Title:

Mr

Forename:

Len

Surname:

Ogier

Representing:

Organisation

Organisation (if applicable):

Ogier Electronics Ltd

Additional comments:

Question 1: What are likely to be the key underlying factors influencing changes in demand for this spectrum (in terms of quantity of spectrum or preferred bands) over the next 5 to 10 years? Please provide band specific evidence to support your view.:

Our responses are focussed mainly on the public sector and police CCTV requirements. Our view is that the demand for new fixed links for CCTV will be lower over the coming 10 years than it has been over the past 10 years. However there will be an increased demand for mobile and transportable CCTV links to cover specific short-term problems, special events, etc. Such links should ideally have a non line of sight capability, which means that a frequency band over 100 MHz wide and below 7 GHz would be advantageous.

Question 2: Will the reducing trend in the numbers of fixed links in the spectrum under review to support mobile backhaul continue? If so, in which bands will this reduction be most apparent and how will link capacity/bandwidth requirements change? What factors will have the biggest influence on the outcome? In your view, what will be the impact, on spectrum demand, of deploying next generation mobile networks for example using Long Term Evolution (LTE) standards? :

No comment

Question 3: How might the changes to current or future public safety networks influence the existing and future requirement of the spectrum under review for fixed link backhaul for public safety applications over the next 5-10

years? In which spectrum bands is demand most likely to arise and how much spectrum would be required? May demand for bands currently used by public safety applications decrease? Is it likely that the public safety services may require access to the spectrum under review for other data networks or for alternative uses?:

There will be an increasing need for public safety equipment on transport systems. We have supplied transmission systems for London Underground to alert train operators of hazards to passenger in stations. We believe that there will be a need to extend these systems to allow passengers to initiate alerts and show video if they are under threat. Successful trials have proven the viability. Such systems could be applied to other public transport, including buses and main line trains. There is no demand at present but we expect that this will change when the economy becomes more buoyant. The frequency band could be the same 7 GHz spectrum mentioned in our response to Question 1.

Question 4: How likely is it that use of CCTV by local authorities will significantly increase overall demand for fixed link infrastructure spectrum over the next 5 to 10 years? If so, in which bands is the additional demand most likely to be required and why? Do you have any information about the relative costs of wired and wireless CCTV links in urban and rural areas?:

Our opinion is that local authorities will generally use microwave for CCTV transmission only when it is difficult or impossible to use existing fibre optic cable.
We believe that the number of new CCTV systems to be installed in the next 10 years will be relatively low and that the requirements will focus on extending existing systems, adding further cameras and converting the existing cameras from analogue to digital. Because of this we suggest that Ofcom give serious consideration to allowing digital transmission in the 31 GHz band. Not only will this support the local authorities aims, it will enable the spectrum to be used more efficiently and allow the use of the 31.5 to 31.8 GHz band to be reduced over time, thereby easing any compatibility issues with the earth exploration satellites.
The other developing requirement as stated above, is that there will be a demand for mobile and transportable CCTV to supplement the existing fixed systems. Here we believe that a coordinated band around 100 MHz wide and below 7 GHz should be made available if at all possible.

Question 5a: What are the main factors (technical or regulatory) that determine preferences for one band over another for satellite applications? Do these factors vary between different types of satellite applications (Mobile, Fixed, Broadcasting and Science services)? In which bands will we see the most significant changes in demand in the next 5 to 10 years, and why?:

No comment

Question 5b: A number of the frequency bands under review are currently used for satellite Permanent Earth Stations (PESs), for example to feed Direct to Home satellite broadcast services. What are the continued and future

spectrum requirements for satellite PESs (E-s & s-E) likely to be and in which bands? Please provide evidence to support your views.:

No comment

Question 5c: During recent years, some commentators have forecast significant demand for spectrum to support satellite consumer terminals. To date this demand has been slow to materialise. Do you have information which would help inform a more accurate assessment of future demand for spectrum in bands currently shared with fixed links?:

No comment

Question 5d: Are there factors specific to the satellite based communications sector which mean that it faces particular difficulties evidencing and satisfying demand for spectrum? If so, how might these be overcome?:

No comment

Question 6: What is the likely timetable for rollout of Smart Grids and what impact will these developments have on demand for spectrum in the bands covered by this review?:

No comment

Question 7: What impact will DAB expansion have on demand for the spectrum under review? Are there any other demand drivers that Ofcom should consider in relation to broadcasting use or services related to broadcasting? :

No comment

Question 8a: What is the likely demand for broadband wireless access applications in the spectrum under review and which bands is this likely to specifically impact? How should Ofcom consider the demand for backhaul to support such applications and is such backhaul demand likely to arise in the spectrum under review?:

We manufacture broadband wireless equipment that operates in the 10.5 GHz band. It has been sold in many countries around the world, but not in the UK despite the auction of licences in the band and the obvious application of wireless for rural broadband.
We believe that the use of wireless in rural broadband has been limited because the local authorities do not have the confidence to make the commitments to such systems. As a result, we do not anticipate any significant increase in demand, unless that confidence can be established, perhaps by trial or demonstration systems.

Question 8b: Do you consider that the emergence of rural broadband fixed wireless access will influence overall demand for the spectrum under review and to what extent? Which bands is this likely to impact most?:

See response to 8a

Question 9: Do you consider that there will be a material additional demand from the PMSE community for access to the spectrum under review? Which bands under review is this likely to impact most and to what extent?:

No comment

Question 10: How might the economics of new fibre provision (with or without reliance on regulatory remedies ? whether active or passive), as compared with wireless provision of both terrestrial and satellite based services, impact on the requirements for wireless backhaul? We are interested in the possible impact, in terms of the extent of possible substitution for wireless links and in terms of the nature of wireless links affected (urban v. rural, lower / higher frequency bands).:

No comment

Question 11: What issues relating to spectrum access for different services do you think Ofcom should review? How might Ofcom start to rely more on commercial decisions when determining allocations of spectrum in the bands covered by this review?:

No comment

Question 12: We would welcome views on the potential for more widespread use of market based approaches to the spectrum under review such as third party band management, and the regulatory steps which would need to be taken to facilitate this. :

We believe that it is unreasonable to expect local authorities to pay licence fees for CCTV based solely on market conditions when the service they provide is to enhance public safety. We also suggest that nationwide auctions of the frequency bands for CCTV is inappropriate because local authorities, who are the major users, have little interest outside their city or borough.

Question 13a: do you consider that any changes should be made to the Ofcom licence fixed link product set?:

With regard to CCTV applications, we suggest that the licence fee can be a strong deterrent. For example, the fee at 31 GHz for a single link over 10 years is more than double the equipment price. This is forcing local authorities to use licence exempt bands, as a consequence of which they are often encountering severe interference, a problem that will

only become worse over time. As we coordinate the 31 GHz band for Ofcom, there are minimal costs and we suggest that the fee should be lowered or even removed, whilst retaining the coordination.

Question 13b: Might a more flexible approach to licensing, in bands where demand is unlikely to exceed supply for the foreseeable future, enable more intensive use of these bands? If so, what form might the licensing take and in which bands would this be appropriate? :

See response to 13a

Question 13c: Are there other actions which Ofcom could take to improve spectrum efficiency by encouraging migration to or use of higher, less heavily used, bands, with a view to freeing up spectrum in popular lower frequency bands? :

See response to 13a

Question 14: What is your view on the impact of geographically uniform fees for spectrum bands included in this review? If you consider that a geographic fee modifier would promote more efficient use of spectrum, how might that modifier be constructed?:

No comment

Question 15: Are there other aspects of the review on which you have evidence that would help inform our consideration of these issues and formulate proposals for consultation?:

No comment

Question 16: Is the proposed list of bands to be included within the review (as set out in Figure A.5.1 in Annex 5 appropriate?:

Ofcom have not included the 24 GHz band (IR2030/1/24), a part of which can be used for fixed links. We suggest that it could be included.