

OsmocomBB - Feature #4396

Circuit Switched Data (CSD) Support

02/13/2020 08:05 PM - laforge

Status: New	Start date: 02/13/2020
Priority: Low	Due date:
Assignee:	% Done: 0%
Category:	
Target version:	
Resolution:	Spec Reference:
Description This would primarily entail: <ul style="list-style-type: none">• permitting the related bearer types on the 04.08 CC side• configuring the DSP correctly to perform the 45.003 interleaving / coding for the respective bearer type• implementing the various rate adaptation functions to get to the individual sync/async characters. AFAIR there even was a hardware accelerator (maybe that was only MTK, not TI?). In any case, we want a software implementation on the host PC side, we don't care about an efficient implementation on the baseband chip. Test/development could be done against Raca1 6103, which supports both data + fax calls	
Related issues: Related to OsmoBTS - Feature #1572: Circuit Switched Data (CSD) Support New 02/23/2016	

History

#1 - 02/13/2020 08:06 PM - laforge

- Tags set to CSD

#2 - 02/13/2020 08:06 PM - laforge

- Related to Feature #1572: Circuit Switched Data (CSD) Support added

#3 - 11/04/2020 10:12 PM - fixeria

configuring the DSP correctly to perform the 45.003 interleaving / coding for the respective bearer type

JFYI, here is an extract from include/calypso/l1_environment.h:

```
/* Channel mode definitions for DEDICATED mode */
#define SIG_ONLY_MODE      0    // signalling only
#define TCH_FS_MODE        1    // speech full rate
#define TCH_HS_MODE        2    // speech half rate
#define TCH_96_MODE        3    // data 9,6 kb/s
#define TCH_48F_MODE       4    // data 4,8 kb/s full rate
#define TCH_48H_MODE       5    // data 4,8 kb/s half rate
#define TCH_24F_MODE       6    // data 2,4 kb/s full rate
#define TCH_24H_MODE       7    // data 2,4 kb/s half rate
#define TCH_EFR_MODE       8    // enhanced full rate
#define TCH_144_MODE       9    // data 14,4 kb/s half rate
```