

General Specification for Broadcast Reception Installation 2007 Edition

The 2007 edition of the General Specification for Broadcast Reception Installation comprises considerable updating and revisions to the 2001 edition.

In line with the global consciousness for our environment, the new specification has been re-written with sustainability as the key objective.

The updating of specification is a continuous process. With the benefit of information technology, electronic version of this new 2007 edition can be kept up-to-date and may be viewed on the ArchSD Homepage.

In view of the revisions and new additions, there will be an introductory period of 3 months whereby the General Specification for Broadcast Reception Installation 2001 Edition will still be the Contractual Document, whilst the new General Specification for Broadcast Reception Installation 2007 Edition may be viewed in parallel in preparation for full implementation by 17 December 2007.

- **Hence, for tenders to be invited on or after 17 December 2007, General Specification for Broadcast Reception Installation 2007 Edition shall be used.**
- **Existing contracts (including contracts using previous editions tendered before 17 December 2007) would not be affected.**

**MAJOR CHANGES IN THE GENERAL SPECIFICATION FOR
BROADCAST RECEPTION INSTALLATION IN GOVERNMENT BUILDINGS – 2007 Edition**

Old Ref. No.	New Ref. No.	Major Changes	Overview
PART A - SCOPE AND GENERAL REQUIREMENTS			
Part A	Part A	Restructure of the General Specification : Section A1 : Scope of specification Section A2 : Statutory obligations and other regulations Section A3 : Execution of works Section A4 : Drawings and manuals	To re-organize and to standardize the structure of Broadcast Reception General Specification.
PART B - INSTALLATION METHODOLOGY			
SECTION B1 - BROADCAST RECEPTION (BR) SYSTEM DESIGN			
	B1.1	Addition of BR system general performance requirement :- to comply with EN 50083-7:1996 and EN 50083-10:2002.	Updating the GS.
B1.1	B1.2	Addition of following requirement :- Radiation limits of the BR System Change the requirement of provision of 1 main trunk system to 4 main trunks to allow for the services by different service providers.	To comply with HKTA 1102:2001 and OFTA Recommendation.
	B1.8	Add in the compatibility of the BR system with the signal adaptors/set top boxes/digital terrestrial television baseline receivers provided by service providers	Updating the GS to suit the digital broadcasting requirement.
SECTION B2 - SIGNAL LEVEL AT FM/TV/DATA TRIPLEX OUTLET			
B2.1	B2.1	The specification has been revised to include the digital broadcast reception. Minimum and Maximum Level for Digital TV signal added.	Updating the GS to suit the digital broadcasting requirement.

Old Ref. No.	New Ref. No.	Major Changes	Overview
B2.2	B2.2	Revise the difference in level between the weakest and the strongest TV signals at the same outlet to suit the digital & analogue broadcast reception.	Updating the GS to suit the digital broadcast reception and complying with OFTA HKTA 1104:2007.
B2.3	B2.3	Revise the carrier to noise ratio to suit the digital & analogue broadcast reception.	Updating the GS to suit the digital broadcast reception and complying with OFTA HKTA 1104:2007.
B2.4	B2.4	Revise the mutual isolation between outlets to suit the digital & analogue broadcast reception.	Updating the GS to suit the digital broadcast reception and complying with OFTA HKTA 1104:2007.
	B2.5	Add in the system performance with return path.	Updating the GS to suit the digital broadcasting.
SECTION B3 - TERRESTRIAL MASTER ANTENNA TELEVISION SYSTEM			
B3.1	B3.1	Change the aerials construction to withstand a sustained wind speed of up to 170 km/hr. and gusts up to 240 km/hr.	to specify clearly the wind load performance of the aerial system.
B3.3	B3.3	Replace frequency allocation plans for FM and TV as stated in Appendices E1 & E2 by referral to OFTA. Specification.	To adopt the suggestion from OFTA.
B3.7	B3.7	Change the adaptable box specification from BS 4662 to IEC 60670-1:2002.	Updating the specification from BS to IEC..
B3.8	B3.8	Revise the title from “FM/TV Duplex Outlets” to “FM/TV/DATA Triplex Outlets”.	Updating the specification to suit DTV requirement..
	B3.9	Add in the installation requirement for fibre optical cable system.	To meet the up-to-date technology.
SECTION B4 - SATELLITE MASTER ANTENNA TELEVISION SYSTEM			
B4.1	B4.1	Delete the sentence “Copies of forms approved by OFTA shall be submitted for confirmation.	Revise as according to latest OFTA requirement..
B4.2.2	B4.2.2	Specify the steel frame support requirement to withstand a sustained wind speed of up to 170 km/hr. and gusts up to 240 km/hr.	To specify clearly the wind load performance of the supporting structure requirement..

Old Ref. No.	New Ref. No.	Major Changes	Overview
B4.2.3	B4.2.3	Change the aerials construction to withstand a sustained wind speed of up to 170 km/hr. and gusts up to 240 km/hr. Change the adaptable box specification from BS 4662 to IEC 60670-1:2002.	to specify clearly the wind load performance of the aerial system. Updating the specification from BS to IEC
SECTION B5 - ANCILLARY SYSTEM			
B5.1	B5.1	Change the adaptable box specification from BS 4662 to IEC 60670-1:2002.	Updating the specification from BS to IEC
Part C - MATERIAL AND EQUIPMENT SPECIFICATION			
Section C1- GENERAL REQUIREMENT			
	C1.1	Add General requirement for Material and equipment for BRI.	Updating the GS.
SECTION C2 - TERRESTRIAL MASTER ANTENNA TELEVISION SYSTEM			
C1.1	C2.1	Add Clause C2.1(f) to include the digital broadcast reception.	Updating the GS to suit the digital broadcasting.
C1.2.1	C2.2.1	Revise equipment specification to suit both analogue and digital reception.	Updating the GS to suit the digital broadcasting.
C1.2.2	C2.2.2	Revise equipment specification to suit both analogue and digital reception.	Updating the GS to suit the digital broadcasting.
C1.2.3	C2.2.3	Revise equipment specification to suit both analogue and digital reception.	Updating the GS to suit the digital broadcasting.
C1.2.4	C2.2.4	Revise equipment specification to suit both analogue and digital reception.	Updating the GS to suit the digital broadcasting..
C1.3.1	C2.3.1	Revise equipment specification to suit both analogue and digital reception.	Updating the GS to suit the digital broadcasting.
C1.3.2	C2.3.2	Revise equipment specification to suit both analogue and digital reception.	Updating the GS to suit the digital broadcasting.
C1.3.3	C2.3.3	Revise equipment specification to suit both analogue and digital reception.	Updating the GS to suit the digital broadcasting..

Old Ref. No.	New Ref. No.	Major Changes	Overview
C1.6	C2.6.1	Revise equipment specification to suit both analogue and digital reception.	Updating the GS to suit the digital broadcasting..
C1.6	C2.6.2	Revise equipment specification to suit both analogue and digital reception.	Updating the GS to suit the digital broadcasting..
C1.7	C2.7	Revise equipment specification to suit both analogue and digital reception. Revise the specification of Coaxial Cable by :- Add in the requirement to comply with relevant IEC Standards. Add in the fire performance. Add in the requirement of distinctive labels/brand name along its length.	Updating the GS to suit the digital broadcasting.. Updating the performance requirement of the coaxial cable
C1.8	C2.8	Revise equipment specification to suit both analogue and digital reception.	Updating the GS to suit the digital broadcasting...
	C1.9 to C1.12	Add Specification for Fiber Optical System	To meet the up-to-date technology.
SECTION C3 - SATELLITE MASTER ANTENNA TELEVISION SYSTEM			
C2.2.1	C3.2.1	Update the specification for Antenna system Revise gusts up to 240 km/hr. Revise wind loading up to 170 km/hr. in any position of operation.	to specify clearly the wind load performance of the aerial system.
C2.3.2(a)	C3.3.2(a)	Amend "CCIR" to "ITU-R".	Revise the name of International Organization
	C3.5	Add Specification for splitter & tee unit.	To meet the up-to-date technology
Part D - INSPECTION, TESTING AND COMMISSIONING DURING CONSTRUCTION PERIOD			
Part D	Part D	General revision this part of G.S. to clearly define the requirements on inspection, testing and commissioning during construction period in the following Sections :- Section D1 : General requirement Section D2 : Routine inspection Section D3 : Handover inspection Section D4 : Testing and commissioning	General revision of the G.S. to clearly define the requirements on Inspection, testing and commissioning during construction period.

Old Ref. No.	New Ref. No.	Major Changes	Overview
PART E – TRAINING, INSPECTION, ATTENDANCE AND OPERATION & MAINTENANCE DURING MAINTENANCE PERIOD			
-	Part E	<p>Newly included this part to clearly define the requirements on training, inspection, attendance and operation & maintenance during maintenance period. It included the following sections :-</p> <p>Section E1 : Training to users and operation and maintenance agents Section E2 : Emergency services and attendance to fault calls Section E3 : Inspection, operation & maintenance requirements Section E4 : Completion of outstanding and defective works</p>	Requirement for Training, inspection, attendance and operation & maintenance during maintenance period is well defined and clearly specified.
ANNEX I : ABBREVIATIONS			
A1.4.2	Annex 1	To restructure the G.S. and update to the list of abbreviations used.	General update.
Appendix E1		Appendix E1 – Channel Allocation of Television Broadcasting Services in Hong Kong was deleted.	Detail of Channel allocation for TV Broadcasting in HK was already detailed in OFTA Specification.
ANNEX II : LIST OF TECHNICAL STANDARDS USED IN THE BRI GENERAL SPECIFICATION			
-	Annex 1I	The list of technical standards used in the BRI General Specification is added as Annex II	General Revision.
Appendix E2		Appendix E2 – Frequency Allocation for FM Sound Broadcasting Services in Hong Kong was deleted.	Detail of Channel allocation for FM Broadcasting in HK was already detailed in OFTA Specification.
ANNEX III : TESTING INSTRUMENT REQUIRED FOR ACCEPTANCE TESTS OF BROADCAST RECEPTION INSTALLATION			
Appendix E3	Annex III	Update the testing equipment for SMATV. Add in the testing equipment for Fiber Optical Cable System.	Updating the requirement for Testing equipment

Old Ref. No.	New Ref. No.	Major Changes	Overview
ANNEX IV : TYPICAL PROVISION OF BROADCAST RECEPTION SYSTEM MAIN TRUNKS			
	Annex IV	Drawing indicated the typical Provision of Broadcast Reception System Main Trunks is added.	Clearly define the trunkings requirement for the BRI.