

Merge proposal for 3 GPP TSG RAN S1.24: Physical Layer Procedures

Source: Siemens

1. Introduction

The current descriptions of the TDD mode in ARIB and ETSI documentation are different in many respects. However, a merge proposal has been made to the TDD adhoc with a solution for most of these differences. This document is based on the a. m. merge proposal and the results of adhoc #1 on TDD. It presents the necessary text changes for S1.24 TDD-Physical Layer Procedures.

2. Text Proposal for S1.24

The following table summarizes the change proposals based on S1.24 version 1.0.0.. For each chapter of S1.24 information is provided about current ARIB and ETSI contents, as well as a proposal for a merged solution and a brief explanation for it.

The entries in bold letters highlight cases, where there are changes compared to the current S1.24 v0.0.1.

	ETSI	ARIB	Merge proposal
6.2 Synchronisation			
6.2.1 Synchronisation of TDD NodeBs	Frame synchr. of cells	No text	ETSI Similar requirements ETSI/ARIB
6.2.2 Synchronisation of ODMA Relays		No text	ETSI
6.3 Channel Allocation	DCA description	No text (No concept of DCA)	ETSI
6.3.1 Resource allocation to cells (slow DCA)			
6.3.2. Resource allocation to bearer services (fast DCA)			
6.3.3 Resource allocation for ODMA			
6.4 Power Control	General text with basic parameters	Detailed description for up- and downlink, based on ARIB channel structure	Keep both versions in brackets until details are decided. Basic parameters are the same
6.4.1 ODMA power Control		No text	ETSI
6.5 Timing Advance		No text	ETSI
6.6 Synchronisation and Cell Search Procedures	Cell search based on sync. Channel	Cell search based on perch channel	Length 256 primary and sec. Sync. Sequences, SF<=16, tgap, toff FFS: CCCH pointing
6.7 ODMA Relay Probing		No text	ETSI
6.7.1 Initial Mode Probing			
6.7.2 Idle Mode Probing			
6.7.3 Active Mode Probing			
6.8 Idling Procedure	No text	Reference to FDD only	Chapter is retained, but details FFS. The structure of the TDD paging channel is not defined yet and differences between FDD and TDD are possible.
6.9 Handover	No text	Description of tree types: DHO, HHO and IFHO(including slotted mode). Complete text was moved to S1.22 and S1.25	Chapter is retained, but details FFS.
6. 10 DTX of RadioFrames	No text	Details for DTX of Radio Frames	Chapter is retained, but details FFS. The ARIB description is based on the ARIB channel structure, which is different to the ETSI one.
6.10.1 Transmit Stop Control			
6.10.2 Transmission Resumption Control			
6.11 Encryption Control	No text	Reference to FDD only	Delete chapter No text available for FDD
6.12 Forward Link Transmit Diversity	No text	Description of STD and PTD	Modify text: SDT will be kept, but diversity scheme for common channels is FFS