Problem Summary

• Many link attributes have been defined in OSPF in the context of the MPLS TE and GMPLS

• Some of them are useful outside of TE
  • Remote interface IP address, Link Local/Remote Identifiers (Segment Routing)
  • Shared Risk Link Group (LFA)
  • Unidirectional Link Delay, Unidirectional Available Bandwidth (Path Computation)

• How do we advertise these attributes without affecting existing MPLS TE application
Proposed Solution

- Use exiting format of the TE link attributes
- Use Extended Link LSA for flooding
- Allocate code points from the OSPF Extended Link TLV Sub-TLV Registry
  - [http://www.iana.org/assignments/ospfv2-parameters/ospfv2-parameters.xhtml#extended-link-tlv-sub-tlvs](http://www.iana.org/assignments/ospfv2-parameters/ospfv2-parameters.xhtml#extended-link-tlv-sub-tlvs)
- Code pints allocated on a case by case bases together with the use-case
Attributes and Non-TE Applications

• Expect future application requirements to be handled by two broad categories.
  • TE LSAs for MPLS and GMPLS Traffic Engineering including optical.
  • TLV-based LSAs for everything else.
• Attributes in second category will be generic and apply to multiple applications.
  • If separate attributes are required, will have unique code points and names (Not expected to be common).
Draft Status

- Problem was presented at IETF 93 and IETF 94
- Problem acknowledged by several vendors
  - Contributed to by authors from several vendors
- Good discussion already taken place on the WG list
  - 01 version reflects some of the discussion
  - Backward Compatibility section has been updated
Draft Status (cont.)

- Proposal is to adopt draft-ppsenak-ospf-te-link-attr-reuse-01 as OSPF WG document
- We expect draft to evolve through the process