**3GPP TSG-RAN WG1 #102-e R1-200xxxx**

**e-Meeting, August 17th – August 28th, 2020**

Title: Draft LS response on power sharing for LTE mobility enhancements

Response to: R1-2005211(R2-2006377)

Release: Rel-16

Work Item: LTE\_feMob-Core

Source: Ericsson [RAN1]

To: RAN2

Cc:

**Contact Person:**

Name: Claes Tidestav

Tel. Number: +46702672120

E-mail Address: claes.tidestav@ericsson.com

**Send any reply LS to: 3GPP Liaisons Coordinator,** [**mailto:3GPPLiaison@etsi.org**](mailto:3GPPLiaison@etsi.org)

**1. Overall Description:**

RAN1 would like to thank RAN2 for the LS on power sharing for LTE mobility enhancements.

RAN1 has discussed the LS and concluded that the RAN1 specifications would have to be amended to describe UL power sharing for LTE DAPS HO. RAN1 agreed to specify UL power sharing for LTE DAPS for inter-band operation.

RAN2 asked following questions:

**Question 1:** Whether LTE DC uplink power sharing mechanism (i.e., mode 1 and mode 2) is applicable for both intra and inter frequency LTE DAPS HO?

**Answer to Q1**: RAN1 concluded that the LTE DC uplink power sharing mechanism (i.e., mode 1 and mode 2) is applicable for inter frequency LTE DAPS HO.

**Question 2:** If specified, RAN2 requests RAN1 to provide a list of UL power sharing parameters to be used for LTE DAPS HO.

**Answer to Q2:** An IE with the same fields as PowerCoordinationInfo-r12 (up to RAN2 whether to reuse PowerCoordinationInfo-r12 or define a new IE) is introduced to configure UL power sharing for LTE DAPS. The IE would contain the fields (up to RAN2 to change field names):

* p-MeNB-r12: INTEGER (1..16): power sharing parameter for target eNB.
* p-SeNB-r12: INTEGER (1..16): power sharing parameter for source eNB.
* powerControlMode-r12: Indicates the power sharing mode

In addition, optional UE capabilities for the support of UL power sharing for LTE DAPS are required:

* Support of power sharing for sync DAPS.
* Support of power sharing for async DAPS.

A UE that supports LTE DAPS HO optionally supports power sharing via these capabilities.

**2. Actions to RAN2:**

RAN1 respectfully asks RAN2 to take the above information into consideration

**3. Date of next TSG RAN WG1 Meetings:**

TSG RAN WG1 Meeting #103-e 26th October – 13th November, 2020, online.

TSG RAN WG1 Meeting #104 1st – 5th March, 2021 GR