

IEEE PAR 802.16.2a

Meeting the Five Criteria

1. Broad Market Potential

This project extends the work of IEEE 802.16.2-2001 to cover further aspects of coexistence for systems compliant to IEEE 802.16 and IEEE 802.16a. The 802.16 and 802.16a PARs justified the market potential for fixed BWA systems in their Five Criteria statements. However, successful deployment of fixed BWA systems will depend, in part, on a defined electromagnetic interference environment. As such, the guidelines developed in this project will benefit the future market success of systems compliant to the 802.16 and 802.16a standards.

2. Compatibility

This amendment to the recommended practice will cover both existing fixed BWA systems and systems compliant to the 802.16 and 802.16a interoperability standards. There will be nothing in this practice which contradicts or forces any deviation from IEEE 802 architectures in compliant systems.

3. Distinct Identity

The subject of coexistence is entirely distinct from the interoperability aspects of 802 standards. The amendments to the recommended practice will be wholly supplementary and in support of the interoperability standards. These amendments will provide recommendations and guidelines for the successful deployment of systems and the efficient use of the designated spectrum, topics not covered by the interoperability standards themselves.

4. Technical feasibility

The 802.16 and 802.16a interoperability PARs addressed technical feasibility of fixed BWA systems. A recommended coexistence practice details what is technically feasible in the use of spectrum and the associated management of interference. Recommendations of this kind, while useful for fixed BWA operators, have also been implemented by regulatory bodies.

5. Economic feasibility

The 802.16 and 802.16a interoperability PARs addressed economic feasibility of fixed BWA systems. This amendment to the recommended coexistence practice will enhance economic feasibility by reducing the need for case-by-case interference analysis that would otherwise add to the deployment cost of fixed BWA systems. Furthermore, identification of particular equipment performance parameters will help focus component suppliers on design criteria which promote lower deployment cost.