**5.5.1.1 General**

***Insert after the first sentence of 5.5.1 the following paragraph and subclauses:***

There are different superframe structures:

⎯ Superframe structure based on beacons defined in 7.2.2.1, which has a long MAC header with the frame type indicated beacon.

⎯ Superframe structure described in 5.5.1.2 based on beacons defined in 7.2.6 (Enhanced Beacon) with an IE defined in 7.2.4.2.1.8 (DSME Descriptor).

⎯ Superframe structure described in 5.5.1.3 based on beacons defined in 7.2.2.5.2, which has a short MAC header of 1-octet length.

***Insert before 5.5.2 the following subclauses:***

**5.5.1.2 DSME-based Multi-Superframe Structure**

The DSME-based PANs shall use the DSME-based multi-superframe structure. A coordinator on a DSME-based PAN (i.e., macDSMEenabled is set to TRUE) shall bound its channel time based on the DSME-based multi-superframe structure by periodically transmitting an Enhanced Beacon (EB) with the DSME descriptor Information Element (IE). A multi-superframe is a cycle of repeated superframes, each of which consists of a beacon frame, a CAP (Contention Access Period) and a CFP (Contention Free Period). An example of a multi-superframe structure is shown in Figure 1.a.



Figure 1.a. DSME-based Multi-Superframe Structure

A single common channel, which is the LogicalChannel used in the successful association, shall be used in beacon and CAP. Optionally, channel hopping can be used for the common channel. Multi-channel can be used in CFP. Beacons shall be transmitted using the common channel at the beginning of one of the superframes according to the beacon scheduling defined in 7.5.10.6. Frames during CAP shall be transmitted using the common channel. Frames during CFP shall be transmitted using the allocated channel for DSME-GTS. A DSME-GTS can be allocated on any of the available channels in the current ChannelPage.

Details on the DSME-based Multi-superframes Structure is described in 7.5.10.