Agenda Item: **8.4**

Source: **CWTS**

To: **TSG RAN**

Title: **Work item description for low chip rate TDD option**

Document for: **Approval**

Work Item Description

Title

Physical layer of low chip rate TDD option

Intended Output

Modification of the specifications concerning the low chip rate TDD option.

- For WG1:

TS	25.201	Physical layer – General description
TS	25.221	Physical channels and mapping of transport channels onto physical channels (TDD)
TS	25.222	Multiplexing and channel coding (TDD)
TS	25.223	Spreading and modulation (TDD)
TS	25.224	TDD; physical layer procedures
TS	25.225	Physical layer; measurements

- For WG2:

TS	25.301	Radio Interface Protocol Architecture
TS	25.302	Services Provided by the physical layer
TS	25.303	UE functions and inter-layer procedures in connected mode
TS	25.304	UE procedure in idle mode
TS	25.305	Stage 2 Functional Specification of Location Services in UTRAN
TS	25.321	MAC protocol specification
TS	25.322	RLC protocol specification
TS	25.323	PDCP Protocol specification
TS	25.324	Broadcast/Multicast Control BMC
TS	25.331	RRC protocol specification
TR	25.921	Guidelines and Principles for protocol description and error handling
TR	25.922	Radio Resource Management Strategies
TR	25.924	Opportunity Driven Multiple Access (ODMA)
TR	25.925	Radio Interface for Broadcast/Multicast Services

- For WG3:

TS	25.402	Synchronisation in UTRAN Stage 2
TS	25.423	UTRAN Iur interface RNSAP signalling
TS	25.433	UTRAN Iub interface NBAP signalling

- For WG4:

TS	25.102	UE Radio Transmossion and Reception
TS	25.105	BTS Radio Transmission and Reception
TS	25.123	RF parameters in support of RRM
TS	25.142	Base station conformance testing(TDD)
TR	25.942	RF system scenarios

Impact on Other Technical Specifications and Technical Reports

The other expect impact on technical specifications and technical reports will be possible for:

TS	34.122	Terminal Conformance Specification, Radio Transmission and Reception
TS	34.123	Mobile Station (MS) Conformance test

Technical Scope

In Release 2000 work plan, the integration of the low chip rate TDD option is included. The integration work will enable the low chip rate TDD mode with it's specific properties. And this work will affect the specifications for physical layer, higher layers, Iur interface and also the RF specifications as well. The technical scope for each TSG RAN Working Group is as following:

- For WG1:
  The purpose of this work item is to confirm the tasks to be done in physical layer group (working group 1) for low chip rate option for Release 2000.

  The features and properties related involved in physical layer of low chip rate option will be:
  - The frame structure and the burst structure
  - Channel description and mapping
  - Modulation and spreading
  - Channel coding and multiplexing
  - Physical layer procedures
  - Measurements by physical layer

- For WG2:
  In working group 2, the work has begun, which means that in 3GPP technical specifications, some extensions and Add-Ons for low chip rate option have been discussed and adopted. This work will go on in Release 2000 for the integration of low chip rate option. In addition, two documents concerning the Location and packet data services are also introduced for further study.

- For WG3:
  Due to the adoption of smart antenna technology, there may need some additional messages in Iur and Iub interface signalling for low chip rate TDD option. Also for adoption of baton hand over, the signalling of the Iur and Iub interface is affected.

- For WG4:
  The main tasks of the technique specification for radio transmission and reception in low chip rate are as follows:
  - The system performance requirements supporting low chip rate services
  - The Rx characteristics requirement
  - The Transmitter characteristics requirement
  - The frequency bands and channel arrangements

Impact on Other 3GPP work items

None

Schedule of Tasks to be performed.

Task	Planned Start	Planned Finish
Create new TR on low chip rate TDD physical layer	01/2000	05/2000
RAN#8 decide whether new specification required	06/2000	06/2000
Drafting new specifications and CRs	06/2000	09/2000
Possible remaining corrections and clarifications	09/2000	12/2000

Note: * These dates are a estimation at present

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