**3GPP TSG-RAN5 Meeting #90-e draft\_r1\_R5-211311**

**Electronic Meeting, 22 Feb – 5 Mar, 2021**

**Title:** LS on confirming successful resource reservation

**Source:** TSG RAN WG5

**To:** TSG CT WG1

**Contact Person:**

#### Name: Hans Rohnert

E-mail Address: hans.rohnert@rohde-schwarz.com

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

**1. Overall Description:**

RAN5 defines different voice call scenarios that execute, among others, variations of precondition usage (MO/MT call, both UEs use preconditions, none of them uses preconditions, only one of them use preconditions, etc). Generally, it is assumed that PRACK or UPDATE is used to signal resource reservation when preconditons are used. If preconditions are not used, no such PRACK or UPDATE request is being used.

The above assumption is mostly based on the following excerpt from TS 24.229 cl 5.1.3.1 on call initiation:

Upon successful reservation of local resources the UE shall confirm the successful resource reservation (see subclause 6.1.2) within the next SIP request.

NOTE 3: In case of the precondition mechanism being used on both sides, this confirmation will be sent in either a PRACK request or an UPDATE request. In case of the precondition mechanism not being supported on one or both sides, alternatively a reINVITE request can be used for this confirmation after a 200 (OK) response has been received for the initial INVITE request, in case the terminating UE does not support the PRACK request (as described in RFC 3262 [27]) and does not support the UPDATE request (as described in RFC 3311 [29]).

The leading sentence of the above quote is not restricted to scenarios where preconditions are used, and in RAN5 tests, we generally assume that UEs support the PRACK and UPDATE methods. Therefore, the question arose which UE behavior is required when preconditions are not used, resources become available before 200 OK for INVITE has been received, and the UE supports PRACK and UPDATE. How and when will the UE then confirm the resource reservation?

RAN5 also tests the scenario of EPS fallback when voice call initiation was started on 5G but then, after the originating UE having received 183 Session Progress (with ensuing PRACK/200 OK) the UE is made to fall back to EPS. Would the UE then have to use PRACK or UPDATE for confirming resource reservation on EPS, assuming that preconditions are used? And in the case of preconditions not being used, no such handshake would happen?

**2. Actions:**

**To CT1 group.**

**ACTION:** RAN5 kindly requests CT1 to address the above questions.

**3. Date of Next TSG-RAN WG5 Meetings:**

TSG-RAN5 Meeting#90 17th – 28th May 2021 Electronic Meeting

TSG-RAN5 Meeting#91 16th – 27th Aug 2021 Electronic Meeting