The Problem

- 2009-05 leads us to make a decision:
 - Do we accept that a /32 is the most specific prefix that should be routed in the global IPv6 table?

- Accepting that this will cause wastage of address space.

- Or do we continue with needs-based allocation of address space, and allow LIRs to split their /32 and announce more-specific prefixes if they need to?
- Both options mean extra prefixes in the routing table
- This is one example, the problem is more general.

IPv6 Address Allocation Policy

- "RIRs will apply a minimum size for IPv6 allocations to facilitate prefix-based filtering."
- The organisation must "advertise the allocation that they will receive as a single prefix if the prefix is to be used on the Internet."
- Do these maxims have any place in the address allocation policy?
- Should we write a policy proposal to the Address Policy WG to remove them?

IPv6 Routability vs. Address Conservation

- Is IPv6 space plentiful enough that we should allow /32s to be allocated on the basis of routability?
 - That is only 8 bits (256x) different to the IPv4 accepted limit.
- If not, should we come up with some guidelines on IPv6 prefix filtering, allowing deaggregation where needed?
 - /36? /40?
 - This is a document for the Routing WG

Summary

- Suggestions:
 - Remove routing and filtering guidelines from addressing policy documents.
 - Create a separate routing and filtering guidelines document.