Description and Justification of Requested Modifications to Licence

The existing grant allows Harris Stratex Networks to perform experiments and demonstrations in the 2500 to 2690 MHz band for both fixed and mobile applications. The emissions permitted are 10M0D7W and the power levels permitted are 6.3 Watts. We have subsequently learned that this is insufficient power for meaningful tests. As a consequence we need to increase the power in our tests to 20 watts transmitters, with 16 dBi sectoral antennas on the fixed station and 6 dBW omni-directional antennas on the mobile equipment.

Mindful of the fact that the 6 MHz channels in this range are licensed to different to users in the area and that the potential for interference is higher, we are have selected from among channels not appearing in the ULS as being within 25 km of our proposed transmitter locations as a starting point. From the Table below, the following channels were identified, with the corresponding bandwidth and distances shown:

2578 - 2584 , 6	52.7
2596 - 2602 , 6	22.9
2608 - 2614 , 6	20.6
2620 - 2626 , 6	52.7
2632 - 2638 , 6	52.7

As is evident, three possibilities were available to us for a band of 6 MHz or fewer, being located at a minimum distance of 52.7 km distant. We have requested use of two of them. However, as our requirements are for testing up to 10 MHz two consecutive channels would have been preferred but none were available. We selected 2578-2584 and 2620-2626 MHz on the basis that although the additional 4 MHz on either side of that channel were assigned to locations closer to our area, they were licensed to the same entity to which these channels are respectively assigned and we would be in a position to cooperate with them for the four extra MHz on either or both sides. Thus, our selected channels (and other details) for the fixed and mobile transmitters are identified as follow:

2578-2584, 2574-2588, 2578-2588 MHz and
2616-2626, 2620-2626, 2620-2630 MHz

We would plan to start immediately with the two 6 MHz channels 2578-2584 and 2620-2626 MHz since they are 52.7 km away and will follow up with the 10 MHz bands subsequently.