Contrary to OsmoNITB, OsmoBSC has no user plane / voice handling inside it. Rather, all media/voice handling is done inside osmo-mgw.

We will not be able to support classic E1/T1 BTSs from OsmoBSC unless we're able to support E1/T1 endpoints in osmo-mgw. So let's implement them. We'll at minimum need endpoint types for 16kbit sub-slots with TRAU frames (voice calls).

TBD is the details on how the signaling is handled. We could possibly open signaling slots directly from the BSC (via libosmo-abis/e1_input), or we could have osmo-mgw open those slots and convert the HDLC payload / LAPD into something that can be transported over IP to osmo-bsc. This is related but a separate ticket.

Related issues:
- Related to OsmoBSC - Feature #2548: Add support for E1/T1 based BTSs to OsmoBSC
- Related to E1/T1 Hardware Interface - Feature #3965: ICE40 based USB E1 adapter
- Related to OsmoMGW - Feature #2659: prepare osmo-mgw architecture for other e...
- Related to OsmoBSC - Feature #4514: OM2000 Support for Ericsson RBS6000 / DUG 20
- Follows OsmoMGW - Feature #4535: Develop "E1/Abis generator"

History
#1 - 10/06/2017 12:38 PM - laforge
- Related to Feature #2548: Add support for E1/T1 based BTSs to OsmoBSC added

#2 - 10/29/2017 06:51 PM - laforge
- Priority changed from Normal to Low

#3 - 04/29/2018 08:45 AM - laforge
- Priority changed from Low to High

#4 - 05/30/2018 02:56 PM - laforge
- Tags set to E1

#5 - 04/30/2019 09:33 AM - laforge
- Related to Feature #3965: ICE40 based USB E1 adapter added

#6 - 07/18/2019 05:08 AM - laforge
- Related to Feature #2659: prepare osmo-mgw architecture for other endpoint types added

#7 - 09/04/2019 09:06 AM - laforge

#8 - 04/27/2020 05:42 PM - laforge
- Related to Feature #4514: OM2000 Support for Ericsson RBS6000 / DUG 20 added

#9 - 04/27/2020 05:42 PM - laforge

#10 - 05/05/2020 07:02 PM - laforge
- Status changed from New to Stalled
dexter is scheduled to work on this. However, in order to do this without having to bring up a whole network with E1 BTS, phones, etc. in his home office, we will first develop an "E1 generator". This will then provide a E1 line with TRAU frames for the different voice codecs via libosmo-abis, so that osmo-mgw can be developed against this, without any external dependencies. See #4535 for details.

Should that E1 generator take more time, some architectural changes and preparation work can happen within osmo-mgw already meanwhile.

#11 - 05/05/2020 07:03 PM - laforge
- Due date set to 05/06/2020
- Start date changed from 10/06/2017 to 05/06/2020
- Follows Feature #4535: Develop "E1/Abis generator" added