

OsmoBSC - Bug #3332

osmo-bsc doesn't allocate "larger" channels

06/11/2018 12:41 PM - laforge

Status:	Resolved	Start date:	06/11/2018
Priority:	High	Due date:	
Assignee:	neels	% Done:	100%
Category:			
Target version:			
Spec Reference:			

Description

If a MS is requesting a channel indicating a SDCCH type (e.g. for LU or SMS), osmo-bsc currently will fail if no SDCCH are available.

It's questionable whether this is a good idea, if at the same time we have plenty of TCH/H or TCH/F sitting idle. A "larger" channel would also allow the MS to complete the related SMS/LU/USSD, i.e. we are rejecting a request for a given service despite being able to fulfill it.

The current behavior prioritizes holding traffic channels available for MT voice calls over providing channels for new MO services. There is some logic to it, but I think it's flawed: We don't yet know if any of those idle channels will ever be needed for MT calls, and on that basis we're denying service to other requests?

Maybe it should be a VTY option, with the default to use "larger" channels if no SDCCH are available.

History

#1 - 06/11/2018 03:49 PM - neels

- Assignee set to neels

I know exactly how to solve this, in `rsl_rx_chan_rqd()` add a

```
if (!lchan && lctype == GSM_LCHAN_SDCCH) {
    LOGP(DRSL, LOGL_NOTICE, "(bts=%d) CHAN RQD: no resources for %s "
        "0x%x, retrying with %s\n",
        msg->lchan->ts->trx->bts->nr,
        gsm_lchant_name(GSM_LCHAN_SDCCH), rqd_ref->ra,
        GSM_LCHAN_TCH_F);
    lchan = lchan_select_by_type(bts, GSM_LCHAN_TCH_F);
}
```

maybe needed for TCH_F and for TCH_H separately...

(`lchan_select_by_type()` is the new `chan_alloc()` after current osmo-bsc refactoring on neels/inter_bsc_ho)

#2 - 07/04/2018 12:57 PM - laforge

- *Priority changed from Normal to High*

#3 - 07/16/2018 02:25 PM - neels

- *Status changed from New to In Progress*

- *% Done changed from 0 to 90*

Implemented in l2fcf9e9baa7d03974a367763f3f52f59dfc2cc51 (currently only on osmo-bsc branch neels/inter-bsc-ho)

#4 - 07/29/2018 02:34 PM - laforge

- *Status changed from In Progress to Resolved*

- *% Done changed from 90 to 100*

patch has been merged