

**Organisation (if applicable):**

David Hall Systems Ltd

**Question 4.1: Do you agree with our assessment of the competition concerns relating to national wholesale competition that could arise if the auction took place with no measures to promote competition? Please state your reasons for your views.:**

We agree that there is a requirement to have a number of operators to ensure effective national wholesale competition and these operators require access to a range of frequency bands to ensure that there is effective wholesale competition. However we are not convinced that the current proposals will achieve this objective and already it appears that competition is beginning to develop differently to that projected by Ofcom.

**Question 4.2: Do you agree that option 4 should be adopted to promote national wholesale competition? Please state the reasons for your views.:**

We have some concerns that option 4 may distort the market though we are not convinced that any other option will produce a better result.

**Question 4.3: Do you agree that the portfolios in group 2 (middle portfolios) of option 4 are likely to be most appropriate and proportionate implementation of this option?:**

This appears to be a valid option and is likely to result in competition between the operators. A possible concern is that it might result in an operator acquiring spectrum they do not want. This spectrum could then be traded so resulting in an outcome that was not projected.

**Question 4.4: Do you believe that geographically split licences for a particular block of 2.6 GHz spectrum between standard power use and lower power use is likely to create significant additional benefits for consumers?:**

We consider that this option should result in additional benefits for the consumers. Additionally it could allow innovative new offerings to be provided and encourage new entrants to enter the market.

**Question 4.5: Please provide your views including the reasons for them on which options you believe should be taken in relation to promoting low power shared use of 2.6 GHz spectrum. :**

We support Option A as this appears to be the simplest to implement and is likely to produce the required results. We also consider that it is the most appropriate means to address the various concerns that have been identified.

**Question 5.1: Do you have any comments on the proposal to include a coverage obligation in at least one of the 800 MHz licences, and the proposed extent of such a coverage obligation?:**

We agree that a coverage requirement should be included in at least one of the licences and that 98% coverage is appropriate. This will ensure that the majority of the population have access to wireless connectivity where it can be provided on a cost effective basis.

**Question 5.2: Do you have any comments on which of the two approaches proposed for the specification of such an obligation would be preferable: Approach A, which would require the licensee to provide a 4G mobile data service to an area within which at least 98% of the UK population lives:**

We consider that Approach A is preferable as the requirement is clearly specified and cannot be mis-interpreted.

**Question 5.3: Do you have any comments on our assessment that it is unlikely to be proportionate to impose such a coverage obligation on more than one licensee?:**

We tend to agree that the coverage requirement should only be placed on one licence though we are concerned about any possible implications such as competition issues between the different licence holders and the value of the spectrum.

**Question 5.4: Do you have any views on the costs and benefits of a wholesale access obligation on the licensee with the coverage obligation in respect to those areas beyond existing 2G mobile voice coverage?:**

No comment

**Question 5.5: Do you have any comments on the possibility that we may in certain limited circumstances consider granting concurrent licences as set out in paragraphs 5.88 to 5.93?:**

We consider that in some situations there may be some benefits from the granting of concurrent licences. However we consider that the costs of doing so are likely to be significant and such a procedure is unlikely to result in any overall benefits for the consumer.

**Question 6.1: Do you agree with our revised proposals for the packaging of the 800 MHz band? Please state the reasons for your preference.:**

We tend to prefer option 2 as this appears to offer a more flexible approach and is a more appropriate means of meeting the various requirements that have been identified.

**Question 6.2: Do you agree with our revised proposals for the packaging of the 2.6 GHz band? Please state the reasons for your views.:**

We agree with the proposed packaging as we consider that it allows maximum flexibility for the market to decide on the use of the spectrum. It also appears to be linked and compatible with the eligibility points discussed in the following section.

**Question 7.1: Do you agree with our revised proposals for the number of eligibility points that should attach to each lot? Please state the reasons for your views.:**

We agree with the proposed packaging as we consider that it allows maximum flexibility for the market to decide on the use of the spectrum. It also appears to be linked and compatible with the eligibility points discussed in the following section.

**Question 7.2: Do you have any comments on the proposed auction rules as explained in section 7, Annex 11 and Annex 12? Please state the reasons for your views.:**

The rules appear complex though this complexity has been designed to ensure that certain objectives are met and we consider that the objectives will be met.

**Question 8.1: Do you have any comments on the Additional Spectrum Methodology as one of several sources of information for estimating the full market value of spectrum?:**

We consider that a full range of methodologies should be used to determine the value of the spectrum. However these sources will only provide an indicative spectrum value so the full market value could be something different. Thus it may be appropriate to consider the implications of having an indicative value that is not the true market value.

**Question 8.2: Do you have any comments on our updated thinking on estimating full market value for the purpose of revising ALF as set out in this section and Annex 13?:**

The auctions in some countries have resulted in very different values for the spectrum. Thus there is a need to understand the reasons for the variations in spectrum value to ensure an appropriate UK value is determined.

**Question A7.1: We would welcome comments on any aspect of the data, assumptions and modelling methodology we have used in our technical analysis, in particular our approach to serving users in a range of both easier and harder to serve locations.:**

No comment

**Question A7.2: We would welcome any additional information, in particular from current operators, on the choice of parameters making up our ?Min var and ?Max var? cases.:**

No comment

**Question A8.1: Do you agree with our assessment of when Everything Everywhere, Vodafone and Telefónica are likely to be able to refarm their**

**existing 2G spectrum? In particular, do you agree with our views on the importance of user devices and the likely availability and take-up of devices that use different technologies and bands? Please state the reasons for your views, including if appropriate your views on handset roadmaps and the practical constraints which apply to those roadmaps.:**

We agree with the suggested dates for Vodafone and Teleonica refarming their spectrum though the evidence suggests that Everything Everywhere is likely to be slightly earlier than Ofcom proposed. The implications of this need to be considered and it may be appropriate to examine what is happening in other countries to determine how the refarming may evolve in the UK.