

Project	IEEE 802.16 Broadband Wireless Access Working Group < <a href="http://ieee802.org/16">http://ieee802.org/16</a> >	
Title	Editorial Corrections for RS_Config-REQ Message in the Baseline Text of 80216j-06/026r3	
Date Submitted	2007-04-25	
Source(s)	Peter Wang, Adrian Boariu, Shashikant Maheshwari, Tony Reid Nokia Siemens Networks 6000 Connection Drive, Irving, TX	Voice: +1 214-912-4613 Fax: peter.wang@nokia.com
Re:	Call for Technical Proposals regarding IEEE Project P802.16j (IEEE 802.16j-07/013)	
Abstract	This contribution proposes fixed and nomadic relay-station preamble segment assignment scheme in order to mitigate interference during the initial RS network entry.	
Purpose	Propose the text regarding fixed and nomadic relay-station preamble segment assignment for multihop relay systems	
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# Editorial Corrections for RS\_Config-REQ/RSP Message in the Baseline Text of 80216j-06/026r3

Peter Wang, Adrian Boariu, Shashikant Maheshwari, Tony Reid  
Nokia Siemens Networks

## 1. INTRODUCTION

The contribution is to merge RS\_Config-REQ message field in Section 6.3.2.3.67 and Section 6.3.2.3.69 of the baseline text of 80216j-06\_026r3.

## 2. CHANGES TO THE SPECIFICATION

### 2.1 [Please do the following changes]

Page 26, line 4

Table <XXX>—RS\_Config-**RSREQ** message format

Page 26, line 8

RS\_Config-**RSREQ** message format

Page 27, line 33

Rename RS\_Config\_REQ\_Message\_format to some other name, for example Relay\_Configuration\_Description.

### 2.2 [Please merge RS\_Config-REQ message field in Section 6.3.2.3.67 and Section 6.3.2.3.69]

#### 6.3.2.3.67 **MR-BS-RS** Configuration **Request Response** Message

This message may be transmitted by an MR-BS for the purpose of RS configuration. An MR-BS may use this message to set operation parameters for an RS. MR-BS may transmit this message as a response to RS\_Config-**RSREQ** or as an unsolicited message and to configure the RS.

Table <xxx> RS\_Config-**RSPREQ** message format

Syntax	Size	Notes
RS_Config- <b>RSPREQ</b> Message Format() {		
Management message type = TBD	8 bits	
Configured para type	8 bits	b0 = 1: preamble configuration is included; b1 = 1: remove multicast RSID to disassociate from the RS group; b2 = 1: Unicast RSID is included; b3 = 1: Multicast RSID is included; b4 = 0: Do not transmit preamble; 1: transmit the assigned preamble. b5 – b7: reserved

<u>If (b0 of Configured para type == 1 ) {</u>		
<u>Reserved</u>	<u>1 bit</u>	
<u>Preamble index</u>	<u>7 bits</u>	
<u>N Preamble</u>	<u>2 bits</u>	<u>N Preamble=0 specifies NULL preamble (e.g., Transparent RS)</u> <u>N Preamble=1 assigns one preamble to the RS</u> <u>N Preamble=2 assigns two preambles on different segments to the RS</u> <u>N Preamble=3 assigns three preambles on different segments to the RS</u>
<u>Reserved</u>	<u>6 bits</u>	<u>Reserved</u>
<u>For (i=0, i&lt;N Preamble; i++){</u>		
<u>Preamble index</u>	<u>8 bits</u>	<u>Assign a preamble index value to the potential RS</u>
<u>}</u>		
<u>}</u>		
<u>If (b2 of Configured para type == 1 ) {</u>		
<u>Unicast RSID</u>	<u>8 bits</u>	<u>Unicast RSID</u>
<u>}</u>		
<u>If (b3 of Configured para type == 1 ) {</u>		
<u>Multicast RSID</u>	<u>8 bits</u>	<u>Multicast RSID as the RS Group ID</u>
<u>}</u>		
<u>TLV Encoded Information</u>	<u>Variable</u>	<u>TLV specific</u>
<u>}</u>		

**Configuration para type**

The first bit is used as preamble index indicator to indicate the preamble index field is present in this message. The second bit is used as the indicator to instruct the RS to remove its multicast RSID so that it is disassociate from the current RS group. The third bit is used as the Unicast RSID indicator to indicate the Unicast RSID field is present in this message. The fourth bit is used as the Multicast RSID indicator to indicate the Multicast RSID field is present in this message.

**Preamble index**

This field is used to indicate the preamble index

**RS response required**

This field is used to enable RS to accept/deny the preamble assignment.

**Unicast RSID**

This field is used to indicate the Unicast RSID

**Multicast RSID**

This field is used to indicate the Multicast RSID for RS group operations

**N-Preamble**

N Preamble is the number of preamble index assigned to the potential RS. For example, N-Preamble=0 means the potential RS does not transmit preamble acting as a Transparent RS. If N-Preamble=1 means the potential RS transmit one preamble index (i.e., the RS transmit one segment value and one IDCell) acting as a Non-Transparent RS. If N-Preamble=2 means the potential RS transmit two preamble index (i.e., the RS transmit two different segment values and IDCells) acting as a Non-Transparent RS.

The RS Config-REQ shall contain the following TLVs:

HMAC/CMAC Tuple (see 11.1.2)

The HMAC/CMAC Tuple shall be the last attribute in the message.

## 2.3 [Delete the table in Section 6.3.2.3.67 in P.30 of the baseline text of 80216j-06\_026r3]

### 6.3.2.3.67 MR-BS configuration response message

This message may be transmitted by an MR-BS for the purpose of RS configuration. An MR-BS may use this message to set operation parameters for an RS. MR-BS may transmit this message as a response to RS\_Config\_REQ or as an unsolicited message.

Table <xxx> RS\_Config\_RSP message format

Syntax	Size	Notes
RS_Config_RSP format {		
Management message type = 68	8 bits	
Configured_para_type	8 bits	b0 = 1: preamble configuration is included; b1 = 1: remove multicast RSID to disassociate from the RS group; b2 = 1: Unicast RSID is included; b3 = 1: Multicast RSID is included; b4 = 0; Do not transmit preamble; 1: transmit the assigned preamble. B5 – b7: reserved
If (b0 of Configured_para_type == 1) {		Assign a preamble index value to the potential RS
— reserved	1 bits	Shall be zero
— Preamble_index	7 bits	Preamble index
— }		
If (b2 of Configured_para_type == 1) {		
— Unicast RSID	8 bits	Unicast RSID
— }		
If (b3 of Configured_para_type == 1) {		
— Multicast RSID	8 bits	Multicast RSID as the RS-Group ID
— }		
}		

#### Configuration\_para\_type

The first bit is used as preamble index indicator to indicate the preamble\_index field is present in this message

The second bit is used as the indicator to instruct the RS to remove its multicast RSID so that it is disassociate from the current RS group

The third bit is used as the Unicast RSID indicator to indicate the Unicast RSID field is present in this message

The fourth bit is used as the Multicast RSID indicator to indicate the Multicast RSID field is present in this message

**Preamble\_index**

This field is used to indicate the preamble index

**Unicast RSID**

This field is used to indicate the Unicast RSID

**Multicast RSID**

This field is used to indicate the Multicast RSID for RS group operations

## 2.4 [Delete Section 6.3.2.3.69 in P.32 of the baseline text of 80216j-06\_026r3]

### 6.3.2.3.69 RS preamble configuration request (RS\_Config\_REQ) message

Syntax	Size	Notes
—— N_Preamble	2 bits	N_Preamble=0 specifies NULL preamble (e.g., Transparent RS) N_Preamble=1 assigns one preamble to the RS N_Preamble=2 assigns two preambles on different segments to the RS N_Preamble=3 assigns three preambles on different segments to the RS
Reserved	6 bits	Reserved
—— For (i=0, i<N_Preamble; i++){		
—— Preamble index	8 bits	Assign a preamble index value to the potential RS
—— }		
TLV Encoded Information	Variable	TLV specific

**N\_Preamble**

N\_Preamble is the number of preamble index assigned to the potential RS. For example, N\_Preamble=0 means the potential RS does not transmit preamble acting as a Transparent RS. If N\_Preamble=1 means the potential RS transmit one preamble index (i.e., the RS transmit one segment value and one IDCell) acting as a Non-Transparent RS. If N\_Preamble=2 means the potential RS transmit two preamble index (i.e., the RS transmit two different segment values and IDCells) acting as a Non-Transparent RS.

The RS\_Config\_REQ shall contain the following TLVs:

HMAC/CMAC Tuple (see 11.1.2)

The HMAC/CMAC Tuple shall be the last attribute in the message