

# Signaling Extensions for Wavelength Switched Networks

draft-ietf-ccamp-wson-signaling-01.txt

**Greg Bernstein**

**Young Lee**

**Sugang Xu**

**Hiroaki Harai**

**Daniel King**

**Giovanni Martinelli**

Grotto Networking

Huawei

NICT

NICT

Old Dog Consulting

Cisco

# Updates 00->01

- Section 4: encoding aligned with info model
- Section 5: Bi-directionality
- Section 6: DWA, reconciled with bidirectionality

# WSON Attributes

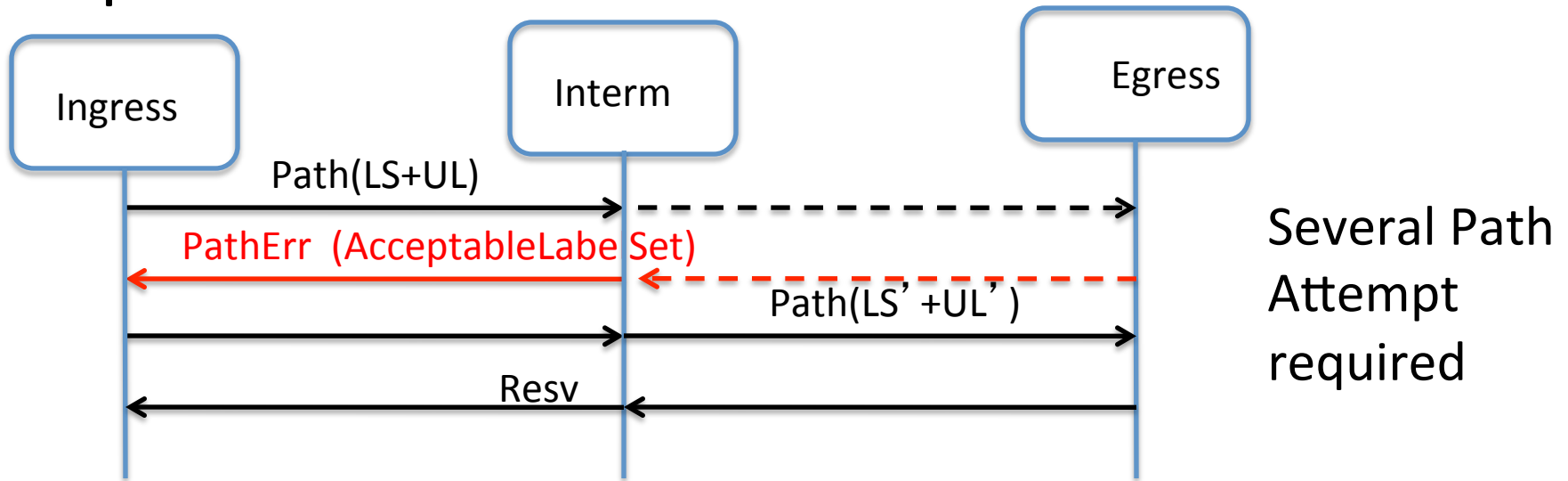
- WSON specific information within a dedicated LSP\_ATTRIBUTE:
  - FEC encoding
  - Modulation Format
  - Regen processing configuration
- No specific TSPEC update for WSON

# Bidirectionality

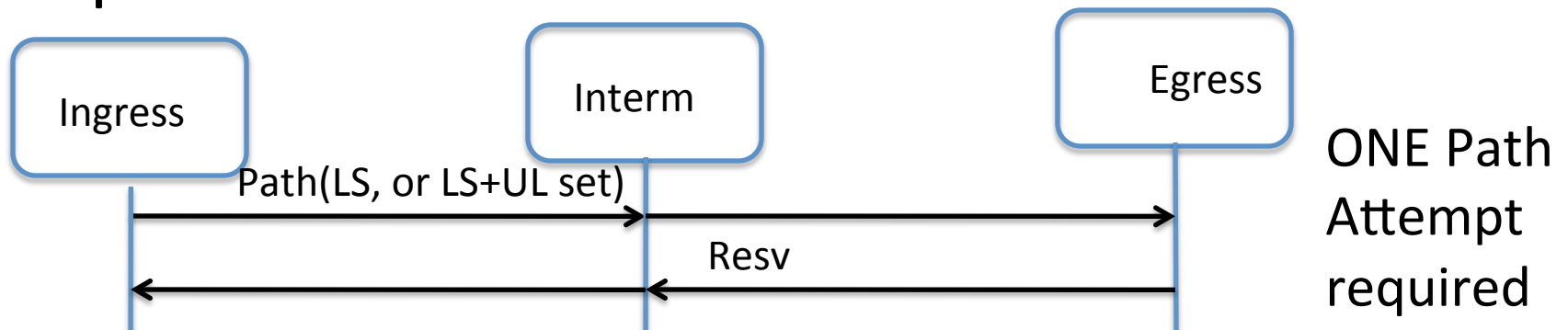
- Need WG comments on possible options.
- Output from RWA process: a path and a Label Set.
- Possible Options in signaling function
  - **Option1**: current, bidir LSP (Label\_Set + Upstream\_Label)
  - **Option2**: bidir LSP (Label\_Set or Label\_Set + some extension to Upstream\_Label)
  - **Option3**: two unidirectional LSPs (associated?)

# Opt 1 and 2: Bidirectional LSP

- Option 1



- Option 2



# Option 3

- Two unidirectional LSP.
- Worth considering association (e.g. draft-zhang-mpls-tp-rsvp-tp-ext-associated-lsp-03).
- Pros:
  - Simple independent signaling.
  - Transport environment may need independent oam.
  - Each LSP for map a physical resource: a wavelenght
- Cons:
  - Bigger State to maintains

# Next Steps

- Updates according to WSON info model and encoding draft
- Bi-directionality decision