

## The UK's Communications Infrastructure Report Ofcom's Proposed Approach to a New Reporting Duty

Response by KCOM

30 September 2010

KCOM is generally supportive of the proposals which Ofcom has put forward for producing the report on the UK's communications infrastructure as required by the Digital Economy Act 2010. In particular, we welcome Ofcom's desire to ensure that any requests for information are not overly burdensome for CPs and that the information requested is reasonable and relevant.

However, we do have some specific concerns on some aspects of Ofcom's proposals, both in terms of the ability to provide specific information in the manner suggested and more generally with regard to the extent of information to be provided, timing, publication and how the report information might be used:

- In collating the data Ofcom must remain mindful of the purpose of the report and not try to extend its use for purposes which are not appropriate;
- Ofcom needs to ensure that there is no unnecessary duplication requiring CPs to provide the same information for different purposes. For example, extensive work has already been carried out on broadband speeds and it is unclear what further information might usefully be gathered;
- The proposed timetable for provision of time-sensitive data is unrealistic and likely to be unachievable for most CPs;
- Further clarification is needed from Ofcom on its proposals for publication of data, particularly data which is commercially sensitive, and the appropriate level of aggregation of data. In this regard, KCOM is particularly concerned that the unique nature of its geographic coverage in the Hull area has implications with regard to confidentiality.

We provide our further detailed comments below in response to the questions posed 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?***

KCOM welcomes the pragmatic approach which Ofcom has taken to identifying the networks, services and operators to be covered by the initial report. With regard to KCOM's inclusion, we have assumed that this only relates to our network in the Hull area reflecting our position as the incumbent provider. We would appreciate Ofcom's confirmation that this is the case.

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

As a starting point aimed at discharging the requirements of the DEA, we would accept the classification system proposed. However, as noted, future analysis must reflect both technology change and emerging patterns of network use and deployment. With the possibility of an NGA "patchwork" of networks developing, rather than the current CGA "duopoly", we do see a need to extend coverage to new players (DRL in South Yorkshire being the most obvious example) and any existing providers who have a key role in the emerging market.

In addition, we would also note the requirements of the Revised Electronic Framework that BIS are proposing to enact by June 2011. These could have an impact on reporting needs and we assume that Ofcom will consult again in due course as to how these might sit alongside the DEA requirements in an integrated scheme with no overlaps.

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

KCOM is concerned that Ofcom feels it is necessary to prioritise information relating to broadband speeds in the first report. Extensive work has already been carried out in the context of Digital Britain in order to identify the speeds available to customers and current generation "not-spots" (including the recent work by BDUK) as well as research being undertaken by Ofcom into the speeds actually received by customers. We are unclear what further information might usefully be provided through this additional information gathering exercise.

***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?***

Our primary concern relates to provision of time-sensitive data. Ofcom's proposals appear to allow only a very short period time to collate this information with the relevant information relating to the three month period ending June 2011 and Ofcom proposing to publish the report in August 2011.



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

The difficulty we envisage in improving comparability stems from the fact that different providers use different underlying infrastructure and product sets to serve their customers, particularly in the area of broadband provision. Base level coverage comparability should be straightforward but performance reporting can vary significantly unless there is agreement on, or imposition of common metrics and methodologies.

## Use of Electromagnetic Spectrum

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

We have no specific comments on this aspect of the report data.

## Coverage

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

KCOM believes that the proposed approach to measuring coverage is appropriate and particularly welcomes the pragmatic solution proposed for USO providers.

We do however have some reservations with Ofcom's comment at paragraph 3.13 that "...the communications infrastructure report should improve the way that coverage data is collected and presented by industry in a way which helps consumers compare similar types of networks and services." The key issue here is what is the purpose of the report? In terms of the provisions of the Digital Economy Act, the main purpose of the report is to provide Government, via the Secretary of State, with an overview of the deployment and availability of electronic networks and services. We do not believe that it is appropriate or practical for the report data to be used for the purpose of aiding consumer in comparing networks and services. Given Ofcom is proposing that only the largest providers submit information, the report will not provide a comprehensive overview of the network and services available to any one consumer and in fact could provide customers with a distorted view of the market, particularly as NGA based services evolve. We believe that far more appropriate sources of this information already exist such as price comparison websites.

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

Yes, although greater clarity on mobile coverage with respect to in-building penetration might be appropriate to give more meaningful data.



## 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?**

KCOM has no particular comments on Ofcom's proposed approach, however we would note that information in this area is likely to become more important given the proposed introduction of obligations on BT to provide access to its ducts and poles as part of the regulatory remedies proposed under the WLA Market Review. We would also note the requirements of Article 12 of the Revised Electronic Framework that BIS are proposing to enact by June 2011. We will be responding to the current consultation on this in due course but we are concerned that in future there could be extensive and unnecessary duplication of effort in producing information under the two regimes.

We also note that there may well be commercial sensitivities around this information, particularly where shared infrastructure is on private land. We would suggest Ofcom needs to give further consideration to this in relation to publication of the data.

## 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?**

KCOM would ask that Ofcom provide further clarification as to what is intended to be covered by the term "wholesale network access". We assume that this intended to cover the provision of infrastructure services such as leased lines and WLR and not interconnection but this is not clear from the consultation.

## Capacity

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

We have no specific comments with respect to the proposed approach for mobile networks and are broadly content with the proposals for fixed voice services. As far as fixed broadband is concerned we note Ofcom's comments with regard to the difficulties in providing meaningful measures and would support, in principle, the delineation between core and access capacity. We would also support the specific approach suggested for cable HFC/DOCSIS based access networks which are subject to specific contention issues. However we do have real concerns about the overall costs and complexity of providing the data that is being sought.

Ofcom is proposing that for ADSL access networks that information is collected on available access capacity (i.e. access line speeds) along with coverage data. As a minimum, Ofcom expects the relevant data to include the modem sync speeds and IP



**KCOM Group PLC**

profiles for each active line. Ofcom also notes that additional data on line attenuation and electrical noise could help provide further insight into the quality of network infrastructure.

KCOM is concerned about the extent of the information Ofcom is suggesting should be provided in relation to ADSL access networks and the ease with which that information can be collated. To run reports detailing all of the relevant information is a huge task which we believe would involve significant time and effort. We are also concerned that this work in effect is replicating information which Ofcom collects through its broadband speeds research.

As far as core capacity is concerned, the key concern is what is a suitable and meaningful metric? Ofcom have noted that network topology choices, which may vary over time, make this a complex problem. One simple approach might be to couple the proposed measure of peak or aggregate actual throughput in a given network with a metric that identified the transit or peering capacity to other networks. Whilst the former would clearly be affected by both internal network “pinch points” and the application of traffic management policies, they would offer some useful proxies for overall network capacity and its potential impact on the user experience.

We would, however, stress that for optimum comparability it is vital that any measures chosen are as uniform and transparent as possible and that clear agreement on how they should be applied be gained from the relevant CPs. We think that this work might best be delegated to an NICC work group to deliver.

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

KCOM agrees that it is sensible to define specific metrics for different types of network.

## **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?***

KCOM agrees that with Ofcom’s proposed approach to gathering specific reports of outages above a certain threshold. However care must be taken in setting those thresholds. For example, KCOM’s geographic coverage and customer base in the Hull area is considerably smaller than the other fixed line CPs which Ofcom is suggesting should be required to provide information. Therefore a “one-size-fits all” measure based on for example the number of customers impacted will not necessarily provide an appropriate standard across all providers.

Ofcom’s approach of only requiring reporting where CPs address mass markets or specific niche sectors of national importance such as Public Sector is clearly right, but does need to take heed of emerging patterns of network use, particularly around the role



of intermediaries acting as “Virtual Service Providers” (VSPs). The underlying network providers to VSP activity are not responsible for the topology and risk profile of the VSP.

This may become a particular concern as Public Sector Networks (PSNs) become more widely adopted for the delivery of critical public services.

We note the reference made to the overlapping requirement to report availability performance under Article 12 of the Revised Electronic Framework. One key issue that this throws up is the question of standardisation of reporting measures. The EU has yet to adopt any proposals in this area and the BIS consultation suggests that Ofcom should consult on appropriate short term measures. One approach would be to adopt the principle in the availability calculations in the CESG standard: Security Procedures Telecommunication Services and Systems [July 2009]. This is designed for public service quality services at 2.2.4 Impact Levels. For a specific service, e.g. Access to Emergency Operator, Ofcom can set a figure that all SPs of whatever size could achieve. We would again suggest that this type of detailed specification design or recommendation be delegated to a suitable technical forum such as the NICC.

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

For minor outages with no “significant” impact, it is probably worth adopting an overall reporting measure on total availability expressed as a percentage.

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

KCOM’s main concern regarding the reporting period is that information regarding outages is information which, for the first report, is information covering the three months to June 2011. While we appreciate Ofcom’s desire to ensure that information is as up-to-date as possible, we believe that the limited time which will be given to collate this information could create issues. If Ofcom is proposing to submit its report to the Secretary of State in August 2011, this leaves a very limited amount of time within which providers will be expected to gather the requested information.

We would also support that for future reports, Ofcom should consider annual data which would provide a more comprehensive picture of availability performance.

## 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?**

We are broadly supportive of the approach suggested. As a well established telco, we have processes and systems in place that address key resilience requirements through normal Business Continuity Planning, the needs of information and network security standards such as ISO 27XXX and NICC1643, and through participation in EC-RRG and



KCOM Group PLC

the CPNI sponsored NSIE. However, we would not underestimate the potential short term burden of collecting and presenting the information that may be required. It is not clear that CPs have ever been requested to report on their networks in this level of comprehensive detail before and therefore the initial effort from CPs may be considerable. KCOM suggests that one potential start point that should not be ignored is the key service document set generated for services that are put forward for accreditation under the CESG standard: Security Procedures Telecommunication Services and Systems [July 2009] where this is available. Comprehensive documentation will not be ready until the scheme is mature and services have been accredited. This material will not exist for many systems that have been operational for some time and as a minimum will require preparation of submission material from many sources.

We are pleased to see that Ofcom recognises the sensitivity of the resilience data and we re-iterate our previously communicated belief that Ofcom analysis of resilience, identifiable to any particular Operator or SP, should not be publically available.

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

KCOM has provided briefings and data on request to ECRRG, Ofcom and CPNI. Information on critical KCOM infrastructure has been provided to National and Local Emergency Planning Authorities under the auspices of the Civil Contingencies Act and other relevant legislation to enable the effective maintenance of services during emergencies. Particular recent emphasis has understandably been in respect of flooding risks.

***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?***

In terms of the proposals on extending the scope of resilience reporting beyond the “obvious suspects”, we think that the approach is sound but the targets may need to be more widely drawn. In particular, we would repeat our earlier comments about PSN providers who will increasingly be used for the delivery of critical public services and would also note the pivotal role that “Internet exchanges”/peering points and Internet transit providers such as Level 3 play in delivering key net based services.

## 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?***

KCOM has no comment to make on other sources of international data which might be considered.

Given the overlap with the emerging requirements of the Revised Framework, liaison with both BEREC and ENISA would seem appropriate, particularly in the context of future NGA characterisation.

