NOPEER Route Attribute

• Propose a well-known transitive advisory scope attribute
• Applied by originating AS to route prefixes
• Interpretable as advice to limit the scope of propagation of the prefix so that the prefix is not advertised across bilateral SKA peer inter-AS connections

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Intended Usage

- Address the TE usage of BGP where specific routes are selectively advertised and a covering aggregate is more generally announced.
- NOPEER would be applied to the more specific advertisements.
- The more specifics would be propagated to the extent that the originating AS has direct and indirect upstream service relationships.
Potential Benefits

• Reduce the unbounded propagation of more specific entries to a scope limited to:
  - the originating AS funding
  - the effective TE scope where the originator’s policy has some leverage

• Quantification:
  - Some 53% of table entries are more specific prefixes of enclosing aggregates
  - Of these:
    • 36% share a common origin AS with the immediately enclosing aggregate
    • 21% share a common AS path with the immediately enclosing aggregate

• NOPEER could reduce the unbounded propagation of TE-based more specifics to a logical boundary of “funded agent” AS’s