

# Alternative criteria to renumbering in initial allocation after the final /8 phase

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# Introduction

- We would like to share the implications of keeping the renumbering requirement in initial allocation criteria after the final /8 phase
- Would like to make a conscious decision as the forum even if we are going to keep the requirement as it is

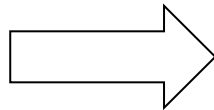
# Intention of the last /8 block

- In principle, it should be used to enable IPv4 and IPv6 dual stack environment during the transition phase/interim measure to face IPv4 address pool run out
- It is not intended for expansions of existing IPv4 service

# Who are eligible and how

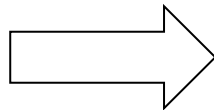
Each LIR is eligible to receive a single IPv4 block of minimum size

New LIRs



Must meet the Initial Allocation Criteria

Existing LIRs



Must meet the Subsequent Allocation Criteria

# Current Initial Allocation Criteria

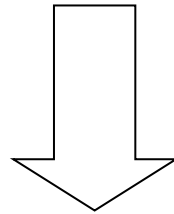
To be eligible to obtain an initial allocation, an LIR must:

- a. have used a /24 from their upstream provider or demonstrate an immediate need for a /24;
- b. have complied with applicable policies in managing all address space previously allocated to it (including historical allocations);
- c. demonstrate a detailed plan for use of a /23 within a year; and
- d. commit to renumber from previously deployed space into the new address space within one year.

The purpose is aggregation into allocation block(s),  
Not reclamation

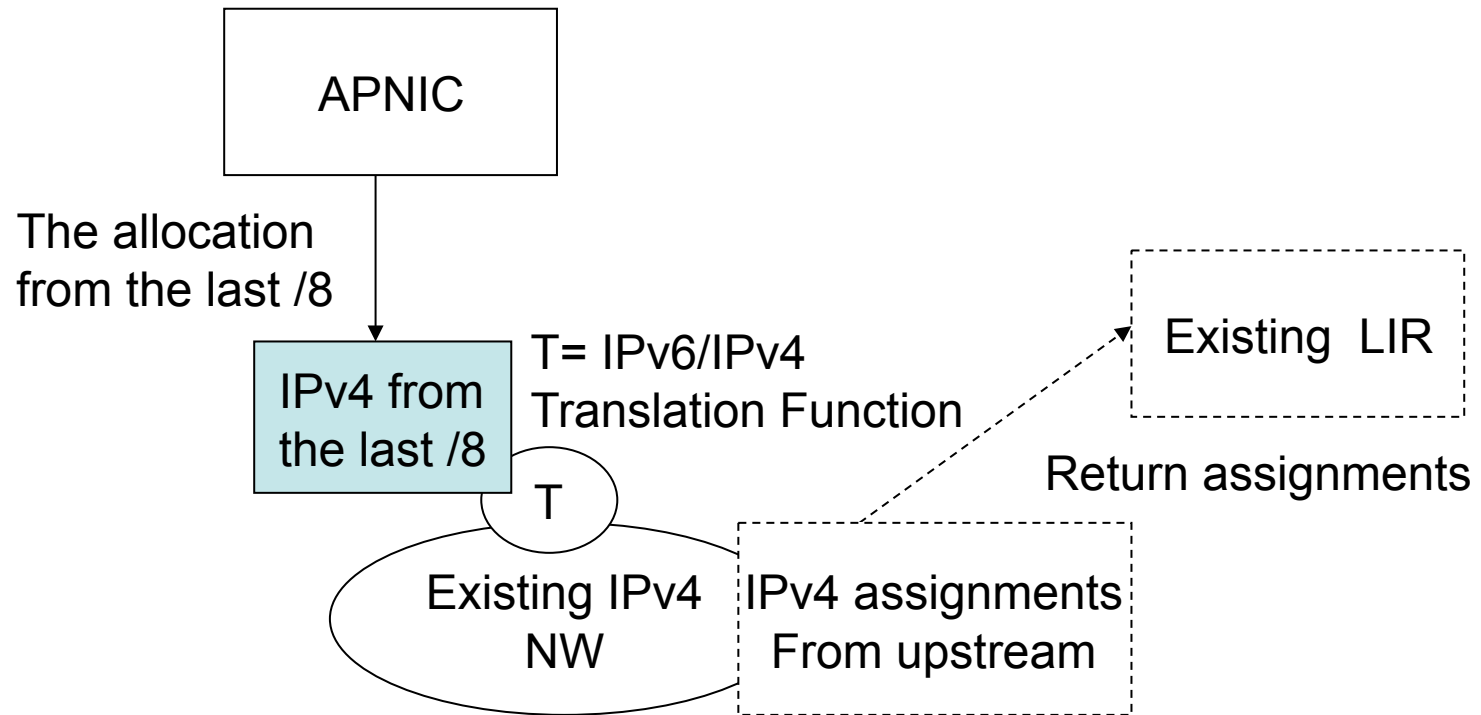
# Renumbering Criteria in Initial Allocation

- Before the final /8, APNIC could make allocations to new LIRs to compensate for IPv4 assignment(s) returned to the upstream
- After the final /8, APNIC can no longer compensate for IPv4 assignment(s) returned to the upstream



- The renumbering requirement in practice will result in reclamation of a new LIR's IPv4 address holding used for its existing network
- This will affect over 95% of new LIRs

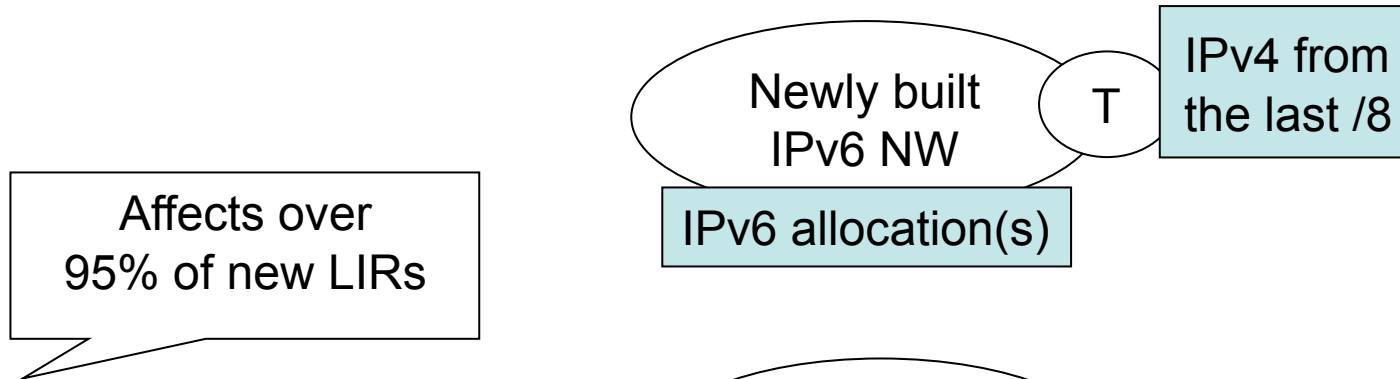
# Issue with renumbering requirement after the final /8 phase



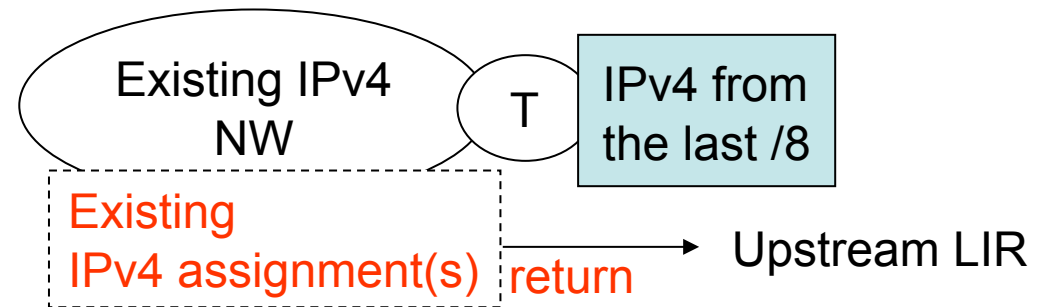
A New LIR must return IPv4 block(s) used in its existing network in order to receive IPv4 block required for IPv6/IPv4 translation function in its network

# Keeping the renumbering requirement in initial allocation

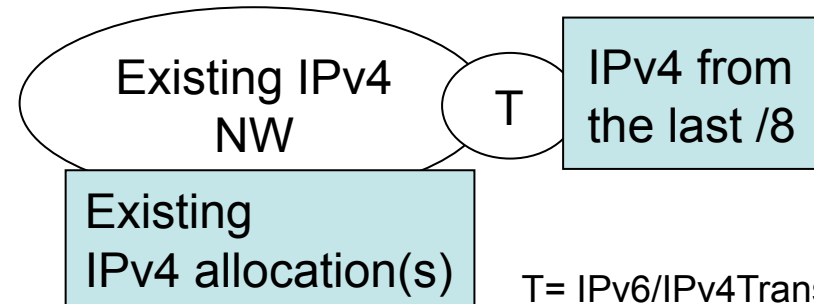
a) New LIR (no IPv4)



b) New LIR (IPv4 from upstream)



c) Existing LIR



T = IPv6/IPv4 Translation Function



# Summary of the issues

- Keeping the renumbering requirement in initial allocation after the final /8 phase will in practice mean a reclamation of a new LIR's IPv4 holdings for existing network to receive necessary IPv4 block for IPv6/IPv4 translation
- It will affect over 95% of new LIRs
- Difficult to provide a rationale reason why existing LIRs are allowed to keep their past allocation but not new LIRs

# Proposed Change in Initial Allocation Criteria

- Keep the justification requirement as it is in the current initial allocation criteria
- Provide an alternative option the renumbering criteria
  - Demonstrate 80%(\*) usage of the past assignments

\* 80% is consistent with the % utilization required in subsequent allocations

# Initial allocation criteria a.f./8 (prop-094)

To be eligible to obtain an initial allocation, an LIR must:

- a. have used a /24 from their upstream provider or demonstrate an immediate need for a /24;
- b. have complied with applicable policies in managing all address space previously allocated to it (including historical allocations);
- c. demonstrate a detailed plan for use of a /23 within a year; and
- d. commit to renumber from previously deployed space into the new address space within one year. **OR**

**Demonstrate that the usage rate of previous IPv4 address space holding from their upstream provider(s) reached 80%**

Prop-094 suggests  
to add this  
alternative

# Additional Note

- Even if this proposal doesn't reach consensus, we would like to propose to at least share the implications to new LIRs when applying for initial allocation
  - they must return their existing IPv4 address holdings to its upstream LIR, if they wish to receive IPv4 block from the last /8