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Source: **Ericsson, Nokia, NTT DoCoMo, Siemens**

Title: **Proposed updates to Table 1 in TR 25.926 “UE Radio Access Capabilities”**

Document for: **Discussion**

This paper proposes some updates to the UE radio access capability parameters (Table1) in TR 25.926 and also proposes allowed values for these parameters. It is proposed that a Liason is sent to WG2, informing about the WG1 view on these parameters.

		UE radio access capability parameter	**Value range**	**Comments**
PH Y parameters	Transport channel parameters in downlink	Maximum total number of bits of all transport blocks received in TTIs that end at the same time	640, 1280, 2560, 3840, 5120, 6400, 7680, 8960, 10240, 20480, 40960, 81920, 163840	
		Maximum total number of bits of all simultaneous transport channels processed in a 10 ms period	640, 1280, 2560, 3840, 5120, 6400, 7680, 8960, 10240, 20480, 40960, 81920, 163840	
		Maximum number of simultaneous transport channels	4,8,16,32	This should be defined as the maximum number of Transport Channels that should be possible to process simultaneously, not taking into account the rate of each Transport Channel.
		Maximum number of simultaneous CCTrCH (TDD) (FFS for FDD)	1, 2, 3, 4, 5, 6, 7, 8	CCTrCH should be interpreted as CCTrCH of DCH type, i.e. a CCTrCH consisting of one or several DCH. Simultaneous reception of CCTrCH of DCH type with CCTrCH of not-DCH type (DSCH, FACH, and/or PCH) is covered by other capabilities (PDSCH support and support for simultaenous reception of DPCH and S-CCPCH).
		Maximum total number of transport blocks received within TTIs that end at the same time	4, 8, 16, 32, 64, 96, 128, 256, 512	"Baseline": One transport block per transport channel
		Maximum number of TFC in the TFCS	16, 32, 64, 96, 128, 256, 512, 1024	"Baseline": on/off for each transport channel
		Support for turbo decoding	Yes/No	

	Support of 24 bits CRC	Yes/No	
	Support of blind rate detection (FFS)	Yes/No	
Transport channel parameters in uplink	Maximum total number of bits of all transport blocks transmitted in TTIs that start at the same time	320, 640, 1280, 2560, 3840, 5120, 6400, 7680, 8960, 10240, 20480, 40960, 81920, 163840	
	Maximum total number of bits of all simultaneous transport channels processed in a 10 ms period	320, 640, 1280, 2560, 3840, 5120, 6400, 7680, 8960, 10240, 20480, 40960, 81920, 163840	
	Maximum number of simultaneous transport channels	2, 4, 8, 16, 32	"Baseline": Test-case requirement
	Maximum number of simultaneous CCTrCH (TDD)	FDD: 1 TDD: 1, 2, 3, 4, 5, 6, 7, 8	No capability for FDD
	Maximum total number of transport blocks transmitted within TTIs that start at the same time	2, 4, 8, 16, 32, 48, 64, 96, 128, 256, 512	"Baseline": One transport block per transport channel
	Maximum number of TFC in the TFCS	4, 8, 16, 32, 48, 64, 96, 128, 256, 512	"Baseline": on/off for each transport channel
	Support for turbo encoding	Yes/No	
	Support of 24 bits CRC	Yes/No	
FDD Physical channel parameters in downlink	Maximum number of DPCH per RL	1, 2, 3, 4, 5, 6, 7, 8	

	Maximum number of DPCH bits received per 10 ms	300, 600, 1200, 2400, 4800, 9600, 19200,	UTRAN should be allowed to flexibly allocate these bits to multiple DPCH within the limit given by the capability "Maximum number of DPCH bits per
	~~Minimum SF~~		This capability is not needed. The relevant UE properties (processing and buffering requirements) are better described by the capabilities "Maximum number of DPCH per RL" and "Maximum number of DPCH bits received per 10 ms" above.
	Support for SF 512	Yes/No	
	Support of PDSCH	Yes/No	
	~~Maximum number of PDSCH~~		Reception of multiple PDSCH in parallel is not seen as needed.
	Simultaneous reception of SCCPCH and DPCH	Yes/No	
FDD Physical channel parameters in uplink	~~Maximum number of DPDCH~~		These two capabilities are better to be combined into a common capability "Maximum number of DPDCH bits per 10 ms" as described below. Note that no flexibility is lost due to this, as multiple DPDCH is only used for SF=4, i.e. when the number of DPDCH bits exceed a certain value.
	~~Minimum SF~~		
	Maximum number of DPDCH bits	150, 300, 600, 1200, 2400, 4800. 9600. 19200. 28800, 38400, 48000, 57600	Range is from SF=256 to SF=4 and up 6 parallel codes with SF=4.
	Support of PCPCH	Yes/No	
TDD physical channel parameters in downlink	Maximum number of timeslots per frame	1, 2, …,14	

		Maximum number of physical channels per frame	1,2,3,..,224	
		Support of PDSCH	Yes/No	
	TDD physical channel parameters in uplink	Maximum Number of timeslots per frame	1,2,..14	
		Maximum number of physical channels per timeslot	1, 2	
		Minimum SF	16,8,4,2,1	
		Support of PUSCH	Yes/No	

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