

**5GAA Working Group WG4 meeting
S-190225
Turin
[Nov 11 - 14, 2019]**

Title: LS to extend the scope of eV2X
Response to:
Work Item: NRI Work Item (XWI)
Source: 5GAA WG4
To: TSG SA

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Attachments:

5GAA, White Paper on C-V2X Use Cases: Methodology, Examples and Service Level Requirements, 29.7.2019

1. Overall Description:

WG1 of 5GAA has concluded that several V2X UCs [1] have stringent latency constraints; the list below indicatively provides a subset:

- Cross-Traffic Left-Turn Assist [high automation]:10 ms;
- High Definition Sensor Sharing: 10 ms;
- See-Through for Pass Maneuver: 50 ms;
- VRU discovery: 100 ms [recommended 20 ms].

Similarly, 3GPP has identified UCs with very demanding delay requirements presented in its analysis in [TS 22.186], e.g., “Cooperative collision avoidance between UEs supporting V2X applications.”, “Sensor information sharing between UEs supporting V2X application”, “Information exchange between a UE supporting V2X application and a V2X Application Server”.

5GAA Network Reselection Improvements (NRI) cross-WI (xWI) identified that LTE-based test deployments, like the one presented in [2], even though it reduced the roaming delay significantly, still failed to meet the most stringent requirements of the previously mentioned UCs.

5GAA believes that enhancements are needed in the current network architecture to meet these requirements for UEs roaming to other MNOs.

5GAA also noticed that SA2 is currently working on eV2XArch_Ph2 architecture enhancements for V2X.

2. Actions:

To 3GPP SA: 5GAA respectfully asks the 3GPP SA to consider, if possible, broadening the scope of eV2XArch_Ph2 by including architectural enhancements for inter-PLMN interactions for UEs roaming to other MNOs in order to reduce the delay required for switching from one MNO to another.

3. Date of Next 5GAA WG2 Meetings:

5GAA F2F meeting #13 (WG only)	Feb 03-07, 2020	Brussels, Belgium
5GAA F2F meeting #14 (WG & GA)	May 11-15, 2020	Spain

3. Reference:

- [1] 5GAA, White Paper on C-V2X Use Cases: Methodology, Examples and Service Level Requirements, 29.7.2019
- [2] <https://www.ericsson.com/en/blog/2019/5/connected-vehicle-cross-border-service-coverage>