**Notes from 3GPP SA2 FS\_5G\_ProSe Conference Call: "preparation for SA2#143e FS\_5G\_ProSe open issues"**

Date: 20210205

Convenor: Deng Qiang (CATT)

Attendance (sorry if I missed someone):

Qualcomm, Ericsson, LG Electronics, OPPO, Samsung, Nokia, Huawei, Xiaomi, KPN, FirstNet, MediaTek, Interdigital, Intel, Matrixx, CATT, ~ about 45 participants.

Agenda:

1. Way-forward for L3 vs. L2 based UE-to-Network Relay solution (KI#3)

- S2-21xxyy-closing outstanding issues for U2N Relays-v0 (Qualcomm)

Discussion: Hong (Qualcomm) presented the paper. Samsung commented since both L3 and L2 solutions are feasible, the paper to conclude supporting both in normative work? Qualcomm clarified that normative work is work planning issue in RANP, this paper intends to close the TR. Samsung asks to have clear description about both or either to be supported. MediaTek commented that RAN2 recommended both L2 and L3 for normative work, and SA2 already recommended that. MediaTek also commented service continuity issue on sol#6 and sol#23, and NOTE 4 and 5 can be removed as RAN2 concluded already. Nokia commented decide both L2 and L3 feasible does not mean support both in normative work and this is not the final conclusion. Huawei shared the same view as MediaTek. Samsung questioned how RANP can decide L3 and thinks SA should be involved. MediaTek commented at WG level there is no issue, and RANP approved WI is another issue. Ericsson questioned how L2 and L3 solutions work together? Qualcomm clarified co-existence needs to be considered if both supported in normative work. Interdigital thinks L2 and L3 are different features and can be supported both via negotiation. Intel reminded that co-existence was discussed in FS\_REAR study at Rel-15 and thinks it shouldn’t be difficult and can be done in normative phase. OPPO support both for normative work.

This paper can be used as basis for concluding KI#3 and further discussion is needed.

- S2-210abc5\_conclusion\_relay (OPPO)

Discussion: Fei (OPPO) presented the paper. MediaTek recommended both L2 and L3 into normative work. Qualcomm thinks the wording proceed into too strong. Intel commented both should be optional. Samsung asked clarification about optional. Qualcomm clarified Relay capability to support at least one. KPN thinks Remote UE support L2 or L3 is also optional. Samsung asked how much time needed for co-existence issue. Qualcomm clarified as discussed at FS\_REAR this can be done at discovery phase by indicating which option the Relay supported. Xiaomi wonders why choose both as optional. Qualcomm clarified different options may be applied to different deployment scenarios. Interdigital agreed with Qualcomm. Samsung asked whether start normative work for L2 need waiting for RAN2. Qualcomm clarified L3 does not wait for RAN2, and L2 is mainly RAN2 impact but not SA2 impact. Samsung thinks L3 has no impact to RAN2. LG Electronics reminds discovery and reselection have RAN2 impact. Qualcomm thinks different options can progress in parallel.

OPPO confirmed this paper can be merged into Qualcomm one and work offline together.

2. Way-forward for L3 vs. L2 based UE-to-UE Relay solution (KI#4)

- S2-21xxyy-closing outstanding issues for U2U Relays-v0 (Qualcomm)

- S2-210abc5\_conclusion\_relay (OPPO)

Discussion: Hong (Qualcomm) and Fei (OPPO) presented the paper respectively. Interdigital commented source/target UE is candidate information at the adaption layer, and wonders why takes sol#8 as basis for conclusion as sol#8 refers to sol#9 in the solution description, and also end-to-end connection establishment procedure is described in sol#9. OPPO agrees with Interdigital that sol#9 can be used as baseline as sol#8 is agreed by RAN2 as conclusion, but still thinks sol#9 is not complete and workable thus L2 Relay should not proceed to normative work. Qualcomm also thinks L2 Relay remains fundamental issues as we discussed last meeting. MediaTek commented solution update is needed for L2 Relay solution and concluded thereafter. Interdigital thinks although some differences last meeting update proposal there is high-level commodity. Qualcomm has concern on the solution update if they changed the RAN2 design.

Solution update for L2 solution is needed, and conclusion should be made based on the updated solution.

3. Way-forward for Control Plane based UE usage reporting or User Plane based UE usage reporting (KI#7)

- S5-211423 (LS from SA5)

Discussion: Deng Qiang (CATT) presented the LS and corresponding solution therein. KPN asked whether the SA5 solution only applied to public safety. Qualcomm clarified the solution may inherit from LTE ProSe solution in SA5, and for 5GS the solution should be applied to both public safety and commercials. Huawei commented the security environment issue. Qualcomm corrected Huawei understanding and Matrixx confirmed Qualcomm clarification. 5G DDNMF charging functionality is also discussed and it is clarified this is what SA5 solution proposed and workable.

It is proposed to inform SA5 about SA2 requirements for 5G ProSe and CATT will draft the LS. It is also agreed decision of CP vs. UP based solution should be made by SA2.

4. Issues identified during pCR drafting

- S2-210LGE3\_23304\_(5.11)\_IWK\_btw\_5GS\_and\_EPS\_v1 (LGE)

Discussion: LaeYoung (LG Electronics) present the paper and would like to discuss the interworking issue for 5G ProSe. Huawei commented if no 4G ProSe deployment then no need to consider interworking, and asked operator about real deployment. MediaTek has similar view and cited the RAN feature as an example. KPN doesn’t see 4G ProSe deployment. Qualcomm thinks commercial is deployed but public safety sees a need.

There are some discussion on how public safety UE works when moving between EPS and 5GS, and agreed to have some description in TS to clarify this scenario.