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**

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| --- | --- | --- |
| Last name, first name: BEEKE, Karina | Email address: Your email address. | Affiliation (if relevant): Your affiliation |
| If you are providing these comments officially **on behalf** of an organization/company, please name this here: **Arqiva**  |
| [x]  I hereby agree that, for the purpose of transparency, **my identity (last and first names, affiliation and organization where relevant) will be displayed** on the ICNIRP website after the consultation phase along with my comments.[ ]  I want my comments to be displayed anonymously. |

|  | **Document****(Guidelines, App A,****App B)** | **Line Number****#** | **Type of comment (General/ Technical/ Editorial)** | **Comment. Proposed change. Context.** |
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| **1** | Guidelines | All | General | **Comment** We welcome this proposal and are pleased to have the opportunity to comment on it. Colleagues have told me that they find it easier to understand than the 1998 guidance and the detailed rationale is useful. In addition, the efforts to ensure stability in the guidance is appreciated. Explain the context of your comment. |
| **2** | Guidelines | 129 | Editorial | **Comment** “dialectric“ is incorrect spelling.**Proposed change** Change spelling to “dielectric“Explain the context of your comment. |
| **3** | Guidelines |  429-431  | General | **Comment** Using the proposed guidance in conjunction with the 2010 guidance in the range 100 kHz – 10 MHz is not as simple as might be thought at first. (See also comments 4 and 5) **Proposed change** Add text to give more detailed guidance for using both publications (2010 and 2018) in the overlap frequency range where the two apply.Explain the context of your comment. |
| **4** | Guidelines | 681-695 | Technical | **Comment** Comparison between the H-field reference level at 100 kHz and that in the 2010 LF guidance shows a drop from 80 Am-1 (2010, occupational) to 49 Am-1 (2018, occupational) at the 100 kHz boundary. Since biological systems generally do not show such sharp discontinuities, this is difficult to interpret.e.g. If we simply take the lower reference level where both the 2010 and 2018 guidance are applicable, then at 99.99 kHz, the H-field reference level is 80 Am-1 but at 100 kHz it is only 49Am-1.**Proposed change** Add text to provide additional guidance on how to interpret the discontinuity at 100 kHz.Explain the context of your comment. |
| **5** | Guidelines |  681-695  | Technical | **Comment** Comparison between the E-field reference level at 100 kHz and that in the 2010 LF guidance shows a significant increase from 170  Am-1 (2010, occupational) to 12200 Vm-1 (2018, occupational). However, without additional guidance, use of this significantly higher reference level is difficult. (Noting that it is assumed that reference levels are given to allow assessments without the need for detailed computational modelling against the biological restrictions)For example, are there measures that could be put in place (such as prevention of arcing etc) that could allow use of this higher reference level without needing to assess against 2010 biological restrictions?**Proposed change** Add text to provide additional guidance on when it is possible to make use of this higher E-field reference level.Explain the context of your comment. |
| **6** | Guidelines | 687-692, Table 4 Note 3 and #  | Technical | **Comment** The range of frequencies up to 400 MHz is contained within the range of frequencies up to 2 GHz. Therefore, Note 3 seems to be inconsistent with #, unless Note 3 relates to far field conditions only.Clarification is needed to make it clear when compliance with only either the E- or the H-field reference level is required and when both are required.**Proposed change** If it is the case that Note 3 is intended for far field conditions only, then the suggested text for Note 3 is:“For frequencies up to 2 GHz, in the far field, compliance is demonstrated if either the **E**-field, **H**-field or **S**inc value is within the reference levels; only one is required.”If the above suggestion is incorrect, then the proposed change is to modify Note 3 and/or # to ensure they are mutually consistent.Explain the context of your comment. |
| **7** | Guidelines | 693-695, Table 4, Note \* | Technical | **Comment** This note (\*) to Table 4 is inconsistent with the text in Appendix A (lines 529-537). Frequencies above 400 MHz are contained within the range 30 MHz to 6 GHz.Note \* in the main document states that no reference level is provided for reactive fields above 400 MHz. However, Appendix A states, “From 30  MHz to 6 GHz, ………….. In the reactive near-field, ICNIRP therefore requires evaluation of both the E-field and H-field and confirmation that both fields do not exceed the reference levels“**Proposed change** Add clarification so that users of the guidance are able to comply fully with the requirementsExplain the context of your comment. |

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| **8** | Guidelines | 769-770 | Technical | **Comment** The given definition of “high-power radiofrequency fields“ cannot be used. Specifying a field strength “at its source“ is not valid.Moreover, field strength varies with position; therefore a change to the definition that included specifying distances in terms of wavelength would be problematic for multi-frequency sources; specifying distances in terms of antenna aperture would be problematic for Low/Medium frequencies where it can be argued that the ground forms part of the antenna.**Proposed Change**: “For the purpose of specification, ICNIRP here defines high-power radiofrequency fields as those with an total mean input power greater than [xxx] W.”(Where [xxx] is an appropriate power in watts)Explain the context of your comment. |