Your response

Question	Your response
Question 1: Please provide feedback on the additions, amendments and clarifications we have made to the wording of the licence condition to implement our decisions on the scope of the licence condition in our October 2020 Statement, giving reasons for your response.	Confidential? – N Footnote 47 of the initial consultation stated, "*If the ICNIRP Guidelines are updated before we issue our final statement following this consultation, or before we start the process of varying any spectrum licences, we will update the definition of the "ICNIRP Guidelines" to refer to the updated version.*" We note that Ofcom's stance on this has now changed and the proposal is to continue referencing the 1998 guidance for now. Our previous consultation response (as part of Arqiva) was made assuming that the guidance referenced would be that from March 2020. If that is now no longer the case, then the following comments apply: • We understand that the proposal to continue referencing the 1998 guidance, for now, is due to Standards not having yet updated to ICNIRP 2020. Our concern is that this could be problematic as we note that many responses to the previous consultation included health concerns; we can imagine that referencing guidance that has been superseded will neither engender confidence from the public nor allay their fears. Moreover, it could be argued that: ○ Ofcom is being unnecessarily restrictive in situations where the 2020 guidance is less restrictive than the 1998 guidance (e.g. the whole body averaging time has increased from 6 minutes to 30 minutes) ○ Ofcom is being insufficiently protective in situations where the 2020 guidance is more restrictive than the 1998 guidance (e.g. reduced averaging area at higher frequencies).

- Even before the March 2020 guidance was issued, the 1998 guidance could not be read in isolation; for frequencies in the range 100 kHz – 10 MHz, both the 2010 guidance (nerve stimulation) and 1998 guidance (thermal effects) were relevant.

If Ofcom's decision is based on the content in Standards, then an alternative approach would be to refer to the Normative reference, EC Recommendation (1999/519/EC).

- If the licence condition is not based on the 2020 guidance, then we would suggest that, in cases where the basic restrictions are the same between 2020 and 1998, or EC Recommendation, (e.g. SAR limits), any associated reference levels from the 2020 guidance could be used as an alternative route to compliance.
  (This suggestion is made on the basis that it is the basic restrictions that are the limits and use of reference levels is simply one route to compliance. Where updated information is available on how to achieve compliance with the basic restrictions, such as additional reference levels not included in the 1998 guidance, we would request that Ofcom makes it clear that these can also be used)

With regard to clarification on the scope of the licence condition, in particular the definition of the public, we note the text in 4.7.3 states,

"*In summary, we have decided to clarify the scope of our licence condition and include a definition of the 'general public'. This definition makes clear that it does not include:*
- *the licensee, owner, installer or user of radio equipment; or*
- *an individual not acting under a contract of employment ….*"

Is the highlighted 'not' an error? This definition appears to be in conflict with that given in A2,

*"**general public**" means any person who is not: (a) the Licensee, owner, operator or installer of the Relevant Radio Equipment; or (b) acting under a contract of employment or otherwise acting for purposes connected with their trade, business or profession or the performance by them of a public function*"

We welcome clarification on the definition of a site and the shared site exemptions.

Question 2: Please provide feedback on the additions and clarifications to our 'Guidance on EMF Compliance and Enforcement', giving reasons for your response.	Confidential? – N We welcome the following: • the clarification on where, and to whom, this guidance applies; in particular, A2.7 • the clarification that compliance with the reference levels will ensure compliance with the basic restrictions, (A2.13) • the clarification regarding the impact of third parties on compliance (A2.36, A2.37) Paragraph A2.33: We are extremely disappointed that neither the licence conditions nor the guidance suggests that licence holders should provide information to other site sharers to aid in their assessments on the cumulative levels from the site. An express obligation to provide information would support the employer's obligation to co-operate and coordinate with other employers, where any workplace is shared under the Management of Health and Safety at work regulations 1999. Paragraph 5.195 states "*... changed the way that we refer to the ICNIRP general public limits in the licence condition which means that we no longer refer to specific table numbers.*" However, we note in A2. Guidance on EMF Compliance and Enforcement: • A2.1 "*identified in Tables 4 and 5 of the guidelines ….*" • A3. Guidance on EMF Compliance and Enforcement, paragraph A2.13, "*It should be noted that the reference levels for general public exposure identified in Table 7 of the 1998 ICNIRP Guidelines ……*" We recommend that table numbers are also removed from the guidance notes. A2.27: We welcome the introduction of a 6-month period to ensure records are up-to-date. However, as we commented in our previous response, the administrative burden of such an exercise should not be underestimated; thus, we would suggest that this period is extended to 12 months.
Question 3: Please provide feedback on the trial version of our EMF calculator, giving reasons for your response.	Confidential? – N The calculator appears straightforward to use but needs to be interpreted correctly. Our comments are as follows:

	• The "Annex" tab uses the phrase, "E-field and H-field limits." However, the ICNIRP reference levels are not limits. Indeed, ICNIRP 1998 states, "*If the measured or calculated value exceeds the reference level, it does not necessarily follow that the basic restriction will be exceeded*." ICNIRP 2020 takes the same approach; compliance with the reference levels is not mandatory. Therefore, we recommend that the word "limits" is replaced with "reference levels". The same comment applies to "power density" for frequencies below 10 MHz (1998) or 6 MHz (2020) • The technical notes in the annex do not distinguish between "E", "H" and "S" as used in the base formulae (general far-field relationships between electric field strength, magnetic field strength and power density) and the expressions for "R" in (a) and (b), where they denote the reference levels. • Multiple frequencies. We note that, in the case of multiple frequencies, the instructions are to "*calculate the separation distance for the summed power for every frequency … and take the largest calculated separation distance to give a conservative result.*" An alternative approach would be to configure the calculator so that multiple columns are used to enter EIRP values with corresponding frequencies and then a weighted sum could be carried out. This could also help users with situations where multiple frequencies below 10 MHz are included, necessitating different summations for thermal effects and nerve stimulation effects. • Vertical clearance information: In many cases, antennas are mounted at height; neighbouring buildings may be within the horizontal radius described by the calculator. However, as long as there is sufficient vertical clearance, there is no issue. The calculator makes no mention of this. An alternative approach could be to configure the calculator to allow the user to enter additional information such as antenna gain and beam width; maybe separate entries for horizontal and vertical. At present, the calculator makes no distinction as to whether a certain EIRP is achieved with low power, high gain, narrow beam width or high power, low gain, wide beam width. • It must be made very clear that there will be many compliant situations that fail if assessed only using this tool.
Miscellaneous Comment	We note Paragraph 5.45 in the Statement document, regarding statistical methods and welcome the clarification.