Consequences of GPP prop-097:

Discussions in Japan about delegations of IPv4 address space in APNIC Free pool

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Purpose

- Would like to discuss if there are needs to revise how to distribute non-103/8 blocks in APNIC pool.

Current IPv4 address allocation

- We're now using 'final /8 policy' to allocate IPv4 address.
  - Maximum /22 for one LIR from the reserved /8 for this purpose (103/8)
  - http://www.apnic.net/policy/add-manage-policy#delegations
- The same policy applies for distributions of:
  - returned IPv4 address to APNIC
  - re-allocations to APNIC from IANA

# Situation changed for IPv4 address allocation

- Global Policy "Global Policy for Post Exhaustion: IPv4 Allocation Mechanisms by the IANA" was ratified (May 2012)
  - IPv4 address returned to IANA will be distributed to RIRs
    - ☐ARIN (/8+/19), RIPE-NCC (/12+/14) and APNIC (35 /16s + 72 /24s.) returned historical IPv4 address space.
    - ☐It is estimated approximately /10 could be re-allocated to APNIC from IANA by the global policy

- Demands for IPv4 address still continue

Room for Considerations

- We understand the needs to secure 103/8 to ensure IPv4 distribution for future APNIC members ☺

- Some thoughts about Non-103/8 IPv4 addresses supplemented to APNIC pool ;
  - Is it necessary to further supplement APNIC's pool for the final /8 policy, in addition to 103/8?
  - If it is possible to revise the current policy on distribution of APNIC pool, how much needs would there be for this revision ?
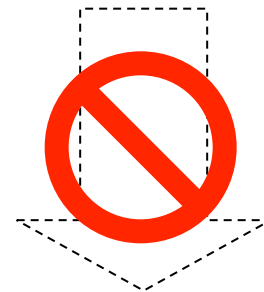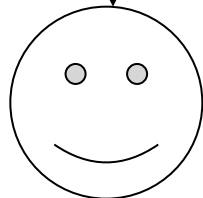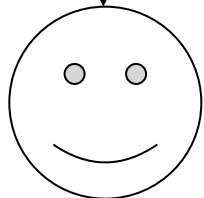
A question

Current APNIC pool: the final /8 policy applies to all

103/8	Re-allocations From IANA	IPv4 directly returned
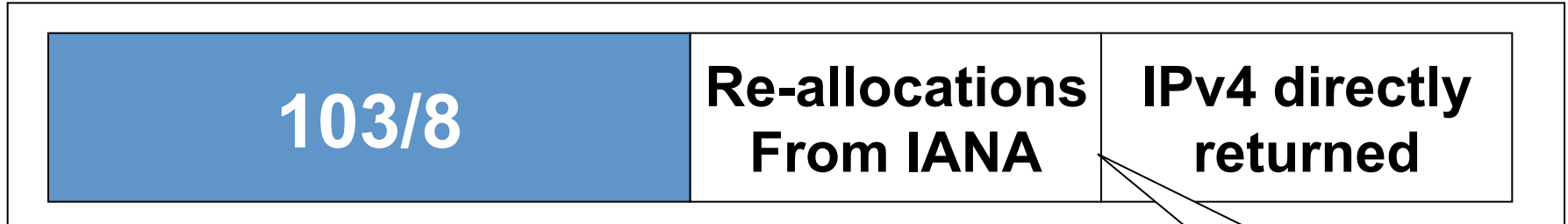
Roughly /8 remaining

Max /22 per entity

Roughly /9?

Should we continue to apply the final /8 policy for these blocks ?

Currently not distributed in practice because 103/8 still available

Survey: What would ISPs in JP think about revising the current policy?

- We conducted a survey to hear opinions of LIRs under JPNIC management.

- We wanted to find out;
  - Would it help if IPv4 could be distributed to those who need it now, from the "non-103/8" pool ?
  - Would changing the distribution policy for "non-103/8" pool hinder IPv6 deployment plans by ISPs?

Overview of the Survey

- Survey period : 30 July – 10 Aug, 2012
- Target : LIR under JPNIC management (411 LIRs:30 Jul)
- Responses : 61 LIRs responded (15% response rate)

- Questions : 6 questions in total
    1. Would you apply if additional IPv4 could be allocated?
    2. Usage of IPv4 address for such allocation
    3. Effect on IPv6 deployment if further IPv4 could be allocated
    4. Minimum size required to make such allocation useful
    5. Opinion about revising the current final /8 policy
    6. Plus Free comments section

Summary of the Survey Result

- If further allocations from the "non-103/8" pool is possible;
  - Will apply 67% ＞Will NOT apply 33%

- Those who "Will Apply" has higher % of IPv6 allocations
  - Will apply 59% ＞Will NOT apply 47%
  - Still needs IPv4, even if working on IPv6 deployment

- 84 % responded that revision of the policy will not effect IPv6 deployment plans

- 71% in favour of revising distribution policy for non-103/8 blocks

Should we revise the final /8 policy?

- There seem to be needs to revise the final /8 policy (Based on survey result in Japan)
- Asked to conduct same survey in NIR SIG to NIRs.
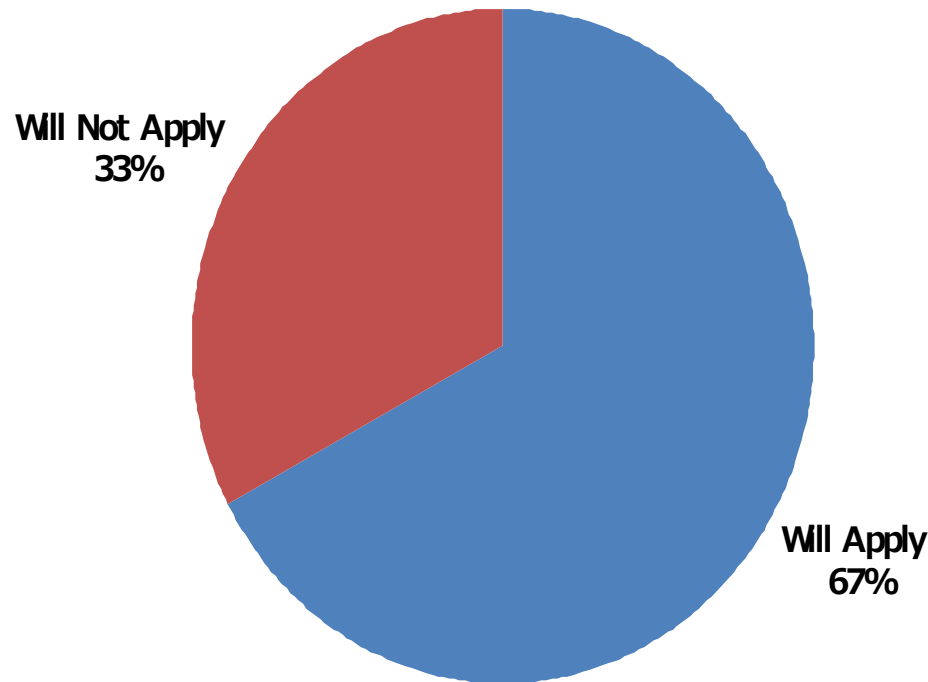 - Possible to do it to APNIC members?

Please give us your comments for revising final /8 policy.

Reference

Survey Result: Q1
Allocation from non-103/8 blocks

Question 1: If it is possible to receive allocation
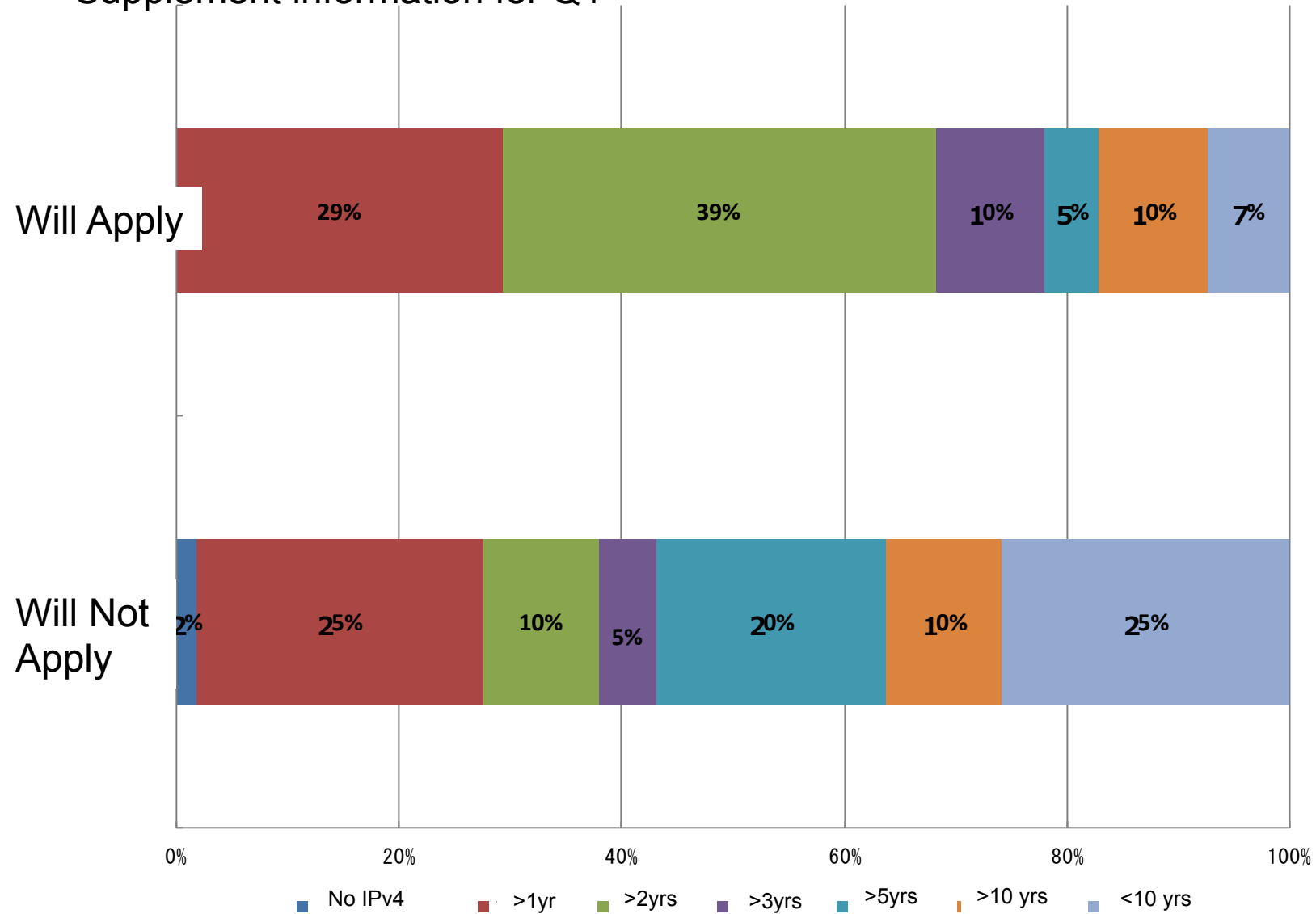from non-103/8 blocks, would you apply for the allocation?

Will Not Apply
33%

Will Apply
67%

Survey Result: Q1
Opinions For/Against

- Opinions "Will Apply"
  - Should make efficient use if there are needs
  - IPv4 is necessary until IPv6 is widely deployed
  - Already causing problems in providing service

- Opinions "Will Not Apply"
  - We should deploy IPv6
  - Efficient utilization is desirable, but perhaps only some (big) LIRs can receive the allocations

Last IPv4 allocation requested date

Supplement information for Q1

Will Apply
- 29%
- 39%
- 10%
- 5%
- 10%
- 7%

Will Not Apply
- 2%
- 25%
- 10%
- 5%
- 20%
- 10%
- 25%

0% 20% 40% 60% 80% 100%

Legend:
- No IPv4
- >1yr
- >2yrs
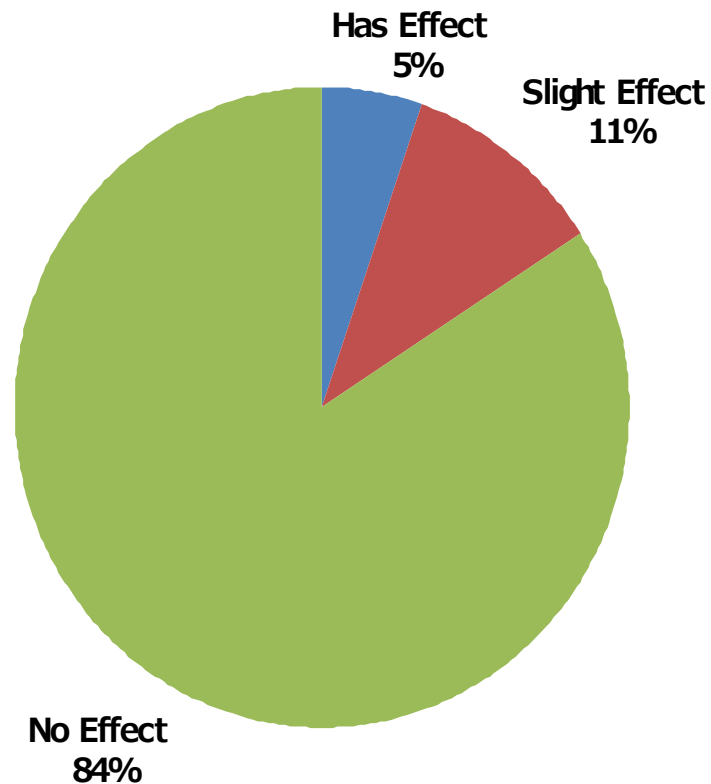- >3yrs
- >5yrs
- >10 yrs
- <10 yrs

14

Survey Result: Q2
How allocated IPv4 will be used

- New customers/Expanding needs of existing customers：31 LIRs

- Co-existence with/Prepare for IPv6：3 LIRs

- … and Others
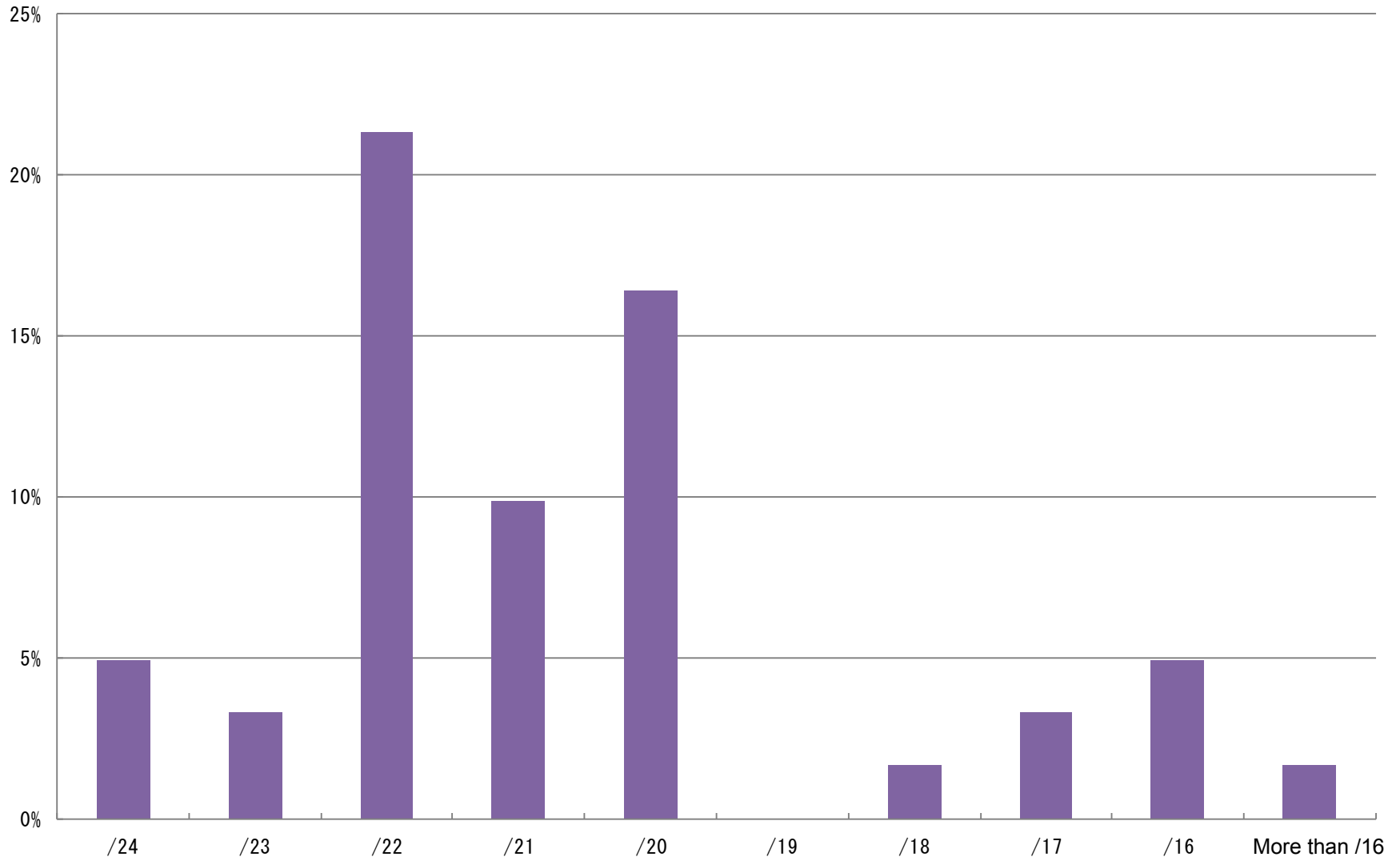
Survey Result: Q3
Effect on IPv6 Deployment Plan

Question 3: Would allocation from non-103/8 blocks affect your IPv6 Deployment plan?
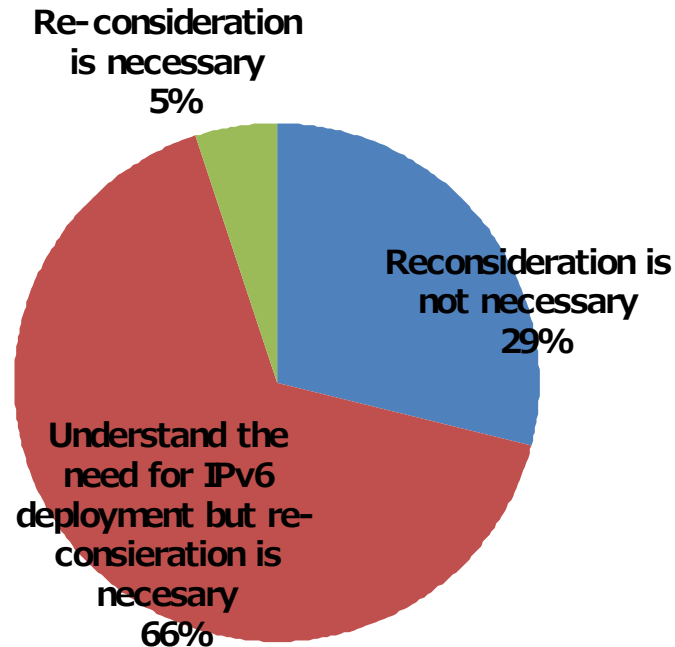
Survey Result: Q4
Minimum size required to be useful

Survey Result: Q5
Needs to re-consider the final /8 policy

Question 5: There are opinions that rather than focusing on changing IPv4 policy, we should put efforts on IPv6 deployment.

Taking such opinion into considerations,
do you still yet feel the needs to re-consider the final /8 policy?

Re-consideration is necessary
5%

Reconsideration is not necessary
29%

Understand the need for IPv6 deployment but re-consieration is necesary
66%

Possible issues in maintaining the current policy

- Risk of not distributing the available block while there are people who needs IPv4 now
- It is sold in markets but APNIC keep the blocks in its pool undistributed
  - Could be considered as price manipulation?
  - Could be considered as "property" with values?
- Wouldn't other RIRs request APNIC not to receive re-allocations from IANA if stocked as reservations for the final /8 policy?