

Reported by (Name):	Wesley Culberson
Organization:	University of Wisconsin – Madison
Position Title:	Assistant Professor Research Director of the UWMRRC
Activity:	IEC subcommittee 62C Working Group 3 meeting
Meeting Dates:	Aug 4-5, 2016
Meeting Location:	Washington DC
Payment \$:	(see below)
Reasons for Attending or not Attending	I am a technical expert on radiation dosimetry representing the interests of the AAPM and am a member of the AAPM Working Group for IEC (WGIEC).
Issues from Previous Meetings or Year:	A number of radiation dosimetry standards were discussed at the meeting. The outstanding issues are detailed in the attached meeting agenda. DAP meters were a large part of the discussion. Also, the creation of new x-ray standards were discussed heavily.
General Description of Activities of the Organization and/or Meeting:	The IEC sets performance and safety standards for manufacturers of equipment being used in radiation therapy. Working Group 3 deals specifically with the radiation dosimetry standards. Constant work is required to ensure the best safety for our AAPM members as well as the most accurate deliveries of dose to the patients in radiation therapy.
Issues for AAPM:	Incorporation of diodes and scintillators as standard dosimeters in radiation therapy, accurate calibrations of well chambers, and inclusion of international standard beams in therapeutic x-ray therapies.
Budget Request (\$):	Total reimbursement request for 2016= \$279.47

MEETING OF SC62C WG 3, 4th and 5th August 2016

To be held after the 2016 AAPM Annual Meeting, in Washington, D.C., USA
Local organizer: Doug Pfeiffer (member of WG 3)

Meeting room:

Cherry Blossom Room, Mezzanine level in the Marriott Marquis
Marriott Marquis Washington, DC
901 Massachusetts Ave. NW
Washington, DC 20001
(202) 824-9200

Agenda

Time schedule:

Thursday, August 04, 1:00 p.m. – 5:00 p.m.
Friday, August 05, 9:00 a.m. – 5:00 p.m.

AGENDA (VERSION 2016-07-26)

1. Opening of the Meeting
2. Approval of the Agenda
3. Confirmation of the minutes of the meeting held in Stockholm, June 2015
4. Report of Convenor to WG3
5. Revision of IEC 60580: "Medical electrical equipment – Dose area product meters"
New stability date is 2018. Last draft of a new edition was drafted by Doug. Some final points need to be discussed. Next step: Agree on CDV and circulate to NCs!
6. Revision of IEC 61267 "Medical diagnostic X-ray equipment – Radiation conditions for use in the determination of characteristics"
New stability date is 2018. Ludwig will present first suggestions for a revision which considers the comments to the 2015 Questionnaire of JP and NL and the question about the necessity of the use of ppV in this document.
7. IEC 61674 Edition 2.0 2012-11: "Medical electrical equipment – Dosimeters with ionization chambers and/or semiconductor detectors as used in X-ray diagnostic imaging"
Stability date is 2019. Amendmend needed? Discuss Table 5 "Minimum rated range" for radiation qualities in mammography. Editorial correction needed in Table 4. Discussion points will be prepared by Ludwig.
8. IEC 61676 Edition 1.1 2009-01: "Medical electrical equipment – Dosimetric instruments used for non-invasive measurement of X-ray tube voltage in diagnostic radiology"
New stability date is 2018. Ludwig will give a short status report. DC circulated 2016-06-24. Comments are to be submitted by 2016-08-05.
9. NWIP "Therapy radiation qualities"
Ludwig will give a status report.
10. New Project "Medical electrical equipment – Dosimetric instruments used for non-invasive measurement of half-value layers in diagnostic radiology"
Ludwig will give a status report.
11. Further work, any other business and place and date of the next meeting
12. Close of the meeting

MEETING OF SC62C WG 3, 25th and 26th June 2015

Unconfirmed Minutes (2015-07-29)

Held in Stockholm/KISTA, Sweden

Local organizer: Tomas Bengtsson (member of WG 3)

Meeting room:

SEK Svensk Elstandard

Room "Omega 1"

Kistagången 16

164 29 Kista

Time schedule:

Thursday, June 25, 1:00 p.m. – 5:00 p.m.

Friday, June 26, 9:00 a.m. – 5:00 p.m.

Participants:

- Ludwig Büermann (Convenor)
- Norbert Bischof (Secretary)
- Thomas Bengtsson
- Bernd Allgaier
- Doug Pfeiffer
- Paul Sunde
- Wes Culberson

Guest:

- Larry De Werd

*Minutes of
Stockholm
Meeting
2015*

1. Opening of the Meeting

The Convenor opened the meeting at 1:00 p.m.

2. Approval of the Agenda

The agenda was changed as reflected in these minutes.

3. Confirmation of the minutes of the meeting held in Austin, July 2014

Two names were written incorrectly and corrected.

4. Report of

- Secretary of SC62C

The new secretary, Norbert Bischof, introduced himself. Next he gave a short report of the TC 62 meeting in New Orleans 2014 (document will be made available on the collaboration tool).

- Convenor to WG3: No special report was given.

5. Revision of IEC 61267 "Medical diagnostic X-ray equipment – Radiation conditions for use in the determination of characteristics"

Stability date was 2014. WG3 decided in Austin on a revision. A Questionnaire was circulated on 2015-05-08 with closing date 2015-06-19. Comments were received from JP and NL.

WG3 decided to confirm the standard for additional 3 years and to extend the stability date to 2018 because some basic general questions need to be addressed before the revision and this needs some time. Meanwhile Ludwig, Paul and Tomas will prepare a revised version of the standard. Comments of JP and NL shall be considered in the revision. Important question: Is ppV really necessary here? This question is related to the revision of IEC 61676 where ppV is defined (see topic 7).

Actions:

Ludwig includes the WG3 decision to confirm the standard and to set the stability date 2018 into the WG3 report for the TC 62 plenary meeting in Kobe (2nd to 13th November 2015).

Note about the review process: "When a decision to confirm is taken at a plenary committee meeting and is minuted in the RM document then there is no need to issue a separate Form RR.

Ludwig, Paul and Tomas will prepare a first draft of a revision until the next meeting.

6. IEC 62467-1 Edition 1.0 2009-06 "Medical electrical equipment - Dosimetric instruments as used in brachytherapy – Part 1: Instruments based on well-type ionization chambers"

- a) Stability date is 2015. Review given by Larry and Wes.
- b) Decide on next steps.

The standard is still up to date.

The stability date was extended by 10 years, so it is 2025.

Actions:

Ludwig includes the WG3 decision to confirm the standard and to set the stability date 2025 into the WG3 report for the TC 62 plenary meeting in Kobe. (See note on topic 5).

7. IEC 61676 Edition 1.1 2009-01: "Medical electrical equipment – Dosimetric instruments used for non-invasive measurement of X-ray tube voltage in diagnostic radiology"

- a) Stability date is 2015. Review prepared by Ludwig.
- b) Decide on next steps.

WG3 decided that this standard needs a basic review.

Important question to be addressed: Is ppV still needed?

Actions:

Norbert will circulate a Document for Comments (DC to 62B+C!) as soon as possible (after the DC is issued, the NCs will have 6 weeks for comments).

Paul and Tomas will prepare a draft of a revision. Ludwig will assist in changing the document accordingly.

All: We will have a Conference Call about the first version of a CD in 2015-12-07 at 16:00 h (central Europe time).

8. NWIP "Therapy radiation qualities"

Status report (Ludwig)

This project is aiming at a definition of reference radiation qualities to be used for calibration and testing of dosimeters used in kilovoltage x-ray beam radiation therapy. For a recent review of this topic see "Advances in kilovoltage x-ray beam dosimetry", PMB 59 (2014) R184-231.

Currently, different radiation qualities are in use worldwide. A recent European Project on this topic will soon be finished and possibly some results can be extracted as a basis for this project.

Actions:

Ludwig will put the German DIN 6809-4 "Clinical dosimetry — Part 4: X-ray therapy with X-ray tube voltages between 10 kV and 300 kV" on the collaboration tool for information of the members.

Larry will ask in US whether new qualities could be accepted.

Ludwig will compile the radiation qualities currently in use until the next meeting.

9. IEC 60731: "Medical electrical equipment - Dosimeters with ionization chambers as used in radiotherapy"

- a) Voting Result on 62C/596A/CDV (closing date was 2014-12-05): approved

- b) Discuss comments (Doug, Edmund)

WG3 added their observations to the comments (see document 596A_CC_62C_596A_CDV_sorted_obs.pdf) attached to these minutes). A part of the comments were addressed by editorial changes to the current edition of the standard. These will be included into Amendment 1 by Bernd. Other comments were more fundamental like the inclusion of other detectors than just ionization chambers. WG3 took the decision to address these fundamental comments in a different document. It remained open how this can be performed formally. Norbert will find out the possibilities by contacting IEC Administrative Assistant.

Meanwhile we got information about the possible options:

Option 1: Either we can stop the project at this stage (CAN) and restart it with new part 1 and part 2 Ed. 1.0. But we would need formal approval from the P-Members of the committee in order to do so.

Option 2: Either, we can publish Amendment 1 and then restart a revision project, with formal approval of the P-Members to revise the publication, and then split the project into two new parts.

Bernd presented first suggestions of the main contents of the new standard (NWIP or 60731 – Part 2) in order to address other detectors than just ionization chambers.

Actions (preferring option 2):

Bernd will add the decided editorial changes to the Amendment 1 (document 62C-60731-Ed3-A1-IS-CDV-FE-ebd-dcl-ARC-abi.doc) which shall then be published (The FDIS stage can be skipped because of the unanimous vote on the CDV.).

Norbert will restart a revision project according to option 2.

10. Revision of IEC 60580: "Medical electrical equipment – Dose area product meters"

- a) The aim is to finish a CD of the revision (based on WD prepared by Doug)
b) Decide on next steps.

Doug presented the current status of the CD and included further changes due to the results of WG3 discussion points. One essential point was to change the term 'ionization chamber' by the term 'radiation detector' at all occurrences where a general radiation detector shall be addressed. Doug will update the CD and make it available to the members on the collaboration tool within no more than 3 months.

Stability date is 2015. WG3 decided that a revision is necessary.

Target dates:

Nov 2015: RR issued at Kobe meeting, project start

Nov 2016: CD

Nov 2017: CDV

Aug 2018: FDIS

Nov 2018: Published Standard

Actions:

Norbert will write the RR.

Doug will compile the updated CD and copy it to the collaboration tool before September 30.

11. New Project "Medical electrical equipment – Dosimetric instruments used for non-invasive measurement of half-value layers in diagnostic radiology"

Tomas presented a draft of a new performance standard on instruments measuring HVL. He compiled his proposal by using IEC 61676 as a basis and exchanged 'X-ray tube voltage' by 'half-value layer'. The draft is attached to the minutes. The project was discussed and considered to be beneficial for the user community. Tomas feels responsible to open the project officially (by

consulting Norbert). He will prepare a CD and make it available for the group on the collaboration tool within no more than about 6 months.

Actions:

Tomas will initialize a NWIP by the Swedish NC.

Tomas will prepare a WD and copy it to the collaboration tool before December 31.

All: Read and give comments to the WD.

12. Further work, any other business and place and date of the next meeting

Because of the currently high workload of WG3 it was discussed to meet at least two times a year. For this year (2015) it was decided to have a phone conference in December.

The next meeting was decided to take place after the 2016 AAPM meeting in Washington DC, which is:

Thursday, August 4 at 1 p.m. until Friday, August 5, 5 p.m.

Actions:

Doug offered to host this meeting (Thank you!).

13. Close of the meeting

The meeting was closed at 5:15 p.m.