The idea for this draft came out of discussion about the infeasibility of renumbering in the Routing Research Group. The RRG reached consensus that whatever solution it proposes should not require site renumbering.

But this worries us because...
Renumbering will happen anyway

- As IPv4 addressing enters its end game, address space will be vigorously consolidated, and that inevitably leads to renumbering actions.
- As IPv6 deploys, people will make false starts, need to correct their addressing plans, and that inevitably leads to renumbering actions.
- Also, it seems a shame to exclude an entire class of multihoming and routing solutions without a full study of the tradeoffs.
Objectives of the draft

- Summary of existing renumbering mechanisms
- Description of current operational issues with renumbering
- Summary of relevant work in progress
- Gap analysis
- Considering both IPv4 and IPv6
  ➔ May lead to suggestions for future work, and/or operational recommendations.
DNS and renumbering

- Updating A and AAAA records through DNS zone file does not provide good synchronization with the host renumbering
- DNS dynamic update [RFC3007] useful and gains deployment
- DNS TTL manipulation to ensure that stale addresses are not cached [RFC4192]
Input requested

- draft-carpenrer-renum-needs-work
- Please read the draft, and email your comments (errors, omissions, suggested text):
  - write to the authors, or the RRG list
  - if there's enough interest, we can set up a dedicated mailing list