802.1Qbc Provider Bridging – Remote Customer Service Interface

IEEE 802.1 Interim
September 2009
Volterra, Italy

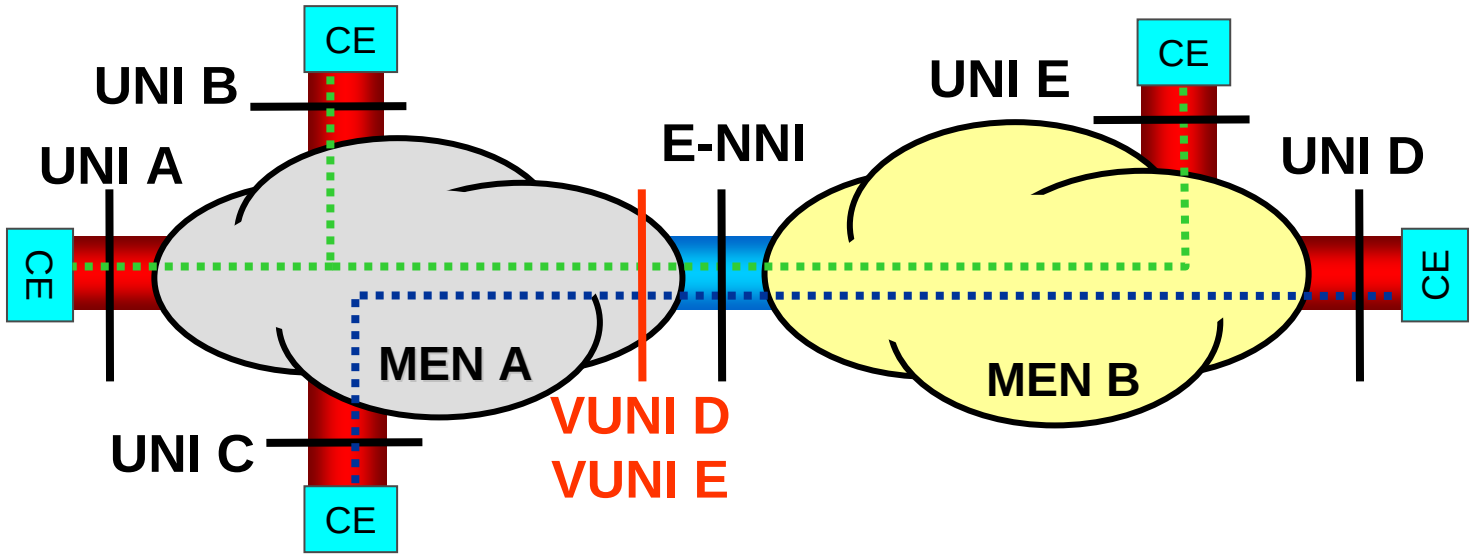
Ben Mack-Crane

(tmackcrane@huawei.com)

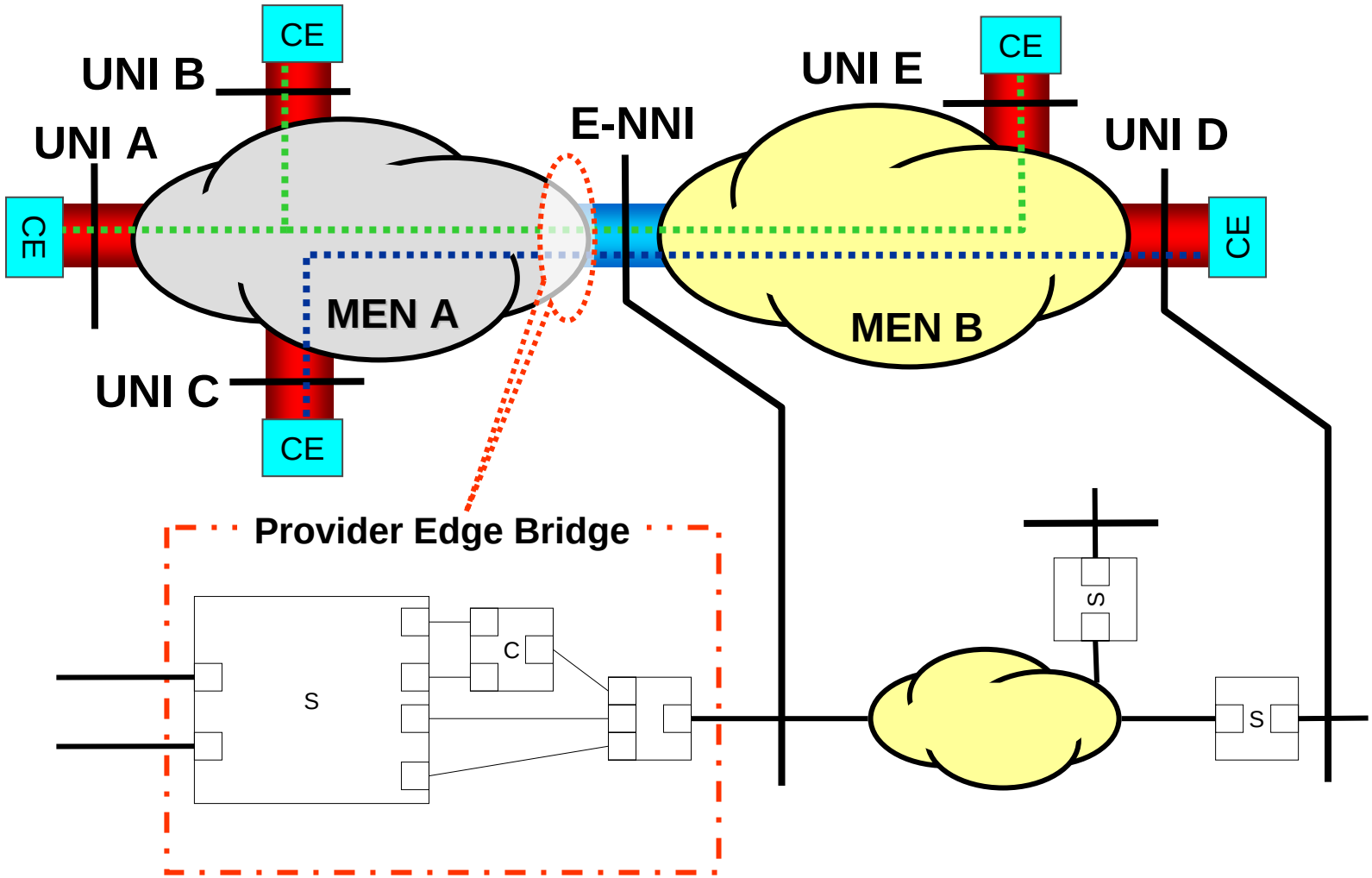
RCSI Solution Details Discussion

- RCSI S-Component
- Bridge protocol relationships
- OAM relationships

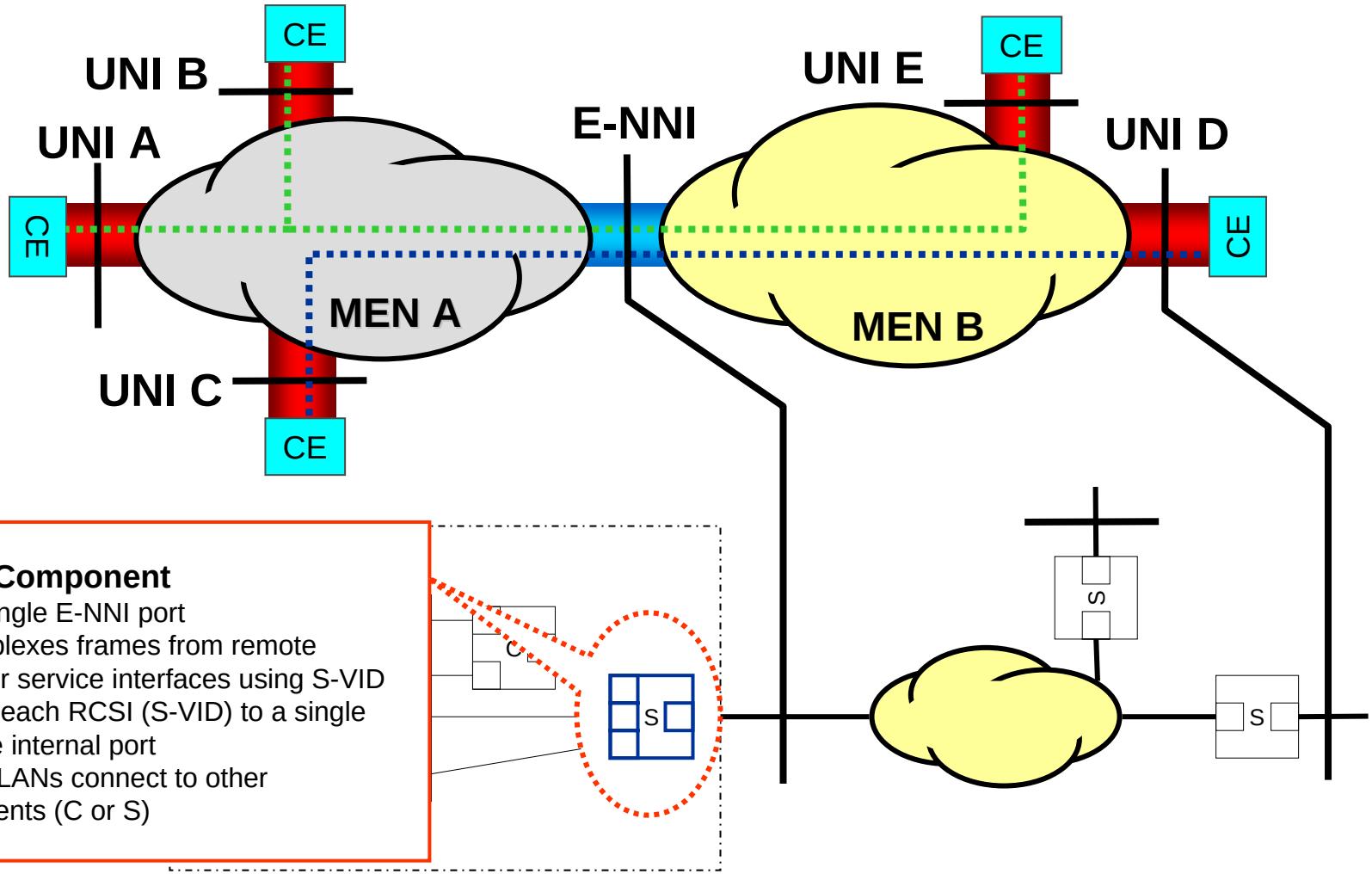
RCSI


CE
UNI B
UNI A
CE
MEN A
UNI C
CE
E-NNI
VUNI D
VUNI E
UNI E
CE
UNI D
MEN B
CE

RCSI PEB


CE
UNI B
UNI A
CE
MEN A
UNI C
CE
E-NNI
UNI E
CE
UNI D
MEN B
CE
Provider Edge Bridge
S
C
S
S

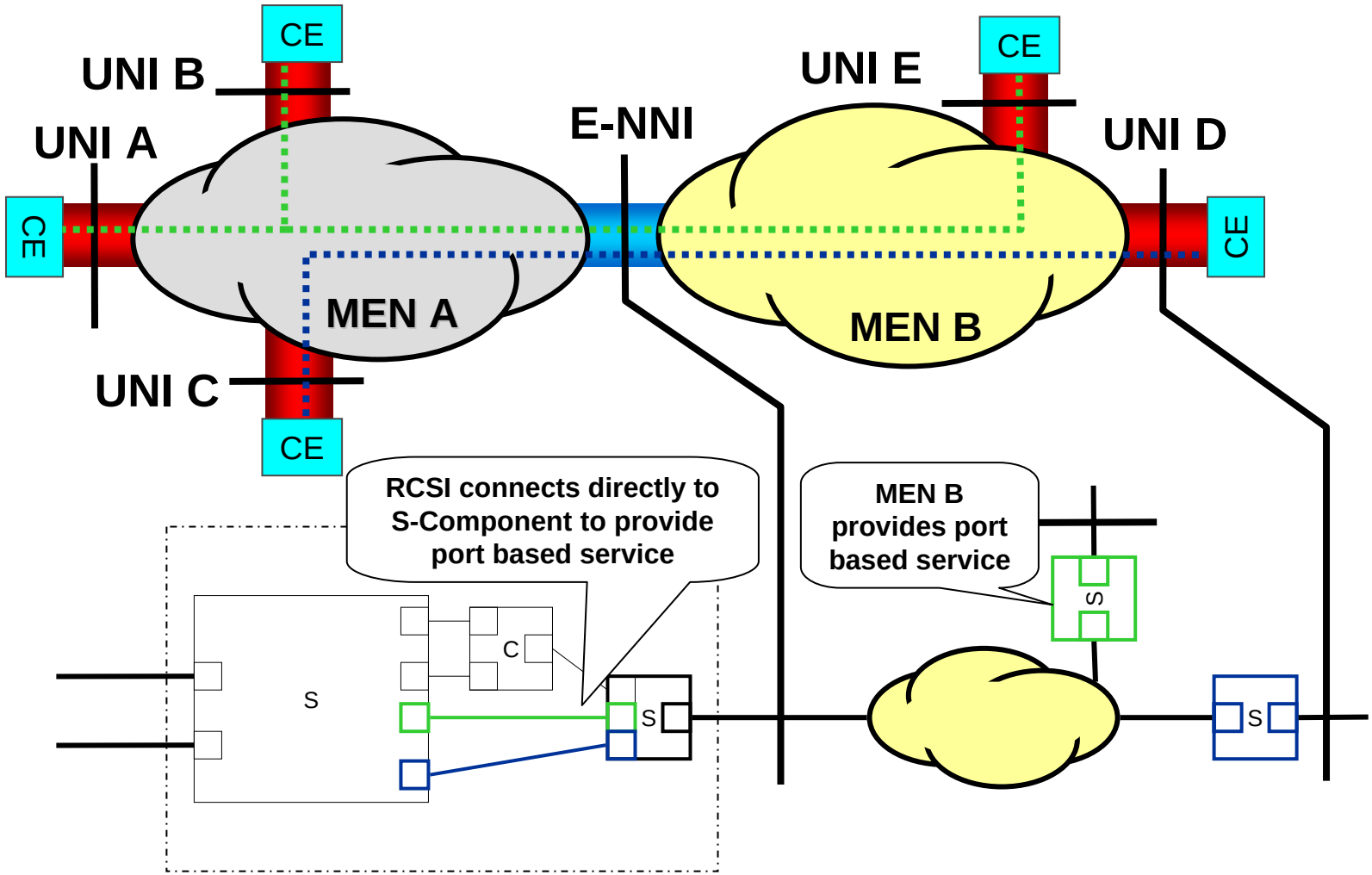
RCSI S-Component



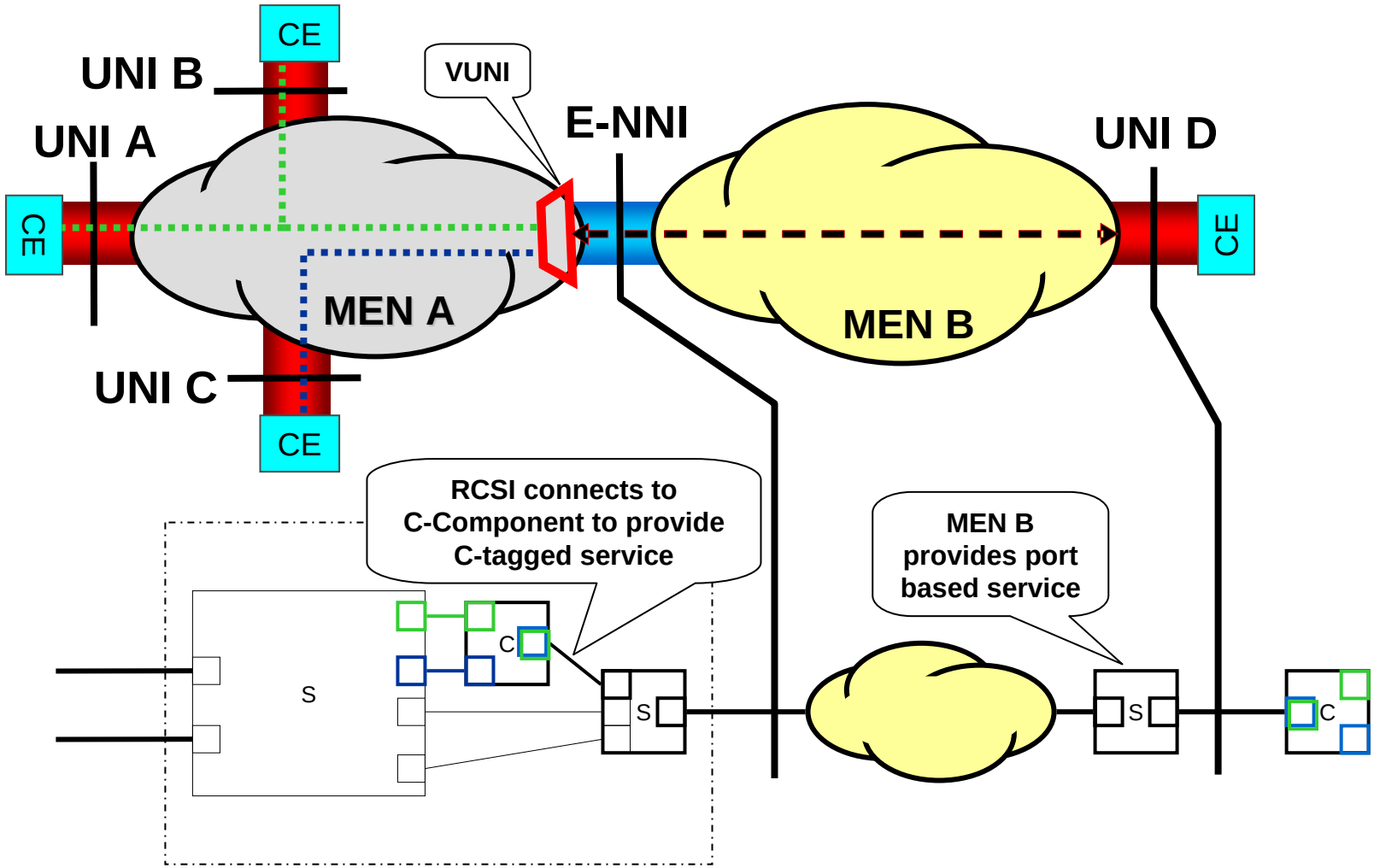
RCSI S-Component

- Has a single E-NNI port
- Demultiplexes frames from remote customer service interfaces using S-VID
- Assigns each RCSI (S-VID) to a single separate internal port
- Internal LANs connect to other components (C or S)

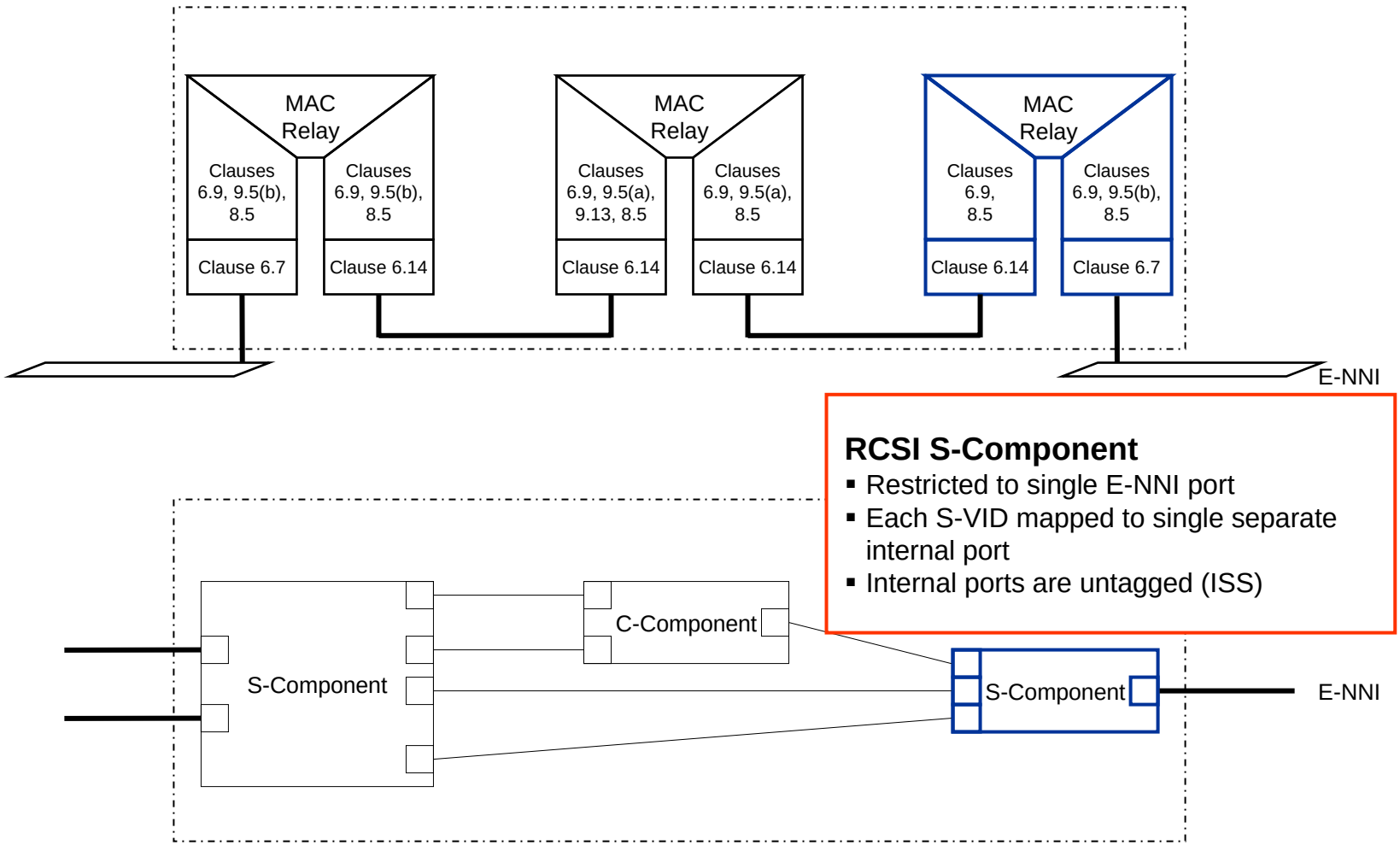
RCSI for Port Based Service



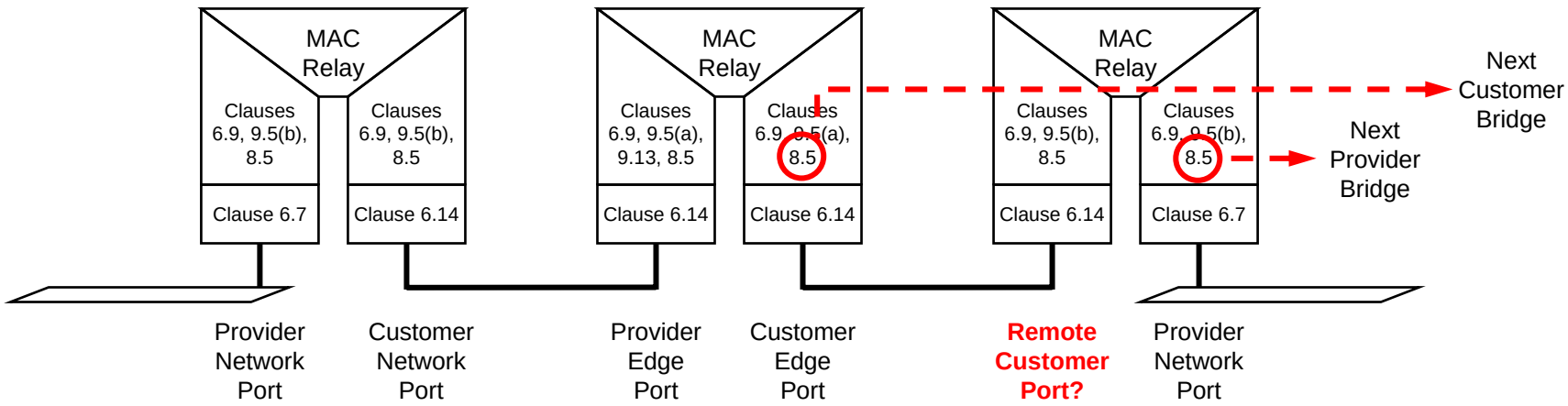
RCSI for C-Tagged Service

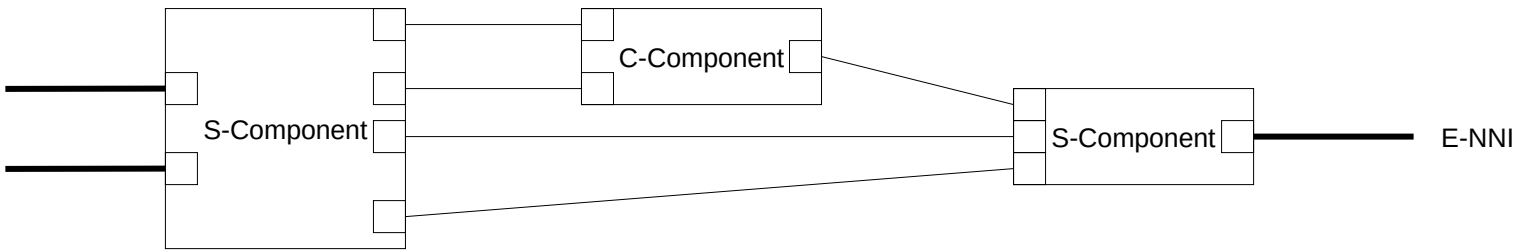


RCSI S-Component

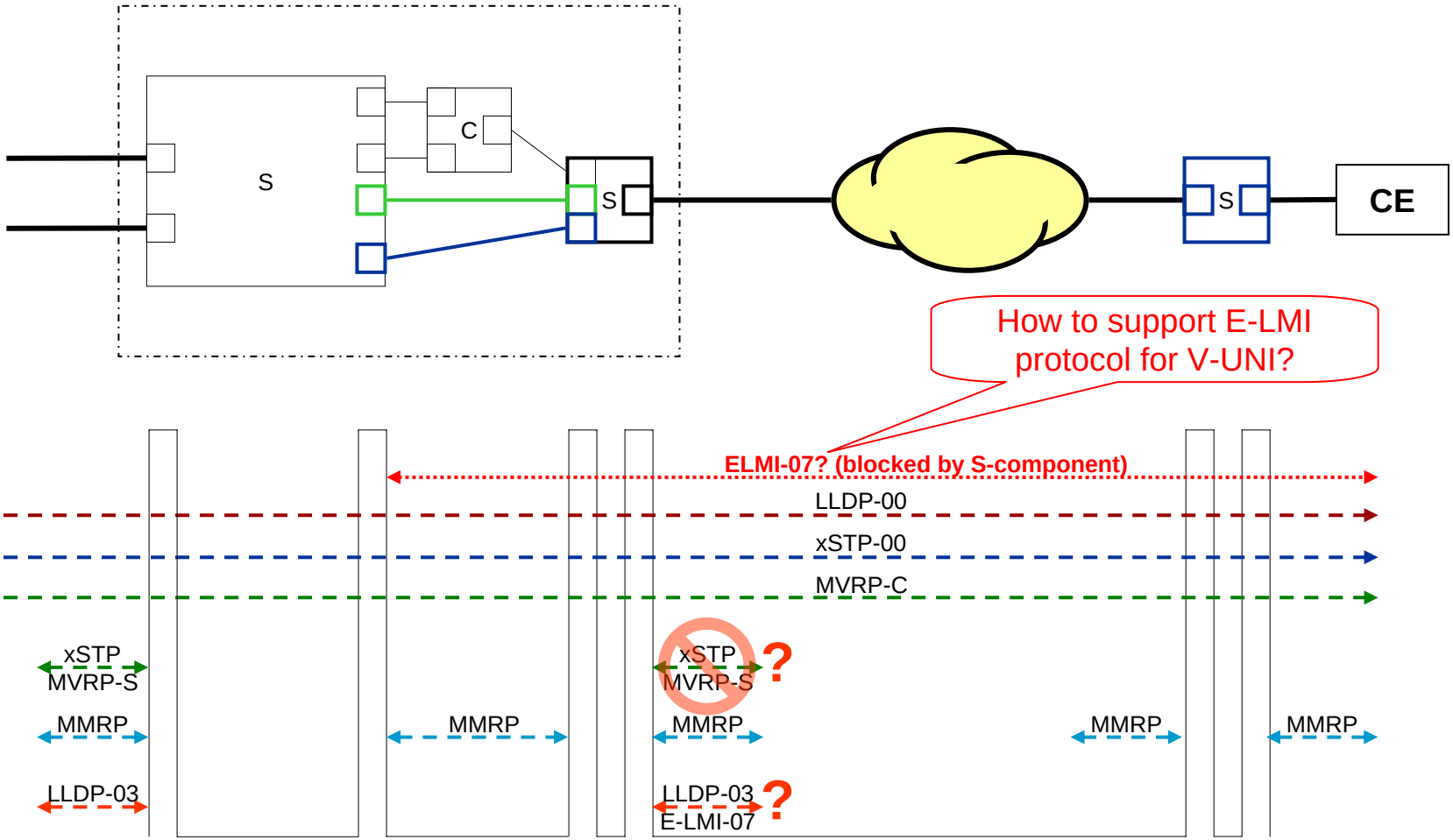


RCSI Protocol Relationships

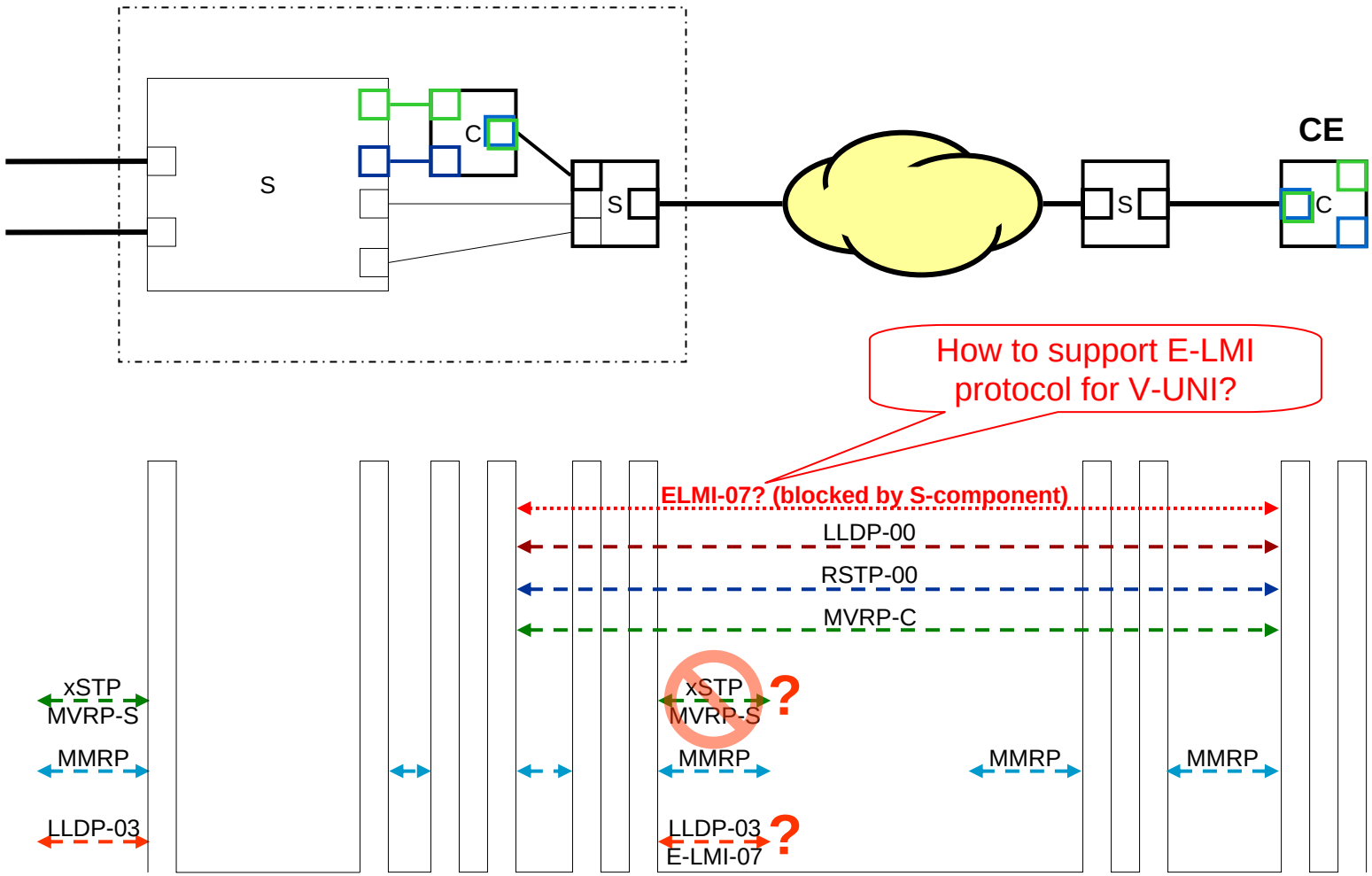




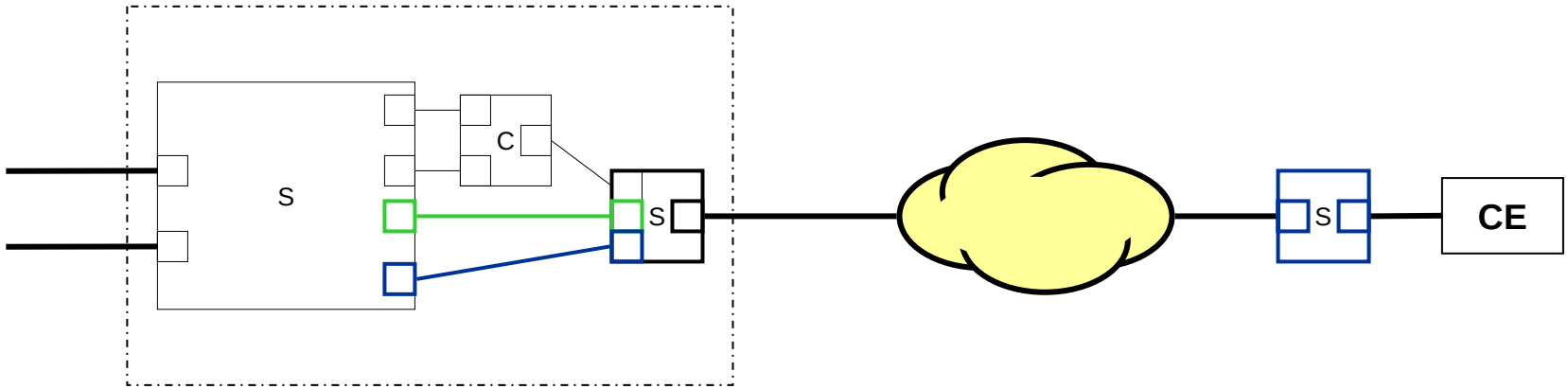
Port Based Service Protocols

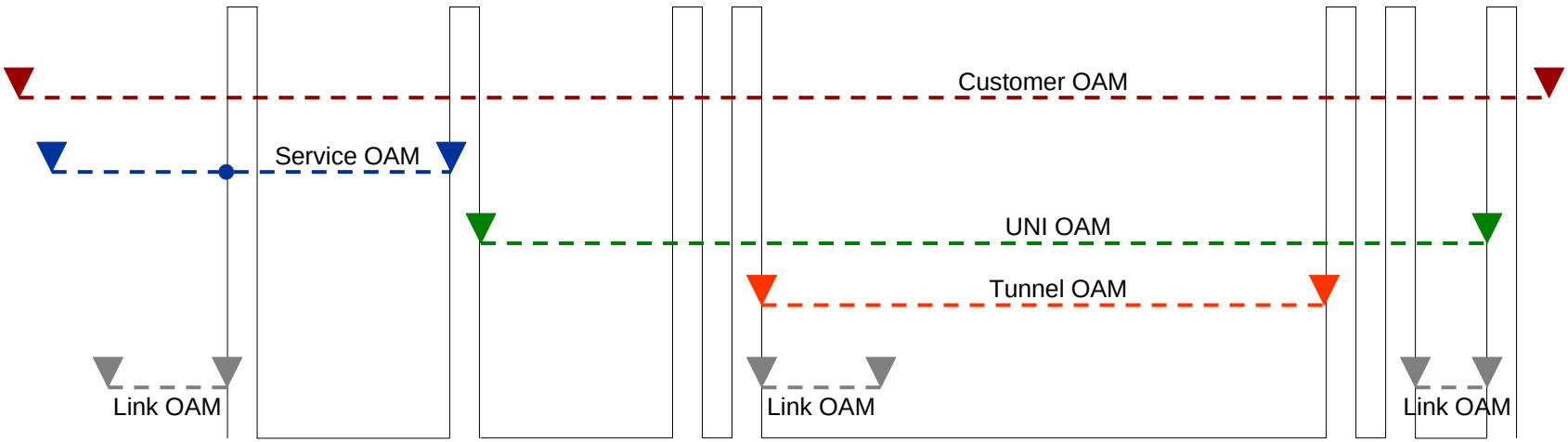


C-Tagged Service Protocols

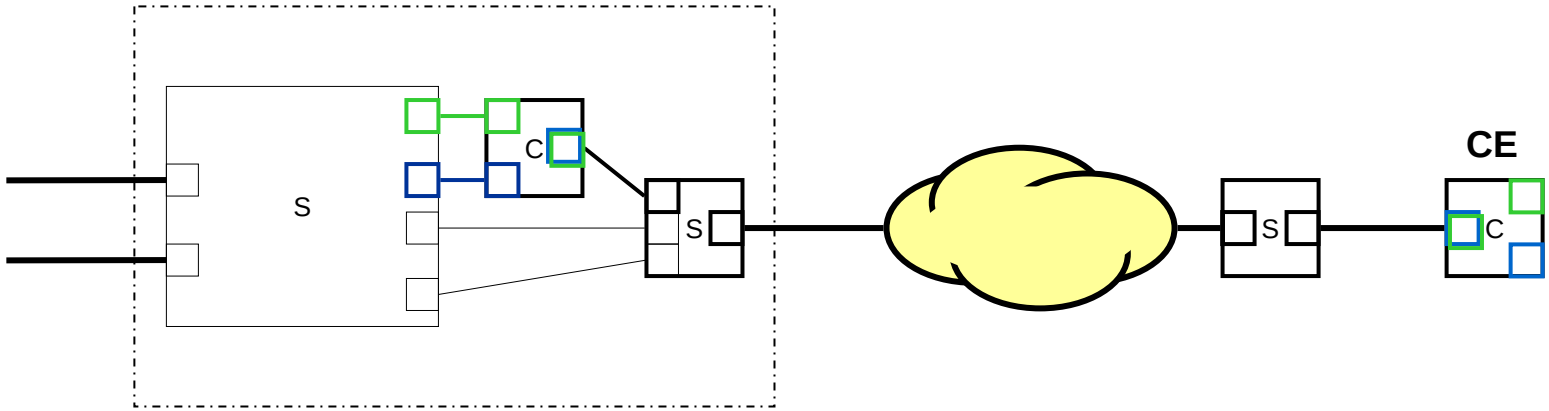


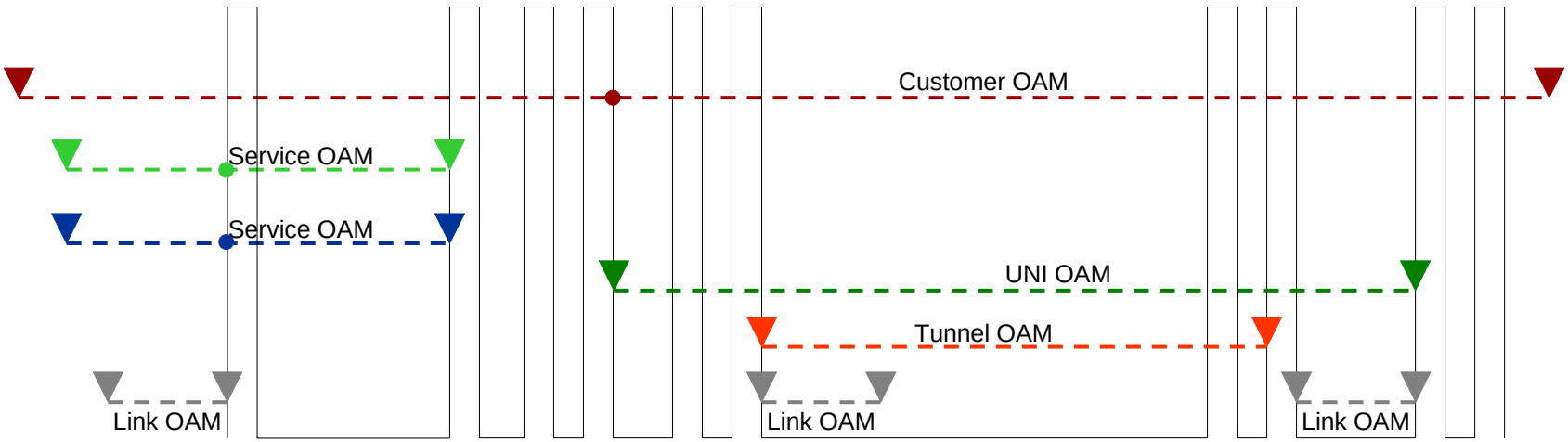
OAM for Port Based Service





OAM for C-Tagged Service





RCSI Additional Requirements?

- Report service status to Customer via E-LMI
  - Including UNI interface (tunnel) status
- Require tunnel service status report from access operator (via E-LMI?)
- Management channel to Service Provider controlled NID