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Chair of LE TG: Mariana Goldhamer
Alvarion

Voice:+972 3 645 6241

marianna.goldhammer@alvarion.com

21a HaBarzel Street, Tel Aviv, Israel

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Base Document:

Purpose:

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IEEE 802.16 LE TG activity

- aprox. 35 participants
- 7 contributions
- Decisions taken for:
 - Updating the input document, based on accepted text
 - Mapping the elements in the Working Documents to an amendment of 802.16 –2004 standard
 - Topics for the Call for Contribution
 - Justification of the Security need

New topics for the Call for Contributions

- Contributions on selecting, for a community, a single MAC frame duration and Tx/Rx intervals and synchronizing them
- Clean-up the cognitive radio signaling
- Clarify the differences, commonalities and usage of the existing mechanisms for coexistence
- Security approach in different network architectures
- Securing the IP address transmission over the air
- Usage scenarios of 802.16h
- Address the coexistence with radars

Justification for activities related to security

- Need for security
- Why it is addressed in 802.16h
- It is in the scope of the 802.16h PAR?

Needs for Security

- Database to be protected
 - BSIS (Base Station Identification Server) Country/Region data base
 - GPS information
 - BS IP address
 - BS data base
 - Timing of the radio signature and coexistence time slot
 - CP uses the information to identify the interferer
 - A malicious user can create interference during these time slots
 - IP addresses in the community
 - Interference to SS data base
- Communication to be protected
 - BS access via IP
 - Denial of service
 - Malicious use of the coexistence protocol
 - False control commands requesting to stop operation
 - Reduce capacity of the systems

Why the inter-system secure communication is developed in LE TG

- There is a need for security
- No other group has defined yet such security mechanisms for communication over the IP network

Is security in the scope of 802.16h PAR?

- Scope: ...“improved mechanisms, as policies and medium access control enhancements”...
- We define the “security policy” for coexistence mechanisms
- We do not open the Chap. 7 – Security Sublayer - in the base standard

Minutes

- Taken by 802.16 LE TG Secretary
 - Nader Zein, NEC Europe
 - Doc. IEEE 802.16h-05/020