| Project	**IEEE 802.16 Broadband Wireless Access Working Group <**http://ieee802.org/16**>**
Title	**MBS service by application signaling between MS and network**
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Re:	LB26b
Abstract	This contribution proposed an optional way of MBS setup operation using application signaling between MS and network.
Purpose	Accept the proposed specification changes on IEEE P802.16Rev2/D3.
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MBS service by application signaling between MS and network

Samsung Electronics

Problem description

According to the current standard, a DSx transaction is required to setup an MBS connection between MS and BS.

MBS content channel transition time during switching b/w broadcast channels

- Incurred by DSx transactions
  - DSD for an existing MBS channel
  - DSA for a new MBS channel
- Waste of air resource by frequent channel transitions by users
- The following is an example of channel transition procedure.
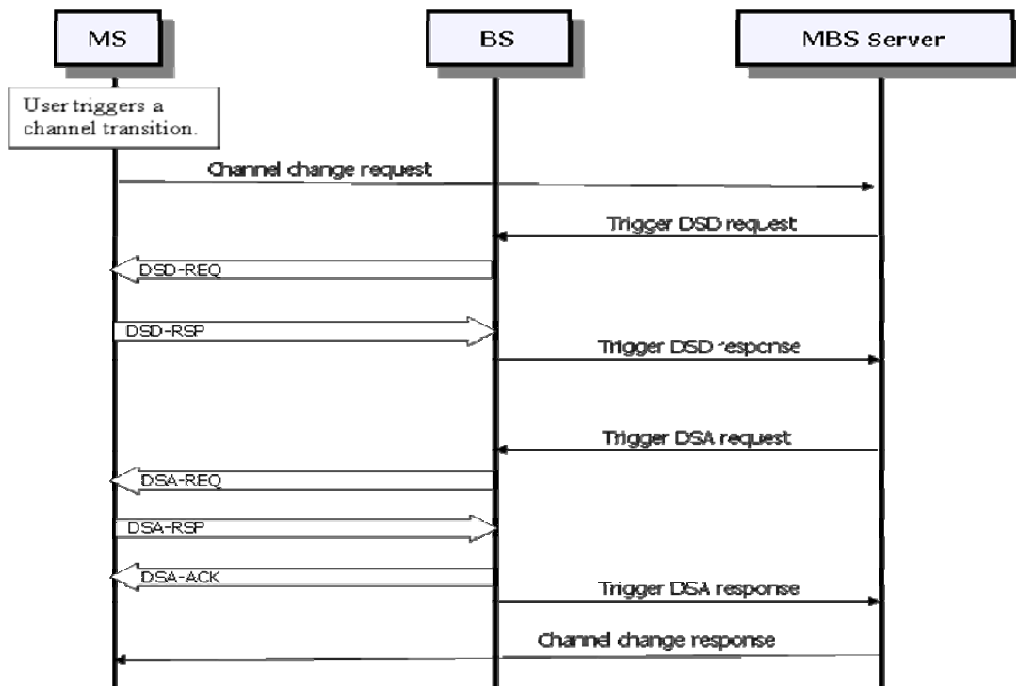
There is a difficulty to support MBS for idle-mode terminals because an MS in idle mode need to make a transition to awake mode before sending DSx messages.

If we add multiple MBS contents at the beginning of MBS service, we can avoid the above-mentioned problems in MBS content channel transition, but the waste of air resource for multiple DSA transactions for MBS contents would be another problem.

Proposed Changes

Add an optional feature which enables MBS service by application signaling between MS and network (e.g., MBS server).

MBS client application in MS obtains MBS content information from MBS server. MBS content information is a type of service guide which may contain MBS Zone ID, IP address of content server, and so on.

MBS client application triggers the decoding of specific MBS bursts in Layer2.

Change #1: Add the following underlined paragraph next to the 4th paragraph in '6.3.23.2.1 Establishment and maintenance of MBSs':

When the MS registers at the BS for receiving multicast and broadcast services, the BS or MS may initiate the DSA procedure with respect to multicast and broadcast connections. Such knowledge may be used to initiate bi-directional upper layers communication between the MS and the network for the purpose of configuration of multicast/broadcast service. After the successful configuration, the MS may reuse the same configuration when it moves to another BS without re-configuration.

The configuration of multicast/broadcast service may be done by upper layer communication only, without DSA procedure. In this case, the communication between the MS and the network includes MBS content information – i.e., a service guide for MBS service, and is outside the scope of this specification.

References

[IEEE802.16-Rev2/D3]   IEEE Computer Society and IEEE Microwave Theory and Techniques Society, "DRAFT Standard for Local and Metropolitan Area Networks Part 16: Air Interface for Broadband Wireless Access Systems", P802.16Rev2/D3 (February 2008). Revision of IEEE Std 802.16-2004 and consolidates material from IEEE Std 802.16e-2005, IEEE Std 802.16-2004/Cor1-2005, IEEE Std 802.16f-2005 and IEEE Std802.16g-2007.