IMT-2000 DS-CDMA and TDD-CDMA System 標準規格及び技術資料の改定の概要

1　改定理由

3GPP TSG 第 46 回（平成 21 年 12 月中華人民共和国・三亜開催）会合において、リリース 99、リリース 4、リリース 5、リリース 6、リリース 7、リリース 8 及びリリース 9 の仕様について追加又は改定が承認され、特にリリース 9 の仕様については仕様凍結が採択された。

このため、第 75 回規格会議(平成 21 年 12 月開催)において承認された ARIB STD-T63/TR-T12 Ver.7.40 に対して、上記のリリース 99 からリリース 8 までの仕様に加え、3GPP TSG 第 46 回会合までに承認されたリリース 9 を含めた仕様の追加又は修正を反映するための改定を行い、それぞれ ARIB STD-T63 Ver.8.00 及び TR-T12 Ver.8.00 とする。

2　改定内容（Ver.7.40 → Ver.8.00）

（ア）リリース 99
- ①　STD-T63 について　追加：　0［ 1］件、 修正：　1［ 0］件
- ②　TR-T12 について　　追加：　0［ 0］件、 修正：　0［ 0］件

（イ）リリース 4
- ①　STD-T63 について　追加：　0［ 2］件、 修正：　2［ 2］件
- ②　TR-T12 について　　追加：　0［ 0］件、 修正：　0［ 0］件

（ウ）リリース 5
- ①　STD-T63 について　追加：　0［ 1］件、 修正：　2［ 4］件
- ②　TR-T12 について　　追加：　0［ 0］件、 修正：　0［ 0］件

（エ）リリース 6
- ①　STD-T63 について　追加：　0［ 1］件、 修正：　2［ 8］件
- ②　TR-T12 について　　追加：　0［ 0］件、 修正：　0［ 0］件

（オ）リリース 7
- ①　STD-T63 について　追加：　0［ 1］件、 修正：27［38］件
- ②　TR-T12 について　　追加：　0［ 0］件、 修正：　0［ 0］件

（カ）リリース 8
- ①　STD-T63 について　追加：　0［ 4］件、 修正：94［101］件
- ②　TR-T12 について　　追加：　0［ 3］件、 修正：　2［　2］件

（キ）リリース 9
- ①　STD-T63 について　追加：　255 件
- ②　TR-T12 について　　追加：　 62 件

上記［ ］内は前回 Ver.7.40 への改定時の件数。

改定内容の詳細は、STD-T63 については、別紙１を参照。TR-T12 については、別紙２を参照。

３　改定のポイント

(ア)リリース9仕様のトランスポーズ開始

リリース9の仕様は、LTE技術仕様であるリリース8の仕様に、新規機能を追加するものである。これまで本標準規格には、3GPP規格のリリース99からリリース8までの仕様についてトランスポーズしているが、21年12月に開催された3GPP TSG 第46回会合においてリリース9の仕様凍結が採択されたことから、当会合において承認されたリリース9の仕様から、ARIB標準規格に反映することとし、本標準規格の版をVer.8.00と改める。

本標準規格におけるリリース9の仕様は、3GPP規格のうちARIB規格として相応しい技術仕様・技術資料のトランスポーズの他に、下記の日本国内での運用に関する技術仕様・技術資料を追加したものである。

ARIB STD-T63-25.A01 9.0.0 : The Low Power Repeaters for DS-CDMA

ARIB TR-T12-27.A01 9.0.0 : Report on external interface connector

ARIB TR-T12-27.A02 9.0.0 : MA - TA interface description

(イ)日本における800MHz帯LTE技術基準の反映

日本における800MHz帯LTEの技術基準について、3GPP仕様化が完了した。

ARIB STD-T63-36.101, ARIB STD-T63-25.133, ARIB STD-T63-36.104,

ARIB STD-T63-36.141

(ウ)新しく追加された主な技術仕様・技術資料

今回リリース9には多くのリリース8仕様の繰り込みがあったが、リリース9として新規に追加された仕様は、主に下記の通りである。

○Home Node B 関連

ARIB STD-T63-20.220 9.0.0 : Service requirements for Home Node B and Home eNode B

ARIB STD-T63-33.320 9.0.0 : Security of Home Node B / Home evolved Node B

○Location Services (LCS) 関連

ARIB TR-T12-25.907 9.1.0：Evaluation of path-loss technologies for Location Services

○Self-optimizing network (SON) 関連

ARIB TR-T12-36.902 9.0.0 : E-UTRAN; Self-configuring and self-optimizing network use cases and solutions

○LTE-Advanced関連

ARIB TR-T12-36.912 9.1.0 : Feasibility study for Further Advancements for E-UTRA

4　電波法関連規則に関する事項の確認について

今回の追加・修正について、電波法・関連規則等との関係を調査した結果、問題ないことを確認した。

以上

(Annex 38)

3GPP ARIB Change history List of Standards Ver. 8.00 **26 April 2010**

1. Release 99

1.1. Added Standards

None

1.2. Revised Standards

Revised Standard Number	Version at ARIB STD-T63 Ver.8.00	Version at ARIB STD-T63 Ver.7.40	3GPP WG	Title	Change Summary
ARIB STD-T63-21.101	3.18.0	3.17.0	SP	Technical Specifications and Technical Reports for a UTRAN-based 3GPP system	Corrections to list of specifications

2. Release 4

2.1. Added Standards

None

2.2. Revised Standards

Revised Standard Number	Version at ARIB STD-T63 Ver.8.00	Version at ARIB STD-T63 Ver.7.40	3GPP WG	Title	Change Summary
ARIB STD-T63-21.101	4.15.0	4.14.0	SP	Technical Specifications and Technical Reports for a UTRAN-based 3GPP system	Correction to list of specs
ARIB STD-T63-25.307	4.15.0	4.14.0	R2	Requirements on UE supporting a release-independent frequency band	Introduction of band XXI

3. Release 5

3.1. Added Standards

None

3.2. Revised Standards

Revised Standard Number	Version at ARIB STD-T63 Ver.8.00	Version at ARIB STD-T63 Ver.7.40	3GPP WG	Title	Change Summary
ARIB STD-T63-21.101	5.14.0	5.13.0	SP	Technical Specifications and Technical Reports for a UTRAN-based 3GPP system	Corrections to list of specifications
ARIB STD-T63-25.307	5.14.0	5.13.0	R2	Requirements on UE supporting a release-independent frequency band	Introduction of band XXI

4. Release 6

4.1. Added Standards

None

4.2. Revised Standards

Revised Standard Number	Version at ARIB STD-T63 Ver.8.00	Version at ARIB STD-T63 Ver.7.40	3GPP WG	Title	Change Summary
ARIB STD-T63-21.101	6.10.0	6.9.0	SP	Technical Specifications and Technical Reports for a UTRAN-based 3GPP system	Correction to list of specifications
ARIB STD-T63-25.307	6.11.0	6.10.0	R2	Requirements on UE supporting a release-independent frequency band	Introduction of band XXI

5. Release 7

5.1. Added Standards

None

5. 2. Revised Standards

Revised Standard Number	Version at ARIB STD-T63 Ver.8.00	Version at ARIB STD-T63 Ver.7.40	3GPP WG	Title	Change Summary
ARIB STD-T63-21.101	7.5.0	7.4.0	SP	Technical Specifications and Technical Reports for a UTRAN-based 3GPP system	Corrections to list of specifications
ARIB STD-T63-21.111	7.2.0	7.1.0	C6	USIM and IC card requirements	・Reference update
ARIB STD-T63-23.203	7.12.0	7.11.0	S2	Policy and charging control architecture	It is clarified in the GPRS specific Annex that the AF instruction to report changes of the IP-CAN bearer level information Type of IP-CAN shall also result in a reporting of RAT type changes. Furthermore, statements about the notification about the signalling path status have been generalized to include the notification about other IP-CAN bearer level events as well.

Revised Standard Number	Version at ARIB STD-T63 Ver.8.00	Version at ARIB STD-T63 Ver.7.40	3GPP WG	Title	Change Summary
ARIB STD-T63-23.228	7.16.0	7.15.0	S2	IP Multimedia Subsystem(IMS); Stage 2	Reference to draft-ietf-mmusic-ice-18 updated to draft-ietf-mmusic-ice-19 (draft still in RC Ed Queue). Reference to draft-ietf-behave-turn-04 updated to draft-ietf-behave-turn-16 (draft still in RC Ed Queue). Reference to draft-ietf-behave-rfc3489bis-04 repalced by RFC 5389. Reference to draft-ietf-sip-outbound-13 replaced by RFC 5626. Reference to draft-ietf-sip-gruu-15 replaced by RFC 5627. draft-ietf-sipping-gruu-reg-event-09 replaced by RFC 5628. Various typos and formatting fixed.
ARIB STD-T63-25.101	7.17.0	7.16.0	R4	UE Radio transmission and reception (FDD)	Changing the test-parameters so that the HS-SCCH ID for the UE under test is transmitted every 4th subframe instead of every sub-frame, and clarification of HS-PDSCH transmitted without re-transmissions were made.
ARIB STD-T63-25.102	7.16.0	7.15.0	R4	UE Radio transmission and reception (TDD)	New requirements and FRC for HSUPA feature were introduced.
ARIB STD-T63-25.105	7.13.0	7.12.0	R4	Base Station (BS) radio transmission and reception (TDD)	Correction of the code rate of E-DCH FRCs for 1.28Mcps TDD was made.
ARIB STD-T63-25.123	7.10.0	7.9.0	R4	Requirements for support of radio resource management (TDD)	The number of additional TDD carriers monitored in CELL-FACH was corrected to 8 to ensure the consistency to Idle and CELL-DCH.
ARIB STD-T63-25.141	7.15.0	7.14.0	R4	Base Station (BS) conformance testing (FDD)	Correction of test set-up and update for “Time alignment error in Tx diversity and MIMO transmission” were made.
ARIB STD-T63-25.142	7.13.0	7.12.0	R4	Base station (BS) conformance testing (TDD)	Correction of the code rate of E-DCH FRCs for 1.28Mcps TDD and the figure number for E-DCH FRC1 A.12 were made.
ARIB STD-T63-25.211	7.9.0	7.8.0	R1	Physical channels and mapping of transport channels onto physical channels (FDD)	Clarify MIMO phase references.

Revised Standard Number	Version at ARIB STD-T63 Ver.8.00	Version at ARIB STD-T63 Ver.7.40	3GPP WG	Title	Change Summary
ARIB STD-T63-25.213	7.7.0	7.6.0	R1	Spreading and modulation (FDD)	Clarify the quantization of E-DPDCH power offset without E-DPCCH boosting.
ARIB STD-T63-25.214	7.14.0	7.13.0	R1	Physical layer procedures (FDD)	Clarify HS-SCCH monitoring when 64QAM is configured. Clarify the timing for the CQI nominal timer and CQI DTX TIMER.
ARIB STD-T63-25.302	7.8.0	7.7.0	R2	Services provided by the physical layer	Updates to Rel-7 HSDPA MIMO for FDD
ARIB STD-T63-25.307	7.7.0	7.6.0	R2	Requirements on UE supporting a release-independent frequency band	Introduction of band XXI
ARIB STD-T63-25.319	7.8.0	7.7.0	R2	Enhanced uplink; Overall description; Stage 2	Correction on SI sent mechanism for 1.28Mcps TDD
ARIB STD-T63-25.321	7.15.0	7.14.0	R2	MAC protocol specification	Clarification of the transmission power of SI-only MAC-e PDU for 1.28Mcps TDD TSN or SI field presences in case of consecutive BCCH/PCCH re-ordering PDUs Clarification for scheduling information reporting for 1.28Mcps TDD Corrections to MAC-ehs reset
ARIB STD-T63-25.423	7.15.0	7.14.0	R3	UTRAN Iur interface RNSAP signalling	Correction for the Cause value mismatch between Rel7 and Rel8/Rel9
ARIB STD-T63-25.433	7.15.1	7.14.0	R3	UTRAN Iub interface NBAP signalling	Correction to ASN.1 for MiMO Power offset
ARIB STD-T63-31.101	7.1.0	7.0.1	C6	UICC-Terminal Interface; Physical and Logical Characteristics	・Reference update
ARIB STD-T63-31.102	7.15.0	7.14.0	C6	Characteristics of the USIM Application	・Reference update
ARIB STD-T63-31.103	7.6.0	7.5.0	C6	Characteristics of the ISIM Application	・Reference update

Revised Standard Number	Version at ARIB STD-T63 Ver.8.00	Version at ARIB STD-T63 Ver.7.40	3GPP WG	Title	Change Summary
ARIB STD-T63-31.115	7.2.0	7.1.0	C6	Secured packet structure for (Universal) Subscriber Identity Module (U)SIM Toolkit applications	・References update
ARIB STD-T63-31.116	7.1.0	7.0.0	C6	Remote APDU Structure for (Universal) Subscriber Identity Module (U)SIM Toolkit applications	・References update
ARIB STD-T63-31.130	7.9.0	7.8.0	C6	(U)SIM Application Programming Interface (API); (U)SIM API for Java Card™	・References update
ARIB STD-T63-31.131	7.1.0	7.0.0	C6	C-language binding for (Universal) Subscriber Identity Module ((U)SIM) API	・References update
ARIB STD-T63-31.133	7.3.0	7.2.0	C6	IP Multimedia Services Identity Module (ISIM) Application Programming Interface (API); ISIM API for Java Card™	・References update

6. Release 8

6.1. Added Standards

None

6. 2. Revised Standards

Revised Standard Number	Version at ARIB STD-T63 Ver.8.00	Version at ARIB STD-T63 Ver.7.40	3GPP WG	Title	Change Summary
ARIB STD-T63-21.101	8.2.0	8.1.0	SP	Technical Specifications and Technical Reports for a UTRAN-based 3GPP system	Corrections to list of specifications
ARIB STD-T63-21.111	8.3.0	8.2.0	C6	USIM and IC card requirements	・Reference update
ARIB STD-T63-21.201	8.2.0	8.1.0	SP	Technical Specifications and Technical Reports relating to an Evolved Packet System (EPS) based 3GPP system	Correction to list of specifications
ARIB STD-T63-21.202	8.2.0	8.1.0	SP	Technical Specifications and Technical Reports relating to the Common IP Multimedia Subsystem (IMS)	Correction to list of specifications
ARIB STD-T63-22.101	8.14.0	8.13.0	S1	Service aspects; Service principles	Providing eCall indication to the PSAP Remove requirement for operator determined eCall call-back duration.
ARIB STD-T63-22.278	8.10.0	8.9.0	S1	Service requirements for the Evolved Packet System (EPS)	One active policy ruleset in ANDSF
ARIB STD-T63-23.038	8.3.0	8.2.0	C1	Alphabets and Language-specific information	Define the use of data coding scheme for the ETWS warning message

Revised Standard Number	Version at ARIB STD-T63 Ver.8.00	Version at ARIB STD-T63 Ver.7.40	3GPP WG	Title	Change Summary
ARIB STD-T63-23.041	8.5.0	8.4.0	C1	Technical Realization of Cell Broadcast Service (CBS)	Additional ETWS requirements for the BSC - CBC Cell Broadcast protocol Clarification on ETWS secondary notification Correction of duplicate detection in the UE
ARIB STD-T63-23.203	8.8.0	8.7.0	S2	Policy and charging control architecture	It is clarified that the AF instruction to report changes of the IP-CAN bearer level information Type of IP-CAN shall also result in a reporting of RAT type changes. Furthermore, statements about the notification about the signalling path status have been generalized to include the notification about other IP-CAN bearer level events as well. The limitation of having BCM over Gx only for 3GPP accesses is removed. Replace the first PCRF with PCEF in the last sentence of clause 6.1.4. - Reference to 23.060 is added as this is where the procedures for 2G/3G access is specified. - A new picture similar to the one in annex A.1 is included with the sole intention to show that it is the PDN-GW that contains the PCEF for 3GPP EPS. - It is clarified that IP-CAN type is EPS - It is clarified that PDN-GW maps QoS according to Appendix E in 23.401 when access to 2G/3G is via Gn/Gp and mobility to E-UTRAN is possible.

Revised Standard Number	Version at ARIB STD-T63 Ver.8.00	Version at ARIB STD-T63 Ver.7.40	3GPP WG	Title	Change Summary
ARIB STD-T63-23.228	8.11.0	8.10.0	S2	IP Multimedia Subsystem(IMS); Stage 2	Reference to draft-ietf-mmusic-ice-18 updated to draft-ietf-mmusic-ice-19 (draft still in RC Ed Queue). Reference to draft-ietf-behave-turn-04 updated to draft-ietf-behave-turn-16 (draft still in RC Ed Queue). Reference to draft-ietf-behave-rfc3489bis-04 repalced by RFC 5389. Reference to draft-ietf-sip-outbound-13 replaced by RFC 5626. Reference to draft-ietf-sip-gruu-15 replaced by RFC 5627. draft-ietf-sipping-gruu-reg-event-09 replaced by RFC 5628. Various typos and formatting fixed. In 4.3.3.2b it is explicitly stated that wildcarded Public User Identities are registered implicitly, but identities matching the wildcarded public identity set can be defined separately: those distinct Public User Identities can have other service profile than the wildcarded Public User Identity set, but must be in the same implicit registration set. Additional corrections: Missing Public User Identity definition added, Public User Identity capitalized throughout the specification.
ARIB STD-T63-23.236	8.1.0	8.0.0	S2	Intra-domain connection of Radio Access Network(RAN) nodes to multiple Core Network (CN) nodes	The usage of the 23.003 mapping is clarified as only applicable to LTE-Legacy RA/TA updating.
ARIB STD-T63-25.A01	8.1.0	8.0.0	R4	The Low Power Repeaters for DS-CDMA	Introduced the protection of E-UTRA BS and revised the editorial corrections.
ARIB STD-T63-25.101	8.9.0	8.8.0	R4	UE Radio transmission and reception (FDD)	With corresponding changes in V7.17.0, clarifications of chapter 9 were made. Modifications of the relevant requirements for Band XI were made to keep consistency with Rel-9 requirements.

Revised Standard Number	Version at ARIB STD-T63 Ver.8.00	Version at ARIB STD-T63 Ver.7.40	3GPP WG	Title	Change Summary
ARIB STD-T63-25.104	8.9.0	8.8.0	R4	Base Station (BS) radio transmission and reception (FDD)	Corrections on Additional spectrum emission limits, Blocking performance requirement and Timing alignment error definition were made. And Clarification of Testing case of Rx diversity, Tx diversity and MIMO was made. Protection of E-UTRA was introduced. And modifications of the relevant requirements for Band XI were made to keep consistency with Rel-9 requirements.
ARIB STD-T63-25.113	8.5.0	8.4.0	R4	Base station and Repeater electromagnetic compatibility (EMC)	Removal of the note 1 from table 3 in 7.1 was made to make conducted emission testing applicable if Radio unit contains the telecommunication port. Modifications of the relevant requirements for Band XI were made to keep consistency with Rel-9 requirements.
ARIB STD-T63-25.133	8.9.0	8.8.0	R4	Requirements for support of radio resource management (FDD)	Corrections to Enhanced Serving HS-DSCH cell change test case and Clarification of measurement requirements of secondary carrier for DC-HSDPA were made. Modifications of the relevant requirements for Band XI were made to keep consistency with Rel-9 requirements.
ARIB STD-T63-25.141	8.9.0	8.8.0	R4	Base Station (BS) conformance testing (FDD)	With corresponding changes in V7.15.0, correction of Spectrum emission limits and Timing alignment error were made. And clarification of the testing cases for MIMO, TX diversity and RX diversity were made. Modifications of the relevant requirements for Band XI were made to keep consistency with Rel-9 requirements.
ARIB STD-T63-25.211	8.6.0	8.5.0	R1	Physical channels and mapping of transport channels onto physical channels (FDD)	Clarify MIMO phase references. Clarify STTD configuration for dula-cell HSDPA.
ARIB STD-T63-25.213	8.5.0	8.4.0	R1	Spreading and modulation (FDD)	Clarify the quantization of E-DPDCH power offset without E-DPCCH boosting.
ARIB STD-T63-25.214	8.8.0	8.7.0	R1	Physical layer procedures (FDD)	Clarify HS-SCCH monitoring. Clarify the timing for the CQI nominal timer and CQI DTX TIMER.

Revised Standard Number	Version at ARIB STD-T63 Ver.8.00	Version at ARIB STD-T63 Ver.7.40	3GPP WG	Title	Change Summary
ARIB STD-T63-25.302	8.5.0	8.4.0	R2	Services provided by the physical layer	Updates to Rel-7 HSDPA MIMO for FDD
ARIB STD-T63-25.304	8.8.0	8.7.0	R2	UE Procedures in Idle Mode and Procedures for Cell Reselection in Connected Mode	Introduction of DC-HSDPA for FDD
ARIB STD-T63-25.306	8.9.0	8.8.0	R2	UE Radio Access capabilities	Making features “Absolute priority reselection to GERAN”, “Absolute priority reselection to UTRA inter-frequency” optional (Option1) Support for carrier-specific STTD configuration for DC-HSDPA
ARIB STD-T63-25.307	8.5.0	8.4.0	R2	Requirements on UE supporting a release-independent frequency band	Introduction of band XXI
ARIB STD-T63-25.319	8.8.0	8.7.0	R2	Enhanced uplink; Overall description; Stage 2	Correction on SI sent mechanism for 1.28Mcps TDD
ARIB STD-T63-25.321	8.8.0	8.7.0	R2	MAC protocol specification	Clarification of the transmission power of SI-only MAC-e PDU for 1.28Mcps TDD Clarification on when to include SI in MAC-i PDU Corrections to some figures in MAC specification TSN or SI field presences in case of consecutive BCCH/PCCH re-ordering PDUs Clarification for scheduling information reporting for 1.28Mcps TDD Corrections to MAC-ehs reset Editorial correction on E-TFC selection for TDD Clarification on Cell Reselection Indication procedure for 1.28 Mcps TDD Clarification on when to include SI in MAC-i PDU for 1.28Mcps TDD Revision necessary as not the latest version was uploaded. Difference to version 8.8.0: first parts of figures 4.2.4.1 and 4.2.4.6-1 removed and "/MAC-i" added to procedure 3 in Annex CA.
ARIB STD-T63-25.367	8.3.0	8.2.0	R2	Mobility Procedures for Home Node B; Overall description; Stage 2	Correction to definition of CSG cell Correction to the manual CSG ID selection description

Revised Standard Number	Version at ARIB STD-T63 Ver.8.00	Version at ARIB STD-T63 Ver.7.40	3GPP WG	Title	Change Summary
ARIB STD-T63-25.423	8.7.0	8.6.0	R3	UTRAN Iur interface RNSAP signalling	Correction of abnormal conditions for Dual cell HS-DSCH in RL Addition procedure Clarification of the meaning of BIT STRING type IEs for SPS operation for 1.28Mcps TDD MAC-e Reset Indicator for MAC-i Reset Further Corrections for DC-HSDPA Wrong ref in tabular STTD is cell specific in Dual-Cell HSDPA Correction on IE “E-AGCH Table Choice”
ARIB STD-T63-25.425	8.4.0	8.3.0	R3	UTRAN Iur interface user plane protocols for Common Transport Channel data streams	Correction on value range for Number of MAC-is SDU in frame Correction to the NodeB procedure when receiving uplink synchronization failure from physical layer for 1.28Mcp TDD
ARIB STD-T63-25.427	8.2.0	8.1.0	R3	UTRAN Iur and Iub interface user plane protocols for DCH data streams	Correction on value range for Number of MAC-is SDU in frame
ARIB STD-T63-25.433	8.7.1	8.6.0	R3	UTRAN Iub interface NBAP signalling	Correction to ASN.1 for MiMO Power offset Clarification of DPC mode configuration for common E-DCH Correction of an error in the HS-DSCH Common System Information LCR IE Clarification of Priority Queue ID for Ehanced CELL_FACH for 1.28Mcps TDD Further Corrections for DC-HSDPA Introduction of E-RNTI in RL Information in RL Setup Request Application of MAC-e Reset Indicator for MAC-i Reset Correction of abnormal conditions for Dual cell HS-DSCH in RL

Revised Standard Number	Version at ARIB STD-T63 Ver.8.00	Version at ARIB STD-T63 Ver.7.40	3GPP WG	Title	Change Summary
					Addition procedure Clarifiction of several IEs names for 1.28 Mcps TDD Correction of HARQ Memory Partitioning configuration in Enhanced Cell_FACH Operation for 1.28 Mcps TDD Correction on IE “E-AGCH Table Choice” Addition of ans.1 definition for the E-DCH Semi-Persistent Resource Reservation Indicator IE Correction on ASN.1 errors in IE Common E-DCH System Information Response LCR for 1.28Mcps TDD Correction on the SPS resource configuration for 1.28Mcps TDD STTD is cell specific in Dual-Cell HSDPA
ARIB STD-T63-25.435	8.4.0	8.3.0	R3	UTRAN Iub interface user plane protocols for Common Transport Channel data streams	Correction to the NodeB procedure when receiving uplink synchronization failure from physical layer for 1.28Mcp TDD Correction on the description of HS-DSCH DATA FRAME TYPE2 Silent Mode for Common E-DCH Correction on value range for Number of MAC-is SDU in frame Correction of the limitation to FACH indicator for 1.28Mcps TDD Clarification for eDRX Indication
ARIB STD-T63-25.446	8.1.0	8.0.0	R3	MBMS synchronisation protocol(SYNC)	Ignorance of Total Number Of Packet and Total Number Of Octet in case of Soft Combining and MBSFN Correction for SYNC Protocol

Revised Standard Number	Version at ARIB STD-T63 Ver.8.00	Version at ARIB STD-T63 Ver.7.40	3GPP WG	Title	Change Summary
ARIB STD-T63-25.467	8.4.0	8.3.0	R3	UTRAN architecture for 3G Home NodeB; Stage 2	Add assigned SCTP Port Number for RUA and HNBAP Clean up of 25.467 Removal of FFS's in the stage2 for HNB
ARIB STD T63-25.469	8.4.0	8.3.0	R3	UTRAN Iuh interface Home Node B Application Part (HNBAP) signalling	Correction to ASN.1 references Addition of cause value for Invalid UE identity
ARIB STD-T63-26.102	8.3.0	8.2.0	S4	Mandatory speech codec; Adaptive Multi-Rate (AMR) speech codec; Interface to Iu, Uu and Nb	Correction of payload field size for mapping of GSM FR on Nb interface.
ARIB-STD-T63-26.237	8.4.0	8.3.0	S4	IMS based PSS and MBMS User Service; Protocols	Clarification on IMS based PSS streaming, SIP Info for content switching, Clarification on Content Identifier in Session Initialization Procedure and Service Selection Information Update.
ARIB STD-T63-26.267	8.3.0	8.2.0	S4	AeCall data transfer; In-band modem solution; General description	Correction to text in clause 4.3.
ARIB STD-T63-27.007	8.10.0	8.9.0	C1	AT command set for 3G User Equipment (UE)	Correction of direction of data for +CPOS Correction of outstanding Editor's note on +WS46
ARIB STD-T63-31.101	8.1.0	8.0.0	C6	UICC-Terminal Interface; Physical and Logical Characteristics	・Reference update
ARIB STD-T63-31.102	8.8.0	8.7.0	C6	Characteristics of the USIM Application	・ Reference update ・ Correction of incorrect tag value ・ Correction of Allowed CSG list
ARIB STD-T63-31.103	8.2.0	8.1.0	C6	Characteristics of the ISIM Application	・Reference update

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ARIB STD-T63-31.115	8.1.0	8.0.0	C6	Secured packet structure for (Universal) Subscriber Identity Module (U)SIM Toolkit applications	・References update
ARIB STD-T63-31.116	8.1.0	8.0.0	C6	Remote APDU Structure for (Universal) Subscriber Identity Module (U)SIM Toolkit applications	・References update
ARIB STD-T63-31.120	8.1.0	8.0.0	C6	UICC-terminal interface; Physical, electrical and logical test specification	・References update
ARIB STD-T63-31.121	8.3.0	8.2.0	C6	UICC-terminal interface; Universal Subscriber Identity Module (USIM) application test specification	- Correction of EF UST in clause 4.4.1 - Definition of the UICC presence detection test when connected to E-UTRAN/EPC - Definition of ACL related test cases for E-UTRA - Editorial correction of the naming of RRCConnectionRequest - Update of CGS list tests
ARIB STD-T63-31.124	8.4.0	8.3.1	C6	Mobile Equipment (ME) conformance test specification; Universal Subscriber Interface Module Application Toolkit (USAT) conformance test specification	- Essential correction of 27.22.4.7.3 - Update of TS 31.124 for terminals supporting E-UTRAN - Introduction of Open Channel tests for E-UTRAN
ARIB STD-T63-31.130	8.3.0	8.2.0	C6	(U)SIM Application Programming Interface (API); (U)SIM API for Java Card™	・References update - Support of missing event EVENT_EVENT_DOWNLOAD_NETWORK_REJECTION - Support of missing constants in USAT Terminal Profile

Revised Standard Number	Version at ARIB STD-T63 Ver.8.00	Version at ARIB STD-T63 Ver.7.40	3GPP WG	Title	Change Summary
ARIB STD-T63-31.131	8.1.0	8.0.0	C6	C-language binding for (Universal) Subscriber Identity Module ((U)SIM) API	・References update
ARIB STD-T63-31.133	8.1.0	8.0.0	C6	IP Multimedia Services Identity Module (ISIM) Application Programming Interface (API); ISIM API for Java Card™	- References update
ARIB STD-T63-31.220	8.1.0	8.0.0	C6	Characteristics of the Contact Manager for 3GPP UICC applications	- References update
ARIB STD-T63-33.102	8.5.0	8.4.0	S3	3G security; Security architecture	Mandating integrity protection of reject messages that cause CSG list to be modified Replacing KDF definition with a reference
ARIB STD-T63-33.107	8.10.0	8.9.1	S3	3G security; Lawful interception architecture and functions	Correction on events names Restoring section header 9.4.5 Correction on PDP context modification event Correction on LI correlation for S4-SGSN
ARIB STD-T63-33.108	8.9.0	8.8.0	S3	3G security; Handover interface for Lawful Interception (LI)	Correction of misalignments for values of “initiator” parameter for EPS Missing TAU Failure Reason parameter mapping for MME interception Correction on LI correlation for S4-SGSN Correction on the length of RAI parameter in ASN.1 module for HI2 EPS

Revised Standard Number	Version at ARIB STD-T63 Ver.8.00	Version at ARIB STD-T63 Ver.7.40	3GPP WG	Title	Change Summary
ARIB STD-T63-33.203	8.8.0	8.7.0	S3	3G security; Access security for IP-based services	Removal of editor's note on draft-ietf-sip-outbound (Rel-8) Removal of editor's note on X.509 Certificate profile aligment Removing editor's notes in Annex P
ARIB STD-T63-33.220	8.8.0	8.7.0	S3	Generic Authentication Architecture (GAA); Generic bootstrapping architecture	KDF clarification
ARIB STD-T63-33.401	8.6.0	8.5.0	S3	3GPP System Architecture Evolution (SAE); Security architecture	selected algorithms forwarding to the target eNB in intra LTE handover Correction of protection of the NAS security mode reject message (Rel-8) EPS NAS security context storage key replacement clarification Clarifications to context handling in idle mode procedures Clarifications to context handling in IRAT handover Correction to store security context to ME Corrections to state transition Not resetting STARTPS to 0 in HO from EUTRAN to UTRAN and not resetting STARTCS to 0 in SRVCC Corrections for 33.401 Concurrency of inter-MME handovers and NAS downlink messages Partial native EPS security context NAS COUNT value Alignment of Context modifications behaviour Clarification of NAS integrity protection activation

Revised Standard Number	Version at ARIB STD-T63 Ver.8.00	Version at ARIB STD-T63 Ver.7.40	3GPP WG	Title	Change Summary
					Nas-token and key calculation at idle mobility from E-UTRAN to UTRAN/GERAN Clarifying the calculation of KeNB when there is more than one NAS SMC Behaviour for lost NAS SMC message when creating mapped context Clarification of Authentication Data and transition to EMM-DEREGISTERED and Correction of text on authentication data transfer Key-Chaining issue in I-RAT handover to UTRAN NCC Initialization in eNB at the Initial Connection Setup Correction of ECM states Replacing KDF definition with a reference Correcting A.11 NAS COUNT handling during IRAT handover Concurrency of inter-RAT handovers and NAS SMC procedure
ARIB STD-T63-33.402	8.6.0	8.5.0	S3	3GPP System Architecture Evolution (SAE); Security aspects of non-3GPP accesses	Correction of CMIPv4 Key derivation and SPI calculation for WiMAX interworking Replacing KDF definition with a reference
ARIB STD-T63-34.108	8.9.0	8.8.0	R5	Common test environments for User Equipment (UE); Conformance testing	Additions/Updates related to TDD, HSPA,..etc. and some corrections.

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ARIB STD-T63-34.114	8.3.0	8.2.0	R5	User Equipment (UE) / Mobile Station (MS) Over The Air (OTA) antenna performance; Conformance testing	- Over The Air antenna performance: New informative Annex for Recommended performance (RP-091119)
ARIB STD-T63-34.121-1	8.9.0	8.8.0	R5	User Equipment (UE) conformance specification; Radio transmission and reception (FDD); Part 1:	Changes related to HSDPA, UTRA-EUTRA HO, ..etc.
ARIB STD-T63-34.121-2	8.9.0	8.8.0	R5	User Equipment (UE) conformance specification; Radio transmission and reception (FDD); Part 2: Implementation Conformance Statement (ICS)	- Updates to Applicability table corresponding to DC-HSDPA tests (RP-091124) - Addition of DC-HSDPA receiver tests into TS 34.121-2 (RP-091124)
ARIB STD-T63-34.123-1	8.9.0	8.8.0	R5	UE conformance specification; Part 1: Protocol conformance specification	Addition of new test cases for 64QAM+MIMO, TDD, eCall, Dual cell, ..etc. and many corrections.
ARIB STD-T63-34.123-2	8.9.0	8.8.0	R5	UE conformance specification; Part 2: ICS proforma specification	Changes related to 34.123-1 changes.
ARIB STD-T62-34.123-3	8.4.0	8.3.0	R5	User Equipment (UE) conformance specification; Part 3: Abstract test suites (ATSs)	Many ciphering test cases and CPC test cases are added. Also many corrections.
ARIB STD-T63-34.124	8.4.0	8.3.0	R4	Electromagnetic compatibility (EMC) requirements for Mobile terminals and ancillary equipment	Modifications of the relevant requirements for Band XI were made to keep consistency with Rel-9 requirements.
ARIB STD-T63-34.229-1	8.4.0	8.3.0	R5	Internet Protocol (IP) multimedia call control protocol based on Session Initiation Protocol (SIP) and Session Description Protocol (SDP); Part 1: Protocol conformance specification	Updating test cases.

Revised Standard Number	Version at ARIB STD-T63 Ver.8.00	Version at ARIB STD-T63 Ver.7.40	3GPP WG	Title	Change Summary
ARIB STD-T63-34.229-2	8.4.0	8.3.0	R5	Internet Protocol (IP) multimedia call control protocol based on Session Initiation Protocol (SIP) and Session Description Protocol (SDP); Part 2: Implementation Conformance Statement (ICS) specification	- Update applicability for test cases 14.1 and 14.2 (RP-091116) - Update applicability for test case 12.2 (RP-091118) - Update table A.12 (RP-091118)
ARIB STD-T63-34.229-3	8.2.0	8.1.0	R5	Internet Protocol (IP) multimedia call control protocol based on Session Initiation Protocol (SIP) and Session Description Protocol (SDP); Part 3: Abstract test suite (ATS)	- CR to 34.229-3 (prose) update to v820 (RP-091156)
ARIB STD-T63-36.101	8.8.0	8.7.0	R4	Evolved Universal Terrestrial Radio Access (E-UTRA); User Equipment (UE) radio transmission and reception	It was made to revise following items; - Test case numbering in TDD PDSCH performance test - Beamforming model for user-specfic reference signal - Redundancy sequences to PMI test - Throughput value correction at FRC for Maximum input level - Correction to the modulated E-UTRA interferer - OCNG using in receiver and performance tests - Miscellaneous corrections on CSI requirements - Rx diversity requirement - A-MPR notation in NS_07 - Single- and multi-PMI requirements - CQI reference measurement channel - Numbering of PDSCH (User-Specific Reference Symbols) Demodulation Tests - Numbering of PDCCH/PCFICH, PHICH, PBCH Demod Tests - Reference Measurement Channels in Annex A - RMC-s for Maximum input level test for low UE categories - UE-category for R.30 - Additional spurious emissions requirements of 1.4 MHz and 3 MHz channel bandwidths for Band 1 PHS protection - Measurement conditions of spurious emission requirements at the edge of spurious domain - Spurious emission table correction for TDD bands 33 and 38 - UTRA ACLR1 requirement definition for 1.4 and 3 MHz BW

Revised Standard Number	Version at ARIB STD-T63 Ver.8.00	Version at ARIB STD-T63 Ver.7.40	3GPP WG	Title	Change Summary
					completed - ACK/NACK feedback modes for TDD requirements - Power control exception - Relative power tolerance: special case for receiver tests - CSI reporting: test configuration for CQI fading requirements - FDD demodulation test cases The relevant requirements for Band 11
ARIB STD-T63-36.104	8.8.0	8.7.0	R4	Evolved Universal Terrestrial Radio Access (E-UTRA); Base Station (BS) radio transmission and reception	It was made to revise following items; - ICS requirement - eNB FDD EVM - Terminology for noise bandwidth - LTE operating band unwanted emissions - Multi-path fading propagation conditions reference - Spurious emissions limits for BS co-existed with another BS - PRACH False alarm probability - UL Timing Adjustment test - Frequency range of unwanted emissions requirements - Testing in case of Rx diversity, Tx diversity and MIMO - Blocking performance requirement for Band 17 The relevant requirements for Band 11
ARIB STD-T63-36.113	8.2.0	8.1.0	R4	Evolved Universal Terrestrial Radio Access (E-UTRA); Base Station (BS) and repeater Electro Magnetic Compatibility (EMC)	Removal of the note 1 from table7.1.1 was made to make conducted emission testing applicable if Radio unit contains the telecommunication port. Modifications of the relevant requirements for Band 11 were made to keep consistency with Rel-9 requirements.

Revised Standard Number	Version at ARIB STD-T63 Ver.8.00	Version at ARIB STD-T63 Ver.7.40	3GPP WG	Title	Change Summary
ARIB STD-T63-36.124	8.1.0	8.0.0	R4	Evolved Universal Terrestrial Radio Access (E-UTRA); Electromagnetic compatibility (EMC) requirements for mobile terminals and ancillary equipment	Modifications of the relevant requirements for Band 11 were made to keep consistency with Rel-9 requirements.
ARIB STD-T63-36.133	8.8.0	8.7.0	R4	Evolved Universal Terrestrial Radio Access (E-UTRA); Requirements for support of radio resource management	It was made to revise following items; - Defining requirements for UTRA TDD measurements for SON - Test case of E-UTRA TDD intra frequency cell reselection - Test case of E-UTRA TDD inter frequency cell reselection - E-UTRA TDD to UTRA FDD reselection test cases - Accuracy requirements for UTRAN FDD - cdma2000 HRPD measurement period - cdma2000 1x measurement period - E-UTRAN FDD - UTRAN FDD Cell Search in DRX Test Cases - Geometry factors for Intra freq Reselection Test Cases - RRM parameters for Bands 12, 14, 17 - PDSCH RMC-s - E-UTRAN TDD - UTRAN TDD cell search for SON - Cell Search Requirements for Intra-LTE Handover to Unknown Target Cell - UE UTRA TDD P-CCPCH RSCP measurement capability - Cell Timing Change Requirements for Event Triggered Reporting - Power Headroom Requirements - The time units for RRC Re-establishment test cases - Cell search test case in DRX to verify L3 filtering - ONCG Patterns The relevant requirements for Band 11

Revised Standard Number	Version at ARIB STD-T63 Ver.8.00	Version at ARIB STD-T63 Ver.7.40	3GPP WG	Title	Change Summary
ARIB STD-T63-36.141	8.5.0	8.4.0	R4	Evolved Universal Terrestrial Radio Access (E-UTRA); Base Station (BS) conformance testing	It was made to revise following items; - ICS requirement - The test method for blocking - EARFCN for band 33 and 34 - FRC A3-2 Coded block size - LTE operating band unwanted emissions - HARQ feedback clarification addition (Annex B) - Spurious emissions limits for BS co-existed with another BS - PRACH False alarm probability - UL Timing Adjustment test - Multi-path fading propagation conditions reference - Frequency range of unwanted emissions requirements - Testing in case of Rx diversity, Tx diversity and MIMO - Applicability of uncertainty for transmitter transient period The relevant requirements for Band 11
ARIB STD-T63-36.211	8.9.0	8.8.0	R1	Evolved Universal Terrestrial Radio Access (E-UTRA); Physical channels and modulation	Clarify the transmit condition for UE specific reference signals.
ARIB STD-T63-36.212	8.8.0	8.7.0	R1	Evolved Universal Terrestrial Radio Access (E-UTRA); Multiplexing and channel coding	Clarify bit widths of rank indication. Correct channel interleaver for PUSCH resource element mapping.
ARIB STD-T63-36.300	8.11.0	8.10.0	R2	Evolved Universal Terrestrial Radio Access (E-UTRA) and Evolved Universal Terrestrial Radio Access (E-UTRAN); Overall description; Stage 2	CR on the usage of Transparent Mode MAC ETWS correction to 36.300 Inclusion of INTER RAT HANDOVER INFO at HO from UTRAN to GERAN Correction on the precondition for cell reselection to HRPD Overload reduction In order delivery of the multiple NAS PDUs

Revised Standard Number	Version at ARIB STD-T63 Ver.8.00	Version at ARIB STD-T63 Ver.7.40	3GPP WG	Title	Change Summary
ARIB STD-T63-36.304	8.8.0	8.7.0	R2	Evolved Universal Terrestrial Radio Access (E-UTRA); User Equipment (UE) procedures in idle mode	Clarification on Parameters for Cell Selection Correction related to Location Registration in manual CSG ID selection procedure. Correction related to PLMN selection in manual CSG ID selection procedure.
ARIB STD-T63-36.314	8.3.0	8.2.0	R2	Evolved Universal Terrestrial Radio Access Network (E-UTRAN); Layer 2 - Measurements	CR on the PRB usage per traffic class taking multiple antenna transmission into account
ARIB STD-T63-36.321	8.8.0	8.7.0	R2	Evolved Universal Terrestrial Radio Access (E-UTRA); Medium Access Control (MAC) protocol specification	Clarification on BSR trigger RNTI for CCCH
ARIB STD-T63-36.331	8.8.0	8.7.0	R2	Evolved Universal Terrestrial Radio Access (E-UTRA); Radio Resource Control (RRC); Protocol specification	Alignment of srs-Bandwidth with 36.211 Clarification of preRegistrationZoneID/secondaryPreRegistrationZoneID Clarification on P-max Clarification on the definition of maxCellMeas Feature grouping bit for SRVCC handover Correction and completion of extension guidelines Clarification on coding of ETWS related IEs
ARIB STD-T63-36.412	8.6.0	8.5.0	R3	Evolved Universal Terrestrial Radio Access Network (E-UTRAN); S1 signalling transport	Specification of SCTP destination port number
ARIB STD-T63-36.413	8.8.0	8.7.0	R3	Evolved Universal Terrestrial Radio Access (E-UTRA) ; S1 Application Protocol (S1AP)	Correction of E-RAB Modify Correction of Transport Layer Address Missing reference and unclear handling of the CDMA2000 Sector ID
ARIB STD-T63-36.422	8.6.0	8.5.0	R3	Evolved Universal Terrestrial Radio Access Network (E-UTRAN); X2 signalling transport	Specification of SCTP destination port number

Revised Standard Number	Version at ARIB STD-T63 Ver.8.00	Version at ARIB STD-T63 Ver.7.40	3GPP WG	Title	Change Summary
ARIB STD-T63-36.423	8.8.0	8.7.0	R3	Evolved Universal Terrestrial Radio Access Network (E-UTRAN); X2 Application Protocol (X2AP)	Clarification on operational use of updated configuration data
ARIB STD-T63-36.508	8.4.0	8.3.0	R5	Evolved Universal Terrestrial Radio Access (E-UTRA) and Evolved Packet Core (EPC); Common test environments for User Equipment (UE) conformance testing	Changes for InterRAT related parameters and other updates & corrections.
ARIB STD-T63-36.509	8.4.0	8.3.0	R5	Evolved Universal Terrestrial Radio Access (E-UTRA); Special conformance testing function for User Equipment (UE)	- Clarification on encoding of DRB Identity in LB setup DRB IE (R5-096062) - IP control signalling in UE test mode (R5-096711)
ARIB STD-T63-36.521-1	8.4.0	8.3.0	R5	Evolved Universal Terrestrial Radio Access (E-UTRA); User Equipment (UE) conformance specification; Radio transmission and reception; Part 1: conformance testing	Most of changes are corrections or updates.
ARIB STD-T63-36.521-2	8.3.0	8.2.0	R5	Evolved Universal Terrestrial Radio Access (E-UTRA); User Equipment (UE) conformance specification; Radio transmission and reception; Part 2: Implementation Conformance Statement (ICS)	- Correction CR to 36.521-2: Applicability changes to update the Demodulation of PDSCH (FDD) tests based on the CR merge results from RAN5#44 (R5-095519) - Update of RRM Confomance test applicability for RLM in DRX test cases (R5-095778) - CR to 36.521-2: Applicability additions for new RRM (FDD) tests (R5-095841)
ARIB STD-T63-36.521-3	8.2.0	8.1.0	R5	Evolved Universal Terrestrial Radio Access (E-UTRA); User Equipment (UE) conformance specification; Radio transmission and reception; Part 3: Radio Resource Management (RRM) conformance testing	Addition of new test cases for handover/reselection (FDD-FDD, TDD-FDD, TDD-TDD, FDD-GSM, TDD-GSM). Many corrections.

Revised Standard Number	Version at ARIB STD-T63 Ver.8.00	Version at ARIB STD-T63 Ver.7.40	3GPP WG	Title	Change Summary
ARIB STD-T63-36.523-1	8.4.0	8.3.2	R5	Evolved Universal Terrestrial Radio Access (E-UTRA) and Evolved Universal Terrestrial Radio Access Network (E-UTRAN); User Equipment (UE) conformance specification; Part 1: Protocol conformance specification	A huge number of updates. (Addition, removal and corrections)
ARIB STD-T63-36.523-2	8.4.0	8.3.0	R5	Evolved Universal Terrestrial Radio Access (E-UTRA) and Evolved Universal Terrestrial Radio Access Network (E-UTRAN); User Equipment (UE) conformance specification; Part 2: ICS	Additions of applicability of new test cases.
ARIB STD-T63-36.523-3	8.1.0	8.0.0	R5	Evolved Universal Terrestrial Radio Access (E-UTRA) and Evolved Packet Core (EPC); User Equipment (UE) conformance specification; Part 3: Test suites	Addition of test cases of GCF WI81/WI82.

7. Release 9

7.1. Added Standards

Added Standard Number	Version at ARIB STD-T12 Ver.8.00		3GPP WG	Title	New Document Summary
ARIB STD-T63-21.111	9.0.0		C6	USIM and IC card requirements	Automatic upgrade from previous Release
ARIB STD-T63-22.001	9.0.0		S1	Principles of circuit telecommunication services supported by a Public Land Mobile Network (PLMN)	Automatic upgrade from previous Release
ARIB STD-T63-22.002	9.0.0		S1	Circuit Bearer Services Supported by a PLMN	Automatic upgrade from previous Release
ARIB STD-T63-22.003	9.0.0		S1	Circuit Teleservices supported by a Public Land Mobile Network (PLMN)	Automatic upgrade from previous Release
ARIB STD-T63-22.016	9.0.0		S1	International Mobile Equipment Identities (IMEI)	Automatic upgrade from previous Release
ARIB STD-T63-22.022	9.0.0		S3	Personalization of Mobile Equipment (ME) Mobile Functionality Specification	Automatic upgrade from previous Release
ARIB STD-T63-22.030	9.0.0		S1	Man-Machine Interface (MMI) of the User Equipment (UE)	Automatic upgrade from previous Release
ARIB STD-T63-22.031	9.0.0		S3	Fraud Information Gathering System (FIGS); Service description; Stage 1	Automatic upgrade from previous Release

Added Standard Number	Version at ARIB STD-T12 Ver.8.00		3GPP WG	Title	New Document Summary
ARIB STD-T63-22.032	9.0.0		S3	Immediate Service Termination (IST); Service description; Stage1	Automatic upgrade from previous Release
ARIB STD-T63-22.034	9.0.0		S1	High Speed Circuit Switched Data (HSCSD) ; Stage 1	Automatic upgrade from previous Release
ARIB STD-T63-22.038	9.0.0		S1	USIM Application Toolkit (USAT/SAT);Service descrption; Stage 1	Discovery of surrounding home (e)NodeB by UICC
ARIB STD-T63-22.053	9.0.0		S4	Tandem Free Operation(TFO);Service description;Stage1	Automatic upgrade from previous Release
ARIB STD-T63-22.057	9.0.0		S1	Mobile Execution Environment (MExE); Service descrption; Stage 1	Automatic upgrade from previous Release
ARIB STD-T63-22.067	9.0.0		S1	enhanced Multi-Level Precedence and Pre-emption service (eMLPP) ; Stage 1	Automatic upgrade from previous Release
ARIB STD-T63-22.071	9.0.0		S1	Location Services (LCS); Service description; Stage 1	Automatic upgrade from previous Release
ARIB STD-T63-22.076	9.0.0		S4	Noise Suppression for the AMR Codec; Service description; Stage 1	Automatic upgrade from previous Release
ARIB STD-T63-22.101	9.6.0		S1	Service aspects; Service principles	Providing eCall indication to the PSAP Remove requirement for operator determined eCall call-back duration. User data repository shall be possible to be shared among different PLMNs that have trusted relationships Use of GTT-IP for IMS emergency calls

Added Standard Number	Version at ARIB STD-T12 Ver.8.00		3GPP WG	Title	New Document Summary
ARIB STD-T63-22.105	9.0.0		S1	Services & Service capabilities	Aggregate Maximum Bit Rate (AMBR) for EPS, UMTS and 2G networks Requimements for IP Addressing Support and Dual stack PDP context
ARIB STD-T63-22.140	9.0.0		S1	Multimedia Messaging Service (MMS); Stage 1	Automatic upgrade from previous Release
ARIB STD-T63-22.141	9.0.0		S1	Presence service; Stage 1	Automatic upgrade from previous Release
ARIB STD-T63-22.142	9.1.0		S1	Value Added Services (VAS) for Short Message Service (SMS) requirements	Limiting the maximum number of times the SM is forwarded To prevent auto reply to auto reply loop Independent provisioning of VAS-SMS
ARIB STD-T63-22.146	9.0.0		S1	Multimedia Broadcast/Multicast Service (MBMS); Stage 1	Addition of the support of eMBMS in Rel-9
ARIB STD-T63-22.153	9.2.0		S1	Multimedia priority service	Correction to priority levels and networks Indication of MPS
ARIB STD-T63-22.174	9.0.0		S1	Push service; Stage 1	Automatic upgrade from previous Release
ARIB STD-T63-22.182	9.2.0		S1	Customized Alerting Tones (CAT) Requirements; Stage 1	Clarification on the interaction with CAT and OIR
ARIB STD-T63-22.183	9.1.0		S1	Customized Ringing Signal (CRS) requirements; Stage 1	CRS media components compatibility

Added Standard Number	Version at ARIB STD-T12 Ver.8.00		3GPP WG	Title	New Document Summary
ARIB STD-T63-22.220	9.3.0		S1	Service requirements for Home Node B (HNB) and Home eNode B (HeNB)	Contribution to Chapter 5.4.1 in 22.220 H(e)NB Hosting Party USIM management Removal of requirement for "Managed Remote Access" from Rel-9 Simplified CSG list handling
ARIB STD-T63-22.228	9.2.0		S1	Service requirements for the IP multimedia core network subsystem (IMS); Stage1	Correction of IUT requirement in Rel-9 Add the feature of completing dialed number to global form
ARIB STD-T63-22.233	9.0.0		S1	Transparent end-to-end packet-switched streaming service; Stage1	Automatic upgrade from previous Release
ARIB STD-T63-22.242	9.0.0		S1	Digital Rights Management (DRM); Stage 1	Automatic upgrade from previous Release
ARIB STD-T63-22.246	9.0.0		S1	Multimedia Broadcast/Multicast Service (MBMS) user services; Stage 1	Updating to also include E-UTRAN for MBMS
ARIB STD-T63-22.259	9.2.0		S1	Service requirements for Personal Network Management (PNM); Stage 1	ME support in Rel-9
ARIB STD-T63-22.268	9.2.1		S1	Public Warning System (PWS) requirements	Re-introduction of the figure in 6.1 which disappeared for some obscure reason
ARIB STD-T63-22.278	9.5.0		S1	Service requirements for the Evolved Packet System (EPS)	One active policy ruleset in ANDSF

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ARIB STD-T63-23.035	9.0.0		S3	Immediate Service Termination (IST); Stage2	Automatic upgrade from previous Release
ARIB STD-T63-23.038	9.1.1		C1	Alphabets and Language-specific information	Define the use of data coding scheme for the ETWS warning message Uniquely identify the I1 protocol in USSD Correction of a typo error in the change history table (wrong version number)
ARIB STD-T63-23.040	9.1.0		C1	Technical realization of Short Message Service (SMS)	Clarification of reset of UNRI and UNRR
ARIB STD-T63-23.041	9.2.0		C1	Technical Realization of Cell Broadcast Service (CBS)	Message IDs for the U.S. Commercial Mobile Alert System (CMAS) Message Identifiers for PWS CBS activation time for ETWS information Cell wide Geographical Scope (GS) code 00 Updates on references Resolution of editor's note Fixes for typographical errors Clarification on duplicate use of "immediate display" Updating of references to stage 1 document Additional ETWS requirements for the BSC - CBC Cell Broadcast protocol Clarification on ETWS secondary notification Correction of duplicate detection in the UE

Added Standard Number	Version at ARIB STD-T12 Ver.8.00		3GPP WG	Title	New Document Summary
ARIB STD-T63-23.042	9.0.0		C1	Compression algorithm for SMS	Automatic upgrade from previous Release
ARIB STD-T63-23.053	9.0.0		S4	Tandem Free Operation (TFO); Service description; Stage 2	Automatic upgrade from previous Release
ARIB STD-T63-23.057	9.0.0		S2	Mobile Execution Environment (MexE) Functional description Stage 2	Automatic upgrade from previous Release
ARIB STD-T63-23.107	9.0.0		S2	Quality of Service (QoS) concept and architecture	Automatic upgrade from previous Release
ARIB STD-T63-23.203	9.3.0		S2	Policy and charging control architecture	It is clarified that the AF instruction to report changes of the IP-CAN bearer level information Type of IP-CAN shall also result in a reporting of RAT type changes. Furthermore, statements about the notification about the signalling path status have been generalized to include the notification about other IP-CAN bearer level events as well. The limitation of having BCM over Gx only for 3GPP accesses is removed. Replace the first PCRF with PCEF in the last sentence of clause 6.1.4. - Reference to 23.060 is added as this is where the procedures for 2G/3G access is specified. - A new picture similar to the one in annex A.1 is included with the sole intention to show that it is the PDN-GW that contains the PCEF for 3GPP EPS. - It is clarified that IP-CAN type is 3GPP-EPS - It is clarified that PDN-GW maps QoS according to Appendix E in 23.401 when access to 2G/3G is via Gn/Gp and mobility to E-UTRAN is possible. NOTE: The difference from the Rel-8 version of the CR is that

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					since APN-AMBR is supported over GTPv1 in Rel9 this parameter does not require mapping and thus it is mentioned that the mapping is done only if the parameter is not received over Gn/Gp (i.e. the SGSN is Rel8 or older). The service data flow filter is explicitly allowed to specify data for service data flow detection in both the uplink and downlink directions. REV2: Changed one occurance of “service data flow filter” to “service data flow template”. REV 3: Inlcuded a note to explain when bidirectional filters should be used. Correct clause A.5.3.2.1 to state that the Default Bearer QoS and Subscribed APN-AMBR are provided by the BBERF. Move User CSG Information change triggers from table 6.1 of credit re-authorization triggers and table 6.4 of PCC related IP-CAN bearer and IP-CAN session related policy information to Annex A, GRPS IP-CAN and EPC separately.
ARIB STD-T63-23.204	9.0.0		S2	Support of Short Message Service (SMS) over generic 3GPP Internet Protocol (IP) access; Stage 2	Automatic upgrade from previous Release
ARIB STD-T63-23.207	9.0.0		S2	End to end quality of service (QoS) concept and architecture	Automatic upgrade from previous Release
ARIB STD-T63-23.228	9.2.0		S2	IP Multimedia Subsystem(IMS); Stage 2	Reference to draft-ietf-mmusic-ice-18 updated to draft-ietf-mmusic-ice-19 (draft still in RC Ed Queue). Reference to draft-ietf-behave-turn-04 updated to draft-ietf-behave-turn-16 (draft still in RC Ed Queue). Reference to draft-ietf-behave-rfc3489bis-04 repalced by RFC 5389. Reference to draft-ietf-sip-outbound-13 replaced by RFC 5626.

Added Standard Number	Version at ARIB STD-T12 Ver.8.00		3GPP WG	Title	New Document Summary
					Reference to draft-ietf-sip-gruu-15 replaced by RFC 5627. draft-ietf-sipping-gruu-reg-event-09 replaced by RFC 5628. Various typos and formatting fixed. In 4.3.3.2b it is explicitly stated that wildcarded Public User Identities are registered implicitly, but identities matching the wildcarded public identity set can be defined separately: those distinct Public User Identities can have other service profile than the wildcarded Public User Identity set. Being in the same Implicit Registration Set is not required as in Release 8, it assumes that protocol solution to transfer the subscriber data of the distinct Public User Identity to S-CSCF when the subscriber data of the matching wildcarded Public User Identity is transferred to S-CSCF. If no protocol solution is agreed, then the "same Implicit Registration Set" requirement is necessary to ensure that distinct Public User Identity will not receive the services of the wildcarded Public User Identity. Additional corrections: Missing Public User Identity definition added, Public User Identity capitalized throughout the specification. Extends Cr reference point with session control. The description of the procedures supported on Iq is aligned on CT4 decisions / specifications. A reference to TS 23.334 is added. Adding description that network needs to provide appropriate information to allow the UE binding of resource reservation to media of the SIP session which uses precondition. Adding description that the UE should use QoS assured sessions with care and for MTSI the UE shall only mark resource reservation as required for voice and video. Adding description that the PCRF ensures a dedicated bearer is used for the IMS media. Terminology in the reactive transcoding call flow description is generalized to remove unnecessary restrictions.

Added Standard Number	Version at ARIB STD-T12 Ver.8.00		3GPP WG	Title	New Document Summary
ARIB STD-T63-23.236	9.0.0		S2	Intra-domain connection of Radio Access Network(RAN) nodes to multiple Core Network (CN) nodes	Automatic upgrade from previous Release
ARIB STD-T63-25.A01	9.0.0		R4	The Low Power Repeaters for DS-CDMA	Updated to release 9 based on Version 8.1.0, and introduced new bands (Band XIX, XXI).
ARIB STD-T63-25.101	9.2.0		R4	UE Radio transmission and reception (FDD)	Updated to Release 9 from previous Release and introduced new bands (Band XIX, XXI), DC-HSUPA, DC-MIMO and MultiBand-DC-HSDPA.
ARIB STD-T63-25.104	9.2.0		R4	Base Station (BS) radio transmission and reception (FDD)	Updated to Release 9 from previous Release and introduced new bands (Band XIX, XXI), DC-HSUPA, DC-MIMO and MultiBand-DC-HSDPA. Correction of transmitter intermodulation was made.
ARIB STD-T63-25.111	9.0.0		R4	Location Measurement Unit (LMU) performance specification; User Equipment (UE) positioning in UTRAN	Automatic upgrade from previous Release
ARIB STD-T63-25.113	9.1.0		R4	Base station and Repeater electromagnetic compatibility (EMC)	Updated to Release 9 from previous Release and introduced new bands (Band XIX, XXI).
ARIB STD-T63-25.133	9.2.0		R4	Requirements for support of radio resource management (FDD)	Updated to Release 9 from previous Release and introduced new bands (Band XIX, XXI), DC-HSUPA, DC-MIMO and MultiBand-DC-HSDPA.
ARIB STD-T63-25.141	9.2.0		R4	Base Station (BS) conformance testing (FDD)	Updated to Release 9 from previous Release and introduced new bands (Band XIX, XXI), DC-HSUPA, DC-MIMO and MultiBand-DC-HSDPA. Correction of transmitter intermodulation was made.
ARIB STD-T63-25.144	9.1.0		R4	User Equipment (UE) and Mobile Station (MS) over the air performance requirements	Updated to Release 9 from previous Release and introduced new bands (Band XIX, XXI).

Added Standard Number	Version at ARIB STD-T12 Ver.8.00		3GPP WG	Title	New Document Summary
ARIB STD-T63-25.171	9.0.0		R4	Requirements for support of Assisted Global Positioning System (A-GPS); Frequency Division Duplex (FDD)	Automatic upgrade from previous Release
ARIB STD-T63-25.201	9.0.0		R1	Physical layer -General Description	Automatic upgrade from the previous release.
ARIB STD-T63-25.211	9.1.0		R1	Physical channels and mapping of transport channels onto physical channels (FDD)	Upgrade from the previous release. Define MIMO mode and phase reference for combinaton of dual-cell HSDPA with MIMO. Modify the definition of physical channels to introduce dual-cell HSUPA.
ARIB STD-T63-25.212	9.1.0		R1	Multiplexing and channel coding (FDD)	Upgrade from the previous release. Define HS-DPCCH coding for combination of dual-cell HSDPA with MIMO. Introduce TxAA extension for non-MIMO UEs. Define secondary uplink frequency activation and deactivation to introduce dual-cell HSUPA.
ARIB STD-T63-25.213	9.1.0		R1	Spreading and modulation (FDD)	Upgrade from the previous release. Introduce dual-cell HSUPA (modify the maximum number of simultaneously-configured uplink dedicated channels, and add an informative annex of uplink modulation for operation on adjacent frequencies).
ARIB STD-T63-25.214	9.1.0		R1	Physical layer procedures (FDD)	Upgrade from the previous release. Define HS-DPCCH power settings and PCI/CQI reporting procedure for combination of dual-cell HSDPA with MIMO. Introduce TxAA extension for non-MIMO UEs. Introduce dual-cell HSUPA (modify E-DCT related procedures, synchronisation procedures, and power control).

Added Standard Number	Version at ARIB STD-T12 Ver.8.00		3GPP WG	Title	New Document Summary
ARIB STD-T63-25.215	9.1.0		R1	Physical layer; Measurements (FDD)	Upgrade from the previous release. Introduce dual-cell HSUPA (modify definitions of UE transmitted power and UE transmission power headroom).
ARIB STD-T63-25.301	9.0.0		R2	Radio Interface Protocol Architecture	Automatic upgrade from previous Release
ARIB STD-T63-25.302	9.0.0		R2	Services provided by the physical layer	Introduction of DC-HSUPA, DC-HSDPA+MIMO, and Dual Band HSDPA for FDD
ARIB STD-T63-25.303	9.0.0		R2	Inter-layer Procedures in Connected Mode	Automatic upgrade from previous Release
ARIB STD-T63-25.304	9.0.0		R2	UE Procedures in Idle Mode and Procedures for Cell Reselection in Connected Mode	Clarifications on autonomous search function for CSG Stage3 CR for UMTS hybrid cell Idle Mode Mobility Access Stratum support for manual CSG selection across PLMN (CR 25.304 Rel-9) Renaming Allowed CSG List (25.304 Rel-9)
ARIB STD-T63-25.305	9.0.0		R2	User Equipment (UE) positioning in Universal Terrestrial Radio Access Network (UTRAN); Stage 2	Automatic upgrade from previous Release
ARIB STD-T63-25.306	9.1.0		R2	UE Radio Access capabilities	Making features “Absolute priority reselection to GERAN”, “Absolute priority reselection to UTRA inter-frequency” optional (Option1) L2 buffer sizes for DC-MIMO and E-DCH category combinations Email discussion outcome for [67b#17] UMTS: DC-HSUPA in 25.306 RAN1 RAN2 alignment on TxAA Introduction of TS0 capability for 1.28Mcps TDD Support for carrier-specific STTD configuration for DC-HSDPA

Added Standard Number	Version at ARIB STD-T12 Ver.8.00		3GPP WG	Title	New Document Summary
ARIB STD-T63-25.307	9.1.0		R2	Requirements on UE supporting a release-independent frequency band	Editorial corrections for Introduction of Band XIX ntroduction of band XXI
ARIB STD-T63-25.308	9.1.0		R2	High Speed Downlink Packet Access (HSDPA); Overall description; Stage 2	Missing message in sequence diagram for Inter-Node B serving HS-DSCH cell change with target cell pre-configuration Introduction of Dual Band HSDPA in 25.308 25.308 Stage 2 CR Introduction of DC-HSDPA and MIMO
ARIB STD-T63-25.319	9.2.0		R2	Enhanced uplink; Overall description; Stage 2	Corrections to DC-HSUPA operation Correction on SI sent mechanism for 1 28Mcps TDD_r9 NBAP/RNSAP for deactivation or activation of secondary carrier in non serving Node B Removal of RL Failure Indication at deactivation of secondary carrier
ARIB STD-T63-25.321	9.1.0		R2	MAC protocol specification	Clarification of the transmission power of SI-only MAC-e PDU for 1.28Mcps TDD Clarification on when to include SI in MAC-i PDU Corrections to some figures in MAC specification TSN or SI field presences in case of consecutive BCCH/PCCH re-ordering PDUs Unoptimized usage of the SID, N representation in MAC-hs header Clarification for scheduling information reporting for 1.28Mcps TDD Corrections to MAC-ehs reset Maximum number of MAC-ehs reordering SDUs per TTI Editorial correction on E-TFC selection for TDD Clarification on Cell Reselection Indication procedure for 1.28 Mcps TDD Clarification on when to include SI in MAC-i PDU for 1.28Mcps TDD Capturing RAN2 agreement for DC-HSUPA in MAC+F36

Added Standard Number	Version at ARIB STD-T12 Ver.8.00		3GPP WG	Title	New Document Summary
ARIB STD-T63-25.367	9.2.0		R2	Mobility Procedures for Home Node B; Overall description; Stage 2	CR on Add Hybrid cell into the manual CSG ID selection in 25.367 Draft CR capturing HNB inbound mobility agreements Removal of description related to small repetition of SIB3/4 Renaming Allowed CSG List (25.367 Rel-9) Correction to definition of CSG cell.
ARIB STD-T63-25.401	9.0.0		R3	UTRAN Overall Description	Automatic upgrade from previous Release
ARIB STD-T63-25.402	9.0.0		R3	Synchronisation in UTRAN Stage 2	Automatic upgrade from previous Release
ARIB STD-T63-25.420	9.0.0		R3	UTRAN Iur Interface: General Aspects and Principles	Automatic upgrade from previous Release
ARIB STD-T63-25.421	9.0.0		R3	UTRAN Iur interface Layer 1	Automatic upgrade from previous Release
ARIB STD-T63-25.422	9.0.0		R3	UTRAN Iur interface signalling transport	Automatic upgrade from previous Release
ARIB STD-T63-25.423	9.1.0		R3	UTRAN Iur interface RNSAP signalling	This document specifies the radio network layer signalling procedures of the control plane between RNCs in UTRAN, between RNC in UTRAN and BSS in GERAN Iu mode and between BSSs in GERAN Iu mode From version 9.0.0 the following were introduced. Introduction of UE AMBR concept in UMTS Introduction of TxAA extension for non-MIMO UEs Introduction of Dual-Band HSDPA

Added Standard Number	Version at ARIB STD-T12 Ver.8.00		3GPP WG	Title	New Document Summary
					Introduction of MIMO for DC HSDPA Introduction of Cell Portion for 1.28 Mcps TDD Single Stream MIMO for DC-HSDPA Activation and deactivation of secondary carrier in non serving Node B Correction of abnormal conditions for Dual cell HS-DSCH in RL Addition procedure Clarification of the meaning of BIT STRING type IEs for SPS operation for 1.28Mcps TDD MAC-e Reset Indicator for MAC-i Reset Further Corrections for DC-HSDPA Wrong ref in tabular STTD is cell specific in Dual-Cell HSDPA Introduction of Dual Cell E-DCH mode of operation Removal of MAC-ehs format indicator Correction on IE “E-AGCH Table Choice” Introduction of Re9 HSPA Capability into RNSAP
ARIB STD-T63-25.424	9.0.0		R3	UTRAN Iur interface data transport & transport signalling for Common Transport Channel data streams	Automatic upgrade from previous Release

Added Standard Number	Version at ARIB STD-T12 Ver.8.00		3GPP WG	Title	New Document Summary
ARIB STD-T63-25.425	9.0.0		R3	UTRAN Iur interface user plane protocols for Common Transport Channel data streams	This document shall provide a description of the UTRAN RNS-RNS (Iur) interface user plane protocols for Common Transport Channel data streams From version 9.0.0, the following was introduced. Introduction of Cell Portion for 1.28 Mcps TDD
ARIB STD-T63-25.426	9.0.0		R3	UTRAN Iur and Iub interface data transport & transport signalling for DCH data streams	Automatic upgrade from previous Release
ARIB STD-T63-25.427	9.0.0		R3	UTRAN Iur and Iub interface user plane protocols for DCH data streams	This document shall provide a description of the UTRAN Iur and Iub interfaces user plane protocols for Dedicated Transport Channel data streams From version 9.0.0, the following was introduced. Introduction of Dual-Cell HSUPA
ARIB STD-T63-25.430	9.0.0		R3	UTRAN Iub Interface: General Aspects and Principles	Automatic upgrade from previous Release
ARIB STD-T63-25.431	9.0.0		R3	UTRAN Iub interface Layer 1	Automatic upgrade from previous Release
ARIB STD-T63-25.432	9.0.0		R3	UTRAN Iub interface signalling transport	Automatic upgrade from previous Release
ARIB STD-T63-25.433	9.1.1		R3	UTRAN Iub interface NBAP signalling	This document specifies the radio network layer signalling protocol called Node B Application Part (NBAP) specification to be used for Control Plane over Iub Interface From version 9.0.0, the following was introduced. Introduction of UE AMBR concept in UMTS

Added Standard Number	Version at ARIB STD-T12 Ver.8.00		3GPP WG	Title	New Document Summary
					Introduction of TxAA extension for non-MIMO UEs Introduction of Dual Band-HSDPA Introduction of MIMO for DC HSDPA Introduction of Cell Portion for 1.28 Mcps TDD Single Stream MIMO for DC-HSDPA Activation and deactivation of secondary carrier in non serving Node B Correction to ASN.1 for MiMO Power offset Clarification of DPC mode configuration for common E-DCH Correction of abnormal conditions for Dual cell HS-DSCH in RL Addition procedure Correction on ASN.1 errors in IE Common E-DCH System Information Response LCR for 1.28Mcps TDD Correction on the SPS resource configuration for 1.28Mcps TDD Addition of ans.1 definition for the E-DCH Semi-Persistent Resource Reservation Indicator IE Correction of several IEs' names for 1.28 Mcps TDD Correction of an error in the HS-DSCH Common System Information LCR IE Correction of HARQ Memory Partitioning configuration in Enhanced Cell_FACH Operation for 1.28 Mcps TDD Clarification of Priority Queue ID for Ehanced CELL_FACH for 1.28Mcps TDD

Added Standard Number	Version at ARIB STD-T12 Ver.8.00		3GPP WG	Title	New Document Summary
					The Power configuration method per Cell Portion for 1.28 Mcps TDD Application of MAC-e Reset Indicator for MAC-i Reset Further Corrections for DC-HSDPA Introduction of E-RNTI in RL Information in RL Setup Request Introduction of Dual-Cell HSUPA STTD is cell specific in Dual-Cell HSDPA Removal of MAC-ehs format indicator Correction on IE “E-AGCH Table Choice” Introduction of Re9 HSPA Capability into NBAP Introduction of dormant mode
ARIB STD-T63-25.434	9.0.0		R3	UTRAN Iub interface data transport & transport signalling for Common Transport Channel data streams	Automatic upgrade from previous Release
ARIB STD-T63-25.435	9.0.0		R3	UTRAN Iub interface user plane protocols for Common Transport Channel data streams	This document provides a description of the UTRAN RNC-Node B (Iub) interface user plane protocols for Common Transport Channel data streams. From version 9.0.0, the following was introduced. Introduction of Cell Portion for 1.28 Mcps TDD
ARIB STD-T63-25.442	9.0.0		R3	UTRAN Implementation Specific O&M Transport	Automatic upgrade from previous Release

Added Standard Number	Version at ARIB STD-T12 Ver.8.00		3GPP WG	Title	New Document Summary
ARIB STD-T63-25.444	9.0.1		R3	Iuh data transport	This document specifies the standards for user data transport protocols between the HNB and HNB-GW/CN.
ARIB STD-T63-25.446	9.0.0		R3	MBMS synchronisation protocol(SYNC)	This document specifies the MBMS Synchronisation Protocol. For the release of this specification it is used on Iu towards UTRAN and M1 towards E-UTRAN From version 9.0.0, the following was introduced. Reusing SYNC for LTE SYNC PDU TYPE2 not applicable for LTE MBMS CR on Mechanism for Consecutive Packet Loss in 25.446
ARIB STD-T63-25.450	9.0.0		R3	UTRAN Iupc interface general aspects and principles	Automatic upgrade from previous Release
ARIB STD-T63-25.451	9.0.0		R3	UTRAN Iupc interface layer1	Automatic upgrade from previous Release
ARIB STD-T63-25.452	9.0.0		R3	UTRAN Iupc interface signalling transport	Automatic upgrade from previous Release
ARIB STD-T63-25.453	9.0.0		R3	UTRAN Iupc interface Positioning Calculation Application Part (PCAP) signalling	Automatic upgrade from previous Release

Added Standard Number	Version at ARIB STD-T12 Ver.8.00		3GPP WG	Title	New Document Summary
ARIB STD-T63-25.467	9.1.0		R3	UTRAN architecture for 3G Home NodeB; Stage 2	This document specifies the UTRAN architecture for 3G Home NodeB (HNB). From version 9.0.0, the following was introduced. Support for paging optimization with CSG membership changes Enhancements to handle HNB to HNB mobility Access Mode and Membership notification for UEs accessing CSG-Hybrid cells Editorial changes: 5.x.2 -> 5.7.2 and adding numbering to Figure 5.7.2-1 CS Mux on Uplink Enhanced Interference Management Mechanisms for HNB Introducing changes for supporting ETWS in Home Node B (Rel9) Add assigned SCTP Port Number for RUA and HNBAP Addition of use of COMMON ID message to convey Hybrid cell membership information. Clean up of 25.467 Mitigating IMSI spoofing in non-CSG UE registration UE registration in case of HNB-GW access control Inbound Mobility to CSG and Hybrid Cells

Added Standard Number	Version at ARIB STD-T12 Ver.8.00		3GPP WG	Title	New Document Summary
ARIB STD-T63-25.468	9.0.0		R3	UTRAN Iuh Interface RANAP User Adaption (RUA) signalling	This document specifies the RANAP User Adaption (RUA) between the Home Node B (HNB) and the Home Node B Gateway (HNB-GW). From version 9.0.0, the following was introduced. RUA enhancement to handle inbound Mobility CSG Membership signalling during UE implicit registration
ARIB STD-T63-25.469	9.0.0		R3	UTRAN Iuh interface Home Node B Application Part (HNBAP) signalling	This document specifies the Home Node B Application Part (HNBAP) between the Home Node B (HNB) and the Home Node B Gateway (HNB-GW). From version 9.0.0, the following was introduced. CS Mux port exchange Support for multiple access mode HNBs Introducing changes for supporting ETWS in Home Node B in 25.469 Hybrid access signalling during UE and HNB registration
ARIB STD-T63-26.071	9.0.0		S4	AMR speech Codec; General description	Automatic upgrade from previous Release
ARIB STD-T63-26.073	9.0.0		S4	AMR speech Codec; C-source code	Automatic upgrade from previous Release
ARIB STD-T63-26.074	9.0.0		S4	AMR speech Codec; Test sequences	Automatic upgrade from previous Release

Added Standard Number	Version at ARIB STD-T12 Ver.8.00		3GPP WG	Title	New Document Summary
ARIB STD-T63-26.077	9.0.0		S4	Minimum Performance Requirements for Noise Suppresser Application to the AMR Speech Encoder	Automatic upgrade from previous Release
ARIB STD-T63-26.090	9.0.0		S4	AMR speech Codec; Transcoding Functions	Automatic upgrade from previous Release
ARIB STD-T63-26.091	9.0.0		S4	AMR speech Codec; Error concealment of lost frames	Automatic upgrade from previous Release
ARIB STD-T63-26.092	9.0.0		S4	AMR speech Codec; comfort noise for AMR Speech Traffic Channels	Automatic upgrade from previous Release
ARIB STD-T63-26.093	9.0.0		S4	Mandatory speech codec speech processing functions; AMR speech Codec; Source Controlled Rate operation	Automatic upgrade from previous Release
ARIB STD-T63-26.094	9.0.0		S4	Mandatory speech codec speech processing functions; Adaptive Multi-Rate (AMR) speech codec; Voice Activity Detector (VAD)	Automatic upgrade from previous Release
ARIB STD-T63-26.101	9.0.0		S4	Mandatory speech codec speech processing functions; Adaptive Multi-Rate (AMR) speech codec frame structure	Automatic upgrade from previous Release
ARIB STD-T63-26.102	9.0.0		S4	Mandatory speech codec; Adaptive Multi-Rate (AMR) speech codec; Interface to Iu, Uu and Nb	Automatic upgrade from previous Release
ARIB STD-T63-26.103	9.0.0		S4	Speech codec list for GSM and UMTS	Automatic upgrade from previous Release

Added Standard Number	Version at ARIB STD-T12 Ver.8.00		3GPP WG	Title	New Document Summary
ARIB STD-T63-26.104	9.0.0		S4	ANSI-C code for the floating-point AMR speech codec	Automatic upgrade from previous Release
ARIB STD-T63-26.110	9.0.0		S4	Codec for Circuit switched Multimedia Telephony Service; General Description	Automatic upgrade from previous Release
ARIB STD-T63-26.111	9.0.0		S4	Codec for Circuit switched Multimedia Telephony Service; Modifications to H.324	Automatic upgrade from previous Release
ARIB STD-T63-26.114	9.1.0		S4	IP Multimedia Subsystem (IMS); Multimedia telephony; Media handling and interaction	Replacement of non-compound RTCP with Reduced-Size RTCP, Adding Support for Explicit Congestion Notification, Managing MTSI Media Adaptation, MTSI DDF for QoE and Variable encoding of video to facilitate quality-recovery techniques.
ARIB STD-T63-26.115	9.0.0		S4	Echo Control for Speech and Multi-media Services	Automatic upgrade from previous Release
ARIB STD-T63-26.131	9.2.0		S4	Terminal acoustic characteristics for telephony; Requirements	Correction of STMR calculation.
ARIB STD-T63-26.132	9.1.0		S4	Speech and video telephony terminal acoustic test specification	Correction of STMR calculation and Handling Acoustic Testing with Noise Suppression Algorithms Employed.
ARIB STD-T63-26.140	9.0.0		S4	Multimedia Messaging Service (MMS); Media formats and codes	Automatic upgrade from previous Release
ARIB STD-T63-26.141	9.0.0		S4	IP Multimedia System (IMS) Messaging and Presence; Media formats and codecs	Automatic upgrade from previous Release

Added Standard Number	Version at ARIB STD-T12 Ver.8.00		3GPP WG	Title	New Document Summary
ARIB STD-T63-26.142	9.0.0		S4	Dynamic and Interactive Multimedia Scenes (DIMS)	Automatic upgrade from previous Release
ARIB STD-T63-26.150	9.0.0		S4	Syndicated Feed Reception (SFR) within 3GPP environments; Protocols and codecs	Automatic upgrade from previous Release
ARIB STD-T63-26.171	9.0.0		S4	Speech codec speech processing functions; Adaptive Multi-Rate - Wideband (AMR-WB) speech codec; General description	Automatic upgrade from previous Release
ARIB STD-T63-26.173	9.0.0		S4	ANSI-C code for the Adaptive Multi-Rate - Wideband (AMR-WB) speech codec	Automatic upgrade from previous Release
ARIB STD-T63-26.174	9.0.0		S4	Speech codec speech processing functions; Adaptive Multi-Rate - Wideband (AMR-WB) speech codec test sequences	Automatic upgrade from previous Release
ARIB STD-T63-26.177	9.0.0		S4	Speech Enabled Services (SES); Distributed Speech Recognition (DSR) extended advanced front-end test sequences	Automatic upgrade from previous Release
ARIB STD-T63-26.190	9.0.0		S4	Speech codec speech processing functions; Adaptive Multi-Rate - Wideband (AMR-WB) speech codec; Transcoding functions	Automatic upgrade from previous Release
ARIB STD-T63-26.191	9.0.0		S4	Speech codec speech processing functions; Adaptive Multi-Rate - Wideband (AMR-WB) speech codec; Error concealment of erroneous or lost frames	Automatic upgrade from previous Release
ARIB STD-T63-26.192	9.0.0		S4	Speech codec speech processing functions; Adaptive Multi-Rate - Wideband (AMR-WB) speech codec; Comfort noise aspects	Automatic upgrade from previous Release

Added Standard Number	Version at ARIB STD-T12 Ver.8.00		3GPP WG	Title	New Document Summary
ARIB STD-T63-26.193	9.0.0		S4	Speech codec speech processing functions; Adaptive Multi-Rate - Wideband (AMR-WB) speech codec; Source controlled rate operation	Automatic upgrade from previous Release
ARIB STD-T63-26.194	9.0.0		S4	Speech codec speech processing functions; Adaptive Multi-Rate - Wideband (AMR-WB) speech codec; Voice Activity Detector (VAD)	Automatic upgrade from previous Release
ARIB STD-T63-26.201	9.0.0		S4	Speech codec speech processing functions; Adaptive Multi-Rate - Wideband (AMR-WB) speech codec; Frame structure	Automatic upgrade from previous Release
ARIB STD-T63-26.202	9.0.0		S4	Speech codec speech processing functions; Adaptive Multi-Rate - Wideband (AMR-WB) speech codec; Interface to Iu, Uu and Nb	Automatic upgrade from previous Release
ARIB STD-T63-26.204	9.0.0		S4	Speech codec speech processing functions; Adaptive Multi-Rate - Wideband (AMR-WB) speech codec; ANSI-C code	Automatic upgrade from previous Release
ARIB STD-T63-26.226	9.0.0		S4	Cellular Text telephone Modem General Description	Automatic upgrade from previous Release
ARIB STD-T63-26.230	9.0.0		S4	Cellular Text Telephone Modem transmitter Bit Exact C-code	Automatic upgrade from previous Release
ARIB STD-T63-26.231	9.0.0		S4	Cellular Text telephone Modem; Minimum performance requirements	Automatic upgrade from previous Release
ARIB STD-T63-26.233	9.0.0		S4	End-to-end transparent streaming service; General description	Automatic upgrade from previous Release

Added Standard Number	Version at ARIB STD-T12 Ver.8.00		3GPP WG	Title	New Document Summary
ARIB STD-T63-26.234	9.1.0		S4	Transparent end-to-end Packet-switched Streaming Service (PSS); Protocols and codecs	Adaptive HTTP Streaming in PSS, Adaptive HTTP Streaming in PSS, PSS QoE reporting during buffering periods, Video profile and level updates and Update of Digital Rights Management Extensions for PSS.
ARIB STD-T63-26.235	9.0.0		S4	Packet switched conversational multimedia application; Default codecs	Automatic upgrade from previous Release
ARIB STD-T63-26.236	9.0.0		S4	Packet switched conversational multimedia applications; Transport protocols	Automatic upgrade from previous Release
ARIB STD-T63-26.237	9.1.0		S4	IMS based PSS and MBMS User Service; Protocols	IMS based MBMS download service, Inter UE Transfer, Clarification on IMS based PSS streaming, SIP Info for content switching, Session set-up for IMS based download unicast service, Architecture for IMS based download unicast service and XML schema and syntax for nBookmark service.
ARIB STD-T63-26.243	9.0.0		S4	ANSI C code for the fixed-point distributed speech recognition extended advanced front-end	Automatic upgrade from previous Release
ARIB STD-T63-26.244	9.0.0		S4	Transparent end-to-end packet switched streaming service (PSS); 3GPP file format (3GP)	New Profile to support Adaptive HTTP-based Streaming in 3GP File Format and File format video and branding updates.
ARIB STD-T63-26.245	9.0.0		S4	Transparent end-to-end Packet witched Streaming Service (PSS); Timed text format	Automatic upgrade from previous Release
ARIB STD-T63-26.246	9.0.0		S4	Transparent end-to-end Packet-switched Streaming Service (PSS); 3GPP SMIL language profile	Automatic upgrade from previous Release

Added Standard Number	Version at ARIB STD-T12 Ver.8.00		3GPP WG	Title	New Document Summary
ARIB STD-T63-26.267	9.0.0		S4	AeCall data transfer; In-band modem solution; General description	Automatic upgrade from previous Release
ARIB STD-T63-26.268	9.0.0		S4	eCall data transfer; In-band modem solution; ANSI-C reference code	Automatic upgrade from previous Release
ARIB STD-T63-26.269	9.0.0		S4	eCall data transfer; In-band modem solution; Conformance testing	Automatic upgrade from previous Release
ARIB STD-T63-26.273	9.0.0		S4	ANSI-C code for the fixed-point Extended Adaptive Multi-Rate - Wideband (AMR-WB+) speech codec	Automatic upgrade from previous Release
ARIB STD-T63-26.274	9.0.0		S4	Speech codec speech processing functions; Extended Adaptive Multi-Rate - Wideband (AMR-WB+) speech codec; Conformance testing	Automatic upgrade from previous Release
ARIB STD-T63-26.290	9.0.0		S4	Audio codec processing functions; Extended Adaptive Multi-Rate - Wideband (AMR-WB+) codec; Transcoding functions	Correction of references.
ARIB STD-T63-26.304	9.0.0		S4	Extended Adaptive Multi-Rate - Wideband (AMR-WB+) codec; Floating-point ANSI-C code	Automatic upgrade from previous Release
ARIB STD-T63-26.346	9.1.0		S4	Multimedia Broadcast/Multicast Service (MBMS); Protocols and codecs	Correction of unreadable picture, MBMS DDF for QoE, MBMS QoE reporting during buffering periods and Video profile and level updates.
ARIB STD-T63-26.401	9.0.0		S4	General audio codec audio processing functions; Enhanced aacPlus general audio codec; General description	Automatic upgrade from previous Release

Added Standard Number	Version at ARIB STD-T12 Ver.8.00		3GPP WG	Title	New Document Summary
ARIB STD-T63-26.402	9.0.0		S4	General audio codec audio processing functions; Enhanced aacPlus general audio codec; Additional decoder tools	Automatic upgrade from previous Release
ARIB STD-T63-26.403	9.0.0		S4	General audio codec audio processing functions; Enhanced aacPlus general audio codec; Encoder specification; Advanced Audio Coding (AAC) part	Automatic upgrade from previous Release
ARIB STD-T63-26.404	9.0.0		S4	General audio codec audio processing functions; Enhanced aacPlus general audio codec; Encoder specification; Spectral Band Replication (SBR) part	Automatic upgrade from previous Release
ARIB STD-T63-26.405	9.0.0		S4	General audio codec audio processing functions; Enhanced aacPlus general audio codec; Encoder specification; Parametric stereo part	Automatic upgrade from previous Release
ARIB STD-T63-26.406	9.0.0		S4	General audio codec audio processing functions; Enhanced aacPlus general audio codec; Conformance testing	Automatic upgrade from previous Release
ARIB STD-T63-26.410	9.0.0		S4	General audio codec audio processing functions; Enhanced aacPlus general audio codec; Floating-point ANSI-C code	Automatic upgrade from previous Release
ARIB STD-T63-26.411	9.0.0		S4	General audio codec audio processing functions; Enhanced aacPlus general audio codec; Fixed-point ANSI-C code	Automatic upgrade from previous Release
ARIB STD-T63-26.412	9.0.0		S4	General audio codec audio processing functions; Source code for 3GP file format	Automatic upgrade from previous Release

Added Standard Number	Version at ARIB STD-T12 Ver.8.00		3GPP WG	Title	New Document Summary
ARIB STD-T63-26.430	1.0.0		S4	Timed graphics	Presented to TSG SA#46 for information.
ARIB STD-T63-27.005	9.0.0		C1	Use of Data Terminal Equipment - Data Circuit terminating Equipment (DTE - DCE) interface for Short Message Service (SMS) and Cell Broadcast Service (CBS)	Automatic upgrade from previous Release
ARIB STD-T63-27.007	9.2.0		C1	AT command set for 3G User Equipment (UE)	AT command for CNAP (Calling Name Presentation) AT command for COLR (Connected Line Identfication Restriction Status) Corrections of AT-command for originated location request Origin for assist_data is correcte “non-GPS” enhancements of AT-command for originated location request Corrections to UCS2 coding of +CUSD New AT-commands for mobile terminated location request and disclosure Correct alignment of notes for +CEREG Addition of intermediate result code for +CPBW New AT-commands for administration of battery Corrections to +CEMODE Correction of direction of data for +CPOS Correction of usage of underscore (default values) for 27.007 Correction of outstanding Editor's note on +WS46

Added Standard Number	Version at ARIB STD-T12 Ver.8.00		3GPP WG	Title	New Document Summary
ARIB STD-T63-27.010	9.0.0		C3	Terminal Equipment to User Equipment (TE-UE) multiplexer protocol	Automatic upgrade from previous Release
ARIB STD-T63-28.062	9.0.0		S4	Inband Tandem Free Operation (TFO) of Speech Codecs; Service Description; Stage 3	Automatic upgrade from previous Release
ARIB STD-T63-31.101	9.0.0		C6	UICC-Terminal Interface; Physical and Logical Characteristics	Automatic upgrade from previous Release
ARIB STD-T63-31.102	9.1.0		C6	Characteristics of the USIM Application	・Introduction of operator controlled CSG list for H(e)NB ・Correction to application session termination ・Correction of incorrect tag value ・Correction of Allowed CSG list ・Editorial correction on tables in NAF Key Centre tag and NAF Key Centre information
ARIB STD-T63-31.103	9.0.0		C6	Characteristics of the ISIM Application	・Correction to application session termination
ARIB STD-T63-31.111	9.0.0		C6	USIM Application Toolkit (USAT)	- Discovery of surrounding CSG cells ・CSG cell selection event
ARIB STD-T63-31.115	9.0.0		C6	Secured packet structure for (Universal) Subscriber Identity Module (U)SIM Toolkit applications	・secured message structure for HTTP

Added Standard Number	Version at ARIB STD-T12 Ver.8.00		3GPP WG	Title	New Document Summary
ARIB STD-T63-31.116	9.0.0		C6	Remote APDU Structure for (Universal) Subscriber Identity Module (U)SIM Toolkit applications	・Remote APDU over HTTP
ARIB STD-T63-31.120	9.0.0		C6	UICC-terminal interface; Physical, electrical and logical test specification	Automatic upgrade from previous Release
ARIB STD-T63-31.121	9.0.0		C6	UICC-terminal interface; Universal Subscriber Identity Module (USIM) application test specification	Automatic upgrade from previous Release
ARIB STD-T63-31.122	9.0.0		C6	USIM conformance test specification	Automatic upgrade from previous Release
ARIB STD-T63-31.124	9.0.0		C6	Mobile Equipment (ME) conformance test specification; Universal Subscriber Interface Module Application Toolkit (USAT) conformance test specification	Automatic upgrade from previous Release
ARIB STD-T63-31.130	9.0.0		C6	(U)SIM Application Programming Interface (API); (U)SIM API for Java Card™	Automatic upgrade from previous Release
ARIB STD-T63-31.131	9.0.0		C6	C-language binding for (Universal) Subscriber Identity Module ((U)SIM) API	Automatic upgrade from previous Release
ARIB STD-T63-31.133	9.0.0		C6	IP Multimedia Services Identity Module (ISIM) Application Programming Interface (API); ISIM API for Java Card™	Automatic upgrade from previous Release
ARIB STD-T63-31.213	9.0.0		C6	Test specification for subscriber (U)SIM; Application Programming Interface (API) for Java Card™	Automatic upgrade from previous Release

Added Standard Number	Version at ARIB STD-T12 Ver.8.00		3GPP WG	Title	New Document Summary
ARIB STD-T63-31.220	9.0.0		C6	Characteristics of the Contact Manager for 3GPP UICC applications	Automatic upgrade from previous Release
ARIB STD-T63-31.221	9.0.0		C6	Contact Manager for 3GPP UICC applications - internal interface aspects	Automatic upgrade from previous Release
ARIB STD-T63-33.102	9.1.0		S3	3G security; Security architecture	Mandating integrity protection of reject messages that cause CSG list to be modified Replacing KDF definition with a reference
ARIB STD-T63-33.105	9.0.0		S3	Cryptographic algorithm requirements	Automatic upgrade from previous Release
ARIB STD-T63-33.106	9.0.0		S3	Lawful interception requirements	Automatic upgrade from previous Release
ARIB STD-T63-33.107	9.0.0		S3	3G security; Lawful interception architecture and functions	Automatic upgrade from previous Release
ARIB STD-T63-33.108	9.1.0		S3	3G security; Handover interface for Lawful Interception (LI)	Correction of misalignments for values of “initiator” parameter for EPS Missing TAU Failure Reason parameter mapping for MME interception Correction on LI correlation for S4-SGSN
ARIB STD-T63-33.110	9.0.0		S3	Key establishment between a UICC and a terminal	Automatic upgrade from previous Release

Added Standard Number	Version at ARIB STD-T12 Ver.8.00		3GPP WG	Title	New Document Summary
ARIB STD-T63-33.141	9.0.0		S3	Presence service; Security	Automatic upgrade from previous Release
ARIB STD-T63-33.203	9.3.0		S3	3G security; Access security for IP-based services	Removing editor's notes in Annex P Removal of editor's note on draft-ieft-sip-outbound Correction of erroneous interface name X.509 certificate profile alignment
ARIB STD-T63-33.210	9.0.0		S3	3G security; Network Domain Security (NDS); IP network layer security	Automatic upgrade from previous Release
ARIB STD-T63-33.220	9.2.0		S3	Generic Authentication Architecture (GAA); Generic bootstrapping architecture	KDF clarification Ua security protocol identifier for IMS media plane security
ARIB STD-T63-33.221	9.0.0		S3	Generic Authentication Architecture (GAA); Support for subscriber certificates	Automatic upgrade from previous Release
ARIB STD-T63-33.222	9.0.0		S3	Generic Authentication Architecture (GAA); Access to network application functions using Hypertext Transfer Protocol over Transport Layer Security (HTTPS)	Automatic upgrade from previous Release
ARIB STD-T63-33.223	9.0.0		S3	Generic Authentication Architecture (GAA); Generic Bootstrapping Architecture (GBA) Push function	Registration of GPL capabilities
ARIB STD-T63-33.234	9.0.0		S3	3G security; Wireless Local Area Network (WLAN) interworking security	Addition of cipher suite for interworking WLAN

Added Standard Number	Version at ARIB STD-T12 Ver.8.00		3GPP WG	Title	New Document Summary
ARIB STD-T63-33.246	9.0.0		S3	3G Security; Security of Multimedia Broadcast/Multicast Service (MBMS)	Impacts of EPS to MBMS security
ARIB STD-T63-33.259	9.0.0		S3	Key establishment between a UICC hosting device and a remote device	Automatic upgrade from previous Release
ARIB STD-T63-33.310	9.1.0		S3	Network domain security; Authentication framework (NDS/AF)	Some corrections for TS 33.310
ARIB STD-T63-33.320	9.0.0		S3	Security of Home Node B (HNB) / Home evolved Node B (HeNB)	Publication of SA approved version
ARIB STD-T63-33.328	9.0.0		S3	IP Multimedia Subsystem (IMS) media plane security	Issue of approved version
ARIB STD-T63-33.401	9.2.0		S3	3GPP System Architecture Evolution (SAE); Security architecture	selected algorithms forwarding to the target eNB in intra LTE handover Clarification of Current security context Security interworking between E-UTRAN and GERAN in 128-bit encryption Correction of protection of the NAS security mode reject message (Rel-9) EPS NAS security context storage Clarification of confidentiality protection in EC Authentication failure during emergency call Correction of ECM states Clarifications to context handling in idle mode procedures

Added Standard Number	Version at ARIB STD-T12 Ver.8.00		3GPP WG	Title	New Document Summary
					Clarifications to context handling in IRAT handover Correction to store security context to ME Corrections to state transition Clarification for algorithm selection during IRAT handover to EUTRAN Corrections for 33.401 Concurrency of inter-MME handovers and NAS downlink messages (Rel-9) Partial native EPS security context NAS COUNT value Clarification of NAS integrity protection activation Nas-token and key calculation at idle mobility from E-UTRAN to UTRAN/GERAN (Rel-9) Clarifying the calculation of KeNB when there is more than one NAS SMC (Rel-9) Behaviour for lost NAS SMC message when creating mapped context (Rel-9) Clarification of Authentication Data and transition to EMM-DEREGISTERED and Correction of text on authentication data transfer NCC Initialization in eNB at the Initial Connection Setup key replacement clarification Replacing KDF definition with a reference Correction of interworking between GERAN and E-UTRAN Correcting A.11

Added Standard Number	Version at ARIB STD-T12 Ver.8.00		3GPP WG	Title	New Document Summary
					Not resetting STARTPS to 0 in HO from EUTRAN to UTRAN and not resetting STARTCS to 0 in SRVCC (Rel-9). Security considerations for emergency sessions in SRVCC Delete the CK keys in the MSC server enhanced for SRVCC in case there is desynchronization of CS keys between the UE and the network in SRVCC NAS COUNT handling during IRAT handover Concurrency of inter-RAT handovers and NAS SMC procedure (Rel-9) Using P-TMSI signature when attaching to SGSN using a GUTI (Rel-9) Key-Chaining issue in I-RAT handover to UTRAN
ARIB STD-T63-33.402	9.2.0		S3	3GPP System Architecture Evolution (SAE); Security aspects of non-3GPP accesses	Correction of CMIPv4 Key derivation and SPI calculation for WiMAX interworking Replacing KDF definition with a reference Deletion of erroneous notes relating to fast re-authentication
ARIB STD-T63-34.109	9.0.0		R2	Terminal logical test interface; Special conformance testing functions	Automatic upgrade from previous Release
ARIB STD-T63-34.124	9.1.0		R4	Electromagnetic compatibility (EMC) requirements for Mobile terminals and ancillary equipment	Updated to Release 9 from previous Release and introduced new bands (Band XIX, XXI).
ARIB STD-T63-34.131	9.0.0		C6	Test specification for C-language binding for (U)SIM API	Automatic upgrade from previous Release

Added Standard Number	Version at ARIB STD-T12 Ver.8.00		3GPP WG	Title	New Document Summary
ARIB STD-T63-35.201	9.0.0		S3	Specification of the 3GPP confidentiality and integrity algorithms; Document 1: f8 and f9 specifications	Automatic upgrade from previous Release
ARIB STD-T63-35.202	9.0.0		S3	Specification of the 3GPP confidentiality and integrity algorithms; Document 2: Kasumi specification	Automatic upgrade from previous Release
ARIB STD-T63-35.203	9.0.0		S3	Specification of the 3GPP confidentiality and integrity algorithms; Document 3: Implementers' test data	Automatic upgrade from previous Release
ARIB STD-T63-35.204	9.0.0		S3	Specification of the 3GPP confidentiality and integrity algorithms; Document 4: Design conformance test data	Automatic upgrade from previous Release
ARIB STD-T63-35.215	9.0.0		S3	Specification of the 3GPP Confidentiality and Integrity Algorithms UEA2 & UIA2; Document 1: UEA2 and UIA2 specifications	Automatic upgrade from previous Release
ARIB STD-T63-35.216	9.0.0		S3	Specification of the 3GPP Confidentiality and Integrity Algorithms UEA2 & UIA2; Document 2: SNOW 3G specification	Automatic upgrade from previous Release
ARIB STD-T63-35.217	9.0.0		S3	Specification of the 3GPP Confidentiality and Integrity Algorithms UEA2 & UIA2; Document 3: Implementers' test data	Automatic upgrade from previous Release
ARIB STD-T63-35.218	9.0.0		S3	Specification of the 3GPP Confidentiality and Integrity Algorithms UEA2 & UIA2; Document 4: Design conformance test data	Automatic upgrade from previous Release
ARIB STD-T63-36.101	9.2.0		R4	Evolved Universal Terrestrial Radio Access (E-UTRA); User Equipment (UE) radio transmission and reception	Updated to Release 9 from previous Release and introduced new bands (Band 18, 19, 20 and 21) and MBMS feature.

Added Standard Number	Version at ARIB STD-T12 Ver.8.00		3GPP WG	Title	New Document Summary
ARIB STD-T63-36.104	9.2.0		R4	Evolved Universal Terrestrial Radio Access (E-UTRA); Base Station (BS) radio transmission and reception	Updated to Release 9 from previous Release and introduced new bands (Band 18, 19, 20 and 21) and Home eNB/Pico eNB feature. Correction of transmitter intermodulation was made.
ARIB STD-T63-36.113	9.1.0		R4	Evolved Universal Terrestrial Radio Access (E-UTRA); Base Station (BS) and repeater Electro Magnetic Compatibility (EMC)	Updated to Release 9 from previous Release and introduced new bands (Band 18, 19, 20 and 21).
ARIB STD-T63-36.124	9.1.0		R4	Evolved Universal Terrestrial Radio Access (E-UTRA); Electromagnetic compatibility (EMC) requirements for mobile terminals and ancillary equipment	Updated to Release 9 from previous Release and introduced new bands (Band 18, 19, 20 and 21).
ARIB STD-T63-36.133	9.2.0		R4	Evolved Universal Terrestrial Radio Access (E-UTRA); Requirements for support of radio resource management	Updated to Release 9 from previous Release and introduced new bands (Band 18, 19, 20 and 21), new test cases for “Combined E-UTRAN interfrequency and GSM cell search”, “Measurement Accuracy of GSM RSSI, UTRAN FDD CPICH RSCP, FDD CPICH Ec/No and TDD P-CCPCH RSCP”. Modifications of test case of E-UTRA TDD intra-/ inter-frequency cell reselection were made.
ARIB STD-T63-36.141	9.2.0		R4	Evolved Universal Terrestrial Radio Access (E-UTRA); Base Station (BS) conformance testing	Updated to Release 9 from previous Release and introduced new bands (Band 18, 19, 20 and 21) and Home eNB/Pico eNB feature. Correction of transmitter intermodulation was made.
ARIB STD-T63-36.201	9.0.0		R1	Evolved Universal Terrestrial Radio Access (E-UTRA); LTE physical layer; General description	Automatic upgrade from the previous release (with editorial corrections).

Added Standard Number	Version at ARIB STD-T12 Ver.8.00		3GPP WG	Title	New Document Summary
ARIB STD-T63-36.211	9.0.0		R1	Evolved Universal Terrestrial Radio Access (E-UTRA); Physical channels and modulation	Upgrade from the previous release. Introduce positioning reference signals and define the PDSCH mapping in connection with positioning reference signals. Introduce precoding and reference signals for enhanced dual layer transmission.
ARIB STD-T63-36.212	9.0.0		R1	Evolved Universal Terrestrial Radio Access (E-UTRA); Multiplexing and channel coding	Upgrade from the previous release. Introduce additional feedback options and DCI format 2B to support enhanced dual layer transmission.
ARIB STD-T63-36.213	9.0.1		R1	Evolved Universal Terrestrial Radio Access (E-UTRA); Physical layer procedures	Upgrade from the previous release. Introduce power control aspects of positioning reference signals, and interaction between positioning reference signals and system information and paging. Introduce additional feedback options and DCI format 2B to support enhanced dual layer transmission. Introduce Physical multicast channel related procedures. Add shorter scheduling request periodicity.
ARIB STD-T63-36.214	9.0.0		R1	Evolved Universal Terrestrial Radio Access (E-UTRA); Physical layer - Measurements	Upgrade from the previous release. Introduce new measurements to support LTE positioning.

Added Standard Number	Version at ARIB STD-T12 Ver.8.00		3GPP WG	Title	New Document Summary
ARIB STD-T63-36.300	9.2.0		R2	Evolved Universal Terrestrial Radio Access (E-UTRA) and Evolved Universal Terrestrial Radio Access (E-UTRAN); Overall description; Stage 2	CR on the usage of Transparent Mode MAC Capturing HeNB inbound mobility agreements ETWS correction to 36.300 Inclusion of INTER RAT HANDOVER INFO at HO from UTRAN to GERAN MBMS Agreements Measurement Overview High level feature description of CMAS RACH optimization in 36.300 Correction on the precondition for cell reselection to HRPD Miscellaneous corrections to 36.300 (Rel-9) Renaming Allowed CSG List (36.300, Rel-9) The scope and method for HO negotiations Access control for handover procedures to LTE CSG/hybrid cells Admission Control in MCE Clarification on SFN Synchronization BMSC-MCE signaling synchronization in session start message CR on multiplexing decision and DSP length M3AP stage 2 M2AP stage 2 CR for Transportation support for LPPa Introduction of MBMS for LTE: C- and U-Plane synchronisation principles CR on Mechanism for Consecutive Packet Loss in 36.300 Overload reduction The scope and method for HO negotiations Introduction of MRO procedures in stage 2 MCE to MME session start response In order delivery of the multiple NAS PDUs
ARIB STD-T63-36.302	9.0.0		R2	Evolved Universal Terrestrial Radio Access (E-UTRA); Services provided by the physical layer	Addition of MBMS reception types Remove FFSs from RAN2 specifications Proposed CR to 36.302 on Introduction of CMAS

Added Standard Number	Version at ARIB STD-T12 Ver.8.00		3GPP WG	Title	New Document Summary
ARIB STD-T63-36.304	9.1.0		R2	Evolved Universal Terrestrial Radio Access (E-UTRA); User Equipment (UE) procedures in idle mode	Clarification on Parameters for Cell Selection Clarifications on autonomous search function for CSG Correction of Treselection inconsistency regarding frequency groups CR to 36.304 - Handling of barring in case of priority based reselection Functions supported for the UE "limited service state" UE's behaviour when camping on cell supporting emergency call Stage3 CR for LTE hybrid cell Idle Mode Mobility Correction related to Location Registration in manual CSG ID selection procedure. Access Stratum support for manual CSG selection across PLMN (CR 36.304 Rel-9) Renaming Allowed CSG List (36.304 Rel-9) Proposed CR to 36.304 on Introduction of MBMS
ARIB STD-T63-36.305	9.1.0		R2	Evolved Universal Terrestrial Radio Access Network (E-UTRAN); Stage 2 functional specification of User Equipment (UE) positioning in E-UTRAN	Removal of UE-based OTDOA and ECID from LPP stage 2 Removal of capability storage at MME Transfer of LPPa PDU over S1
ARIB STD-T63-36.306	9.0.0		R2	Evolved Universal Terrestrial Radio Access (E-UTRA); User Equipment (UE) radio access capabilities	Automatic upgrade from previous Release
ARIB STD-T63-36.314	9.0.0		R2	Evolved Universal Terrestrial Radio Access Network (E-UTRAN); Layer 2 - Measurements	Automatic upgrade from previous Release
ARIB STD-T63-36.321	9.1.0		R2	Evolved Universal Terrestrial Radio Access (E-UTRA); Medium Access Control (MAC) protocol specification	Capturing MBMS agreements in MAC Clarification on BSR trigger Correction on HARQ Process ID for DL SPS and DRX RNTI for CCCH SR prohibit mechanism for UL SPS Clarification on monitoring of PDCCH Introduction of SR prohibit timer

Added Standard Number	Version at ARIB STD-T12 Ver.8.00		3GPP WG	Title	New Document Summary
ARIB STD-T63-36.322	9.0.0		R2	Evolved Universal Terrestrial Radio Access (E-UTRA); Radio Link Control (RLC) protocol specification	Capturing MBMS agreements in RLC
ARIB STD-T63-36.323	9.0.0		R2	Evolved Universal Terrestrial Radio Access (E-UTRA); Packet Data Convergence Protocol (PDCP) specification	Automatic upgrade from previous Release
ARIB STD-T63-36.331	9.1.0		R2	Evolved Universal Terrestrial Radio Access (E-UTRA); Radio Resource Control (RRC); Protocol specification	(Rel-9)-clarification on the description of redirectedCarrierInfo Adding references to RRC processing delay for inter-RAT mobiltiy messages Alignment of srs-Bandwidth with 36.211 Baseline CR capturing eMBMS agreements Capturing agreements on inbound mobility Clarification of preRegistrationZoneID/secondaryPreRegistrationZoneID Clarification on NCC for IRAT HO Clarification on P-max Clarification on the definition of maxCellMeas Correction of q-RxLevMin reference in SIB7 Correction on SPS-Config field descriptions correction on the definition of CellsTriggeredList Correction relating to CMAS UE capability Feature grouping bit for SRVCC handover Correction and completion of extension guidelines RACH optimization Stage-3 Stage 3 correction for CMAS SR prohibit mechanism for UL SPS Parameters used for enhanced 1xRTT CS fallback Correction on UTRAN UE Capability transfer Maximum number of CDMA2000 neighbors in SIB8 Introduction of UE Rx-Tx Time Difference measurement Introduction of SR prohibit timer Remove FFSs from RAN2 specifications Renaming Allowed CSG List (36.331 Rel-9) Re-introduction of message segment discard time Application of ASN.1 extension guidelines

Added Standard Number	Version at ARIB STD-T12 Ver.8.00		3GPP WG	Title	New Document Summary
					Support for Dual Radio 1xCSFB Shorter SR periodicity CR to 36.331 for Introduction of Dual Layer Transmission Draft CR to 36.331 on Network ordered SI reporting UE e1xcsfb capabilities correction Clarification on coding of ETWS related IEs
ARIB STD-T63-36.355	9.0.0		R2	Evolved Universal Terrestrial Radio Access (E-UTRA); LTE Positioning Protocol (LPP)	RAN #46 approval of TS 36.355
ARIB STD-T63-36.401	9.0.0		R3	Evolved Universal Terrestrial Radio Access Network (E-UTRAN); Architecture description	Automatic upgrade from previous Release
ARIB STD-T63-36.410	9.0.0		R3	Evolved Universal Terrestrial Radio Access Network (E-UTRAN); S1 layer 1 general aspects and principles	Transportation support for LPPa
ARIB STD-T63-36.411	9.0.0		R3	Evolved Universal Terrestrial Radio Access Network (E-UTRAN); S1 layer 1	Automatic upgrade from previous Release
ARIB STD-T63-36.412	9.0.0		R3	Evolved Universal Terrestrial Radio Access Network (E-UTRAN); S1 signalling transport	Automatic upgrade from previous Release
ARIB STD-T63-36.413	9.1.0		R3	Evolved Universal Terrestrial Radio Access (E-UTRA) ; S1 Application Protocol (S1AP)	Rel-9 version is created based on v.8.7.0 Adding the RTD information in UPLINK CDMA2000 TUNNELING Handling of Emergency Calls in Limited Service Mode Emergency Calls Mobility Handling S1AP Kill procedure for cancellation of PWS warning messages S1AP Write-Replace Warning procedure for PWS/CMAS

Added Standard Number	Version at ARIB STD-T12 Ver.8.00		3GPP WG	Title	New Document Summary
					Support for paging optimization with CSG membership changes Inclusion of Access Mode and Subscription Status for UE prioritisation in LTE hybrid cells Handling of Multiple concurrent CMAS Warning Notifications CR for Transportation support for LPPa Introducing the “Data Forwarding Not Possible” indication to HANDOVER REQUEST ASN.1 correction for BroadcastCompleteAreaList Correction on abnormal handling of Subscriber Profile ID for RAT/Frequency priority IE Align IE’s in Tabular for two messages with their ASN.1 for R9 Rejection Criteria for Overload Introduction of inbound LTE mobility Repetition Period for CMAS Correction of E-RAB Modify Clarification on handover restriction Correction of Transport Layer Address Missing reference and unclear handling of the CDMA2000 Sector ID
ARIB STD-T63-36.414	9.0.0		R3	Evolved Universal Terrestrial Radio Access Network (E-UTRAN); S1 data transport	Automatic upgrade from previous Release
ARIB STD-T63-36.420	9.0.0		R3	Evolved Universal Terrestrial Radio Access Network (E-UTRAN); X2 general aspects and principles	Automatic upgrade from previous Release

Added Standard Number	Version at ARIB STD-T12 Ver.8.00		3GPP WG	Title	New Document Summary
ARIB STD-T63-36.421	9.0.0		R3	Evolved Universal Terrestrial Radio Access Network (E-UTRAN); X2 layer 1	Automatic upgrade from previous Release
ARIB STD-T63-36.422	9.0.0		R3	Evolved Universal Terrestrial Radio Access Network (E-UTRAN); X2 signalling transport	Automatic upgrade from previous Release
ARIB STD-T63-36.423	9.1.0		R3	Evolved Universal Terrestrial Radio Access Network (E-UTRAN); X2 Application Protocol (X2AP)	Rel-9 version is created based on v.8.7.0 Handling of Emergency Calls in Limited Service Mode Emergency Calls Mobility Handling Introduction of signalling support for Composite Available Capacity with relative units Configuration adaptation for MLB on X2 Clarification on operational use of updated configuration data Automatic PRACH information exchange over X2 for SON Introduction of Radio Link Failure Indication procedure Introduction of Handover Report procedure Introduction of signalling support for Composite Available Capacity with relative units
ARIB STD-T63-36.424	9.0.0		R3	Evolved Universal Terrestrial Radio Access Network (E-UTRAN); X2 data transport	Automatic upgrade from previous Release
ARIB STD-T63-36.440	9.0.0		R3	Evolved Universal Terrestrial Radio Access Network (E-UTRAN); General aspects and principles for interfaces supporting Multimedia Broadcast Multicast Service (MBMS) within E-UTRAN	Approved at RAN#46

Added Standard Number	Version at ARIB STD-T12 Ver.8.00		3GPP WG	Title	New Document Summary
ARIB STD-T63-36.441	9.0.0		R3	Evolved Universal Terrestrial Radio Access Network (E-UTRAN); Layer 1 for interfaces supporting Multimedia Broadcast Multicast Service (MBMS) within E-UTRAN	Approved at RAN#46
ARIB STD-T63-36.442	9.0.0		R3	Evolved Universal Terrestrial Radio Access Network (E-UTRAN); Signalling Transport for interfaces supporting Multimedia Broadcast Multicast Service (MBMS) within E-UTRAN	Approved at RAN#46
ARIB STD-T63-36.443	9.0.0		R3	Evolved Universal Terrestrial Radio Access Network (E-UTRAN); M2 Application Protocol (M2AP)	Approved at RAN#46
ARIB STD-T63-36.444	9.0.0		R3	Evolved Universal Terrestrial Radio Access Network (E-UTRAN); M3 Application Protocol (M3AP)	Approved at RAN#46
ARIB STD-T63-36.445	9.0.0		R3	Evolved Universal Terrestrial Radio Access Network (E-UTRAN); M1 Data Transport	Approved at RAN#46
ARIB STD-T63-36.455	9.0.0		R3	Evolved Universal Terrestrial Radio Access (E-UTRA); LTE Positioning Protocol A (LPPa)	Approved at RAN#46

7.2. Revised Standards

None

別紙２

(Annex 38)

3GPP ARIB Change history List of Technical Report Ver. 8.00 **26 April 2010**

1. Release 99

1.1. Added Technical Report

None

1.2. Revised Technical Report

None

2. Release 4

2.1. Added Technical Report

None

2.2. Revised technical Report

None

3. Release 5

3.1. Added Technical Report

None

3.2. Revised Technical Report

None

4. Release 6

4.1. Added Technical Report

None

4.2. Revised Technical Report

None

5. Release 7

5.1. Added Technical Report

None

5. 2. Revised Technical Report

None

6. Release 8

6.1. Added Technical Report

None

6. 2. Revised Technical Report

Revised Technical Report Number	Version at ARIB TR-T12 Ver.8.00	Version at ARIB TR-T12 Ver.7.40	3GPP WG	Title	Change Summary
ARIB TR-T12-25.993	8.4.0	8.3.0	R2	Typical examples of Radio Access Bearers (RABs) and Radio Bearers (RBs) supported by Universal Terrestrial Radio Access (UTRA)	Editorial modification to 25.993
ARIB TR-T12-26.969	8.1.0	8.0.0	S4	eCall data transfer; In-band modem solution; Characterization report	Editorial corrections and clarifications of characterization test results

7. Release 9

7.1. Added Technical Report

Added Standard Number	Version at ARIB STD-T12 Ver.8.00		3GPP WG	Title	New Document Summary
ARIB TR-T12-21.900	9.0.0		SP	Technical Specification Group working methods	Automatic upgrade from previous Release
ARIB TR-T12-21.902	9.0.0		SP	Evolution of 3GPP system	Automatic upgrade from previous Release
ARIB TR-T12-21.905	9.4.0		S1	Vocabulary for 3GPP Specifications	Clarify the term "Active Set" in 21.905
ARIB TR-T12-22.908	9.0.0		S1	Study on Paging Permission with Access Control	Automatic upgrade from previous Release
ARIB TR-T12-22.912	9.0.0		S1	Study into network selection requirements for non-3GPP access	Automatic upgrade from previous Release
ARIB TR-T12-22.936	9.0.0		S1	Multi-system terminals	Automatic upgrade from previous Release
ARIB TR-T12-22.937	9.0.0		S1	Requirements for service continuity between mobile and Wireless Local Area Network (WLAN) networks	Automatic upgrade from previous Release
ARIB TR-T12-22.942	9.0.0		S1	Study on Value Added Services (VAS) for Short Message Service (SMS)	Automatic upgrade from previous Release
ARIB TR-T12-22.944	9.0.0		S1	Service requirements for UE functionality split	Automatic upgrade from previous Release
ARIB TR-T12-22.947	1.0.0		S1	Study on Personal Broadcast Service	Submission to TSG-SA for information

Added Standard Number	Version at ARIB STD-T12 Ver.8.00		3GPP WG	Title	New Document Summary
ARIB TR-T12-22.948	9.0.0		S1	Study of requirements of IP-Multimedia Subsystem (IMS) convergent multimedia conferencing	Automatic upgrade from previous Release
ARIB TR-T12-22.949	9.0.0		S1	Study on a generalized privacy capability	Automatic upgrade from previous Release
ARIB TR-T12-22.950	9.0.0		S1	Priority service feasibility study	Automatic upgrade from previous Release
ARIB TR-T12-22.952	9.0.0		S1	Priority service guide	Automatic upgrade from previous Release
ARIB TR-T12-22.953	9.0.0		S1	Multimedia priority service feasibility study	Automatic upgrade from previous Release
ARIB TR-T12-22.967	9.0.0		S1	Transferring of emergency call data	Automatic upgrade from previous Release
ARIB TR-T12-22.968	9.0.0		S1	Study on requirements for an Public Warning System (PWS) service	Automatic upgrade from previous Release
ARIB TR-T12-22.978	9.0.0		S1	All-IP network (AIPN) feasibility study	Automatic upgrade from previous Release
ARIB TR-T12-22.980	9.0.0		S1	Network composition feasibility study	Automatic upgrade from previous Release
ARIB TR-T12-22.982	9.0.0		S1	Study of Customised Alerting Tone (CAT) requirements	Automatic upgrade from previous Release
ARIB TR-T12-22.983	9.0.0		S1	Services alignment and migration	Automatic upgrade from previous Release
ARIB-TR-T12-22.986	9.0.0		S1	Study on Service Specific Access Control	One-step-approved at SA#42
ARIB TR-T12-23.977	9.0.0		S2	Bandwidth And Resource Savings (BARS) and speech enhancements for Circuit Switched (CS) networks	Automatic upgrade from previous Release
ARIB TR-T12-25.903	9.0.0		R1	Continuous connectivity for packet data users	Automatic upgrade from previous Release

Added Standard Number	Version at ARIB STD-T12 Ver.8.00		3GPP WG	Title	New Document Summary
ARIB TR-T12-25.906	9.0.0		R4	Dynamically reconfiguring a Frequency Division Duplex (FDD) User Equipment (UE) receiver to reduce power consumption when desired Quality of Service (QoS) is met	Automatic upgrade from previous Release
ARIB-TR-T12-25.907	9.0.1		R4	Evaluation of the inclusion of path loss based location technology in the UTRAN	The document captures the evaluation of Path-loss technologies which cover a broad scope of specific location technologies, including: RSSI Trilateration technologies, certain Enhanced Cell-ID technologies, and RF pattern matching technologies
ARIB TR-T12-25.912	9.0.0		RP	Feasibility study for evolved Universal Terrestrial Radio Access (UTRA) and Universal Terrestrial Radio Access Network (UTRAN)	Automatic upgrade from previous Release
ARIB TR-T12-25.913	9.0.0		RP	Requirements for Evolved UTRA (E-UTRA) and Evolved UTRAN (E-UTRAN)	Automatic upgrade from previous Release
ARIB TR-T12-25.914	9.0.0		R4	Measurements of radio performances for UMTS terminals in speech mode	Automatic upgrade from previous Release
ARIB TR-T12-25.942	9.0.0		R4	Radio Frequency (RF) system scenarios	Automatic upgrade from previous Release
ARIB TR-T12-25.943	9.0.0		R4	Deployment aspects	Automatic upgrade from previous Release
ARIB TR-T12-25.951	9.0.0		R4	Base Station (BS) classification (FDD)	Automatic upgrade from previous Release
ARIB TR-T12-25.963	9.0.0		R4	Feasibility Study on interference cancellation for UTRA FDD UE	Automatic upgrade from previous Release

Added Standard Number	Version at ARIB STD-T12 Ver.8.00		3GPP WG	Title	New Document Summary
ARIB TR-T12-25.967	9.0.0		R4	FDD Home Node B (HNB) Radio Frequency (RF) requirements (FDD)	The document captures the approach towards the RF related issues for Home NB: a) RF requirements of the HNB application, b) Deployment scenarios and their potential bottlenecks, c) Guidance on how to control the interference to surrounding macro networks and provide good coverage for Home NB.
ARIB TR-T12-25.993	9.0.0		R2	Typical examples of Radio Access Bearers (RABs) and Radio Bearers (RBs) supported by Universal Terrestrial Radio Access (UTRA)	Automatic upgrade from previous Release
ARIB TR-T12-25.996	9.0.0		R1	Spatial channel model for Multiple Input Multiple Output (MIMO) simulations	Automatic upgrade from previous Release
ARIB TR-T12-26.902	9.0.0		S4	Video codec performance	Automatic upgrade from previous Release
ARIB TR-T12-26.903	1.0.0		S4	Improved video support for Packet Switched Streaming (PSS) and Multimedia Broadcast/Multicast Service (MBMS) Services	Presented for information at TSG SA#46.
ARIB TR-T12-26.911	9.0.0		S4	Codec for Circuit switched (CS) Multimedia Telephony Service;Terminal Implementer's Guide	Automatic upgrade from previous Release
ARIB TR-T12-26.914	9.0.0		S4	Multimedia telephony over IP Multimedia Subsystem (IMS); Optimization opportunities	Automatic upgrade from previous Release
ARIB TR-T12-26.935	9.0.0		S4	Packet Switched (PS) conversational multimedia applications; Performance characterization of default codecs	Automatic upgrade from previous Release
ARIB TR-T12-26.936	9.0.0		S4	Performance characterization of 3GPP audio codecs	Automatic upgrade from previous Release

Added Standard Number	Version at ARIB STD-T12 Ver.8.00		3GPP WG	Title	New Document Summary
ARIB TR-T12-26.937	9.0.0		S4	Transparent end-to-end packet switched streaming service (PSS); Real-time Transport Protocol (RTP) usage model	Automatic upgrade from previous Release
ARIB TR-T12-26.943	9.0.0		S4	Recognition performance evaluations of codecs for Speech Enabled Services (SES)	Automatic upgrade from previous Release
ARIB TR-T12-26.944	9.0.0		S4	End-to-end multimedia services performance metrics	Automatic upgrade from previous Release
ARIB TR-T12-26.946	9.0.0		S4	Multimedia Broadcast/Multicast Service (MBMS) user service guidelines	Automatic upgrade from previous Release
ARIB TR-T12-26.967	9.0.0		S4	eCall data transfer; In-band modem solution	Automatic upgrade from previous Release
ARIB TR-12-T26.969	9.0.0		S4	eCall data transfer; In-band modem solution; Characterization report	Automatic upgrade from previous Release
ARIB TR-T12-26.975	9.0.0		S4	Performance characterization of the AMR speech codec	Automatic upgrade from previous Release
ARIB TR-T12-26.976	9.0.0		S4	Performance characterization of the Adaptive Multi-Rate Wideband (AMR-WB) speech codec	Automatic upgrade from previous Release
ARIB TR-T12-26.978	9.0.0		S4	Results of the Adaptive Multi-Rate (AMR) noise suppression selection phase	Automatic upgrade from previous Release
ARIB TR-T12-27.A01	9.0.0		C6	Report on External Interface Connectors	Automatic upgrade from previous Release
ARIB TR-T12-27.A02	9.0.0		C6	MT-TA Interface Description	Automatic upgrade from previous Release
ARIB TR-T12-31.900	9.0.0		C6	SIM/USIM internal and external interworking aspects	Automatic upgrade from previous Release

Added Standard Number	Version at ARIB STD-T12 Ver.8.00		3GPP WG	Title	New Document Summary
ARIB-TR-T12-33.919	9.0.0		S3	3G Security; Generic Authentication Architecture (GAA); System description	Automatic upgrade from previous Release
ARIB-TR-T12-33.924	9.0.0		S3	Identity management and 3GPP security interworking; Identity management and Generic Authentication Architecture (GAA) interworking	Publication of SA-approved version
ARIB-TR-T12-33.937	9.0.0		S3	Study of mechanisms for Protection against Unsolicited Communication for IMS (PUCI)	Publication in Release 9
ARIB-TR-T12-33.980	9.0.0		S3	Liberty Alliance and 3GPP security interworking; Interworking of Liberty Alliance Identity Federation Framework (ID-FF), Identity Web Services Framework (ID-WSF) and Generic Authentication Architecture (GAA)	Missing logout for interworking
ARIB TR-T12-34.926	9.0.0		R4	Electromagnetic compatibility (EMC); Table of international requirements for mobile terminals and ancillary equipment	Automatic upgrade from previous Release
ARIB-TR-T12-36.902	9.0.0		R3	Evolved Universal Terrestrial Radio Access Network (E-UTRAN); Self-configuring and self-optimizing network (SON) use cases and solutions	This document provides descriptions of agreed use cases and solutions with regards to self configuring and self optimizing networks.
ARIB-TR-T12-36.912	9.1.0		R1	Feasibility study for Further Advancements for E-UTRA (LTE-Advanced)	This document is related to the technical report for the study item "Further advancements for E-UTRA (LTE-Advanced)".
ARIB TR-T12-36.913	9.0.0		RP	Requirements for further advancements for E-UTRA (LTE-Advanced)	Automatic upgrade from previous Release

Added Standard Number	Version at ARIB STD-T12 Ver.8.00		3GPP WG	Title	New Document Summary
ARIB TR-T12-36.938	9.0.0		R2	Evolved Universal Terrestrial Radio Access Network (E-UTRAN); Improved network controlled mobility between E-UTRAN and 3GPP2/mobile WiMAX radio technologies	Automatic upgrade from previous Release
ARIB TR-T12-36.942	9.0.0		R4	Evolved Universal Terrestrial Radio Access (E-UTRA); Radio Frequency (RF) system scenarios	Automatic upgrade from previous Release

7. 2. Revised Technical Report

None

IMT-2000 MC-CDMA System 標準規格及び技術資料の改定の概要

1　改定理由

IMT-2000 MC-CDMA System 標準規格及び技術資料について、第 75 回規格会議（2009 年 12 月 16 日）において ARIB STD-T64/ TR-T13 Ver.5.00 に改定した。

今回は、主に 2009 年 9 月～12 月に 3GPP2 が制定した仕様及び技術資料の導入並びに既存の ARIB STD-T64 と TR-T13 の誤記訂正の対処のために、ARIB STD-T64/ TR-T13 Ver.5.10 として改定するものである。

2　改定内容

2.1　STD-T64 の主な改定点（別紙 1 参照）

(1) 新規規格の追加

① HRPD Revision.B 無線インタフェース仕様
② HRPD Revision.B 無線パフォーマンス試験仕様（3件）
③ HRPD Revision.B 無線コンフォーマンス試験仕様
④ バンドクラス仕様
⑤ E-UTRAN－cdma2000 システム間インタワーク・コンフォーマンス試験仕様

(2) 既存規格の改定

なし

(3) 既存規格の誤記訂正

① 音声コーデック仕様（5件）
② データサービス仕様（3件）
③ ICカード仕様
④ 無線コンフォーマンス試験仕様（2件）
⑤ バンドクラス試験仕様（3件）
⑥ システムパラメータリスト（2件）

2.2　TR-T13 の改定点（別紙 2 参照）

(1) 新規規格の追加

なし

(2) 既存規格の改定

なし

(3) 既存規格の誤記訂正

① 全体概要
② CDMA2000要求条件
③ ICカード仕様要求条件
④ 音声コーデック要求条件

3　電波法関連規則に関する事項の確認について

今回追加する標準規格について、電波法及びその関連規則等との関係を調査した結果、問題のないことを確認している。

以 上

別紙 1

STD-T64（Ver.5.00 から Ver.5.10）の改定点

(1)　新規規格の追加

番号	規格名称	表題	内容
1	ARIB STD-T64-C.S0024-B v3.0	cdma2000 High Rate packet Data Air Interface Specification	HRPD Revision.B 無線インタフェース仕様。マルチキャリア, 64-QAM, 間欠送受信などの機能を追加。
2	ARIB STD-T64-C.S0029-B v1.0	Test Application Specification (TAS) for High Rate Packet Data Air Interface	HRPD Revision.B 無線パフォーマンス試験及びそのインタフェース仕様。HRPD Revision.B 対応の仕様を追加。
3	ARIB STD-T64-C.S0032-B v1.0	Recommended Minimum Performance Standards for cdma2000 High Rate packet Data Access Network	HRPD Revision.B 基地局 無線パフォーマンス試験仕様。HRPD Revision.B 対応のパフォーマンス試験を追加。
4	ARIB STD-T64-C.S0033-B v1.0	Recommended Minimum Performance Standards for cdma2000 High Rate packet Data Access Terminal	HRPD Revision.B 移動局 無線パフォーマンス試験仕様。HRPD Revision.B 対応のパフォーマンス試験を追加。
5	ARIB STD-T64-C.S0038-B v1.0	Signaling Conformance Specification for High Rate packet Data Air Interface	HRPD Revision.B シグナリングコンフォーマンス試験仕様。HRPD Revision.B 対応のコンフォーマンス試験を追加。
6	ARIB STD-T64-C.S0057-D v1.0	Band Class Specification for cdma2000 Spread Spectrum Systems	バンドクラス仕様。Band Class 20（米国 1.5 GHz 帯）, Band Class 5（海外 450 MHz 帯一部拡張）の規定を追加。
7	ARIB STD-T64-C.S0095-0 v1.0	Signaling Test Specification for EUTRAN - cdma2000 Connectivity and Interworking	E-UTRAN – cdma2000 システム間インタワーク仕様のシグナリング コンフォーマンス試験仕様。新たに仕様化。

(2)　既存規格の改定

なし

(3)　既存規格の誤記訂正

番号	規格名称	表題	内容
1	ARIB STD-T64-C.S0014-B v1.0	Enhanced Variable Rate Codec, Speech Service Options 3 and 68 for Wideband Spread Spectrum Digital Systems	表紙の誤記訂正。
2	ARIB STD-T64-C.S0014-C v1.0	Enhanced Variable Rate Codec, Speech Service Options 3, 68, and 70 for Wideband Spread Spectrum Digital Systems	表紙の誤記訂正。
3	ARIB STD-T64-C.S0017-0 v5.0	Data Service Options for Spread Spectrum Systems	表紙の誤記訂正。

4	ARIB STD-T64-C.S0017-003-A v1.0	Data Service Options for Spread Spectrum Systems: AT Command Processing and the Rm Interface	規格内容の誤記訂正。
5	ARIB STD-T64-C.S0017-004-A v1.0	Data Service Options for Spread Spectrum Systems: Async Data and Fax Services	規格内容の誤記訂正。
6	ARIB STD-T64-C.S0020-0	High Rate Speech Service Option 17 for Wideband Spread Spectrum Communication Systems	表紙の誤記訂正。
7	ARIB STD-T64-C.S0023-A v3.0	Removable User Identity Module for Spread Spectrum Systems	表紙の誤記訂正。
8	ARIB STD-T64-C.S0030-0 v1.0 and v2.0 Supporting Code	Supporting Code for Selectable Mode Vocoder Service Option (Floating Code, Fixed Code)	採番の誤記訂正。
9	ARIB STD-T64-C.S0043-0 v1.0	Signaling Conformance Test Specification forcdma2000 Spread Spectrum Systems	表紙の誤記訂正。
10	ARIB STD-T64-C.S0044-0 v1.0	Interoperability Specification for cdma2000 Air Interface	表紙の誤記訂正。
11	ARIB STD-T64-C.S0053-0 v1.0	Minimum Performance Specification for the Source-Controlled Variable-Rate Multimode Wideband Speech Codec (VMR-WB), Service Option 62 for Spread Spectrum Systems	表紙の誤記訂正。
12	ARIB STD-T64-C.S0057-B v1.0	Band Class Specification for cdma2000 Spread Spectrum Systems, Revision B	表紙の誤記訂正。
13	ARIB STD-T64-C.S0057-C v1.0	Band Class Specification for cdma2000 Spread Spectrum Systems, Revision C	表紙の誤記訂正。
14	ARIB STD-T64-C.S0057-D v1.0	Band Class Specification for cdma2000 Spread Spectrum Systems, Revision D	表紙の誤記訂正。
15	ARIB STD-T64-C.R1001-F v1.0	Administration of Parameter Value Assignments for cdma2000 Spread Spectrum Standards, Release F	表紙の誤記訂正。
16	ARIB STD-T64-C.R1001-G v1.0	Administration of Parameter Value Assignments for cdma2000 Spread Spectrum Standards, Release G	表紙の誤記訂正。

その他、エディトリアルな修正を行った。

別紙 2

TR-T13（Ver.5.00 から Ver.5.10）の改定点

(1) 新規規格の追加

なし

(2) 既存規格の改定

なし

(3) 既存規格の誤記訂正

番号	規格名称	表題	内容
1	ARIB TR-T13-SC.R2002-001-0 v1.0	3GPP2 System Capability Guide Release B	表紙の誤記訂正。
2	ARIB TR-T13-C.R1000-0 v1.0	Capabilities Requirements Mapping for cdma2000 Standards	採番、表紙の誤記訂正。
3	ARIB TR-T13-S.R0060-0 v1.0	Removable User Identity Module (R-UIM)/Mobile Equipment (ME) Interface Testing, Stage 1 Description	表紙の誤記訂正。
4	ARIB TR-T13-S.R0080-0 v1.0	CDMA2000 Wideband Speech Codec, Stage 1 Requirements	表紙の誤記訂正。

OFDMA Broadband Mobile Wireless Access System (WiMAX™ applied in Japan) 標準規格の改定の概要

1　改定理由

OFDMA Broadband Mobile Wireless Access System (WiMAX™ applied in Japan) 標準規格(ARIB STD-T94)は、平成 19 年 12 月 12 日の第 68 回規格会議で Ver. 1.0 が策定され、その後の規格会議を経て、Ver. 1.5 に改定されている。

今回、国際標準の改訂及び国内規格の改正に応じて、ARIB STD-T94 Ver. 2.0 として改定するものである。

2　改定内容

2.1　STD-T94 がトランスポーズしている国際標準の改訂に伴う改定

(1)　WiMAX Forum標準の新リリースの発行

① System Profile Release 1.5 (August 1, 2009)
http://www.wimaxforum.org/resources/documents/technical/T23
(主な追加機能)
- FDD/HFDD方式 (注1)
- マルチキャストブロードキャスト機能 (注2)
- 位置情報サービス機能 (注3)
- ヘッダー圧縮機能 (注4)
- 閉ループ型MIMOダイバシティ (注5)

② Network Architecture Release 1.5 (November 21, 2009)
http://www.wimaxforum.org/resources/documents/technical/T32
http://www.wimaxforum.org/resources/documents/technical/T33
(主な追加機能)
- マルチキャスト・ブロードキャストサービス
- 位置情報サービス
- ヘッダー圧縮のためのシグナリング
- IMSとのインターフェース
- インターネットアプリとのインターフェース
- 無線リンクでの端末のプロビジョニング

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[1] 現在、FDD/HFDD 方式は国内 BWA システムの対象外のため、T94 には含めない。FDD/HFDD：Frequency Division Duplex/Half Duplex FDD
[2] MBS：Multicast Broadcast Service
[3] LBS： Location Based Service
[4] RoHC： Robust Header Compression
[5] CL-MIMO： Closed-Loop Multiple Input Multiple Output

(2)　STD-T94の構成（別紙1参照）

Ver. 1.5で規定している既存のSystem Profile Release 1.0及びNetwork Architecture Release 1.0はそのまま残し、Release 1.5を追加する。

Chapter 4ではSystem Profile を記載したWiMAX Forumドキュメントを、また、Chapter 5ではNetwork Architectureを記載した同ドキュメントを、そのまま転載して参照している。転載については、WiMAX　Forumの許可を得ている。

2.2 国内規格の改正に伴う主な改定点（別紙 1 参照）

(1)　WiMAX 小電力レピータの導入　（平成 21 年 11 月 24 日 公布・施行）

（主な特徴）

- 通信エリア拡大のための中継局
- 無線局の種別は陸上移動局
- 小電力
- 包括免許を付与することが可能
- 設置場所はユーザが自由に設定
- ユーザが自由に操作

2.3　Attachment 2 の記載方法の変更

Attachment 2 “List of Essential Industrial Property Rights (selection of option 2)” に、”Reference (Not applied in Japan)”扱いのIPRが含まれていたので、Attachment 2からReferenceの部分を分離して、両者を明確に区別する。

2.4　Editorial な修正

2.1項及び2.2項に示す改定を実施する際に発見された、Editorialな誤記を修正している。

3　電波法関連規則に関する事項の確認について

今回の改定内容については、電波法関連規則等との関係を調査した結果、問題のないことを確認している。

4　STD-T94 標準規格の電子媒体による配布への変更

今回の改定により、ページ数が 3,390 ページに増大して、印刷物による配布が困難になったので、今後は印刷物による配布は廃止して、DVD 等の電子媒体により配布する。

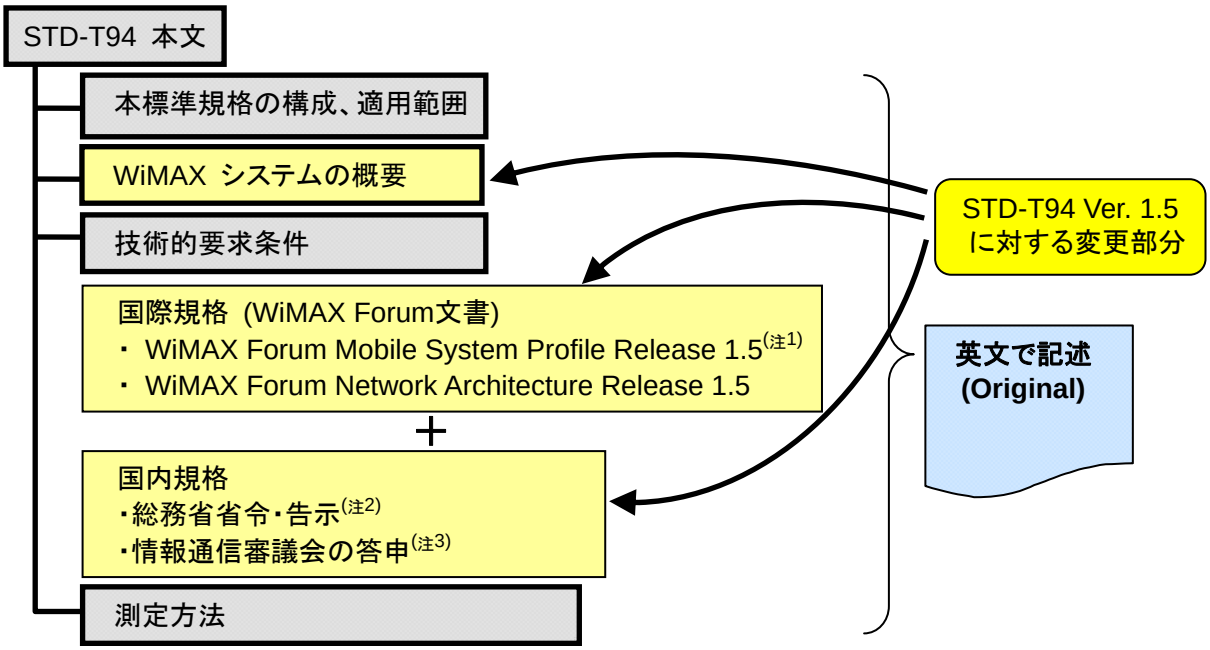
以 上

別紙 1

STD-T94（Ver.1.5 から Ver.2. 0）改定点の補足

(1) STD-T94 の構成

➢ 本文の構成



（注1） IEEE802.16-2009 の参照を含む
（注2） STD-T94 Ver. 1.5 に、「陸上移動局の中継によるもの」に関する無線設備規則・告示の改正(2009.11.24)を追加
（注3） STD-T94 Ver. 1.5 に、「2.5GHz 帯を使用する広帯域移動無線アクセスシステムの技術的条件」の「小電力レピータの技術的条件」に対する答申(2009.6.23)を追加

➢ 章構成

Preface

Chapter 1 General Description
- 1.1 Outline
- 1.2 Scope of the Standard
- 1.3 Reference Regulation
- 1.4 Reference Document

Chapter 2 System Overview
- 2.1 Mobile WiMAX Network Architecture
- 2.2 WiMAX Netwo0rk Reference Model
- 2.3 Physical Layer Model
- 2.4 MAC Layer Description
- **2.5 Low Power Repeater (今回追加)**

Chapter 3 Technical Requirements for WiMAX System
- 3.1 Overview
- 3.2 General Condition
- **3.3 Low Power Repeater (今回追加)**

Chapter 4 System Profile
4.1 Release 1.0
4.2 Release 1.5 (今回追加)

Chapter 5 Network Architecture
5.1 Release 1.0
5.2 Release 1.5 (今回追加)

Chapter 6 Measurement Method

(2) 小電力レピータの主要諸元

	陸上移動局対向器	基地局対向器
使用周波数	2595 MHz – 2625MHz	
中継方式	再生方式および非再生方式	
最大キャリア数	3キャリア	
通信方式	TDD	
多重化方式	OFDM および TDM の複合	OFDMA
変調方式	BPSK, QPSK, 16QAM または 64QAM	QPSK または 16QAM
送信バースト繰返し周期	5 ms	
送信バースト長	3.65ms 3.55ms 3.45ms 3.35ms 3.25ms 3.15ms 3.05ms 2.95ms 2.85ms 2.75ms	1.35ms 1.45ms 1.55ms 1.65ms 1.75ms 1.85ms 1.95ms 2.05ms 2.15ms 2.25ms
送信電力	200 mW 以下	
周波数許容偏差	2×10^{-6} 以下	
空中線利得	2 dBi 以下	
占有周波数帯域幅	4.9 MHz (5MHz システム), 9.9 MHz (10MHz システム)	
隣接漏えい電力	5MHz システム 7.5MHz – 8MHz: -20-2.28x(Df-7.5) dBm/MHz 以下 8MHz – 17.5MHz: -21-1.68x(Df-8) dBm/MHz 以下 17.5MHz – 22.5MHz: -37 dBm/MHz 以下 10MHz システム 15MHz – 20MHz: -21-32/19x(f-10.5) dBm/MHz 以下 20MHz – 25MHz: -37 dBm/MHz 以下	
スプリアス領域における不要発射の強度	9kHz – 150kHz: -13dBm/kHz 以下 150kHz – 30MHz: -13dBm/10kHz 以下 30MHz – 1000MHz: -13dBm/100kHz 以下 1000MHz – 2505MHz: -13dBm/MHz 以下 2505MHz – 2530MHz: -37dBm/MHz 以下 2530MHz – 2535MHz: 1.7f-4338dBm/MHz 以下 2535MHz – 2630MHz: -18dBm/MHz 以下 2630MHz – 2630.5MHz: -13-8/3.5x(f-2627)dBm/MHz 以下 2630.5MHz – 2640MHz: -21-16/9.5x(f-2630.5)dBm/MHz 以下 2640MHz – 2655MHz: -37dBm/MHz 以下 2655MHz - : -13dBm/MHz 以下	

小電力データ通信システム/ワイヤレスＬＡＮシステム
標準規格の改定の概要

現行 RCR STD-33　5.3 版から 5.4 版への改定の概要及び主な変更内容は以下の通りです。

No.	改定の概要と主な変更内容
1	改定の概要 (1) 参考２の漏洩同軸ケーブルに関する解説書について、等価等方輻射電力が基準より小さい場合にアンテナ利得で補う事が可能であることを明記 (2) 誤記訂正等
2	主な変更内容
(1) 関連	・「参考２　漏洩同軸ケーブルに関する解説書」の記載の中で、等価等方輻射電力が基準より小さい場合にアンテナ利得で補う事が可能であることを明記。また、他システムに関する表現と、アンテナ利得上限が 2.14dBi であるかのような表現の削除（一部削除、下線部を追加）。 １　はじめに （省略）これは、ARIB STD-T66（第二世代小電力データ通信システム／ワイヤレス LAN システム）及び RCR STD-33（小電力データ通信システム／ワイヤレス LAN システム）を対象と~~し、アンテナ利得 2.14dBi 以下という条件で検討されたものであり、その他の無線システムについては、導入にあたり別途検討が必要である~~する。 ２　本書の目的 （省略）、同じスロット構成であっても全体の敷設形状や長さによって利得に差が生ずる。~~従来は、主に鉄道、トンネル、地下街などの公共設備において免許を付与された無線局に使用されていたので、その運用状態は行政やメーカが管理可能であった。しかし、無線 LAN のような免許不要局のアンテナとして市場に流通する場合には、その扱いは技術基準適合証明を受けた者又は工事設計認証を受けた者にゆだねられ、最終的には一般ユーザの手に渡ることになり、電波法の遵守と他システムへの与干渉防止を図るために、いかなる状況でもアンテナ利得が上限値を超えないという担保が必要になる。また、現行の技術基準や審査基準との整合性が保たれるよう、アンテナ利得の測定及び算出方法を定める必要がある。~~そこで、どのような敷設形状でも長さにより推定される最大利得の算出方法を定める必要がある。 ３　漏洩同軸ケーブルの考え方 （省略） （３）アンテナ利得 漏洩同軸ケーブルのアンテナ利得は、2.14dBi 以下~~を担保しなければならない。~~

	であること。ただし、等価等方輻射電力（周波数拡散方式及びOFDM方式の場合は1MHzの帯域幅における等価等方輻射電力）が、アンテナ利得2.14dBiの送信空中線に平均電力が10mW（周波数拡散方式及び占有周波数帯幅が26MHz以下のOFDM方式の場合は1MHzの帯域幅における平均電力が10mW、占有周波数帯幅が26MHzを超え38MHz以下のOFDM方式の場合は1MHzの帯域幅における平均電力が5mW。ただし、FH方式又はDS方式及びFH方式の複合方式若しくはFH方式及びOFDM方式の複合方式を用いるものであって、2,427MHz以上、2,470.75MHz以下の周波数の電波を使用するものにあっては、1MHzの帯域幅における平均電力が3mW）の空中線電力を加えたときの値以下となる場合は、その低下分を送信空中線の利得で補うことができるものとする。また、専用の付属給電線を使用する場合は、その損失分も含めてアンテナ利得として良いこととする。 4　利得の測定と算出方法 前述のように、漏洩同軸ケーブルは敷設形状を変えると利得が変化するので、~~いかなる敷設形状でも利得が2.14dBiを越えないという担保が必要となる。~~どのような敷設形状でも長さにより推定される最大利得を求める必要がある。そこで、全てのスロットから送信される電波が、同じ伝搬距離の受信点において、全て同位相で加算（最大値合成）されるという理論上考えられる最も厳しい条件を仮定し、測定と計算によって最大利得を推定する。 （省略） （３）単一型のアンテナ利得の算出 （省略） 【算出例】 全長n=100m、Gu=－18 dBi、αc= 0.13 dB/mの場合、(２)式から、G100=－2.92 dBi を得る。更に、n=500mまで計算した結果をグラフにすると図５のように~~なり、この漏洩同軸ケーブルは、150m付近から利得が飽和し、これ以上延長しても2.14dBiを超えないことが分かる~~なる。
(2) 関連	・誤記訂正、明確化のための追記、参照告示の変更等を行う。

(詳細は、規格会76-12の改定履歴の改定部分を参照のこと)

第二世代小電力データ通信システム/ワイヤレスＬＡＮシステム
標準規格の改定の概要

現行 ARIB STD-T66　3.4 版から 3.5 版への改定の概要及び主な変更内容は以下の通りです。

No.	改定の概要と主な変更内容
1	改定の概要 (1) 誤記訂正等
2	主な変更内容
(1) 関連	・「参考５　漏洩同軸ケーブルに関する解説書」中の「３　漏洩同軸ケーブルの考え方」の「（３）アンテナ利得」の記載における誤記訂正（下線部を追加)。 ３　漏洩同軸ケーブルの考え方 （省略） （３）アンテナ利得 漏洩同軸ケーブルのアンテナ利得は、2.14dBi 以下であること。ただし、等価等方輻射電力（周波数拡散方式及び OFDM 方式の場合は 1MHz の帯域幅における等価等方輻射電力）が、アンテナ利得 2.14dBi の送信空中線に平均電力が 10mW（周波数拡散方式及び占有周波数帯幅が 26MHz 以下の OFDM 方式の場合は 1MHz の帯域幅における平均電力が 10mW、占有周波数帯幅が 26MHz を超え 38MHz 以下の OFDM 方式の場合は 1MHz の帯域幅における平均電力が 5mW。ただし、FH 方式又は DS 方式及び FH 方式の複合方式若しくは FH 方式及び OFDM 方式の複合方式を用いるものであって、2,427MHz 以上、2,470.75MHz 以下の周波数の電波を使用するものにあっては、1MHz の帯域幅における平均電力が 3mW）の空中線電力を加えたときの値以下となる場合は、その低下分を送信空中線の利得で補うことができるものとする。また、専用の付属給電線を使用する場合は、その損失分も含めてアンテナ利得として良いこととする。

(詳細は、規格会 76-13 の改定履歴の改定部分を参照のこと)

参考資料７６－１０

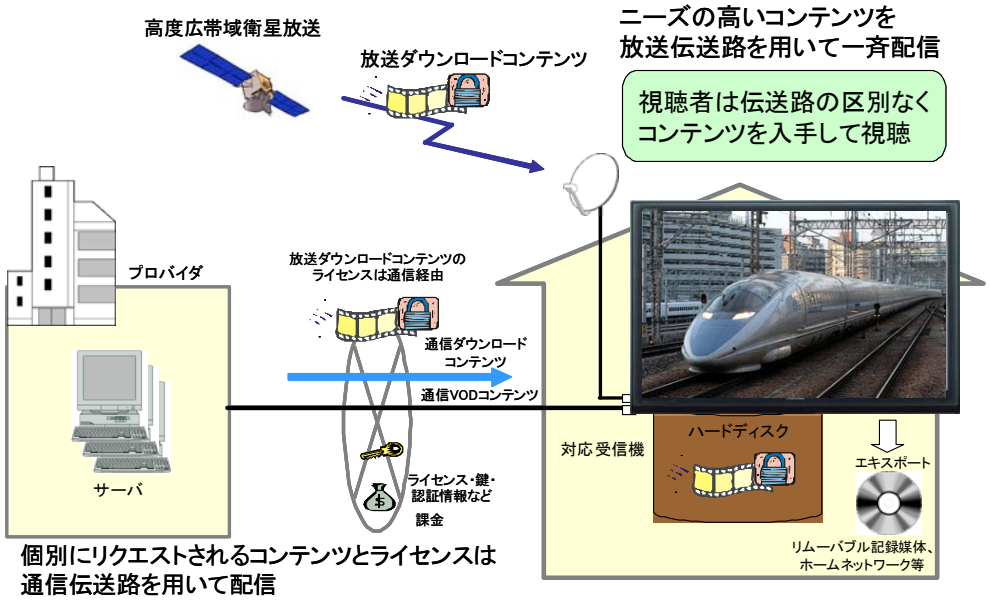
高度広帯域衛星デジタル放送におけるダウンロード方式標準規格の概要

(STD-B45 1.0 版)

本標準規格は、2008 年 7 月の情報通信審議会・放送システム委員会において、STD-B44「高度広帯域衛星デジタル放送の伝送方式」で規定される TLV による蓄積型放送サービスを導入するためには、今後 ARIB において検討が必要であるとの報告を受けて検討を行い、このたびダウンロード方式として規格化を行うものである。

通信回線を用いて、高品質コンテンツを VOD やダウンロードで提供するサービスが既に始まっている。しかしながら、通信回線を用いたサービスでは、利用者が多くなると、通信帯域や送信設備の制約から伝送にかかる時間が増えるなどサービス品質の低下の懸念が想定される。一方、衛星放送の伝送路は、伝送帯域が常に確保され、全国の多数の端末に同時に安定して伝送できるという利点があり、高画質・高音質のコンテンツを多数の視聴者に一斉に提供する高速ダウンロードが可能と考えられる。

本標準規格で規定する方式は、放送と通信が連携することを前提に、ニーズの高いコンテンツは放送伝送路を用いて一斉配信し、個別にリクエストされるコンテンツやライセンスは通信伝送路を用いて個別に配信するハイブリッド型の方式である。



本標準規格の特徴を以下に示す。

- ダウンロードサービス用として、映像フォーマットは STD-B32 で規定されている 2160/60P までを、映像符号化方式は同じく MPEG-4 AVC 方式を採用した。

- 音声符号化方式は、ロスレス符号化方式として MPEG-4 ALS 方式（22.2ch まで）を STD-B32 に新たに規定することとし、MPEG-2 AAC 方式とともに採用した。
- データ伝送方式としては、STD-B32 で規定される IP ヘッダ圧縮方式により IP パケットのヘッダを圧縮することで、伝送効率を高めた。圧縮された IP パケットの伝送方式は、STD-B32 で規定される TLV パケットによる伝送方式を採用した。
- その他規格全体として、既にサービスが始まっている通信回線によるダウンロードサービスの方式と整合性が取れるように留意した。特に、受信機モデル、DRM 仕様など受信機に依存する部分については、外部規格を参照するようにした。

1　適用範囲

本標準規格は、高度広帯域衛星デジタル放送におけるダウンロード方式によるデジタル放送に適用する。

2　構成と概要

本標準規格は、9 つの章と 6 つの解説から構成される。また、外部規格（IPTV フォーラムの「IPTV 規定ダウンロード仕様」など）を必要に応じて参照するように規定した。

概要を以下に示す。

第 1 章　一般事項

目的、適用範囲、参照文書、用語の説明について記載した。

第 2 章　サービス要件

本標準規格で想定するサービスの前提条件、要求条件およびシステム全体のモデルを示した。

第 3 章　受信機モデル

ダウンロード方式に対応する受信機のリファレンスモデルとその構成要素を規定した。また、各構成要素に対応する受信機機能についても規定した。なお、本標準規格では、ダウンロードサービスを受けるための機能以外の受信機能（通常の受信機能）については、規定していない。

第 4 章　DRM 仕様

DRM に関わるシステムモデルと、DRM に求められる機能要件を記載した。なお、DRM 仕様の詳細規定については、外部規格（IPTV フォーラムの「IPTV 規定 ダウンロード仕様」）を参照した。

第 5 章　コンテンツの符号化・多重化

映像符号化方式（MPEG-4 AVC 規格に準拠する方式、2160/60P まで）、音声符号化方式（MPEG-2 AAC 規格に準拠する方式または MPEG-4 ALS 方式、22.2ch まで）、字幕・文字スーパー（STD-B24 に準拠）および、多重化方式（タイムスタンプ付き TS）を規定した。

第 6 章　ダウンロード制御情報

受信機がダウンロードの予約・実行を行う際に用いる制御情報（ダウンロード制御情報：XML 文書）の記述形式および、各要素の想定する運用詳細などを規定した。

第 7 章　ECG メタデータ

本標準規格における ECG メタデータについて、STD-B38 付録 C.1「高度広帯域衛星デジタル放送ダウンロードサービスにおける ECG メタデータ」を参照するように規定した。

第 8 章　再生制御情報

ダウンロードしたコンテンツの再生時などに使用する再生制御情報について、外部規格（IPTV フォーラムの「IPTV 規定 ダウンロード仕様」）を参照するように規定した。

第 9 章　データ伝送方式

映像・音声等を多重化したファイル、ダウンロード制御情報、ECG メタデータなどのファイルを IP パケット化し、IP ヘッダを圧縮して伝送するデータ伝送方式を規定した。

解説 1　ダウンロード方式のプロトコルスタック

本標準規格で規定するダウンロード方式のプロトコルスタックと、関連する各章との関係を示した。

解説 2　受信機の動作例

第 3 章で規定した受信機のリファレンスモデルについて、ダウンロード処理の動作例を解説した。

解説 3　ダウンロードサービスにおける DRM 処理シーケンス

ダウンロードサービスの全体のシーケンスに沿って、各フェーズにおける DRM 関連処理動作を解説した。

解説 4　ダウンロード制御情報とコンテンツダウンロード

ダウンロード制御情報とダウンロード番組の関係、およびダウンロード制御情報から見たダウンロードの動作例を解説した。

解説 5　RFC 3926 で規定される FLUTE 準拠のパケットへの変換

第 9 章に規定のデータ伝送方式により構成されたパケットは、受信機側で RFC 3926 として規定される File Delivery over Unidirectional Transport（FLUTE）準拠のパケットに変換することが可能であることを解説した。

解説 6　ダウンロードサービスにおける課金シナリオ分析

本標準規格に基づくダウンロードサービスを課金の観点から 6 つのシナリオに分け、それぞれについて、画面遷移例、ECG やダウンロード制御情報などの動作シーケンス例などを解説した。本解説は、本標準規格に直接関わるものではないが、今後事業者運用規定を策定する際に参考になる。

キーワード（用語と略語）

DRM	Digital Rights Management
MPEG-4 ALS	MPEG-4 Audio Lossless Coding：今回 STD-B32 にダウンロードサービス用として追加規定する
ダウンロード制御情報	受信機がダウンロード予約・実行を行うのに用いられる制御情報。XML 文書として記述される
ECG	Electronic Contents Guide：デジタル・コンテンツを検索、閲覧するアプリケーション機能の総称
ECG メタデータ	ECG で利用される、コンテンツの属性を記述したデータの総称
再生制御情報	ダウンロードしたコンテンツの再生やリムーバブル記録媒体へのコピーの際に使用する制御情報
ダウンロード番組	特定のサービス、特定の時間枠で伝送される、ダウンロードの単位となるファイルの集合

改定履歴

版数	策定または改定日	主な改定内容
1.0 版	2010 年 4 月**日	策定

解説1　ダウンロード方式のプロトコルスタック

高度広帯域衛星デジタル放送におけるダウンロード方式のプロトコルスタックを図 C1-1 に示す。

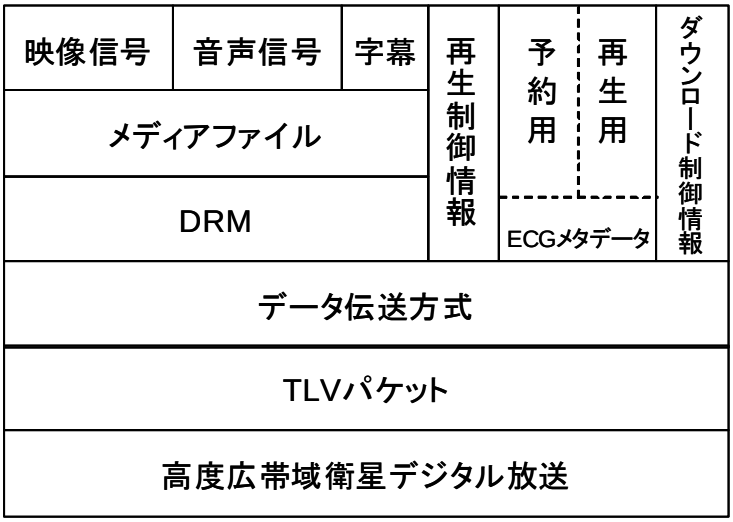


図 C1-1　ダウンロード放送のプロトコルスタック

各項目を概説する。

項目	概説
高度広帯域衛星デジタル放送	ARIB STD-B44 に規定する伝送方式によるデジタル放送
TLV パケット	ARIB STD-B32 第 3 部に規定する可変長パケット形式
データ伝送方式	本標準規格　第 9 章に規定するファイルを伝送する方式
DRM	本標準規格　第 4 章に示される DRM
メディアファイル	本標準規格　第 5 章に規定する多重化に基づいた形式のファイル
映像信号	本標準規格　第 5 章に規定する映像信号
音声信号	本標準規格　第 5 章に規定する音声信号
字幕	本標準規格　第 5 章に規定する字幕・文字スーパー
再生制御情報	本標準規格　第 8 章に規定する再生制御情報
ECG メタデータ 予約用	本標準規格　第 7 章に規定する予約用メタデータ
ECG メタデータ 再生用	本標準規格　第 7 章に規定する再生用メタデータ
ダウンロード制御情報	本標準規格　第 6 章に規定するダウンロード制御情報

サーバー型放送における符号化、伝送及び蓄積制御方式標準規格の改定の概要

現行 ARIB STD-B38 1.3 版に対する、改定の概要及び主な変更内容は以下のとおりです。

No.	改定の概要と主な変更内容
1	改定の概要
	(1) 高度広帯域衛星デジタル放送におけるダウンロード方式標準規格（STD-B45）の規定に伴う改定 (2) 標準規格書構成の見直し (3) 項目番号等の変更、補足、誤記訂正、表現の明確化及び用法の統一
2	主な変更内容
(1) 関連	◎　本編 1) 「メタデータの分類」の記載（3.1.1） 本改定で新設するメタデータを含め、サーバー型放送で用いられるメタデータの分類について追加記載した。 2) 名前空間の変更（例：http://www.arib.or.jp/metadata/tva/2010/04）（3.2.1） 名前空間の記述方法は規格が定められた年月を用いて異なる版を識別する。 3) コンテンツ記述メタデータの分類スキームの追加、変更（3.2.3） 辞書の追加（見直し、新設、拡張）に伴い、特定の用語の名前と意味を定義するための分類スキームに関し、辞書および辞書内の用語の参照先を追加した。また、URI 属性の追加および変更を行った。 4) 基本タイプに単純タイプ"YearRangeType"を追加（3.2.3.2） 5) 基本コンテンツ記述の記述形式の追加、変更（3.2.3.3） "ImageLocatorType"、"TemporalSegmentLocatorType"、 "TitleMediaType"、"PromotionalInformationType"の各複合タイプを追加した。複合タイプ"RelatedMaterialType"に要素"PromotionalMedia"を追加した。複合タイプ"CaptionLanguageType"に属性"description"を追加した。その他、タイプの定義変更を行った。 6) 音声及び映像の情報の記述形式の追加（3.2.3.4） 複合タイプ"StreamDescriptionType"を追加した。複合タイプ"AudioAttributesType"に"StreamDescription"、"BitRate"、"SamplingRate"の各要素を追加した。 7) 番組情報の記述形式の追加（3.2.3.6） 単純タイプ"PeriodTypeType"、複合タイプ"PeriodType"を追加した。複合タイプ"ProgramInformationType"に要素"Period"を追加した。 8) グループ情報の記述形式の追加（3.2.3.7） 複合タイプ"ProgramGroupTypeType"の記述形式を追加した。複合タイプ"GroupInformationType"に"OtherIdentifier"、 "Period"の各要素を追加した。

	9) ライセンスメタデータの新設（3.2.7） コンテンツに付随する利用権利（ライセンス）に関する情報を記述するためのメタデータ記述。コンテンツの利用条件や、ライセンスを取得する為の制御情報を規定する。複合タイプ"LicenseInformationType"として定義する。 10) ライセンスメタデータに関する情報テーブルの追加（3.2.8.1、3.2.8.2） 情報テーブルの定義"LicenseInformationTableType"を複合タイプとして追加定義した。ARIB サーバー型放送番組情報文書の記述形式において、複合タイプ"ProgramDescriptionType"に要素"LicenseInformationTable"を追加した。 11) 購入に関する項目を規定するメタデータの記述形式の追加（3.2.8.1） 複合タイプ"PurchaseInformationType"に要素"CRIDRef"を追加した。 12) メタデータ伝送方式の追加（3.4） 高度広帯域衛星デジタル放送におけるダウンロード伝送方式を追加し、メタデータファイルフォーマットを規定した。（3.4.2） ◎ 付録 13) メタデータジャンル辞書の新設（A.1.2） 従来のメタデータジャンル辞書に加えて、ダウンロードサービスなど、より具体的なサービスを想定したメタデータジャンル辞書を新設した。 14) HowRelated 辞書の拡張（A.3） ダウンロードサービスなど、より具体的なサービスを想定し、拡張を行った。基本コンテンツ記述から、関連するコンテンツ及び参照情報（参照する他のコンテンツ、ライセンス情報、シリーズ情報）への関係性を識別する。 15) PromotionalType 辞書の新設（A.5） 基本コンテンツ記述で使用し、「お勧め」や「新着」を定義する。 16) PurchaseType 辞書の見直し（A.6） ダウンロードサービスなど、より具体的なサービスを想定し、全面的に見直しを行った。基本コンテンツ記述で使用し、番組の販売形態等を定義する。 17) UnitType 辞書の見直し（A.7） ダウンロードサービスなど、より具体的なサービスを想定し、全面的に見直しを行った。基本コンテンツ記述で使用し、視聴単位時間などを定義する。 18) Roll 辞書の拡張（A.8） 辞書の項目を拡張した。基本コンテンツ記述などで使用し、番組キャストや制作情報などを定義する。 19) AudioComponent 辞書の一部見直し（A.9） "5.1ch"の表記を"5.1ch サラウンド"に改めた。 20) その他の辞書の新設（A.10～A.15） その他、音声及び映像の情報の記述で使用する AudioCodingFormat 辞書（A.10）、VisualCodingFormat 辞書（A.11）、FileFormat 辞書（A.12）を新設した。また、ライセンスメタデータで使用する OutputPort 辞書（A.13）、CopyControlMedthod 辞書（A.14）、ExportMedia 辞書（A.15）を新設した。 21) スキーマ（記述形式）の掲載（B.1）

	本編の規定に対応する全体スキーマを新たに規定した。名前空間を"http://www.arib.or.jp/metadata/tva/2010/04"とする。 22) 高度広帯域衛星デジタル放送ダウンロードサービスにおけるECGメタデータの規定（C.1） 高度広帯域衛星デジタル放送ダウンロードサービスにおいて用いるECGメタデータを規定する。 ◎　付属 23) 高度広帯域衛星デジタル放送ダウンロードサービスにおけるECGメタデータ利用に関する運用ガイドラインの規定 付属1　高度広帯域衛星デジタル放送ダウンロードサービスにおけるECGメタデータ利用に関する運用ガイドライン 第1章 一般事項 第2章 メタデータ文字符号 第3章 メタデータ文書 第4章 コンテンツ記述メタデータ 第5章 インスタンス記述メタデータ 第6章 ライセンス参照情報 第7章 CRIDならびにその他の識別情報 第8章 メタデータ伝送方式
(2) 関連	1) 付録の採番方法の変更 付録A　メタデータ辞書、付録B　スキーマ、付録C　サービス毎の規定（C.1 高度広帯域衛星デジタル放送ダウンロードサービスにおけるECGメタデータ） 2) 付属の新設 付属1　高度広帯域衛星デジタル放送ダウンロードサービスにおけるECGメタデータ利用に関する運用ガイドライン
(3) 関連	・ 上記改定における規定項目の追加等に伴い、節番号等を変更した。 ・ 必要に応じて、データの定義等を補足した。 ・ その他、誤記訂正、表現の明確化及び用法の統一などを行った。

（詳細は、規格会76-15の改定履歴を参照のこと）

デジタル放送における映像符号化、音声符号化及び多重化方式標準規格の改定の概要

（STD-B32　2.2 版から 2.3 版）※第 2 部のみ

現行 ARIB STD-B32 2.2 版に対する、改定の概要及び主な変更点は以下のとおりです。

No.	改定の概要と主な変更内容
1	改定の概要
第 2 部	(1) ロスレス音声符号化方式規定の追加 - MPEG-4 ALS(Audio Lossless Coding)方式規定の追加 (2) その他
2	主な変更内容
第 2 部 (1) 関連	- MPEG-4 ALS 方式規定の追加 高度広帯域衛星デジタル放送のダウンロード放送サービスにて用いるロスレス音声符号化方式として、MPEG-4 ALS 方式規定の追加を行った。 ① 「第 6 章　ロスレス音声符号化方式」を新設 ② 「解説 4　MPEG-4 ALS 方式の概要」を新設 ③ 「付録 A　デジタル放送に適用される技術方式」の表 A-1 に MPEG-4 ALS 方式の適用範囲を追加 ④ 「1.3.1　準拠文書」に MPEG-4 ALS 関連の準拠文書 2 件を追加 ⑤ 「1.4.2　略語」に「ALS」を追加
第 2 部 (2) 関連	- 誤記修正 ① 解説 3　3 次元配置の音声モードのダウンミックス係数について 「表 1　5.1 チャンネルへのダウンミックス係数インデックス」のダウンミックス式の誤記を修正

（詳細は、規格会 76-16 の改定履歴を参照のこと）

デジタル放送に使用する番組配列情報標準規格の改定の概要
（STD-B10　4.7 版から 4.8 版）

現行 ARIB STD-B10 4.7 版に対する、改定の概要及び主な変更点は以下のとおりです。

No.	改定の概要と主な変更内容
1	改定の概要
	(1) 高度広帯域衛星デジタル放送のダウンロード方式に関連する規定の追加 (a) 可変長パケット多重化方式に関連するテーブル (b) MPEG-4 ALS*音声符号化方式に関連する記述子 (2) 識別子の割当状況の更新 (a) ストリーム形式種別割り当て (3) 参考文献の更新 ALS*：Audio Lossless Coding
2	主な変更内容
(1) 関連	(a) ダウンロード放送において、スケジュールに基づいて配信されるコンテンツを受信機で予約実行して蓄積する際、受信機が放送局の時刻と正確な同期を取る必要があり、TLV*パケットによって時刻情報を伝送可能とするため、TDT*と TOT*を TLV により伝送されるテーブルとして追加した。（第 1 部 5.2 表 5-2（2）、　第 2 部 5.1.3 表 5-2（2）） (b)ダウンロード放送でロスレス音声符号化方式の MPEG-4 ALS 方式を用いる際、そのストリームを識別するために MPEG-4 音声記述子および MPEG-4 音声拡張記述子を追加した。 （第 1 部 5.3 表 5-3、6.2 図 6-78、図 6-79、　第 2 部 6.l 表 6-1、 6.2.50、6.2.51） TLV*：Type Length Value 、TDT*：時刻日付テーブル(Time and Date Table)、 TOT*：時刻日付オフセットテーブル(Time Offset Table)
(2) 関連	(a) MPEG-2 Systems で規定されているストリーム形式種別割り当てに追加があったため、割り当て表を更新した。（第 2 部 付録 E 表 E-4）
(3) 関連	前回の STD-B10 改定以降の ARIB 標準規格および技術資料の改定を反映すると共に、外部規格の最新情報を反映するよう参考文献を更新した。（第 2 部参考文献）

（詳細は、規格会 76-17 の改定履歴を参照のこと）

デジタル放送用受信装置標準規格(望ましい仕様)の改定の概要
（ARIB STD-B214.8 版から 4.9 版）

現行 ARIB STD-B21 4.8 版に対する、改定の概要及び主な変更点は以下のとおりです。

・カーエンタテイメント用途の拡大に伴い、車載等デジタルインタフェースである GVIF(Gigabit Video Interface)を STD-B21 のデジタル映像出力の規定に追加した。

No.	改定の概要と主な変更内容
1	改定の概要
	(1) デジタル映像出力に GVIF を追加
2	主な変更内容
(1) 関 連	第 6 章 6.1.3.3 デジタル出力 ・(1)デジタル映像出力に GVIF を装備する受信機について規定を追加した。

（詳細は、規格会 76-18 の改定履歴表を参照のこと）

5.1ch サラウンド番組の制作技術ガイドライン技術資料の概要

技術資料 ARIB TR-B30（1.0 版）の概要及び主な内容は以下のとおりです。

No.	概要と主な内容
1	概要
	デジタル放送の普及に伴って、5.1ch サラウンドサウンドを用いた臨場感の高い放送への期待が高まるにつれ、スタジオでのサラウンド番組の制作機会が増加している。サラウンドサウンドの技術規格は放送関連、機器関連、スタジオ関連など多岐に渡っており、実際の番組制作にはこれらさまざまな知識が必要とされる。これら関連する標準規格を考慮しつつ、たサラウンドの放送番組を制作する際に特化した、準拠すべきガイドラインの策定が望まれていた。本技術資料は、サラウンドサウンドに関する各種規格・文献を参考に、デジタル放送におけるサラウンド番組を制作する際に参考とすべき事柄をまとめたものである。本ガイドラインに則りサラウンド番組が制作されることで、制作時に意図した音響表現が視聴者の再生環境で可能なかぎり再現できること、制作現場での機器運用や素材交換が円滑に進められることを目的としている。 (1) 一般事項 (2) 再生環境 (3) 録音 (4) 標準サラウンドテスト音源 (5) ダウンミックス (6) サラウンド番組制作時の注意点 (7) 解説、参考資料
2	主な内容
(1) 関連	■ 目的 ■ 参照文書 ■ 用語の説明
(2) 関連	■ スピーカ配置 制作スタジオ内のスピーカ配置として、ダイレクトサラウンド方式である ITU-R BS.775-2 準拠とした。また、スタジオ環境によってはディフューズサラウンド方式も適する場合があることを紹介している。 ■ 再生レベル 各チャンネルの再生レベルは 79dBC を推奨値とした。また LFE チャンネルについては他のチャンネルより 10dB 高く設定することとした。 ■ ベースマネージメント メインチャンネルの低周波成分をサブウーファから再生するベースマネージメントについて紹介。
(3) 関連	■ 録音時の処理 録音時には各トラックの冒頭に基準信号を入れる。また、データシートを添付することを推奨した。 ■ 基準信号と基準レベル 使用する基準信号を定義したほか、データシートの記載内容を例示した。 ■ トラックアサイン トラックアサインは ITU-R BR.1384 準拠とした。

(4) 関 連	■ サラウンドテスト音源の構成 サラウンド機器の調整確認用のテスト音源を、「収録時のレベル調整用信号」と「モニター調整用信号」にわけて定義した。また、この信号で位相チェックも行えるようにした。
(5) 関 連	■ デジタル放送のダウンミックス 特にデジタル放送の番組制作時に注意が必要なダウンミックスについて解説した。 ■ ダウンミックスアルゴリズム ARIB STD-B21 に記載されている受信機で行われる 5.1CH から 2CH へのダウンミックスアルゴリズムについて解説。 ■ ダウンミックス音声のモニター スタジオ制作時に、5.1ch を制作しつつ、同時にダウンミックス後の音声も確認するためのモニター環境について解説。 ■ ダウンミックス音声のレベルバランス ダウンミックスにより発生する番組間レベル差問題について、その原因を説明、制作時での注意喚起を行った。 ■ サラウンド番組制作時の基本事項 ダウンミックスに関連した制作時の基本的注意点をまとめた。
(6) 関 連	■ サラウンド番組制作時の全体的な注意点として下記をあげた。 ①ベースマネージメントを使用した検聴 ②ダウンミックス再生を考慮したミキシング ③部屋の大きさによる留意点 ④LFE チャンネルの扱い ⑤LFE チャンネルの周波数帯域 ⑥ダイバージェンス機能について
(7) 関 連	■ （解説）ベースマネージメント ■ （解説）モニタースピーカの再生レベル調整 ■ （解説）劇場用サラウンドと民生用サラウンド ■ （参考資料）5.1ch サラウンド番組の制作事例

（詳細は、規格会 76-19 を参照のこと）

ファイルベースによる番組交換方式技術資料の概要

技術資料 ARIB TR-B31（1.0 版）の概要及び主な内容は以下のとおりです。

No.	概要と主な内容
1	概要
	近年、放送機器は、メモリーカードカメラ、ノンリニア編集機、IP 伝送機器など IT 技術をベースにしたものが実用化されている。このため、これらの機器間で受け渡す放送素材はファイルとして取り扱うことが多くなってきた。このような状況を踏まえ、放送コンテンツ(主に編集済み素材)について MXF(Material eXchange Format)方式を基本としたファイルベースによる番組交換方式を運用ガイドラインとしてまとめた。 記載内容の項目は、以下のとおり。 (1) ファイルベース番組交換方式のスコープ (2) MXF 規格の解説 (3) 映像・音声データのファイル化 (4) 字幕データ・補助データのファイル化 (5) 番組交換メタデータ (6) パッケージ配信 (7) 参考
2	主な内容
(1) 関 連	■ 本技術資料のスコープは、放送局間及び制作プロダクションと放送局間のファイルベースでの放送コンテンツ(主に編集済み素材)の交換方式を記載している。 ■ リファレンスモデルとして、ファイル化された番組を配信パッケージに分割して伝送する配信モデルを定義し、その運用ガイドラインを記載している。 ■ 配信パッケージには、当該パッケージに添付することができるパッケージインフォメーション文書を定義し、当該パッケージで送るコンテンツ(映像/音声、字幕、メタデータファイルなど)の内容を指示することができる。更に、プログラムプレイリスト文書と呼ばれるキューシート概念の文書を定義し、各ファイルの送出順などを指定も可能にしている。 ■ 番組を時間軸方向に分割するための概念としてロールを、配信パッケージを構成する映像/音声ファイルなどの実体をアセットと定義し、従来概念との整合性を考慮している。
(2) 関 連	■ 映像/音声のファイル交換方式は、MXF 方式を基本に記載している。このため、MXF 規格のチュートリアルな解説を設けた。 ■ 規格全体に関する項目として、全体の構造や KLV 符号化等について概説した。 ■ メタデータについては、構造メタデータ、記述メタデータ等について解説した。 ■ MXF 上での複数の映像音声ファイルの出力イメージを指定するオペレーショナルパターン、映像/音声/字幕データなどなどの重畳単位であるエッセンスコンテナ、映像/音声のマッピングを規定してコンテンツパッケージを構成するジェネリックコンテナなどについて解説した。 ■ MXF にデータを格納するための共通コンテナ（Generic Container）と映像/音声の各種符号化ごとのコンテナラベルや映像/音声エレメントのキー（Key）について解説した。

(3) 関 連	■ 映像/音声データのファイル形式は、MXF を使用することを明記し、その実装上の制約を運用ガイドラインとして規定した。 ■ オペレーショナルパターンについては、OP-1a と OP-atom を中心に解説した。 ■ 映像の符号化方式の選択は、ユーザ依存としたが、MPEG2、H.264 などの主要な符号化方式については、Intra-Frame 圧縮の場合と long-GOP の場合のコンテナラベルやエレメントキーについて規定した。 ■ 音声の符号化方式の選択も、ユーザ依存としたが、AES3 や BWF などの音声形式についてもコンテナラベルやエレメントキーについて規定した。
(4) 関 連	■ 字幕データは、MXF ファイルに字幕データを重畳する方法と字幕データを単独ファイルとして配信する方法を運用ガイドラインとして規定した。 ■ 字幕データを含めた補助データ(ANC パケット)についても MXF ファイルに格納する方式を規定した。ANC パケットとは、放送局間信号、データ放送トリガー信号、字幕データ、字幕データオプション 1、字幕データオプション 2、ユーザデータ 1、ユーザデータ 2 を想定している。 ■ MXF ファイルに字幕データを格納する場合は、SMPTE 436M を使用して ANC データとして格納する方法と SMPTE 410 を使用し字幕ファイルを格納する方法があるが、前者について運用ガイドラインとして規定し、後者については SMPTE 規格手続きの未了のため今回はスコープ外とした。 ■ MXF ファイルに字幕データを格納しない場合は、ARIB 策定デジタル字幕データもしくは NAB 策定アナログ字幕ファイルで交換する運用ガイドラインを規定している。
(5) 関 連	■ MXF ファイルを構成する映像/音声/字幕データに関する番組交換メタデータについての運用ガイドラインを規定した。 ■ 番組交換メタデータは XML で記述し、映像/音声/字幕データが格納されている MXF ファイルとは別の独立した XML ファイルとして扱う形態についての運用ガイドラインを規定した。 ■ 番組交換メタデータの一部は、SMPTE380M で規定される DMS-1 にマッピングし、映像/音声/字幕データが格納されている MXF ファイルに重畳して扱う形態についての運用ガイドラインを規定した。 ■ 番組交換メタデータの階層は、番組全体の情報を記述する Program Framework といつくかのファイルに分割された映像/音声/字幕データに関する情報について記述する Roll Framework について規定した。
(6) 関 連	■ パッケージの配信は、記録メディアなどの物理的媒体やネットワーク伝送などでの運用を想定し、運用ガイドラインを規定した。 ■ パッケージインフォメーション文書の構造や運用について規定した。 ■ プログラムプレイリスト文書の構造や運用について規定した。 ■ パッケージの配信について、物理的媒体(記録メディア)及びネットワークによる配信について規定した。
(7) 関 連	■ ユーザ要求条件(ユースケースや番組交換メタデータの項目)を添付した。 ■ 番組交換メタデータ及びパッケージインフォメーション、プログラムプレイリストの XML スキーマ及び XML Diagram を添付した。 ■ Media Dispatch Protocol の概要を添付した。

（詳細は、規格会 76-20 を参照のこと）

地上デジタルテレビジョン放送運用規定技術資料の改定の概要
（4.0 版から 4.1 版）

現行 ARIB TR-B14 4.0 版に対する、改定の概要及び主な変更内容は以下のとおりです。

運用概要

No.	改定の概要と主な変更内容
1	改定の概要
	(1) 第二編改定に伴う用語の追加
2	主な変更内容
(1) 関連	3 章「用語」 ・ 用語「GVIF」を追加した。

（詳細は規格会７６－２１の改定履歴表を参照のこと。）

第二編　地上デジタルテレビジョン放送　受信機機能仕様書

No.	改定の概要と主な変更内容
1	改定の概要
	(1) GVIF インタフェース規定の追加 車内等のデジタルインタフェースである GVIF を使用可能とするための規定追加を行った。
2	主な変更内容
(1) 関連	3 章「用語」 ・「GVIF」を追加した。 7.10.4 項「デジタル映像出力」 ・ GVIF 関連規定を追加した。 7.14.5 項「デジタル映像端子」 ・ GVIF 関連規定を追加した。

（詳細は規格会７６－２１の改定履歴表を参照のこと。）

ＢＳ/広帯域ＣＳデジタル放送運用規定技術資料の改定の概要

(ARIB TR-B15 4.8 版から 4.9 版)

現行 ARIB TR-B15 4.8 版に対する、改定の概要及び主な変更内容は以下のとおりです。

第二部　広帯域 CS デジタル放送運用規定および BS・広帯域 CS 共用デジタル受信機機能仕様

第七編　広帯域ＣＳデジタル放送　送出運用規定　（第四分冊）

No.	改定の概要と主な変更内容
1	改定の概要
	（1）　「株式会社キッズステーション」の追加 （2）　「マルチチャンネルエンターテイメント株式会社」の社名変更 （3）　service_id 一覧の更新
2	主な変更内容
(1)	「株式会社キッズステーション」が委託放送事業者認定を受け、2010 年 4 月に開局予定である。TS_id、Service_id、broadcast_id、ロゴ ID 等を割り当てる。
(2)	「マルチチャンネルエンターテイメント株式会社」の社名変更に伴い、TS_id,、service_id、broadcaster_id、ロゴ ID、ワンタッチボタン一覧の同社名を「株式会社スカパー・エンターテイメント」に変更する。
(3)	2010 年 4 月 1 日時点の service-id 一覧に更新する。

（詳細は、規格会７６－２２の改定履歴表を参照のこと。）