

Backbone Router

draft-thubert-6lowpan-backbone-router-03

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6TSCH informal Meeting
86th IETF Meeting
Orlando

What's a Backbone Router?

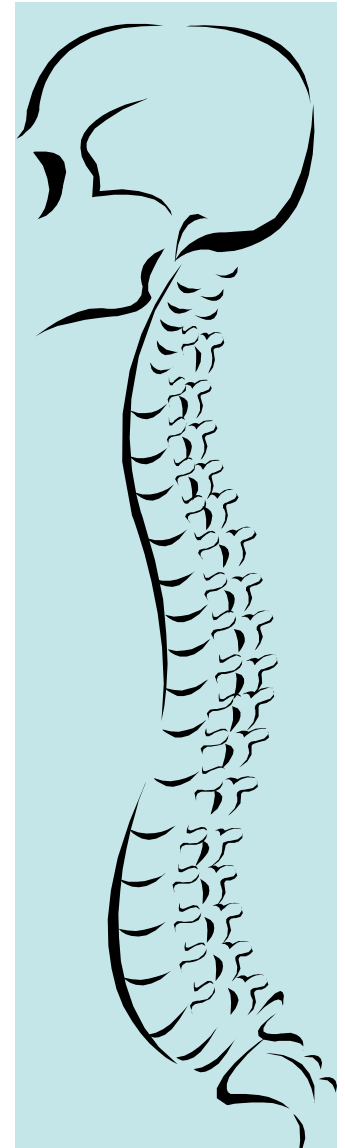
Common ND based abstraction over a backbone

Scales DAD operations (distributes 6LoWPAN ND LBR)

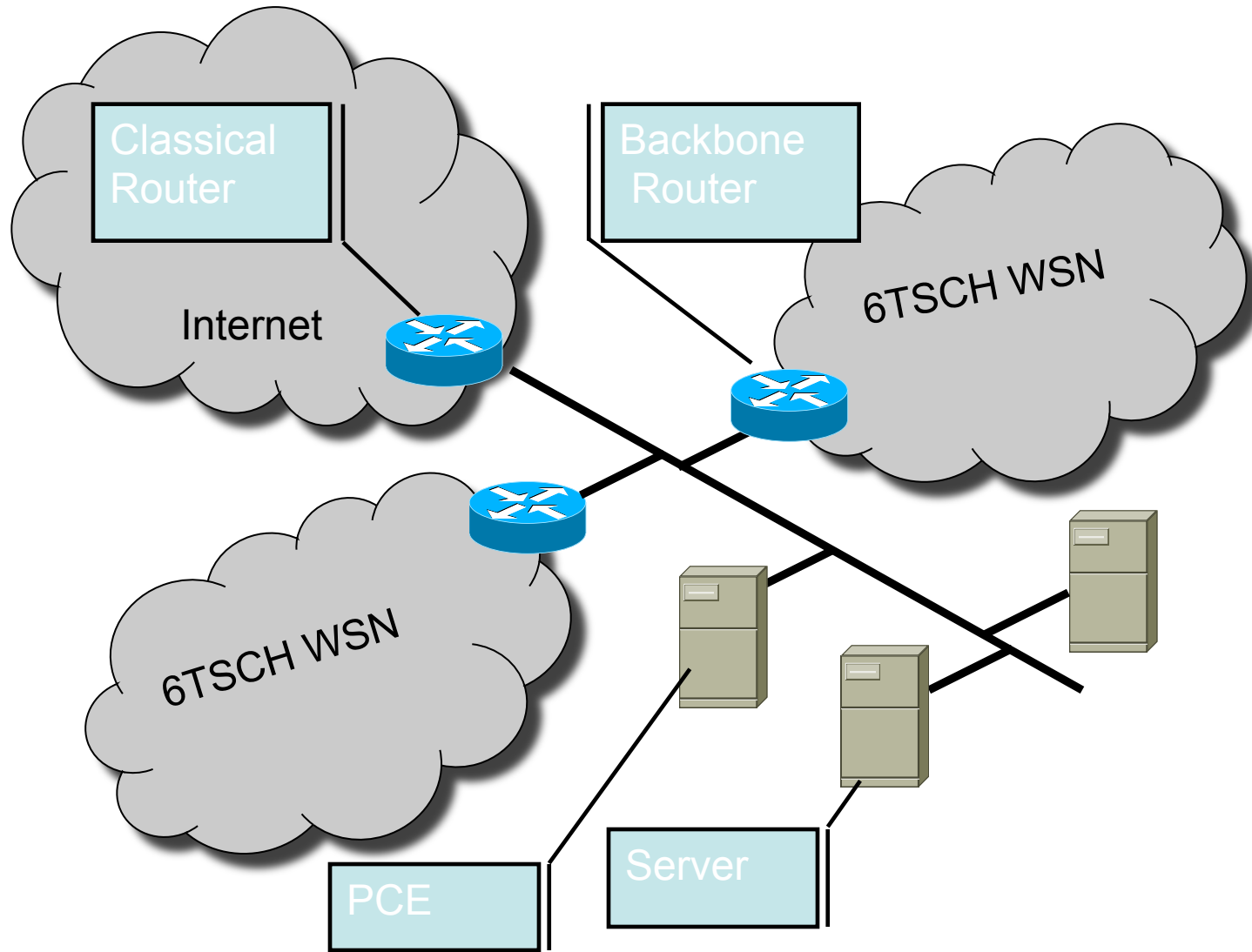
Scales the subnetwork (high speed backbone)

Allows interaction with nodes on the backbone or in other subnets running different operations

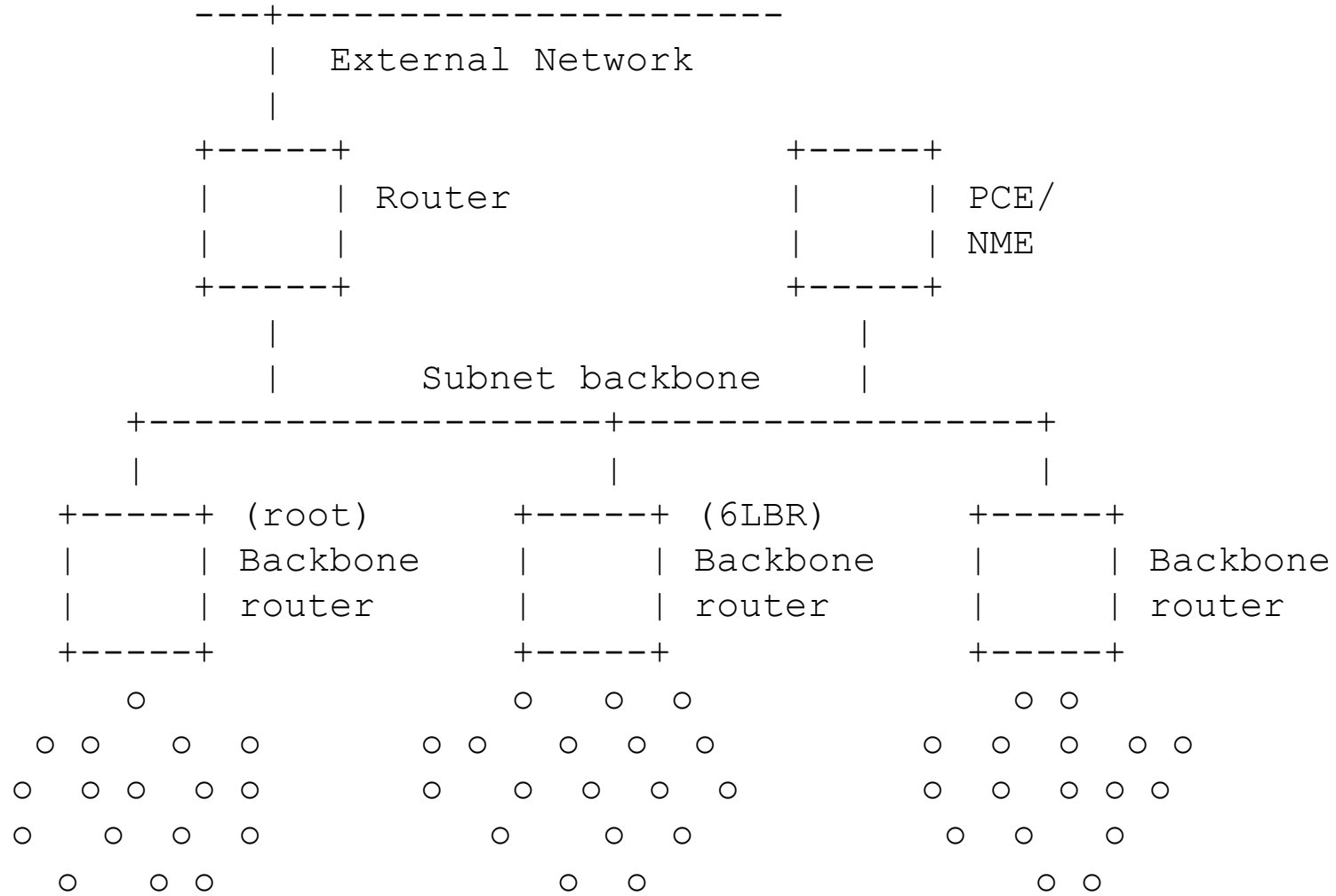
<http://tools.ietf.org/html/draft-thubert-6lowpan-backbone-router>



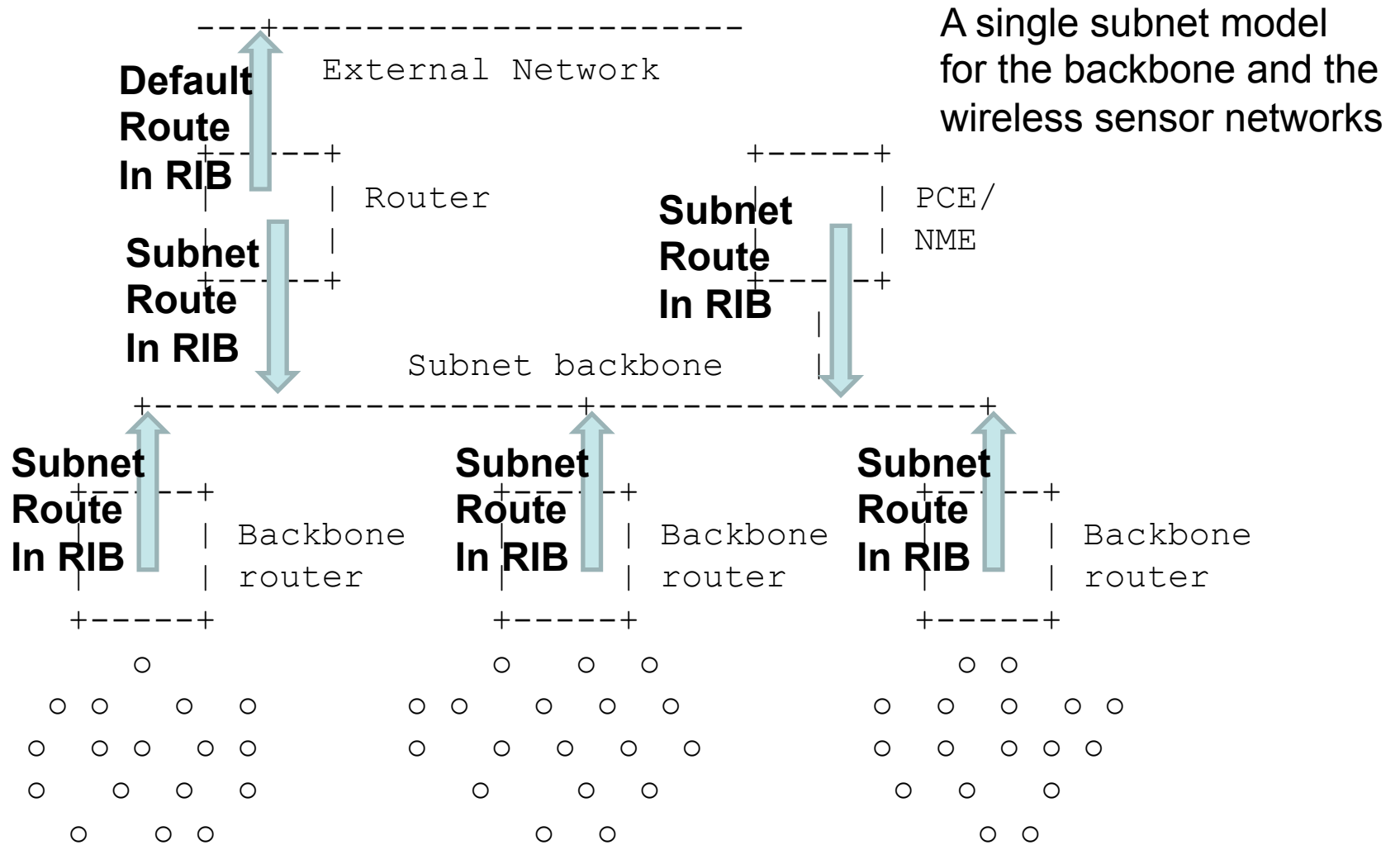
6TSCH reference model



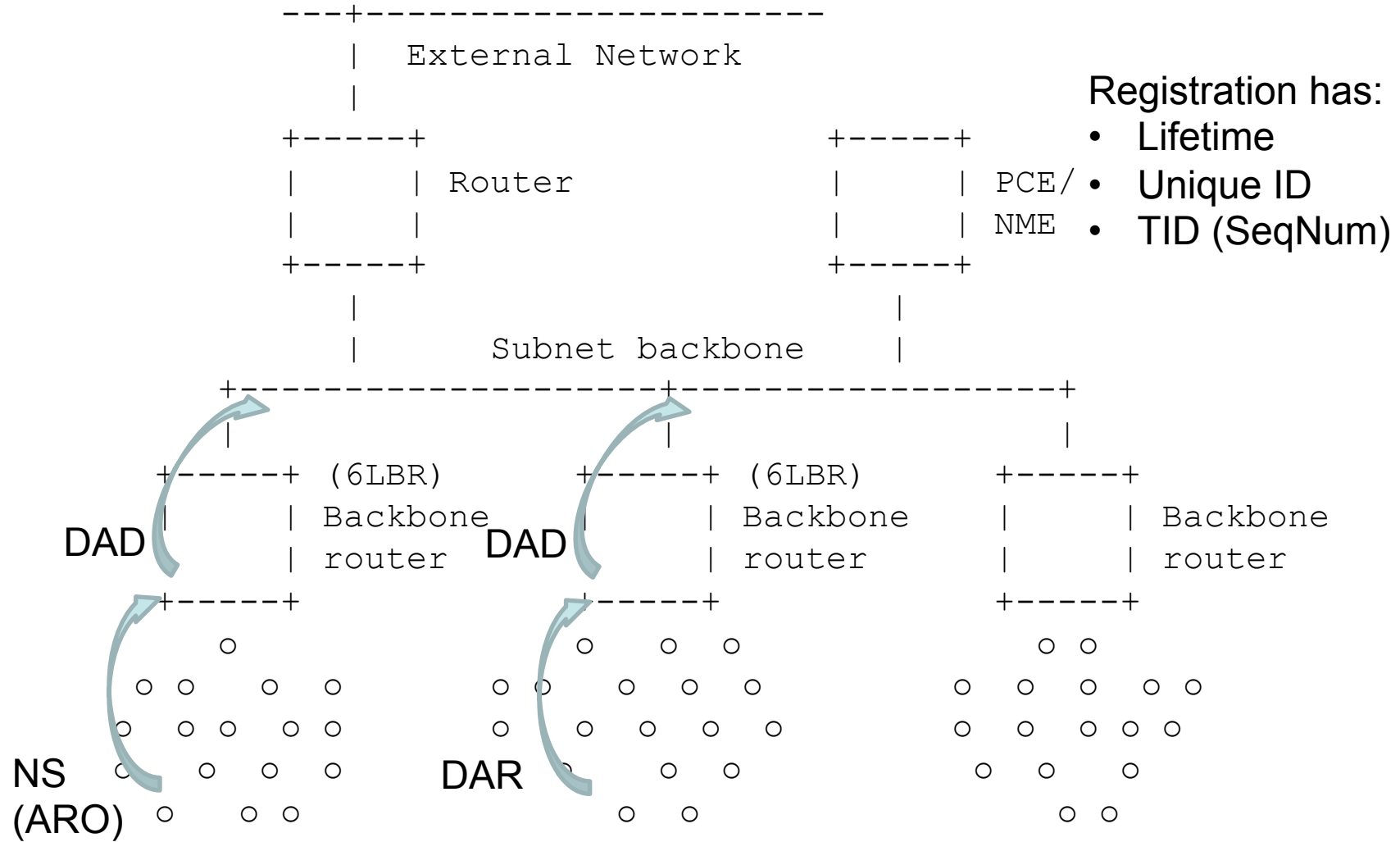
Initial time



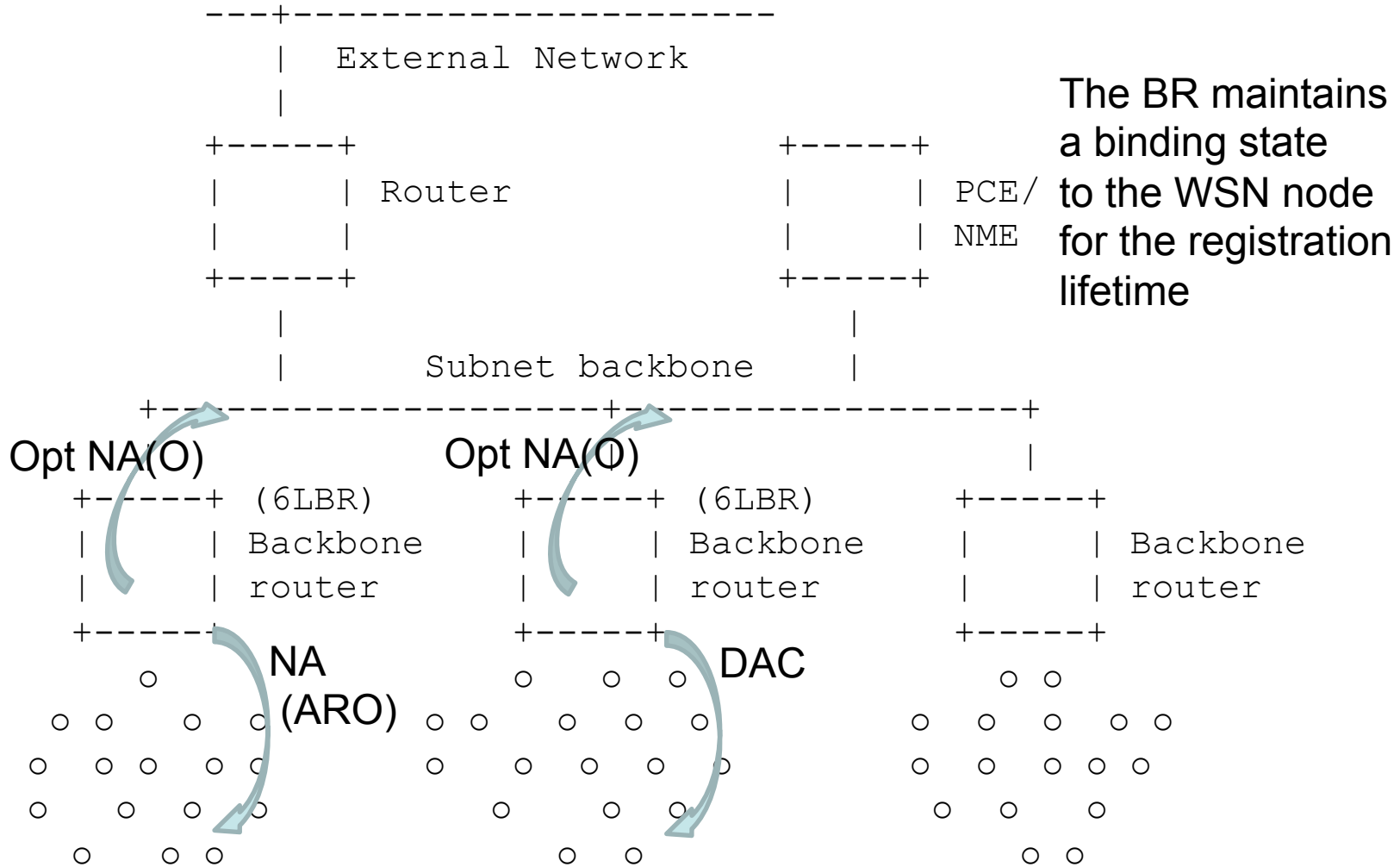
Initial time



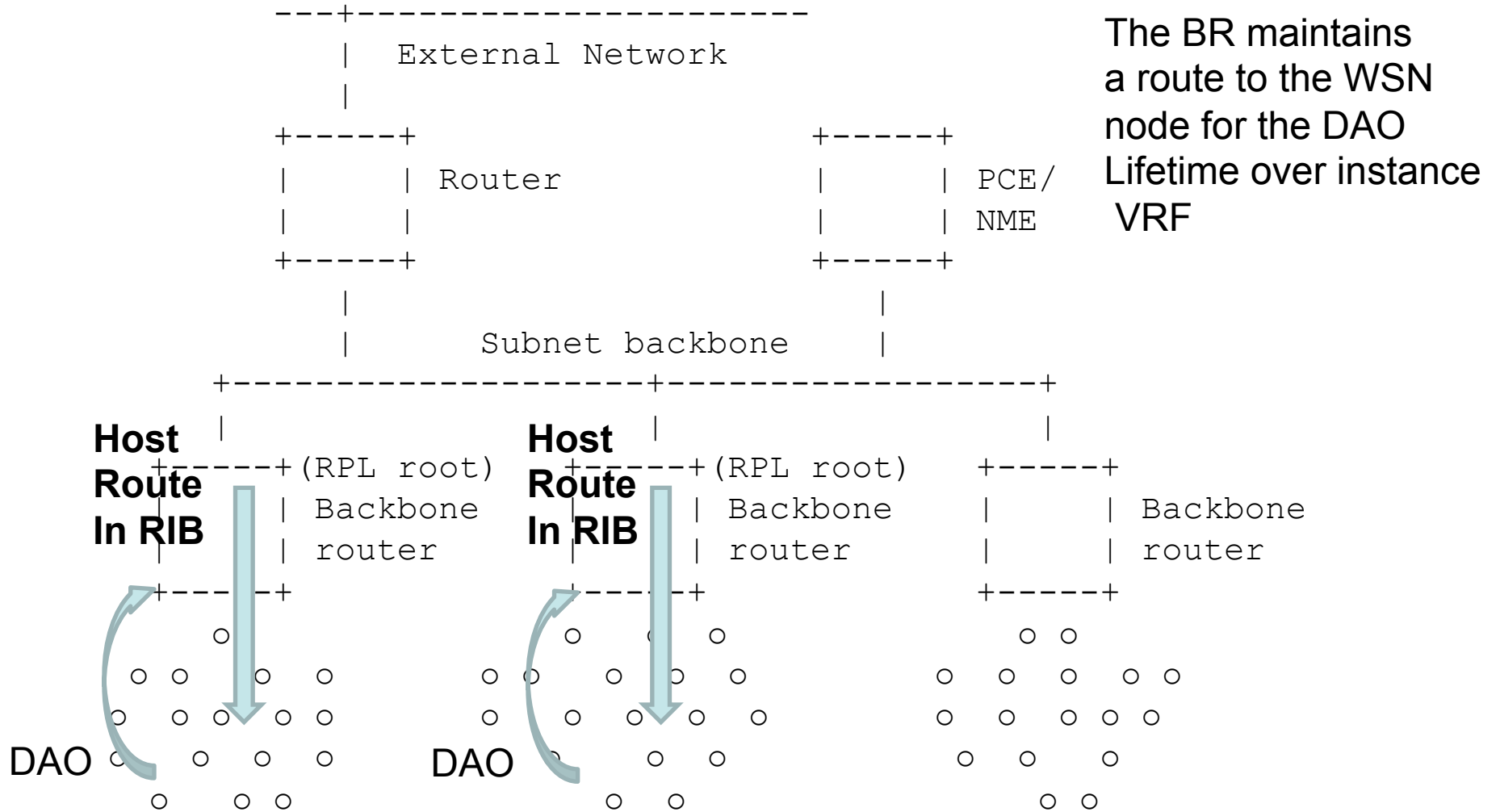
Registration (1st step)



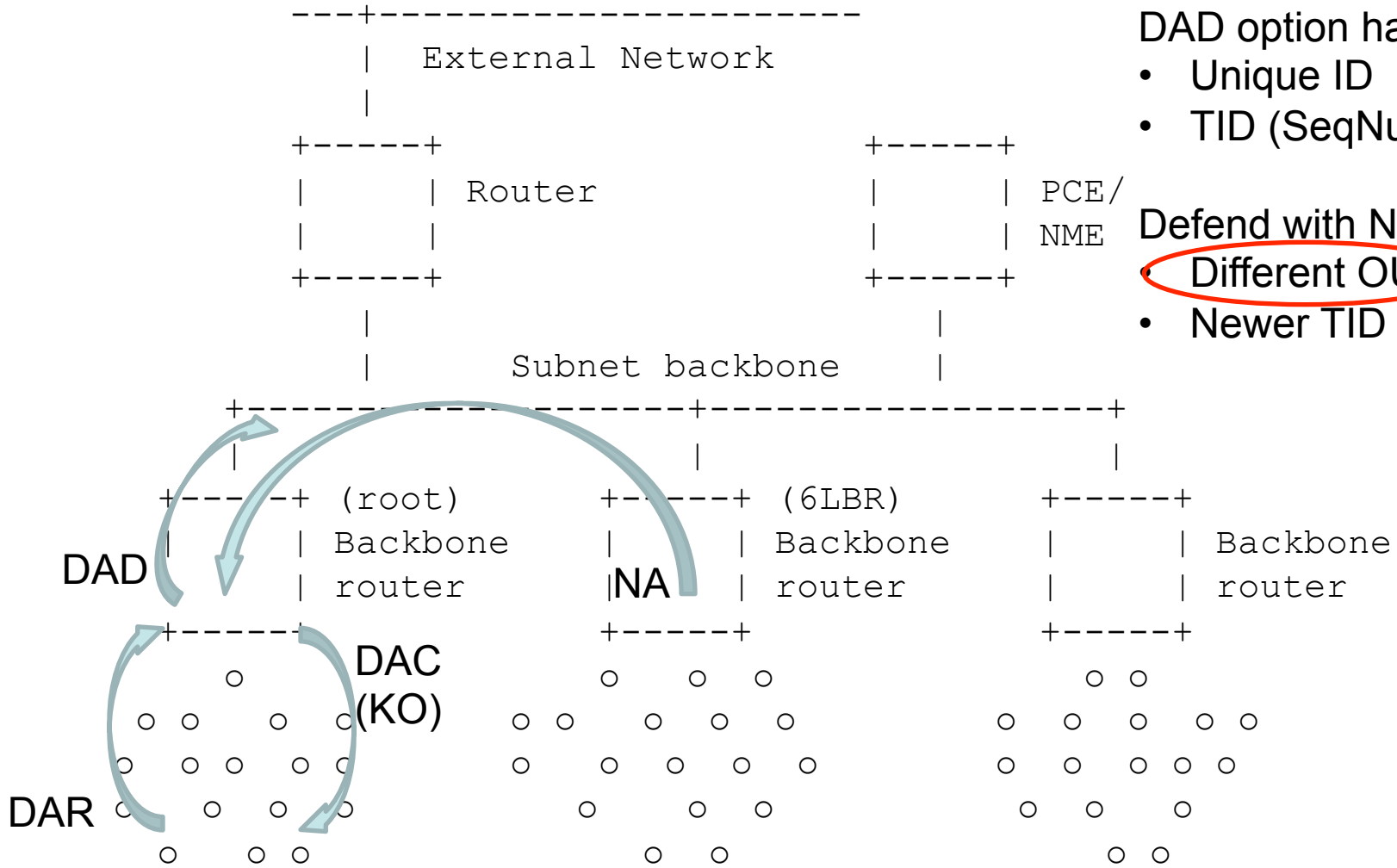
Registration (2nd step one second later)



Registration (3rd step)



Duplication



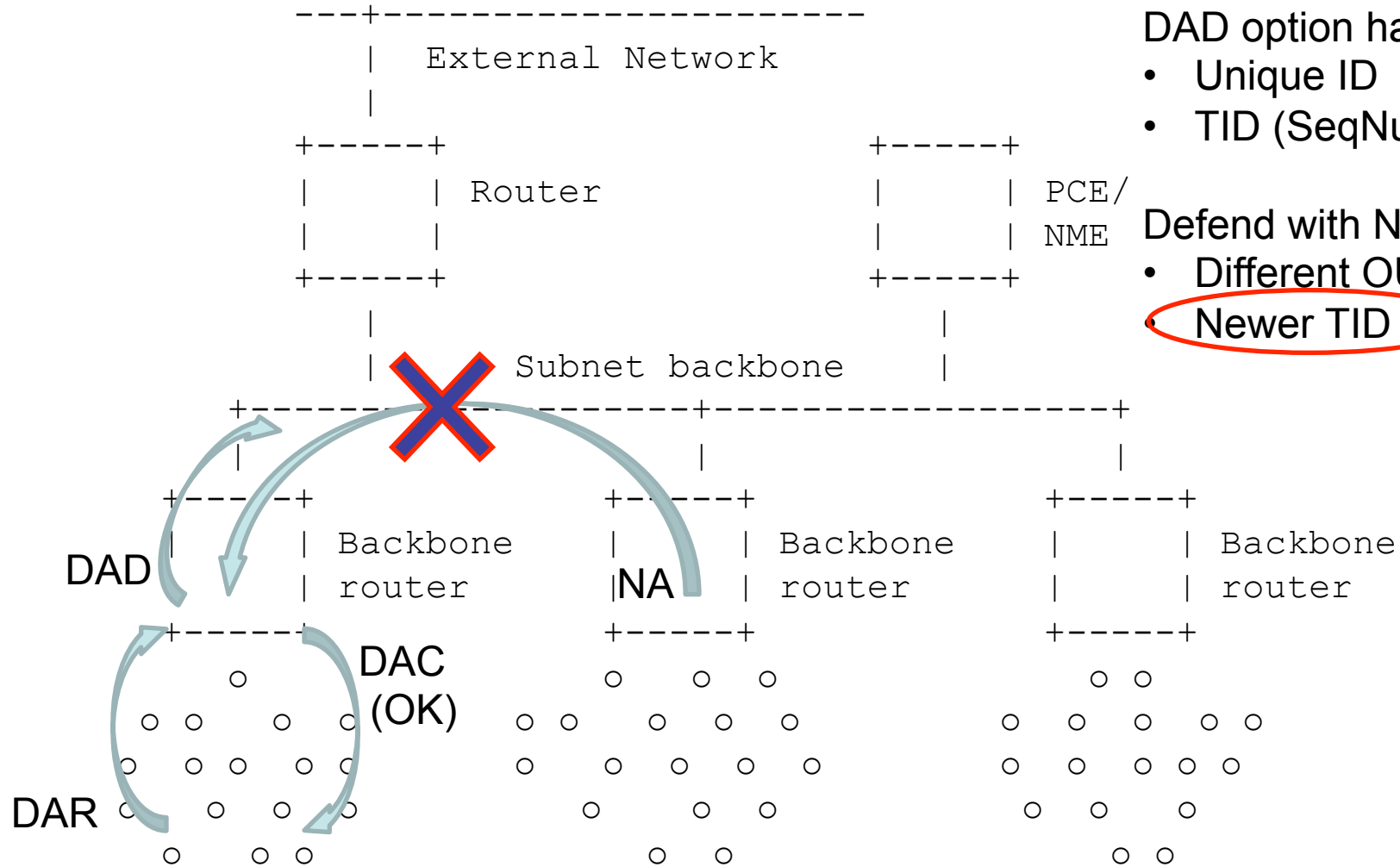
DAD option has:

- Unique ID
- TID (SeqNum)

Defend with NA if:

- Different OUID
- Newer TID

Mobility



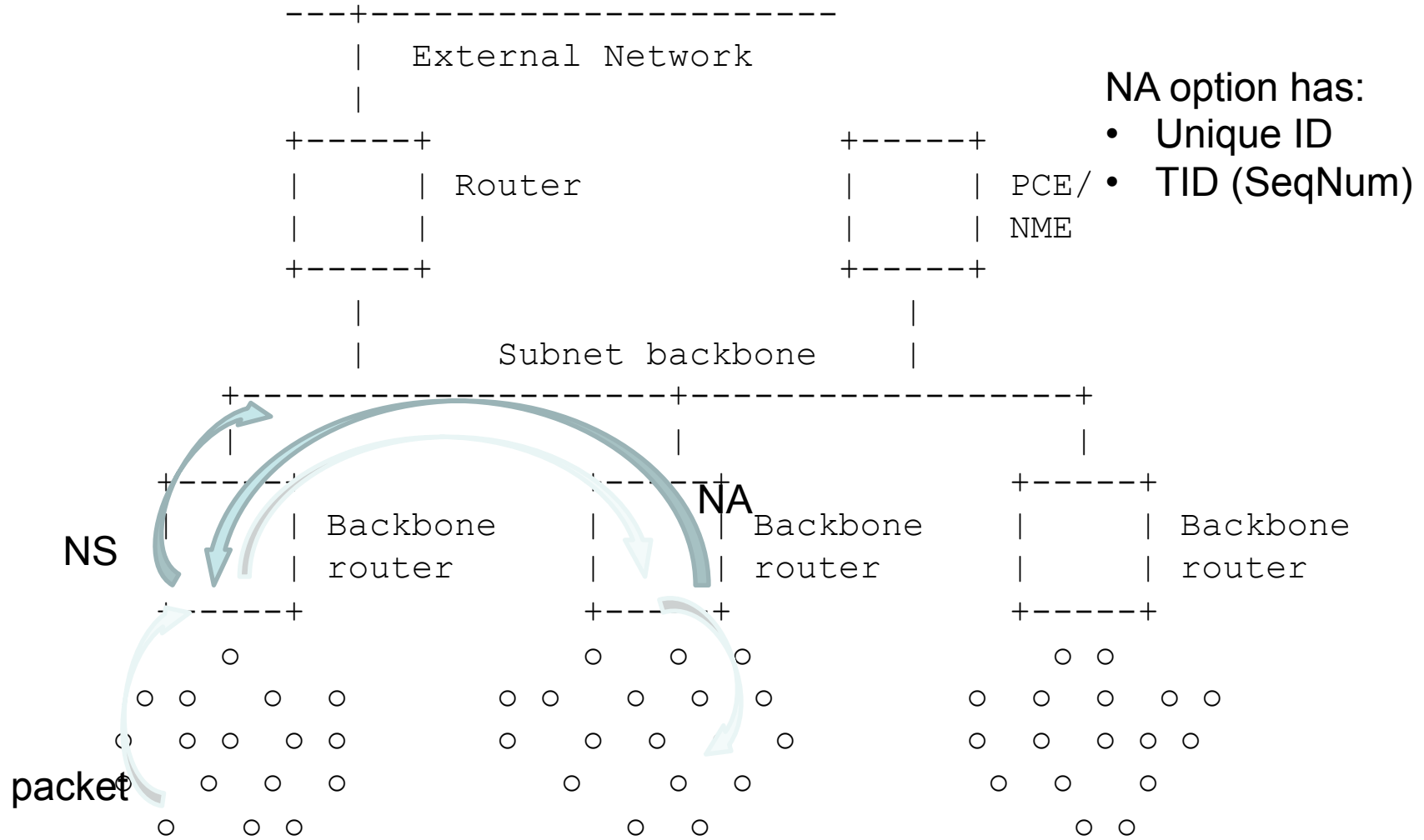
DAD option has:

- Unique ID
- TID (SeqNum)

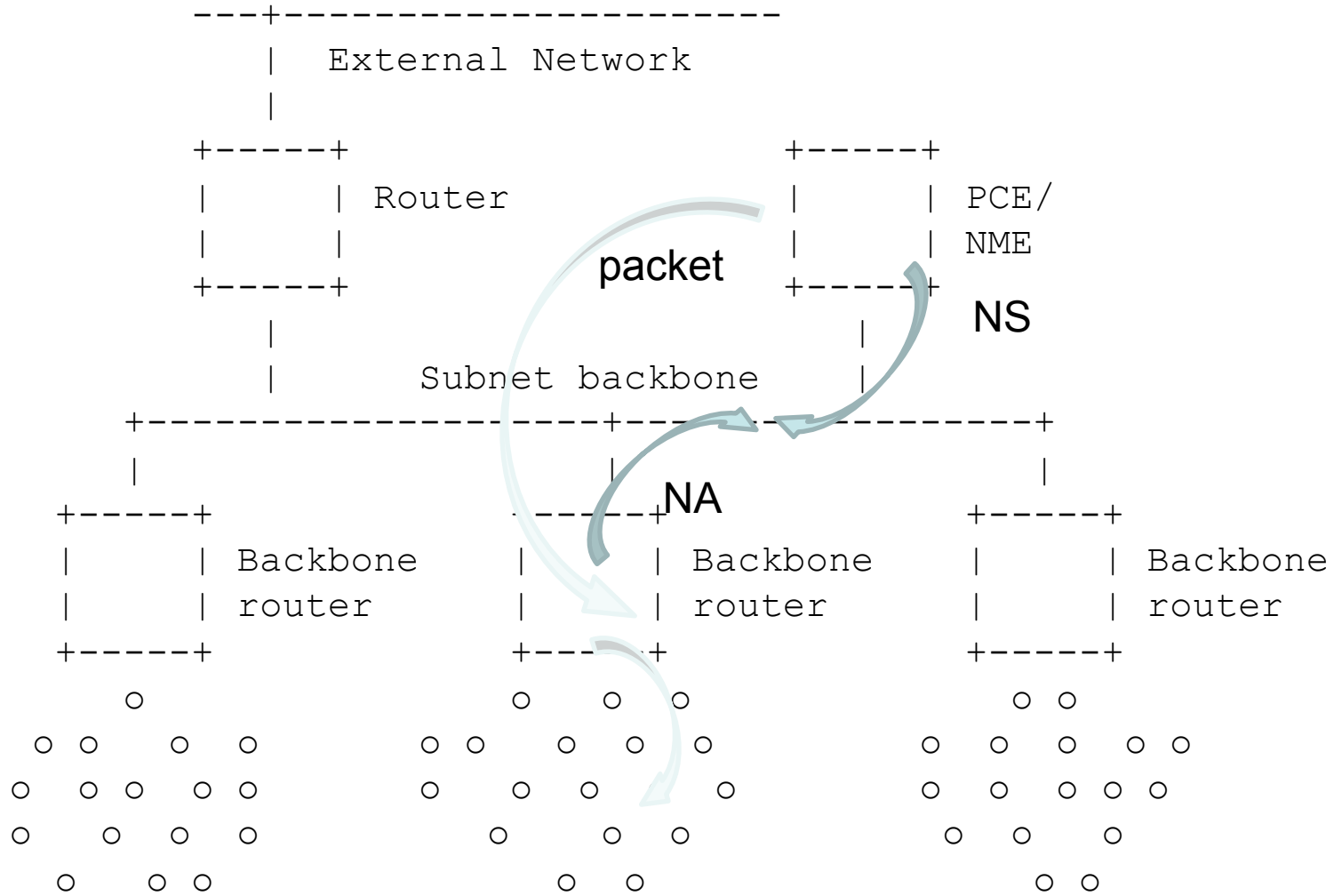
Defend with NA if:

- Different OUID
- **Newer TID**

Resolution



Resolution (2)



Enhanced Address Registration Option

- Used to resolve conflicts
- Need In ND: TID to detect movement ->eARO
- Need In RPL: Object Unique ID if we use RPL for DAD

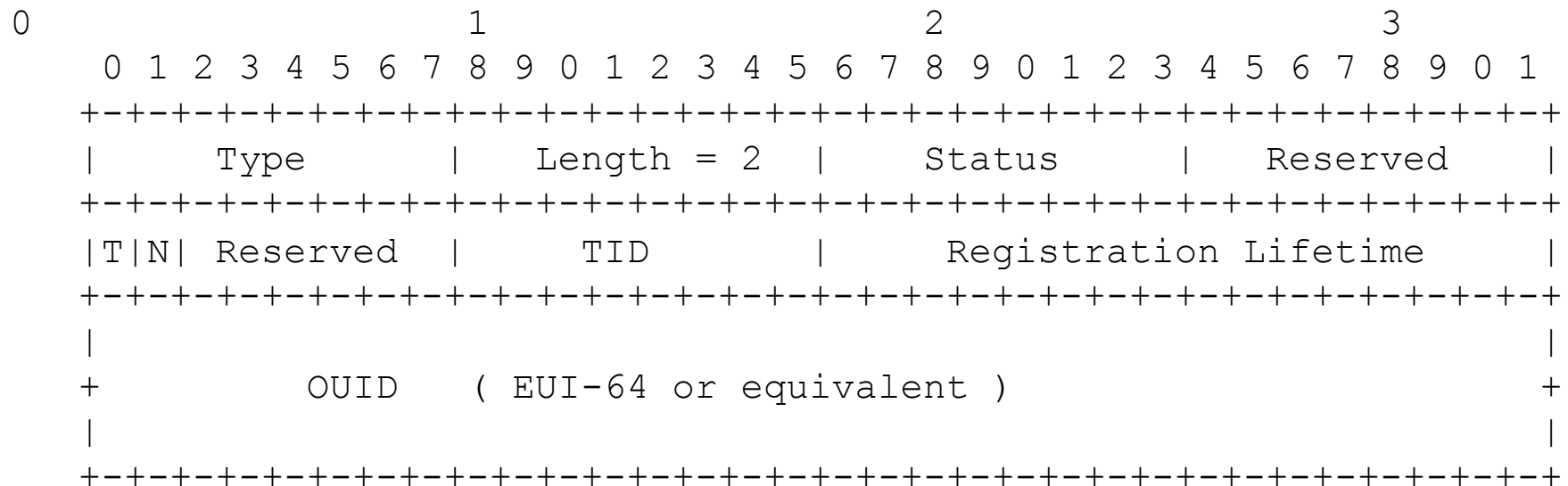


Figure 2: EARO

????? Questions ?????