

OsmoBSC - Feature #4852

VGCS/VBS support in osm-bsc

11/05/2020 02:51 PM - laforge

Status: New	Start date: 11/05/2020
Priority: Low	Due date:
Assignee:	% Done: 0%
Category:	
Target version:	
Spec Reference:	
Description	
In order to support GSM-R ASCII, we'd need VGCS/VBS support.	
In the BSC, this mostly means the following:	
<ul style="list-style-type: none">• definition of VBS/VGCS areas e.g. via VTY (or simply assume all areas are global in initial implementation)• Abis: generation of RSL NOTIFICATION messages• A interface / BSSMAP<ul style="list-style-type: none">◦ VGCS/VBS SETUP + VGCS/VBS SETUP ACK + VGCS/VBS SETUP REFUSE messages◦ VGCS/VBS ASSIGNMENT REQ◦ UPLINK REQUEST, UPLINK RELEASE NOTIFICATION, UPLINK SEIZED COMMAND, UPLINK REQUEST ACK, UPLINK REJECT◦ VGCS ADDITIONAL INFORMATION	
There's quite a bit of state machines and logic required.	
<ul style="list-style-type: none">• VGCS/VBS setup procedure• VCGS/VBBS assignment proceure<ul style="list-style-type: none">◦ procedures according to TS 48.008 section 3.1.21, 3.1.22• handling of uplink related allocation and release procedures (VGCS)• periodic NCH transmissions• SACCH indications of NCH changes• managing the bsc-colocated osmo-mgw<ul style="list-style-type: none">◦ allocate a 'broadcast' endpoint with one sender and many recipients◦ RTP connections for each BTS◦ RTP connection to the MSC◦ modifying rcvonly/sendonly/sendrecv according to current talker setate (VGCS)	
Related issues:	
Related to OsmoBTS - Feature #4851: VCGS/VBS support in osmo-bts	New 11/05/2020
Related to OsmoMGW - Feature #4853: VBS/VGCS support in osmo-mgw	New 11/05/2020
Related to OsmoMSC - Feature #4854: VGCS/VBS support in osmo-msc	New 11/05/2020

History

#1 - 11/05/2020 02:53 PM - laforge

- Description updated

#2 - 11/05/2020 02:53 PM - laforge

- Tags set to ASCII

#3 - 11/05/2020 02:54 PM - laforge

- Project changed from OsmoBTS to OsmoBSC

#4 - 11/05/2020 02:54 PM - laforge

- Related to Feature #4851: VCGS/VBS support in osmo-bts added

#5 - 11/05/2020 02:57 PM - laforge

- Related to Feature #4853: VBS/VGCS support in osmo-mgw added

#6 - 11/05/2020 03:00 PM - laforge

- Related to Feature #4854: VGCS/VBS support in osmo-msc added