



**I E T F**

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# draft-ginsberg-lsr-flex-soft-dataplane

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# Use Case

- Flex-algo requires data-plane participation - [[RFC9350](#)]
- Flex-algo supports several data-planes
  - Segment Routing (SR-MPLS, SRv6) - [[RFC8667](#)] [[RFC8665](#)]
  - IP Flex-algo - [[RFC9502](#)]
- Use of Flex-algo for application that does not require any of the currently defined flex-algo data-planes
- IP Flex-algo - can be used directly with IPv4 and IPv6 forwarding
  - requires IPv4/IPv6 Algorithm specific prefix advertisements
  - loss of the reachability in base (algo 0) topology may be problematic in existing deployments

# Use Case - Cont.

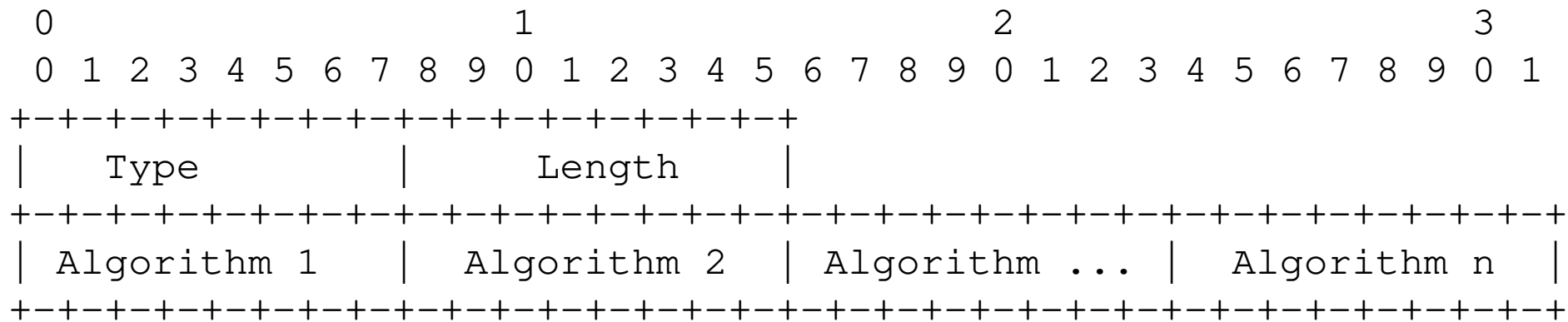
- draft-xz-pim-flex-algo describes the PIM extension to build multicast tree using flex-algo constraint-based path
  - Example: low latency optimization for multicast
- Applicability is for a generic IP network, which does not necessarily run any existing flex-algo defined data-planes

# What is Defined

- The new flex-algo data-plane
- It is referred to as "soft" because the flex-algo paths computed for this data-plane are not used by forwarding directly
  - they will not be installed in the data path
  - they may be used by an application to create a forwarding state that is maintained by the application itself - PIM is an example

# Soft Data-plane Participation Advertisement

- ISIS Soft Data-plane Algorithm Sub-TLV
  - sub-TLV of the IS-IS Router Capability TLV
- Similar TLV is defined for OSPF



# Next Steps ...

- Comments are welcomed