

CCVPN Use Case Extension External API

Davide Cherubini – Emmanuel Sarris – Razanne Abu-Aisheh

Vodafone

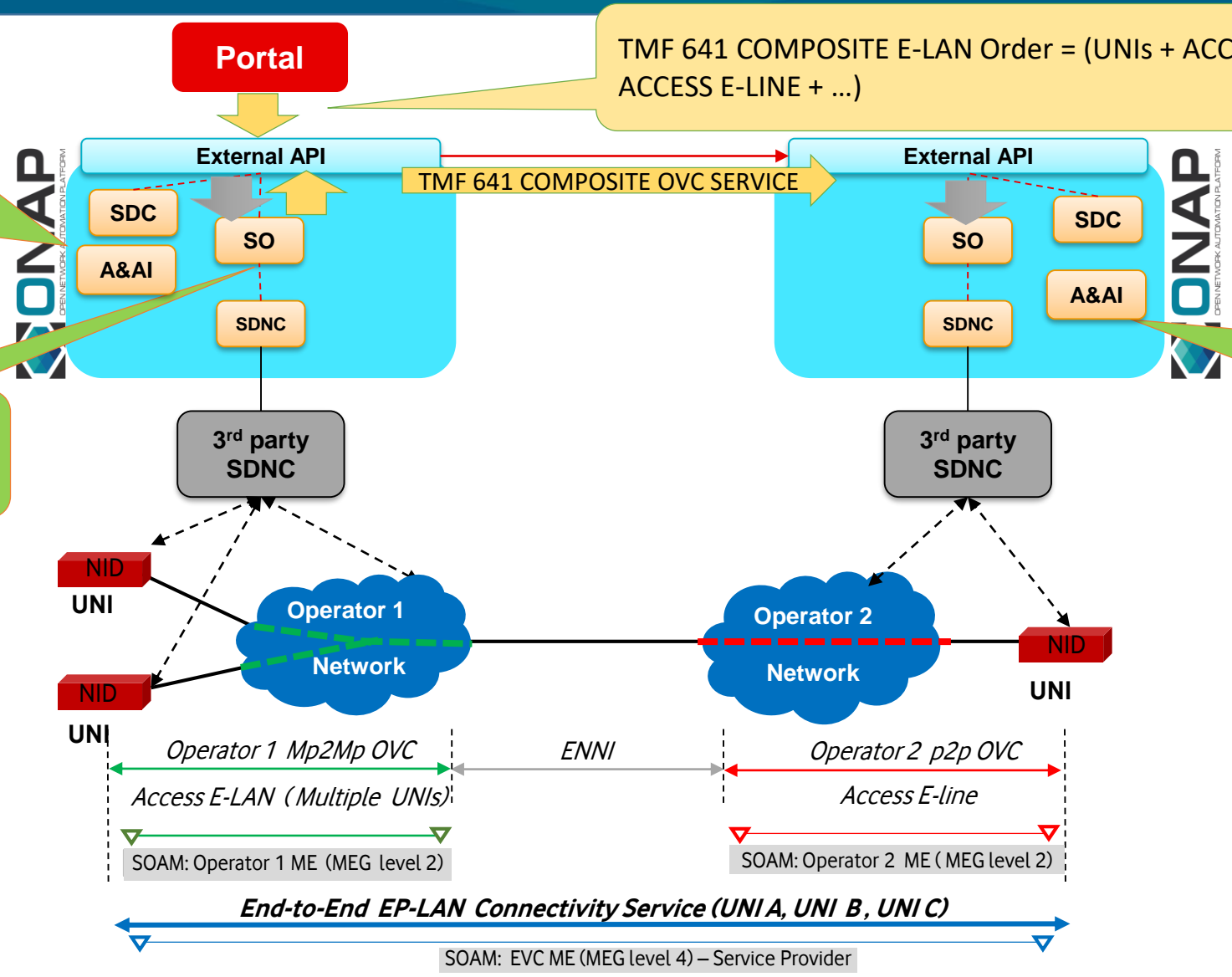
SO Service Decomposition

COMPOSITE E2E SERVICE INSTANCE for EP-LAN: (UNIs + ACCESS E-LAN + ACCESS E-LINE + ...)

TMF 641 COMPOSITE E-LAN Order = (UNIs + ACCESS E-LAN + ACCESS E-LINE + ...)

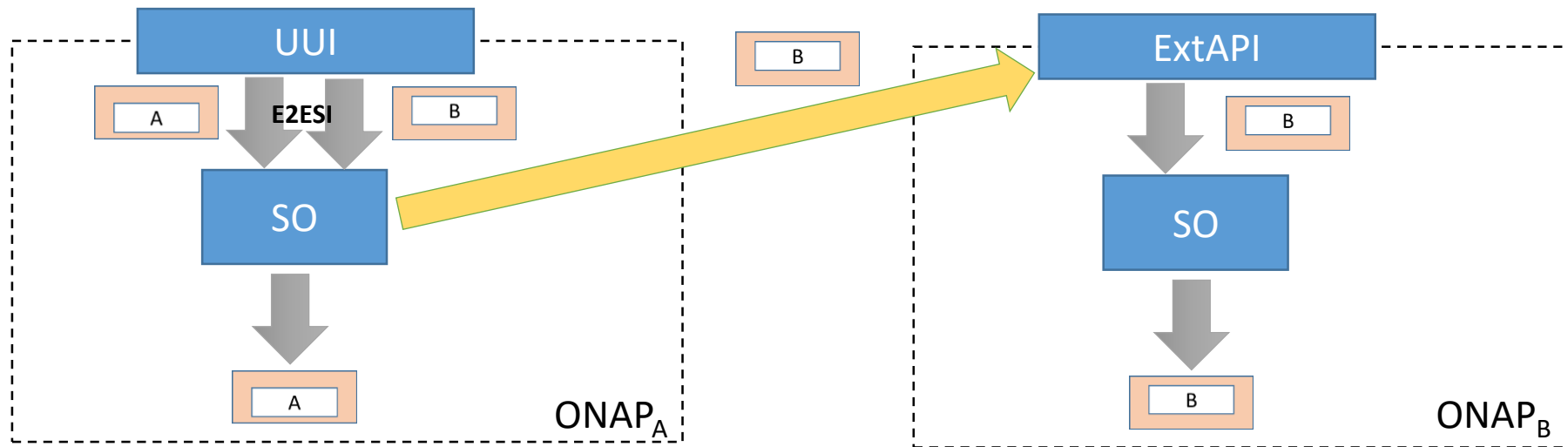
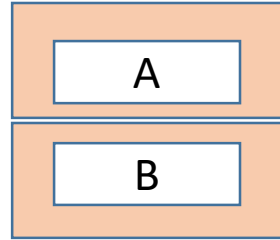
SERVICE DECOMPOSITION

COMPOSITE OVC SERVICE INSTANCE: (UNI + ACCESS E-LINE + ...)

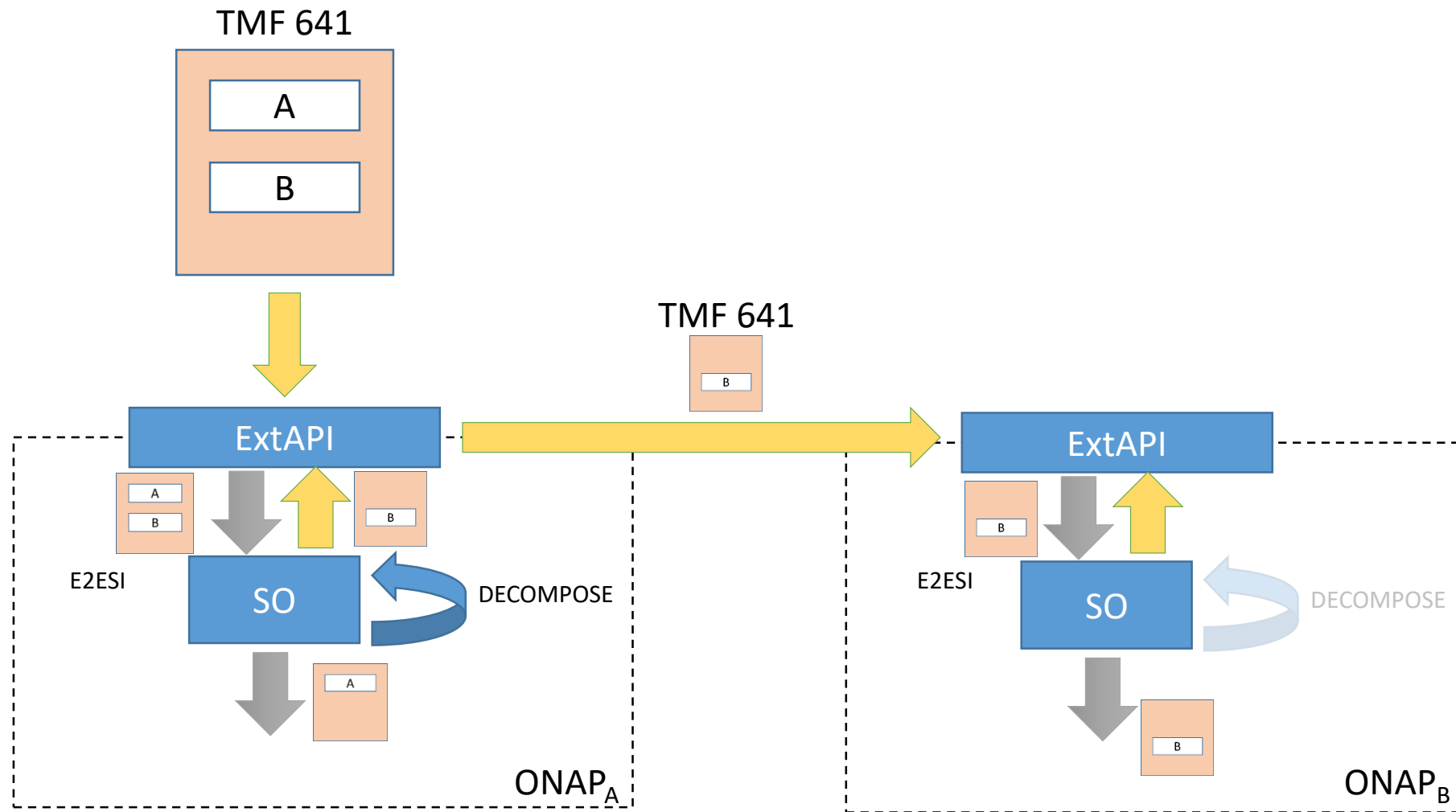


CCVPN Order Handling (current implementation)

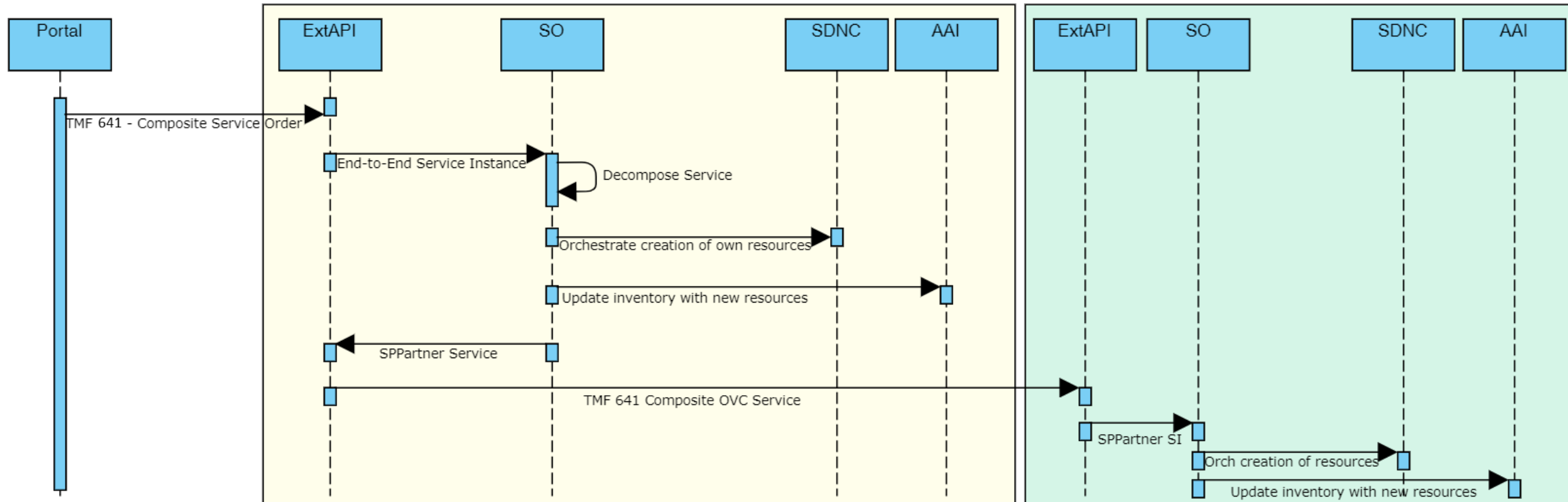
CCVPN Service

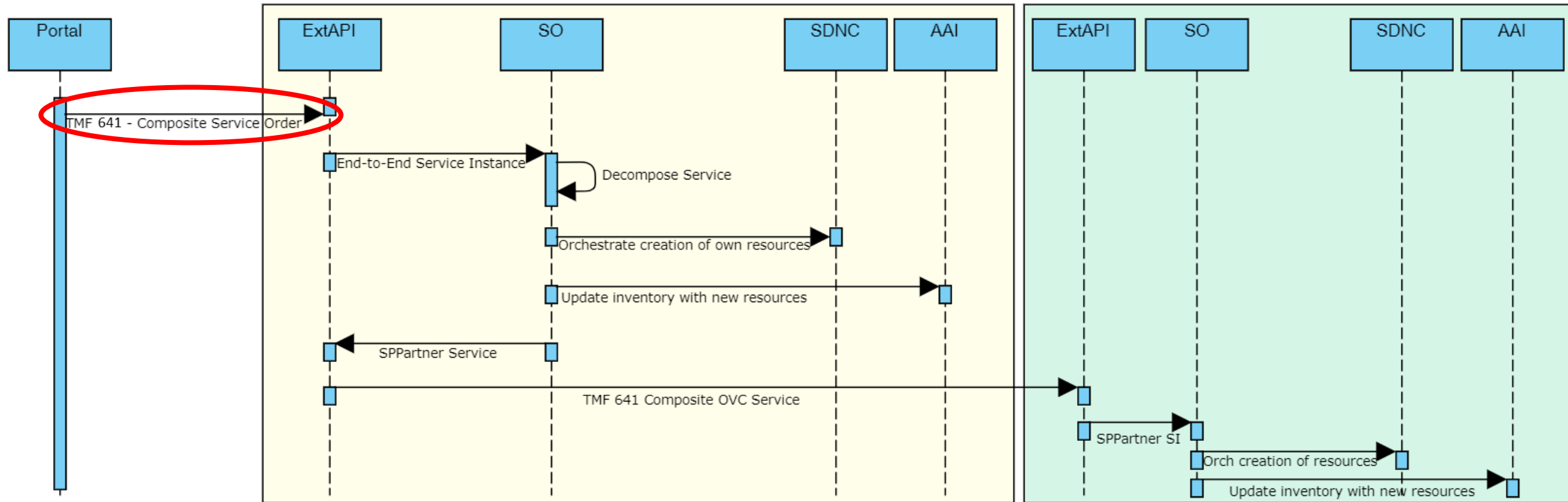


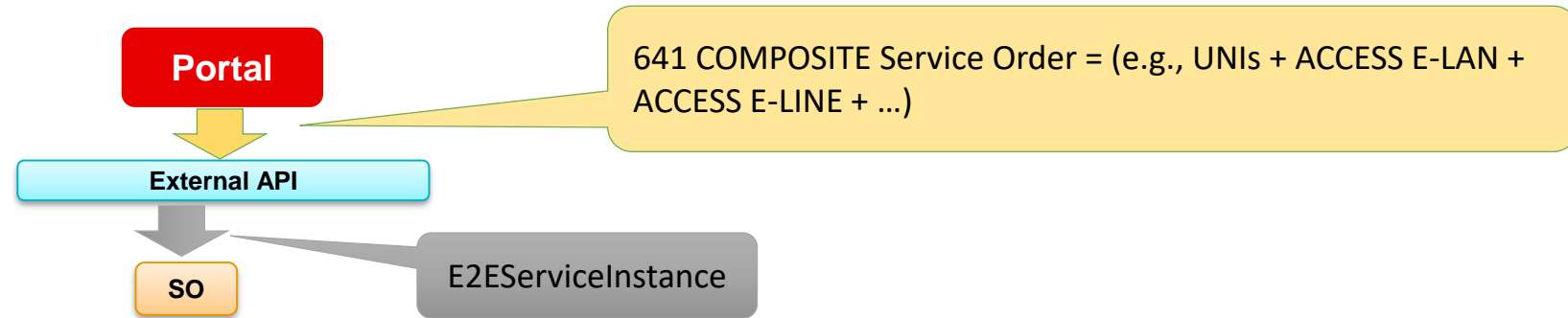
CCVPN Order Handling (Dublin)



CCVPN Sequence Diagram

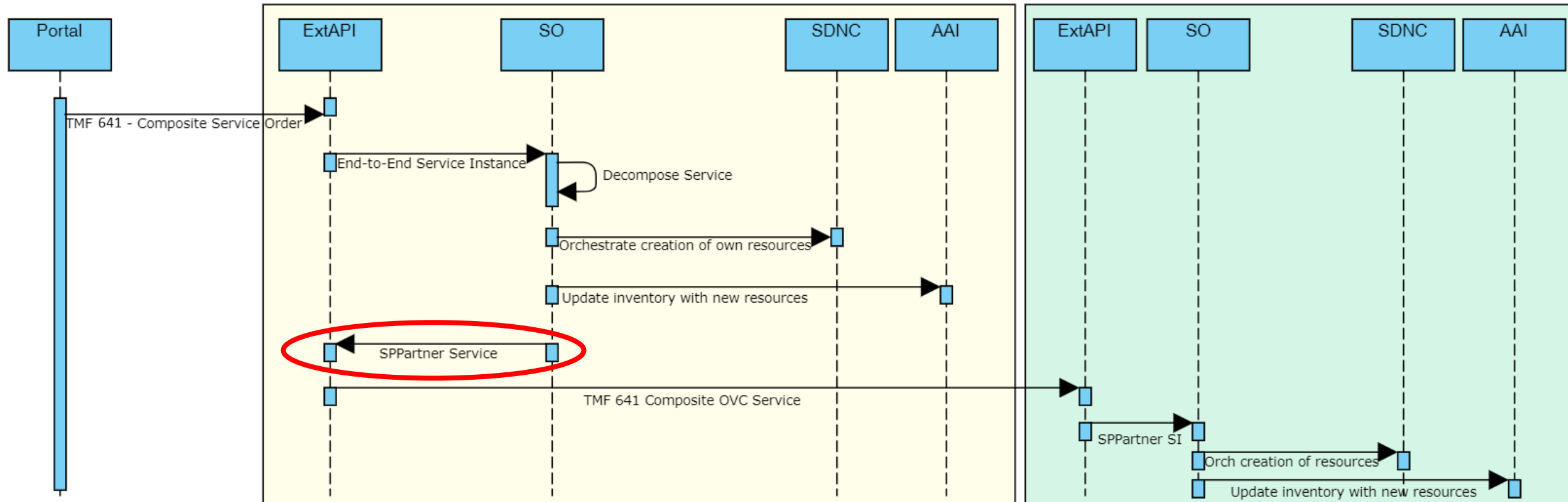




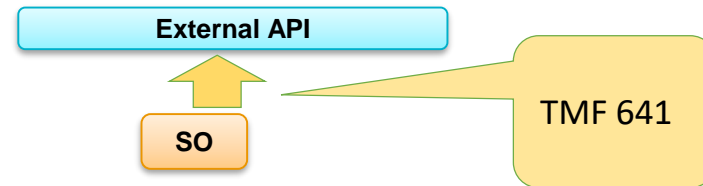


- The external Portal makes a single Service Order via TMF 641, with one service orderItem for the composite Service.
- Parameters for all services can be passed as one composite orderItem to External API. Then passed to SO as one 'Create E2EServiceInstance' request. SO can then Create the connectivity services (UNIs, Access E-LAN, Access E-Line, ENNs ...) from one parent Composite Service Specification

CCVPN Sequence Diagram

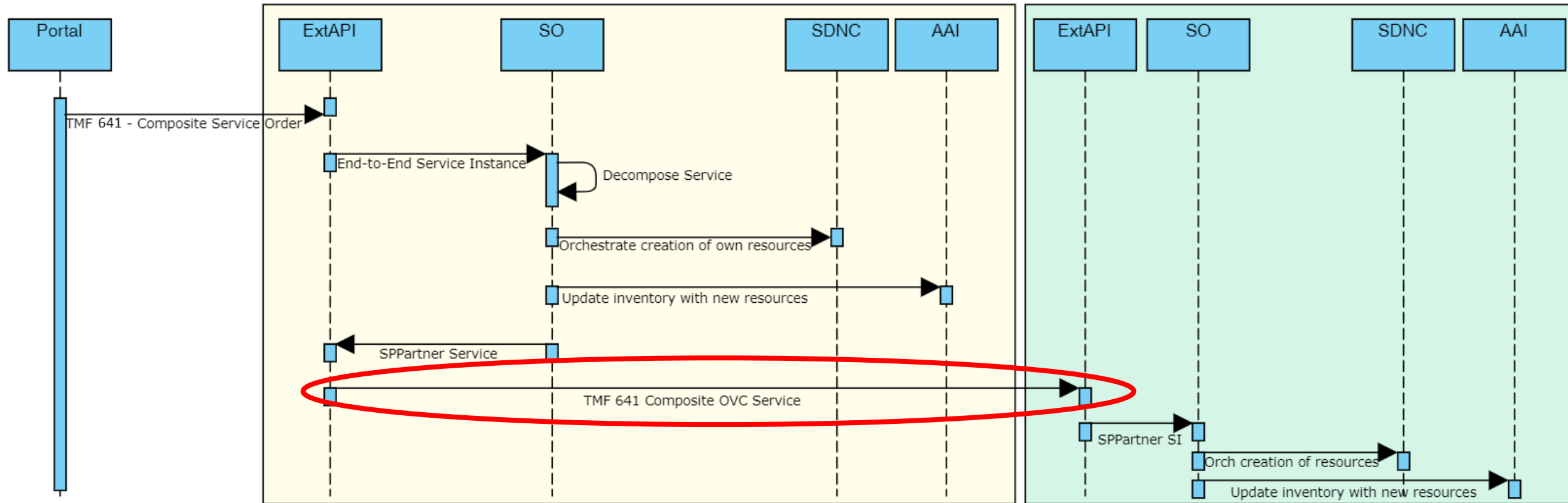


SO → ExtAPI Call-back

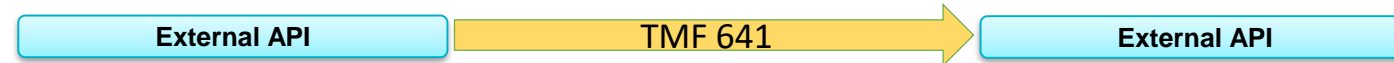


- SO must be able to invoke External API of current ONAP instance instead of External API of second ONAP instance
- Provide a call-back URL to External API for registering with its Hub for TMF 641 completion notification
- SO must implement a new API to process call-back notification from External API after the TMF 641 processing is complete
- Process acknowledgement from External API and relay it back to SO (Service Order API & Hub API)

CCVPN Sequence Diagram



Inter-ONAP Interface (East-West)



- TMF 641 with MEF Interlude Payload
- **Service Order API:** invoke the External API of 3rd party ONAP instance based on URL passed in TMF 641 headers
- **Hub API:**
 - invoke the Hub API of 3rd party ONAP instance based on URL passed by SO in the Hub request
 - Process call-back notification from 3rd party ONAP instance (and relay it back to SO)



ONAP

OPEN NETWORK AUTOMATION PLATFORM