**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:**

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**Attachments: -**

**1. Overall Description:**

During RAN2#118, RAN2 discussed how to deliver the discovery messages which are sent using unicast L2 ID (e.g., response message of model-B discovery) or groupcast L2 ID (e.g., Group member discovery announcement / solicitation message) as the destination L2 ID, since RAN2 noticed that there is no cast type indicator provided to lower layer based on the current TS 23.304.

Considering the current AS-layer specification, as for sidelink communication in legacy, 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, RAN2 understand the issue can be solved if upper layer can provide the cast type indicator to AS-layer.

**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 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 BC-type cast-type-indicator in SCI by Tx-UE, and are thus filtered in MAC layer at Rx-UE based on destination L2 ID by assuming it is BC-type discovery message?**

**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