

Project	IEEE 802.16 Broadband Wireless Access Working Group < http://ieee802.org/16 >
Title	Stuff
Date Submitted	2002-09-17
Source(s)	Nico van Waes Nokia Wireless Routers
Re:	IEEE LMSC Sponsor Ballot of P802.16a/D5
Abstract	<p>Proposed material referenced by submitted comments</p> <p>Changes from r0:</p> <ul style="list-style-type: none"> Moved "Disable reception" on Rx side in figure 31b after issuance of ARQ-Reset 0x0. Replaced Discard on Tx side in figure 31b with "Discard SDUs of which fragments have been sent" Replaced Error on Tx side in figure 31b with "Requestion deletion of this connection" Switched transmitter and receiver heading in figure 31c Inserted ARQ-Reset 0x2 transmission on the (corrected) transmitter side in figure 31c Inserted an additional "Clear T17" in 31c
Purpose	Adoption
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Stuff

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6.2.2.2.1 Fragmentation Subheader

Replace Table 7 through Table 8 with:

Table 7—Fragmentation Subheader format

Syntax	Size	Notes
Fragmentation Subheader() {		
FC	2 bits	Indicates the fragmentation state of the payload: 00 = no fragmentation 01 = last fragment 10 = first fragment 11 = continuing (middle) fragment
if (Type bit#3)		See Table 4.
FSN	3 bits	Sequence number of the current SDU fragment. This field increments by one (modulo 8) for each fragment, including unfragmented SDUs.
else		
FSN	11 bits	Sequence number of the current SDU fragment. This field increments by one (modulo 2048) for each fragment, including unfragmented SDUs.
Reserved	3 bits	
}		

6.2.2.2.3 Packing Subheader

Replace Table 11 through Table 12 with:

Table 11—Packing Subheader format

Syntax	Size	Notes
Packing Subheader() {		
FC	2 bits	Indicates the fragmentation state of the payload: 00 = no fragmentation 01 = last fragment 10 = first fragment 11 = continuing (middle) fragment
if (Type bit#3)		See Table 4.
FSN	3 bits	Sequence number of the current SDU fragment. This field increments by one (modulo 8) for each fragment, including unfragmented SDUs.
else		
FSN	11 bits	Sequence number of the current SDU fragment. This field increments by one (modulo 2048) for each fragment, including unfragmented SDUs.
Length	3 bits	
}		

6.2.2.3.30 ARQ Feedback message

An SS supporting ARQ shall be able to receive and process the ARQ Feedback message.

The ARQ Feedback message, as shown in Table 56a, can be used to signal any combination of different ARQ ACKs (cumulative, selective, selective with cumulative). The message shall be sent on the appropriate basic management connection.

Table 56a—ARQ Feedback message format

Syntax	Size	Notes
ARQ_Feedback_Message_Format() {		
Management message Type =33	8 bits	
ARQ_Feedback_Payload	variable	See [REF]6.2.3.4.3.
}		

ARQ Feedback information shall be either sent using this ARQ Feedback message or by packing (“piggybacking”) the ARQ_Feedback_Payload as described in 6.2.3.4.3.

6.2.3.4.3 Packing ARQ Feedback Information Elements

An ARQ Feedback Payload (see Table 57a) consists of one or more ARQ Feedback Information Elements (see 6.2.4.2). The ARQ Feedback Payload may be sent on an ARQ or non-ARQ connection. However, policies based on implementation and/or QoS constraints may restrict the use of certain connections for transporting ARQ Feedback Payload. The ARQ Feedback Payload is treated like any other payload (SDU or fragments) from the packing perspective, except that only one ARQ Feedback Payload shall be present within a single MAC PDU.

Table 57a—ARQ Feedback Payload format

Syntax	Size	Notes
ARQ_Feedback_Payload_Format() {		
do	8 bits	
ARQ_Feedback_IE(last)	variable	Insert as many as desired, until last==TRUE See 6.2.4.2.
until (last)		
}		

The presence of an ACK Feedback Payload in a MAC PDU is indicated by the value of bit #4 of the Type field in the generic MAC header. When present, the first packed payload shall be the ARQ Feedback Payload. The Packing Subheader preceding the ARQ Feedback Payload indicates the total length of the payload including the Packing Subheader and all ARQ Feedback Information Elements within the payload. The FSN field of the Packing Subheader shall be ignored for the ARQ Feedback Payload and the FC bits shall be set to 00.

6.2.3.4.4 Transmitter state machine

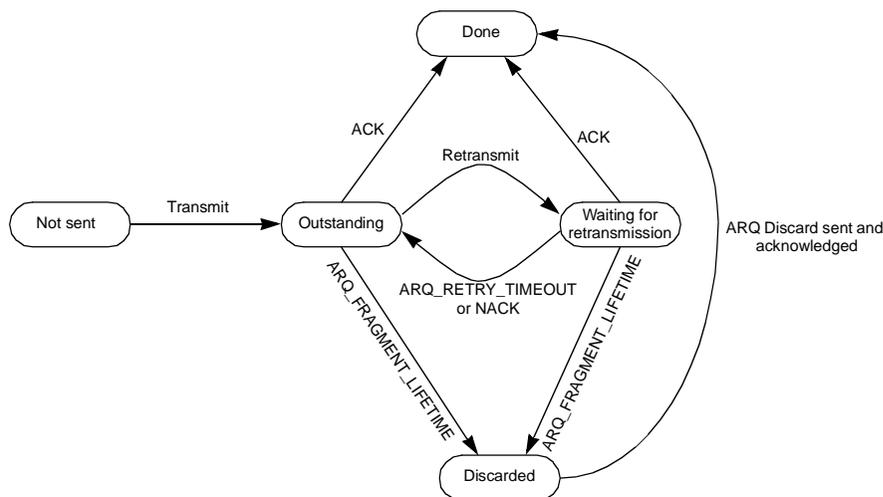


Figure 31a—ARQ transmit fragment states

6.2.4.5.2 Transmitter state machine

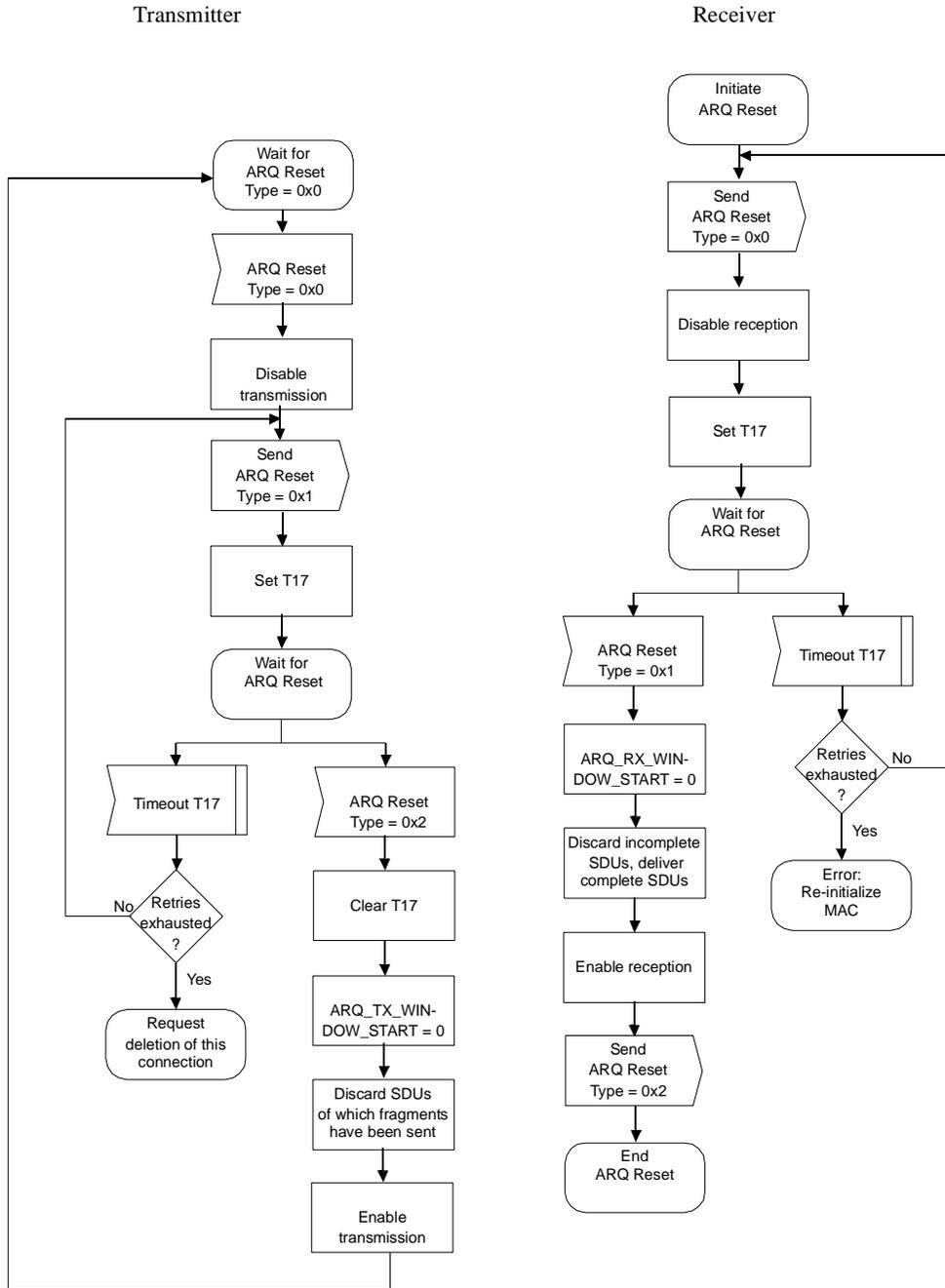


Figure 31b—ARQ Reset message dialog - receiver initiated

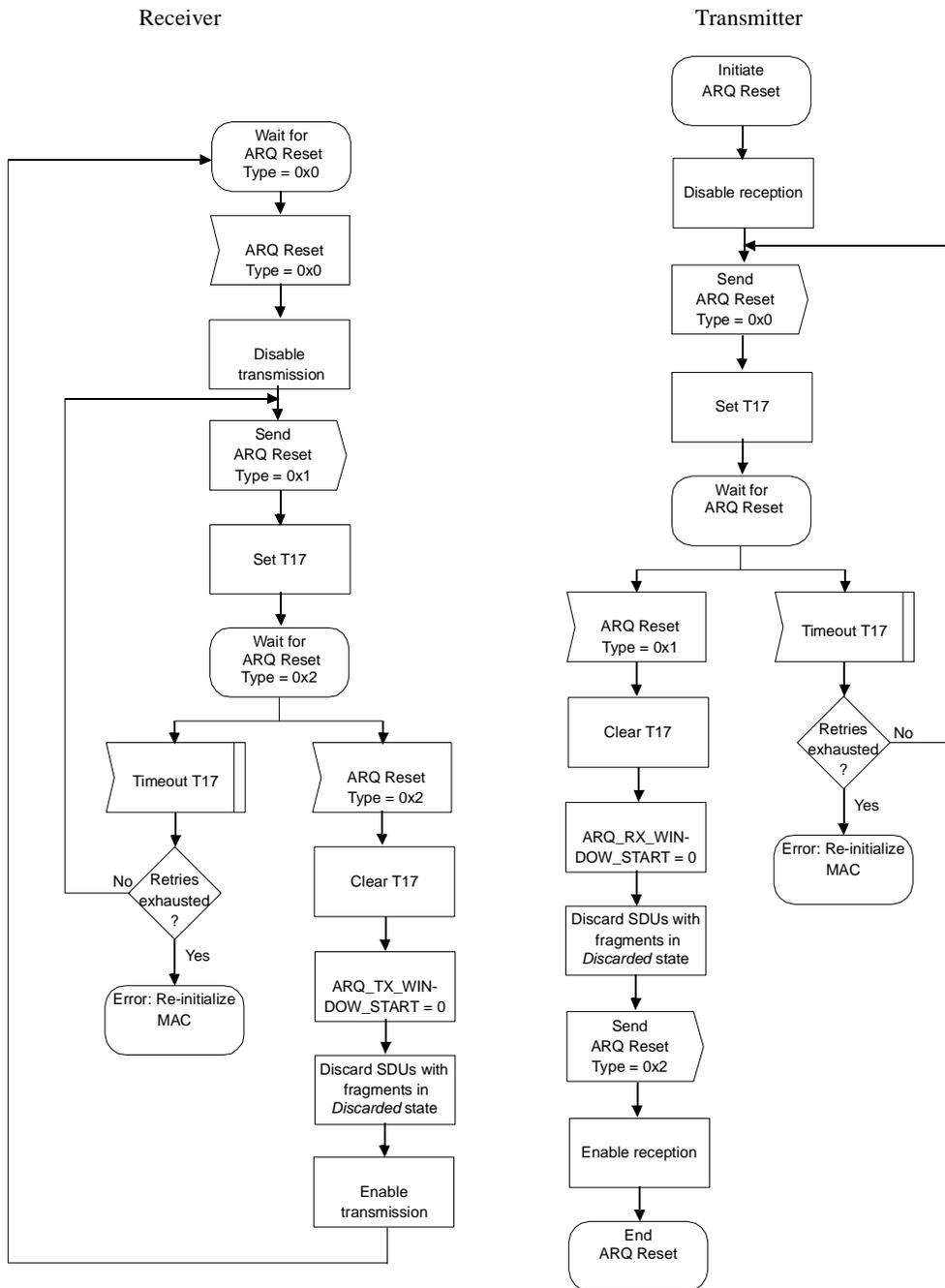


Figure 31c—ARQ Reset message dialog - transmitter initiated

6.2.6.7.2 Centralized scheduling

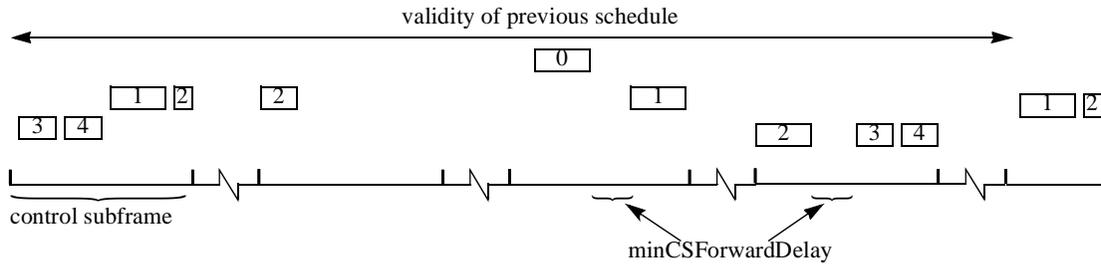


Figure 36c—MSH-CSCH schedule validity

6.2.9.13.3 Open Sponsor Channel

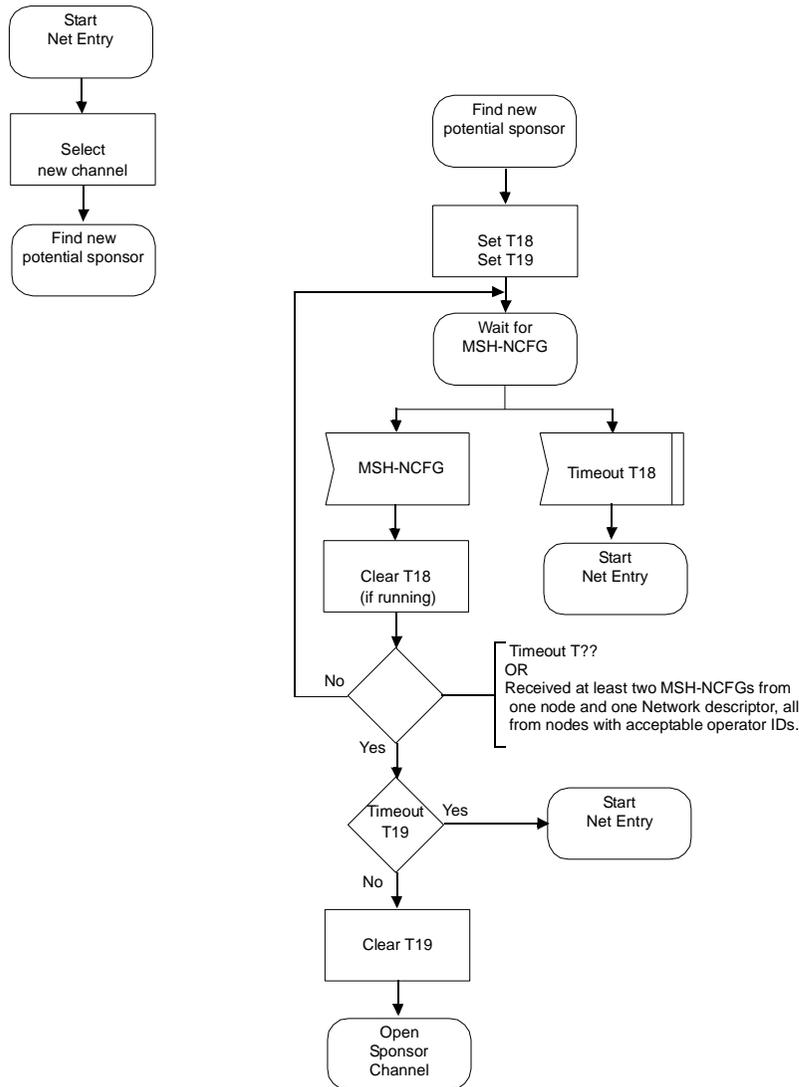


Figure 54a—Mesh network synchronization and entry - New node - I

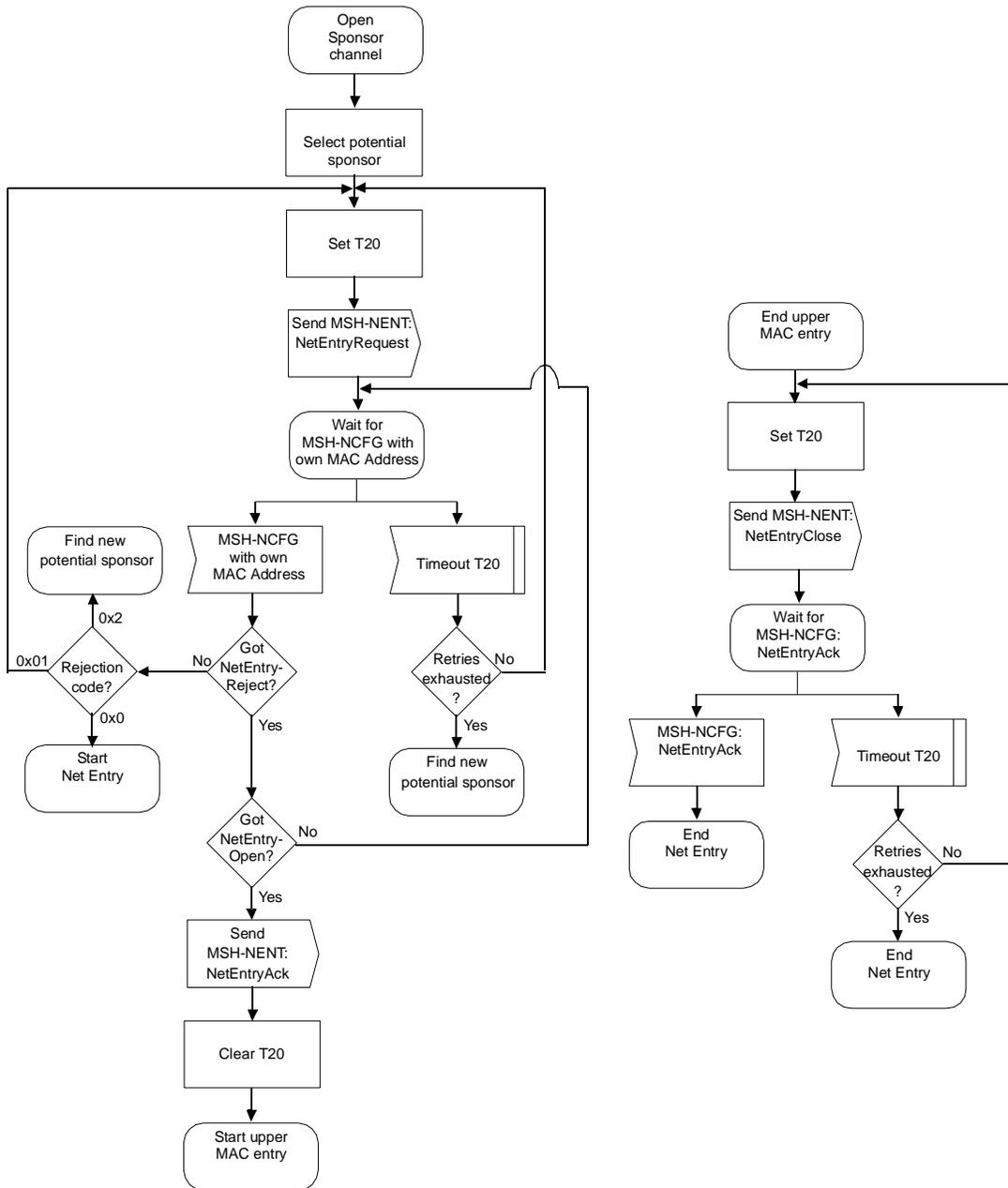


Figure 54b—Mesh network synchronization and entry - New node - II

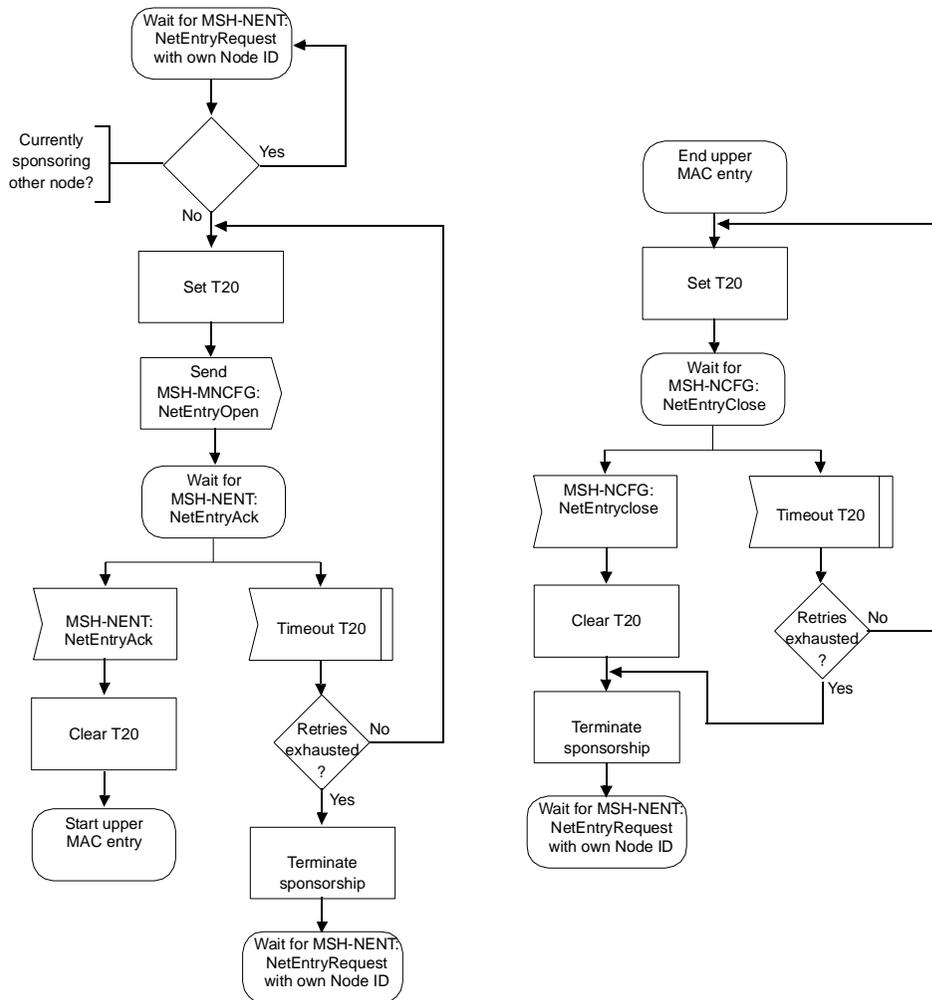


Figure 54c—Mesh network synchronization and entry - sponsor node

8.4.11.1.3 Receiver rejection mask

The receiver shall comply with the following rejection mask.

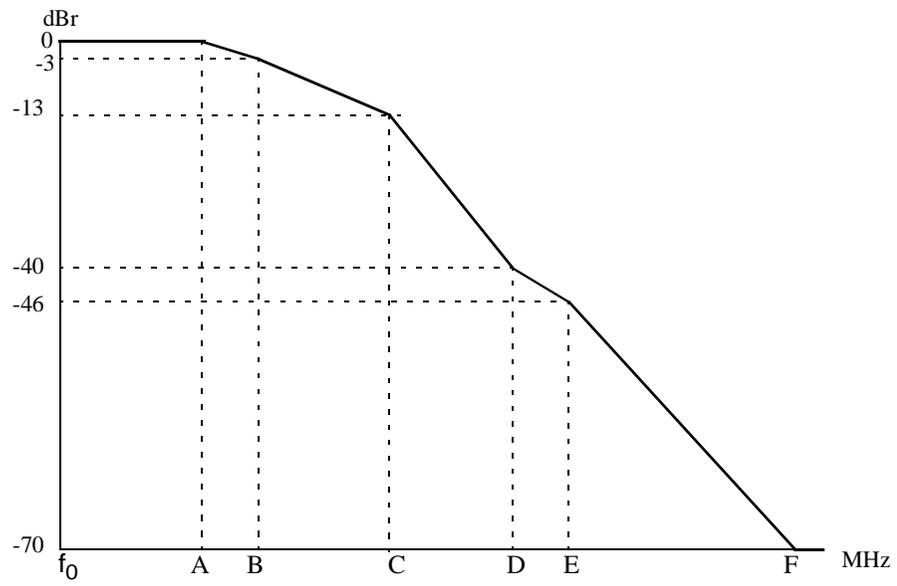


Figure 128bt—Receiver rejection mask

Table 116bh—Receiver rejection mask parameters

Channelization (MHz)	A	B	C	D	E	F
20	9	9.5	10.5	11.5	12	14
10	4.5	4.75	5.25	6.75	6	7