

IEC TC 62: Overview & Work Program

Norbert Bischof, Secretary IEC TC 62, SC 62B and SC 62C

Presented by Nicole Denjoy

DITTA Vice-Chair
COCIR Secretary General

DITTA Workshop on International Standards

Florianópolis, , 12 Sept. 2016



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- IEC TC 62 Achievements in Q2/2016
- IEC TC 62 Work Program
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INTERNATIONAL ELECTROTECHNICAL COMMISSION (IEC)

The International Electrotechnical Commission (IEC) is a non-governmental organisation of Member Countries.

The IEC publishes International Standards and other publications for electrical, electronic and related technologies.

The stakeholders in IEC include industry, academia, regulators, users and consultants.

The International Standards Organisation (ISO) is a partner organisation of IEC. Both organisations follow a common set of rules and directives.



IEC TC 62





















IEC TC 62 SCOPE

Outline IEC TC 62

Since 2011, the scope of Technical Committee 62 of the IEC is:

To prepare international standards and other publications concerning electrical equipment, electrical systems and software used in healthcare and their effects on patients, operators, other persons and the environment.

NOTE: This scope includes items that are also within the scopes of **other committees** and will be addressed through **cooperation**. Attention will **focus on safety and performance** (e.g. radiation protection, data security, data integrity, data privacy and environmental aspects) and will **contribute to regulatory frameworks**. Healthcare includes **medical practice as well as emergency medical services, homecare, and support of persons** with disabilities in their daily lives (i.e. Ambient Assisted Living).























IEC TC 62 KEY DATA

Outline IEC TC 62

- 29 Participating Countries
- 19 Observer Countries
- Secretariat: Germany
- 1285 experts in
- ~ 50 working groups with a total number of
- 2122 seats in
- 4 Subcommittees.
- 66 "harmonized standards"
- 75 "recognized standards"
- 36 "recognized standards"

European Union

FDA CDRH, USA

Health Canada























LEADERSHIP OF IEC TC 62

Outline IEC TC 62

TC 62 Electrical equipment in medical practice

Sec DE Norbert Bischof, Chair Michael Appel, US

Asst Sec Annette Hagen

3 Advisory and ad-hoc Groups

SC 62A Common aspects of electrical equipment used in medical practice

Sec US Charles Sidebottom, Chair Justin McCarthy, UK

Asst Sec Hae Choe

25 Working Groups and Maintenance Teams

SC 62B Diagnostic imaging equipment

Chair Yan Kang, CN Sec DE Norbert Bischof,

Asst Sec Annette Hagen

17 Working Groups and Maintenance Teams

SC 62C Radiotherapy, nuclear medicine and radiation dosimetry

Chair Alan Cohen, US Sec DE Norbert Bischof,

Asst Sec Annette Hagen

4 Working Groups and Maintenance Teams

SC 62D Electromedical equipment

Chair Juergen Stettin, DE Sec US Jeffrey Eggleston

Asst Sec Hae Choe

30 Working Groups and Maintenance Teams

Organization Chart of TC 62 and Subcommittees (effective June 1, 2016) Figure 1

























IEC TC 62: NEW PROJECTS Q2/2016

IEC TC 62 Achievements

62A/1096/NP Health software and health IT systems safety, effectiveness and security - Foundational principles, concepts and terms 62A/1100/RR IEC 62304 Ed 2: Health software - Software life cycle processes 62B/1003/RR IEC 60601-2-63 Ed 1: Medical electrical equipment - Part 2-63: Particular requirements the basic safety and essential performance of dental extra-oral X-ray equipment 62B/1005/RR IEC 60601-2-65 Ed 1: Medical electrical equipment - Part 2-65: Particular requirements the basic safety and essential performance of dental intra-oral X-ray equipment	
62B/1003/RR IEC 60601-2-63 Ed 1: Medical electrical equipment - Part 2-63: Particular requirements the basic safety and essential performance of dental extra-oral X-ray equipment 62B/1005/RR IEC 60601-2-65 Ed 1 : Medical electrical equipment - Part 2-65: Particular requirements	I
the basic safety and essential performance of dental extra-oral X-ray equipment 62B/1005/RR IEC 60601-2-65 Ed 1 : Medical electrical equipment - Part 2-65: Particular requirements	
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62B/1008/RR IEC 60601-2-54 Ed 1: Medical electrical equipment - Part 2-54: Particular requirements the basic safety and essential performance of X-ray equipment for radiography and radioscopy	for
62B/1011/RR IEC 60601-2-43 Ed 2: Medical electrical equipment - Part 2-43: Particular requirements the basic safety and essential performance of X-ray equipment for interventional procedures	for
62C/645/NP Dedicated Radionuclide Imaging Devices - Characteristics and Test Conditions - Part 1: Cardiac SPECT	:
62D/1349/NP Medical electrical equipment - Part 2-xx: Particular requirements for the basic safety and essential performance of home light therapy equipment	d
62D/1354/RVN ISO 81060-3 Ed 1: Non-invasive sphygmomanometers – Part 3: Clinical investigation of continuous non-invasive automated measurement type	f
Preliminary work item of SC 62C IEC 62083 to cover the subject of the rejected work item on "Requirements of safety of external-beam radio-therapy systems including RTPS for a moving target"	























IEC TC 62: MILESTONES REACHED Q2/2016

IEC TC 62 **Achievements**

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Document	Project							
62B/1004/CDV	Amendment 1 to IEC 60601-2-63: Medical electrical equipment - Part 2-63: Particular requirements for the basic safety and essential performance of dental extra-oral X-ray equipment							
62B/1006/CDV	Amendment 1 to IEC 60601-2-65: Medical electrical equipment - Part 2-65: Particular requirements for the basic safety and essential performance of dental intra-oral X-ray equipment							
62B/1012/CDV	Amendment 1 to IEC 60601-2-43: Medical electrical equipment - Part 2-43: Particular requirements for the basic safety and essential performance of X-ray equipment for interventional procedures							
62D/1344/CDV	Amendment 1 to IEC 60601-2-4: Medical Electrical Equipment - Part 2-4: Particular requirements for the basic safety and essential performance of cardiac defibrillators							

Document	Project
62A/1093/DTR	ISO TR 80002-2 Ed 1: Medical device software - Part 2: Validation of software for medical device quality systems
62A/1097/DTR	IEC TR 80001-2-9 Ed 1: Application of risk management for IT networks incorporating medical devices - Part 2-9: Application guidance - Guidance for use of security assurance cases to demonstrate confidence in IEC TR 80001-2-2 security capabilities
62A/1099/DTR	IEC TR 60601-4-1 Ed 1: Medical electrical equipment - Part 4-1: Guidance and interpretation - Medical electrical equipment and medical electrical systems employing a degree of autonomy























IEC TC 62: PUBLICATIONS Q2/2016

25 new or revised Standards published

SC 62A: 3

SC 62C: 3

SC 62D: 19

No Standards withdrawn























IEC TC 62: EXAMPLE PUBLICATIONS Q2/2016

IEC TC 62 **Achievements**

SC	Publication reference	Title
62A	IEC TR 60601-4-2 Ed 1	Medical electrical equipment - Part 4-2: Guidance and interpretation - Electromagnetic immunity: performance of medical electrical equipment and medical electrical systems
62A	IEC TR 62366-2 Ed 1	Medical devices - Part 2: Guidance on the application of usability engineering to medical devices
62A	IEC TR 80001-2-8 Ed 1	Application of risk management for IT-networks incorporating medical devices - Part 2-8: Application guidance - Guidance on standards for establishing the security capabilities identified in IEC TR 80001-2-2
62C	IEC 60731:2011+AMD1:2016 Ed 3.1	Medical electrical equipment - Dosimeters with ionization chambers as used in radiotherapy
62C	IEC 60731:2011/AMD1:2016 Ed 3	Amendment 1 - Medical electrical equipment - Dosimeters with ionization chambers as used in radiotherapy
62C	IEC 61303:1994/COR1:2016 Ed 1	Corrigendum 1 - Medical electrical equipment - Radionuclide calibrators - Particular methods for describing performance

Complete list available upon request























FUTURE OF IEC 60601 SERIES

Work Program IEC TC 62

At the meetings in Kobe November, 2015, IEC TC 62 developed a procedure for the future updates of the IEC 60601 series.

A two-step approach was taken.

The first step, "Amendment 2 to Edition 3 of IEC 60601-1", is intended with restrictively selected modifications, and a publication date in **2019**.

The second step, "Edition 4 of IEC 60601-1" is intended to possibly include larger modifications, such as a **new architecture**, and a publication date around **2024**.























AMENDMENT 2 TO IEC 60601 EDITION 3

Work Program IEC TC 62

For the first step, amendment 2, the SC 62A CAG has "restrictively" selected 160 modifications.

A couple of documents have been circulated in SC 62A:

Questionnaire	Results	Standard	Comments
62A/1077/Q	62A/1102/RQ	60601-1	67 pages
62A/1078/Q	62A/1103/RQ	60601-1-2	55 pages
62A/1079/Q	62A/1104/RQ	60601-1-6	51 pages
62A/1080/Q	62A/1105/RQ	60601-1-8	49 pages
62A/1082/Q	62A/1106/RQ	60601-1-10	48 pages
62A/1083/Q	62A/1107/RQ	60601-1-11	51 pages

These 160 modifications will be subject to the SC 62A meeting in Frankfurt, Germany



















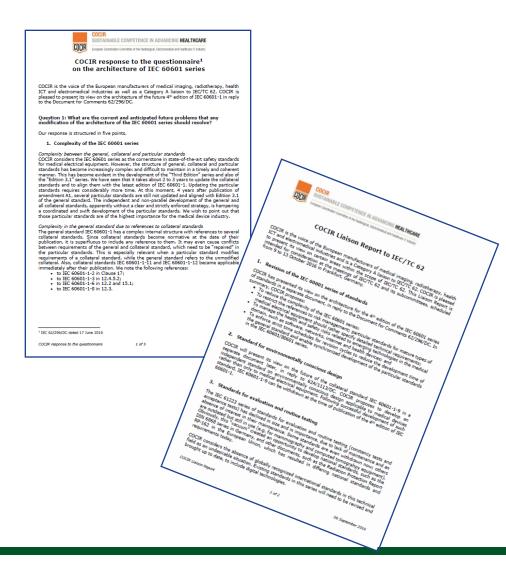




EDITION 4 OF IEC 60601-1

Work Program IEC TC 62

For Edition 4 of the IEC 60601-1, TC 62 has circulated a document for comments to its National Committees and to Liaison Bodies.

























SOFTWARE AND IT NETWORKS - SNAG AND JWG 7

In dealing with **software** and the integration of medical devices with **IT-networks**, **IEC TC 62 2011** has established the Software and Networks Advisory Group (SNAG). This group is responsible for reviewing the scope and justification of proposals for new or maintenance work that originates from sources, other than National Committees or formal liaison organizations. The Group makes work recommendations to the TC/SC Officers on whether and how to allocate the work within TC 62 and about cooperation to be established with other committees or organizations.

IEC TC 62 has allocated work proposed by the SNAG to Joint Working Group 7 of its Subcommittee 62A and ISO TC 215 Health Informatics.





















IEC TC 62 FRANKFURT

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VLADIVOSTOK 2017

МИНИСТЕРСТВО ПРОМЫШЛЯННОСТИ В ТОРГОВЛИ РОССИЙСКОЙ ФЕДЕРАЦИИ

Forthcoming Meetingscrom регулярованию и метрологии (Рустандарт)



MINISTRY OF INDUSTRY AND TRADE OF RUSSIAN FEDERATION

FEDERAL AGENCY
ON TECHNICAL REGULATING
AND METROLOGY
(Rosstandart)

Ленниский проспект, д. 9, Москва В-49, ГСП-1, 119991 Tel: +7 (499) 236-40-44

http://www.gost.ru

Leninsky prospekt, 9, Moscow, Russia V-49, GSP-1, 119991

Fax: +7 (499) 237-98-15

02-06.2016 n 5N-7972/01

To: Mr. Michael Appel, IEC/TC 62 Chairman

Mr. Norbert Bischof, IEC/TC 62, IEC/SC B and IEC/SC 62C Secretary

Mr. Justin P McCarthy, IEC/SC 62A Chairman

Mr. Charles Sidebottom P.E., IEC/SC 62A Secretary

Mr. Yan Kang, IEC/SC 62B Chairman

Mr. Geoffrey S. Ibbott, IEC/SC 62C Chairman

Mr. Jürgen Stettin, IEC/SC 62D Chairman

Mr. Jeffrey L. Eggleston, IEC/SC 62D Secretary

Dear Sirs,

The Russian National Committee for the IEC (Federal Agency on Technical Regulating and Metrology) invites the IEC/TC 62 "Electrical equipment in medical practice", IEC/SC 62A "Common aspects of electrical equipment used in medical practice", IEC/SC 62B "Diagnostic imaging equipment", IEC/SC 62C "Equipment for radiotherapy, nuclear medicine and radiation dosimetry", IEC/SC 62D "Electromedical equipment" and their WGs to carry out the Plenary meeting and the meetings of SCs and WGs in the framework of the 81st IEC General Meeting on 2^d-13th October 2017 in Vladivostok (Russian Federation).

In case of acceptance of our invitation, we would be very grateful to you if you let us know of the desired dates for the meeting(s) and estimated number of delegates.

For organizing of the 81st IEC GM the Russian NC will found the Organizing Committee. It will be responsible for all questions, concerning the meetings, such as sending invitations, hotel reservations, holding of working meetings and cultural events.

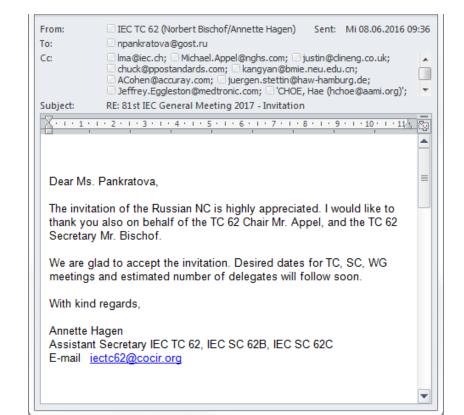
With best regards,

Mr. Boris Potemkin

Deputy Head of the Federal Agency on Technical Regulating and Metrology

Januar June

c: Mr. Laurent Mailly, IEC Technical Officer

























THANK YOU!

Norbert Bischof,

Secretary IEC TC 62, SC 62B and SC 62C bischof@cocir.org

Nicole Denjoy

DITTA Vice-Chair & COCIR Secretary General denjoy@globalditta.org