Project	**IEEE 802.16 Broadband Wireless Access Working Group <http://ieee802.org/16>**	
Title	**Handoff SDL charts proposal**	
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Source(s)	Itzik Kitroser Yossi Segal Yigal Leiba Zion Hadad Runcom Technologies Ltd. 2 Hachoma St. 75655 Rishon Lezion, Israel	Voice: +972-3-9528440 Fax: +972-3-9528805 mailto:itzikk@runcom.co.il mailto:yossis@runcom.co.il mailto:yigall@runcom.co.il mailto:zionh@runcom.co.il
Re:	Letter Ballot #14	
Abstract	This document presents SDL charts that describes the handoff process.	
Purpose	Integration into TGe draft.	
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Handoff SDL charts proposal

Itzik Kitroser
Yossi Segal
Yigal Leiba
Zion Hadad
Runcom Technologies Ltd.

1. General

This contribution contains a proposal of SDL charts that describe the handoff process.

In addition, the handoff process initiated by the BS side seems to contain a redundant message - MOB_MSSHO-RSP, which is recommended to be removed.

In the MSS initiated handoff process, the MSS sends handoff request by MOB_MSSHO-REQ message, which contains neighbors measurements report, the BS response with MOB_BSHO-RSP with recommendation on target BS, and the transaction is finished with indication of the MSS before the handoff by the MOB_HO-IND message.

When the process is initiated by the BS, the MOB_BSHO-REQ message is sent to the MSS with recommended neighbors list, the MSS responds with MOB_MSSHO-RSP, and than, before the handoff occurs, the MSS sends MOB_HO-IND message. In this process the transmission of MOB_MSSHO-RSP seems to be redundant since the BS already recommended about the potential neighbors without the measurements reported by the MSS, and the indication of handoff is done by the MOB_HO-IND message.

2. Proposed changes

[Page 29, line 44, remove section 6.4.2.3.51 MSS HO Response (MOB_MSSHO-RSP) message]

[Page 59, line 64, Add the following entries to table 269]

Table 269—Parameters and constants

System	Name	Time reference	Minimum value	Default value	Maximum value
MSS	T28	Time the SS waits for MOB_BSHO-RSP message			
MSS	T29	MOB_HO-IND timeout when sent with HO_IND_type=01 or 10			

[Add at the end of section 1.4.1.2.2.2]

Figure 0h shows the SDL of an MSS initiating handoff with the BS.

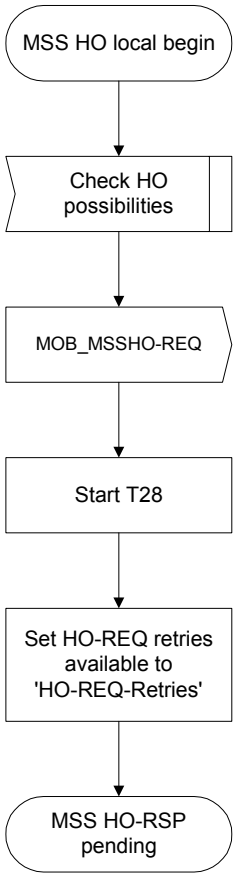

Figure 0h—MSS handoff locally initiated transaction begin state flow diagram

Figure 0i shows the SDL of an MSS waiting for a response from the BS, in addition it present the case in which the MSS has decided to stop the handoff in the middle of the process.

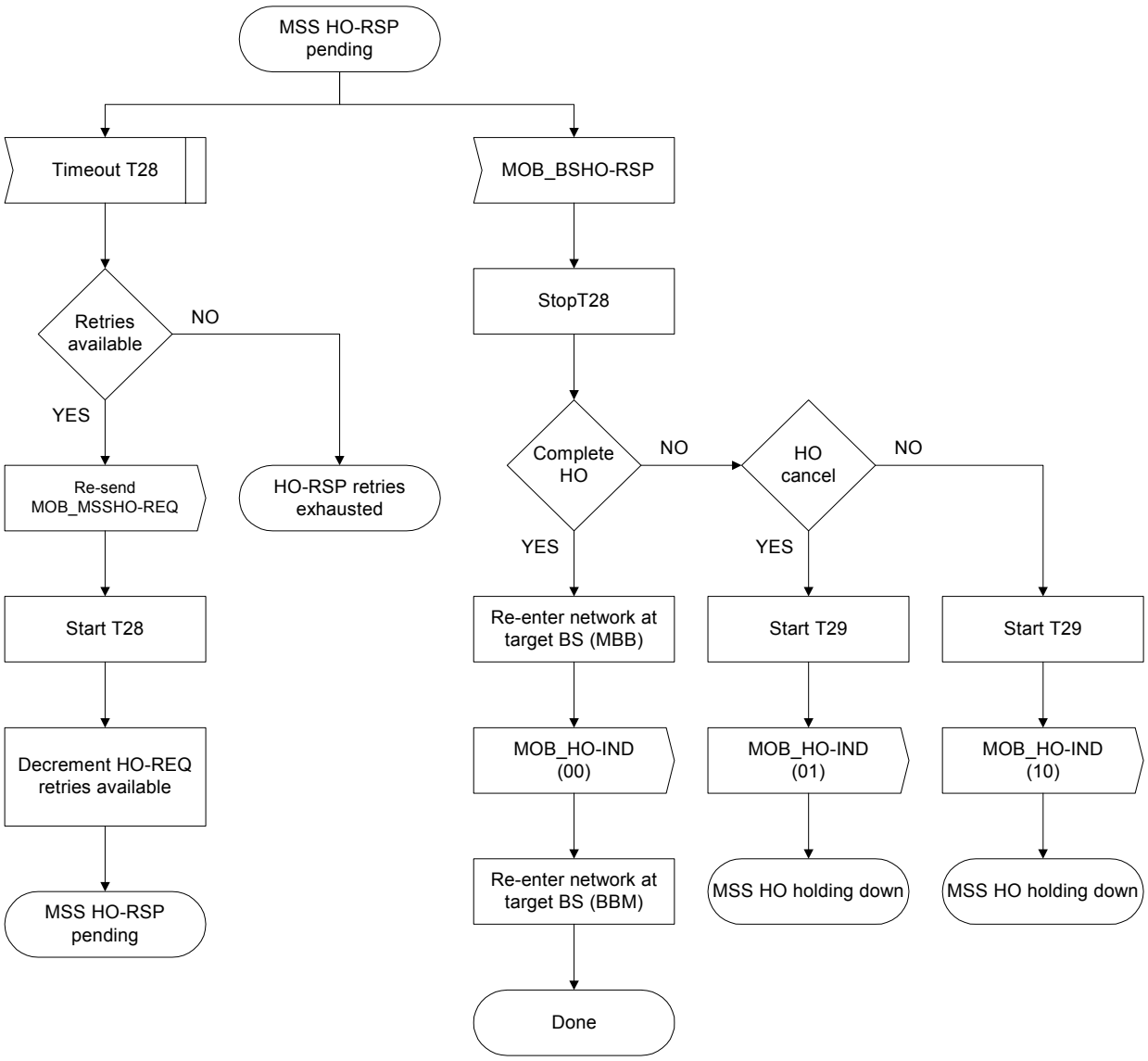

Figure 0i—locally initiated transaction MOB_BSHO-RSP pending state flow diagram

Figure 0j shows the SDL of an MSS following a canceling of the handoff and ensuring that the MOB_HO-IND message was received by the BS (by expiration of T29 timeout). While waiting, if new handoff process is required, the MSS shall stop T29 timer without waiting.

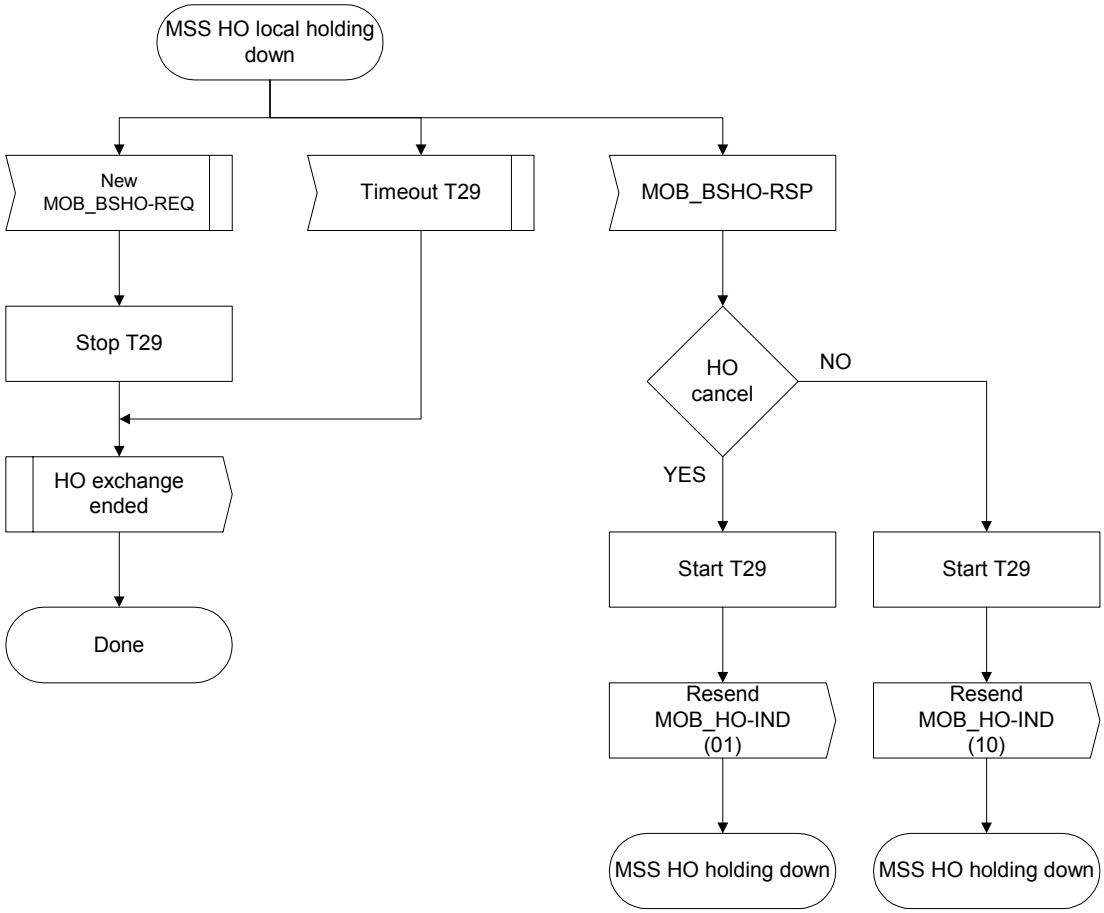

Figure 0j—MSS Handoff locally initiated transaction holding state flow diagram

Figure 0k shows the SDL of an MSS receiving MOB_BSHO-REQ message from the BS., in addition it present the case in which the MSS has decided to stop the handoff in the middle of the process.

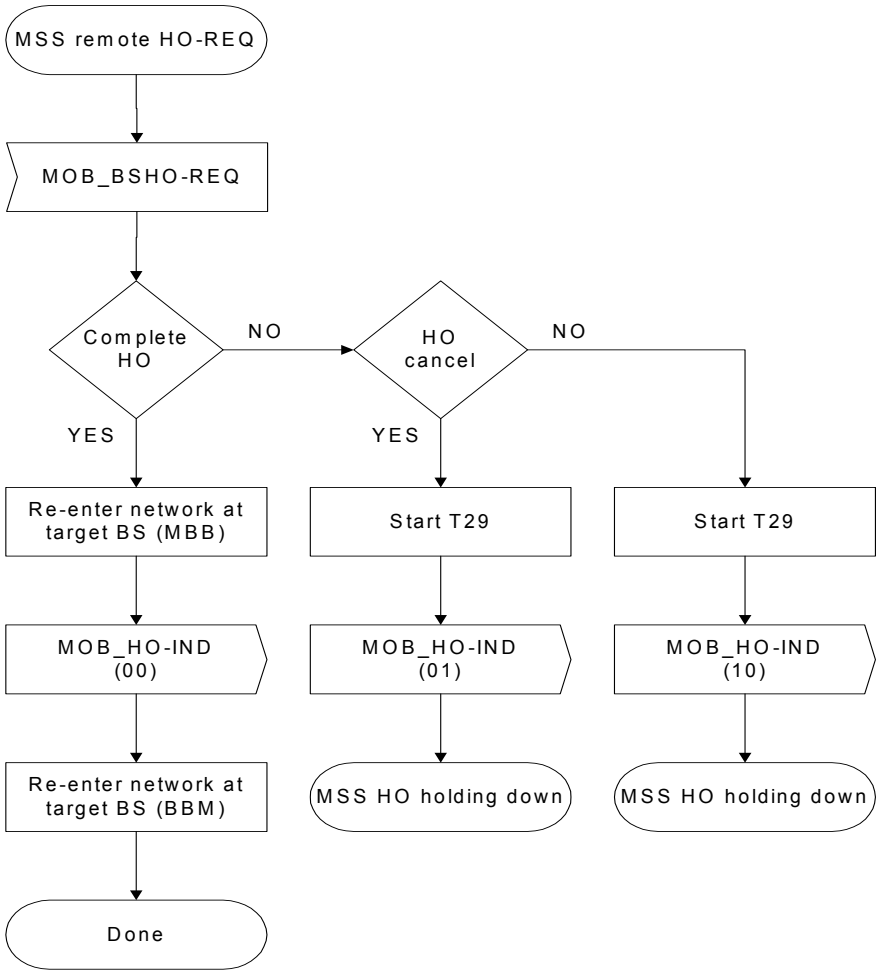

Figure 0k—locally initiated transaction MOB_BSHO-RSP pending state flow diagram