Skype briefing for the Digital Economy All Party Parliamentary Group on preserving the open and neutral character of the Internet
ahead of the 29th March 2011 event "Preserving the open Internet? Opportunities and challenges for the UK's economy, society, consumers, and civil liberties?"

Abstract

Imagine not being able to use a microwave – just because your electricity supplier does not allow microwaves (they compete with another part of their business, apparently). Imagine having to pay extra for water when the water supplier detects that it is used to make coffee. Imagine not being able to do a video call with your newborn grandson in Australia or Canada – just because your Internet provider does not allow the use of Voice over IP (they compete with another part of their business, apparently). Ridiculous? Not really. Restrictions to what UK Internet users can or cannot do with their broadband connections are commonplace today.

The implementation into UK law of the revised EU rules on telecommunications will soon start, and includes new provisions on the question, designed to protect 'net neutrality and net freedoms' according to the European Commission. How will or should the UK implement those rules? The UK Minister of Communications Ed Vaizey MP's call for self-regulatory guidelines to protect the open Internet, including a non-discrimination principle, seems a good way forward. But such guidelines need to be implemented, meaningfully and properly, without delay, and supervised by the regulator and Government in the knowledge that should abuse persist, the full extent of regulatory powers will be deployed in order to genuinely protect the open nature of the Internet.

Introduction

Imagine that for the first time, you just bought a microwave oven. You come home ready to enjoy a quick ready-meal. But when you plug in the new appliance, it doesn't work; not because the microwave itself does not work, but instead (you find out after ringing too many helplines for your sanity), because your electricity supplier will not allow you to use microwaves. They say it's because microwaves consume far less energy than traditional electric grills so their return on investment for building electricity networks is diminished if they allow microwaves. They argue it's their freedom to sell electricity the way they want to.

Surreal? Not really: this is not a Monty Python sketch, but exactly what happens already today for most UK households when they buy mobile access to "the Internet". Instead of being able to use all of the Internet, UK consumers are most often forbidden by their provider to use the online tools and content of their choice, for purely arbitrary reasons.

A real-life example: Mrs Stewart's daughter Kate, who's moved from her native Cumbria to Australia, just gave birth to little Anna. Kate encourages the proud Mrs Stewart to meet and talk to her new-born granddaughter using video-chat on the Internet.

But Mrs Stewart soon realises she won't be able to interact with her granddaughter until she visits Cumbria next Christmas: she can't make any video calls because her Internet provider forbids the use of 'Voice over the Internet'. Already disappointed because she does not like the idea of terminating her two-year contract with a provider she has had for the past few years already, she realises she has no choice anyway: in her region, the only few Internet providers available either also forbid the use of online voice and video communications, or some require substantial 'premium' fees in order to do so, on top of what Mrs Stewart already pays for Internet access.

This is the reality in Britain today: rather than having access to all that the Internet has to offer, UK consumers (both individuals, businesses or public services) are routinely restricted by their 'Internet' provider in the type of content, applications, services and information they can access and use online.

What is net neutrality all about?

Net Neutrality is commonly defined as carrying data over the Internet in a way that does not impact how data is carried, the processing of the information they contain, or the applications that allow their exchange. Rather than 'Net neutrality' *per se*, we refer to 'the open Internet' or 'innovation without needing prior permission'. It all boils down to **the same fundamental principle which has underpinned the Internet since its infancy: as long as somebody connects to the global public Internet, they can access all of it, choose what they do online, and decide which online application to use, and which not to use**.

Any content, or a service or application created, that is compatible with the Internet protocol – an SME that starts trading online, a blog, an online application, the Open University, anything that goes online on the Internet – would be accessible to all those connected to the Internet, without any prior permission being required from anyone. It is for users - not for Internet access providers - to decide which Internet applications can be accessed and, ultimately, which will succeed. **In the same way that in the past, telephone companies did not listen in to their customers' conversations or choose what they talked about, so today's Internet service providers should not be deciding what their customers are reading or accessing or putting online.**

This is not to say that Internet traffic should not be managed according to which broadband speeds or data volumes a consumer has chosen as part of their contract, or that networks cannot be 'managed' by Internet providers in times of traffic congestion to ensure a better user experience, but this should be based on purely technical reasons, rather than commercial preference.

An economic, social and citizen imperative for the UK in the global information age

Sir Tim Berners-Lee explained that *"[w]hen I invented the Web, I didn't have to ask anyone's permission. Now, hundreds of millions of people are using it freely. I am worried that that is going [to] end … Freedom of connection, with any application, to any party,[i]s the fundamental social basis of the Internet, and, now, the society based on it. […] protect net neutrality, so I can continue to innovate in the Internet space. I want to see the explosion of innovations happening out there on the Web, so diverse and so exciting, continue unabated."*[1]

Innovation without needing prior permission has obvious and direct benefits: for citizens, more freedom of expression and communication, and access to information; for consumers, more choice and value; and for the wider economy and society, the Internet provides a global platform for the widespread diffusion of information, new tools and knowledge, for trade and exchanges of all kinds, including public services – and will be a key driver for future economic growth for developed and developing countries alike. In 2009 the Internet contributed an estimated £100billion, or 7.2% of GDP, to the UK economy, a figure which stands to grow[2] – with the right policies and safeguards in place. This is why the Internet has grown to become what the president of French communications regulator ARCEP called '*a strategic collective good*' [3].

Threatening the Internet's basic underpinning would have dire consequences for all. As we come out of the economic crisis, **it is crucial that the UK remains competitive in the global information economy of the 21st century: protecting an open Internet has to be a fundamental underpinning of that effort**.

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[1] Sir Tim Berners Lee's second blog entry , http://dig.csail.mit.edu/breadcrumbs/node/144
[2] *Connected Kingdom – How the Internet is transforming the UK economy*, Boston Consulting Group, Oct. 2010; http://www.connectedkingdom.co.uk/downloads/bcg-the-connected-kingdom-oct-10.pdf
[3] Jean-Ludovic Silicani, video interview on net neutrality, 18 March 2010, http://www.arcep.fr/index.php?id=10370#16521

Abuse is already taking place in the UK
But threats to the open Internet and Internet users' freedom of choice are not mere future worries. Many operators throughout Europe prohibit, block, degrade or over-charge consumers for the use of certain Internet applications and services. **Two thirds of UK mobile consumers are prohibited from or over-charged for using voice over the Internet (VoIP) or peer-to-peer applications. Many are also prohibited from accessing Internet videos, audio or instant messaging other than those provided by their mobile provider.**

Some operators explain their discriminatory behaviour by the need to finance new networks to cope with the ever-increasing demand for Internet access and use. They point the finger at 'freeriders' and 'bandwidth-hungry' applications, or the risk of revenue cannibalisation. This is severely misguided.

Concerning network congestion, it is arguably true that especially in the mobile world, the 'last mile' to the end-user can become congested (who hasn't struggled to make a normal mobile phone call from a crowded park or outdoor concert? It's hardly a new issue). But many more technologies are emerging (WiFi, femtocells) that can offload mobile networks by relying on the fixed network, let alone the LTE move to an all-IP mobile infrastructure, which will significantly help reduce congestion. In any case, why should the management of temporary issues of congestion - unless there is a genuinely technical reason behind it - result in commercial preference being given to this or that service compared to others? As the new 'Digital Agenda' European Commissioner Neelie Kroes put it very clearly: "*The core issue is whether Internet access providers and broadband providers should be able to exercise control and limit users' access to any content; to me that is a no go when it's done for commercially motivated reasons*". [4]

Looking at some of the financial concerns, Morgan Stanley predict a mobile Internet market of more than one billion subscribers by 2013.[5] The GSM Association (GSMA) forecasts that within the next 15 years there will be more than 50 billion mobile connections thanks to the 'Internet of Things'[6]. And revenues from data access experience fast growth, contributing an ever greater and profitable part of telecom operators' bottom line. That should sound like a massive revenue opportunity to anyone.

Complaining about content and applications providers as 'freeriders', or asking them to pay telecom operators for delivering their traffic to consumers is a warped logic: no consumer wants a fiber optic cable to arrive at their house, or a satellite dish to be attached to their roof – they require this hardware only because they want to access the Internet content, applications and services of their choice. Operators who make it more difficult and / or expensive for the Twitters, the Wikipedias, the Facebooks, the Skypes, and the many 'start-up guys in their garages' to innovate online look foolish at best, suicidal at worst: they are threatening the very reason that operators get revenues from being Internet access providers, i.e. consumer demand for the new online products and content of their choice.

By allowing the creation of new barriers such as the payment of fees for online content delivery or other forms of tax on innovation, we would alter for the worst the current virtuous, "win-win" cycle of supply and demand which has delivered so much for consumers, for the economy and society as a whole, for online innovators and for operators themselves.

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[4] Quote from hearing of then-Commissioner-designate Neelie Kroes, January 2010. Official European Parliament press release, January 14, 2010:
http://www.europarl.europa.eu/news/expert/infopress_page/008-67217-013-01-03-901-20100113IPR67216-13-01-2010-2010-false/default_en.htm
[5] Mary Meeker, 'Economy + Internet trends', October 20, 2009,
http://www.scribd.com/doc/21365349/Mary-Meeker-s-Internet-Presentation-2009
[6] Tom Phillips, GSMA, speech at Westminster eForum event on 'More than Talk – the future of Mobile',Oct. 2009, http://www.westminsterforumprojects.co.uk/forums/showpublications.php?pid=60

A way forward?

It is therefore crucial that all actors in the Internet ecosystem continue to abide by the basic, non-discrimination principle of the open Internet: end-users should be able to access and distribute information and run applications and services of their choice on the Internet, without discrimination, except for genuine legal or technical impediments.

The principle is simple enough, and applying it will not require any regulatory 'red tape'. Tim Berners-Lee commented that "*[t]here have been suggestions that we don't need legislation because we haven't had it. These are nonsense, because in fact we have had net neutrality in the past - it is only recently that real explicit threats have occurred.*"[7]

The existence of voluntary guidelines on network neutrality in Norway[8], that have been signed up to by all stakeholders in that country including operators, or the commitment expressed by operators elsewhere such as Rogers in Canada[9] and the US Federal Communications Commission (FCC) Order on the open Internet[10], show that it is entirely possible to ensure that we preserve the highly innovative and beneficial platform that is the open Internet, without stopping operators from innovating or investing in new networks. As for the detail, there is now already a mass of regulatory best practice to define what constitutes genuine technical impediments, such as the Canadian regulator CRTC's framework defining what constitutes reasonable Internet Traffic Management Practices[11].

The way forward for the UK has to be an unambiguous protection of 'the open Internet', which will best serve the interests of consumers, as well as the economy and society more widely[12]. Ed Vaizey MP called for self-regulatory guidelines to be devised to complement the new legislation on electronic communications coming from the EU and which will be transposed into UK law by May 2011 including provisions to protect the open Internet. According to the Minister, the guidelines would be "*guided by three simple principles. The first is users should be able to access all legal content. Second, there should be no discrimination against content providers on the basis of commercial rivalry and finally traffic management policies should be clear and transparent.*"[13]

These self- / co-regulatory guidelines seem a good way forward. In order to serve their purpose of preserving the open Internet as a key enabler of consumer / citizen choice and economic growth and global competitiveness, they need to be developed and implemented, meaningfully and properly, without delay, and with the involvement of all relevant stakeholders. They should also be supervised by the regulator and Government in the knowledge that should abuse persist, the full extent of regulatory powers will be deployed in order to genuinely protect the open nature of the Internet.

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[7] Tim Berners-Lee, *Ibid.*

[8] Norway guidelines for network neutrality, 24 February 2009: http://www.npt.no/ikbViewer/Content/109604/Guidelines%20for%20network%20neutrality.pdf

[9] 'Is Rogers setting a benchmark for net neutrality?', Jim Courtney, *Voice on the Web*, June 29, 2009, http://voiceontheweb.biz/2009/06/is-rogers-setting-a-benchmark-for-net-neutrality-policies/

[10] FCC Report and Order in the Matter of Preserving the Open Internet, 23 December 2010, http://www.fcc.gov/Daily_Releases/Daily_Business/2010/db1223/FCC-10-201A1.pdf

[11] CRTC Telecom Regulatory Policy CRTC 2009-657, *Review of the Internet traffic management practices of Internet service providers*, Oct. 21, 2009, http://www.crtc.gc.ca/eng/archive/2009/2009-657.htm.

[12] See in Annex the specific suggestions made to the Minister by a broad range of stakeholders in their joint letter of 2 December 2010 welcoming Ed Vaizey's speech on the open Internet.

13 DCMS: Open internet roundtable statement, 16 March 2011, http://www.culture.gov.uk/news/news_stories/7958.aspx

<u>**ANNEX: Joint letter welcoming Ed Vaizey's speech on the open Internet, 2 Dec. 2010**</u>

To The Hon. Ed Vaizey MP, Minister for Culture, Communications and Creative Industries
cc the Rt Hon Jeremy Hunt MP, Secretary of State for Culture, Media and Sport,
the Rt Hon Dr Vince Cable MP, Secretary of State for Business, Innovation and Skills.

2 December 2010

Dear Minister,

The Open Internet

We welcome your recent statement that the UK Government supports access to the open Internet. In particular we support your call for adherence to the openness principle both for fixed and mobile access to the Internet, whereby

- *"consumers should always have the ability to access any legal content or service,*
- *content and service providers should have the ability to innovate and reach end users."*[14]

This is the first time that such a clear political commitment has been made in the UK to preserve the end-to-end principle that underpins the Internet, and the benefits it brings to citizens, consumers, businesses and economic growth.

In order to safeguard these benefits for all stakeholders in the future, five key principles are important complements to this political commitment:

1. The Internet should remain open so that everyone is able to send and receive the content, use the services and run the applications of their choice, on the device of their choice, within the law.

2. Traffic management should be kept to a minimum, and deployed for purely technical, security or legal reasons. There should be no discrimination in the treatment of Internet traffic, based on device, or the origin and/or destination of the content, service or application.

3. Meaningful information about any traffic management practices must be made available to all stakeholders, end users and businesses who rely on broadband infrastructure to reach their customers.

4. Future investment in network capacity and underlying infrastructure must take place in a way that is consistent with the end-to-end principle and where new models of Internet access do not compromise openness.

5. For competitive markets to function effectively, the regulatory framework must be fit for purpose and able to respond to abuses by network providers.

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[14] http://www.bis.gov.uk/news/speeches/ed-vaizey-open-internet

End-users' choice of which applications, content, and services to view, use or run is already restricted in the UK today, especially when accessing the Internet on mobile. The Government's commitment to the open Internet must be reflected in action on the ground to remove any such arbitrary restrictions to the open Internet. We also recommend the Government's policies on the open Internet and traffic management take account of citizens' access to public services online in the future.

In conclusion, we call on the UK Government to add more detail to its position in support of the open internet by:

- protecting the open internet through a judicious implementation of the new EU legislation for electronic communications.

- requiring Ofcom to closely monitor the market and demonstrate that effective and timely enforcement processes are in place to respond to complaints about unfair discrimination from any affected stakeholder.

- pressing UK Internet service providers to urgently develop meaningful self-regulation to ensure fair principles around traffic management to serve as a benchmark for assessing what is or is not acceptable practice, as has been done in other countries. Ofcom should step in if ISPs do not deliver this in a timely way.

- ensuring that Ofcom's forthcoming review on switching delivers real benefits to broadband subscribers in terms of their ability to change providers and drive meaningful choice between broadband Internet packages.

- conducting a wide-ranging policy debate about this crucial subject for the future competitiveness of the UK's economy and well-being of UK society, and adopting a joined-up approach in policy making, by assessing long-term implications of traffic management practices and the maintenance of an open Internet for the economy, for consumers and citizen's interests, including freedom of expression, access to public services and digital inclusion.

Jeff Lynn, Chairman,
The Coalition for a Digital Economy

Julie Meyer, CEO

Robert Hammond, Head of Post and Digital
Communications

Stefan Krawczyk,
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Charles Grimsdale, Partner

Andrew McClelland,
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Jeremy Dear, General Secretary

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**Professor William Dutton, Director
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