Project	IEEE 802.16 Broadband Wireless Access Working Group <http://ieee802.org/16>
Title	RSSI formula with unavailability periods
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Re:	P802.16-2004/Cor2/D3
Abstract	This documents propose improvement to MBS_MAP_IE() in order to let MS to decode MBS_MAP without prior knowledge of DIUC information when there is no DIUC change.
Purpose	Adoption into P802.16-2004/Cor2/D4
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RSSI formula with unavailability periods

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Problem statement

Currently only the CINR formula takes into account the unavailability periods, while the RSSI formula ignores them. Equation (142) should be changed such that is consistent with equation (146a) used for CINR averaging.

Suggested Remedy

Replace equation (142) on page 355 of "P802.16-2004/Cor2/D3" with the following:

$$\hat{x}_{RSSI}^2[k] = \begin{cases} |R[0]|^2 & k = 0 \\ \left(1 - \propto_{avg}\right)^{n+1} \hat{x}_{RSSI}^2[k-1] + \left(1 - \left(1 - \propto_{avg}\right)^{n+1}\right)|R[k]|^2 & k > 0 \end{cases} \quad (mW)^2 \ (142)$$

Add the following text right after equation (143)

n is number of consecutive frames in which no measurement is made. In frames where no measurement is made, the MS shall report the latest averaged results.