Dear Ofcom,

Please find my responses below.

Kind regards, Heikki

Question 1: Do you agree with our assessment of the likely costs and benefits of our proposal to license MCWSDs as a transitional arrangement? Please provide any available evidence to support your response.

I agree. In the case that a radio license for the WSD would take more time and cost more than transitional arrangement, the transitional arrangement has related benefits. Manual configuration is possible for fixed devices in the US, and it is a very good alternative for professional installations.

Question 2: If you agree that Ofcom should allow MCWSDs to operate in the UHF TV band within the TVWS framework, how long do you believe that the licensing regime would need to be in place?

For this licensing regime there might be cases that do not disappear. For example, indoor use or other places where GPS signal cannot be received. Due to this, a confirmation of the fixed 3 year period and a new check near the end of the period makes sense.

Question 3: If you agree that Ofcom should allow MCWSDs to operate in the UHF TV band within the TVWS framework, when do you believe it would be appropriate to conduct a review to assess whether there is an ongoing need to license MCWSDs?

I think that 3 years should be enough.

Question 4: Do you agree with the proposed terms of the draft licence as set out in Annex 5 and as discussed below?

I agree with the terms.

Question 5: Do you think it would be beneficial for the licensing regime for MCWDs to cover both masters and slaves?

The regime should cover both masters and slaves. In the case that slaves cannot co-locate and are connected to a manually configured master device, the operation should be permitted by using generic operating parameters.

Question 6: Do you agree that our licensing regime should only apply to type A devices?

The regime should primarily cover Type A devices. The Orkney island ferries are an example where the line between fixed and mobile device is not so clear.

Question 7: Do you agree with our approach to allow a number of MCWSDs under the control of a single licensee to be subject to a single licence?

I agree with the approach. There is a possibility that an organization would consolidate the devices of multiple WSD network providers and would such decrease the license cost of multiple small WSD

networks. Example cases where consolidation is allowed and cases where it is considered as a misuse of the regime could be given.

Question 8: Do you agree that the proposal for specific licence terms will mitigate the risks posed by the use of MCWSDs?

I agree. Professionally installed devices should be able to configure manually in addition to automatic configuration.

Question 9: Do you consider the proposed licence terms are appropriate and proportionate?

In my opinion, they are appropriate and proportionate.

Question 10: Do you have any comments on our proposal to require applicants for licences to deploy MCWSDs to supply details of their QA process on application?

Ofcom has more experience of problems that have occurred without requiring QA. Generally, I would think that professional users qualify without separate assurance.

Question 11: Do you agree with the proposed technical conditions of the draft licence?

I agree. The conditions should ensure that the installer of the devices is responsible of the correct configuration parameters instead of the database provider.

Question 12: Do you have any comments on the proposed duration for this licence?

What ever period it is, the minimum duration of the license should be stated in the beginning.

Question 13: Do you have any comments on our proposed licence fee of £1,500:

1500 GBP sounds expensive for small installations. Ofcom has more experience in license pricing and its effect on interest to deploy networks.

Question 14: Do you have any comments on our proposed five year minimum notice period for revocation for spectrum management reasons?

The most important is to have the duration known in advance. Then operators can make their own business risk assessments.

Question 15: Do you believe there is likely to be an ongoing need for white space devices that allow some level of manual configuration? Please give reasons for your answer.

Indoor and other situations where GPS signal is not available. The difference between generic and specific request results make it very important to be able to inform the location of slave devices as well.

Question 16: Do you believe there is merit in exploring allowing enhanced operation through a licensing regime in the future and if so what additional capabilities should be allowed?

I think that this is a good proposal. Increased power levels are one possible option especially on the rural areas.