OsmoMSC - Bug #5197

msc_i Unimplemented msg type: HANDOVER_PERFORMED

07/12/2021 02:18 PM - pespin

<table>
<thead>
<tr>
<th>Status:</th>
<th>New</th>
<th>Start date:</th>
<th>07/12/2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Priority:</td>
<td>Normal</td>
<td>Due date:</td>
<td></td>
</tr>
<tr>
<td>Assignee:</td>
<td>neels</td>
<td>% Done:</td>
<td>0%</td>
</tr>
<tr>
<td>Category:</td>
<td></td>
<td>Spec Reference:</td>
<td></td>
</tr>
<tr>
<td>Target version:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Resolution:</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Description

As seen on a running osmo-msc:

<0010> ran_msg_a.c:848 msc_i(IIMSI-...:MSISDN-...:TMSI-0x...:GERAN-A-65:PAGING_RESP)[0x...]{READY}:
    RAN decode: BSSMAP: Unimplemented msg type: HANDOVER_PERFORMED

Seems the message type is missing in ran_a_decode_bssmap. Is this expected? what's missing?

History

#1 - 07/12/2021 06:13 PM - neels

If the BSC decides to handover within the BSS for improved reception, it does the entire handover procedure on its own, and when that succeeded tells the MSC about a possible change in LAC and codec.

So apparently osmo-msc so far doesn't care about that.

However I remember that we had patches related to storing the correct LAC in the VLR, so in that way it may be good to actually decode the HANDOVER PERFORMED, store the new LAC.

...and forward the LAC change to the HLR? Oh wait, checking GSUP and the HLR, we apparently do not store the LAC in the HLR at all. Where did I get that from?

So only update the serving cell in the VLR then, i.e. vlr_subscr->cgi from the received struct gsm0808_handover_performed->cell_id.

We need a decoder of this message in libosmocore/src/gsm/gsm0808.c, so far we only have the encoder (gsm0808_create_handover_performed()).

Possibly the BSC could also signal a codec change; theoretically we might need to tell the MGW or MNCC about that? Could also be that it must be one of the permitted codecs and only the RTP payload number changes in the RTP stream -- but for that we'd have to put all possible codecs in the MGCP which we don't. We are still miles away from using that info properly, first step there would be to merge these long standing osmo-msc codec patches (that code bomb that negotiates SDP over MNCC and properly overlays all codec limitations from MS, BSC, CN and remote call leg).