

Three  
Star House  
20 Grenfell Road  
Maidenhead  
SL6 1EH  
United Kingdom

T +44(0)1628 765000  
F +44(0)1628 765001  
www.three.co.uk



**BY EMAIL ONLY  
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Jill Faure  
6<sup>th</sup> Floor  
Strategy and Market Developments  
Ofcom  
Riverside House  
2A Southwark Bridge Road  
London  
SE1 9HA

23 September 2010

Dear Jill,

**Three's response to Ofcom's Consultation regarding the UK Communications Infrastructure Report dated 22 July 2010 (the "Consultation")**

Three welcomes the opportunity to respond to Ofcom's Consultation, and to comment more generally on Ofcom's proposed approach to its new reporting duty under the Digital Economy Act 2010 (the "Act").

Since winning our 3G licence in 2000, Three, backed by our shareholder Hutchison Whampoa Ltd, has consistently invested in the development of the UK's largest mobile broadband network. Three is driving the expansion of mobile broadband infrastructure and has been at the forefront of many key sector developments. We have driven the success of data services and the take-up of mobile internet access. We have also led the way in mobile infrastructure sharing with our ground-breaking radio access network ("RAN") sharing arrangement with T-Mobile.

We generally support Ofcom's proposals in the Consultation, we do, however, have some concerns regarding certain data sets that Ofcom is proposing to request from mobile operators, which are not available to us in the form described by Ofcom. We suggest approaches below for dealing with this.

We are also concerned about the purpose of the report and how it will be distributed within government. Much of the data to be collated is of a commercially secret and highly confidential nature and could be used to cause significant damage to Three and our network if it became available to the wider public. Any such information which is provided to Ofcom as part of this process, should not be capable of being disclosed, whether under the Freedom of Information Act 2000 ("FOIA") or otherwise, without the operator's consent, and the upmost care would need to be taken in the reporting of such information to ensure that its confidentiality is

respected. We are keen to hear more about Ofcom's proposals for maintaining the confidentiality of any information supplied to them by operators.

In the remainder of this response, we have responded to each of the specific questions posed by Ofcom in the Consultation.

## **Overall Approach**

### **Question 1. Have we got the scope right? Is the set of networks, services and operators we propose to report on appropriate and is our approach to data gathering and analysis correct?**

We agree that Ofcom's approach of focussing on the most widely available and most commonly used public networks and services and on the largest providers for each is likely to result in the most value from the report.

We welcome Ofcom's desire to establish an efficient and proportional process to minimise the burden on operators in accordance with its legal obligations in this regard. We identify below some areas where data sets should be amended to align with this objective.

In addition, the scope of any information requests made by Ofcom needs to be tightly defined and not duplicate previous requests. To this end, we agree with Ofcom's proposal to use suitable data that it has already collected for other purposes, rather than make duplicate requests of operators. We also agree that Ofcom will need to seek permission from operators to use this data if it was previously collected for a specific purpose under Ofcom's information gathering powers under the Communications Act 2003.

### **Question 2. Do you agree with our approach to classifying different types of networks and services? Are there better ways to define them?**

We broadly agree with the classification of networks and services, to the extent that it applies to Three.

### **Question 3. Do you agree with our proposal to prioritise 2G mobile coverage and broadband speeds for the first report?**

We agree with Ofcom's proposal to prioritise 2G mobile coverage in this report. However, we do note that by the time the next report is due to be prepared in summer 2014, 2G is likely to be all but obsolete. Therefore, it may not be appropriate for Ofcom to focus on 2G mobile coverage in subsequent reports.

We also agree with Ofcom's proposal to prioritise broadband speeds for this report. In our view, broadband speeds in fixed telecoms, particularly in backhaul networks, should be Ofcom's primary focus because slow speeds here have industry-wide implications.

### **Question 4. Do you agree with our proposed reference date for the report as a date in June 2011 and are we allowing enough time for the provision of data?**

We recognise that Ofcom's obligations under the Digital Economy Act 2010 require the reference date for the first report to be within a period of 12 months following the date on which the Act came into force. Therefore, we agree with Ofcom's proposed reference date.

We suggest that operators be given at least two months to respond to the initial information request covering less time-sensitive information and data, which Ofcom plans to issue in early 2011. Given the wide-ranging scope of the report, we believe that operators will need at least this length of time to respond. The longer Ofcom is able to give operators to respond, the fuller and more helpful the responses are likely to be.

Ofcom has indicated that, for availability data, it would require three months worth of data to be submitted within a week of the reference date. This proposed timeframe for providing availability data is very tight, and we are concerned that this would not give us sufficient time to collate and verify the necessary data. We urge Ofcom to look again at these timescales and, if at all possible, give operators at least a month to provide this data.

#### **Question 5. How can we improve the comparability of data between different operators?**

We welcome Ofcom's approach of working with network and service providers to overcome the barriers which currently make comparability of data very difficult, if not impossible. We also recognise the importance to consumers of being able to make accurate comparisons between service providers on matters including coverage, and will work with Ofcom's Technology team on their project to identify industry-wide comparators for coverage.

Three is supportive of attempts to establish a cross industry means for comparing network coverage as this will not only better equip consumers to make informed choices but will incentivise operators to expand and improve their networks.

However, we have concerns that, especially for capacity data, it will not be possible to adopt a "one size fits all" set of standards, as we explain in detail below.

#### **Use of Electromagnetic Spectrum**

##### **Question 6. Do you agree with our approach for reporting on the use of electromagnetic spectrum?**

We broadly agree with Ofcom's approach of using existing data sources available to them, especially given that Ofcom already has extensive information relating to the allocation of spectrum bands in the UK. We also welcome Ofcom's efforts to minimise the reporting burden on industry in relation to spectrum utilisation data.

#### **Coverage**

##### **Question 7. Do you agree with our approach to measuring coverage?**

We broadly agree with Ofcom's approach to measuring coverage for this first report. In particular, we agree that currently each mobile operator has a different approach to measuring and reporting coverage, and uses different standards. We recognise that it will be impossible for standardised data to be collated in time for the first report. Therefore, we welcome Ofcom's

suggestion to collect and rely on data held by mobile operators in its existing form, rather than trying to apply new measurement standards.

[REDACTED]

[REDACTED]

Again this is the subject of Ofcom's coverage project and any proposal to gather data on speed should be informed by the conclusions of that project.

Finally, we believe that it is important that the data that Ofcom collects from operators is as accurate and up-to-date as possible. Therefore, we suggest that Ofcom requests that operators provide their most recently collated coverage data.

**Question 8. How do you think we should establish an appropriate level of granularity and the right technical assumptions to make the data useful?**

Ofcom proposes using population density data from the Office for National Statistics to extrapolate population coverage data, and we agree with this approach. [REDACTED]

We agree that establishing an appropriate level of granularity of data is important to make the data useful. We currently plot our coverage in tiles of [REDACTED]. Therefore, we would be able to provide this data set to Ofcom as part of our response to any forthcoming information request. [REDACTED]

Ofcom has asked for stakeholder views on the extent to which operators could adopt a common set of modelling tools and parameters which would allow a direct comparison of coverage predictions. In the mobile industry, most operators have adopted different models which are tuned to different clutter/land use/topographic characteristics. In addition, operators' models may be tuned to be more accurate in areas that reflect the particular customer base of each operator and their target segments. That said, it would be difficult, though not impossible, to obtain agreement from all operators on one model type and tuning method.

There is of course significant overlap here with the work being completed by Ofcom's Technology team as part of the coverage project. We recognise the value to consumers of having comparable data relating to mobile coverage when making purchasing decisions. Therefore, Three is pro-actively working with this team to explore the issues surrounding comparability of coverage data. We think that this work should also inform Ofcom's infrastructure report.

**Infrastructure Sharing**

**Question 9. Do you agree our proposed approach will enable us to report adequately on arrangements for infrastructure sharing? Are there reasons why network operators would be unable to provide us with the data we have proposed to collect?**

We broadly agree with Ofcom's approach to collecting data relating to infrastructure sharing. However, as we explain below, there are a couple of data sets that Ofcom has proposed,

which are either not relevant to mobile operators or would not be useful to Ofcom in the way proposed.

We understand from the Consultation that, in a mobile context, Ofcom will be focusing on the sharing of mobile transmitter masts by mobile operators. As Ofcom is already aware, in 2007 Three entered into a RAN sharing arrangement with T-Mobile. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

In addition, in relation to the ducts, poles and associated facilities used by fixed telecoms, it is clear that additional infrastructure sharing would help to deliver improved services over mobile networks and potentially lower the cost of mobile broadband to consumers whilst increasing its reach. One such example of beneficial sharing would be for ducts to be opened in order to allow competition in the backhaul portion of our network. Competition in this currently largely single-provider market would drive improvements and lower prices and allow MNOs to innovate in the services and offerings available to consumers.

## **Wholesale Network Access**

**Question 10. Do you agree our proposed approach will enable us to report adequately on the provision of wholesale network access? Are there reasons why network operators would be unable to provide us with the data we have proposed to collect?**

We broadly agree with Ofcom's approach to collecting data relating to wholesale network access. However, we may have difficulties providing some of the data Ofcom is proposing to collect, for the reasons explained below.

For Three, the primary means of providing wholesale network access to third parties is by contracting with them as mobile virtual network operators ("MVNOs"), and we assume that it is the MVNO market that Ofcom is planning to focus on for the report.

In relation to Three's MVNOs, we would be able to give Ofcom data regarding [REDACTED]

[REDACTED]

[REDACTED]

The MVNOs deal with all aspects of billing their individual customers. Therefore, the MVNOs are best placed to provide information relating to their volumes of end users to Ofcom. [REDACTED]

## **Capacity**

**Question 11. How do you currently measure the capacity of the network?**

We apply different measurement techniques to different parts of our network, namely the wireless network (RAN) and the core network.

[REDACTED] However, we note that every mobile operator may apply a different technique to measure capacity in their own wireless network as there is no standard industry approach.

[REDACTED] Again, therefore, Three's approach may be different to those of other operators.

To assess capacity in the core network, Ofcom proposes using capacity demand as a proxy for capacity supply. However, in our view, this approach is acceptable only for assessing service capacity. It is not a suitable means of assessing network capacity, and in this instance, it is not possible to use service capacity as a proxy for network capacity.

[REDACTED]

In paragraph 3.38 of the Consultation, Ofcom states that it does not currently hold detailed information on network capacity, [REDACTED]

[REDACTED]

We also note that we have already given most, if not all, of this data to Ofcom on previous occasions, so Ofcom may be able to use this data in the first instance.

**Question 12. Do you agree that we should define specific metrics for different types of networks?**

In our view, it is not possible or desirable to define specific metrics for assessing wireless network capacity across the mobile industry, because each operator has different vendors, different counters and different techniques which they have developed to suit their requirements. Requiring operators to measure wireless network capacity on an aligned set of metrics is highly likely to cause operators to incur significant time and expense.

It is also not possible or desirable to define specific metrics across the industry for measuring core network capacity, because each operator will build their network using different drivers. For example, high throughput may be the aim for one operator, whereas another may be more focussed on having a high subscriber base. Measuring capacity also depends on the vendor kit used in the core network where specific metrics are related to the vendor type.

In our view, the only way that it would be possible to define specific metrics to be used across industry would be to request that all vendors (i.e. kit suppliers) measure parameters of network equipment in the same way. However, this would involve significant industry collaboration and openness to reach agreement, and most if not all operators would likely have to significantly change their current measurement techniques, incurring time and expense.

**Availability**

**Question 13. Do you agree with the proposed approach of gathering specific reports of outages above a certain threshold, and how do you think such thresholds should be set?**

Whilst we broadly support Ofcom's objective regarding assessment of availability of minor and major outages, in our view it will be very difficult to apply a standardised threshold across the industry. This is primarily because each operator will already have in place their own processes for assessing system outages, and aligning these may be time consuming and costly.

In our view, Ofcom's reporting obligations should not extend to requiring operators to create new data – this would place too great a burden on industry. Therefore, it is only appropriate to ask operators to provide that information which they currently collate relating to availability of their network.

[3<]

[3<]

**Question 14. For smaller outages, which statistical data do you think it is valuable to gather?**

For minor outages, Ofcom has proposed that it will request that data be broken down into: a) average duration; b) average number of customers affected; c) time of day profile; d) planned vs. unplanned; e) most frequent causes; and f) range of services affected. [3<]

**Question 15. Is a three-month reporting period sufficient to assess availability performance?**

Yes, we believe it is.

**Resilience**

**Question 16. Do you agree with our approach to reporting resilience and emergency planning and the list of data we would ideally collect from CPs?**

Whilst we recognise that Ofcom has an obligation under the Act to collect certain data from operators to enable it to report on resilience, we are concerned that Ofcom's current approach assumes a 'one size fits all' assessment. Ofcom's list of questions in the information request should not be proscriptive or assume that a particular approach will have been taken. Different organisations necessarily take different approaches to resilience and emergency planning, and have different appetites for risk. Therefore, there can be no 'one size fits all' solution.

We also urge Ofcom to take account of each operator's individual circumstances, and how these may affect their approach to resilience planning. [3<]

We recognise that the resilience and emergency preparedness of communications networks is a matter which is now attracting great scrutiny, at both a nationwide and European level. This

has resulted in Ofcom gaining new reporting powers under the Digital Economy Act 2010, which without a doubt place a significant additional reporting burden on businesses in the sector. Added to which, further wide-ranging and onerous measures will be introduced as a result of the revised EU Communications Framework, which must be implemented in the UK by 25 May 2011. However, we believe that Ofcom should do all it can to keep the reporting burden on industry to a minimum, especially in light of the current economic climate.

In addition, we note the necessary overlap between the data that Ofcom is obliged to include in its Infrastructure Report and the new security requirements placed on operators under Articles 13a and 13b of the revised EU Framework Directive. BIS (Department for Business, Innovation and Skills) has indicated that Ofcom will shortly publish a consultation regarding its draft guidance as to how compliance with these new obligations will be assessed, with final guidance expected in 2011<sup>1</sup>. The content of this forthcoming guidance will necessarily feed into the way in which Ofcom and operators approach data collation for the Infrastructure Report.

In any event, resilience within the telecoms sector is traditionally strong, with the demands of our customer base driving high availability of services. Three seeks to establish a balance between operating as a commercial organisation and our customers' expectation of the level of service available to them. Whilst Three would be open to supporting the setting of standards across industry, we are very concerned about the cost implications, especially for smaller operators. The cost of meeting standardised resilience levels would lead to a competitive disadvantage for the smaller operators in the industry who may compete in the market primarily on price. We strongly believe that a self-regulatory approach is preferable in such a competitive and fast-moving industry.

[3<]

[3<]

[3<]

**Question 17. Do you already provide information to other organisations and government agencies around resilience issues? If so, what are they?**

[3<]

[3<]

[3<]

**Question 18. Do you agree that there are additional networks and services which are of sufficient importance to include in the report? If so, what are they?**

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<sup>1</sup> BIS discussion paper regarding its approach to implementing the revised EU communications framework, published on 13 September 2010, at para 110



We note Ofcom's proposals regarding reporting on additional networks and services, and agree that they are of national importance. However, as we do not have any direct involvement in any of these services, we are unable to comment specifically on Ofcom's proposals.

## International Comparisons

### **Question 19. Are there other sources of international data which we should consider? Are we focusing on the right networks and metrics? In particular, have we got the right metric for commenting on next-generation access deployments?**

We broadly agree that the sources Ofcom has identified will be useful to Ofcom when compiling their report. We also suggest that Ofcom considers using these additional sources of international data:

- The European Commission's 15th Progress Report on the Single European Electronic Communications Market published 25 August 2010<sup>2</sup>.
- The Global Mobile Suppliers Association<sup>3</sup>.

Ofcom states that they plan to focus in particular on comparing next-generation and high-speed internet access in the UK with those in other countries. We welcome Ofcom's focus on this area, as we note that the UK is beginning to lag behind other countries, including other EU Member States, in respect of LTE roll-out.

We would be pleased to meet with you to expand on any of these issues further if this would be of assistance.

Yours sincerely



**Jane Jellis**

Head of Legal: Regulatory and Competition  
Hutchison 3G UK Limited

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<sup>2</sup> available at:

[http://ec.europa.eu/information\\_society/policy/ecomm/library/communications\\_reports/annualreports/15th/index\\_en.htm](http://ec.europa.eu/information_society/policy/ecomm/library/communications_reports/annualreports/15th/index_en.htm)

<sup>3</sup> GSM/3G/LTE market updates, information papers and statistics available on website: <http://www.gsacom.com/>

## COVER SHEET FOR RESPONSE TO AN OFCOM CONSULTATION BASIC DETAILS

Consultation title: The UK Communications Infrastructure Report – Ofcom’s proposed approach to its new reporting duty

To (Ofcom contact): Jill Faure

Name of respondent: Jane Jellis

Representing (self or organisation/s): Hutchison 3G UK Limited

Address (if not received by email):

## CONFIDENTIALITY

Please tick below what part of your response you consider is confidential, giving your reasons why

Nothing	<input type="checkbox"/>	Name/contact details/job title	<input type="checkbox"/>
Whole response	<input type="checkbox"/>	Organisation	<input type="checkbox"/>
Part of the response	<input checked="" type="checkbox"/>	If there is no separate annex, which parts?	

The following confidential information has been redacted in this response (indicated by “[<]”):

1. Data or other commercial information which is not public and business secrets or other commercially sensitive information.
2. Explanations of Three’s intent or future plans which are not in the public domain and which, if disclosed, would provide commercially sensitive information to third parties, including Three’s competitors.

If you want part of your response, your name or your organisation not to be published, can Ofcom still publish a reference to the contents of your response (including, for any confidential parts, a general summary that does not disclose the specific information or enable you to be identified)?

Yes.

## DECLARATION

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Name Jane Jellis

Signed (if hard copy)