AT&T Comments on Ofcom Consultation Document, *Mobile Citizens, Mobile Consumers - Adapting Regulation For A Mobile, Wireless World*

AT&T Inc. and its UK affiliate, AT&T Global Network Services (UK) B.V., (collectively "AT&T"), are pleased to provide the following comments on the Consultation Document, *Mobile Citizens, Mobile Consumers - Adapting Regulation For A Mobile, Wireless World*, issued by Ofcom on 28 August 2008 (the "*Consultation*").

AT&T has a strong interest in policy results that maximise investment, innovation and customer benefit. AT&T is a competitive provider of business connectivity and managed network services in the UK and other EU Member States, a leading provider of bilateral connectivity services between the US and the UK, and a leading provider of broadband, IPTV and mobile services in the USA, where the number of our mobile customers reached 74.9m in 3Q 2008. AT&T's mobile customers can make wireless calls on six continents and in more than 200 countries, including the UK (where we have international mobile roaming agreements with each of the UK's 5 mobile network operators). We offer mobile data-roaming in more than 145 countries, including the UK, for laptops, hand-held devices and other data services, and we offer roaming for third-generation (3G) services in 60 countries. We also offer wireless service on 120 cruise ships worldwide.

In this submission, AT&T is limiting its comments to the *Consultation* question regarding the role that net neutrality might play in the mobile sector. The mobile markets in the US and the UK have evolved very differently and have different characteristics, but both are among the least concentrated and most competitive mobile markets in the world. AT&T asserts that prescriptive and predictive net neutrality regulation has no role to play in such competitive markets, and that Ofcom should rely on competition to ensure that the future development of the mobile Internet provides an open and flexible environment for a wide range of services.

1. Competition In The Mobile Industry Will Ensure Consumer Choice

Competition in the mobile industry extends not just to operators and the services and service plans that they offer: competition among wireless handset manufacturers is also vibrant. There is virtually no vertical integration between carriers and handset manufacturers in the industry today, and each operator offers consumers a range of handsets produced by a range of manufacturers, with a range of functionalities and applications.

But the mobile industry is still a comparatively young and dynamically changing industry, especially the mobile broadband market. 3G networks are only just now being deployed in many countries, and the myriad services and applications that will run over those networks are only just now being developed. Regulatory intervention at this point, with the market in its infancy and changing rapidly, could have disastrous long-term unintended effects, distorting investment and stifling the ongoing innovation and experimentation that is critical in this early stage of mobile broadband deployment. Broadband in the mobile industry is still nascent, but it holds enormous potential to provide consumers with an additional choice for accessing the Internet. 3G technology enables mobile operators to deliver innovative, IP-based services – such as instant-messaging and websurfing– in addition to voice and data over mobile handsets. The technology also enables new, powerful ways to access already popular Internet-based services and applications – such as video and music – that promise to become more robust as they are optimised for the mobile environment. Mobile operators are investing huge amounts to provide these new advanced broadband services with no guarantee as to which will ultimately prove successful in the marketplace.

Mobile operators have strong incentives to develop innovative content and applications, and to partner with other providers that can develop broadband offerings – such as video, music, and web-related applications such as social networking – that will be attractive in the mobile context. The Apple iPhone and the associated iTunes Apps Store are great examples of how these commercial partnerships between mobile providers, device

manufacturer and applications providers are evolving to enable new innovative devices and services. The development of such content and applications is critical: it will drive consumer demand for mobile broadband services, and thereby permit operators to realise the fruits of their massive investment in mobile broadband networks. AT&T therefore urges Ofcom to continue with its expressed preference for relying on competition to ensure consumer choice.

2. Mobile Broadband Raises Significant Network Management Challenges

Notwithstanding the great potential of this nascent and dynamic industry, mobile broadband poses many ongoing challenges to operators, application providers, and handset manufacturers. Operators and their partners must figure out ways to deliver broadband services and content that, among other things, must work well in a mobile environment using wireless transmission, that are attractive on a small screen, that economise on battery life, and that do not require handsets that will be priced out of the market.

Additional challenges arise from the shared nature of the wireless spectrum. All communications networks that rely on shared resources face important issues of congestion and resource constraints, and these problems are particularly acute in the mobile industry. Wireless communications – whether voice or data – take place within assigned spectrum bands. Because each communication must occur on specific frequencies within those bands, there are physical limits on the uses a wireless network can support in any particular geographic area. That poses unique challenges in the mobile broadband world because it means that customers' uses of bandwidth-intensive applications can undermine the quality of service and bandwidth available to other customers on the same network. Because there is not infinite spectrum for wireless broadband, there is an acute need for network management.

The build-out of mobile networks is based on assumptions regarding consumer usage. A basic assumption, for example, is that most consumers

want to use their handsets for services that are optimised for mobile use – including voice service, text-messaging, email access, and limited web-browsing. Decisions on capacity build and rates in pricing plans are based on those assumptions. Although advances in digital technologies allow operators to increase the efficiency of mobile networks and to provide capacity for simultaneous uses, there are limits to the spectrum, which take on added significance with rising demand for mobile broadband services. In this environment, the integrity, security, and efficient use of the mobile network as a whole can be jeopardised by certain uses, for example, continuous downloading and streaming video – regardless of the effect those heavy or inefficient uses have on the reliability of the network for other users. In order to manage effectively shared wireless resources, and in addition to continuing efforts to improve spectrum efficiency, mobile operators need to adopt a variety of approaches, including usage policies, aimed at optimising the availability of mobile broadband capacity for use by all of its customers, not just a limited few.

If a mobile operator strikes the wrong balance in its usage policies – adopting policies that are too permissive and that undermine the quality and reliability of its network, or usage policies that are too strict and that inhibit popular uses – market forces will continue to provide the remedy. Moreover, given rapidly changing technology and evolving consumer preferences, these policies too are sure to change in response to the market and the evolving capabilities of mobile broadband networks. Indeed, it remains to be seen precisely how the services and applications enabled by operators' investment in 3G networks come to the market. Some of the applications will fail either as a technological matter or because consumers do not want them; others will be wildly successful. Which applications fall into which category, however, should be dictated by consumer demand and market forces, not regulatory fiat, especially in such a nascent, dynamically changing and competitive marketplace.

3. Network Management Is Crucial To Ensuring Quality of Service

Intelligent network management techniques are critical to ensuring quality of service amidst unprecedented traffic growth and the increasing availability of more sophisticated, quality-sensitive services and applications. This applies to all IP-based networks, whether fixed or mobile. As Internet usage patterns evolve and become more variable and bandwidth-intensive with the proliferation of high bandwidth applications and the ongoing explosion in Internet traffic, the extent of required network upgrades, and the resulting impact on consumer rates, will depend, in large measure, on the degree of reasonable network management, including traffic prioritisation, that network operators are allowed to exercise. In particular, intelligent networks that rely on a combination of increased capacity and more sophisticated network management techniques, such as traffic prioritisation along with efficient cost-distribution agreements involving content and application providers, are likely to result in better quality of service and lower end user consumer fees while ensuring that consumers continue to have access to an open Internet. However, regulatory intervention to restrict network providers' ability to differentiate their service offerings or pre-empt new service and pricing options would likely result in the use of inefficient, sub-optimal arrangements that would raise prices, reduce incentives to invest in network capacity and performance, limit the potential of the Internet to enable new applications and services, such as real-time video and telemedicine, that require differentiated handling, and limit competition in the broadband Internet marketplace. Such regulation would harm the interests of both users and service providers and limit future investment.

Such network management is essential not only to ensure quality and availability of service, but also more specifically for the prevention of SPAM, malware, and cyber-attacks. As part of network management today, mobile operators can block certain inbound messages, specifically to prevent SPAM and denial of service attacks on the messaging network, similar to what ISPs do to manage email SPAM. Several SPAM and anti-virus controls exist on

nodes in messaging networks today, allowing mobile operators to offer a secure and reliable network experience to users, for example:

- Rate Limiters on email gateways and inter-carrier SMS gateways can interrogate the origination address and prevent a single address from sending excessive messages to multiple customers.
- Content Filtering on email gateways can interrogate the content of messages to match key words and phrases utilised by spammers.
- IPs which historically or perpetually SPAM customers can be added to a blacklist on email gateways.
- On email gateways and intercarrier MMS interfaces, the content of MMS events may be interrogated for known viruses.

Mobile net neutrality obligations would inhibit operators' ability to manage against SPAM, viruses and other nefarious uses of the network and would be harmful to the customer experience. They would also impact the ability of mobile operators to manage the overall utility of scarce spectrum to ensure that the widest possible group of end users obtains a quality service.

4. Ofcom Already Has The Tools To Address Anti-competitive Conduct

AT&T believes that competition in mobile Internet will drive consumer choice, openness, and innovation. As the *Consultation* recognises[1], in the event that individual cases of anti-competitive or abusive misconduct should arise, Ofcom already has the necessary tools, under its regulatory powers under the Communications Act or under competition law, to respond in a targeted manner to restrictions imposed to hinder competition, that are not subject to competitive pressures.

* * *

In conclusion, AT&T believes that net neutrality regulation has no role to play in the mobile industry. AT&T therefore urges Ofcom to rely on

[1] *Consultation* at 8.78.

competitive market forces to ensure quality and customer choice and to avoid prescriptive net neutrality obligations that would limit the ability for device developers and mobile operators to use beneficial network management tools and that would undermine investment and innovation in the sector.

6 November 2008

Contact:

Mike Corkerry
Executive Director, EMEA Regulatory Affairs
AT&T
Tel: 020 7663 5041
Email: mike.corkerry@att.com
Web: www.att.com