Project	**IEEE 802.16 Broadband Wireless Access Working Group <http://ieee802.org/16>**
Title	**Stuff**
Date Submitted	**2002-09-04**
Source(s)	Nico van Waes Nokia Wireless Routers
Re:	IEEE LMSC Sponsor Ballot of P802.16a/D5
Abstract	Proposed material referenced by submitted comments
Purpose	Adoption
Notice	This document has been prepared to assist IEEE 802.16. It is offered as a basis for discussion and is not binding on the contributing individual(s) or organization(s). The material in this document is subject to change in form and content after further study. The contributor(s) reserve(s) the right to add, amend or withdraw material contained herein.
Release	The contributor grants a free, irrevocable license to the IEEE to incorporate material contained in this contribution, and any modifications thereof, in the creation of an IEEE Standards publication; to copyright in the IEEE's name any IEEE Standards publication even though it may include portions of this contribution; and at the IEEE's sole discretion to permit others to reproduce in whole or in part the resulting IEEE Standards publication. The contributor also acknowledges and accepts that this contribution may be made public by IEEE 802.16.
Patent Policy and Procedures	The contributor is familiar with the IEEE 802.16 Patent Policy and Procedures <http://ieee802.org/16/ipr/patents/policy.html>, including the statement "IEEE standards may include the known use of patent(s), including patent applications, provided the IEEE receives assurance from the patent holder or applicant with respect to patents essential for compliance with both mandatory and optional portions of the standard." Early disclosure to the Working Group of patent information that might be relevant to the standard is essential to reduce the possibility for delays in the development process and increase the likelihood that the draft publication will be approved for publication. Please notify the Chair <mailto:chair@wirelessman.org> as early as possible, in written or electronic form, if patented technology (or technology under patent application) might be incorporated into a draft standard being developed within the IEEE 802.16 Working Group. The Chair will disclose this notification via the IEEE 802.16 web site <http://ieee802.org/16/ipr/patents/notices>.

Stuff

Nico van Waes
Nokia Wireless Routers

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

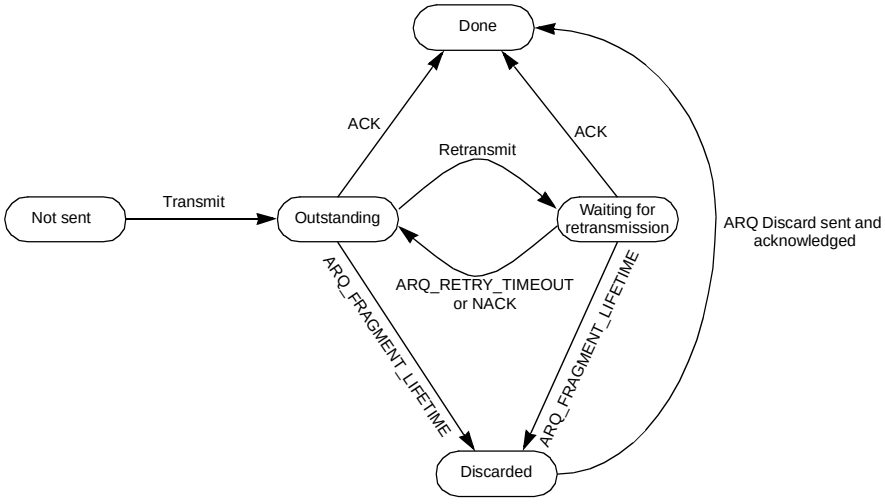

Figure 31a—ARQ transmit fragment states

6.2.4.5.2 Transmitter state machine

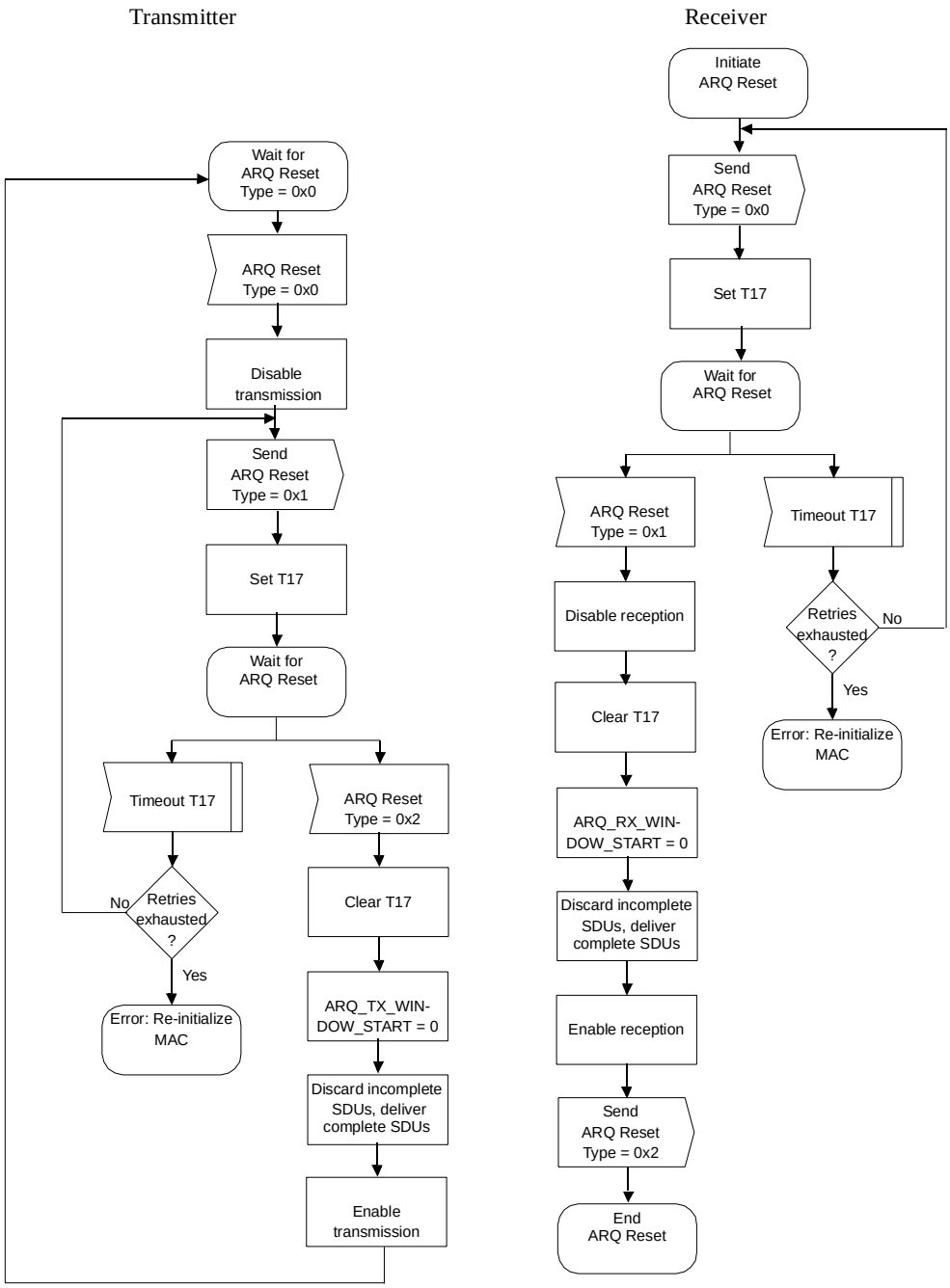

Figure 31b—ARQ Reset message dialog - receiver initiated

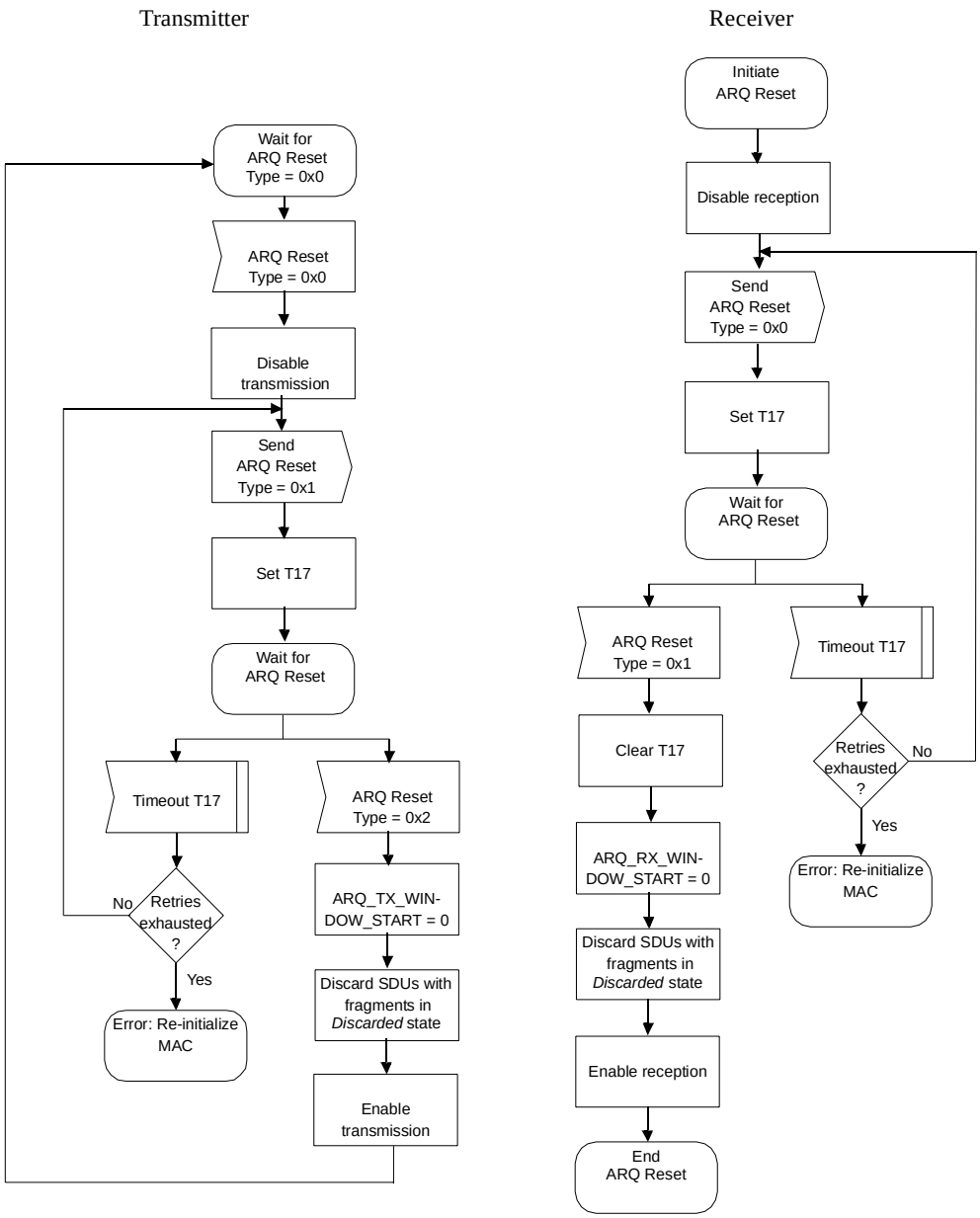

Figure 31c—ARQ Reset message dialog - transmitter initiated

6.2.6.7.2 Centralized scheduling

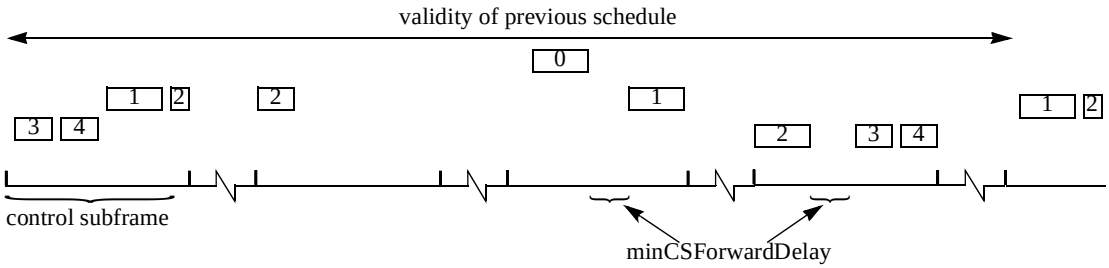

Figure 36c—MSH-CSCH schedule validity

6.2.9.13.3 Open Sponsor Channel

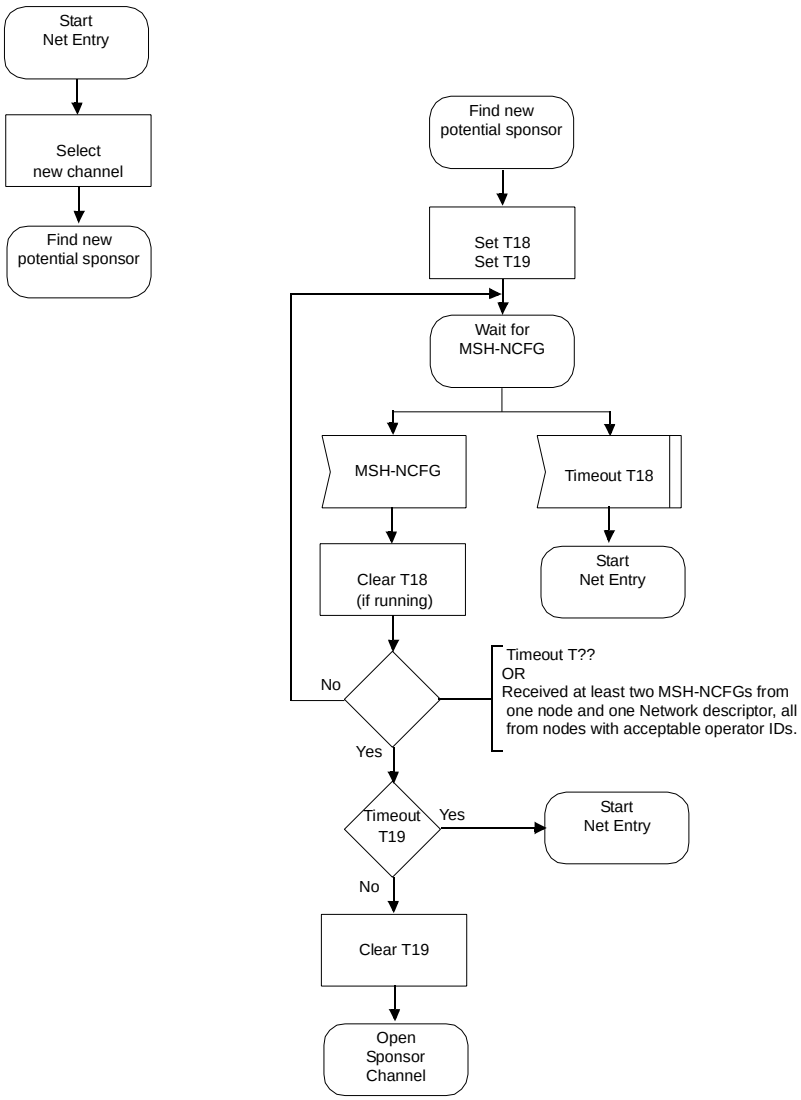

Figure 54a—Mesh network synchronization and entry - New node - I

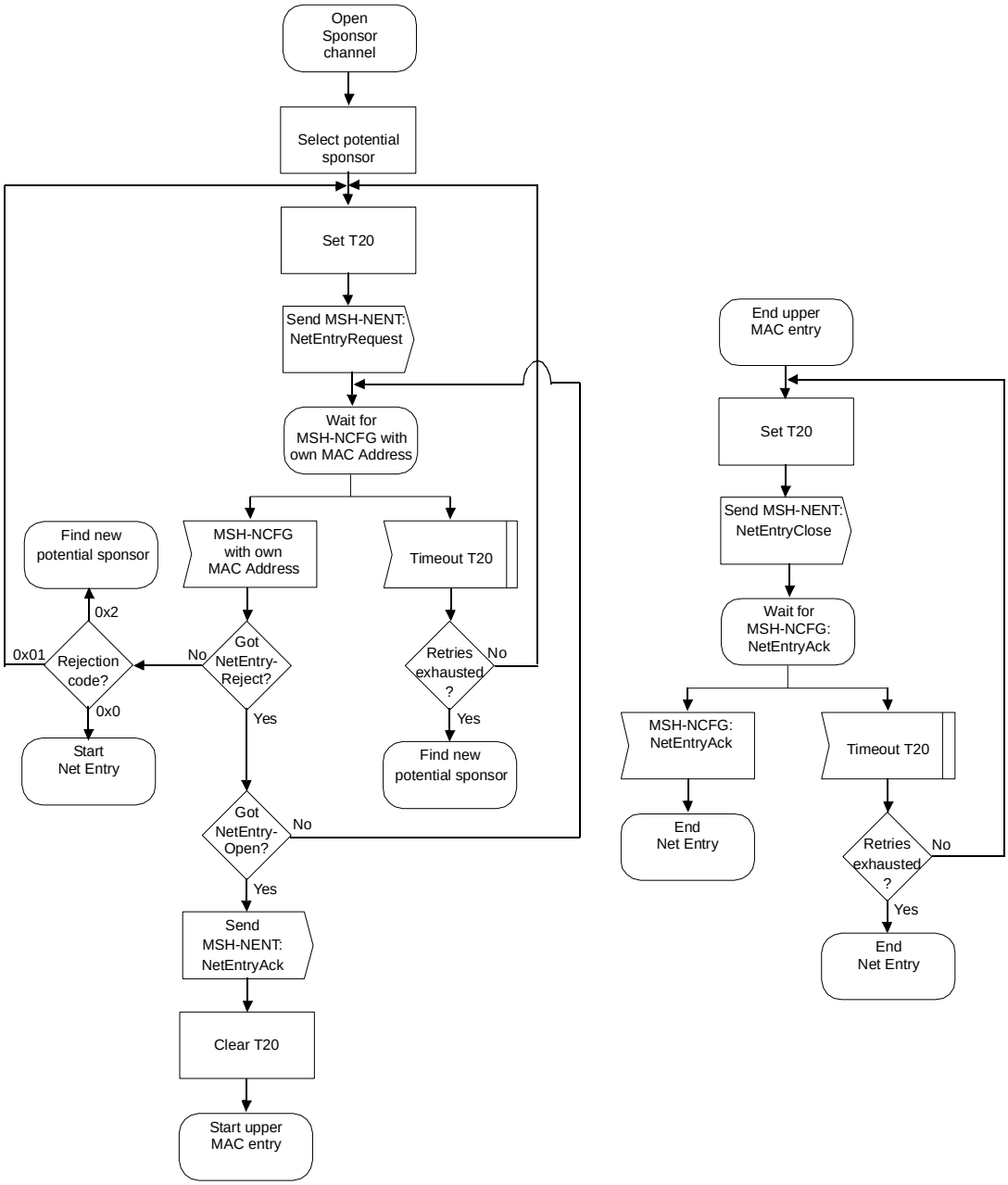

Figure 54b—Mesh network synchronization and entry - New node - II

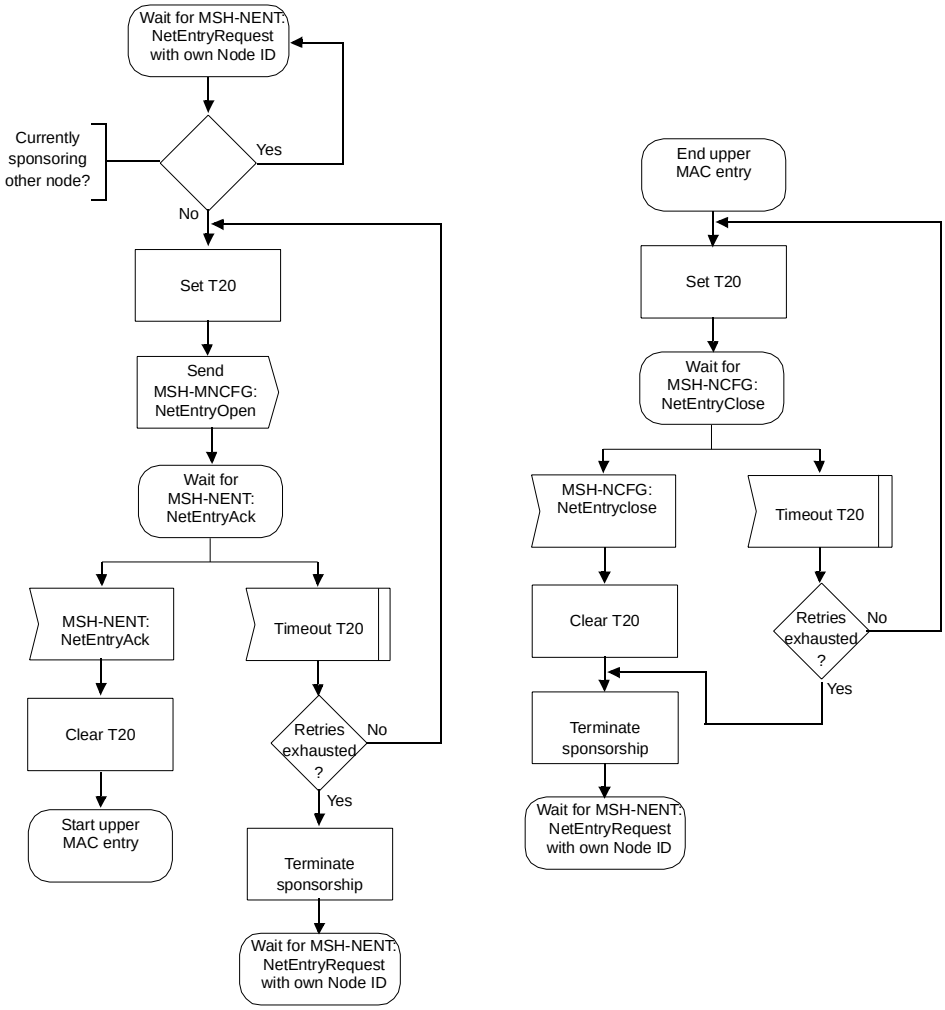

Figure 54c—Mesh network synchronization and entry - sponsor node

8.4.11.1.3 Receiver rejection mask

The receiver shall comply with the following rejection mask.

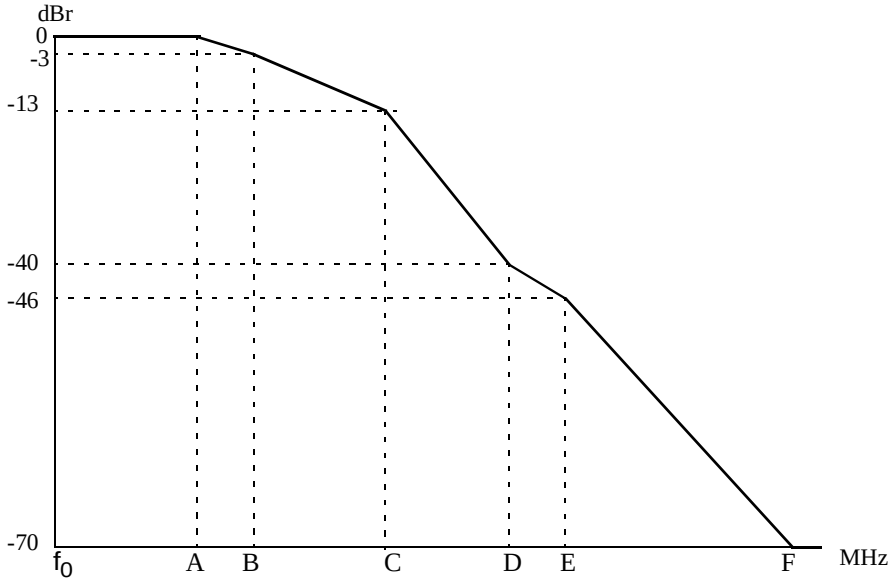

Figure 128bt—Receiver rejection mask

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