TSG-RAN meeting #10 **RP-000668**
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Title: Japanese regulatory items in TS 25.141 and TS 34.121
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1. Introduction

This document summarises items needed for conformance test for both BS and UE, taking regulation of Japan, in order to efficiently and proactively accelerate the process in 3GPP.

2. Discussion

In response to Recommendation of ITU-R WP8F on handling of measurement uncertainty in [1], the way to define test tolerances in TS25.141 was proposed at TSG RAN WG4 #14 held in Sophia Antipolis in R4-000991 [2] and agreed by that group. Since it was considered that the discussion of RAN WG4 would definitely influence TSG T WG1 where comprehensive conformance specification of UE has been elaborated in TS34.121, the conclusion of RAN WG4 has been unofficially provided TSG T WG1 members with. Point was what test tolerance values for what test items need to be specified with the highest priority from regulatory point of view of Europe and Japan since UE may be in global circulation in the beginning of 2002. In addition, it should be kept in mind that legislation procedure in both regions is considered to take seven to eight months.

The document of Tdoc R4-000991 covers most of important test items but not exhaustively. The pertinent items to be under regulation of Japan for BS and UE from viewpoints of Ordinance for Regulating Radio Equipment of Japan defined by Ministry of Posts and Telecommunications (MPT) of Japan are tabulated in the Table 1 and Table 2 in Annex, respectively. For the further requisite process in 3GPP, especially in TSG RAN WG4 and TSG T WG1, ARIB recommends to take the contents of this document for reference. Please note that these tables are only for items being covered in 3GPP specification document of TS25.141 and TS34.121.

3. References:

[1] Document 8/20-E, “MEASUREMENT UNCERTAINTY AS IT APPLIES TO TEST LIMITS FOR THE TERRESTRIAL COMPONENT OF IMT-2000,” ITU-R Working Party 8F
[2] R4-000991, "Proposal for definitions, test tolerances and way forward in TS25.141", Measurement Uncertainty AdHoc.
[3] R4-000419, "Proposal on Measurement Uncertainty", ARIB.
[4] "Ordinance for Regulating Radio Equipment of Japan", The Ministry of Posts and Telecommunications (MPT)

Annex

Table 1 Test Tolerances for conformance test of UE in TS34.121

Clause	Item	Items Under regulation of Japan	Items under conformance test by TELEC
Emission Requirements			
5.9	Spectrum Emission Mask		
5.10	ACLR	X	X
5.11	(Tx) Spurious Emissions	X	X
6.8	Rx Spurious Emissions	X	X
Other emission requirements			
5.8	Occupied Bandwidth	X	X
5.12	Transmit Intermodulation		
Frequency requirement			
5.3	Frequency error	X	X
Power accuracy requirements			
5.2	Maximum output power	X	X
5.4.1	Open Loop Power Control in the Uplink	Note 2	
5.4.2	Inner Loop Power Control in the Uplink	Note 2	
5.4.3	Minimum Output Power		
5.4.4	Out of sync handling of output power		
5.5.1	Transmit OFF Power	X	
5.5.2	Transmit ON/IFF Time mask		
5.6	Change of TFC		
5.7	Power setting in uplink compressed mode		
Receiver performance			
6.2	Receiver Sensitivity	X	
6.3	Maximum Input Level		
7	Performance Requirements		
Receiver immunity to strong interferers			
6.4	Adjacent Channel Selectivity	X	
6.5	Blocking Characteristics	Note 3	
6.6	Spurious Response	X	
6.7	Intermodulation Characteristics	X	
Other requirements			
5.13.1	Error Vector Magnitude	Note 4	
5.13.2	Peak code domain error	Note 4	

Note1: “X” denotes that regulation of Japan or TELEC specifies the corresponding values.
Note2: This shall be automatically controlled to be the bare minimum. Corresponding values are not specified.
Note3: Defined as spurious response.
Note4: Defined as modulation accuracy.
Note5: TELEC currently specifies that test tolerance (TT) equal to 0 will be applied.

Table 2 Test Tolerances for conformance test of BS in TS25.141

Clause	Item		Items Under regulation of Japan	Items under conformance test by TELEC
Emission Requirements				
6.5.2.2	ACLR		X	X
6.5.2.1	Spectrum Emission Mask			
6.5.3	(Tx) Spurious emissions		X	X
7.7	Rx Spurious emissions		X	X
Other emission requirements				
6.5.1	Occupied bandwidth		X	X
6.6	Transmit intermodulation		X	X
Frequency requirement				
6.3	Frequency error		X	X
Power accuracy requirements				
6.2.1	Base station maximum output power		X	X
6.2.2	CPICH power accuracy			
6.4.2	Power control steps	Relative 1dB step	Note 2	
		Avg. in 10 steps	Note 2	
6.4.3	Power ctrl dynamic range	At max./min. power	Note 2	
		25 dB relative power	Note 2	
6.4.4	Total power dynamic range	Total power	Note 2	
		At 25dB relative power	Note 2	
Receiver performance				
7.2	Receiver sensitivity		X	
8	Performance requirement			
Receiver immunity to strong interferers				
7.4	Adjacent Channel Selectivity		X	
7.5	Blocking characteristics		Note 3	
7.6	Intermodulation characteristics		X	
Other requirements				
6.7.1	Error vector magnitude		Note 4	
6.7.2	Peak code Domain error		Note 4	
7.3	Rx dynamic range			
7.8	Verification of BER calculation			

Note1: "X" denotes that regulation of Japan or TELEC specifies the corresponding values.
Note2: This shall be automatically controlled to be the bare minimum. Corresponding values are not specified.
Note3: Defined as spurious response.
Note4: Defined as modulation accuracy.
Note5: TELEC currently specifies that test tolerance (TT) equal to 0 will be applied.