

Standards Update

Another year

has passed since I reported on British Standards.

By Dave Hodges, SCTE Executive Committee

Due to COVID-19 restrictions of late, online meetings have nonetheless produced another excellent update on British Standards.



David Hodges, Chair, SCTE Standards and Technical Committee

November 2021 saw the usual week of meetings for the working groups of BSI EPL100/04, CENELEC TC209 and IEC TC100/TA05 and for the working group convenors to meet. The meetings were held between the 8th to the 12th November 2021 but on-line, not face to face.

The risk-based process of creating and vetting Standards continues to cause significant problems for the revision of harmonised Standards and, for us particularly, insofar as this affects our EMC Standard EN50083-2. The stalled Standards are waiting for complete re-writes.

Below is the brief work activity on Standards at present.

WG1 (Safety) IEC 60728-11 ed5

This revised Standard has been re-checked for consistency in the actions taken resolving committee comments and has been returned to IEC for completion of the FDIS process.

WG2 (EMC and RED) EN50083-2:2012/PrA2:2019-06

In the past, this working group has received information and guidance from TC 210 WG 16 on performance criteria but the commission no longer accepts the TC 210 input on the basis that it is generic.

“ The risk-based process of creating and vetting Standards continues to cause significant problems for the revision of harmonised Standards. ”

A revised draft has been generated for working group comment.

It was previously agreed that EN50083-8 should be updated following the successful revision of part 2.

ETSI ERM17/WG5 was joined by two CENELEC members in order to assist/report on the work on ETSI EN 303 354 which potentially includes EMC tests. These may conflict with those on EN50083-2. The revised ETSI Standard is now going through the EU commission approval vetting procedures.

WG3 (Coaxial equipment) IEC 60728-103 ed1

The work on this Standard continues, based on IEC 60728-3 with digitally modulated signals only.

The DOCSIS work continues, the intention being to adapt IEC 60728-3 to DOCSIS 4.0. The draft document has been prepared, and will be submitted through IEC.

IEC TR 60728-103-1 will, when completed, update/replace the current technical report IEC TR 60728-3-2 (Ed. 1, 2016-10): Method of measurement of 5th order non-linearity for active electronic equipment using five carriers.

WG5 (Optical systems and equipment)

Work is ongoing on four new Standards

IEC 60728-106 ed1. Optical equipment for systems loaded with digital channels only is at CD stage

IEC 60728-113 ed2. Optical systems for broadcast signal transmissions loaded with digital channels only is at CD stage

IEC 60728-114: Optical transmission systems using RFoG technology is at CD stage

EC 60728-115 ed1. In-Building Optical systems for broadcast signal transmissions has been completed and will be issued shortly.

In addition this working group issued a draft report entitled “A STUDY OF IPTV SYSTEM FOR OPTICAL BROADCAST SERVICE Part I: IPTV Examples and Applications”.

This was considered by the working group and raised a number of questions including the feasibility of distributing Ultra-Hi-Definition 4K/8K broadcasts and completion of the Standard for transmission over FTTH. This has been with the working group since 2014.

WG7 (Systems)

Work has started on two new Standards:-

IEC60728-101-1 ed1. RF cabling for two-way home networks with all-digital channels load is ready for a second CD stage

IEC 60728-101-2 ed1. Performance requirements for signals delivered at the system outlet in operation with all-digital channels load is ready for a second CD stage

WG8 (Satellite Systems and Equipment)

This Working Group has no outstanding items at this time.

In addition to the working groups, CENELEC TC209 and IEC TC100/TA05 have liaison agreements with a number of other groups and organisations and among them are:-

- CLC/TC 46X and CLC/SC 46XA
- CLC/TC210
- CLC/TC 215
- ETSI TC Cable
- ETSI/TC ERM17

Currently, Volker Leisse, Carsten Engelke and Dave Hodges are supporting WG5 of this technical committee.

My thanks go to Thomas Wegmann, secretary of CENELEC TC209, for the following table.

“ It is always better to take part at the formulating stage rather than discover horrific implications for our business when the Standard is published! ”

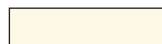
**Present status of International and European Standards and projects of EN 50083 and IEC/EN 60728 series and other standards and projects under TC209 and 100/TA5 responsibility
(Status: 2021-11-06)**

"European Standard EN 50083 series"	International Standard IEC 60728 series (Stability Date)	European Standard EN 60728 series	Title of European Standard "Cable networks for television signals, sound signals and interactive services;"
---	IEC 60728-1:2014 (2020-12)	EN 60728-1:2014	Part 1: System performance of forward paths
---	IEC 60728-1-1:2014 (2020-12)	EN 60728-1-1:2014	Part 1-1: RF cabling for two-way home networks
---	IEC 60728-1-2:2014 (2020-12)	EN 60728-1-2:2014	Part 1-2: Performance requirements for signals delivered at the system outlet in operation
---	IEC 60728-101:2016 (2018-12)	EN 60728-101:2017	Part 101: System performance of forward paths with all-digital channels load
---	IEC 60728-101-1		Part 101-2: RF Cabling for two-way home networks with all-digital channels load 100/3575/CD until 2021-05-14
	IEC 60728-101-2		Part 101-2: Performance requirements for signals delivered at the system outlet in operation with all-digital channels load 100/3576/CD until 2021-05-14
	IEC 60728-106		Part 106: Optical equipment for systems loaded with digital channels only 100/3563/CD until 2021-04-02
---	IEC 60728-113:2018 (2021-12)	EN 60728-113:2018	Part 113: Optical systems for broadcast signal transmissions loaded with digital channels only 100/3562/CD until 2021-04-02
	IEC 60728-114		Part 114: Optical transmission systems using RFOG technology 100/3606/NP approved
	IEC 60728-115	prEN 60728-115	Part 115: In-Building Optical systems for broadcast signal transmissions CDV/prEN approved 2020-12-18
EN 50083-2:2012	IEC 60728-2:2018 (2020-12)	---	Part 2: Electromagnetic compatibility for equipment <i>Note: IEC aligned with EN of 2012</i>
EN 50083- 2:2012/ A1:2015	---	---	Part 2: Electromagnetic compatibility for equipment; Amendment A1
EN 50083-2:2012 /prA2: 2019-06			Part 2: Electromagnetic compatibility for equipment; Amendment A2 WORK STOPPED
CLC/TR 50083-2- 1:2014	---	---	Electromagnetic compatibility measurements
CLC/TR 50083-2-2:2014	---		Interference situation for DVB-T reception in the presence of LTE base station signals
CLC/TS 50083-2- 3:2018	---		LTE (4G) Interference Mitigation Filters in the 800MHz band
EN 50083-2-4: 2019	---		LTE (4G) Interference Mitigation Filters operating in the 700MHz and 800MHz bands for DTT reception

	IEC 60728-3:2017 (2020-20)	EN IEC 60728-3:2018	Part 3: Active wideband equipment for cable networks. NOTE: also replaces EN 60728-3-1:2012 and CLC/TC 50083-3-3:2014
---	IEC/TR 60728-3-2:2016-10		Part 3-2 : Method of measurement of 5th order non-linearity for active electronic equipment using five carriers
---	IEC 60728-4:2007 (2020-12)	EN 60728-4:2008	Part 4: Passive wideband equipment for coaxial cable networks
---	IEC 60728-5:2015 (2018-12)	EN 60728-5:2016	Part 5: Headend equipment
CLC/ TR 50083-5-1: 2009	After approval in CENELEC	---	Technical Report: IP gateways and interfaces for headends
---	IEC 60728-6:2011 (2020-12)	EN 60728-6:2011	Part 6: Optical equipment
CLC/ TR 50460:2005	IEC/TR 60728-6-1: 2006 (2018-12)	---	System guidelines for analogue optical transmission systems
---	IEC 60728-7-1:2003	EN 60728-7-1:2005	Part 7-1: Hybrid Fibre Coax Outside Plant Status Monitoring - Physical (PHY) Layer Specification
	IEC 60728-7- 1:2003/ A1:2015	EN 60728-7- 1:2003/ A1:2015	
---	IEC 60728-7-2:2003 Stabilised until 2026	EN 60728-7-2:2005	Part 7-2: Hybrid Fibre Coax Outside Plant Status Monitoring - Media Access Control (MAC) Layer Specification
---	IEC 60728-7-3:2009 Edition 2 Stabilised until 2026	EN 60728-7-3:2009 Edition 2	Part 7-3: Hybrid Fibre Coax Outside Plant Status Monitoring - Power supply to Transponder Interface Bus (PSTIB) Specification
EN 50083-8:2013	IEC 60728-12:2017 (2020-12)	---	Part 8: Electromagnetic compatibility for networks
EN 50083-8			<i>Maintenance decided</i>
EN 50083-9:2002	IEC 60728-9:2000 (2012-12) IEC 60728-9-am1 (2012-12) Stabilised until 2026	---	Part 9: Interfaces for CATV/SMATV headends and similar professional equipment for DVB/ MPEG-2 transport streams
	IEC 60728-10:2014 (2020-12)	EN 60728-10:2014	Part 10: System performance for return paths
CLC/ TR 50083-10-1: 2014	---	---	Guidelines for the implementation of return paths in cable networks
EN 60728-11:2017/ A11:2018	IEC 60728-11:2016 (2018-12)	EN 60728-11:2017	Part 11: Safety requirements <i>Common Modifications for LVD</i>
	IEC 60728-11 Ed 5	EN 60728-11:2017	Part 11: Safety requirements <i>FDIS awaited</i>
---	IEC 60728-13:2010 (2020-12)	EN 60728-13:2010	Part 13: Optical systems for broadcast signal transmissions
---	IEC 60728-13-1:2017 (2020-12)	EN 60728-13-1:2017	Part 13-1: Bandwidth expansion for broadcast signal over FTTH system
---	IEC 60728-14:2014 (2019-12)	EN 60728-14:2014	Part 14: Optical transmission systems using RFOG technology

Other standards and projects under the responsibility of CLC/TC209 and/or IEC 100/TA5

	International Standard (Stability date)	European Standard/ Publication	Title of European Standard
---	---	EN 50494:2007	Satellite signal distribution over a single coaxial cable in single dwelling installations
---	---	EN 50585:2014	Transport of satellite delivered signals over IP networks
		EN 50607:2015	Satellite signal distribution over a single coaxial cable - second generation
		CLC/TR 50607-10:2015	Satellite signal distribution over a single coaxial cable - Part 10: Implementation guideline
---	IEC 61114-1:1999 (Stabilised until 2026)	EN 61114-1:1999	Receiving antennas for satellite broadcast transmissions in the 11/12GHz band - Part 1: Electrical measurements
---	IEC 61114-2:1996 (Stabilised until 2026)	EN 61114-2:1996	Methods of measurement on receiving antennas for satellite broadcast transmission in the 11/12GHz band - Part 2: Mechanical and environmental tests on individual and collective receiving antennas



Actual projects (new or revision)



Changes since Rev. 33 of this document, published in August 2017



Actual European version, published



Delayed projects

Wanted: Contributions and comments on standards

Standards' work is often painstaking and time-consuming, but always worthwhile. It is always better to take part at the formulating stage rather than discover horrific implications for our business when the Standard is published! The maintenance teams/working groups in IEC and CENELEC are always looking for technical experts; if you really cannot devote time for the actual meetings, then at least consider commenting on the interim drafts that they issue.

The SCTE is happy to circulate drafts of Standards issued for comment and voting and to cross-correlate input into BSI. Please contact me if you would like to be on the circulation list. I have a growing list of engineers who have volunteered to provide comment on draft Standards as they go through the creation stage. If you would be willing to provide commitments please contact dave@hodges.co.com

Finally

A big thank you to Dr Roger Blakeway who has stepped down from chairing and sitting on the UK technical committee for the industry's Standards.



Please email me at dave@hodges.co.com if you would like to be included on the draft circulation list.