



# ICES

*International Committee on Electromagnetic Safety*

**Reply to:**

Dr. Ralf Bodemann  
Chairman IEEE-ICES

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**To:**

Dr. J. Zoetelief  
Editor-in-Chief "Radiation Protection Dosimetry"  
c/o TU Delft  
Gebouw 22, kamer A 264  
Lorentzweg 1  
2628 CJ Delft  
The Netherlands

**Re:** Paper by Dhungel, Zmirou-Navier, and van Deventer, Rad. Prot. Dos. (2014) pp. 1-6  
"Risk Management Policies and Practices Regarding Radio Frequency Electromagnetic Fields: Results From a WHO Survey"

Dear Dr. Zoetelief:

The IEEE International Committee on Electromagnetic Safety (ICES) would like to comment on a statement in the above mentioned paper which occurs at the bottom of page 2/top of page 3:

"Seven countries (Bolivia, Chile, Honduras, India, Republic of Korea, Trinidad and Tobago and the USA) reported following the US Federal Communications Commission (FCC) limits, which is based on exposure limits recommended by the IEEE and ICES (International Committee for Electromagnetic Safety.)"

First: We would like to clarify that ICES is a Standards Coordinating Committee (SCC39) of the IEEE Standards Association (IEEE-SA): the correct committee name is IEEE International Committee on Electromagnetic Safety. ICES, through its volunteer members, independently develops and recommends exposure limits or standards in accordance with the IEEE-SA's rigorous open consensus process. If the



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IEEE-SA Standards Board determines that an ICES proposed standard was developed in compliance with all of the IEEE-SA's procedural requirements, the Standards Board will approve and publish the standard as an IEEE voluntary standard. Hence, although ICES independently develops exposure limits for approval and publication by the IEEE, the IEEE and ICES do not separately develop exposure limits or standards, as might be perceived when reading the statement.

Second: The statement that the limits of the seven countries are based on the limits recommended by IEEE ICES is no longer correct. The FCC basic restrictions (peak spatial-average specific absorption rate – SAR) for partial-body exposure (8 W/kg and 1.6 W/kg averaged over 1 g of tissue for the occupational/controlled environment and public/uncontrolled environment, respectively) are based on IEEE Standard C95.1-1991. ICES subsequently revised the 1991 standard, most recently in 2005, and the IEEE approved and published the latest revised version as IEEE Standard C95.1-2005. The corresponding SAR limits in the 2005 IEEE standard, 10 W/kg and 2 W/kg averaged over 10 g of tissue, are essentially the same as those found in the 1998 guidelines of the International Commission on Non-Ionizing-Radiation Protection (ICNIRP). (The SAR limits for whole-body exposure, 0.4 W/kg and 0.08 W/kg for controlled environments and general public exposure, respectively, are the same in all three documents.) Thus, while at one time the FCC and IEEE SAR limits were essentially the same, they are no longer.

We would appreciate it if you could print this letter in one of the next issues of “Radiation Protection Dosimetry” for clarification.

Respectfully submitted,

A handwritten signature in black ink that reads 'R. Bodemann'.

Dr. Ralf Bodemann  
Chairman, IEEE ICES

Please note that the author of this letter speaks only on behalf of ICES and not on behalf of the IEEE or the IEEE-SA.