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Source(s)	David Comstock, Junxian Mo Huawei Technologies Co., Ltd. E-mail: dcomstock@huawei.com Aeri Lim Samsung Electronics aeri.lim@samsung.com *<http://standards.ieee.org/faqs/affiliationFAQ.html>
Re:	IEEE 802.16Rev2/D5, Letter Ballot 26d Reply Comments
Abstract	Proposal to provide updates and clarifications of the use of bitmaps for identifying BSs in MOB_SCN-REQ/RSP/REP messages.
Purpose	Adopt proposed text changes for IEEE 802.16Rev2/D5 revision
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Updates for MOB_SCN-REQ/RSP/REP text

David Comstock, Junxian Mo
Huawei Technologies Co., Ltd.
Aeri Lim
Samsung Electronics

Description

The following proposed text changes provide updates and clarifications for the use of bitmaps to identifying BSs in MOB_SCN-REQ/RSP/REP messages.

Proposed Text Changes

Modify Section 6.3.2.3.42 as follows:

6.3.2.3.42 MOB_NBR-ADV (neighbor advertisement) message

BSs supporting mobile functionality shall be capable of transmitting a MOB_NBR-ADV management message at a periodic interval (MOB_NBR-ADV interval; see Table 548) to identify the network and define the characteristics of neighbor BS to potential MS seeking initial network entry or HO. For the compression of neighbor BSIDs using this message in MOB_SCN-REQ, MOB_SCN-RSP, MOB_SCN-REP, and MOB_MSHO-REQ messages, the BS~~s~~ shall keep a mapping-table~~s~~ of neighbor BS MAC addresses and neighbor BS indexes transmitted through MOB_NBR-ADV message, for each Configuration Change Count. Using these mapping-tables, BSs can derive 48-bit neighbor BSID from neighbor BS index included in MOB_SCN-REQ, MOB_SCN-RSP, MOB_SCN-REP, or MOB_MSHO-REQ messages. MOB_SCN-REQ, MOB_SCN-RSP, and MOB_SCN-REP messages may identify the MOB_NBR-ADV BS indexes using a BS index bitmap (Nbr_Index_Bitmap), where a BS index corresponds to the position of a BS in the MOB_NBR-ADV message and a bit position in the bitmap corresponds to a BS index of the MOB_NBR-ADV.

[…]

Modify Section 6.3.2.3.43 as follows:

6.3.2.3.43 MOB_SCN-REQ (scanning interval allocation request) message

A MOB_SCN-REQ message may be transmitted by an MS to request a scanning interval for the purpose of seeking available BSs and determining their suitability as targets for HO. An MS may request the scanning allocation to perform scanning or noncontention association ranging.

For the compression of neighbor BSIDs through a reference to this message in MOB_SCN-RSP, the BS may keep a mapping-table of neighbor BS MAC addresses and neighbor BS indexes transmitted through this message, for each MOB_SCN-REQ sequence number (Req_Seq_Num), where a BS index corresponds to the position of a BS in the MOB_SCN-REQ message, such that a BS Index of 0 identifies the first BS in the MOB_SCN-REQ message and each next BS Index (incremented by 1) identifies the next BS in the message, according to the sequential order that the BSs appear in the message.

A BS index bitmap (Req_Bitmap_Index) in a MOB_SCN-RSP message may be used to identify MOB_SCN-REQ BS indexes such that each bit position corresponds to a BS Index of the corresponding MOB_SCN_REQ message, the least significant bit corresponds to the first BS Index, each next significant bit corresponds to the next BS Index in sequential order, the most significant bit corresponds to the BS Index of the last requested BS, and BSs with BS Index greater than the last requested BS are not requested and do not have a corresponding bit position in the bitmap. Bitmap position bit value of 1 indicates that the BS is requested and a bit value of 0 indicates that the BS is not requested.

An MS shall generate MOB_SCN-REQ messages in the format shown in Table 146.

Table 146—MOB_SCN-REQ message format

Syntax	Size (bit)	Notes
MOB_SCN-REQ_Message_format() {	—	—
Management Message Type = 54	8	—
Scan duration	8	Units are in frames.
Interleaving interval	8	Units are frames.
Scan Iteration	8	—
N_Recommended_BS_Index	8	Number of neighboring BS to be scanned or associated, which are using BS index that corresponds to the position of BS in MOB_NBR-ADV message or, when equal to 0xFF, indicates that the BS index bitmap (Nbr_Bitmap_Index) is used.
If(N_Recommended_BS_Index != 0) {	—	—
Configuration change count for MOB_NBR-ADV	8	Configuration Change Count value of referring MOB_NBR-ADV message
}	—	—
if(N_Recommended_BS_Index == 0xFF){	—	—
Reserved	1	Shall be set to zero.
Req_Seq_Num	1	One-bit sequence number for this message that is toggled ~~incremented~~ for each new message.
Nbr_Bitmap_Size	6	Size of Nbr_Bitmap_Index in nibbles ((Nbr_Bitmap_Size+1)*4), which may be less than or equal to the number of BSs in MOB_NBR_ADV.
Nbr_Bitmap_Index	(Nbr_Bitmap_Size+1)*4 ~~Up to the number BSs in MOB_NBR-ADV~~	Each bit position corresponds to a BS Index of the corresponding MOB_NBR-ADV message, where the least significant bit corresponds to the first BS Index, each next significant bit corresponds to the next BS Index in sequential order, the most significant bit corresponds to the BS Index of the last requested BS, and BSs with BS Index greater than the last requested BS are not requested and do not have a corresponding bit position in the bitmap. Bitmap position bit value: 0: the corresponding BS is not requested.. 1: the corresponding BS is requested.
for(each ‘1’ in Nbr_Bitmap_Index) {	—	—
Reserved	1	Shall be set to zero.
Scanning_type	3	0b000: Scanning without association. 0b00l: Scanning with association level 0: association without coordination

		0b010: Scanning with association level 1: association with coordination. 0b011: Scanning with association level 2: network assisted association. 0bl00—0b111: Reserved
}	—	—
} else {	—	—
for(j = 0; j < N_Recommended_BS_Index; j++) {	—	—
Neighbor_BS_Index	8	BS index corresponds to position of BS in MOB_NBR-ADV message
Req_Seq_Num	1	One-bit sequence number for this message that is toggled ~~incremented~~ for each new message.
Scanning type	3	0b000: Scanning without association. 0b00l: Scanning with association level 0: association without coordination 0b010: Scanning with association level 1: association with coordination. 0b011: Scanning with association level 2: network assisted association. 0bl00—0b111: Reserved
}	—	—
}	—	—
N_Recommended_BS_Full	8	Number of neighboring BS to be scanned or associated, which are using full 48 bits BS ID.
for(j = 0; j < N_Recommended_BS_Full; j++) {	—	—
Recommended BS ID	48	—
Req_Seq_Num	1	One-bit sequence number for this message that is toggled ~~incremented~~ for each new message.
Scanning type	3	0b000: Scanning without association. 0b001: Scanning with association level 0: association without coordination 0b010: Scanning with association level 1: association with coordination. 0b011: Scanning with association level 2: network assisted association. 0b100-0b111: Reserved
}	—	
Padding	*variable*	If needed for alignment to byte boundary.
TLV encoded information	*variable*	—
}	—	—

[…]

The following parameters shall be included in the MOB_SCN-REQ message:

N_Recommended_BS_Index
If not equal to 0xFF, this is the ~~N~~number of neighboring BS to be scanned or associated, which are included in MOB_NBRADV message. If equal to 0xFF, this indicates that the BS index bitmap (Nbr_Bitmap_Index) is used to identify the BS index that corresponds to the position of BS in MOB_NBR-ADV message. When MS receives MOB_SCN-RSP message from BS in response to MOB_SCN-REQ message, MS shall check whether Configuration Change Count stored by MS is the same as one included in MOB_SCN-RSP message sent by BS. If MS detects mismatch of Configuration Change Counts, it may retransmit MOB_SCN-REQ message to BS, In this case, MS shall set this value to zero.

Configuration Change Count for MOB_NBR-ADV
The value of Configuration Change Count in MOB_NBR-ADV message referred in order to compress neighbor BSID.

Req_Seq_Num
One-bit sequence number for ~~this~~ the MOB_SCN-REQ message that is ~~incremented~~ toggled ~~after~~ for each new message ~~transmission of this message~~and may be included in a MOB_SCN-RSP message to identify the MOB_SCN-REQ message associated with a MOB_SCN-REQ BS Index bitmap (Req_Bitmap_Index), where a bit position in this bitmap corresponds to a BS index of the MOB_SCN-REQ message and where a BS index corresponds to the position of a BS in the MOB_SCN-REQ message. When an MS receives a MOB_SCN-RSP message from the BS that includes Req_Seq_Num, the MS shall compare its stored value of Req_Seq_Num with the one included in the MOB_SCN-RSP message and discard the MOB_SCN-RSP message if there is a mismatch.

Nbr_Bitmap_Index
Bitmap of BS indexes ~~of BS into~~ for a MOB_NBR-ADV message, where each bit position corresponds to a BS Index of the corresponding MOB_NBR-ADV message, the least significant bit corresponds to the first BS Index, each next significant bit corresponds to the next BS Index in sequential order, the most significant bit corresponds to the BS Index of the last requested BS, and BSs with BS Index greater than the last requested BS are not requested and do not have a corresponding bit position in the bitmap. Bitmap position bit value of 1 indicates that the BS is requested and a bit value of 0 indicates that the BS is not requested.

Neighbor_BS_Index
BS index corresponds to position of BS in MOB_NBR-ADV message.

[…]

Modify Section 6.3.2.3.44 as follows:

6.3.2.3.44 MOB_SCN-RSP (scanning interval allocation response) message

A MOB_SCN-RSP message shall be transmitted by the BS either unsolicited or in response to a MOB_SCN-REQ message sent by an MS. A BS may transmit MOB_SCN-RSP to start MS scan reporting with or without scanning allocation. A BS may allocate the scanning allocation for MS scanning with Scanning type = 0b000, or MS noncontention association ranging with Scanning type = 0b010 or 0b011. The message shall be transmitted on the Basic CID.

For the compression of neighbor BSIDs through a reference to this message in MOB_SCN-REP, the BS may keep a mapping-table of neighbor BS MAC addresses and neighbor BS indexes transmitted through this message, for each MOB_SCN-RSP sequence number (Rsp_Seq_Num), where a BS index corresponds to the position of a BS in the MOB_SCN-RSP message, such that a BS Index of 0 identifies the first BS in the MOB_SCN-RSP message and each next BS Index (incremented by 1) identifies the next BS in the message, according to the sequential order that the BSs appear in the message.

A BS index bitmap (Rsp_Bitmap_Index) in a MOB_SCN-REP message may be used to identify MOB_SCN-RSP BS indexes such that each bit position corresponds to a BS Index of the corresponding MOB_SCN_RSP message, the least significant bit corresponds to the first BS Index, each next significant bit corresponds to the next BS Index in sequential order, the most significant bit corresponds to the BS Index of the last recommended BS, and BSs with BS Index greater than the last recommended BS are not recommended and do not have a corresponding bit position in the bitmap. Bitmap position bit value of 1 indicates that the BS is recommended and a bit value of 0 indicates that the BS is not recommended.

The format of the MOB_SCN-RSP message is depicted in Table 147.

Table 147—MOB_SCN-RSP message format

Syntax	Size (bit)	Notes
MOB_SCN-RSP_Message_format() {	—	—
Management Message Type = 55	8	—
Scan duration	8	In units of frames. When Scan Duration is set to zero, no scanning parameters are specified in the message. When MOB_SCN-RSP is sent in response to MOB_SCN-REQ, setting Scan Duration to zero denies MOB_SCN-REQ.
Report mode	2	0b00: No report 0b01: Periodic report 0b10: Event-triggered report 0b11: One-time scan report
Reserved	3	Shall be set to zero.
Rsp_Seq_Num	1	One-bit sequence number for this message that is toggled ~~incremented~~ for each new message.
Use_Nbr_Bitmap_Index	1	Indicates if the bitmap of BS indexes for MOB_NBR-ADV is used. 0: Bitmap of BS indexes for MOB_NBR-ADV is not used. 1: Bitmap of BS indexes for MOB_NBR-ADV is not used.
Use_Req_Bitmap_Index	1	Indicates if the bitmap of BS indexes for MOB_SCN-REQ is used. 0: Bitmap of BS indexes for MOB_SCN-REQ is not used. 1: Bitmap of BS indexes for MOB_SCN-REQ is not used.
Report period	8	If Report mode is set to 0b0l or 0b1l, this is the Report Period, in frames; otherwise this field is set to 0. For MS request denied (Scan Duration == 0), Report period is the number of frames that BS suggests to MS before transmitting next MOB_SCN-REQ.
Report metric	8	Bitmap indicating metrics on which the corresponding triggers are based: Bit 0: BS CINR mean Bit 1: BS RSSI mean Bit 2: Relative delay Bit 3: BS RTD: this metric shall be only measured on serving BS/anchor BS. Bits 4—7: *Reserved*; shall be set to zero.
If (Scan Duration != 0) {	—	—

Start frame	8	—
Interleaving interval	8	Duration in frames.
Scan iteration	8	—
If(Use_Nbr_Bitmap_Index == 1) {	—	—
Configuration change count for MOB_NBR-ADV	8	—
Reserved	2	Shall be set to zero.
Nbr_Bitmap_Size	6	Size of Nbr_Bitmap_Index in nibbles ((Nbr_Bitmap_Size+1)*4), which may be less than or equal to the number of BSs in MOB_NBR ADV.
Nbr_Bitmap_Index	(Nbr_Bitmap_Size+1)*4 ~~Up to the Number of BSs in MOB_NBR-ADV~~	Each bit position in this bitmap corresponds to a BS Index of the corresponding MOB_NBR-ADV message, where the least significant bit corresponds to the first BS Index, each next significant bit corresponds to the next BS Index, the most significant bit corresponds to the BS Index of the last recommended BS, and BSs with BS Index greater than the last recommended BS are not recommended and do not have a corresponding bit position in the bitmap. Bitmap position bit value: 0: the corresponding BS is not recommended. 1: the corresponding BS is recommended. When Use_Req_Bitmap_Index equals 1, Nbr_Bitmap_Index only includes BSs that were included in the MOB_NBR-ADV message but that were not included in the corresponding MOB_SCN-REQ message.
for(each '1' in Nbr_Bitmap_Index) {	—	—
Reserved	1	Shall be set to zero.
Scanning_type	3	0b000: Scanning without association 0b001: Scanning with association level 0: association without coordination 0b010: Scanning with association level 1: association with coordination 0b011: Scanning with association level 2: network assisted association 0b100—0b111: *Reserved*
If((Scanning_type == 0b0l0) OR Scanning_type == 0b0ll){	—	—
Rendezvous_time	8	—
CDMA_code	8	—
Transmission_opportunity_offset	8	—

}	—	—
}	—	—
} else {	—	—
N_Recommended_BS_Index	8	Number of neighboring BS to be scanned or associated, which are using BS index that corresponds to the position of BS in MOB_NBR-ADV message. If ~~both~~ N_Recommended_BS_Index, ~~and~~ N_Recommended_BS_Full, Use_Nbr_Bitmap_Index, and Use_Req_Bitmap_Index are set to 0, the BS recommends the MS scan all neighbors listed in the MOB_NBR-ADV message. MS may scan a sub-set of the list.
If(N_Recommended_BS_Index != 0) {	—	—
Configuration change count for MOB_NBR-ADV	8	Configuration Change Count value of referring MOB_NBR-ADV message.
}	—	—
for(j = 0; j < N_Recommended_BS_Index; j++){	—	—
Neighbor_BS_Index	8	BS index corresponds to position of BS in MOB_NBR-ADV message.
Reserved	1	Shall be set to zero.
Scanning type	3	0b000: Scanning without association 0b001: Scanning with association level 0: association without coordination 0b010: Scanning with association level 1: association with coordination 0b011: Scanning with association level 2: network assisted association 0b100—0b111: *Reserved*
If (Scanning type == 0b0l0 OR Scanning_type == 0b011) {	—	—
Rendezvous time	8	Units are frames.
CDMA code	8	From initial ranging codeset.
Transmission_opportunity offset	8	Units are transmission opportunity.
}	—	—
}	—	—
}	—	—
If(Use_Req_Bitmap_Index == 1) {	—	—
Req_Seq_Num	1	One-bit sequence number for the corresponding MOB_SCN-REQ message.

Reserved	1	Shall be set to zero.
Req_Bitmap_Size	6	Size of Req_Bitmap_Index in nibbles ((Req_Bitmap_Size +1)*4), which may be less than or equal to the number of BSs in MOB_SCN-REQ.
Req_Bitmap_Index	(Req_Bitmap_Size +1)*4 ~~Up to the Number of BSs in MOB_SCN-REQ~~	Each bit position in this bitmap corresponds to a BS Index of the corresponding MOB_SCN-REQ message, where the least significant bit corresponds to the first BS Index, each next significant bit corresponds to the next BS Index, the most significant bit corresponds to the BS Index of the last recommended BS, and BSs with BS Index greater than the last recommended BS are not recommended and do not have a corresponding bit position in the bitmap. Bitmap position bit value: 0: the corresponding BS is not recommended. 1: the corresponding BS is recommended.
for(each '1' in Req_Bitmap_Index){	—	—
Reserved	1	Shall be set to zero.
Scanning_type	3	0b000: Scanning without association 0b001: Scanning with association level 0: association without coordination 0b010: Scanning with association level 1: association with coordination 0b011: Scanning with association level 2: network assisted association 0b100—0b111: *Reserved*
if(Scanning_type == 0b0l0 OR Scanning_type == 0b0ll){	—	—
Rendezvous_time	8	—
CDMA_code	8	—
Transmission_opportunity_offset	8	—
}	—	—
}	—	—
}	—	—
N_Recommended_BS_Full	8	Number of neighboring BS to be scanned or associated, which are using full 48 bits BS ID.
for(j = 0; j < N_Recommended_BS_Full; j++){	—	—
Recommended BS ID	48	BS IDs of BSs that MS shall scan.
Reserved	1	Shall be set to zero.

Scanning type	3	0b000: Scanning without association 0b001: Scanning with association level 0: association without coordination 0b010: Scanning with association level 1: association with coordination 0b011: Scanning with association level 2: network assisted association 0b100—0b111: *Reserved*
If (Scanning type == 0b0l0 OR Scanning_type == 0b011) {	—	—
Rendezvous time	8	Units are frames.
CDMA code	8	From initial ranging codeset.
Transmission_opportunity offset	8	Units are transmission opportunity.
}	—	—
}	—	—
Padding	*variable*	—
}	—	—
TLV encoded information	*variable*	—
}	—	—

[…]

Req_Seq_Num

One-bit sequence number for the ~~corresponding~~ MOB_SCN-REQ message associated with a MOB_SCN-REQ BS Index bitmap (Req_Bitmap_Index), where a bit position in this bitmap corresponds to a BS index of the MOB_SCN-REQ message and where a BS index corresponds to the position of a BS in the MOB_SCN-REQ message.

Rsp_Seq_Num

One-bit sequence number for ~~this~~ the MOB_SCN-RSP message that is ~~incremented~~ ~~T~~toggled ~~after~~ for each new ~~transmission of this~~ message. ~~.~~ and may be included in a MOB_SCN-REP message to identify the MOB_SCN-RSP message associated with a MOB_SCN-RSP BS Index bitmap (Rsp_Bitmap_Index), where a bit position in this bitmap corresponds to a BS index of the MOB_SCN-RSP message and where a BS index corresponds to the position of a BS in the MOB_SCN-RSP message. When an BS receives a MOB_SCN-REP message from an MS that includes Rsp_Seq_Num, the BS shall compare its stored value of Rsp_Seq_Num with the one included in the MOB_SCN-REP message and discard the MOB_SCN-REP message if there is a mismatch.

Use_Nbr_Bitmap_Index

Indicates if the bitmap of BS indexes for MOB_NBR-ADV is used.

Use_Req_Bitmap_Index

Indicates if the bitmap of BS indexes for MOB_SCN-REQ is used.

Nbr_Bitmap_Index

~~Bitmap index of BS into the MOB_NBR-ADV message~~Bitmap of BS indexes for the corresponding MOB_NBR-ADV message where each bit position corresponds to a BS Index of the corresponding MOB_NBR-ADV message, the least significant bit corresponds to the first BS Index, each next significant bit corresponds to the next BS Index in sequential order, the most significant bit corresponds to the BS Index of the last recommended BS, and BSs with BS Index greater than the last recommended BS are not reported and do not have a corresponding bit position in the bitmap. Bitmap position bit value of 1 indicates that the BS is recommended and a bit value of 0 indicates that the BS is not recommended.

When Use_Req_Bitmap_Index equals 1, Nbr_Bitmap_Index only includes BSs included in the MOB_NBR-ADV message but not included in the corresponding MOB_SCN-REQ message.

Req_Bitmap_Index

Bitmap of BS indexes ~~of BS into~~ for the corresponding MOB_SCN_REQ message, where each bit position corresponds to a BS Index of the corresponding MOB_SCN_REQ message, the least significant bit corresponds to the first BS Index, each next significant bit corresponds to the next BS Index in sequential order, the most significant bit corresponds to the BS Index of the last recommended BS, and BSs with BS Index greater than the last recommended BS are not reported and do not have a corresponding bit position in the bitmap.

This bitmap identifies recommended BSs that were included in the corresponding MOB_SCN-REQ message, including BSs that are included in the MOB_NBR-ADV message that were included in the MOB_SCN-REQ message.

[…]

Modify Section 6.3.2.3.45 as follows:

6.3.2.3.45 MOB_SCN-REP (scanning result report) message

When the report mode is 0b10 (i.e., event triggered) in the most recently received MOB_SCN-RSP, the MS shall transmit a MOB_SCN-REP message to report the scanning results to its serving BS after each scanning period if the trigger condition is met. For a periodic report (i.e., Report Mode is 0b01) and for One-time Scan Report (Report Mode is 0b11), the MS reports the scanning results to its serving BS at the time indicated in the MOB_SCN-RSP message except when it is in the scanning interval. The MS shall include all available scanning results for the requested BSs specified in the said MOB_SCN-RSP message. The MS may transmit a MOB_SCN-REP message to report the scanning results to its serving BS at anytime. The message shall be transmitted on the Primary Management CID. (See Table 148).

Table 148—MOB_SCN-REP message format

Syntax	Size (bit)	Notes
MOB_SCN-REP_Message_format() {	—	—
Management Message Type = 60	8	—
Report Mode	1	0: Event-triggered report 1: Periodic report
N_current_BSs	3	When FBSS/MDHO is supported, N_current_BSs is the number of BSs currently in the diversity set; When FBSS/MDHO is not supported or the MS has an empty diversity set, N_current_BSs is set to 1.
Use_Nbr_Bitmap_Index	1	Indicates if the bitmap of BS indexes for MOB_NBR-ADV is used. 0: Bitmap of BS indexes for MOB_NBR-ADV is not used. 1: Bitmap of BS indexes for MOB_NBR-ADV is not used.
Use_Rsp_Bitmap_Index	1	Indicates if the bitmap of BS indexes for MOB_SCN-RSP is used. 0: Bitmap of BS indexes for MOB_SCN-RSP is not used. 1: Bitmap of BS indexes for MOB_SCN-RSP is not

		used.
Reserved	2	—
Report metric	8	Bitmap indicating presence of certain metrics (threshold values) on which the corresponding trigger's are based: Bit 0: BS CINR mean Bit 1: BS RSSI mean Bit 2: Relative delay Bit 3: BS RTD; this metric shall be only measured between the serving BS/anchor BS and the reporting MS Bits 4-7: Reserved: shall be set to zero
For (j = 0; j < N_current_BSs; j++) {	—	—
Temp BSID	4	Diversity set member ID assigned to this BS. When the MS has an empty diversity set or FBSS/MDHO is not supported. Temp BSID shall be set to 0.
Reserved	4	Shall be set to zero.
If (Report metric[Bit 0] == 1)	—	—
BS CINR mean	8	—
If (Report metric[Bit 1] == 1)	—	—
BS RSSI mean	8	—
If ((Report metric[Bit 2] == 1) and (TempBSID != anchor))	—	—
Relative delay	8	In case FBSS/MDHO is in progress, this field shall include the relative delay of BSs currently in the diversity set, except for that of the anchor BS.
If ((Report metric[Bit 3] == 1) and ((TempBSID == anchor BS) or (TempBSID == serving BS)))	—	—
BS RTD	8	This field shall include the RTD between the serving BS anchor BS and the reporting MS.
}	—	—
if(Use_Nbr_Bitmap_Index == 1) {	—	—
Configuration change count for MOB_NBR-ADV	8	—
Reserved	2	Shall be set to zero.

Nbr_Bitmap_Size	6	Size of Nbr_Bitmap_Index in nibbles ((Nbr_Bitmap_Size+1)*4), which may be less than or equal to the number of BSs in MOB_NBR ADV.
Nbr_Bitmap_Index	(Nbr_Bitmap_Size+1)*4 ~~Up to the Number of BSs in MOB_NBR-ADV~~	Each bit position in this bitmap corresponds to a BS Index of the corresponding MOB_NBR-ADV message, where the least significant bit corresponds to the first BS Index, each next significant bit corresponds to the next BS Index, the most significant bit corresponds to the BS Index of the last reported BS, and BSs with BS Index greater than the last reported BS are not reported and do not have a corresponding bit position in the bitmap. Bitmap position bit value: 0: the corresponding BS is not reported. 1: the corresponding BS is reported. When Use_Rsp_Bitmap_Index equals 1, Nbr_Bitmap_Index only includes reported BSs that were included in the MOB_NBR-ADV message but that were not included in the corresponding MOB_SCN-RSP message.
for(each '1' in Nbr_Bitmap_Index) {	—	—
if(Report_metric[Bit 0] == 1)	—	—
BS_CINR_mean	8	—
if(Report_metric[Bit 1] == 1)	—	—
BS_RSSI_mean	8	—
if(Report_metric[Bit 1] == 1)	—	—
Relative_delay	8	—
}	—	—
} else (	—	—
N_Neighbor_BS_Index	8	Number of neighboring BS that are included in MOB_NBR-ADV message.
If (N_Neighbor_BS_Index != 0){	—	—
Configuration change count for MOB_NBR-ADV	8	Configuration Change Count value of referring MOB_NBR-ADV message
}	—	—
For(j = 0; j <	—	—

N_Neighbor_BS_Index; j++ {		
Neighbor_BS_Index	8	BS index corresponds to position of BS in MOB_NBR-ADV message
If(Report metric[Bit 0] == 1)	—	—
BS CINR mean	8	—
If(Report metric[Bit 1] == 1)	—	—
BS RSSI mean	8	—
If(Report metric[Bit 2] == 1)	—	—
Relative delay	8	—
}	—	—
}	—	—
N_Neighbor_BS_Full	8	Number of neighboring BS that are using full 48 bits BS ID.
for(j = 0; j < N_Neighbor_BS_Full; j++){	—	—
Neighbor BSID	48	—
If(Report metric[Bit 0] == 1)	—	—
BS CINR mean	8	—
If(Report metric[Bit 1] == 1)	—	—
BS RSSI mean	8	—
If(Report metric[Bit 2] == 1)	—	—
Relative delay	8	—
}	—	—
If(Use_Rsp_Bitmap_Index == 1) {	—	—
Rsp_Seq_Num	1	One-bit sequence number for the corresponding MOB_SCN-RSP message.
Reserved	1	Shall be set to zero.
Rsp_Bitmap_Size	6	Size of Rsp_Bitmap_Index in nibbles ((Rsp_Bitmap_Size +1)*4), which may be less than

		or equal to the number of BSs in MOB_SCN-RSP.
Rsp_Bitmap_Index	(Rsp_Bitmap_Size +1)*4 ~~Up to the Number of BSs in MOB_SCN-RSP~~	Each bit position in this bitmap corresponds to a BS Index of the corresponding MOB_SCN-RSP message, where the least significant bit corresponds to the first BS Index, each next significant bit corresponds to the next BS Index, the most significant bit corresponds to the BS Index of the last reported BS, and BSs with BS Index greater than the last reported BS are not reported and do not have a corresponding bit position in the bitmap. Bitmap position bit value: 0: the corresponding BS is not reported. 1: the corresponding BS is reported.
for(each '1' in Rsp_Bitmap_Index) {	—	—
If(Report metric[Bit 0] == 1)	—	—
BS_CINR_mean	8	—
If(Report_metric[Bit 1] == 1)	—	—
BS_RSSI_mean	8	—
If(Report_metric[Bit 2] == 1)	—	—
Relative_delay	8	—
}	—	—
}	—	—
Padding	*variable*	If needed for alignment to byte boundary.
TLV encoded information	*variable*	Optional
}	—	—

[…]

Rsp_Seq_Num
Sequence number for the ~~corresponding~~ MOB_SCN-RSP message associated with a MOB_SCN-RSP BS Index bitmap (Rsp_Bitmap_Index), where a bit position in this bitmap corresponds to a BS index of the MOB_SCN-RSP message and where a BS index corresponds to the position of a BS in the MOB_SCN-RSP message.

Use_Nbr_Bitmap_Index
Indicates if the bitmap of BS indexes for MOB_NBR-ADV is used.

Use_Rsp_Bitmap_Index
Indicates if the bitmap of BS indexes for MOB_SCN-RSP is used.

Nbr_Bitmap_Index

Bitmap of BS indexes ~~of BS into~~ for the corresponding MOB_NBR-ADV message where each bit position corresponds to a BS Index of the corresponding MOB_NBR-ADV message, the least significant bit corresponds to the first BS Index, each next significant bit corresponds to the next BS Index in sequential order, the most significant bit corresponds to the BS Index of the last reported BS, and BSs with BS Index greater than the last reported BS are not reported and do not have a corresponding bit position in the bitmap. Bitmap position bit value of 1 indicates that the BS is reported and a bit value of 0 indicates that the BS is not reported[DRC1][DRC2].

When Use_Rsp_Bitmap_Index equals 1, Nbr_Bitmap_Index only includes BSs included in the MOB_NBR-ADV message but not included in the corresponding MOB_SCN-RSP message.

Rsp_Bitmap_Index

Bitmap of BS indexes ~~of BS into~~ for the corresponding MOB_SCN-RSP message,~~,~~ where each bit position corresponds to a BS Index of the corresponding MOB_SCN-RSP message, the least significant bit corresponds to the first BS Index, each next significant bit corresponds to the next BS Index in sequential order, the most significant bit corresponds to the BS Index of the last reported BS, and BSs with BS Index greater than the last reported BS are not reported and do not have a corresponding bit position in the bitmap. Bitmap position bit value of 1 indicates that the BS is reported and a bit value of 0 indicates that the BS is not reported.

This bitmap identifies BSs included in the corresponding MOB_SCN-RSP message, including BSs that are included in the MOB_NBR-ADV message that were included in the MOB_SCN-RSP message.

[…]