

## OsmoBTS - Bug #4032

### RLL/LAPDm ABM has no TTCN3 tests

05/29/2019 02:19 PM - laforge

<b>Status:</b>	Resolved	<b>Start date:</b>	05/29/2019
<b>Priority:</b>	Normal	<b>Due date:</b>	
<b>Assignee:</b>	Hoernchen	<b>% Done:</b>	100%
<b>Category:</b>	Abis		
<b>Target version:</b>			
<b>Spec Reference:</b>	3GPP TS 51.010-1 Section 25.2		
<b>Description</b>			
While we test pretty much all parts of RSL, the RLL part (controlling the LAPDm instances) currently doesn't have a lot of testing yet.			
What we test so far:			
<ul style="list-style-type: none"><li>• establish indication</li><li>• establish request</li><li>• release indication</li><li>• release request</li><li>• unit data indication</li><li>• init data request</li></ul>			
But what's missing is the part dealing with LAPDm while it is established, including segmentation/reassembly, acknowledgements, re-transmission, ...			
<b>Related issues:</b>			
Related to OsmoBTS - Feature #3075: do not transmit SI13 when the PCU is not ...		<b>Resolved</b>	<b>03/19/2018</b>

#### History

##### #1 - 05/29/2019 02:19 PM - laforge

- Related to Feature #3075: do not transmit SI13 when the PCU is not connected added

##### #2 - 06/04/2019 03:40 PM - laforge

- Status changed from New to In Progress

- % Done changed from 0 to 70

there's a variety of tests now in BTS\_Tests\_LAPDm.ttcn.

They will be enabled in the jenkins builds once <https://gerrit.osmocom.org/c/docker-playground/+/14376> is merged.

##### #3 - 06/04/2019 08:53 PM - laforge

- Checklist item [ ] 25.2.6.1 N(S) sequence error added

Checklist item [ ] 25.2.6.2 N(R) sequence error added

Checklist item [ ] 25.2.6.3 Improper F bit added

Checklist item [ ] 25.2.7 Test on receipt of invalid frames added

- Assignee changed from laforge to Hoernchen

- Spec Reference set to 3GPP TS 51.010-1 Section 25.2

I implemented a variety of tests in BTS\_Tests\_LAPDm, with only four tests remaining TBD. Handing over to @Hoernchen for completing those.

The existing examples should serve as a template. The 3GPP spec references is written for testing the MS side. You have to mirror all communication, as we want to test the BTS. Please note the C/R bits of LAPDm are inverted per direction. However, if you use the symbolic constants like existing test cases you won't have to worry about that.

The L3 payload doesn't matter at all. So if the spec says "send a MM INFO" or whatever, it doesn't matter. This is just so that normal phones will react "reasonable" when executing the test against them. As we don't have any L3 but simply attach to RSL/RLL, we can transmit arbitrary L3 payload.

##### #4 - 06/12/2019 05:29 PM - Hoernchen

- Checklist item [x] 25.2.6.1 N(S) sequence error set to Done

*Checklist item [x] 25.2.6.2 N(R) sequence error set to Done*  
*Checklist item [x] 25.2.6.3 Improper F bit set to Done*  
*Checklist item [x] 25.2.7 Test on receipt of invalid frames set to Done*

**#5 - 06/12/2019 05:30 PM - Hoernchen**

*- % Done changed from 70 to 100*

Added in <https://gerrit.osmocom.org/c/osmo-tcn3-hacks/+/14419>

**#6 - 06/13/2019 12:56 PM - Hoernchen**

*- Status changed from In Progress to Resolved*