

SRv6 Mobile User Plane(MUP) Architecture for DMM

draft-hmkk-dmm-srv6mup-architecture-01

IETF112, DMM Working Group

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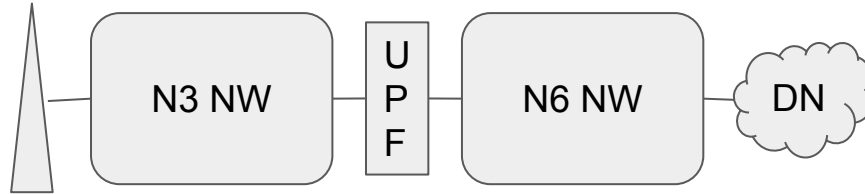
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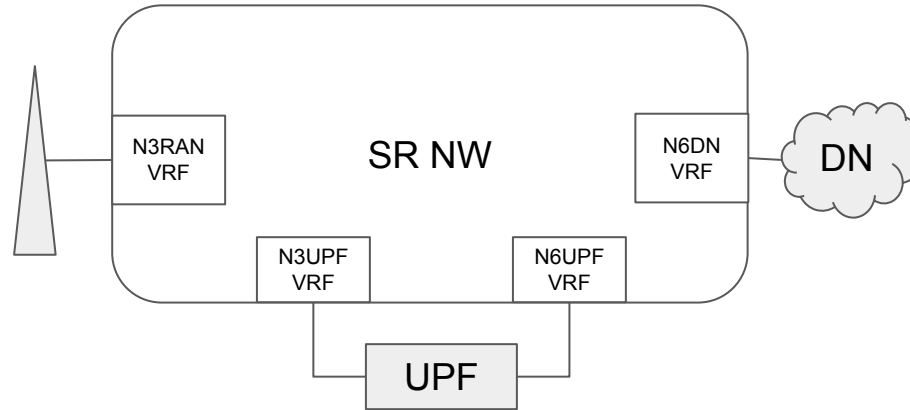
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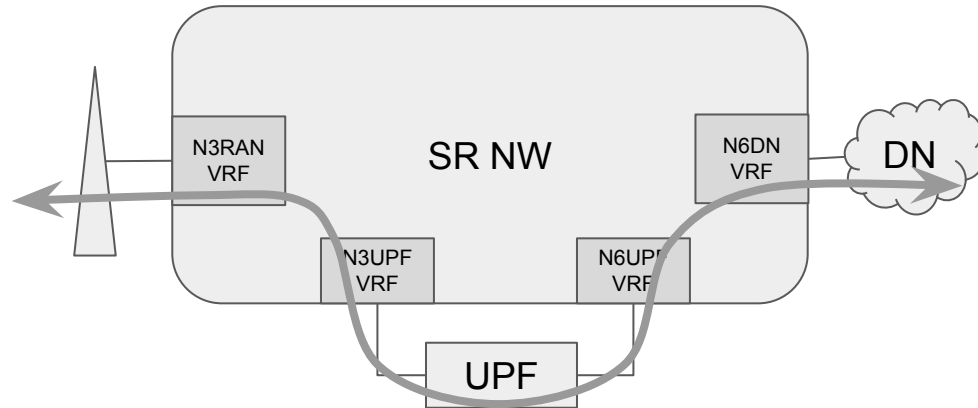
The 5G User Plane Architecture



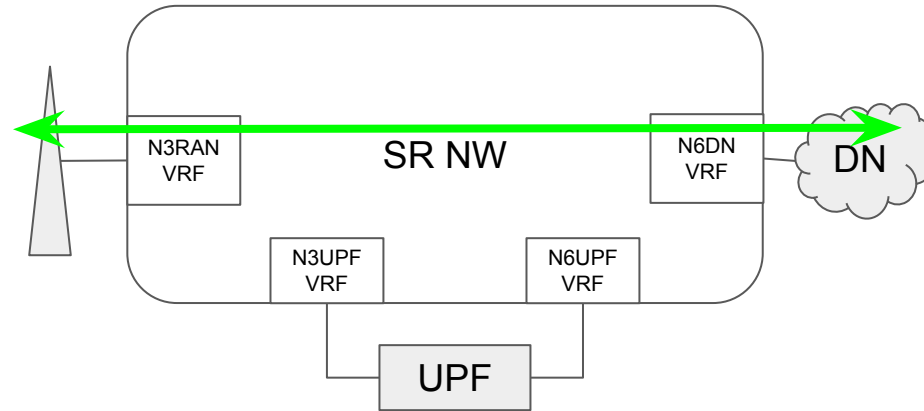
An implementation for 5G User Plane on the SR Underlay



5G User Plane Data Path on the SR Underlay

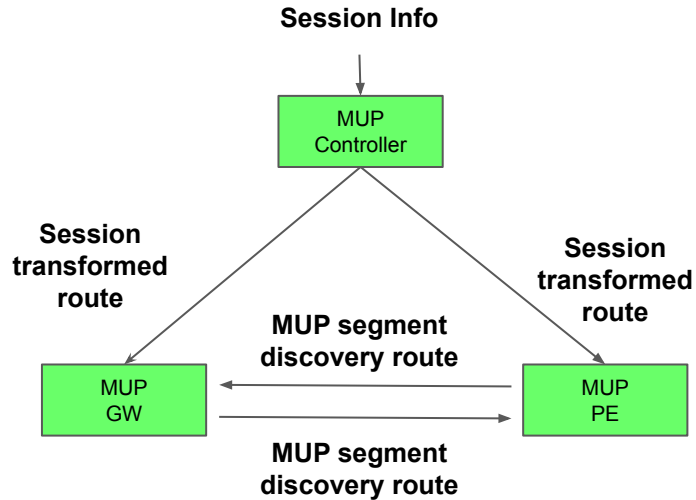


5G User Plane Data Path on the SR MUP Architecture

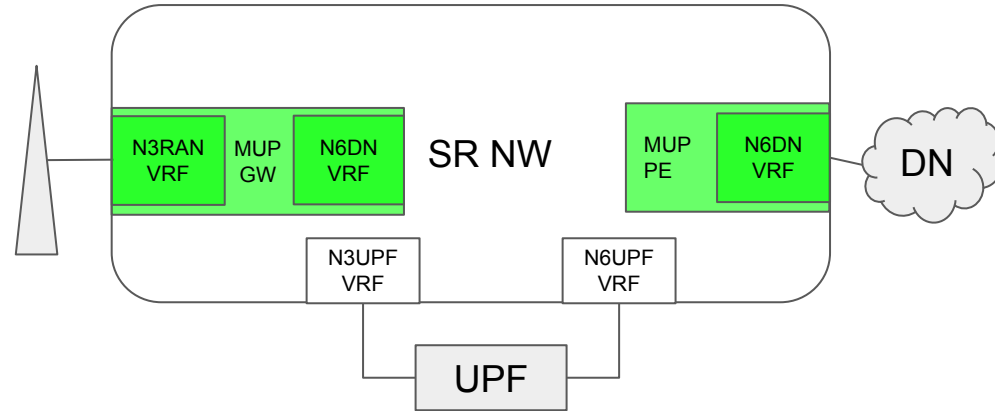


SRv6 Mobile User Plane Architecture Overview

Control Plane (BGP)

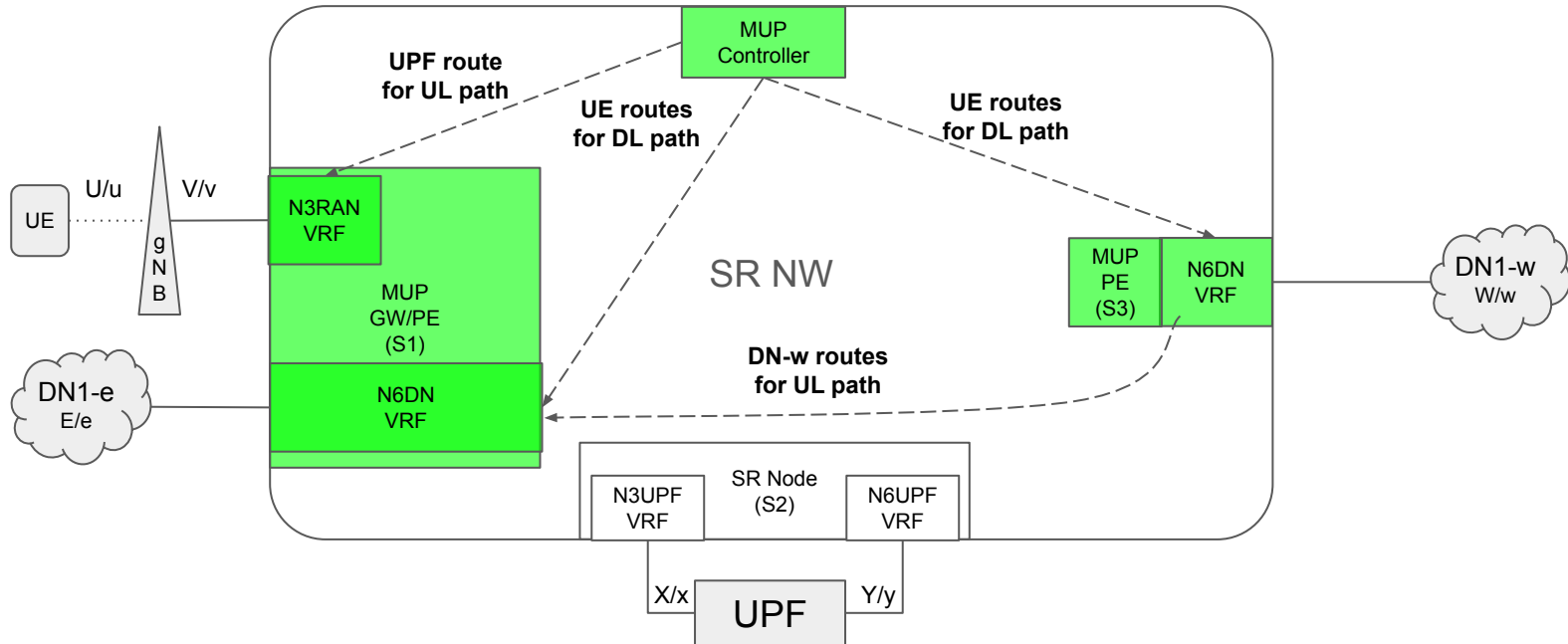


Data Plane (3GPP)

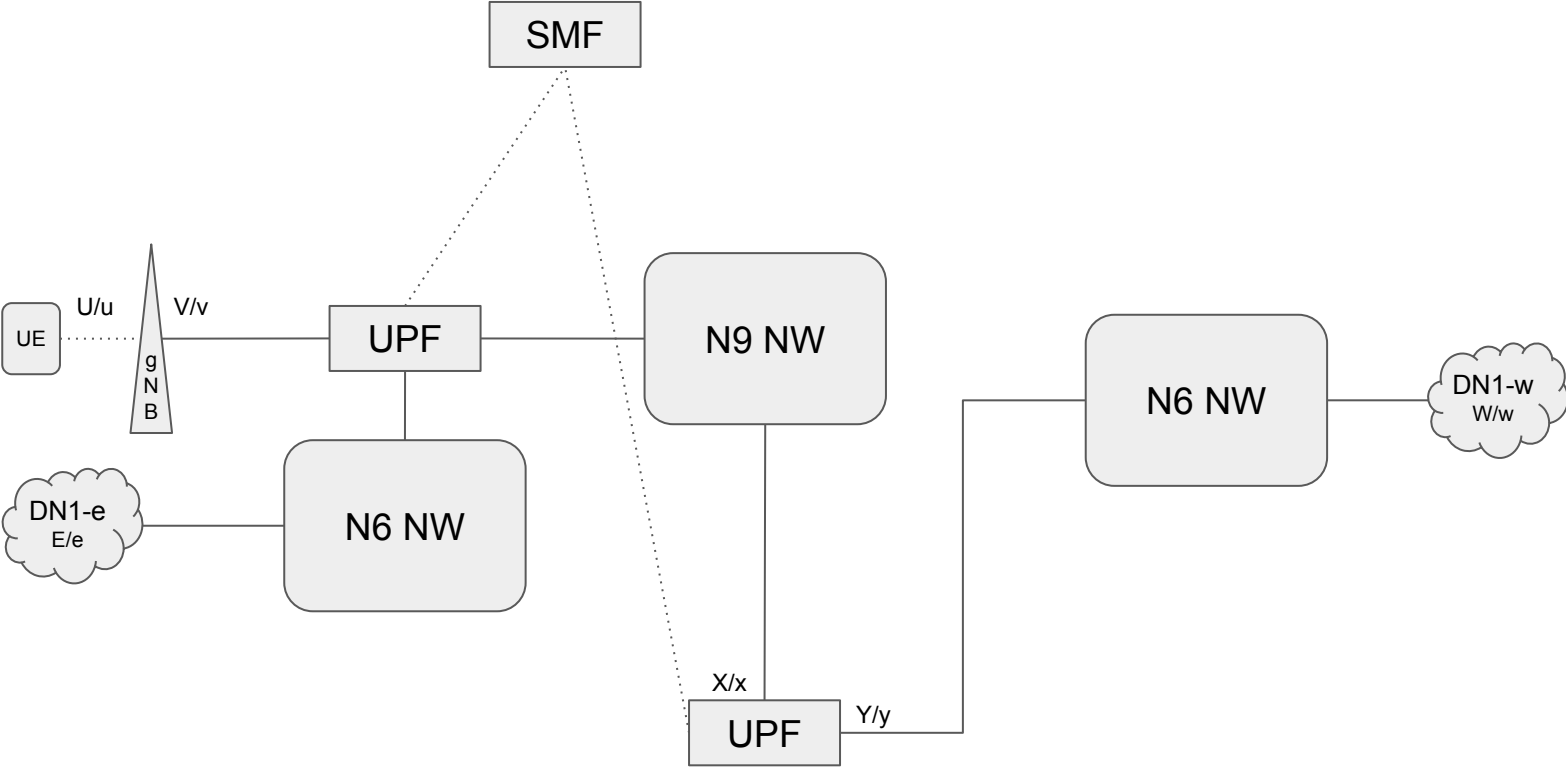


Use Case: Multiple DN sites in the single DNN w/o UPF incrementation (1)

Provide optimized path for each distributed Cloud and MEC site

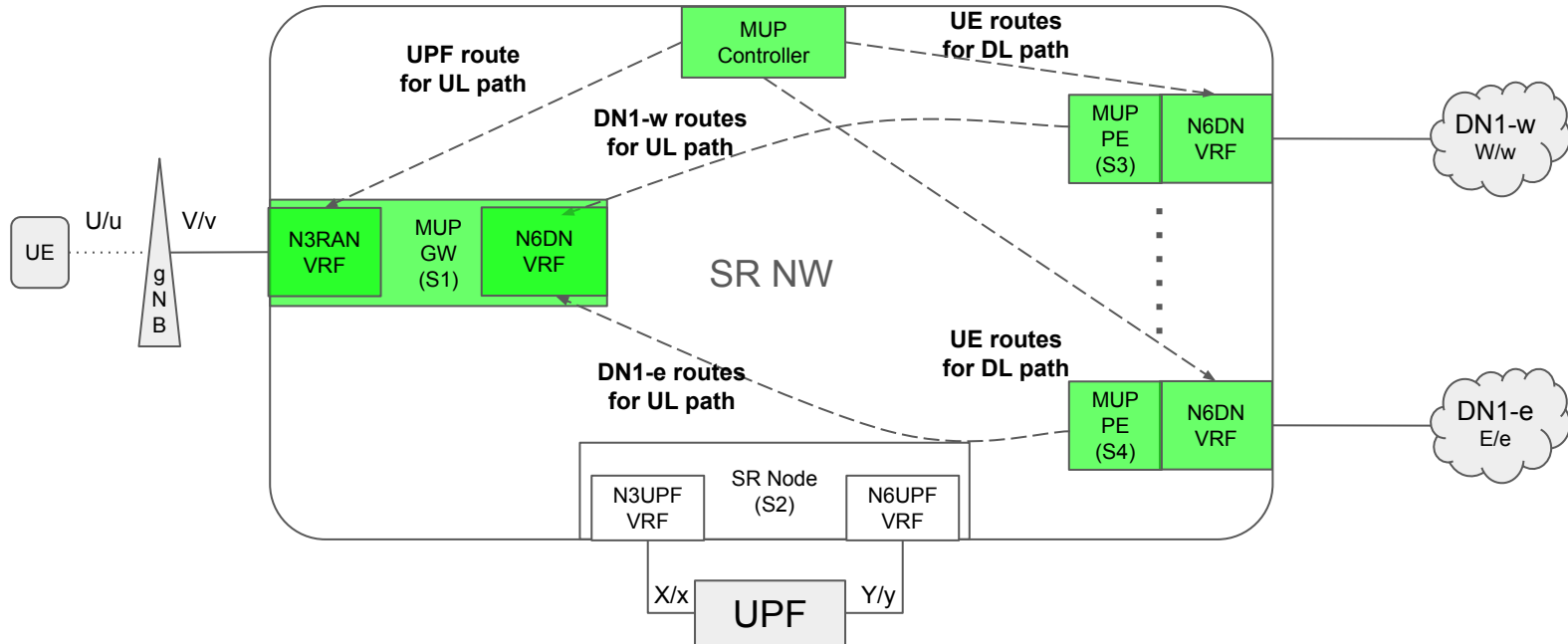


Equivalent Network Model

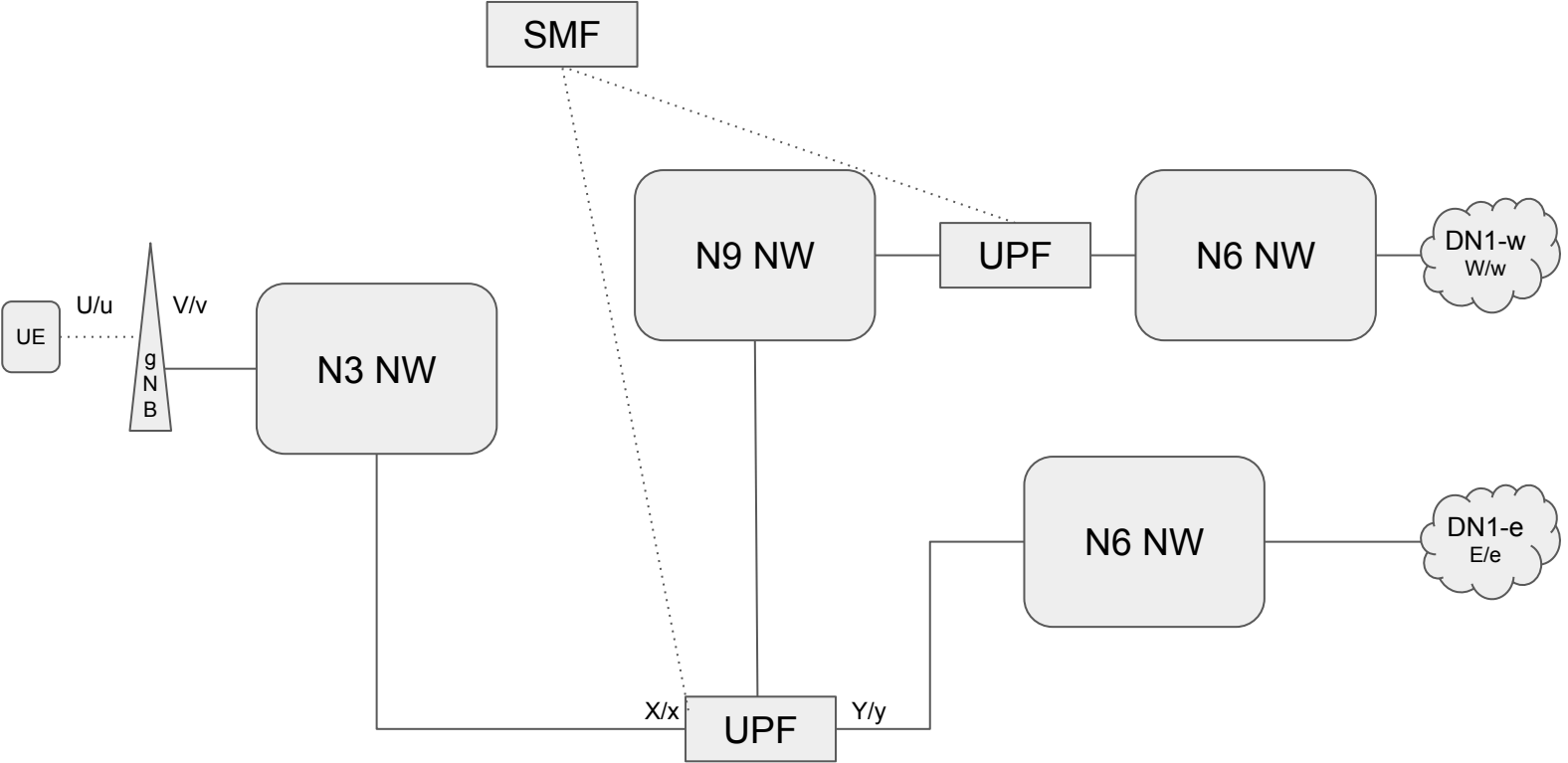


Use Case: Multiple DN sites in the single DNN w/o UPF incrementation (2)

Provide optimized path for each distributed Cloud and MEC site



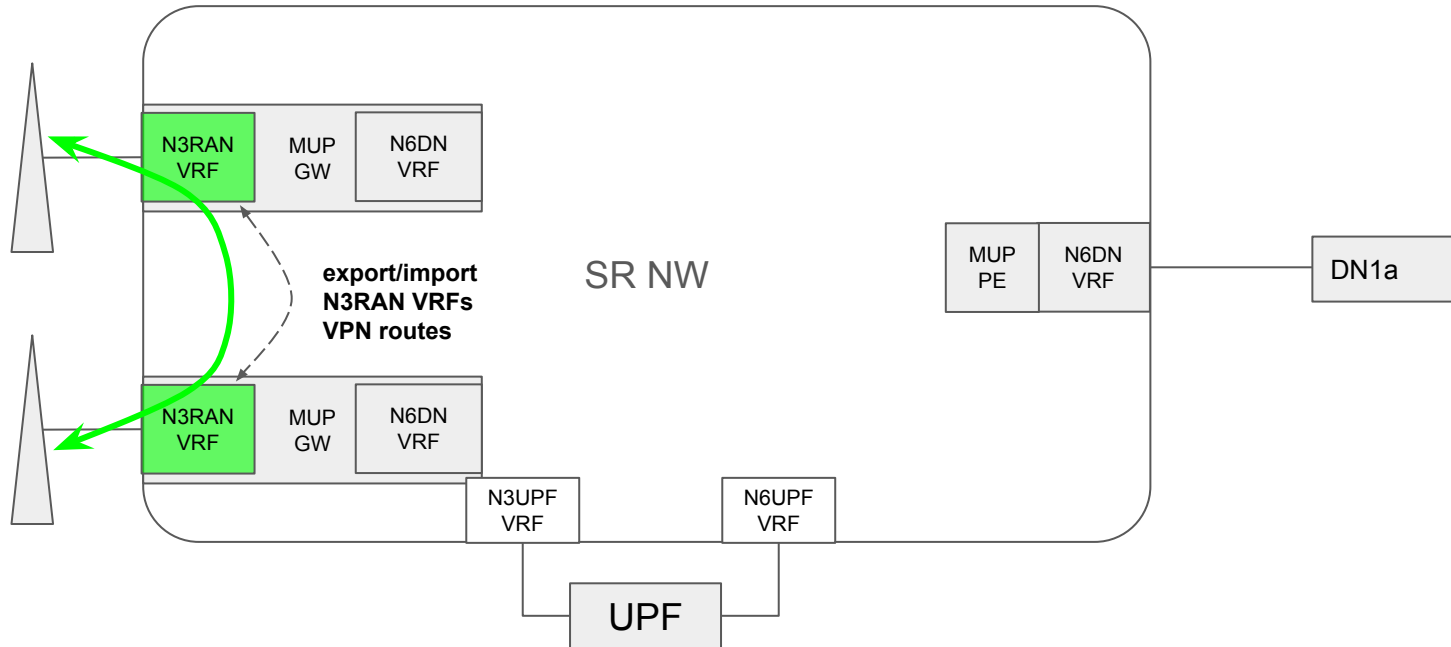
Equivalent Network Model



Appendix

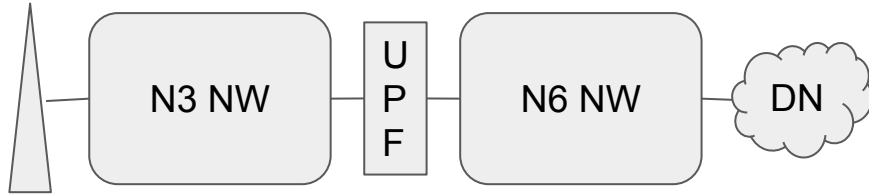
Unchanged: X2 Hand-over Interface

Connectivity between N3RAN VRFs keeps X2 interface as it is.

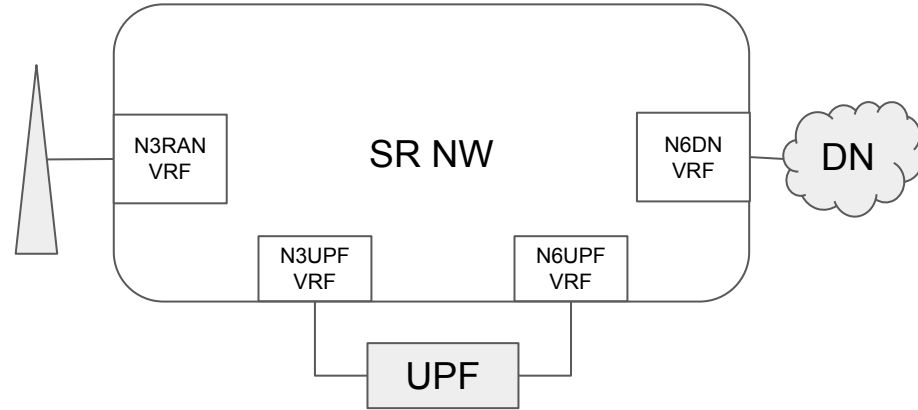


5G User Plane Views

3GPP 5G architecture view

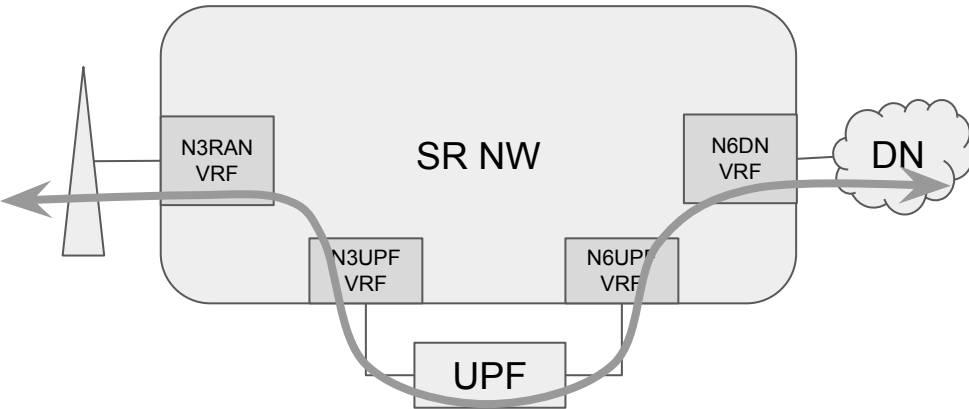


An implementation view on the SR Underlay

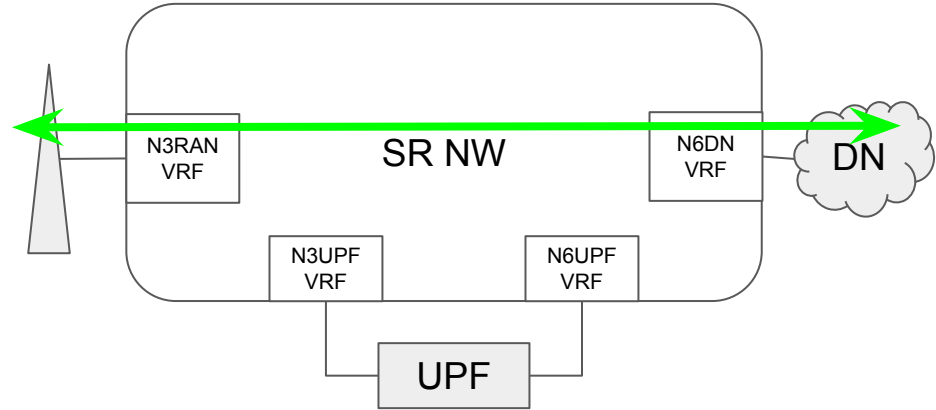


5G User Plane Data Path Options

Traditional 3GPP 5G Data Path

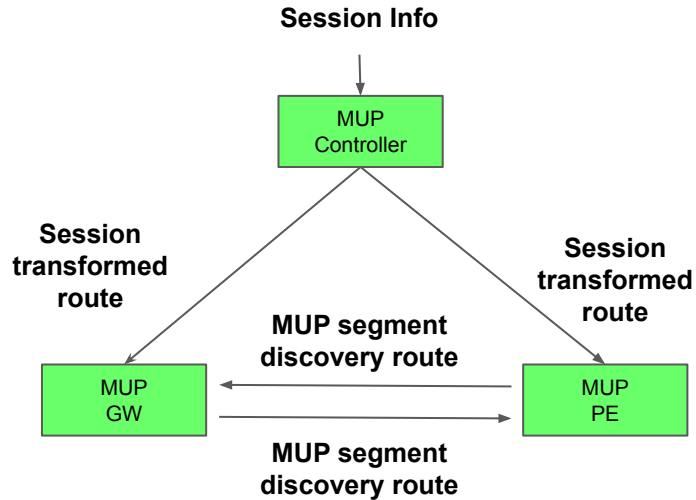


SRv6MUP architecture view

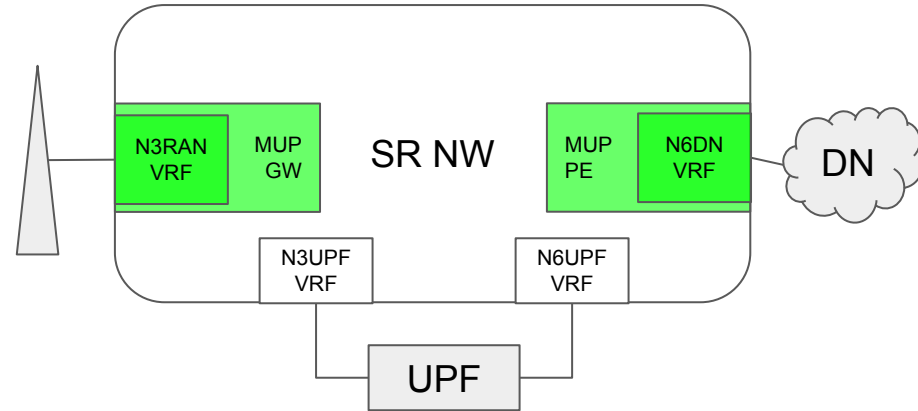


SRv6 Mobile User Plane Architecture Overview

BGP Control Plane

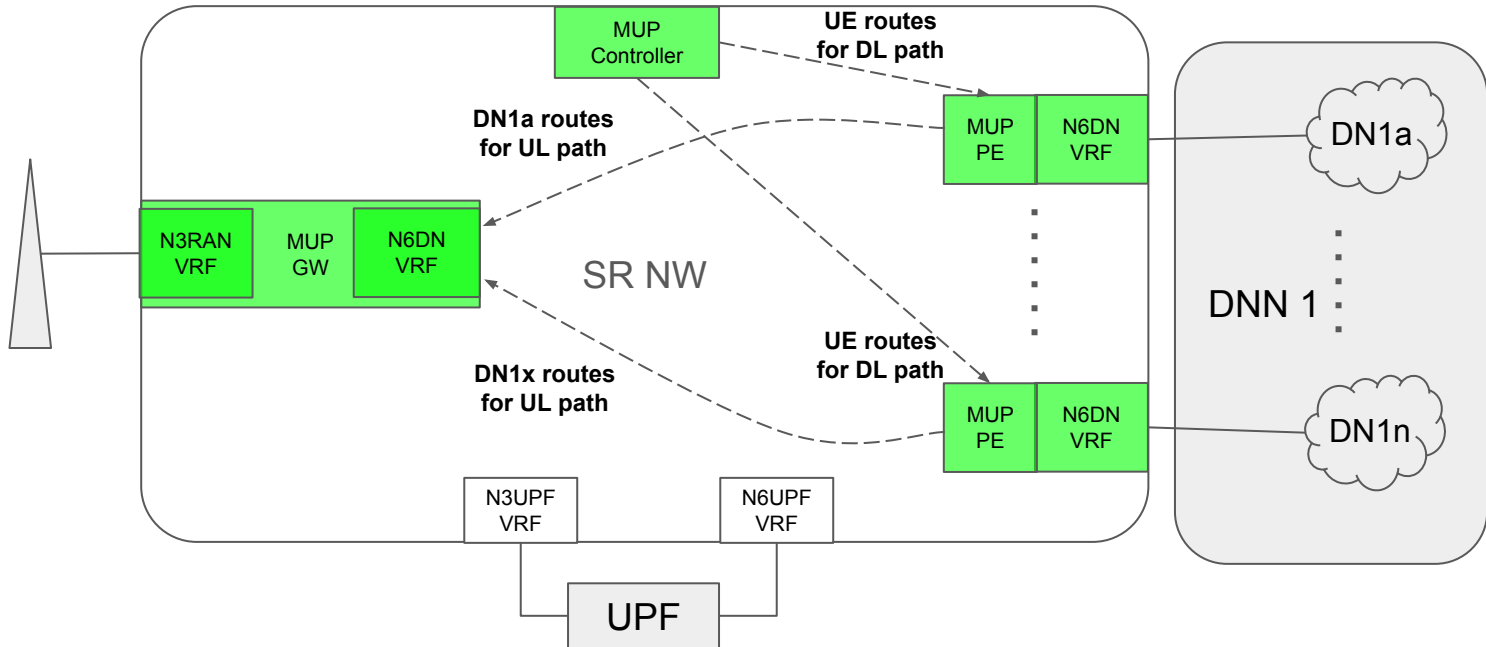


User Plane integrated SRv6 Data Plane



Use Case: Multiple DN sites in the single DNN w/o UPF incrementation

Provide optimized path for each distributed Cloud and MEC site



Otherwise

