DLEP ‘Relay Point’ Extension

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The Problem

• MANET link-state routing protocols often use ‘Designated Routers’
• Multicast protocols use ‘Rendezvous Points’

But:

• There may be a mismatch between the assumed topology used by the selection algorithm and the actual radio network:
  - Some radio networks are hub-and-spoke
  - Some have special relay nodes
The Proposal

• Allow a modem to inform a router if it is a good candidate to be a relay.
• Allow a router to inform other routers if it is willing and/or already elected to be a relay point.

Note:
• This is unrelated to multicast destinations and the local modem’s ability to multicast
How?

• A DLEP Extension! (of course)

• 2 new Destination Data Items:
  - Router Relay Point
    • Willingness to be a relay
    • Elected to be a relay
  - Modem Relay Point
    • Good candidate for a relay
Drafts to be written

- DLEP Relay Point Extension draft (in progress)
  - Data Item descriptions, layout, usage, etc.
- PIM draft
  - How to use with PIM
- OLSRv2 draft?
  - How to use with OLSRv2
    - Need an expert for this!
- OSPF-MDR draft?
  - As above!
Questions?