IEC TC87: report to CCAUV11

The scope of TC 87 is to prepare standards related to the characteristics, methods of measurement, safety, and specifications of fields, equipment and systems in the domain of ultrasonics.

Close liaison is maintained with TC 62 and TC 29 in fields of common interest.

TC 87 Working Groups

Working Groups	
WG 3	High power transducers
WG 6	High Intensity Therapeutic Ultrasound (HITU) and Focusing transducers
WG 7	Ultrasonic surgical equipment
WG 8	Ultrasonic field measurement
WG 9	Pulse-echo diagnostic equipment
WG 13	Terminology
WG 14	Determination of ultrasound exposure parameters
WG 15	Underwater Acoustics

TC87 Work Programme

Project Reference	Title	Document Reference	Init. Date	Current Stage	Next Stage	WG	Project Leader
IEC 60050-801/AMD1 ED2	Amendment 1 - International Electrotechnical Vocabulary- Chapter 801: Acoustics and electroacoustics, Section 32 - Underwater acoustics	87/662/CD	2015-10	CD	PCC	WG 15	K. G. Foote
IEC 60565-1 ED1	Underwater acoustics - Hydrophones - Calibration of hydrophones, Part 1: Procedures for free-field calibration	87/587/RR	2015-09	ACD	CD	WG 15	S. Robinson
IEC 60565-2 ED1	Underwater acoustics - Hydrophones - Calibration of hydrophones, Part 2: Procedures for low frequency pressure calibration	87/646/CD	2015-09	ACDV	TCDV	WG 15	Y. Chen

IEC 61828 ED2	Ultrasonics - Focusing transducers - Definitions and measurement methods for the transmitted fields	87/663/CD	2015-06	CD	PCC	WG 6	T.L. Szabo
IEC 62127-1 ED2	Ultrasonics - Hydrophones - Part 1: Measurement and characterization of medical ultrasonic fields up to 40 MHz	87/654/RR	2017-03	ACD	CD	WG 8	Volker Wilkens
IEC 62359/AMD1 ED2	Amendment 1 - Ultrasonics - Field characterization - Test methods for the determination of thermal and mechanical indices related to medical diagnostic ultrasonic fields	87/661/FDIS	2015-11	BPUB	PPUB	WG 8	K. Sandstrom
IEC 62359/AMD1/FRAGF ED2	Amendment 1			DECPUB			
IEC TS 62900 ED1	Ultrasonics - Field Characterisation - measurement-based simulation in water and other media	87/590/NP	2016-01	ACD	CD	WG 6	D. Sinden
IEC TS 62903 ED1	Ultrasonics - Measurements of electroacoustical parameters and acoustic output power of spherically curved transducers using the self-reciprocity method	87/652/DTS	2015-10	APUB	TPUB	WG 8	W. Shou
IEC TS 62937 ED1	Measurement of ultrasound field parameters at high pressure therapeutic levels in water	87/586/NP	2016-01	ACD	CD	WG 6	T. Szabo
IEC 63001 ED1	Measurement and evaluation of the cavitation noise	87/664/CD	2015-05	CD	PCC	WG 3	Stefan Bandelin
IEC 63009 ED1	Ultrasonics - Physiotherapy systems - Field specifications and methods of measurement in the frequency range 20 kHz to 0.5 MHz	87/620/CD	2015-06	ACDV	TCDV	WG 8	B. Herman
IEC 63045 ED1	Ultrasonics - Non-focusing and weakly focusing pressure pulse sources - Characteristics of fields	87/589/NP	2016-02	ACD	CD	WG 7	F. Ueberle
IEC TS 63070 ED1	Ultrasonics - Field characterisation - Infra-red imaging techniques for determining temperature elevation in tissue-mimicking material and at the radiation surface of a transducer in still air	87/651/CD	2016-07	ADTS	TDTS	WG 14	Satoshi YAMAZAKI
IEC TS 63081 ED1	Ultrasonics - Methods for the characterisation of the ultrasonic properties of materials.	87/616/NP	2016-08	ACD	CD		A. Hurrell

The above work programme is accurate as of 2017-09-04.

Meetings

The last meeting of IEC/TC87 took place in Japan in September 2016.

The following Convenors were appointed/re-appointed for another period of 3 years:

WG 3 Sam Howard (US) (new appointment)
WG 6 Thomas L Szabo (US)
WG 7 Mark Evan Schaefer (US)
WG 8 Volker Wilkens (DE)
WG 9 Paul L. Carson (US) and Peter D. Edmonds (US)
WG 13 Marvin C. Ziskin (US)
WG 14 Adam Shaw (GB)
WG 15 Stephen P. Robinson (GB)

Some selected excerpts from the plenary meeting resolutions include:

- IEC/TC 87 agreed to change the project IEC 63081 from an International Standard (IS) to a Technical Specification (TS), as more work is required before proceeding to an IS;
- IEC/TC 87 agreed to change the status of the project IEC 62900 from IS to TS;
- IEC/TC 87 will contact IEC/CO requesting sales figures for IEC 61157 ed.2.1 – this standard may be withdrawn if it is not being used;
- IEC/TC 87 agreed to change the title of the project IEC/TS 62903 from 'Ultrasonics - measurements of electroacoustical parameters and acoustic output power of spherically focusing transducers using the self-reciprocity method ' to read 'Ultrasonics - Measurements of electroacoustical parameters and acoustic output power of spherically curved transducers using the self- reciprocity method'
- IEC/TC 87 agreed to withdraw the project IEC/TS 62558 A1 due to the comments received on the CD vote. This amendment is no longer applicable;
- IEC/TC 87 agreed to change the title of the project IEC/TS 63070 to add the words 'at the'. The new title reads: Ultrasonics – Field characterisation – Infra-red imaging techniques for determining temperature elevation in tissue-mimicking material and at the radiation surface of a transducer in still air'
- There is currently no work item on elastography a new working group might be established as and when a new work item is created.

There were interim meetings of IEC TC87 Working Groups in Vienna in June 2017.

The next TC 87 plenary meeting has been scheduled for June 2018 to be held in Olomouc in the Czech Republic.

Bajram Zeqiri & Stephen Robinson (NPL),
4th September 2017.