

## OpenBSC - Bug #3657

### fix support for non voice configuration

10/16/2018 01:32 PM - dexter

<b>Status:</b>	Resolved	<b>Start date:</b>	10/16/2018
<b>Priority:</b>	Urgent	<b>Due date:</b>	
<b>Assignee:</b>	dexter	<b>% Done:</b>	90%
<b>Category:</b>			
<b>Target version:</b>			
<b>Resolution:</b>		<b>Spec Reference:</b>	
<b>Description</b>			
<p>At the moment osmo-bsc does not permit non voice configurations. A valid voice codec configuration must be in place, otherwise the COMPLETE LAYER 3 INFORMATION message generation will fail because the SPEECH CODEC LIST (BSS supported) IE can not be generated. The speech codec list is a mandatory IE, but only if the network supports an IP based user plane interface. In networks that intentionally do not support voice, it could be garmented that those networks do not have such an interface and therefore the inclusion of the speech codec list is not needed. Also a speech codec list with 0 elements is indeed permitted by the spec. We could also include a speech codec list with 0 elements for the non-voice configurations.</p>			

#### History

##### #1 - 10/16/2018 01:32 PM - dexter

- Status changed from New to In Progress

##### #2 - 10/16/2018 03:23 PM - dexter

- % Done changed from 0 to 90

The problem should be fixed now. First of all I have taken some actions to allow zero length codec list. I have fixed both, the encoding and the decoding and added a unit test for the zero length corner case.

See also: <https://gerrit.osmocom.org/11373>

The BSC uses the speech codec list decoding functionality once, I have fixed it so that it now checks the length, before this it was relying on the fact that the decoding function fails for the zero length case.

See also: <https://gerrit.osmocom.org/#/c/osmo-bsc/+/11386>

Then I have removed the check for zero length that the BSC does before it generates the COMPLETE LAYER 3 INFORMATION message. It now sends a possibly empty speech codec list to the encoder function that now happily encodes it.

See also: <https://gerrit.osmocom.org/#/c/osmo-bsc/+/11387>

The last thing I added is optional. I am not sure if it is really needed or if we should abandon it. I now again check for zero length codec list and if this is the case the codec list will be completely excluded. I should be permitted by the spec because in general the IE is optional, it is only required if the network supports an IP based user-plane interface. If we have no codecs available we effectively don't support an IP based user-plane interface and therefore we may exclude the IE completely. I think in the end it is a matter of taste what. Having a zero length speech codec element inside the COMPLETE LAYER 3 INFORMATION message wouldn't look that nice, but it still would be spec compliant.

See also: <https://gerrit.osmocom.org/#/c/osmo-bsc/+/11388>

##### #3 - 10/22/2018 08:38 PM - dexter

- Status changed from In Progress to Resolved

All patches are merged, I think we can close this.