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LIAISON STATEMENT

For action to:	-
For comment to:	-
For information to:	3GPP SA3, IETF Security Area, ISO/IEC JTC 1/SC 27/WG 4&5
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ITU-T Study Group 17 thanks you for your continuous collaboration with Q6/17.

SG17 adopted a new work item at our August/September 2017 meeting X.nb-iot, *Security Requirements and Framework for Narrow Band Internet of Things*.

The intent of this Recommendation is to study the challenges brought forward by NB-IoT, and hence the specific security requirements as well as the security framework. Its summary is found below:

<Summary of draft Recommendation ITU-T X.nb-iot>

Currently, due to the telecommunication technology developing, in the mobile communication domain, the communication pattern is changing from person-person to person-thing and thing-thing, thus the Internet of everything is become to an inevitable tendency.

Compared to the short distance communication technologies, such as Bluetooth, ZigBee etc., cellular mobile network with the characteristics of widely coverage, mobility, huge connections that could bring more affluent application scenarios is supposed to become as the main interconnection technology of Internet of Things.

Narrow Band Internet of Things (NB-IoT) is based on the cellular mobile network which only expends approximately 180KHz bandwidth, it could deploy on the GSM network, UMTS network and LTE network directly in order to reduce the cost and achieve smooth upgrade. Taking the advantage of low power dissipation, widely coverage, low cost, high capacity, NB-IoT is considered as the important motivation that the operators which could be widely used in the multiple vertical industries. As a new technology with abundant applications, the NB-IoT has its own characteristics which may bring new security issues.

In order to ensure the security of NB-IoT deployments and applications, the security threats and relevant security requirements specific to NB-IoT need to be analysed and the overall security framework need to be established.

This draft Recommendation aims to analyse the potential deployment scheme and typical application scenarios of NB-IoT, analyses the security threats and requirements specific to the NB-IoT deployment and thus establishes the security framework for the operator to safeguard this new technology applications.