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23 September 2005

Ronald C Petersen
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Re: PC95.1 - Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz

Dear Ronald:

I am pleased to inform you that on 22 September 2005 the IEEE-SA Standards Board approved the above referenced project until 31 December 2005. A copy of the file can be found on our website at <http://standards.ieee.org/board/nes/projects/C95-1.pdf>.

Now that your project has been approved, please forward a roster of participants involved in the development of this project. This request is in accordance with the IEEE-SA Operations Manual, Clause 5.1.2i under Duties of the Sponsor which states:

"Submit annually to the IEEE Standards Department an electronic roster of individuals participating on standards projects"

For your convenience, an Excel spreadsheet for your use has been posted on our website at <http://standards.ieee.org/guides/par/roster.xls>. Please forward this list to me via e-mail at j.haasz@ieee.org no later than 21 December 2005.

Please visit our website, IEEE Standards Development Online (<http://standards.ieee.org/resources/development/index.html>), for tools, forms and training to assist you in the standards development process. Also, we strongly recommend that a copy of your draft be sent to this office for review prior to the final vote by the working group to allow for a quick review by editorial staff before sponsor balloting begins.

If you should have any further questions, please contact me at 732-562-6367 or by email at j.haasz@ieee.org.

Sincerely,

Jodi Haasz
Program Manager
International Stds Programs and Governance
Standards Activities
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PAR FORM

PAR Status: Modified Revision PAR

PAR Approval Date: 2005-09-22

PAR Signature Page on File: Yes

1. Assigned Project Number: PC95.1

2. Sponsor Date of Request: 2005-07-24

3. Type of Document:

4. Title of Document:

Draft: Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz

5. Life Cycle: Full-Use

6. Type of Project:

6a. Is this an update to an existing PAR? Yes

If Yes: Indicated PAR number/approval date: C95.1 - 1997-06-26

If Yes: Is this Project in Ballot now? Yes

6b. The Project is a: Revision of Std C95.1-1991

7. Working Group Information:

Name of Working Group: Safety Levels with Respect to Human Exposure, 3 kHz–300 GHz Working Group

Approximate Number of Expected Working Group Members:70

8. Contact information for Working Group Chair:

Name of Working Group Chair: C. K Chou

Telephone: 954-723-5387 **FAX:** 954-723-5611

Email: ck.chou@motorola.com

9. Contact information for Co-Chair/Official Reporter, Project Editor or Document Custodian if different from the Working Group Chair:

Name of Co-Chair/Official Reporter, Project Editor or Document Custodian: John A D'Andrea

Telephone: 210 536 6527 **FAX:** 210 536 6537

Email: john.dandrea@navy.Brooks.AF.MiL

10. Contact information for Sponsoring Society or Standards Coordinating Committee:

Name of Sponsoring Society and Committee: SCC39-International Committee on Electromagnetic Safety International Committee on Electromagnetic Safety

Name of Sponsoring Committee Chair: Ronald C Petersen

Telephone: 908-234-0373 **FAX:** 908-470-9230

Email: r.c.petersen@ieee.org

Name of Liaison Rep. (if different from the Sponsor Chair):

Telephone: FAX:

Email:

Name of Co-Sponsoring Society and Committee:

Name of Co-Sponsoring Committee Chair:

Telephone: FAX:

Email:

Name of Liaison Rep. (if different from the Sponsor Chair):

Telephone: FAX:

Email:

11. The Type of ballot is: Individual Sponsor Ballot

Expected Date of Submission for Initial Sponsor Ballot: January 2005

12. Projected Completion Date for Submittal to RevCom: August 2005

Target Extension Request Information for a Modified PAR whose completion date is being extended past the original four-year life of the PAR:

13. Scope of Proposed Project:

Recommendations are made to protect against established adverse health effects in human beings associated with exposure to electric, magnetic and electromagnetic fields in the frequency range of 3 kHz to 300 GHz. The recommendations are expressed in terms of basic restrictions (BRs) and maximum permissible exposure (MPE) values. The BRs are limits on internal fields, specific absorption rate (SAR), and current density; the MPEs, which are derived from the BRs, are limits on external fields and induced and contact current. The recommendations, which protect against effects associated with electrostimulation and tissue and whole-body heating, are intended to apply to all human exposures except for exposure of patients by, or under the direction of, physicians and medical professionals. These recommendations are not intended for the purpose of preventing interference with medical and other devices that may exhibit susceptibility to radio frequency (RF) fields. The recommendations at 300 GHz are compatible with existing recommendations for safe exposure in the infrared frequency range, which begins at 300 GHz, cf., ANSI Z136.1 [B7], ICNIRP guidelines [B63], and IEC 60825-1 [B65]. IEEE Std C95.6 [B72] is the applicable standard for use at frequencies below 3 kHz.

Is the completion of this document contingent upon the completion of another document?

No

14. Purpose of Proposed Project:

The purpose of this standard is to provide exposure limits to protect against established adverse effects to human health induced by exposure to RF electric, magnetic and electromagnetic fields over the frequency range of 3 kHz to 300 GHz.

15. Reason for the Proposed Project:

The reason for this project is to update the 1991 standard by including an evaluation and analysis of the scientific literature published after the literature review cut-off date for the 1991 standard

(1986) in order to provide rational, science-based limits to protect against established adverse health effects associated with exposure to RF energy across the spectrum from 3 kHz to 300 GHz. The stakeholders include the telecommunications industry, the broadcast industry, the Department of Defence, federal agencies such as FCC and OSHA, workers in any industry that uses RF energy, and the general public.

16. Intellectual Property:

- a. Has the IEEE-SA policy on intellectual property been presented to those responsible for preparing/submitting this PAR?** Yes 2005-07-22
- b. Is the sponsor aware of copyright permissions needed for this project?** Yes
Copyright permission is now being sought for one figure in the Annex of the draft standard.
- c. Is the sponsor aware of trademarks that apply to this project?** No
- d. Is the sponsor aware of possible registration activity related to this project?** No

17. Are there other documents or projects with a similar scope? No

Similar Scope Project Information:

18. Is there potential for this document (in part or in whole) to be adopted by another national, regional or international organization? Do not know at this time

If yes, the following questions must be answered:

Organization Name?

Technical

Committee

International

Contact

Information?

19. Will this project result in any health, safety, or environmental guidance that affects or applies to human health or safety? Yes

If yes, please explain:

This standard recommends limits for exposure to RF fields and induced and contact currents to protect against established adverse health effects. These recommendations are based on an extensive evaluation of the extant scientific literature carried out by a number of literature evaluation working groups of Subcommittee 4 and by a number of independent international panels of experts.

20. Sponsor Information

- a. Is the scope of this project within the approved/scope/definition of the Sponsor's Charter?** Yes
If no, please explain:
- b. The Sponsor's procedures have been accepted by the IEEE-SA Standards Board Audit Committee?** Yes

21. Additional Explanatory Notes: (Item Number and Explanation)

6 (a). The original document was approved in 1991, reaffirmed in 1997, Amendment 1 was approved in 1999 and Amendment 2 approved in 2004. 6 (b) The reason for modifying the PAR is to bring the scope into line with that of the draft now being balloted. Specifically, to indicate that the revised standard addresses the effects of electrostimulation at frequencies below 100 kHz and that induced and contact currents are addressed. 11. The draft is now undergoing a sponsor recirculation ballot. The approval rate of the initial ballot was 96%. 13. The changes reflect the fact that the revised recommendations protect against "established adverse health effects," and effects associated with electrostimulation are now addressed. 14. The two amendments to the 1991 standard, i.e., that address inconsistencies with the induced current limits and increasing the peak spatial-average specific absorption rate of the outer ear (pinna) to that of the extremities, are included in the revised standard. (Note - the scope and purpose are combined as a single paragraph in the 1991 standard.) 20 (b) This revision was developed under the P&Ps of SCC-28, which have been accepted by AudCom.