

ICS 33.060
CCS M 36

YD

**INDUSTRY STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

YD/T 2741-2014

**Technical Specification for Uu-T Interface of LTE based
Broadband Trunking Communication (B-Trunc) System (Phase
1)**

基于LTE技术的宽带集群通信(B-Trunc)系统接口技术要求（第一阶段）空中接口
(English Translation)

Issued on: October 14, 2014

Implemented on: October 14, 2014

**Issued by: Ministry of Industry and Information Technology of the
People's Republic of China**

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1 Scope

The present document specifies the physical layer, layer 2, and layer 3 protocols for interface of LTE based broadband trunking communication (B-TrunC) system (Phase 1).

The present document applies to UEs and eNodeBs of LTE based broadband trunking communication (B-TrunC) system (Phase 1).

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the dated version applies to this document. For undated references, the latest edition (including all amendments) applies to this document.

YD/T 2560.1-2013, TD-LTE digital cellular mobile telecommunication network technical requirement for Uu interface physical layer (Phase 1) Part 1.General

YD/T 2560.2-2013, TD-LTE digital cellular mobile telecommunication network technical requirement for Uu interface physical layer (Phase 1) Part 2.Physical channel and modulation

YD/T 2560.3-2013, TD-LTE digital cellular mobile telecommunication network technical requirement for Uu interface physical layer (Phase 1) Part 3.

Multiplexing and channel coding

YD/T 2560.4-2013, TD-LTE digital cellular mobile telecommunication network technical requirement for Uu interface physical layer (Phase 1) Part 4.Physical layer procedure

YD/T 2560.5-2013, TD-LTE digital cellular mobile telecommunication network technical requirement for Uu interface physical layer (Phase 1) Part 5.Physical layer measurement

YD/T 2561.1-2013, TD-LTE digital cellular mobile telecommunication network technical requirement for Uu interface layer two (Phase 1) Part 1.MAC protocol

YD/T 2561.2-2013, TD-LTE digital cellular mobile telecommunication network technical requirement for Uu interface layer two (Phase 1) Part 2.RLC protocol

YD/T 2561.3-2013, TD-LTE digital cellular mobile telecommunication network technical requirement for Uu interface layer two (Phase 1) Part 3.PDCP protocol

YD/T 2562.1-2013, TD-LTE digital cellular mobile telecommunication network technical requirement for Uu interface layer three (Phase 1) Part 1.RRC protocol

YD/T 2562.2-2013, TD-LTE digital cellular mobile telecommunication network technical requirement for Uu interface layer three (Phase 1) Part 2.UE procedures in idle mode

3 Abbreviated terms

For the purposes of this document, the following abbreviated terms apply.

BSR Buffer Status Report

CQI Channel Quality Indication

CRC Cyclic Redundancy Check

DL-SCH Downlink Shared Channel eNode B Evolved NodeB

E-UTRAN Evolved UTRAN

G-RNTI Group-Radio Network Temporary Identifier

HARQ Hybrid Automatic Repeat Request

LCID Logical Channel ID

LTE Long Time Evolution

MAC Medium Access Control

NAS Non-Access Stratum

PBCH Physical Broadcast Channel

PCH Paging Channel

PCFICH Physical Control Format Indicator Channel

PDCCH Physical Downlink Control Channel

PDCP Packet Data Convergence Protocol

PDSCH Physical Downlink Shared Channel

PHICH Physical Hybrid ARQ Indicator Channel

PMCH Physical Multicast Channel

PMI Precoding Matrix Indicator

PRACH Physical Random Access Channel

PUCCH Physical Uplink Control Channel

PUSCH Physical Uplink Shared Channel

RI Rank Indication

RLC Radio Link Control

RNTI Radio Network Temporary Identifier

RRC Radio Resource Control

TCCH Trunking Control Channel

TDD Time Division Duplex

TDRB Trunking Data Radio Bearer

TGID Trunking Group Identification

TPCCH Trunking Paging Control Channel

TPCH Trunking Paging Channel

TP-RNTI Trunking Paging-Radio Network Temporary Identifier

TSRB Trunking Signalling Radio Bearer

TTCH Trunking Traffic Channel

4 Physical layer. General description

The physical layer process for point-to-point services (e.g. individual calls) of broadband trunking communication (B-TrunC) system is specified in YD/T 2560.1-2013.

Only the physical layer process for point-to-multipoint services is defined in the present document.

When the trunking function is supported, the definition of physical channels, modulation and channel coding scheme are specified in YD/T 2560.1-2013.

The following downlink physical channels of B-TrunC are defined.

- Physical Downlink Shared Channel, PDSCH;
- Physical Downlink Control Channel, PDCCH;
- Physical Broadcast Channel, PBCH;
- Physical Control Format Indicator Channel, PCFICH;
- Physical Hybrid ARQ Indicator Channel, PHICH.