

Qualcomm

RWS-210022

3GPP TSG RAN Rel-18 workshop
Electronic Meeting, June 28 - July 2, 2021
Agenda Item: 4.2

Dedicated CUs for Network Slicing

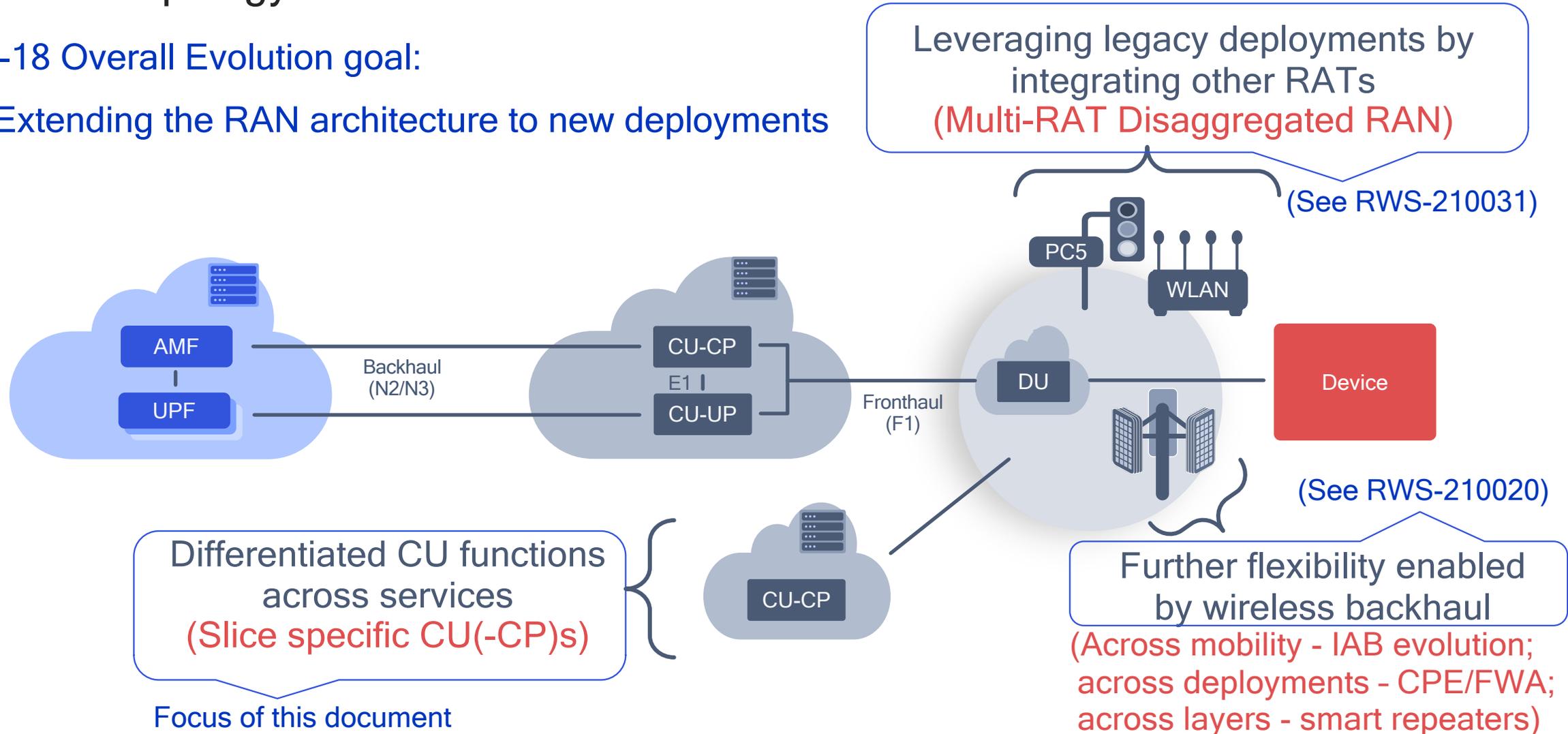
5G

Dedicated CUs for Network Slicing - Background

Network Topology Evolution

Rel-18 Overall Evolution goal:

- Extending the RAN architecture to new deployments



Dedicated CUs for Network Slicing - Motivation

Extend slice concept of dedicated CN functions to the RAN

Allow differentiated CU functions to support different functional and performance requirements across services

Specialized CU functions deployed for different services

Potential different CU functions supported at each location

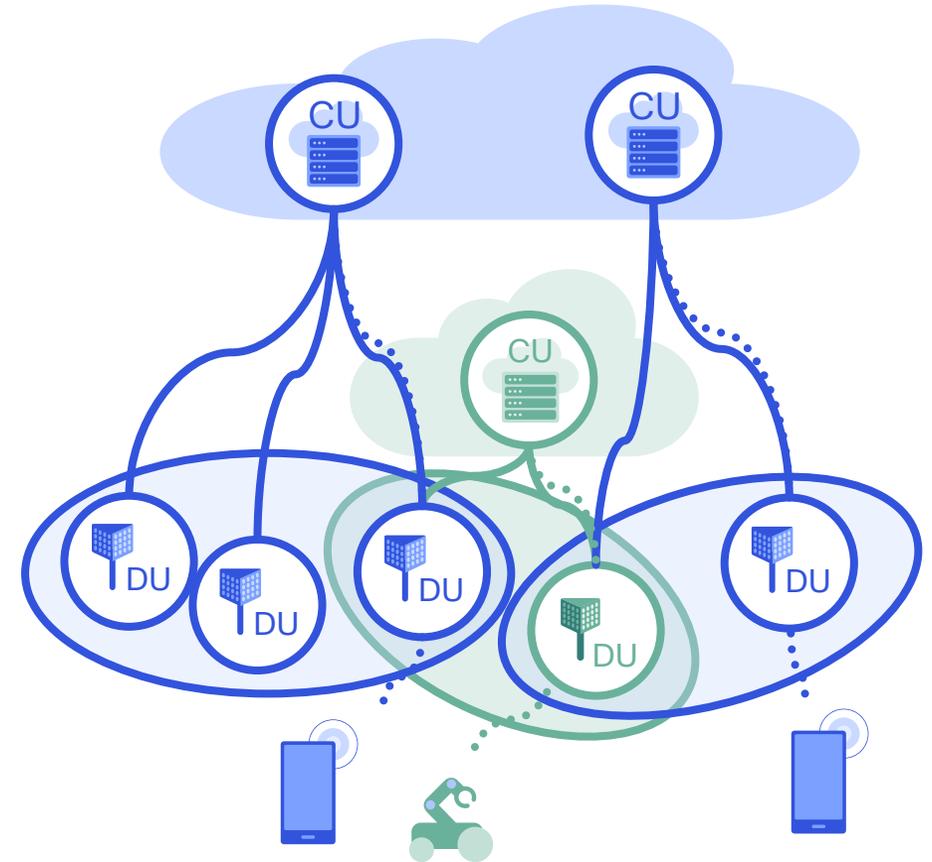
E.g., URLLC may need edge CU/MEC for low latency

E.g., MBB may use deeper CU to reduce deployment costs

CU specialization through implementation and deployment

Specific functionality, processing capability, location, etc.

CU selected based on network slicing information.



Slice specific CUs extend dedicated network functions to the RAN for optimized coverage and performance across services

Dedicated CUs for Network Slicing - 3GPP Impacts

Study / Work required at 3GPP

- RAN3-led SI to enable slice specific CU(-CP/UP) deployments, including
 - Architecture and functional aspects
 - Interaction with DU,
 - Common procedures,
 - SIB control, etc
 - CU selection / re-selection based on slice information
 - Procedures at access, handover and change of active PDU sessions