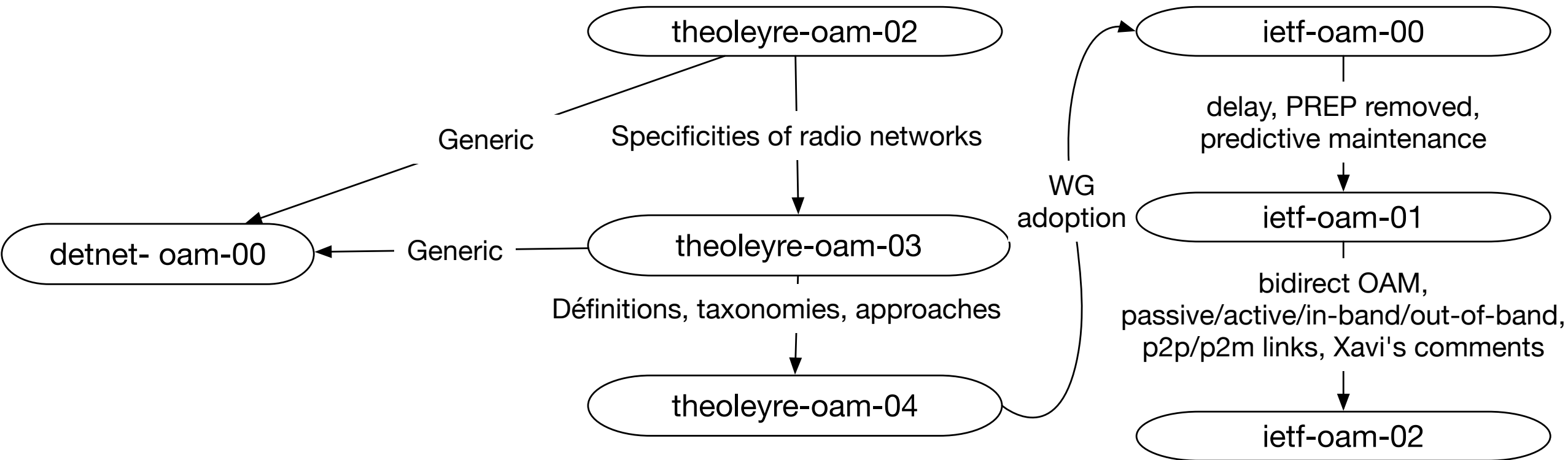


# Operations, Administration and Maintenance (OAM) features for RAW

draft-ietf-raw-oam-support-02

Theoleyre, Papadopoulos, Mirsky, Bernardos

# Update



# Update - Vocabulary

- Definitions
  - In-band / out-of-band: without / without the data packets (same resources)
  - Types of link (still collision free)
    - p2p: one transmitter + one receiver
    - p2m: one transmitter + several receivers
    - Radio = broadcast transmission
  - Constraints
    - Battery lifetime
    - mobility
- Delay = Time between generation and reception
  - Transmission delay (fixed)
  - Residence time (scheduling + retransmissions)

# Update

- Predictive maintenance
  - RAW = wireless = continuously changing
  - Predictions for the SLO
    - reconfiguration if required
  - ➔ Proactively detect anomalies
- Fault tolerance
  - Multi-attachment : multiple MIP for each hop
- Information collection
  - Information Elements
  - Hierarchical monitoring: overhead would be too large + small bandwidth

# Bidirectional OAM

- How shall the statistics be reported to the source?
  - Multipath → large number of possible forwarders for each hop
  - MIP = each router with multiple forwarders
- MUST be supported
  - Individual polling and report of each MIP
  - May be inefficient with multipath
- SHOULD be supported
  - The MEP triggers a collection of all the statistics through all the MIP

# Next Step

- Thank's to Xavi for his comments !
  - Others?
  - Your comments, suggestions, questions always welcome and greatly appreciated
- WGLC?

Thank you!