Change the size of last /8 allocations

... and other random thoughts related to it ...

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Change allocation size

- allow allocations smaller than /22 (/23 or /24)
 - some LIRs became LIR just to get one /24 (because they can no longer get a /24 PI block)
- re-instate some form of "need-based"
 - "need" = "do you really need", under no circumstance "as much as you need"
 - re-define the "need" criteria (not necessarily the same we used to have)
- if less than a /22 is allocated
 - ??? keep a reservation until pool-185 is full ???
 - ??? just do things "in sequence" ????

... on the other hand

- RIPE NCC :
 - <u>1</u>.02 x /8 free (+ reserved space : 0.07 x /8)
 - exactly 1 x /22 per LIR; no more, no less.
- APNIC:
 - 0.73 x /8 free
 - 1 x /22 from "103-pool" and 1 x /22 from recovered space per member
 - smaller allocations possible
- LACNIC:
 - 0.178 x /8 free
 - a /22 per member every 6 months
 - smaller allocations possible
- ARIN:
 - 0.198 x /8 free, "hit the wall" strategy
- AfriNIC:
 - 2.71 x /8 free, the sun is shining / no exhaustion yet

Change allocation size (#2)

Just random ideas, some of them may be interesting, some of them not.

Go up to /21 (??? /20 ???)

- ??? separate "pool-185" from "recovered space" ???
- in several steps
 - get the first /22, wait X months, get the second one (if pool(s) is(are) not empty)
 - ... wait another X months, get a third one (if pool(s) is(are) not empty), repeat
 - X = 24 ?? 30 ?? 36 ?? 18 ??
- add conditions for more than /22
 - no outbound transfers
 - not already having /20 (?? /19 ?? /21 ??) or more space
 - audit (re-check the "need" for extra space)

Original "spirit" of the "last /8" policy

Keep a small stock for as long as possible in order to facilitate IPv6 migration

- most customers don't care about IPv6 (very few actually DO care)
- market segments where "no dedicated public IPv4 per customer" = no customer at all
- even in residential, you still need IPv4 (even if private) -> must dual-stack
- product/marketing doesn't understand well the "dual-stack thing" -> "Can't we just use IPv6 <u>instead</u> of IPv4 ?"

So the result is:

- Most small LIRs are suffering with only a /22 (unless they pay or cheat)
- RIPE NCC is getting "recovered space" faster that it's allocating with current policy
- may give the impression that "IPv4 will never totally run out", "use of more NAT will make IPv4 last forever" -> no incentive to IPv6 migration.