**3GPP TSG RAN WG2#118-e R2-220xxxx**

**e-Meeting, 9th - 20th May, 2022**

**Title:** LS on Cast Type for Discovery message

**Response to:**

**Release:** Rel-17

**Work Item:** NR\_SL\_Relay-Core, 5G\_ProSe

**Source:** OPPO [To be RAN2]

**To:** SA2

**Cc:** CT1

**Contact Person:**

Name: Qianxi Lu

E-mail Address: qianxi.lu@OPPO.com

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

**Attachments: -**

**1. Overall Description:**

During RAN2#118, RAN2 discussed how to deliver the discovery messages. AS-layer specification requires Tx-UE to carry cast-type-indicator in SCI, based on which the delivered packet is to be filtered by MAC layer by Rx-UE. But RAN2 noticed that there is no cast type indicator provided to lower layer for discovery message transmission based on the current TS 23.304, so AS-layer cannot know the cast type (unicast/groupcast/broadcast) of the destination L2 ID, and thus the AS layer cannot set the cast type of the discovery message based on the destination L2 ID. Thus, RAN2 has the following question:

**Q1: Can upper layer provide unicast / groupcast / broadcast cast-type-indicator to AS layer for the delivery of each discovery message?**

In case SA2 answers No to Q1, RAN2 discussed another option, i.e., AS-layer delivers all discovery messages using broadcast as the cast cast-type type-indicator in SCI, regardless of whether unicast, groupcast or broadcast L2 ID is used as the destination L2 ID. Considering this is different from sidelink communication in legacy, RAN2 would like to check with SA2.

**Q2: If No to Q1, whether SA2 is fine if all discovery message sent to unicast / groupcast / broadcast destination L2 ID always uses broadcast-type cast-type-indicator in SCI by Tx-UE, and are thus filtered in MAC layer at Rx-UE based on the destination L2 ID of the discovery message and broadcast-type cast-type indicator?**

**2. Actions:**

**To SA2:**

**ACTION:** RAN2 respectfully ask SA2 to provide answer for Q1 and Q2 above.

**3. Date of Next TSG WG RAN4 Meetings:**

TSG-RAN WG2 Meeting #119-e 15 - 26 August 2022 E-meeting

TSG-RAN WG2 Meeting #119-bis-e 10 -19 October 2022 E-meeting