

Agenda item: Release 99

Source: Vodafone Group, France Telecom, Telia

Title: Proposed parameter values for 2G-3G handover preconfigurations

Document for: Discussion

INTRODUCTION

At RAN WG1 and WG2 meetings #18, the parameters for the four following default preconfiguration bearers have been specified:

- 13.6 kbps stand-alone SRB
- 12.2 kbps speech + 3.4 kbps SRB
- 64 kbps conversational CS + 3.4 kbps SRB
- 57.6 kbps streaming CS + 3.4 kbps SRB

However there are still some preconfiguration RABs from the original list for Release 99 that are missing [1]. At their last meeting (#19, Sophia-Antipolis) RAN WG2 proceeded notably with the specification of the following default preconfiguration bearers that we consider as essential for Release 99 UE based on [3]:

- 3.4 kbps stand-alone SRB
- 7.95 kbps speech + 3.4 kbps SRB
- 28.8 kbps conversational CS + 3.4 kbps SRB
- 32 kbps conversational CS + 3.4 kbps SRB
- 14.4 kbps streaming CS + 3.4 kbps SRB
- 28.8 kbps streaming CS + 3.4 kbps SRB

Note that the multimode AMR bearer has been replaced in favour of the single AMR mode with moderate codec rate 7.95 kbps as suggested by SA4 [4]. Single mode AMR RABs are sufficient for handover purposes bearing in mind that the bearer could be reconfigured rapidly in 3G after handover.

This contribution proposes values for the relevant layer 1 parameters for these bearers, as requested by RAN WG2 in their LS [2]. The particular parameters on which RAN WG1's guidance has been requested are the following ones:

- Transport Channels: gain factor, rate matching attribute, DCH BLER quality
- Physical Channels: power control algorithm, TPC step size

The proposal is to update RAN WG2 CR to 25.331 with these parameter values.

PROPOSED PARAMETER VALUES

The following tables provide the values for the six remaining bearers to specify as listed above:

RAB information	Parameter	3.4 kbps stand-alone SRB [3, 6.10.2.4.1.2]	7.95 kbps speech + 3.4 kbps SRB [3, 6.10.2.4.1.6]	28.8 kbps conv. CS-data + 3.4 kbps SRB [3, 6.10.2.4.1.12]
TrCH	UL Rate Matching attribute	160	(200,190,160)	(180,160)
	DL DCH BLER-quality value	5×10^{-2}	7×10^{-3} (class A)	2×10^{-3}
	UL ?d	[15]	[15]	[15]
	UL ?c	[11]	[11]	[8]
PhyCH	UL DPCCH Power Offset	[handover to UTRAN message]	[handover to UTRAN message]	[handover to UTRAN message]
	UL DPCCH PCP	[handover to UTRAN message]	[handover to UTRAN message]	[handover to UTRAN message]
	UL Power Control Algorithm	PCA 1	PCA1	PCA1
	UL TPC step size	1	1	1

RAB information	Parameter	32 kbps conv. CS-data + 3.4 kbps SRB [3, 6.10.2.4.1.14]	14 kbps streaming + 3.4 kbps SRB [3, 6.10.2.4.1.15]	28.8 kbps streaming + 3.4 kbps SRB [3, 6.10.2.4.1.16]
TrCH	UL Rate Matching attribute	(185, 160)	(165,160)	(155,160)
	DL DCH BLER-quality value	2×10^{-3}	1×10^{-2}	1×10^{-2}
	UL ?d	[15]	[15]	[15]
	UL ?c	[8]	[11]	[8]
PhyCH	UL DPCCH Power Offset	[handover to UTRAN message]	[handover to UTRAN message]	[handover to UTRAN message]
	UL DPCCH PCP	[handover to UTRAN message]	[handover to UTRAN message]	[handover to UTRAN message]
	UL Power Control Algorithm	PCA 1	PCA1	PCA1
	UL TPC step size	1	1	1

REFERENCES

- [1] R1-00-1412, LS on Default Configurations, RAN WG1 meeting #17, Stockholm.
- [2] R2-01-0725, Draft LS on Default Configurations, RAN WG2 meeting #19, Sophia Antipolis.
- [3] 3GPP TS 34.108, Common Test Environments for User Equipment (UE), Conformance Testing (Release 99)
- [4] R2-01-0310, Reply from SA4 to RAN2 on Default configurations for handover, RAN WG2 meeting #19, Sophia Antipolis.