An Information Model for Network Topologies

draft-medved-i2rs-topology-im-00.txt

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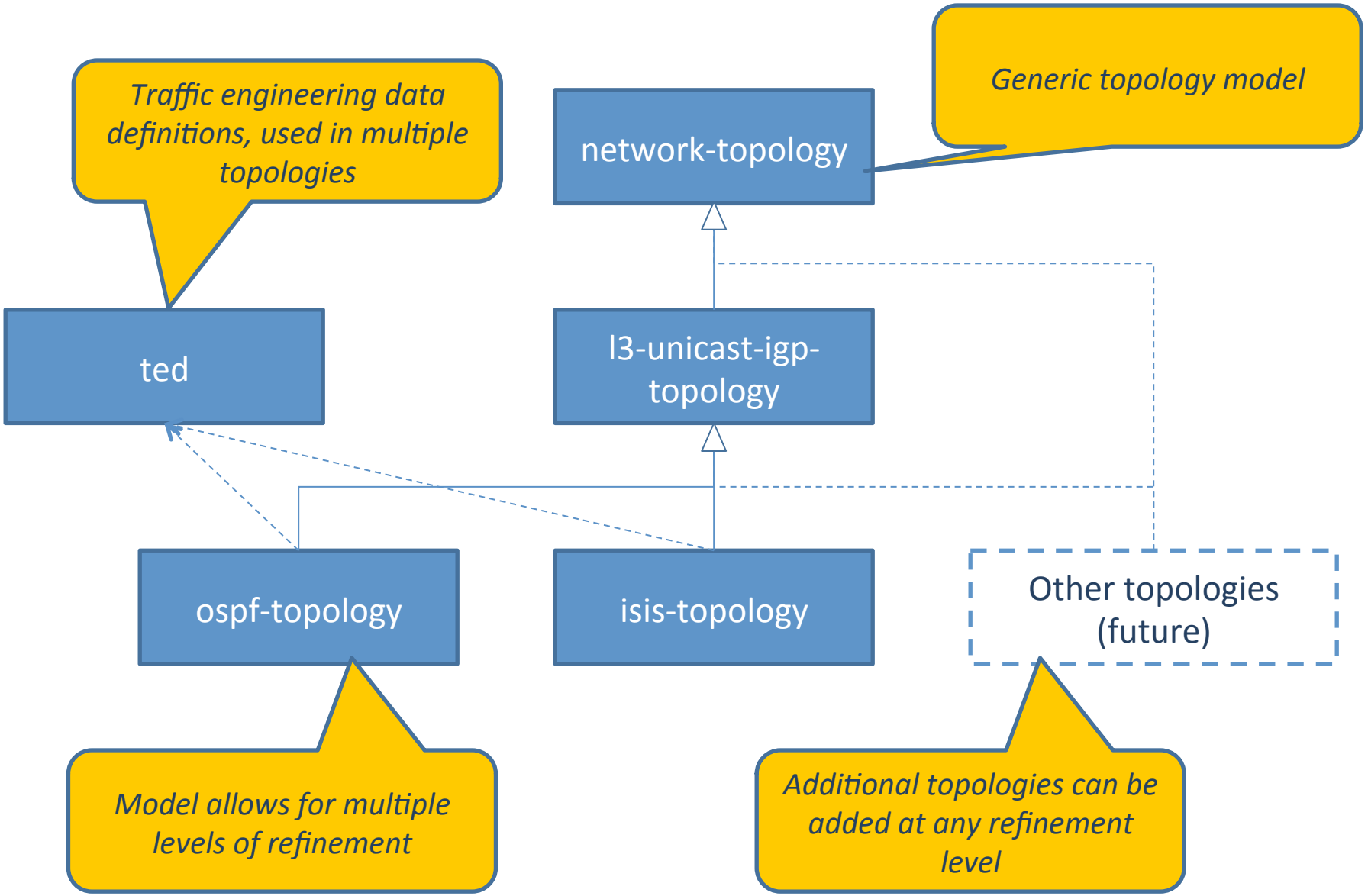
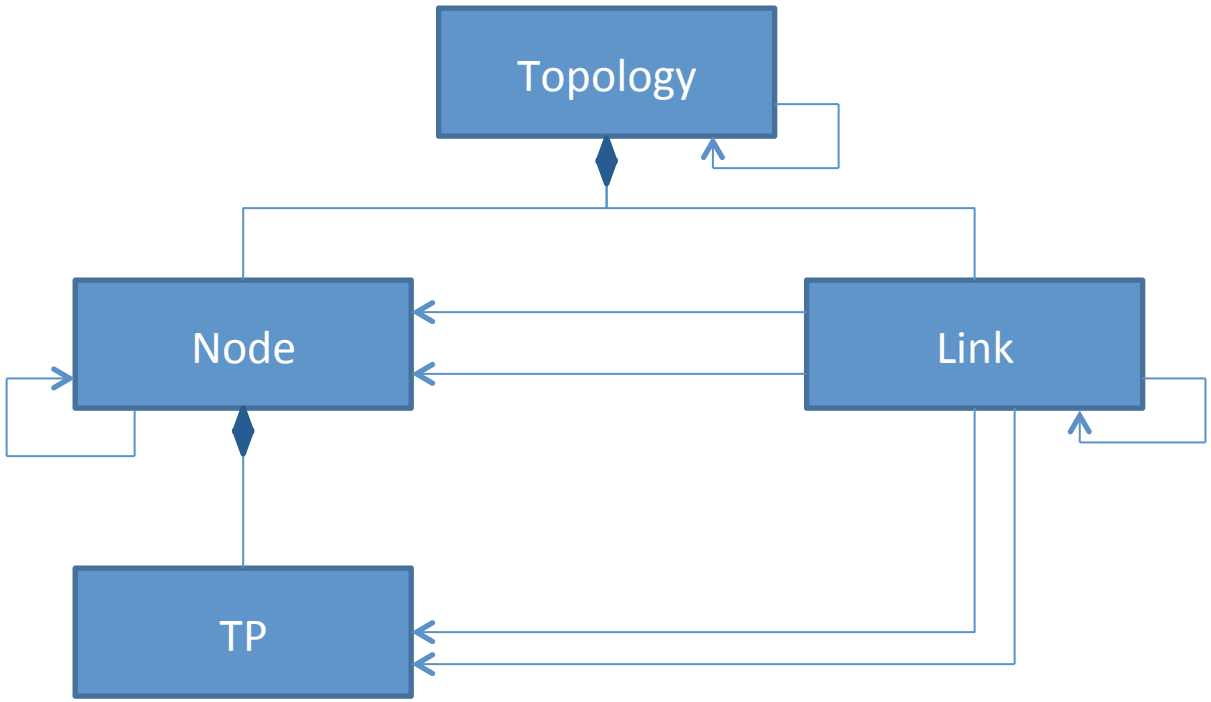
Purpose

- Information model for network topologies
- Generic topology model, extensions for specific topologies
  - L3 Unicast IGP, OSPF, IS-IS as part of this draft
  - Can be extended for other topologies
- Specified using RBNF
- Applications
  - Data nodes capture and reconcile their understanding of network topology, propagate topology info
  - Network controllers represent controller network topology
- Ask: Adopt as WG item

Data model structure

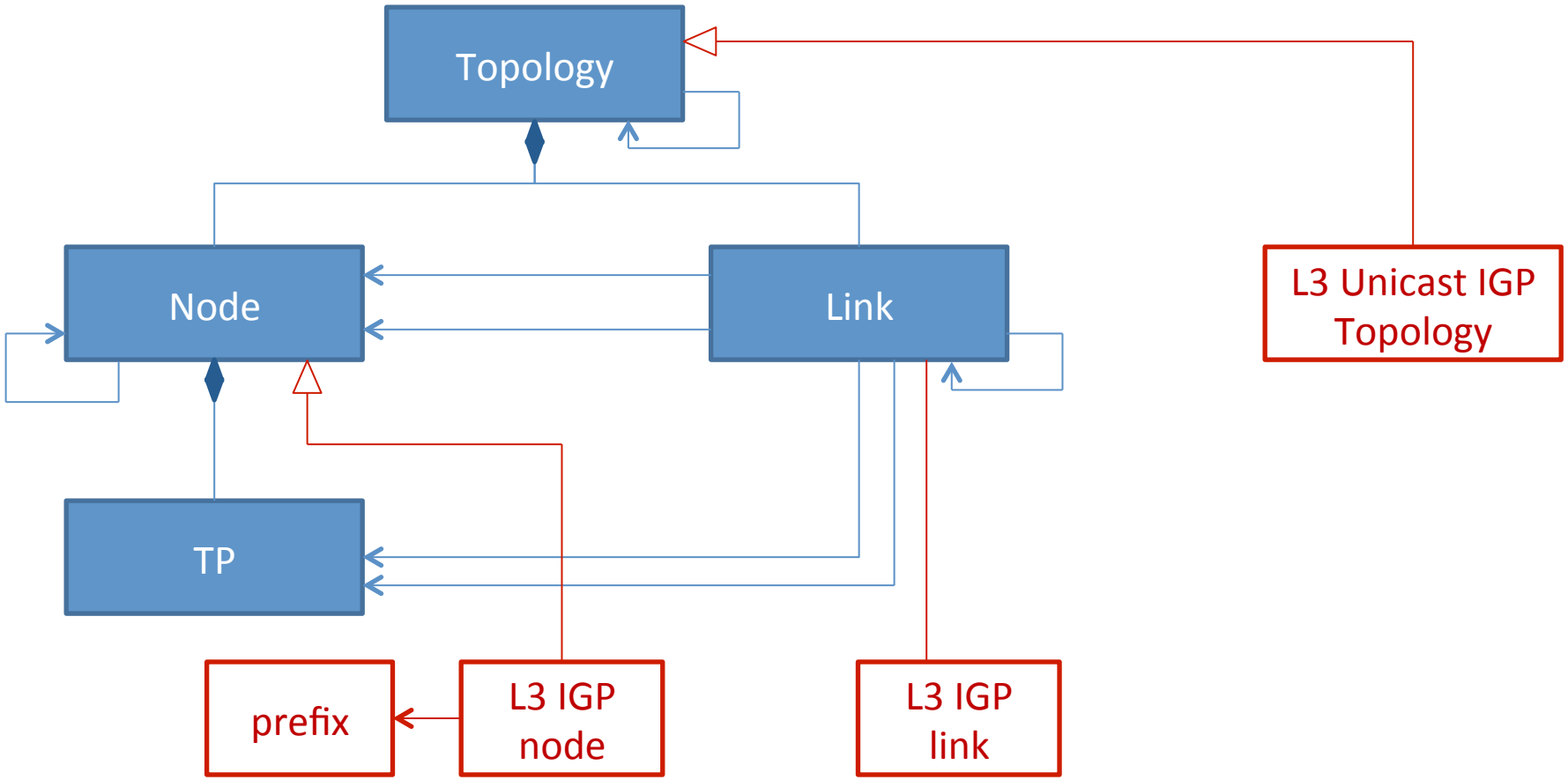


Data model structure (contd.)



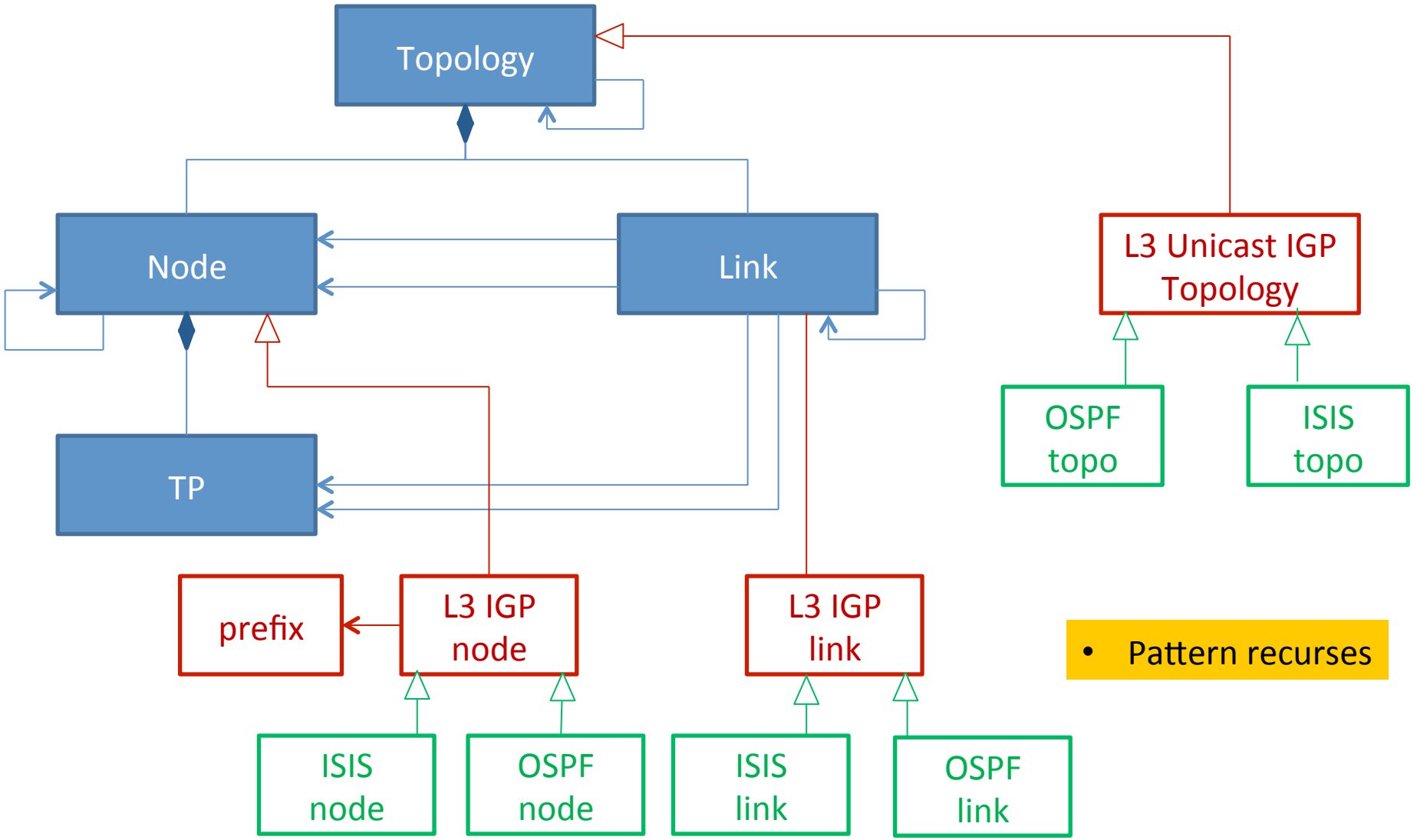
- Links connect nodes, are terminated by termination points
- Topologies can refer to underlay topologies
- Links can refer to underlay links
- Nodes can refer to underlay nodes
- Unidirectional, point-to-point links
  represent non-ptp through hierarchies of nodes links

Data model structure (contd.)



- Derive Layer 3 Unicast IGP topology object classes
- Integrity rules ensure links, nodes, topology of matching type

Data model structure (contd.)



Questions?