



RWS-230312

New WI on UE-Group Centric Mobility

Agenda Item: 5

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Document for: Discussion for decision

Background

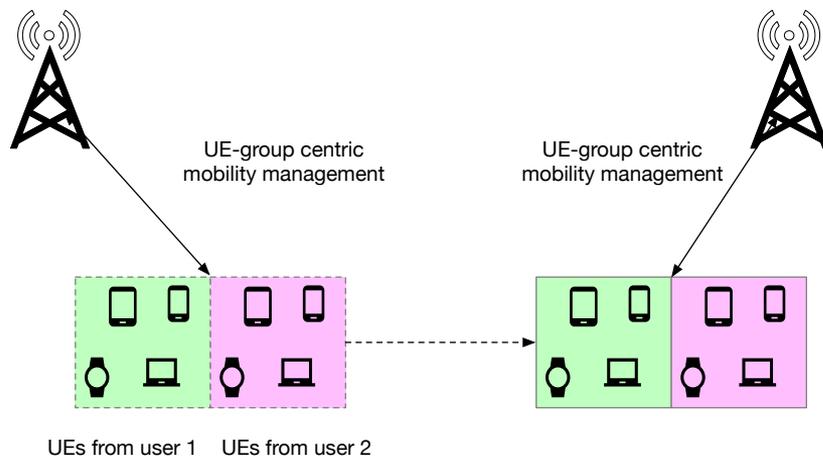
A few enhancements on mobility enhancement were introduced

- All the enhancements are still based on UE-centric manner
- The UEs need to perform the measurement and report individually
 - This leads to high UE power consumption and high report overhead
- The NW needs to send the mobility related signaling, e.g., handover command or cell switching command, to each UE separately
 - This results in high signaling overhead as the number of UEs increase

Motivation

UE density becomes higher in commercial network

- Case 1: Some UEs may belong to the same user, and such UEs usually share the same mobility property, e.g., moving direction and speed
- Case 2: Some UEs from different users may also share the same mobility property, e.g., UEs in the same car or bus



Proposal

Proposal 1: Specify the mechanism to support UE-group centric mobility for UEs with the same mobility property, where the UEs belong to the same user based on Rel-18 LTM framework (Case 1)

- Specify UE-group centric beam measurement and report
- Specify group-cast beam indication
- Specify group-cast cell switching command

Proposal 2: Study and if needed, specify the mechanism to support UE-group centric mobility for UEs with the same mobility property, where the UEs can belong to different users based on Rel-18 LTM framework (Case 2)

- Study and if needed, specify the mechanism for UE-group management for UEs sharing the same mobility property