**ProSe conclusion discussion agenda for KI#1**

**Question group1: Questions for U2U discovery key provision**

Question 1.1:

U2U relay discovery security materials are provisioned to UEs by 5G DDNMF in HPLMN or a PKMF?

Decision:

Question 1.2:

If U2U discovery security materials are provisioned by the 5G DDNMF in HPLMN, and there may be many PLMNs are involved in a U2U relay service. How to handle this complex situation?

Therefore, can we make the decision that the U2U relay discovery security materials are provisioned by a PKMF?

Decision:

Question 1.3:

If U2U discovery security materials are provisioned by a PKMF, can this PKMF also provision direct discovery security materials?

(PKMF can provision direct discovery security materials, which seems reasonable, otherwise it may encounter the complex situation mentioned in Question 1.2.)

Decision:

**Question group2: Questions for security of U2U discovery set and direct discovery set.**

Question 2.1:

There is a potential security requirement in the TR:

*The 5G System shall provide a means to protect the privacy sensitive information of source UE and target UE during UE-to-UE Relay discovery procedure.*

Should we meet this security requirement?

Decision:

Question 2.2:

How to protect the U2U discovery set and direct discovery set?

Current controversy:

* Option1: Use one key set for both U2U discovery set and direct discovery set.
* Option2: Use two key sets for U2U discovery set and direct discovery set, respectively.

Existing solutions for two key sets in TR:

Use *discovery security policy* or *discovery set protection indication* to enable or disable the protection of direct discovery set, i.e. using one or two key sets for the message protection according to an indicator in the message.

The argument is that the existing solutions cannot meet the scenario of Model A.

New solution proposals for two key sets:

* S3-232009(CATT)
* S3-231785(InterDigital)

Question 2.3:

Using one or two key sets to protect the U2U discovery set and direct discovery set?

Decision:

**Question group3: Questions for discovery function is integrated into PC5 establishment procedure.**

Question 3.1:

How to integrate discovery function into the PC5 establishment procedure?

Option1: Discovery (authorization) is performed after unicast is established (out of scope of SA3).

Option2: Discovery information is carried in the Direct Communication Request (DCR).

Option3: Both option1 and option2

New solution proposal:

* S3-231822 (Philips)

Decision: