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.	I feel more consideration is needed regarding the definition of “general public”. Amateur radio transmitters are often established on residential sites (houses in residential areas). At the maximum power (400W PEP) allowed by the Amateur Radio full licence, and a moderate gain antenna 6dBi, the expected EIRP will be in the region of 1600W, indicating an “exclusion” zone of around 15m according to the calculator provided. In almost all residential cases, it is not possible to put an antenna that far away from neighbouring property. Under the current definition, if I understand correctly, my neighbours property is considered an area accessible to the general public even though in reality only about 5 people have access to it. Additionally, my family members would be considered members of the general public within my own house under the current definition. If I were to mount said antenna on my chimney, the neighbours property boundary is only 2.5m away. This would prevent me from using the full power attributed to my licence, limiting me to only a fraction, only 15W. Many amateurs will be in the same boat here, and I believe this will negatively impact the Amateur radio community. The current amateur radio licencing structure incentivised progression with things such as increased power limits. In many cases, the only way to fully use their licence to its full capability, would be to setup a mobile station and leave their home which adds an additional hurdle (many amateurs are elderly and do not have the mobility or energy to do this). Regarding licencing, amateurs which have to adhere to these field strength limits will see little to no point in progressing to higher licencing tiers. In a similar vain, those with small gardens will have to use lower power as well. When one considers compromised antennas much be used in confined spaces, the effectiveness of

	the antenna is reduced and power is the only way to increase their signal strength. Those who are unable to make effective contacts will drop out of the hobby due to not wishing to break the limits on exposure, or will simply break the licencing conditions. Further to this, the ECNIRP guidelines argue only on the issue of tissue warming. For this there are two standards, one for occupationally exposed persons and one for the general public. The only difference between these two groups is the idea that one is trained to identity the reason they may be feeling warming is due to RF exposure, and the only reason the general public exposure limits are several times lower is because of this fact, not because of a significantly increased risk of harm or injury. I argue that the general public guidelines are only designed to protect members of the general public from the risks associated with unattended transmitters (and transmitters that see 24/7 operation), where there is no-one who is close to the transmitter to either warn people in the event they were to wander onto a transmitter site. In many cases with amateur radio, the operator is closer to the antenna that any member of the public and would be able to identity the effects of tissue warming and stop transmitting if this became the case. I believe the proposed licencing changes should include exceptions for all or some of the following; transmitters use for amateur radio purposes, transmitters operated for non-commercial purposes from residential premises, for attended transmitters.
Question 2: Please provide feedback on the additions and clarifications to our 'Guidance on EMF Compliance and Enforcement', giving reasons for your response.	In amateur radio, construction of ones own equipment is permitted. It is common for amateurs to build their own antennas for which accurate determine of exact gain and field pattern is difficult if not impossible. The current licencing conditions for most of the allocated band specify power limits in terms of PEP, except for a few specific frequencies which impose EIRP limits. Without knowing the exact gain of antennas which are homemade, the act of simply using a calculator to determine field strength and calculating the exclusion region is

	not possible. Simulation of antennas is not necessarily accessible to all users meaning this will require physical measurements to be carried out which will be cost prohibitive, and cumbersome to carry out. I do not believe compliance can be effectively assessed for transmitters on private residences.
Question 3: Please provide feedback on the trial version of our EMF calculator, giving reasons for your response.	A more advanced calculation program should be provided allowing calculation to take into consideration height and radiation patterns of common antennas (ie. Yagi, Dipole, 1/4wave, 5/8wave)