Project	**IEEE 802.16 Broadband Wireless Access Working Group <http://ieee802.org/16>**	
Title	**Figures accompanying ballot**	
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Re:	Working group letter ballot on IEEE 802.16a/D1-2001	
Abstract	The document contains figures referenced in comments by the author	
Purpose		
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Figures referenced in comments

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1.

The Fragmentation sub-header (FSH) is shown in Table 1.

Table 1—Fragmentation Sub-header Format

Syntax	Size	Notes
Fragmentation sub-header () {		
FC	2 bits	
FSN	3 bits	Bits 2:0
reserved for CS use	3 bits	
FCR	2 bits	
FSNR	6	
FSN	3	Bits 5:3
reserved	2	
TSN	11	
}		

The fields of the Fragmentation sub-header are defined in Table 2.

Table 2—Fragmentation Sub-header Fields

Name	Length (bits)	Description
FC	2	Fragmentation Control Indicates the fragmentation state of the payload: 00 = no fragmentation 01 = last fragment 10 = first fragment 11 = continuing (middle) fragment
FSN	6	Fragmentation Sequence Number Defines the sequence number of the current SDU fragment. This field increments by one (modulo 64) for each fragment, including unfragmented SDUs.
FCR	2	Replicates the value of the FC bits in the original transmission unit
FSNR	6	Replicates the FSN of the original transmission unit
TSN	11	Transmission Unit Sequence number

The Packing sub-header is defined in Table 3.

Table 3—Packing Sub-header

Syntax	Size	Notes
Packing sub-header () {		
FC	2 bits	
FSN	3 bits	
Length	11 bits	
FCR	2 bits	
FSNR	6	
FSN	3	Bits 5:3
reserved		
TSN	11	
}		

The fields of the packing sub-header are defined in Table 4.

Table 4—Packing Sub-header Fields

Name	Length (bits)	Description
FC	2	Fragmentation Control Indicates the fragmentation state of the payload: 00 = no fragmentation 01 = last fragment 10 = first fragment 11 = continuing (middle) fragment
FSN	6	Fragmentation Sequence Number Defines the sequence number of the current SDU fragment. This field increments by one (modulo 64) for each fragment, including unfragmented SDUs.
Length	11	The length in bytes of the MAC SDU or SDU fragment, including the two-byte packing sub-header.
FCR	2	Replicates the value of the FC bits in the original transmission unit
FSNR	6	Replicates the FSN of the original transmission unit
TSN	11	Transmission Unit Sequence number

Table 5

Table 5—ARQ Feedback Sub-header Fields

Name	Length (bits)	Description
TSN	11	Transmission Unit Sequence number
reserved	5	
ACK MAP		Acknowledgement map

.

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Table 6—ARQ_feedback_IE

Syntax	Size	Notes
ARQ_feedback_IE() {		
CID	16 bits	
TSN	11 bits	
reserved	5	
ACK MAP	16 bits	
}		

Table 7—ARQ Feedback Message Format

Syntax	Size	Notes
ARQ_Feedback_Message_Format() {		
Management Message Type = 34	8 bits	
Number of ARQ_feedback_IEs	8 bits	
for (i = 1; i < n; i++) {		
ARQ_feedback_IE	32 bits	
}		
}		

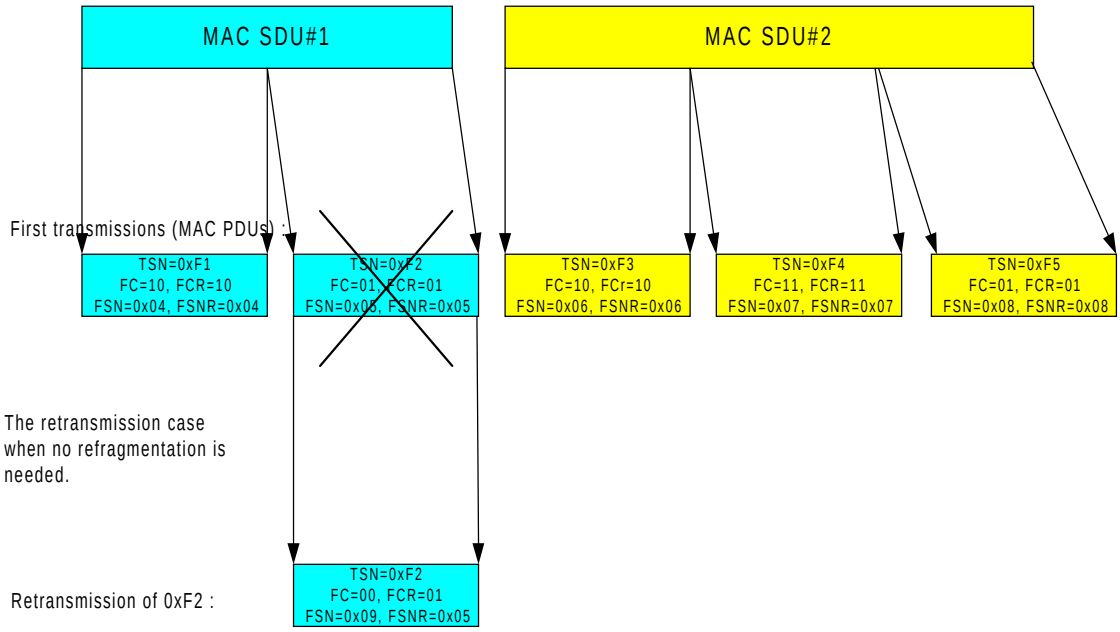

Figure 1—Retransmission without refragmentation

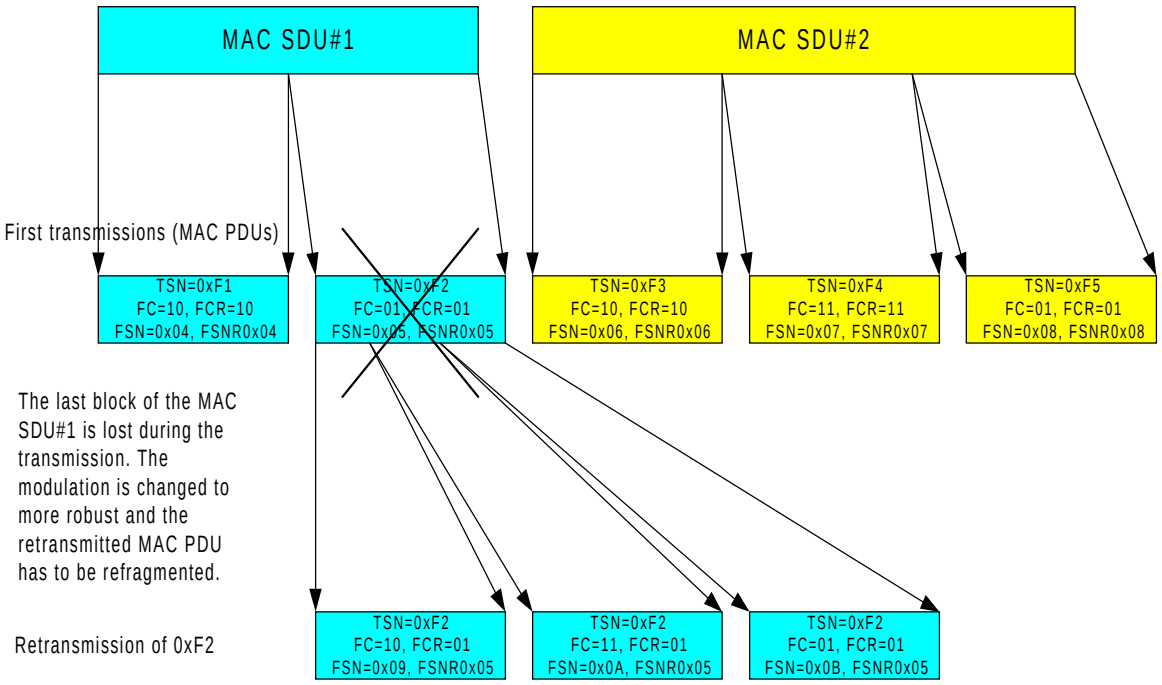

Figure 2—Retransmission with refragmentation