OsmoBTS - Bug #4465
Incorrect number of SUB measurements detected

03/20/2020 09:16 PM - laforge

**Status:** In Progress
**Priority:** Normal
**Assignee:** dexter
**Category:** osmo-bts-trx
**Target version:** 
**Spec Reference:**

**Description**

When running current osmo-trx + osmo-bts-trx I every so often get:

```
ERROR <0004> measurement.c:645 (bts=0,trx=0,ts=1,ss=0) Incorrect number of SUB measurements detected! (4 vs exp 3)
ERROR <0004> measurement.c:645 (bts=0,trx=0,ts=1,ss=0) Incorrect number of SUB measurements detected! (4 vs exp 3)
ERROR <0004> measurement.c:645 (bts=0,trx=0,ts=2,ss=0) Incorrect number of SUB measurements detected! (4 vs exp 3)
```

I was under the impression that after a lot of related effort we meanwhile do everything correctly in terms of measurement processing? The message doesn't make me very confident.

**Related issues:**
Related to OsmoBTS - Bug #4467: bad voice quality in current osmo-bts-trx master

**History**

#1 - 03/20/2020 09:43 PM - laforge
- Related to Bug #4467: bad voice quality in current osmo-bts-trx master added

#2 - 04/22/2020 03:00 PM - dexter
- % Done changed from 0 to 80

I have checked the problem with current master. The checks of the sub frames for AMR were indeed problematic. There we would expect at least 1 SUB frame (SACCH), the remaining frames would be the result of DTX periods, which are negotiated dynamically.

However, what confuses me a bit is that the error says "(4 vs exp 3)". At least for AMR the current master currently does not implement the SUB frame tagging, so I would expect (1 vs exp 0) as error here. It would be good to know with which codec the problem occurs and if DTX was used or not.

See also:
https://gerrit.osmocom.org/c/osmo-bts/+/17928 measurement: remove unecessary is_amr_sid_update parameter
https://gerrit.osmocom.org/c/osmo-bts/+/17929 measurement: expect at least 1 SUB frame for AMR

#3 - 04/22/2020 03:00 PM - dexter
- Status changed from New to In Progress

#4 - 04/23/2020 09:38 AM - dexter
- % Done changed from 80 to 90

I have now checked this more thoroughly, the SUB frames that are coming in when AMR-DTX is enabled are counted correctly. The number matches up, number of SID-FRAMES + 1 SACCH.

#5 - 05/04/2020 07:00 PM - dexter

The patch 17929 is still in review. However, there were also problems with the RSSI, which are now fixed, see also #2978