

# Standardization of Mobile Broadband Network Performance Measurements: Target Applications

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## Re:

Solicitation of input contributions by IEEE 802.16's Metrology Study Group <<http://ieee802.org/16/sg/met>> for IEEE 802.16's Session #79 of 14-17 May 2012.

## Base Contribution:

IEEE 802.16-12-0342-00-Smet, referencing IEEE 802.16-12-0344-00-Smet and IEEE 802.16-12-0361-00-Smet

## Purpose:

Consideration during discussions of Study Group activity and plans.

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# **Standardization of Mobile Broadband Network Performance Measurements: Target Applications**

# Introduction

- IEEE 802.16-12-0342 proposes initiation of a new project on “Standardization of Mobile Broadband Network Performance Measurements”
  - draft PAR in 802.16-12-0343
  - draft Five Criteria in 802.16-12-0344-01
- Under “Technical Feasibility,” 802.16-12-0344-01 calls out several existing and developing technologies
- This contribution compares the target applications of the various approaches
- Conclusion is that target applications are complementary and can be addressed by a single standard.

# Who Uses the Measurement Data?

- Considering examples in IEEE 802.16-12-0344-01 (Annex 2, Clause 4a), four types of parties identified
  1. Governments and Regulators
    - FCC, Ofcom, European Commission
  2. General Public
    - M-Lab, Project BISmark, MobiPerf, RootMetrics
  3. Operators
    - Epiteiro
  4. Enterprises
    - Mobile Pulse

# Uses of Data by User Types

## 1. Governments and Regulators

- characterization of available networks, due to economic impact

## 2. General Public

- carrier selections, considering service location

## 3. Operators

- assessment of deployed services, by technology, device type, location, time of day, etc.; failure identification

## 4. Enterprises and Public Service agencies

- assessments of subscribed services, by technology, device type, location, time of day, etc.; provides insight into expected availability; supports performance agreements

# Measurement Needs by User Types

1. Governments and Regulators
  - statistical, anonymous, crowd-sourced data
2. General Public
  - statistical, anonymous, crowd-sourced data
3. Operators
  - full data details for all users
4. Enterprises
  - detailed sample data collected for all users
    - when and where

# Conclusion

- Multiple types of users and target markets
- Multiple applications
- Similar measurement needs
- Different data needs