Core testing infrastructure - Feature #5128

dec_RlcmacDlCtrlBlock: Get rid of annoying warning about remaining padding

04/23/2021 11:15 AM - pespin

Description

While running PCU_Tests, (probably) ./library/RLCMAC_EncDec.cc prints lots of warnings at runtime, for each RLCMAC block parsed, due to final padding not being parsed:


Ideally we should modify ./library/RLCMAC_Types.ttcn and have an "octetstring padding optional" or alike, and the Decoder should put the decoded padding in there.

Or even simpler, read the padding bytes to avoid this kind of warnings.

History

#1 - 04/23/2021 03:14 PM - laforge

I think I tried at the time I wrote this, but couldn't find a method that worked. But that was years ago, with very limited TTCN/TITAN knowlege, and with a much older version of TITAN.

#2 - 04/23/2021 06:18 PM - pespin

I think I initially misunderstood the possible cause due to creating the ticket quickly.

IIUC, the warning is probably logged when from ./library/RLCMAC_EncDec.cc C function dec__RlcmacDlBlock(), we end up calling:

ret_val.ctrl() = dec__RlcmacDlCtrlBlock(stream);

which is defined as titan external function in TTCN3 RLCMAC_Types.ttcn:

```c
/* TS 44.060 10.3.1 Downlink RLC/MAC control block */
type record RlcmacDlCtrlBlock {
    DlMacHeader    mac_hdr,
    DlCtrlOptOctets opt optional,
    RlcmaDlCtrlMsg payload
} with {
    /* Automatic padding by RAW encoder seems to causing problems
    * due to padding sequence 2b inserted shifted from octet
    * boundary on some messages. See UL CTRL blocks in TC_t3193.
    * See 3GPP TS 44.060 Figure 11.1 (below)
    * variant "PADDING(184), PADDING_PATTERN('00101011'B)" */
    variant (opt) *PRESENCE(mac_hdr.payload_type = MAC_PT_RLCMAC_OPT)"
};
```

05/21/2021
So ideally we should have a "octetstring padding optional" at the end of "record RlcmacDlCtrlBlock", but titan seems to be having some issues? Apparently I wrote those comments in following commit but I don’t recall doing so lol:

commit cb00c52b0727ae10086bdc8417060110f317900b
Author: Pau Espin Pedrol <pespin@sysmocom.de>
Date:   Fri Nov 6 19:52:05 2020 +0100

pcu: Specify (M)CS to use when sending UL rlcmac data blocks
Apply padding and spare bits in the encoder according to CS/MCS format.
Change-Id: I918acac81f550077daeda3374b3de9b426ff3572

So it seems I did some related work but for the "encoder" part, while this issue shows up in the "decoder" one.