

Title: Report of License Exempt Ad Hoc Committee

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**Ad Hoc Committee on Licensed-Exempt Coexistence
- Report -**

Mariana Goldhamer
Ah-Hoc Chair

Common meeting with IEEE 802.19

- Tuesday morning
 - 802.19 Charter and intended P&P changes
 - Presented by Steve Shellhammer, 802.19 Chair
 - Presentation on LE Ad-Hoc work and further intentions

Tuesday evening meeting

- 16 participants, from 802.11, 802.16, 802.19, etc.
- Work to further develop the Ad-Hoc Report
 - C802.16-04/14
 - Consolidated and revised document of interference analysis
 - Shows RSL degradation due to interference on co-channel, 1st and 2nd adjacent channel, for different scenarios, in 2.4GHz and 5.8GHz bands
- Contribution on potential solutions
 - C802.16-04/17
 - Initial idea, based on predictive behavior of 802.16 systems
- Recommendation on further work
 - S802.16-04/18r1

**Proposal for creation of a Study Group on
Coexistence in License-Exempt bands**

802.16 LE Coexistence Ad-Hoc Committee Results

- There are considerable co-existence problems between systems operating in a non-coordinated mode
- We believe that a solution mechanism could be achieved
- Not only 802.16 systems should be considered as interference sources; possible solution mechanism may be applicable to other radio interfaces
- A Study Group is recommended to continue the work

Study Group scope - 1

- Assess the feasibility of a coexistence protocol, PHY independent, and adapted to 802.16 MAC protocol, including:
 - PHY/MAC modifications
 - PHY independent protocol
 - Inter-system communication protocol
 - Spectrum sharing rules
 - Take advantage of the 802.16 MAC predictive behavior
- Study differences between Licensed and LE environment, considering the amendment of IEEE 802.16.2 standard

Study Group scope - 2

- Study the impact on protocol and “Recommended practice” of spectrum sharing with primary (licensed) spectrum users in LE bands
 - Dynamic deployment environment

Supplementary issues for SG scope - 1

- Consider interference from and to other sources in 802 community, including IEEE 802.11 and IEEE 802.15, as it relates to IEEE 802.16
 - Inputs from other WGs and TAGs are welcome

Conclusion

- LE Ad-Hoc Committee proposes the creation of an 802.16 Study Group on LE Coexistence