, but majority of /29s could be extended to /28.

HD ratio

Does anyone understand that?

- Let’s remove it and replace it with a simple table.

Number of /48s assigned	Number of /56s assigned	You can get a …
≥ 1	≥ 1	/28
≥ 2.097.152	≥ 536.870.912	/24
≥ 33.554.432	≥ 8.589.934.592	/20
≥ 536.870.912	≥ 137.438.953.472	/16

HD ratio

Does anyone understand that?

- Or replace it with a simple table with round numbers

Number of /48s assigned	Number of /56s assigned	You can get a …
≥ 1	≥ 1	/28
≥ 2 million	≥ 512 million	/24
≥ 32 million	≥ 8 billion	/20
≥ 512 million	≥ 128 billion	/16

HD ratio

Does anyone understand that?

- Do we want to talk about /48 and /56, or just talk about end-sites?

Number of end-sites	You can get a …
≥ 1	/28
≥ 2 million	/24
≥ 32 million	/20
≥ 512 million	/16

Questions for discussion

Audentes fortuna iuvat

- Where do we want to take the IPv6 allocation policy?
  A. Keep it fine-grained as it is today (with admin overhead, HD ratio etc…)
  B. Make it coarser and stick to nibble boundaries (easier, simpler, generous)

- If B: should we also remove the HD ratio and replace it with a simple table?
- If yes: do we care about fractions or should we round the numbers?