

Dear Contributor,

Thank you for participating in the public consultation of the ICNIRP draft guidelines.

Please note that it is important that ICNIRP understands exactly the points that you are making. To facilitate our task and avoid misunderstandings, please:

- be concise
- be precise
- provide supporting evidence (reference to publication, etc.) if available and helpful.

**How to complete the comments table:**

Please use 1 row per comment. If required, please add extra rows to the table.

This response document asks you to provide your 'comment', your 'proposed change', and the 'context' to this comment and proposed change. What is meant by these is the following:

**Comment :** A brief statement describing the issue that you have identified (and that you would like ICNIRP to take into account in the final version of the guidelines).

**Proposed Change:** A brief statement describing how you would like the document changed to account for this issue.

**Context:** A brief statement identifying relevant documents in support of your comment and proposed change.

**Please, provide your details below as per the online form and the provision of the privacy policy**

Last name, first name: Scientific Committee on Health, Environmental and Emerging Risks (SCHEER)	Email address:	Affiliation (if relevant): European Commission
If you are providing these comments officially <b>on behalf</b> of an organization/company, please name this here: <i>organization/company</i>		
<p>X I hereby agree that, for the purpose of transparency, <b>my identity (last and first names, affiliation and organization where relevant) will be displayed</b> on the ICNIRP website after the consultation phase along with my comments.</p> <p><input type="checkbox"/> I want my comments to be displayed anonymously.</p>		

	Document (Guidelines, App A, App B)	Line Number #	Type of comment (General/ Technical/ Editorial)	Comment. Proposed change. Context.
1	Guidelines	118-119	Editorial	The field inside the body depends on many more parameters. „on the EMF source properties (size, distance, frequency, modulation, field intensity and polarization), on the size of the body, as well as on the physical properties and spatial distribution of the tissues within the body.“ It is better to include as many parameters determining the field distribution as possible.
2	Guidelines	129	Editorial	dialectric dielectric Typo
3	Guidelines	156	Editorial	In the third column of Table 1, line 10, the entry is „radiant exposure“, instead of the units. Change to „joule per square meter“ Consistency
4	Guidelines	231	Technical	„health effects are primarily related to absolute temperature: “This is true for whole body exposure. In the case of local exposure, tissue damage is dependent on temperature and time at that temperature. This is why the CEM43oC concept was introduced and is mentioned in line 319, further below. „related to absolute temperature and the time at this temperature“. Consistency.
5	Guidelines	272-275	Editorial	„human adults“: It is important to mention whether these were resting human adults. „resting human adults“ Consistency
6	Guidelines	319-320	Editorial	„Yarmolenko et al. 2011“ is missing from the reference list. Insert reference in the reference list. Consistency
7	Guidelines	479	Editorial	„a SAR of“ „an SAR of“ Typo

Add further rows if needed. For this copy the above row.

And paste it here.

8	Guidelines	482-487	Technical	<p>„A reduction factor of 2“</p> <p>Please, justify better the selection of reduction factors and explain how uncertainty was taken into account for deriving them.</p> <p>The need for the reduction factor is clear and discussed at several points in the document. However, the value of 2 is not explained in detail. Was it derived quantitatively by following a rigorous uncertainty analysis procedure, or is it an educated guess? Moreover, it is different than the reduction factor for whole body exposure. The fact that „the associated health effect is less serious medically“ for local exposure should not play a role in the derivation of the reduction factors. The procedure for deriving these numbers should be self-consistent and uniform throughout the guidelines. Any deviations should be adequately justified in a scientific way.</p>
9	Guidelines	675-677	Technical	<p>„a smaller temperature rise“</p> <p>Give a value (or percentage) and the respective reference.</p> <p>This is a „sensitive“ issue, because it relates to children, and a significant one because it has an impact on the decision of not changing the reference levels. The statement here reads like a hypothesis/assertion. It would better to give a value for the expected temperature rise with respect to adults, or a reference to support the statement.</p>
10	Guidelines	709	Editorial	<p>„(66-30 GHz)“</p> <p>„(6-30 GHz)“</p> <p>Typo</p>
11	Appendix A	171-172	Technical	<p>„As described above, power absorption is confined within the surface tissues at frequencies above 6 GHz. This may lead to thermoregulatory response initiation time being reduced.“</p> <p>Remove the sentence.</p> <p>What is the biological rationale for this? Is there a reference to support it? At the surface of the body (skin) there are numerous heat receptors sending signals to the hypothalamus.</p>
12	Appendix A	341	Editorial	<p>„°C kg W<sup>-1</sup>“</p> <p>„°C kg W<sup>-1</sup>“</p> <p>Typo</p>
13	Appendix A	672	Technical	<p>„internationally standardized child models“</p> <p>Remove the whole sentence.</p> <p>These are scaled voxel models of Japanese children. (a) They are not globally valid; (b) they are not models of real children but scaled down from adult Japanese models; and (c) they should not be considered „standardized“: Who did standardize them and</p>

				when? (i.e.: Is there an international standard document describing them? By which standardization organization?)
14	Appendix B	25-27	Technical	<p>„To complement the WHO and SCENIHR reviews, ICNIRP also considered research published subsequent to that included in the WHO and SCENIHR reviews in the development of the current guidelines.“</p> <p>Insert cut-off date for publications taken into consideration.</p> <p>We thank ICNIRP for acknowledging the work performed by SCENIHR (now SCHEER). For reasons of consistency/transparency, it is suggested that ICNIRP clearly states a cut-off date for the literature that it has considered in the process of developing the guidelines.</p>
15	Appendix B	27-29	Technical	<p>„In order to provide an indication of ICNIRP’s evaluation process, overviews of the literature and conclusions that ICNIRP reached, as well as a limited number of examples, are provided.“</p> <p>Elaborate further.</p> <p>Are the inclusion/exclusion criteria for the studies of the peer-reviewed literature that have been considered during the risk assessment process itemised somewhere? Will ICNIRP issue a detailed report on the evaluation of the studies and the list of those that have been considered in the risk assessment process?</p>
16	Guidelines	16	General	<p>„This publication replaces the radiofrequency part of the 1998 guidelines (ICNIRP 1998);“</p> <p>Elaborate further.</p> <p>An abstract with the changes that have been made to the previous guidelines would be most useful.</p>
17	Appendix B	346-406	Technical	<p>SCHEER notes the striking difference between this evaluation of the NTP-studies and the conclusions of the NTP peer review by external experts which concluded that the NTP studies were well designed, and that the results demonstrated that RFR were carcinogenic to the heart (schwannomas) and brain (gliomas) of male rats. This section also does not explain the concordance between high quality animal data (NTP studies, Falcioni studies) and human data with regard to the occurrence of specific tumours such as schwannoma’s and brain glioma’s. The guidance also does not explain how the local SAR levels, considered to be more relevant than whole body exposures, applied in the NTP-studies compare to the local SARs ICNIRP-guideline values.</p> <p>It is recommended to re-evaluate the NTP- and Falcioni studies as well as the significance of the findings in the light of the available human data, taking into consideration the NTP peer review.</p> <p>Explain the context of your comment.</p>
Continue1 8 numbering	Guidelines		General	<p>Consider a precaution.</p>

Continue numbering	Document ?	Line number	Type of comment	Insert your comment. Insert your proposed change. Explain the context of your comment.
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