Project	**IEEE 802.16 Broadband Wireless Access Working Group <http://ieee802.org/16>**
Title	**Data Transfer Related PHY Primitives Example**
Date Submitted	**2001-01-18**
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Re:	This document clarifies the example of the primitives interchanged between PHY and MAC for Data Transfer. It is submitted in response to the "Call for comments on IEEE802.16.1/D1-2000 (Draft standard for Air Interface for Fixed Broadband Wireless Access System).
Abstract	This document depicts the sequence of primitives interchanged between BS MAC and BS PHY, and between SS MAC and SS PHY to carry out one downlink and one uplink burst transmission. This figure has been performed taking into account the primitive definitions included in the current IEEE802.16.1/D1-2000 standard version.
Purpose	The objective of this document is to show one example of the primitive interchange between MAC and PHY concordant with the primitive definitions included in the current standard version (section 8.1.3.24.5).
Notice	
Release	
Patent Policy and Procedures	

Data Transfer Related PHY Primitive Example

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1 Introduction

This document shows one graphical example of the sequence of primitives interchanged between MAC and PHY layers of the BS and SS during a downlink/uplink burst transmission.

The objective pursued by this contribution is to provide one example concordant with the primitive definitions included between 8.1.3.15 and 8.1.3.24 sections of the IEEE802.16.1/D1-2000 standard version.

In other words, this figure is intended to replace figures 118 and 119 of the current standard version (page 213).

From the previously mentioned primitive definitions, the following assumptions have been considered:

- **PHY_TXSTART.indication** primitive indicates to MAC when the actual transmission burst period starts.
- **PHY_MACPDU.confirmation** primitive indicates to MAC when the previously requested MACPDU has been completely transmitted (with success or with failure).
- **PHY_RXSTART.indication** primitive indicates to MAC when the actual reception burst period starts. The definition of this primitive is missing in the current standard version. However, it has been assumed that it works similarly to PHY_TXSTART.indication primitive.
- **PHY_MACPDU.indication** primitive indicates to MAC when a MAC PDU has been received from the PHY.

2 Data Transfer Related Primitives Example

As it has been already mentioned, the example depicted in the following figures is proposed to be included into the IEEE802.16.1/D1-2000 standard, removing the figures 118 and 119 currently included.

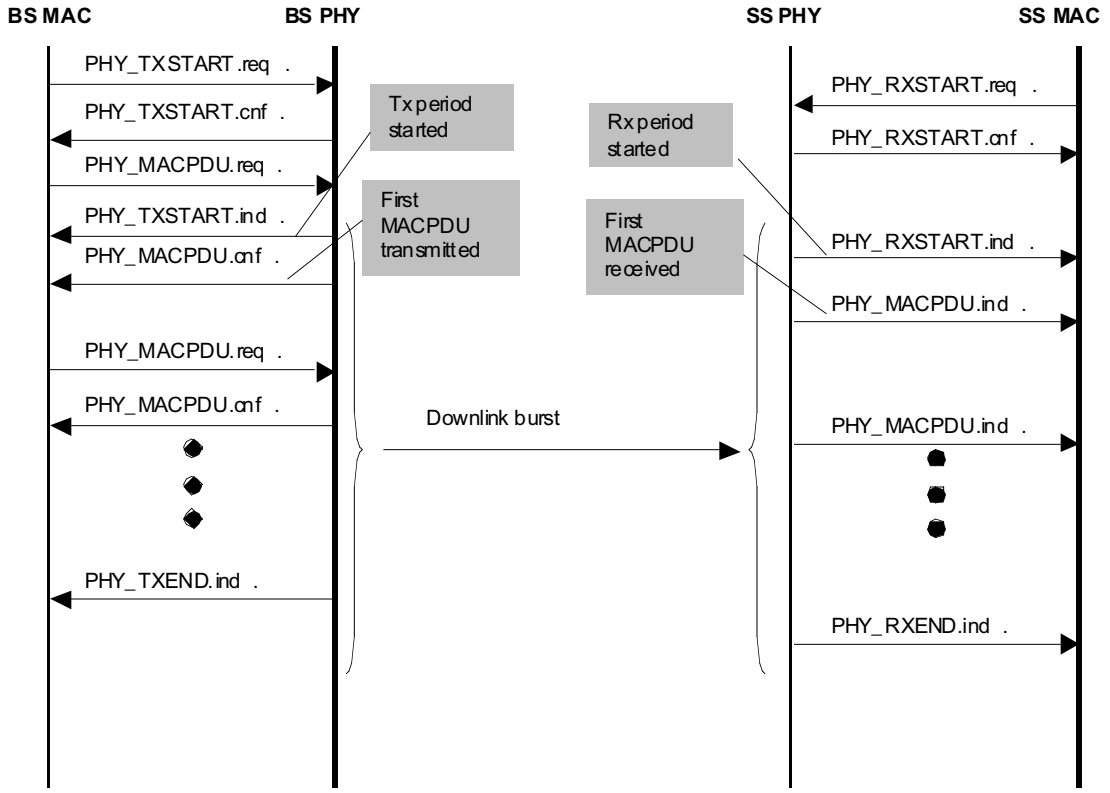

Figure 118 – Data Tx/Rx Downstream Primitives

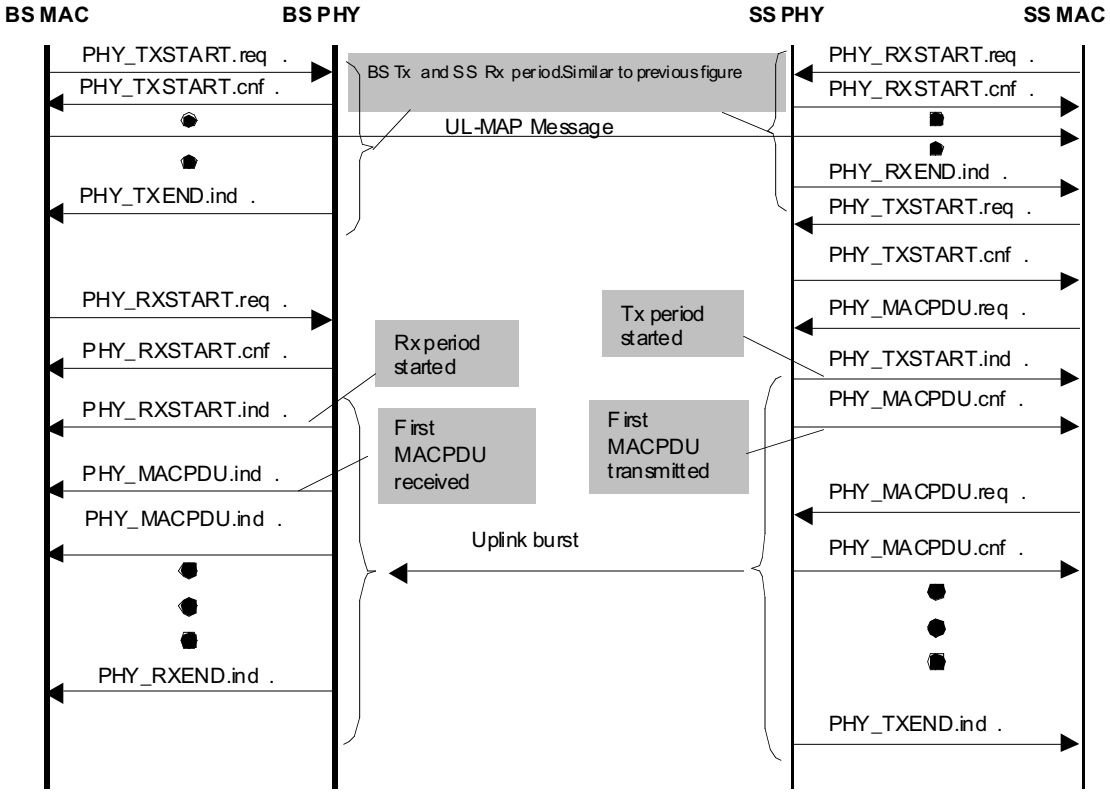

Figure 119 – Data Tx/Rx Upstream Primitives