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Title	**Modification of HO process SDLs**
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Re:	This is a response to a Call for comments about IEEE802.16e-D3
Abstract	The document contains suggestions on modification of HO process SDLs
Purpose	The document is submitted for review by 802.16e Working Group members
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Modification of HO process SDLs

Jaesun Cha and Sungcheol Chang

ETRI

1. Introduction

As specified in IEEE P802.16e/D3, after an MSS or BS has initiated an HO using MOB_MSSHO/BSHO-REQ, the MSS may cancel HO at any time. The HO cancellation means that there is no further HO process. Therefore, after MOB_MSSHO-IND with the HO cancel option (HO_IND_type = 01), MSS and BS should complete handover process, and the start of timer T29 is useless in case of HO cancel. However, HO process SDLs depict that MSS shall wait for MOB_BSHO-RSP after it sends MOB_HO-IND.

In addition to the above problem, there is another problem in describing HO reject process. Even after MSS signaled rejection of Serving BS instruction to HO through HO_IND_type field in the MOB_HO-IND set value of 10, the MSS could choose Target BS from new Target BS list which is reconfigured by Serving BS. However, there is no such description in HO process SDLs.

In order to fix those problems, we propose to modify the HO process SDLs.

2. Proposed changes to IEEE 802.16e-D3

6.3.20.5 HO process SDLs

[Change Figure 130k – locally initiated transaction MOB_BSHO-RSP pending state flow diagram]

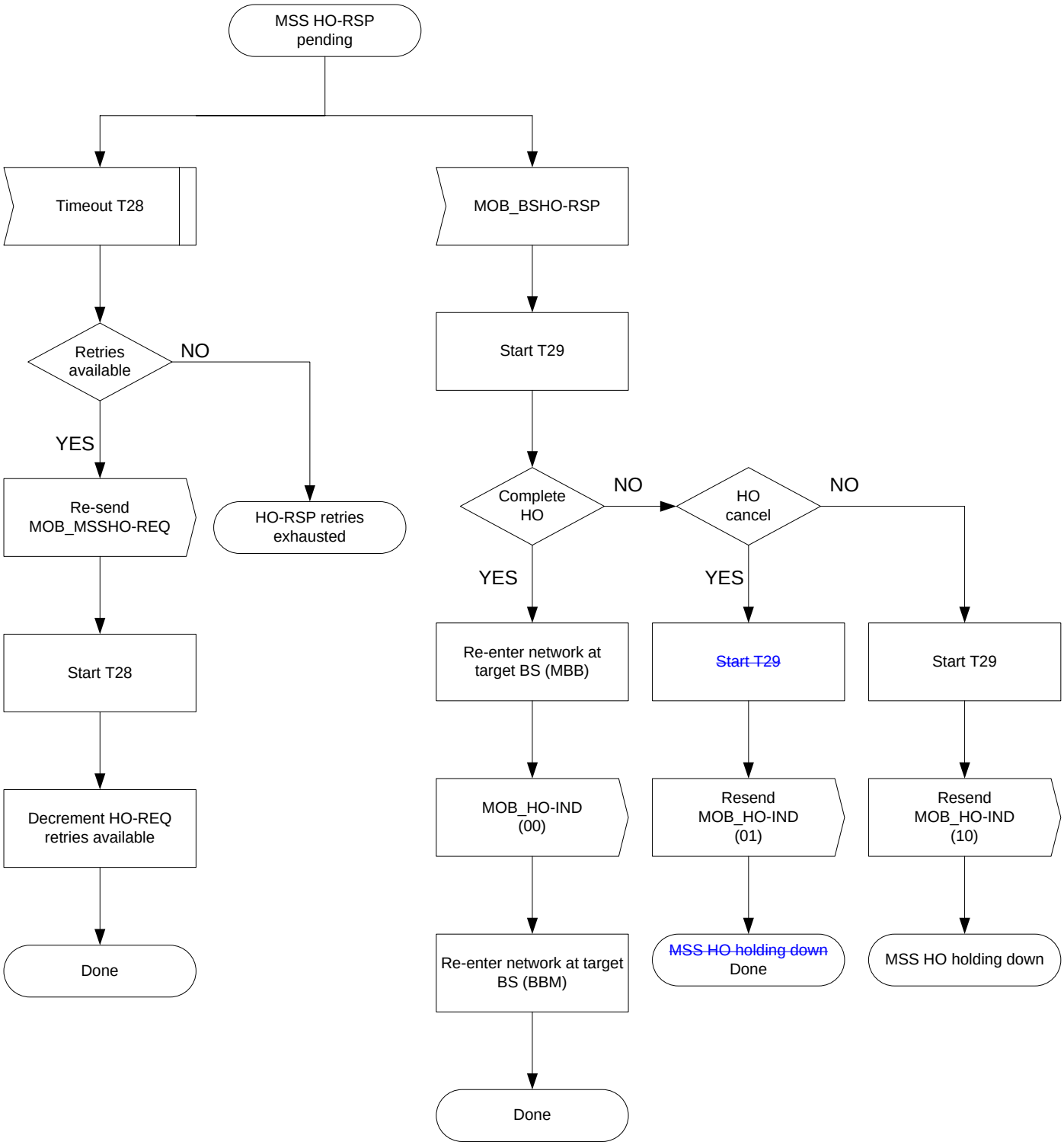

Figure 130k – locally initiated transaction MOB_BSHO-RSP pending state flow diagram

[Change Figure 130l – MSS Handoff locally initiated transaction holding state flow diagram]

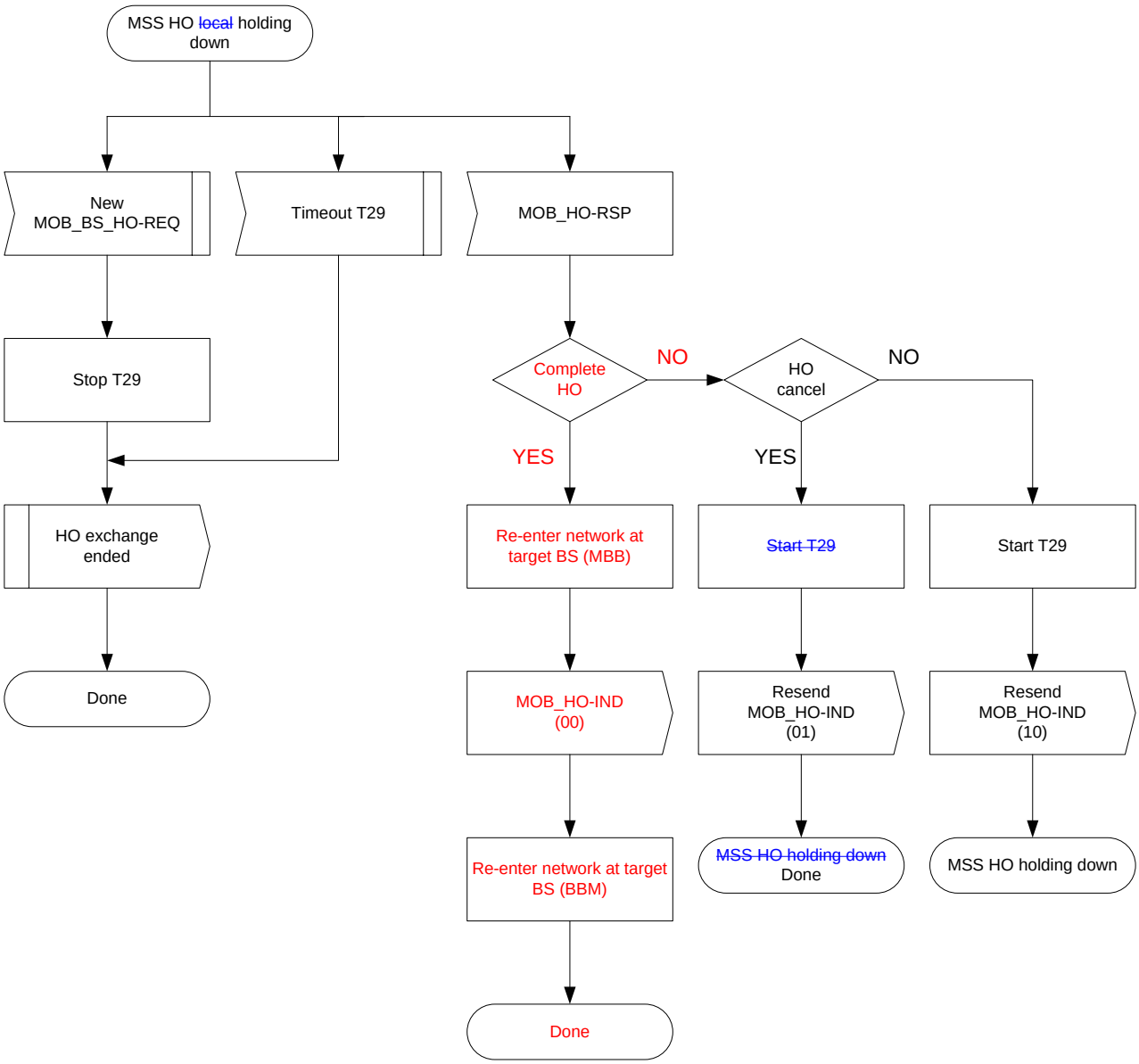

Figure 130l – MSS Handoff locally initiated transaction holding state flow diagram

[Change Figure 130m –locally initiated transaction MOB_BSHO-RSP pending state flow diagram]

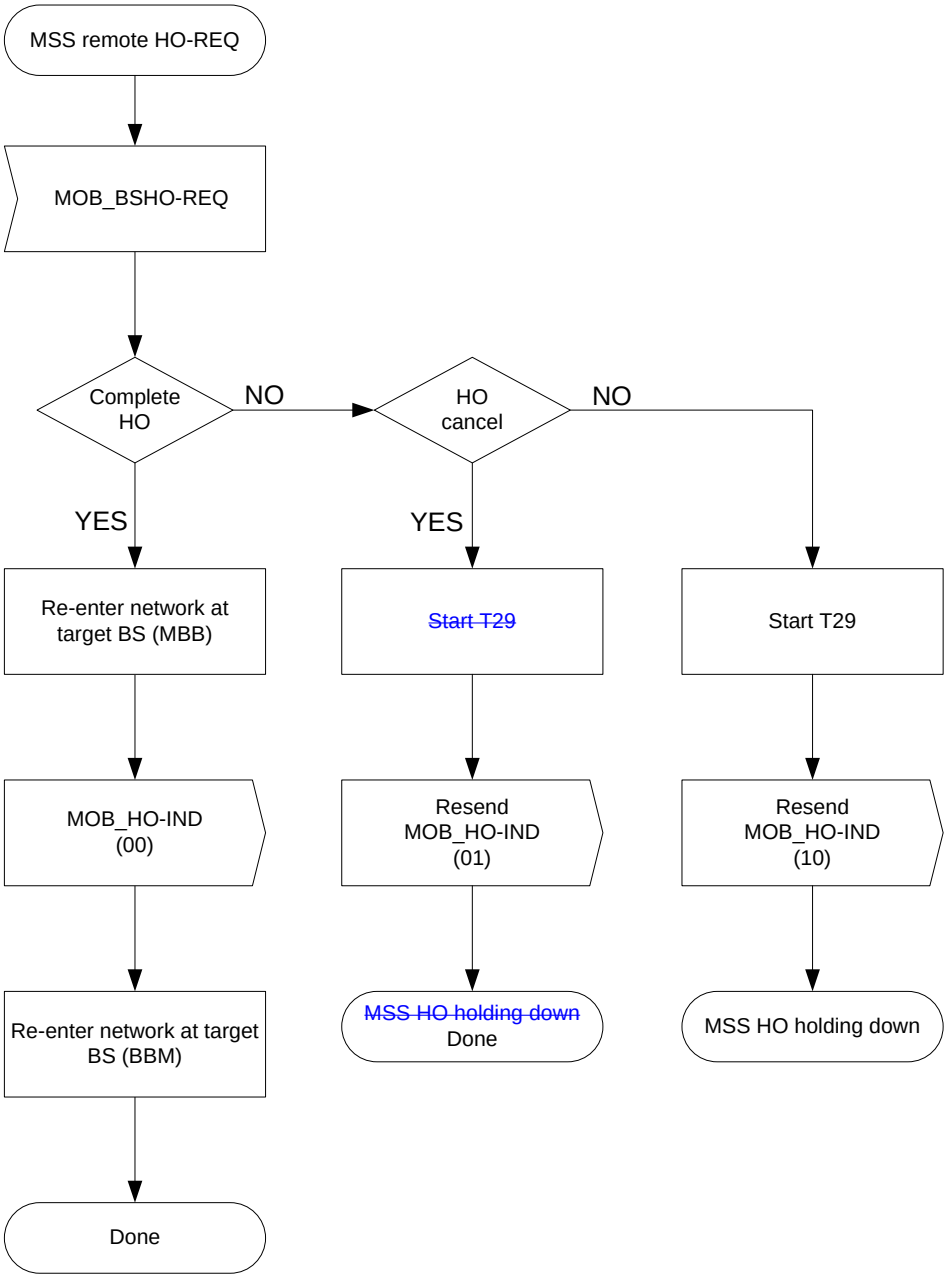

Figure 130m – locally initiated transaction MOB_BSHO-RSP pending state flow diagram

[Change the last row of Table 340a – Parameters and Constants]

System	Name	Time Reference	Minimum Value	Default Value	Maximum Value
MSS	Min_Sleep_Interval	Minimum sleeping time allowed to MSS	2 Frames		
MSS	Max_Sleep_Interval	Maximum sleeping time			1024

		Allowed to MSS			Frames
MSS	Listening_Interval	The time duration during which the MSS, after waking up and synchronizing with the DL transmissions, can demodulate downlink transmissions and decide whether to stay awake or go back to sleep			64 Frames
MSS	MOB_NBR-ADV interval	Nominal time between transmission of MOB_NBR-ADV messages			1s
MSS	ASC-AGING-TIMER	Nominal time for aging of MSS associations	0.1s		1s
MSS	Serving BS ID AGING-TIMER	Nominal time for aging of Serving BS association. Timer recycles on successful Serving BS DL-MAP read			5s
MSS	T28	Timer the SS waits for MOB_BSHO-RSP message			
MSS	T29	MOB_HO-IND timeout when sent with HO_IND_type=~~01 or~~ 10			