

Question 1: Do you agree we have identified the most relevant cost drivers to take account of in our charging approach?

Confidential? – N

We believe that Ofcom has objectively identified the main relevant cost drivers, in terms of the fixed costs of staff, ICT, accommodation etc. However, we also believe that if Ofcom is performing this role as the UK's delegate, then it would be appropriate that these costs – which are inescapable and “sunk” rather than “fixed” – should be met by the UK, as these costs stem from Ofcom having the capability to perform the role at all, and are not related to how many UK satellite operators Ofcom represents, or to whether or not Ofcom represents the Overseas Territories and Crown Dependencies as well as the UK itself.

We also broadly agree with the list of tasks identified by Ofcom requiring staff effort. The list identified in the consultation is broadly similar to the list of tasks which we perform, as we explain below.

We believe that it should be more clear how Ofcom estimates the effort spent on crosscutting spectrum management activities at the international level (primarily CEPT and ITU), and how this is split between, for example, effort on the space sector versus effort on the terrestrial sector, and different degrees of engagement on specific matters, which will change between WRCs.

Another concern – related to this – is that while most of the Overseas Territories are located in Region 2 and have scope to engage in regional preparation for WRCs, that scope is limited to attending CITELE meetings, as recognized and permitted by the 2007 MoU between Ofcom and HM Government. Most of the Overseas Territories do not benefit from Ofcom's participation in the work of CEPT, which is generally focussed on Region 1 and is therefore irrelevant to those Overseas Territories located in Region 2. As such, it is not appropriate that Overseas Territories located in Region 2 should be made to contribute to the cost of Ofcom's participation in the work of CEPT.

Whilst we appreciate that Ofcom has to perform due diligence on satellite applications, which goes beyond that required by the ITU, and this may be in support of Ofcom's wider functions, we also believe that Ofcom has failed

to take account of similar work performed by the local administrations in the Overseas Territories and the Crown Dependencies.

Although Ofcom believes that as the delegate of the UK it cannot, in turn, delegate these functions, it needs to be understood that the local administrations also have wider policy and regulatory roles which we cannot ignore, and which Ofcom must take into account. In Bermuda's case in particular, Ofcom was consulted while we were developing our regulatory framework, the Satellite Network Notification and Coordination Regulations 2007. This framework was designed to ensure that any company whose proposal meets our requirements automatically meets those of Ofcom. This in turn should result in a diminution of the effort required by Ofcom, and not require a duplication of effort.

We recognize that Ofcom might not be fully aware of Bermuda's requirements and the extent to which they align with Ofcom's own. For Ofcom's reference, and to facilitate continued discussion between Bermuda and Ofcom on this point prior to implementation, we provide a summary of Bermuda's requirements and procedures below:

The Ministry of Transport and Regulatory Affairs is responsible for licensing the operation of radio equipment onboard satellites and for ensuring operators' filings are submitted in accordance with the procedures of the Radio Regulations. Operators have to submit a proposal to the Ministry of Transport and Regulatory Affairs that includes at least the following information, required by Regulation 5 of the Satellite Network Notification and Coordination Regulations 2007:

- Corporate and commercial information.
- Technical details of the network in the ITU's electronic format.
- Proof that the applicant is a body corporate, incorporated in Bermuda.
- Proof of the necessary technical, financial and legal capabilities to carry out the proposed project in conformity with the project timetable.

Undertaking to pay Bermuda's and the ITU's administrative charges.

After reviewing the operator's application to ensure it meets these requirements, the Ministry will send the proposal to Ofcom for filing with the ITU.

Throughout the process the Minister can issue the following certificates to the operator:

- *Certificate of Compliance*, showing that the satellite operator is competent and capable of carrying out the proposed satellite network project, and that the project is in the interests of the people of Bermuda.
- *Certificate of Competence*, showing that the satellite operator is competent and capable of fully discharging all aspects associated with international coordination of satellite networks in compliance with ITU procedures, and that coordination can proceed in accordance with the procedures in the Radio Regulations.
- *Certificate of Coordination*, describing the coordination status of the satellite network, in accordance with the relevant requirements of the Radio Regulations. This is a "live" document which is updated throughout the coordination process.

After receiving notice that the satellite network will be brought into use, the Minister may issue a radio license to the operator to operate the network in accordance with the Radio Regulations.

Ofcom will note that Bermuda's requirements outlined above are compatible with those of Ofcom, which should therefore reduce the amount of duplicative effort. As stated above, we will be available to hold continued discussions with Ofcom on this point before implementation.

Question 2: Are there any other factors you consider we should take account of in our charging approach? Please explain why in your response.

Confidential? – N

Please see our comment in response to question 1 above. We believe strongly that Ofcom has failed to take account of due diligence work and other supporting work undertaken by the local administrations of the Overseas Territories and Crown Dependencies.

Although it may be necessary for Ofcom to represent the Overseas Territories and Crown Dependencies to the ITU on the UK's behalf, there are a number of areas of local regulation which extend beyond this area, matters such as corporate administration and governance, in which we would simply not expect Ofcom to have the expertise or the desire to acquire it, and where Ofcom needs to trust in the expertise of the local administrations.

At this point we would draw parallels with the shipping and aviation sectors, where Bermuda has jurisdiction for ships and aircraft on its own registers, rather than the UK. In shipping in particular, Bermuda is consistently one of the internationally best-performing and highly regarded of registries, and is a leading member of the Red Ensign Group. The Red Ensign Group of registries includes the UK and Overseas Territories. Bermuda has a "Class 1" register which means that there are no restrictions on the type of ship we can register. The whole Red Ensign Group is represented at the International Maritime Organization (IMO) by the UK, and Bermuda cannot be a member state of the IMO in its own right, but the UK does not regulate Bermuda-registered ships and Bermuda is independently audited for meeting international standards.

It is currently HM Government's policy to support significant and substantial growth in the UK space industry, and companies based in the Overseas Territories and Crown Dependencies should be seen as part of the wider UK space family, particularly "new space" start-up companies proposing innovative or potentially high-growth applications.

Question 3: What comments, if any, do you have on our charging options 1-4?

Confidential? – N

Although we believe that option 4 is the most fair, we understand the complexities of putting

this into practice as described by Ofcom. Whilst these complexities may have been true in the past we believe that, with current project management and similar platforms normally in use in business, this would not in fact create a substantial administrative burden today.

We also recognise that there are a certain number of tasks which generally have to be done for each network or system notice filed, and ongoing tasks which are common to all networks or systems, and that some are more complicated than others and will need greater effort – by Ofcom and by their operator – before they are brought into use and/or notified.

In effect, the model which Bermuda adopted was a combination of methods 1 and 4, with a fixed-fee component and the possibility of charging an hourly rate for additional tasks to be determined after discussion with the operator making the proposal. This was arrived at after consultation with several satellite operators, ranging from large and longestablished global operators, to smaller innovative companies at the start-up stage.

If we understand correctly, this is the effect that Ofcom has tried to achieve with option 3, although absent more information about how Ofcom derived its figures it is difficult to comment definitively. As we have said elsewhere in our responses we will remain available for further discussion with Ofcom.

Question 4: What other charging options, if any, do you believe we should consider?

Confidential? – N

As stated in our responses generally, the model Bermuda adopted was a combination of a fixed fee and the possibility of an additional variable fee to be based upon additional effort identified in discussion with the operator. As noted in our response to question 1, we believe that some of Ofcom's costs are inescapable and sunk, and therefore should be met by the UK.

We also note that Overseas Territories located in Region 2 do not generally benefit from Ofcom's participation in the work of CEPT,

which is generally focussed on Region 1. This is therefore irrelevant to those Overseas Territories located in Region 2, who should not be expected to contribute to it.

We also believe that Ofcom has failed to take account of supporting work undertaken by the local administrations in the Overseas Territories and Crown Dependencies, including, where necessary, participation in the work of CITELE.

We would suggest that this could be addressed by means of a discount or rebate, recognising that Ofcom's workload is diminished in direct proportion to the work done by the local administrations of Overseas Territories and Crown Dependencies. We accept that the amount of effort undertaken by some will be greater than others but, as noted in our response to question 1, the consultation proposals simply do not provide sufficient granularity of the different efforts expended within Ofcom for us to make a concrete proposal at this stage. We would welcome further discussions with Ofcom, prior to implementation, on how best to achieve this, including discussions of a possible "tariff" based upon the efforts identified. Please see also our response to question 6 below.

Question 5: Do you agree that our preferred charging option, option 3, is the best way to meet our objectives? If no, please state your preferred charging option and explain why.

Confidential? – N

Please see our response to question 3 above. Bermuda adopted a model based upon both a fixed and variable fee, and we understand that this is what Ofcom is seeking to achieve with the graduated fees in option 3. Although we are not able to comment in detail on the assumptions of effort Ofcom assigns to each gradation we note that Ofcom proposes an annual refinement of these and we believe that if this is done in a timely and transparent manner, the effective difference between options 3 and 4 will likely narrow. Please also see our response to question 6 below.

Question 6: Do you have any comments on our proposed charging approach (as set out above)?

Confidential? – N

As stated in our responses generally, the model Bermuda adopted was a combination of a fixed fee and the possibility of an additional variable fee to be based upon additional effort identified in discussion with the operator. We also strongly believe that the UK should cover Ofcom's overheads because these are the costs of Ofcom simply having the capability to perform the role, regardless of the scale of that, and that Ofcom has failed to take account of supporting work undertaken by the local administrations in the Overseas Territories and Crown Dependencies. Please see also our response to questions 1, 2 and 4 above.

Question 7: Do you have any comments on our proposals for implementing our charging approach?

Confidential? – N

We appreciate the difficulties of starting afresh in "year one" with only historical data, and of the need to charge in advance based upon an extrapolation of previous effort.

We hope that through a mechanism of continuous engagement and transparency Ofcom will be able to refine this quickly. We reiterate that we believe strongly that Ofcom must take account of work which is undertaken by the local administrations of the Overseas Territories and Crown Dependencies and we would welcome the opportunity to discuss this in more detail with Ofcom prior to implementation.

Question 8: Do you have any other comments on matters arising from this consultation?

Confidential? – N

The Government of Bermuda welcomes this opportunity to provide additional comments on this consultation. First, we would like to bring to Ofcom's attention the damaging effects its proposed fees are likely to have on the space sectors of Overseas Territories and Crown Dependencies, as well as the space sector and broader economy of the UK.

Bermuda, like a number of other Overseas Territories and Crown Dependencies, is an emerging space administration. One of Bermuda's strongest assets in the development of our space sector has been a streamlined and

cost-effective process for filing networks with the ITU. Due to inherent financial and other resource constraints that Bermuda faces but larger space administrations typically do not, we consider the efficient provisioning of administrative services, such as satellite filings, to be one of the key ways in which Bermuda can and does participate in the growing space industry. In light of this, the imposition of the proposed fees would have a disproportionate impact on Bermuda as compared to the UK, because our ability to attract new satellite operators and grow our space sector depends heavily on our ability to offer competitive and responsive satellite filing services. The proposed fees would negatively affect our global competitiveness and in turn that of the wider UK space family.

We also wish to highlight the fact that cost efficiency has played a critical role in the growth of the UK space sector to date, and that Ofcom's proposed cost recovery fees could disincentivize operators from selecting the UK, Overseas Territories or Crown Dependencies as a filing jurisdiction in the future. This could lead to lost revenue, including direct and indirect taxation, and revenue from licensing intellectual property, particularly from innovative down-stream applications which, at first glance, may not be immediately obviously linked to the system filed with the ITU. This in turn would undermine the UK economy and slow the expansion of the country's space sector just as the UK seeks to grow its share of

the global space economy from 6.5% to 10% by 2030.

As we note above, companies based in Bermuda should be seen as part of the wider UK space family, and not as something apart, distant or in competition. The UK should recognise the role that Overseas Territories and Crown Dependencies can play in working towards this goal. As well as taking account of work done by the local administrations, the UK should recognise and build upon other areas of local expertise, as it does already in other sectors such as corporate governance, financial services, shipping and aviation (although we note that activities under the Outer Space Act are somewhat different, and the possible extension of the Space Industry Act will also require detailed discussions in this area).

In relation to the above points, while we recognize that Ofcom's proposed fees are comparable to or lower than those which some other administrations charge for satellite filings, we would like to note that Ofcom's proposed fees are higher than certain administrations and would thus make the UK less competitive compared with those administrations. For example, we consider that Ofcom points out in the consultation document that France does not charge for its own ITU filings, and that France's total charges for satellite filings amount to €20,000, which is lower than the £35,300 and £50,900 that Ofcom estimates it would charge to process coordinated GSO and NGSO filings, respectively.

Ofcom also notes in the consultation document that Luxembourg charges fixed and variable filing fees, the latter of which are dependent upon the number of different orbital positions or the number of different planes occupied for GSO or NGSO networks, respectively. We wish to point out that these fees are likely to be lower than those proposed by Ofcom. For example, in the case of a GSO filing for 29 satellites each at separate orbital positions, using three unique frequency bands, the equation $€1,750 + (29 * 3) * 10$ for the cost of coordination yields €2,620. The equation for

the cost of notification also yields €2,620. Together, the cost of coordination and notification would be €5,240, considerably lower than the cost that would result from Ofcom's proposed fees.

Lastly, we wish to reiterate that we will be available to hold continued discussions with Ofcom, prior to implementation, on the points raised above in our response. This includes discussions on the compatibility of our satellite filing requirements with Ofcom's own, the possibility of a "tariff" or similar mechanism to take account of work undertaken by the Overseas Territories and Crown Dependencies, and the details regarding how Ofcom derived its cost figures