**IEEE P802.15**

**Wireless Personal Area Networks**

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| Project | IEEE P802.15 Working Group for Wireless Personal Area Networks (WPANs) | |
| Title | Resolution to Status comments in 802.15.4md | |
| Date Submitted | July, 17 2019 | |
| Source | [Tero Kivinen] [] | Voice: [] Fax: [] E-mail: [kivinen@iki.fi] |
| Re: | LB158 comments | |
| Abstract | Proposed resolution how to resolve lots of comments related to status. | |
| Purpose | Solve the issue. | |
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# Description of Problem

There are several cases where Status is used inconsistently. Firstly there are few MAC commands, and IEs where there is field called Status. Those can be confusing especially in descriptions of the related MLME-calls. Then there is some cases where over the air status is mixed with the local status information. Sometimes this is done in very confusing manner by mapping over the air errors to some local existing error codes..

# Solution

Firstly change all Status fields in MAC commands and IEs to have some kind of prefix.

Secondly separate the remote operation status from the local MLME operation status, by adding another parameter to MLME-primitives.

# Changes to 802.15.4

## MLME related status issues

MLME-ASSOCIATE.response, and MLME-ASSOCIATE.confirm uses Status inconsitently.

### MLME-ASSOCIATE.response

MLME-ASSOCIATE.response uses Status when it is actually giving out the Association Status field value for the Associate Respond Command. Rename the Status in .response to AssociationStatus, and change references to correct table.

CID-255 Resolution: Accept, i.e., Change Status to AssociationStatus.

CID-260 Resolution: Revised. Proposed resolution:

In Table 8-6 rename Status to AssociationStatus, change Valid range to "As defined in Table 7-55", and change Description to "The association status of the association attempt as defined in 7.5.3".

CID-257 Resolution: Revised. Proposed resolution:

If the AssocationStatus parameter~~field~~ of MLME-ASSOCIATE.response primitive is set to Fast assocation successful, then association response shall be sent to the device requesting fast association directly.

### MLME-ASSOCIATE.confirm

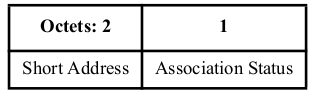
The MLME-ASSOCIATE.confirm conbines Status field that tells the result of the local operation with the actual association response over the air from the other end. This means we cannot get proper error information from the other end to the next higher layer. Make separate parameter for AssociationStatus, which contains the Assocation Status field value from the Assocation Response command.

CID-259 Resoltion Accept, i.e., Add AssociationStatus parameter to this primitive immediately after the AssocShortAddress paramater.

CID-261 Resolution Accept, i.e., Add AssociationStatus parameter to this primitive with Type "Enumeration", Valid Range "As defined in Table 7-55", and Description of "The association status of the association attempt from association request command as defined in 7.5.3". Add this immediately after the AssocShortAddress paramater.

CID-262 Resoltion Accept, i.e., duplicate of CID-261.

## Association command and Status field

Figure 7-111 – Association Response command Content:

There is only Association Status field no Status field.

The text in Section 6.4.1, and 6.4.3 refers it directly as Status field, instead of Assocation Status field. Also CID-255 changed the name of the Status parameter to AssocationStatus to reduce confusion, so do the change here to.

CID-100 Resolution: Accept, i.e., Change “Status field” to “Assocation Status field”.

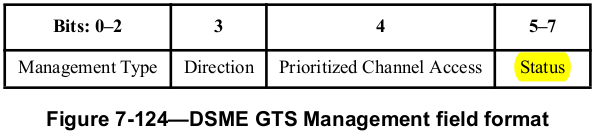
CID-101 Resolution: Accept, i.e., Change “Status field” to “Assocation Status field”.

CID-106 Resolution: Accept, i.e., Change “Status parameter” to “AssociationStatus parameter”.

CID-107 Resolution: Accept, i.e., Change “Status field” to “Assocation Status field”.

CID-108 Resolution: Accept, i.e., Change “Status field” to “Assocation Status field”.

## Rename Status field to Dsme Gts Status field

DSME GTS Response command has field called Status. This is confusing. See figure 7-124:

Proposal is to rename that field to “Dsme Gts Status field”.

CID-212: Resolution: Accept, i.e., change “Status field” to “Dsme Gts Status field” twice on row 7.

CID-213: Resolution: Accept, i.e., change “Status” to “Dsme Gts Status”.

CID-214: Resolution: Accept, i.e., change title from “Status field values” to “Dsme Gts Status field values”.

CID-215: Resolution: Accept, i.e., change “Status Field” to “Dsme Gts Status field”. The 7.5.16 DMSE GTS Notify command contains DSME GTS Management field which is defined in Figure 7-124, and this text refers to that subfield.

CID-125 – CID-128: Resolution: Accept, i.e., Change Status field" to "Dsme Gts Status field".

## DMSE Status field

The problem is that the MLME-DSME-GTS.response and confirm mixes

## Have separate status parameters for local and remote end



## Generic DMSE related issues



## Generic Status issues



## MCSP-DATA related issues



## MLME-SOUNDING related status issues

