This document proposes a list of Key Characteristics that the final 802.16.3 Air Interface Standard must address.

For review by the Task Group to determine those characteristics most essential to define technically prior to issuance of a Call for Proposals (see 802.16.3-00/03r1: Revised Development Plan Proposal for 802.16.3 Air Interface Standard). This document addresses only PHY characteristics as it assumes that the 802.16.3 MAC will be the same or very nearly the same as the 802.16.1 MAC.

This document has been prepared to assist IEEE 802.16. It is offered as a basis for discussion and is not binding on the contributing individual(s) or organization(s). The material in this document is subject to change in form and content after further study. The contributor(s) reserve(s) the right to add, amend or withdraw material contained herein.

The contributor grants a free, irrevocable license to the IEEE to incorporate text contained in this contribution, and any modifications thereof, in the creation of an IEEE Standards publication; to copyright in the IEEE’s name any IEEE Standards publication even though it may include portions of this contribution; and at the IEEE’s sole discretion to permit others to reproduce in whole or in part the resulting IEEE Standards publication. The contributor also acknowledges and accepts that this contribution may be made public by IEEE 802.16.

The contributor is familiar with the IEEE 802.16 Patent Policy and Procedures (Version 1.0) <http://ieee802.org/16/ipr/patents/policy.html>, including the statement “IEEE standards may include the known use of patent(s), including patent applications, if there is technical justification in the opinion of the standards-developing committee and provided the IEEE receives assurance from the patent holder that it will license applicants under reasonable terms and conditions for the purpose of implementing the standard.”

Early disclosure to the Working Group of patent information that might be relevant to the standard is essential to reduce the possibility for delays in the development process and increase the likelihood that the draft publication will be approved for publication. Please notify the Chair <mailto:r.b.marks@ieee.org> as early as possible, in written or electronic form, of any patents (granted or under application) that may cover technology that is under consideration by or has been approved by IEEE 802.16. The Chair will disclose this notification via the IEEE 802.16 web site <http://ieee802.org/16/ipr/patents/letters>. 
Proposed Key Characteristics of 802.16.3 Air Interface Standard
Brian G. Kiernan
InterDigital Communications Corporation

1.0 Radio Frequency Bands and Channels
  1.1 Frequency Bands
  1.2 Frequency Plans
  1.3 RF Channelization and Bandwidth
  1.4 Propagation Characteristics
  1.5 Emission Requirements
  1.6 Coexistence Requirements
  1.7 Regulatory Requirements

2.0 Multiplexing and Multiple Access Technique
3.0 Duplex Scheme
4.0 Modulation
5.0 Frame Structure and Timing
6.0 Coding and Interleaving
7.0 Synchronization
8.0 Physical and Logical Channel Structure and Organization
9.0 Dynamic Channel Allocation
10.0 Power Control
11.0 Equalization
12.0 PHY-MAC Interaction
13.0 Diversity Techniques
14.0 Transmitter/Receiver Performance Requirements