UE + DS-TT
NG-RAN
AMF
SMF
UPF+ NW-TT
PCF
NEF/ NRF
AF
1. PDU Session Establishment Request
(UE DS-TT Residence time, DS-TT MAC address, Port Management capabilities)
2. N4 Establishment Request
3. N4 Establishment Response
(Port # for DS-TT, Port # for NW-TT, Bridge ID)
4. Npcf_SMPolicyControl_Update_Request
(5GS Bridge information ,
Port management Information container)
5. Npcf_PolicyAuthorisation_Create_Request
(5GS Bridge information, Port management Information container)
6. Npcf_PolicyAuthorisation_Create_Response
(MAC address of DS-TT port,
QoS container (including Survival time))
7. Npcf_SMPolicyControl_Update_Response
(PCC Rule (SDF with 5QI, survival time, MAC address of DS-TT port)
8. Namf_Communication_N1N2MessageTransfer
(PDU Session ID, CN Tunnel Info, QoS profile with QFI (incl. survival time),
SMF derived CN assisted RAN parameters tuning)
9. PDU Session Resource Setup Request
(PDU Session ID, CN Tunnel Info, QoS profile with QFI (incl. survival time),
NAS PDU, UL NG-U UP TNL Information)
10. PDU Session Resource Setup Response
11. PDU Session Establishment Accept
(QoS flow with 5QI, survival time)
User plane traffic flows from UE to UPF via 5G-RAN