



CENTRE FOR LAW
AND DEMOCRACY

**A Truly World-Wide
Web:
Assessing the Internet from
the Perspective of Human
Rights**

April 2012



A Truly World-Wide Web: Assessing the Internet from the Perspective of Human Rights



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Introduction

Five hundred years ago, a new invention emerged in Europe that revolutionised communication, creating a platform for dissent and paving the way for an unprecedented dialogue challenging entrenched powers. This invention, the printing press, gave rise to enormous decentralisation of power and social upheaval, culminating in the overthrow of repressive authorities and a new understanding of social relations. Today, human communication is undergoing a similar revolution with the spread of the Internet, which has also spurred popular uprisings, decentralisation of power, and enhancement of respect for human rights. Just as freedom of expression has become unthinkable without a concomitant right to print and publish, access to the Internet has become established as a primary delivery mechanism for a range of human rights, most notably freedom of expression, but also the rights to education, to healthcare, to political participation and to work, among others.

The Internet's role in enabling so many fundamental human rights reflects its ubiquity as a social tool. It has become a central forum for shopping and commerce, for socialising and dating, for culture and entertainment, for formal and informal education, for political debate and engagement, for religious and spiritual pursuits, for medical consultation and for professional advancement in nearly every field. In short, for many people the Internet has transformed practically every aspect of day-to-day life.

But despite the Internet's universality in some societies, it is far from a universally accessible medium. While 73.8% of people in the developed world have access to the Internet, only 26.3% of people in the developing world use the Internet.¹ Regional disparities are even starker. While 72.2% of households in Europe have access to the Internet, in Africa that number is 5.7%.² Statistics such as this have given rise to discussions of a global "digital divide", separating Internet haves from have-nots.

There are a variety of reasons for this disparity. In addition to the obvious financial and infrastructural issues that limit development generally, social obstacles and, in many cases, outdated or intransigent government policies also limit Internet penetration. Although a technological gap between the rich world and the poor world is nothing new, the Internet's role in the enabling and delivery of human rights raises questions as to whether inability to access the Internet should be viewed as more than just a development issue. Considering the centrality of the

¹ International Telecommunications Union, *Key Global Telecom Indicators for the World Telecommunication Service Sector*, updated 16 November 2011. Available at: http://www.itu.int/ITU-D/ict/statistics/at_glance/KeyTelecom.html.

² *Ibid.*

Internet to the enjoyment of basic human rights, should access to the Internet itself be considered a human right? This Report supports the idea of a human right of access to the Internet, due to the role it plays in the actualisation of fundamental human rights, most notably freedom of expression.

Running alongside the question of access are a number of regulatory issues. As a key medium for exercising the right to freedom of expression, it is clear that State regulation of the Internet must respect international guarantees of this right, just as this is the case for regulation of the print and broadcast media. The unique nature of the Internet as a medium means that regulatory systems and rules which have been applied to other sectors cannot simply be transferred to the Internet, although in many countries this is exactly what has been done.

Part I of this Report evaluates the concept of the Internet as a human right, and explores the responsibilities that flow from this understanding, in relation to both access issues and regulatory obligations on States in order to protect and promote this right. Part II delves in some detail into a number of key regulatory issues where the particular nature of the Internet demands special treatment. Part III discusses the practical difficulties in promoting universal Internet access, describing major obstacles and potential solutions and specifically exploring the promise of mobile Internet. For each Part, the Report identifies key questions that require further study, with the aim of framing future research into how the right to the Internet can best be protected and promoted around the world.

The aim of this Report is to provide a comprehensive mapping of the main issues arising from an understanding of the Internet as a human right, and to establish parameters within which future debate on human rights issues for the Internet can take place. It does not claim to provide a comprehensive analysis of all of the issues it identifies, or policy solutions to them. The Centre for Law and Democracy intends to follow up this work with a programme of further study and policy analysis, with a view to providing broad policy responses to each of the issues raised in this Report.

Part I: The Internet as a Human Right

I.1 The Internet and Politics: A Case Study

In order to understand better, and in a more concrete fashion, the importance of the Internet in modern life, it is useful to examine in greater depth the impact that the Internet has had. For this purpose, this Report focuses on one particularly important area of freedom of expression, namely political speech. The use of the Internet in political life is perhaps more developed in the United States than in any other country, so this case study starts with an analysis of the impact of the Internet on politics in that country. However, the Internet has proven its importance in many

other contexts, perhaps especially poignantly in repressive countries, and this is discussed in the second part of the case study.

I.1.1 The Internet and Political Speech in the United States

Elections in the United States tend to revolve around money, and campaign contributions are treated as a central aspect of political speech.³ In the course of his 2008 campaign for President, Barack Obama raised over \$500 million using online tools,⁴ roughly two-thirds of his total campaign budget.⁵ In parallel to the Internet's increasingly important potential in terms of fundraising (or perhaps because of it), the Internet has also reshaped the way politicians in the United States campaign. The 2008 Presidential campaign was widely viewed as a watershed moment. In the run up to that election, both major political parties held a "YouTube Debate" where questions were submitted by users uploading videos to the content-sharing website.⁶ Webchats with candidates and online networking and advertising have also become standard aspects of campaigns.

This shifting emphasis has transformed the meaning of citizen participation in the political process. The most recognisable image from the 2008 campaign, Shepard Fairey's iconic "Hope" poster, was a product of the Internet. Mr. Fairey found the source photograph by searching Google Images, and then released his modified work through the Internet. Although printed copies were also made, the image's rapid distribution and popularisation were primarily due to its "viral" spread through social media sites. Mr. Fairey's image has since been acquired by the Smithsonian Institution for its National Portrait Gallery. Without access to the Internet (specifically, Google Images) it would have been far more difficult for Mr. Fairey to create the poster, and it would have been practically impossible for his work to have had anywhere near as big an impact as it did.

Although the United States has been at the forefront of the integration of the Internet into the electoral process, it is by no means alone in this regard. Facebook pages, Twitter accounts and web chats have all become standard aspects of political campaigning throughout the developed world.⁷

³ This fact predates the Internet by a long margin. See Centre for Law and Democracy, *Regulation of Paid Political Advertising: A Survey*, March 2012. Available at: <http://www.law-democracy.org/?p=1827>.

⁴ Jose Antonio Vargas, "Obama Raised Half a Billion Online", *The Washington Post*, 20 November 2008. Available at: http://voices.washingtonpost.com/44/2008/11/20/obama_raised_half_a_billion_on.html.

⁵ Obama's total campaign budget was \$745 million, according to Open Secrets. Available at: <http://www.opensecrets.org/pres08/summary.php?cycle=2008&cid=N00009638>.

⁶ Transcripts available at: <http://www.cnn.com/2007/POLITICS/07/23/debate.transcript/index.html> and http://articles.cnn.com/2007-11-28/politics/debate.transcript_1_abortion-rights-debate-candidates?_s=PM:POLITICS.

⁷ See, for example, Sam Stein, "Merkel Announces U.S. Trip Via Twitter, German Press Corps Goes Nuts", *Huffington Post*, 6 April 2011, available at: http://www.huffingtonpost.com/2011/04/04/merkel-announces-us-trip-_n_844418.html; "Dominique de Villepin utilise de plus en plus Twitter pour critiquer le gouvernement", *République Solidaire*, 28 December 2011, available at: <http://www.republiquesolidaire.fr/9766-dominique-de-villepin-utilise-de-plus-en-plus-twitter-pour->

The Internet also facilitates coordinated political activism, including at a global level. In late 2011, the United States Congress began discussing the Stop Online Piracy Act (SOPA), which would have granted enormous powers to holders of copyrighted material to shut down websites suspected of infringement, both in the United States and internationally.⁸ The proposed bill immediately attracted criticism from the European Parliament,⁹ as well as from NGOs, academics and tech companies.¹⁰ However, the most effective protest against the proposed bill was conceived, coordinated and carried out entirely online. On 18 January 2012, over 7,000 websites, including Wikipedia and Reddit, blacked out their services for 24 hours. The protest attracted enormous attention both online and in traditional media, and an estimated 162 million web users viewed the protest banner that replaced Wikipedia's site. By the end of the day, it was reported that several United States Senators who had sponsored the legislation were withdrawing their support, and the bill was shelved shortly thereafter.¹¹ Political action on this scale is virtually unthinkable without the Internet, while the immediate success of the blackout is a clear demonstration of the power of online protest.

It remains true in the United States, and elsewhere in the developed world, that political speech is possible without access to the Internet. But people who live in the United States – or in any other nation where the Internet has established a central place in political discourse – who do not have access to the Internet are denied full substantiation of their right to freedom of expression. Not only has the Internet expanded and enriched political discourse, but now that a significant and increasing amount of the political process is taking place online, access to the Internet has become a requirement for the full realisation of the right to free expression and to political engagement.

I.1.2 The Liberating Influence of the Internet in Repressive Countries

The Internet is at least equally important as a tool for political participation in countries that are not fully democratic, as recent uprisings in Iran and the Arab world have demonstrated. In the Iranian case, widespread allegations of vote rigging and fraud during the 2009 Presidential elections saw massive popular

critiquer-le-gouvernement-francetelevisions-28122011/ [in French]; and “David Cameron blames Mumsnet webchat delays on laptop”, BBC News, 19 November 2009, available at: http://news.bbc.co.uk/2/hi/uk_news/politics/8368975.stm.

⁸ U.S. Bill H.R. 3261, Stop Online Piracy Act, 112th Cong., 2011. Available at: <http://thomas.loc.gov/cgi-bin/bdquery/z?d112:h.r.3261>.

⁹ Jennifer Baker, “European Parliament Joins Criticism of SOPA”, PC World, 18 November 2011. Available at:

http://www.pcworld.com/businesscenter/article/244247/european_parliament_joins_criticism_of_sopa.html

¹⁰ Declan McCullagh, “Google, Facebook, Zynga oppose new SOPA copyright bill”, cnet, 15 November 2011. Available at: http://news.cnet.com/8301-31921_3-57325134-281/google-facebook-zynga-oppose-new-sopa-copyright-bill/.

¹¹ “Did Wikipedia's anti-SOPA blackout accomplish its goal?”, National Post, 19 January 2012. Available at: <http://news.nationalpost.com/2012/01/19/what-did-wikipedias-blackout-accomplish/>.

protests against Mahmoud Ahmadinejad's purported re-election. Police and pro-government militia responded violently, leading to the deaths of several protesters, which in turn spurred further protests, although the uprising was ultimately suppressed. Due to the strong role that social media services played in the protests, the mainstream media dubbed these events the "Twitter Revolution." Anti-authoritarian protests across the Arab world in 2011 and 2012, dubbed the "Arab Spring", were triggered by a Tunisian man's self-immolation in protest against corrupt and arbitrary treatment at the hands of local authorities. This led to a popular uprising in Tunisia against the longstanding and repressive government, and spurred similar protests across the Arab world, most notably in Egypt, Libya, Syria, Bahrain and Yemen.

In both the Iranian and Arab protests, significant attention has been devoted to the role that the Internet, and specifically social media sites such as Twitter and Facebook, played in the uprisings. Although some have expressed scepticism about claims that the protests were coordinated and mobilised online,¹² it is significant that during the Iranian, Egyptian and Syrian uprisings the government responded to the protests by shutting down or drastically reducing Internet service.¹³ In the Iranian case, it is evident that the United States government considered social media to be an important component of the protests, since the State Department took the unusual step of asking Twitter's administrators to delay implementing a planned upgrade that would have cut daytime service to protesting Iranians.¹⁴

The role of social media in these uprisings further illustrates how online communication can substantiate the right to free expression. In countries where political speech is banned or heavily regulated, the Internet is the best (and often the only) way to subvert these restrictions, allowing citizens an avenue to express themselves and to vent their frustrations with comparative anonymity. It also provides protesters with a connection to the outside world. Thanks to the Internet, footage showing the brutality of government crackdowns in Egypt, Iran, Syria, Bahrain and Libya appeared nearly instantaneously on YouTube, mobilising and

¹² See Joel Schectman, "Iran's Twitter Revolution? Maybe Not Yet", Bloomberg Businessweek, 17 June 2009, available at: http://www.businessweek.com/technology/content/jun2009/tc20090617_803990.htm; and "Tunisia protesters use Facebook, Twitter and YouTube to help organize and report", Los Angeles Times, 14 January 2011, available at: <http://latimesblogs.latimes.com/technology/2011/01/tunisia-students-using-facebook-and-twitter-to-organize.html>.

¹³ See Hiawatha Bray, "Finding a way around Iranian censorship", The Boston Globe, 19 June 2009, available at: http://www.boston.com/business/technology/articles/2009/06/19/activists_utilizing_twitter_web_proxies_to_sidestep_iranian_censorship/; Toby Mendel, *Assessment of Media Development in Egypt* (2011: Cairo, UNESCO Communication and Information Sector), available at: <http://unesdoc.unesco.org/images/0021/002146/214638EB.pdf>; and Elizabeth Flock, "Syria Internet services shut down as protesters fill the streets", The Washington Post, 3 June 2011, available at: http://www.washingtonpost.com/blogs/blogpost/post/syria-internet-services-shut-down-as-protesters-fill-streets/2011/06/03/AGtLwxHH_blog.html.

¹⁴ Sue Fleming, "U.S. State Department speaks to Twitter over Iran", Reuters, 16 June 2009. Available at: <http://www.reuters.com/article/2009/06/16/us-iran-election-twitter-usa-idUSWBT01137420090616>.

consolidating public and global opinion against the atrocities. It might theoretically have been possible to smuggle the footage into the hands of journalists through other means, but it would have been far more difficult, slower, more dangerous and less likely to succeed.

For these protestors, the Internet is the only effective mechanism for enabling a right to free expression. This is equally true for bloggers in China or for anyone else living under a regime where the fundamental right to freedom of expression is infringed. An Iranian protester with a working Internet connection will (to a certain degree) be able to exercise their right to free expression. Cut off that Internet connection, and their free expression disappears:

Even in nations with totalitarian systems, the Internet will offer a kind of fifth column for democratic expression that will be increasingly virulent. Despite the efforts of closed societies to stamp out the Internet, their economic need to go online will inevitably lead to a democratic opening through Internet participation.¹⁵

In democratic societies the distinction is not quite so black and white, but access to the Internet has nonetheless become inextricably fused with the right to free expression in practice. That is to say, the Internet has added so much to our modern capacity to exercise the right to freedom of expression, in terms of political speech but also in terms of every other aspect of communication – including the arts, socialising and networking, commerce and commercial speech, and religious expression – that to be denied access to the Internet is to lose the ability to exercise fully one’s right to free expression. The Internet has done so much to expand the practical reality of free expression that its denial can, in some sense, render the right itself hollow, just as the right to express oneself orally but not to print or publish would curtail the right to free expression so much that it would lose an important part of its very meaning.

1.2 Access to the Internet as a Human Right

1.2.1 Legal Developments

The claim that access to the Internet is a human right is not new, and there have been a number of legal developments along these lines. This idea has been recognised, to varying degrees, in several jurisdictions. In 2001 Greece amended its constitution to include Article 5A, which states:

2. All persons have the right to participate in the Information Society. Facilitation of access to electronically transmitted information, as well as of the production, exchange and diffusion thereof, constitutes an obligation of the State...¹⁶

¹⁵ Dick Morris, “Direct Democracy and the Internet” (2000-2001) 34 *Loyola L.A. Law Review* 1033, p. 1053.

¹⁶ (2008 Rev. Ed.). Available at: <http://www.hellenicparliament.gr/UserFiles/f3c70a23-7696-49db-9148-f24dce6a27c8/001-156%20aggliko.pdf>.

In France, the Constitutional Council in 2009 struck down a controversial law that would have required ISPs to permanently block Internet access of users accused of copyright violations, in part because the freedom to access online communication services was held to be protected under the Declaration of the Rights of Man and the Citizen of 1789.¹⁷ Although the French decision does not explicitly recognise the Internet as a freestanding right in the way that the Greek Constitution does, this decision was subsequently cited by the Costa Rican Constitutional Court, in a ruling that went considerably further:

In the context of a society based on information or knowledge, this imposes upon public authorities, for the benefit of those under their administration, to promote and guarantee universal access to these new technologies.¹⁸

Several jurisdictions have also recognised the importance of access to the Internet by imposing legal requirements to ensure universal service, beginning with Estonia, which in 2000 mandated that online access must be “universally available to all subscribers regardless of their geographical location, at a uniform price.”¹⁹ Similar requirements have been introduced in Finland,²⁰ Spain²¹ and the Canadian province of Nova Scotia.²²

At the international level, the importance of the Internet was recognised as early as 1999 by the Inter-American Commission on Human Rights:

[The Internet] is a mechanism capable of strengthening the democratic system, contributing towards the economic development of the countries of the region, and strengthening the full exercise of freedom of expression. Internet is an unprecedented technology in the history of communications that facilitates rapid transmission and access to a multiple and varied universal data network, maximizes the active participation of citizens through Internet use, contributes to the full political social, cultural and economic development of nations, thereby strengthening democratic society. In turn, the Internet has the potential to be an ally in the promotion and dissemination of human rights and democratic ideals and a very important instrument for activating human rights organizations, since its speed

¹⁷ Cons. constitutionnel, 10 June 2009, 2009-580 DC. Available at: http://www.conseil-constitutionnel.fr/conseil-constitutionnel/root/bank_mm/anglais/2009_580dc.pdf. The Council later approved an amended version of the law allowing for a maximum cut-off of one year, and which introduced judicial review into the process.

¹⁸ Sentencia 12790: Expediente: 09-013141-0007-CO, para. V. Unofficial translation by the author.

¹⁹ Tel Act, 9 Feb. 2000, s. 5.2.2. Available at:

http://www.medialaw.ru/laws/russian_laws/telecom/npa/6etr/estonia.htm.

²⁰ Communications Market Act, 363/2011, s. 60C(2). Available at:

<http://www.finlex.fi/en/laki/kaannokset/2003/en20030393.pdf>.

²¹ Sustainable Economy Act of 2011, Art. 52. Available at

<http://www.boe.es/boe/dias/2011/03/05/pdfs/BOE-A-2011-4117.pdf> [in Spanish].

²² Canada, Nova Scotia, Department of Economic and Rural Development and Tourism, *Broadband for Rural Nova Scotia* (1 December 2011). Available at: <http://www.gov.ns.ca/econ/broadband>.

and amplitude allow it to send and receive information immediately, which affects the fundamental rights of individuals in different parts of the world.”²³

The most significant international step towards recognising the right to access the Internet came in 2011, with the adoption of the *Joint Declaration on Freedom of Expression and the Internet* by the special mandates for freedom of expression at the UN, OAS, OSCE and African Commission,²⁴ which recognised the duty of States to promote universal access to the Internet:

Giving effect to the right to freedom of expression imposes an obligation on States to promote universal access to the Internet. Access to the Internet is also necessary to promote respect for other rights, such as the rights to education, health care and work, the right to assembly and association, and the right to free elections.²⁵

There is, thus, a substantial body of law recognising access to the Internet either directly as a human right or as a vital delivery mechanism for human rights.

1.2.2 Key Characteristics of the Right of Access to the Internet

The importance of the Internet as a tool for making freedom of expression a reality gives rise to certain obligations for States. However, this does not necessarily mean that all States are obliged to provide universal access immediately. Establishing universal Internet access is both expensive and technically difficult. In this respect, the right to access the Internet is different from civil and political rights. While no nation can claim to be too poor to offer its people democracy or freedom of religion, many nations simply cannot afford to provide universal Internet access. It is, therefore, important to examine the scope and nature of the obligations that arise in relation to the right of access to the Internet, and to elaborate more clearly the degree of responsibility that this imposes upon different States.

The right of access to the Internet gives rise to certain positive obligations on States, first and foremost a duty to work towards universal Internet access. However, the resources that States are able to allocate to extending access to the Internet are dependent on the means at their disposal, taking into account their wealth and level of development. While many European countries are currently in a position to institute universal access programmes, the same cannot be said of many of the world’s poorer nations, particularly those with large rural populations. As a result,

²³ IACHR, *Annual Report of the Inter-American Commission on Human Rights 1999: Report of the Office of Special Rapporteur for Freedom of Expression*; Chapter II: Evaluation of the State of Freedom of Expression in the Hemisphere, Part D: The Internet and Freedom of Expression.

²⁴ The United Nations (UN) Special Rapporteur on Freedom of Opinion and Expression, the Organization for Security and Co-operation in Europe (OSCE) Representative on Freedom of the Media, the Organization of American States (OAS) Special Rapporteur on Freedom of Expression and the African Commission on Human and Peoples’ Rights (ACHPR) Special Rapporteur on Freedom of Expression and Access to Information. Since 1999, these mechanisms have adopted a Joint Declaration annually focusing on a different freedom of expression theme.

²⁵ 1 June 2011. Available at: <http://www.law-democracy.org/wp-content/uploads/2010/07/11.06.Joint-Declaration.Internet.pdf>.

although there is a right of access to the Internet, realisation of this right it is subject to progressive implementation. In other words, although all States have a duty to promote universal access to the Internet, actualisation of this right will vary depending on a State's level of development and other considerations.

Several jurisdictions, mostly in the developed world, have instituted programmes to guarantee universal access to broadband Internet. These initiatives are generally funded through a mixture of public and private money, and involve the setting of various benchmarks for required minimum service. In Canada, the Broadband for Rural Nova Scotia programme, a public-private partnership, guarantees any household that requests it connection to the Internet at a download speed of at least 1.5 mbps, and at a cost that is comparable to what urban customers pay.²⁶ Finland has a universal access programme that is also financed through a combination of private investment and public subsidies, and a benchmark minimum data transfer speed of 1 mbps which must be provided at a "reasonable price".²⁷ In order to ensure that all residences or businesses are able to connect to the Internet should they choose to do so, Finland obliges telecoms companies to extend optical fibre networks or cable networks capable of carrying a transfer speed of at least 100 mbps to within 2 km of every home or business.²⁸

The question of what connection speed is necessary to ensure meaningful enjoyment of the right to the Internet is difficult partly because adequate connection speeds are a moving target. As faster connections become the norm, websites are designed with increasingly high requirements for access. As a result, connection speeds that were perfectly adequate ten years ago would struggle to handle many modern websites. However, the larger difficulty in providing a definitive answer to the question of what speed of connection is adequate is that this is dependent on the resources available.

An analogy can be made between the right of access to the Internet and the right to education, another right which is subject to progressive implementation. Education is recognised as a human right in the *Universal Declaration of Human Rights* (UDHR).²⁹ However, the extent of a State's responsibilities in implementing this right depends on the resources available to it. Article 13(2) of the *International Covenant on Economic, Social and Cultural Rights* (ICESCR)³⁰ spells out States' responsibilities regarding the right to education:

The States Parties to the present Covenant recognize that, with a view to achieving the full realization of this right:

²⁶ Motorola, "The Role Model for Sustainable Rural Broadband" (2011). Available at: http://www.motorola.com/web/Business/_Documents/Case%20studies/_Static%20files/WNS_Case%20Study_Utility_Broadband%20for%20Rural%20Nova%20Scotia%20Initiative.pdf.

²⁷ Finland, Ministry of Transport and Communications, *Internet*. Available at: <http://www.lvm.fi/web/en/internet>.

²⁸ *Ibid.*

²⁹ UN General Assembly Resolution 217A(III), 10 December 1948, Article 26.

³⁰ UN General Assembly Resolution 2200A (XXI), 16 December 1966, entered into force 3 January 1976.

- (a) Primary education shall be compulsory and available free to all;
- (b) Secondary education in its different forms, including technical and vocational secondary education, shall be made generally available and accessible to all by every appropriate means, and in particular by the progressive introduction of free education;
- (c) Higher education shall be made equally accessible to all, on the basis of capacity, by every appropriate means, and in particular by the progressive introduction of free education;
- ...
- (e) The development of a system of schools at all levels shall be actively pursued, an adequate fellowship system shall be established, and the material conditions of teaching staff shall be continuously improved.

Thus, primary education is a set requirement, but secondary and higher education should be progressively introduced in a non-discriminatory fashion, as far as resources permit. This is reinforced by the language of Article 2(1) of the ICESCR, which states:

Each State Party to the present Covenant undertakes to take steps, individually and through international assistance and co-operation, especially economic and technical, to the maximum of its available resources, with a view to achieving progressively the full realization of the rights recognized in the present Covenant by all appropriate means, including particularly the adoption of legislative measures.

The specific obligations incumbent upon each State to provide education to their people depends on the resources available to it. As a country develops, those responsibilities increase. In other words, the obligation is not necessarily to provide universal education, but to work towards the provision of universal education, making the best possible use of resources and prioritising its development as befits a human right.

The same can now be said of the Internet. Most States may not be in a position to provide all of their citizens with universal access, but the right of access to the Internet means that all States have an obligation to work towards progressive realisation of this goal.

For some States, particularly if Internet penetration is low and resources are limited, other baseline responsibilities need to be addressed to create a legal and regulatory environment that encourages the development and use of the Internet. For example, it might be necessary to promote competition by breaking up historic government monopolies over the provision of Internet services, which have been shown to obstruct the development of the sector. These issues are explored in more detail in Part III.

I.3 Regulating the Internet

It is clear that, as it is a vehicle for expressing oneself, regulation of the Internet must conform with the general standards applicable to regulation of other

expressive media. As the special mandates on freedom of expression stated in their 2011 Joint Declaration:

Freedom of expression applies to the Internet, as it does to all means of communication. Restrictions on freedom of expression on the Internet are only acceptable if they comply with established international standards, including that they are provided for by law, and that they are necessary to protect an interest which is recognised under international law (the 'three-part' test).³¹

Conceptually, this duty is analogous to the obligation that exists with regards to other mediums of communication.

The three-part test referred to above comes from Article 19(3) of the *International Covenant on Civil and Political Rights (ICCPR)*,³² a treaty ratified by 167 States as of April 2012, which states:

- (3) The exercise of the rights provided for in paragraph 2 of this article carries with it special duties and responsibilities. It may therefore be subject to certain restrictions, but these shall only be such as are provided by law and are necessary:
 - (a) For respect of the rights and reputations of others;
 - (b) For the protection of national security or of public order (ordre public), or of public health or morals.

This means that States can only legitimately impose restrictions on the Internet where such restrictions are set out in a clear legal rule, pursue a legitimate aim, and are necessary in order to protect that aim, which implies that they limit the right to freedom of expression no more than is necessary to protect the aim.

Where States engage in overt measures to control the Internet – such as deleting websites or cutting off or reducing service – this clearly engages the right to freedom of expression. This is no different from seizing copies of a newspaper or destroying a publication's presses. At the same time, in most cases, simply extending measures designed for other communications mediums, such as newspapers or broadcasting, to the Internet will not provide adequate protection to the right to freedom of expression, because such measures fail to take into account the special nature of the Internet.

Regulation of the Internet raises a number of new and challenging issues. For example, given the Internet's anonymous nature, and the importance of anonymity to the open discussion fostered online, overly intrusive monitoring mechanisms violate the right to freedom of expression via the Internet by undermining the quality and candour of online expression. The global nature of the Internet raises difficult jurisdictional issues. The ease of sharing information over the Internet has also challenged traditional approaches towards intellectual property. The Internet is

³¹ Adopted 1 June 2011, para. 1(a). Available at: <http://www.law-democracy.org/wp-content/uploads/2010/07/11.06.Joint-Declaration.Internet.pdf>.

³² UN General Assembly Resolution 2200A(XXI), adopted 16 December 1966, in force 23 March 1976.

also different from other mediums inasmuch as it is almost universally accessible. The famous quote that freedom of the press is guaranteed only to those who own one no longer really applies.³³ Closely related to this is the ability of the Internet to support new, democratic public spaces for debate (virtual public squares). The importance of maintaining these spaces in a democracy needs to be taken into account in the face of regulations which would undermine the ability of these spaces to function.

Regulatory measures are unlike the measures required to foster universal access to the Internet. They are often negative in nature – in the sense of prohibiting States from taking certain actions rather than requiring them to take a particular action – and in any case they cost little to implement beyond the expenses incurred in ensuring that the regulatory regime is consistent with international freedom of expression standards. As a result, States are required to respect these principles immediately and any failure to do so is a violation of the right to freedom of expression on the Internet.

Part II: Major Regulatory Issues

The Internet as a medium is poorly suited to traditional conceptions of law and jurisdiction. A great part of the Internet's value comes from its borderless character, which allows ideas to spread instantaneously from one corner of the world to another. As the Arab Spring and the Occupy protests of 2011 demonstrated, acts of political expression in one country can be extremely relevant to likeminded people elsewhere. However, this also means that regulation in one part of the world can have an impact on the Internet experience of all users. As a result, while the Internet should not be a lawless or unregulated place, a critical aspect of the Internet's development must involve a harmonisation of regulatory regimes in order to respect and preserve the Internet's international character.

Harmonising different legal regimes is always a major challenge, and particularly so when dealing with human rights. Since the adoption of the ICCPR, which protects freedom of expression in generalised terms, progress in universalising the specific protections for this right have been limited. Although clear international standards on free expression issues such as defamation have emerged, cultural differences and divergent legal traditions have prevented them from being universally applied. In this respect, as in so many others, the Internet is a game changer due to its globalising power. National boundaries simply do not translate in an online context. Where cultural differences between States might previously have justified divergent approaches to a particular issue, the universality and inherent nature of the Internet means that, in many cases, discordant national attempts at regulation will be simultaneously harmful and ineffective. They will be ineffective because the Internet

³³ A. J. Liebling, "Do you belong in journalism?", *The New Yorker*, 14 May 1960.

transcends traditional notions of jurisdiction. A single State's attempts to crack down on a particular practice will in most cases easily be subverted, at least by those with some degree of technical prowess. However, such attempts are also harmful to freedom on the Internet, since they give rise to a capricious legal environment, and differential standards depending on one's technical skill level. In essence, territorial standards are ill suited to a borderless online world, with the potential to chill the development of the Internet as a whole.

As a result, it is important for the international community to prioritise the adoption of globally harmonised standards for the Internet. A significant risk here, however, is that such standards may not be in line with international human rights standards. Harmonisation is only useful inasmuch as it promotes the universal value of the Internet and creates an environment conducive to the growth and enjoyment of the Internet.

Many of the regulatory problems listed here require significant further research in order to establish global "better practices." This Part provides a sketch of the major regulatory issues that need to be addressed, as well as preliminary thoughts on how these problems should be reconsidered in light of the need to respect freedom of expression on the Internet.

II.1 Net Neutrality

Net neutrality is a key Internet regulatory issue which has been the subject of extensive debate globally. Without delving too deeply into the technicalities, the debate over net neutrality stems from claims that increasing use of the Internet for bandwidth-intensive activities, such as streaming high-quality video or downloading large files, is straining the capacity of service providers and slowing down the Internet for all users.

Several solutions have been proposed to address this alleged congestion. These include instituting fees per distance that data packets travel,³⁴ throttling large consumers of bandwidth or users of particular services³⁵ or, most controversially, the institution of a "tiered" Internet allowing users to pay in order to have their data prioritised.³⁶ These proposals have been criticised for being contrary to the principle of net neutrality, which holds that all Internet traffic should be handled in a non-discriminatory fashion.

³⁴ Vytautas Valancius *et al.*, "How Many Tiers? Pricing in the Internet Transit Market", paper presented to ACM SIGCOMM 2011, Toronto, Canada, 17 August 2011. Available at: <http://conferences.sigcomm.org/sigcomm/2011/papers/sigcomm/p194.pdf>.

³⁵ *Comcast Corp. v. FCC*, 600 F. 3d 642 (D.C. Cir. 2010).

³⁶ Al Franken, "Net Neutrality is Under Attack... Again", The Huffington Post, 8 November 2011. Available at: http://www.huffingtonpost.com/al-franken/net-neutrality-is-under-a_b_1082225.html.

States have approached this regulatory issue in different ways. In July 2010, Chile became the first country in the world to legally guarantee net neutrality.³⁷ Between June and September 2010 the European Union held a public consultation on net neutrality regulation, but ultimately decided against legislating on the matter, determining that transparency and media scrutiny would be sufficient to keep the Internet free and open.

Political wrangling around net neutrality continues in the United States, but for the time being the Federal Communication Commission's (FCC) Open Internet Order governs the issue.³⁸ The three main rules in the Order are a requirement of transparency regarding network management practices, a prohibition on blocking legal content, and a prohibition on "unreasonable discrimination" against legal content (defined as distinctions that go beyond "reasonable network management"). The precise meaning of this remains unclear, but the explanatory note to the Order suggests that while some traffic management to mitigate or reduce congestion may be justified, particularly to prevent heavy-users from crowding out everyone else, broad-brush throttling measures and premium prioritisation schemes will not be permitted.

Pinning down the ideal regulatory formula is beyond the scope of this analysis, but regulatory agencies should structure their frameworks in line with the understanding that access to the Internet is a human right and, consequently, the model which allows for the best and most affordable universal access should be adopted. The claim, made by proponents of a tiered Internet, that increasing profits for service providers is necessary in order to spur further investment which will in turn provide a faster Internet for all users, deserves to be investigated along with other claims.³⁹ However, the Internet's status as a human right means that any scheme which would result in the poor being priced out of the online world, or which would reduce connection speed and utility among the rural or disadvantaged, should be rejected.

A human rights framework should also be incorporated into wider debates about which network regulatory model will provide the best service. In the course of the 2007 inquiry by the FCC into broadband industry practices, the Motion Picture Association of America (MPAA) submitted a comment that, "Any policy efforts relating to Net Neutrality must promote the protection of intellectual property."⁴⁰ This claim, like all other claims, in particular those made by vested

³⁷ See Boletín N° 4915-19. Available at http://www.camara.cl/pley/pley_detalle.aspx?prmID=5300 [in Spanish].

³⁸ Preserving the Open Internet, Final Rule, 76 FR 185 (23 September 2011). Available at: <http://www.gpo.gov/fdsys/pkg/FR-2011-09-23/pdf/2011-24259.pdf>.

³⁹ Arshad Mohammed, "Verizon Executive Calls for End to Google's 'Free Lunch'", The Washington Post, 7 February 2006. Available at: <http://www.washingtonpost.com/wp-dyn/content/article/2006/02/06/AR2006020601624.html>.

⁴⁰ WC Docket No. 07-52. Available at: <http://apps.fcc.gov/ecfs/document/view?id=6519529325>.

interests, needs to be assessed in light of the overriding need to focus on providing a faster and more effective Internet for all users.

II.2 Copyright and Intellectual Property

Among the most contentious regulatory issues are those surrounding the protection of intellectual property online. Although intellectual property rights holders have a legitimate interest in ensuring that their rights are protected, several countries have passed or are in the process of discussing laws that take an overly heavy-handed approach to the issue of online piracy.

One of the most common approaches to regulating online piracy is through “notice and takedown” provisions, such as those found in the United States’ Digital Millennium Copyright Act (DMCA)⁴¹ or the European Union’s Directive on Electronic Commerce.⁴² In essence, the notice and takedown system grants content hosts immunity from liability for copyright infringement perpetrated by their users as long as they act expeditiously to remove the content once notified. In practical terms, the DMCA procedure is that if a copyright owner discovers their material online they must provide the host of the content with notice including information on how to locate and identify the material, a statement of good faith belief that there is no legal basis for use of the work (such as fair use or fair dealing), and a statement that the complainant is or is authorised to act on behalf of the copyright holder. The host must then remove the content, with a requirement to notify the individual who perpetrated the alleged infringement after the material has been removed.

The “notice and takedown” system has been criticised for placing an onus on content hosts to enforce copyright claims without proper judicial process. Because their immunity is conditional on speedy compliance, and because they do not want to risk liability, content hosts generally do not investigate whether the copyright claims are legitimate, or whether the material in question could fall under one of the exceptions to copyright. From a legal perspective, it is safer for them just to comply with any notices they may receive. Under the DMCA, the problem of false notifications is meant to be addressed through the counter-notice mechanism, whereby the alleged infringer provides notice to the content host of their intent to challenge the removal, along with their consent to refer the matter to an appropriate judicial body. If the copyright owner does not respond to the counter-notice by filing a lawsuit for copyright infringement within fourteen days, the ISP is required to restore the material.

Despite these safeguards, there is evidence that DMCA provisions have been abused. In 2008, an organisation presumed to be representing the Church of Scientology filed over 4000 takedown notices with YouTube over a period of 12 hours for videos

⁴¹ Pub. L. No. 105-304, 112 Stat. 2860 (Oct. 28, 1998).

⁴² Directive 2000/31/EC of the European Parliament and of the Council of 8 June 2000 on certain legal aspects of information society services, in particular electronic commerce, in the Internal Market.

that were critical of Scientology.⁴³ Although many users responded with counter-claims, they nonetheless had their content, and in some cases their accounts, suspended while YouTube dealt with the procedure. The Church of Scientology has also used the DMCA to force Google to delist critical websites, though they are by no means the only offender.⁴⁴ Creationist groups are known to have employed similar tactics to silence their opponents.⁴⁵ The United States District Court for the Northern District of California found in 2008 that Universal Music Corporation had abused the DMCA through a takedown request over a YouTube video.⁴⁶ The video contained a clip of children dancing to a song by Prince, the audio of which was of poor quality and which was only audible for about twenty seconds. The Court found that the video so obviously constituted fair use that Universal had acted indiscriminately and in bad faith by filing the takedown.

The DMCA includes sanctions for knowingly abusing the law, which were notably applied in the case of *Online Policy Group v. Diebold*.⁴⁷ Diebold was a Californian company that manufactured electronic voting machines, which had been criticised following allegations that the machines were faulty. An unknown person published leaked (or possibly stolen) internal emails from Diebold employees that suggested the company knew about the flaws, and relevant quotes from the emails were subsequently duplicated over the Internet. In response, Diebold sent out dozens of letters alleging that the reprinting of the emails was a copyright violation, and demanding that they be taken down. Nearly all of the content hosts complied, but one, the Online Policy Group, fought back alleging that Diebold was abusing the DMCA. The judge found that the republications obviously constituted fair use, and that Diebold could not have reasonably believed that reprinting the emails was a copyright violation. As a result, the court ordered Diebold to pay USD125,000 in damages. Although the *Diebold* case ended with a just resolution, it illustrates well the potential for abuse within the notice and takedown system. Dozens of content hosts other than the Online Policy Group complied with Diebold's takedown requests, even though the company did not have a legal leg to stand on.

Critics of the notice and takedown system have advocated a move to a system involving greater due process, which would involve granting web users who are subject to a complaint the opportunity to respond before the material is taken down.⁴⁸ However, content owners have also expressed dissatisfaction with the

⁴³ Eva Galperin, "Massive Takedown of Anti-Scientology Videos on YouTube", Electronic Frontier Foundation, 5 September 2008. Available at: <https://www.eff.org/deeplinks/2008/09/massive-takedown-anti-scientology-videos-youtube>.

⁴⁴ "Google Asked to Delist Scientology Critics (#1)", Chilling Effects Clearinghouse. Available at: <http://www.chillingeffects.org/notice.cgi?NoticeID=232>.

⁴⁵ Bob Beschizza, "YouTube Bans Anti-Creationist Group Following DMCA Claim", Wired, 16 September 2007. Available at: <http://www.wired.com/wiredscience/2007/09/youtube-support/>.

⁴⁶ *Lenz v. Universal Music Corp.*, 572 F. Supp. 2d 1150 - Dist. Court, ND California 2008.

⁴⁷ 337 F. Supp. 2d 1195 (N.D.Cal. September 30, 2004).

⁴⁸ See <http://www.laquadrature.net/en/notice-action-eu-commission-must-put-freedom-of-expression-first>.

current procedure, and have argued for the system to be strengthened and expedited further, in their favour.

Given the evidence of abuse of the DMCA, it is troubling that the political winds appear to favour even harsher anti-piracy laws, including some measures which allow for Internet service to be cut off entirely for users accused of copyright infringement. In France, for example, the Creation and Internet Law establishes a complaints driven three-strike process for violations of intellectual property.⁴⁹ After three complaints about a particular IP address, the web-service provider is required to suspend the user's Internet access services. Significantly, the user is also blacklisted from obtaining Internet access services from any other company for a period of up to a year. A similar three-strikes approach to cutting off Internet access was adopted in South Korea with the 2009 revisions to the Korean Copyright Act.⁵⁰ In the United Kingdom, the Digital Economy Act,⁵¹ passed in 2010, empowers the government to block Internet access from any location where copyright is being infringed, or where infringement is being facilitated. The United States' SOPA proposal would have enabled intellectual property rights holders to obtain court orders barring advertisers from doing business with sites that enable or facilitate copyright infringement, and have required search engines and even domain name registrars to delist these sites.⁵²

Several of these measures have faced stiff resistance. As mentioned above, debate over the SOPA bill was put on hold after a massive campaign against its passage. In the United Kingdom, the government announced that they would halt implementation of the provision of the Digital Economy Act that allowed Internet access to be blocked, also after a public outcry.⁵³ The constitutionality of the Korean Copyright Act has also been questioned.⁵⁴

The idea of a right of access to the Internet has important implications for measures which lead to preventing individuals from accessing the Internet entirely, since such measures would need to be justified under the three-part test for restrictions on freedom of expression, described above. Given the extreme nature of these sanctions, it is difficult to see how measures that allow for access to be blocked with little or no due process, or which establish a reverse onus on users to justify their Internet use, could stand up to such scrutiny.

⁴⁹ Loi n°2009-669 du 12 juin 2009 favorisant la diffusion et la protection de la création sur internet, J.O., 12 June 2009, 9666.

⁵⁰ Sun Young-Moon and Daeup Kim, "The Three Strikes Policy in Korean Copyright Act 2009: Safe or Out?" 6 *Wash LJ Tech & Arts* 171 (2011).

⁵¹ 2010, c. 24.

⁵² U.S. Bill H.R. 3261, Stop Online Piracy Act, 112th Cong., 2011. Available at: <http://thomas.loc.gov/cgi-bin/bdquery/z?d112:h.r.3261>.

⁵³ "Government drops website blocking", BBC News, 3 August 2011. Available at: <http://www.bbc.co.uk/news/technology-14372698>.

⁵⁴ Sun Young-Moon and Daeup Kim, note 50.

Beyond the regulatory problems noted above, this Internet presents a more fundamental question about the underlying rules regarding protection of intellectual property. A balance needs to be found between safeguarding freedom of expression and the open character of the Internet, on the one hand, and providing appropriate protection to intellectual property rights, on the other. In finding this balance, the fact that the Internet has fundamentally changed both attitudes towards and realistic possibilities of protection of intellectual property has to be taken into account. It is unrealistic to expect a generation weaned on filesharing to accept a return to the restrictive rules of the past regarding intellectual property. The emergence of the Pirate Party, whose political agenda focuses almost entirely on intellectual property law reform and which now holds seats in the European Parliament, is an illustration of how attitudes are changing.

This does not mean that there should be no protection for intellectual property. Indeed, even the Pirate Party does not advocate this, instead suggesting that copyright terms should be limited to five years.⁵⁵ While rights-holders would likely consider this to be unrealistic, current copyright protections, which generally extend either fifty or seventy years beyond the death of the creator, could also be seen as extreme, particularly when contrasted with patents, which generally expire after twenty years.⁵⁶

One might also question why copyright protection should persist even after the death of the intended beneficiary, namely the creator. With increasing numbers of copyrights now being held by (immortal) corporations, the “life-of-the-artist” itself has become conspicuously archaic as a yardstick. It is somewhat ironic to hear complaints by rights-holding organisations about how traditional judicial remedies for copyright infringement are ill equipped to deal with digital piracy, when these same groups are fighting for the maintenance of a system so obviously crafted for an earlier age.

Questions may also be raised as to the scope of copyright protection. The *Diebold* case is a good example of how copyright law has expanded far beyond its original purpose of protecting the livelihoods of artists and writers. Based on this purpose, it is difficult to understand why the internal emails of employees at a manufacturing firm require copyright protection at all.

Some rights-holders have adapted to the shifting values of the online age. Within the music industry, there has been considerable debate over the implications of filesharing. Although the recording industry is a major lobbyist in favour of tougher anti-piracy laws, many prominent musicians have embraced filesharing as an

⁵⁵ International Pirate Party, “International – English – The Pirate Party”. Available at: <http://www.piratpartiet.se/international/english>.

⁵⁶ For further discussion of the onerous nature of modern copyright law, see the work of David Vaver, a good introduction to which can be found at: <http://www.slaw.ca/2006/04/25/publishers-and-copyright/>.

effective way of marketing their music and connecting with their fans.⁵⁷ Others have experimented with new business models, most notably the band Radiohead, which released an album free for download over the Internet and then invited users to pay whatever they thought was appropriate.⁵⁸ Other bands have advocated subscription models, where users pay a flat monthly rate that entitles them to download or listen to unlimited material.⁵⁹

Time, and the market, will tell if any of these approaches are broadly sustainable over the longer term. But by seeking the strict enforcement of traditional copyright law and refusing to acknowledge how the Internet has changed the situation, major rights-holding organisations risk marginalising their own position. The spread of the Internet should be viewed as an opportunity for meaningful reform and dialogue about the protection of intellectual property, with a view to arriving at an appropriate balance between the interests of creators and those of the public.

II.3 Defamation

A lot of judicial attention, including at the international level, has been devoted to achieving a proper balance between protecting reputations through defamation law and ensuring respect for freedom of expression. As a result, a number of international standards on this have been widely recognised. These include the idea that defamation should be a matter for the civil, rather than the criminal, law, based on the idea that criminal defamation laws cannot be justified as “necessary” given that civil laws provide adequate protection for reputations.⁶⁰ Similarly, remedies for defamation should be proportionate, and a written retraction or apology or a small monetary payout should usually suffice, unless the victim can show that he or she has suffered real monetary damage. Public bodies should not be permitted to sue for defamation, since free and open criticism of their work is an important part of the democratic process. Public officials do have the right to bring defamation cases to protect their reputations, but the law should reflect the fact that their position means that they are required to tolerate a greater degree of criticism than ordinary citizens. All of these standards, established to deal with offline statements, are equally applicable to the Internet.

⁵⁷ Steve Hargrave, “Singers Challenge Lily Over Download Debate”, SkyNews, 19 October 2009. Available at: <http://news.sky.com/home/showbiz-news/article/15408601>.

⁵⁸ Angela Monaghan, “Radiohead challenges labels with free album”, The Telegraph, 2 October 2007. Available at: <http://www.telegraph.co.uk/finance/markets/2816893/Radiohead-challenges-labels-with-free-album.html>.

⁵⁹ Helienne Lindvall, “Behind the Music: Moguls and musicians thrash out filesharing”, The Guardian, 13 September 2010. Available at: <http://www.guardian.co.uk/music/musicblog/2010/sep/13/behind-the-music-filesharing>.

⁶⁰ Joint Declaration of the UN Special Rapporteur on Freedom of Opinion and Expression, the OSCE Representative on Freedom of the Media and the OAS Special Rapporteur on Freedom of Expression, 10 December 2002. Available at: <http://www.cidh.oas.org/relatoria/showarticle.asp?artID=87&IID=1>.

However, the Internet has given rise to new issues regarding defamation law. First, because defamation is based on harm to one's reputation, defamation suits could traditionally be filed in any jurisdiction where such harm was caused, which generally meant anywhere the harmful material was distributed. However, material published on the Internet can be accessed anywhere in the world. This gives rise to an enormous potential for "forum-shopping" in online defamation suits, whereby well-financed litigants can file suit in jurisdictions where the laws are most favourable to them.

There is, as a result, a need to rethink the concept of jurisdiction in the context of online defamation cases. Subjecting all online comments to a vast patchwork of different standards for defamation is impractical and would chill free speech by forcing writers to adopt a "lowest common denominator" approach whereby all expression was crafted to avoid liability in those jurisdictions which are most restrictive with regards to freedom of expression.⁶¹ It could also lead to people erecting "walls" within the Internet to prevent their speech from being accessible in countries with problematic defamation laws, curtailing the Internet's borderless character. A good solution to this problem was proposed in the 2011 Joint Declaration on Freedom of Expression and the Internet of the four special international mandates on freedom of expression – United Nations (UN) Special Rapporteur on Freedom of Opinion and Expression, the Organization for Security and Co-operation in Europe (OSCE) Representative on Freedom of the Media, the Organization of American States (OAS) Special Rapporteur on Freedom of Expression and the African Commission on Human and Peoples' Rights (ACHPR) Special Rapporteur on Freedom of Expression and Access to Information:

Jurisdiction in legal cases relating to Internet content should be restricted to States to which those cases have a real and substantial connection, normally because the author is established there, the content is uploaded there and/or the content is specifically directed at that State. Private parties should only be able to bring a case in a given jurisdiction where they can establish that they have suffered substantial harm in that jurisdiction (rule against 'libel tourism').⁶²

Another issue which requires rethinking in the Internet age is the traditional understanding of harm. This idea is rooted in a village context of reputation and honour; early defamation laws were adopted mainly to try and prevent duelling. However, traditional understandings of reputation do not necessarily correspond to the freewheeling world of online discussion.

This problem is illustrated by the United States case of *Bock v. Scheff*.⁶³ Carey Bock had hired Sue Scheff's company to help her with a family issue and, unhappy with

⁶¹ Toby Mendel, *Mapping Digital Media: Reference Series No. 1: Online Media and Defamation* (2011, Online, Open Society Foundations). Available at: http://www.soros.org/initiatives/media/articles_publications/publications/mapping-digital-media-online-defamation-20110503/online-media-and-defamation-20110503.pdf.

⁶² Note 25, clause 4(a).

⁶³ *991 So.2d 1043*, (Fla. 4th Dist. 2008).

the services she received, Ms. Bock posted negative comments about Ms. Scheff and her company in an online forum for parents with troubled kids. Ms. Scheff sued Ms. Bock for defamation and, when Ms. Bock neglected to contest the suit (she subsequently claimed to have been unable to afford a lawyer), Ms. Scheff was awarded more than US\$11 million in damages. There is a clear difference between Ms. Bock as an individual venting her frustrations online and a newspaper publishing a damning exposé of a particular business. The former is far more likely to be taken with a grain of salt. However, as this case illustrates, civil law (at least in the United States) has yet to take this distinction into account. The chilling effect of judgments like this, which subject every critical comment made on every message board to massive potential liability, and their potential to undermine the ability of the Internet to stimulate public debate, are obvious.

This is not to say that defamed parties should be denied any remedy. Indeed, the growing importance of online advertising and commerce means that one's online reputation is important and often commercially valuable. But there are alternative remedies to damage awards that are arguably better suited to the online context. One is the right of reply, whereby aggrieved parties are given a chance to respond in the same manner in which the defamatory material was disseminated. Long a staple of the print media, the right of reply is even more appropriate in an online context since the democratisation of discourse is the essence of the Internet. Although the exorbitant size of the settlement is why *Bock v. Scheff* stands out, it might be argued that the entire case was unnecessary since Ms. Bock's comments were posted on a public message board where Ms. Scheff was free to respond on equal terms. Absent demonstrable material harm – such as the loss of a client as a result of a posting – there is no discernable reason why netizens should not be allowed to decide for themselves who is in the wrong after hearing both sides of the story.

Traditional understandings regarding what constitutes publication and republication are also ill suited to the online context. In many countries, every republication of a defamatory statement constitutes a new act of defamation. But online publication is in effect continuous, and laws need to be adapted to accommodate this. Furthermore, even printed references to defamatory statements can be considered as separate acts of defamation.⁶⁴ This means that merely hyperlinking to a defamatory statement can lead to liability, a state of affairs which obviously undermines the free exchange of information online.

This ties into the issue of liability for ISPs or websites hosting or publishing defamatory material. In the United States, the Communications Decency Act of 1996⁶⁵ provides broad immunity to any “interactive computer service” such that they are not considered publishers when handling material produced entirely by third parties. In *Barrett v. Rosenthal*,⁶⁶ this immunity was found to extend to

⁶⁴ *Lindley v. Delman*, 25 P. 2d 751 (1933).

⁶⁵ 47 U.S.C. § 230.

⁶⁶ *Barrett v. Rosenthal* (2006) 40 Cal.4th 33 [51 Cal.Rptr.3d 55, 146 P.3d 510].

deliberate acts of republication by web users. The defendant in that case, Ilena Rosenthal, came across a letter on the Internet which contained false information about Dr. Stephen Barrett, a psychiatrist notable for campaigning against alternative medicine and health fraud. She reposted the letter on two alternative medicine newsgroups. The California Supreme Court ultimately ruled that she had immunity since she had neither authored nor edited the letter in question.

This approach differs from that in several other jurisdictions, which have yet to revisit their defamation laws. In Argentina, Google and Yahoo! have been subjected to numerous injunctions ordering them to remove search engine links to allegedly defamatory material. Some of these judgments have also ordered the search engines to remove all links to “similar sites”, a near practical impossibility for them.⁶⁷

In the European Union, the Directive on Electronic Commerce provides absolute protection for those who act as mere conduits of information. Hosts of user-generated content are protected so long as they remove material once they are aware of its defamatory nature, or of facts pointing to this.

The similarity between this process and the notice and takedown procedures applied to copyright infringement have produced similarly problematic results, whereby content hosts take an overly cautious approach rather than risk liability. This is exacerbated by the complexity of defamation law, as well as the enormous potential costs of losing a case (or even fighting one). Once again, in establishing a proper standard it is instructive to examine the 2011 Joint Statement of the special international mandates on freedom of expression:

a. No one who simply provides technical Internet services such as providing access, or searching for, or transmission or caching of information, should be liable for content generated by others, which is disseminated using those services, as long as they do not specifically intervene in that content or refuse to obey a court order to remove that content, where they have the capacity to do so (‘mere conduit principle’).

b. Consideration should be given to insulating fully other intermediaries, including those mentioned in the preamble, from liability for content generated by others under the same conditions as in paragraph 2(a). At a minimum, intermediaries should not be required to monitor user-generated content and should not be subject to extrajudicial content takedown rules which fail to provide sufficient protection for freedom of expression (which is the case with many of the ‘notice and takedown’ rules currently being applied).⁶⁸

More generally, in order to adapt defamation law properly to the Internet age, wider contextual factors need to be taken into account. It has long been recognised that

⁶⁷ See CELE, *Emerging Patterns in Internet Freedom of Expression: Comparative Research Findings in Argentina and Abroad*. Available at: http://mediadevelopmentresearch.com/wp-content/uploads/2010/01/InternetandFoE_CenterforStudiesonFreedomandExpression.pdf.

⁶⁸ Note 25, clause 2.

redress for defamation is limited by the overall public interest, so that where it is in the public interest for even a defamatory statement to be made, liability should not ensue. Many variables have traditionally been taken into account in determining whether or not this is the case, including the identity of the complainant and the author, the intentions of the author, the nature and tone of the allegation, the source of information upon which the statement is based, the public interest and urgency of the subject, and whether or not the author contacted the complainant prior to publishing it.

In the Internet age, it is relevant to apply these considerations not only to the public interest in the particular statement, but also the forum in which it is made. As a space for public debate, the Internet provides users with unprecedented freedom to engage in lively debate on issues large and small. There is a clear public interest in maintaining this state of affairs. As a result, the approach to imposing liability for defamation needs to consider not only the statement itself, but also the nature of the forum in which it was made, and the implications of imposing liability for that forum. As the special mandates stated in their 2011 Joint Declaration:

Standards of liability, including defences in civil cases, should take into account the overall public interest in protecting both the expression and the forum in which it is made (i.e. the need to preserve the ‘public square’ aspect of the Internet).⁶⁹

II.4 Other Content Restrictions

Several of the points raised above, in relation to defamation, also apply more generally to all restrictions on content on the Internet. This is the case, for example, for the rules on jurisdiction and intermediary liability.

Content filtering, widely seen as an inappropriate system for protecting against illegal content, is already being carried out in many countries. While restrictions at the national level can occasionally be justified – for example where they are designed to locate and block the spread of computer viruses – any such measures must meet strict requirements of necessity and proportionality. It is clear, for example, that broad brush filtering of the type carried out by the Chinese government is not acceptable as a restriction on freedom of expression under international law. The Chinese measures include restrictions on searching for particular news items, such as the Tiananmen Square protests, and the blocking off of entire websites, notably many human rights organisations such as Amnesty International. Although China’s “Great Firewall” is the best known example, they are far from the only country that carries out widespread Internet censorship.

It is important that any measures to restrict content are imposed in a transparent manner. While blocking off a particular website might occasionally be justified, such

⁶⁹ *Ibid.*, clause 4(b).

as a site wholly dedicated to promoting racial violence in a region where there was a real risk of such violence taking place, governments should be open and transparent about any and all censorship measures. For instance, users attempting to visit a blocked website should be presented with a message stating that the website has been blocked, rather than a generic error message.

Even where liability is not at issue, traditional means of censorship, such as blocking potentially offensive material at the border, are problematic in an online context since a Balkanisation of the Internet would undermine its universal and globalising power. As a result, governments should be wary of imposing the same strict standards on online content that they might consider appropriate for printed or broadcast material, since greater leeway is the price of keeping the Internet free and open.

Content restrictions designed to address the problem of spam are a particularly difficult issue. Anti-spam measures are necessary to conserve bandwidth and to protect users from intrusive mass marketing. Far from being a mere annoyance, the unrestricted proliferation of spam constitutes a threat to the Internet's value and character. However, there are difficulties in defining just what constitutes spam and in striking a balance between controlling true spam and overbroad measures. Canada's anti-spam law, which requires users to expressly opt-in to receiving emails unless there is an existing business relationship, provides an interesting model in this area.⁷⁰

II.5 Commercial Regulations

In many countries, the spread of Internet access has been largely driven by commercial opportunities specifically enabled by the Internet. And regardless of whether or not users go online specifically to conduct business, the commercial regulations that govern the Internet impact the browsing experience of everyone. It is, therefore, important that regulatory regimes are designed to foster and protect electronic commerce, while at the same time respecting human rights and other social values on the Internet.

Providing appropriate protection for consumers is a key part of this. Many potential consumers, particularly in the developing world where the Internet is a new phenomenon, have a natural distrust for the detachment and distance involved in online commerce. A Chinese vending site, Alibaba.com, got around this problem by setting up its own escrow service to ensure that consumer payments would not go through until the customer was satisfied.⁷¹ However, many countries lack

⁷⁰ An Act to promote the efficiency and adaptability of the Canadian economy by regulating certain activities that discourage reliance on electronic means of carrying out commercial activities, S.C. 2010, c. 23. Available at: http://lois-laws.justice.gc.ca/PDF/2010_23.pdf.

⁷¹ Bruce Einhorn, "How China's Alibaba Is Surviving and Thriving", Bloomberg Businessweek, 9 April 2009. Available at: http://www.businessweek.com/magazine/content/09_16/b4127059272628.htm.

companies that possess the scale and technical acumen to set up this kind of service. As a result, governments should develop regulatory frameworks that provide adequate protection for consumers in the context of e-commerce. Some countries in the developed world have already done this.⁷²

Another element of building trust is consumer awareness, with a concomitant need for transparency on the part of ISPs and others. The key here is informed consent, with a need for companies to provide accessible and understandable terms of service that ensure that consumers are aware of the nature of the agreements that they enter into. In the online context, this is complicated by the widespread use of clickwrap and browsewrap agreements, whose legal status remains poorly defined.

Browsewrap agreements are so-called because they are presented on websites, accessible by browsing. Nearly every commercial website contains terms of service in the form of browsewrap. However, the legal force of these terms and conditions is unclear. In the case of *Register.com v. Verio*,⁷³ a court of appeal in the United States held that browsewrap terms were legally binding, and that the defendant company could rely on implied consent even if the plaintiff was never actually presented with the terms. It was sufficient that the website informed them that terms existed and provided a link to them. By contrast, a Canadian case, *Zhu v. Merrill Lynch HSBC*,⁷⁴ found that the defendant company could not rely on a limitation of liability to indemnify them for the nearly \$10,000 that the plaintiff had lost as a result of problems with their online stock trading service because the waiver was never specifically presented to the user. A further factor in that case was the convoluted language in which the terms of service were written. The plaintiff, a software engineer with considerable trading experience, complained that he had been unable to understand them. The judge noted that if a user with as much expertise as the plaintiff found the language impenetrable, there was an obvious problem with the way it had been written.

Clickwrap agreements differ in that they are directly presented to consumers, and require the user to specifically assent to their enforceability (generally by clicking a button that says "I Agree"). These are commonly bundled with software as an end-user licence agreement (EULA), where acquiescence is required as part of the installation process. Although the level of consumer awareness (or consumer culpability for their own ignorance) is higher with clickwrap than with browsewrap, it is questionable whether these agreements actually constitute informed consent since consumers rarely actually read the contracts contained therein, many of which are long and filled with complex legal jargon. The fact that lengthy clickwrap agreements have become such a ubiquitous presence in the digital world, and the

⁷² See, for example, The Consumer Protection (Distance Selling) Regulations (U.K.), 2000 No. 2334, available at: <http://www.legislation.gov.uk/ukxi/2000/2334/contents/made>; and Industry Canada, Office of Consumer Affairs, *Internet Sales Contract Harmonization Template* (Ottawa: 25 May 2001), available at: [http://www.ic.gc.ca/eic/site/oca-bc.nsf/vwapj/Sales_Template.pdf/\\$FILE/Sales_Template.pdf](http://www.ic.gc.ca/eic/site/oca-bc.nsf/vwapj/Sales_Template.pdf/$FILE/Sales_Template.pdf).

⁷³ 356 F.3d 393 (2d Cir. 2004).

⁷⁴ 2002 BCPC 535 (B.C.S.C.).

fact that most consumers do not experience any notable direct consequences from their acquiescence, give rise to a natural tendency to treat the contracts as a mere nuisance. On the other hand, businesses in every industry have a right to draw up reasonable terms of service. There is an argument that if consumers refuse to take the time to acquaint themselves with the terms of the contracts they enter into, it is hardly fair to blame the businesses for their customers' wilful ignorance.

The common law of contracts generally holds that when an agreement contains particularly onerous terms it is incumbent on the drafter to take special measures to ensure that the other party is made aware of them. This principle should hold true for clickwrap and browsewrap agreements. However, at the moment there are no accepted standards for what constitutes an onerous clause, and what constitutes appropriate notice, potentially leaving consumers in a legal vacuum. Given the fact that very few users actually read clickwrap or browsewrap agreements, and even fewer are capable of understanding them, this is an issue that needs to be resolved in order to ensure effective and consistent consumer protection in the context of online commerce.

Related to this are issues of jurisdiction which, given the international nature of electronic commerce, also requires international agreement in order to ensure that wronged parties have an effective remedy. Although some international standards have emerged to guide electronic commerce,⁷⁵ many major issues in this field have yet to receive sufficient attention.

II.6 Data and Privacy Protection

Another vital measure to ensure that users trust online communications, which is key to the use of the Internet as a medium for enabling freedom of expression, is the protection of user privacy. This applies to private sector actors, such as Internet service providers and commercial websites, as well as to governments.

The ins and outs of online privacy have been the subject of voluminous scholarly research. What is relevant to this analysis is the understanding that the value of the Internet as a vehicle for the right to free expression is significantly dependent on users' feelings of anonymity. The protests in Iran and the Arab Spring occurred in the context of highly repressive regimes, where political expression is a dangerous business. The Internet allowed young dissidents to congregate and develop solidarity, and the protesters felt confident in participating in this political discourse because of their perceptions of the Internet as an anonymous space. Take away that anonymity, and the Internet's value as a forum for open discourse is diminished.

⁷⁵ OECD (2002), *Best Practice Examples under the OECD Guidelines on Consumer Protection in the Context of Electronic Commerce*, OECD Digital Economy Papers, No. 61, OECD Publishing. Available at: <http://dx.doi.org/10.1787/233574467655>.

The importance of anonymity to the candour of online debate is not limited to repressive nations. When TechCrunch.com, a popular web forum for the discussion of technology products, changed its format to require users to attach their real name to any comments left, they found that the site, which had been known for hosting blistering criticism of sub-standard products, lost its scathingly honest character.⁷⁶ The importance of anonymity to online expression was recognised by the Council of Europe Declaration on Freedom of Communication:

In order to ensure protection against online surveillance and to enhance the free expression of information and ideas (...) States should respect the will of users of the Internet not to disclose their identity.⁷⁷

Limitations to online privacy are commonly found in both civil and criminal legislation. On the criminal side, some degree of surveillance by the authorities can be justified as necessary for protecting national security, or for stopping cybercrimes, such as the spread of child pornography. The issue is when do such measures start to trench on human rights. There is also a tension between online anonymity and the rules on defamation and intellectual property since, in some instances, protection of reputation and property rights is possible only where anonymity is lifted. Once again, finding the right balance for the online world can be difficult.

Several jurisdictions have already put in place excessively intrusive measures which undermine anonymity on the Internet. Italy requires all users of cyber cafés to register with a photo ID, and requires the managers of these cafés to track the websites each user visits.⁷⁸ These rules place Italy in the same category as Syria when it comes to Internet monitoring, with both countries claiming that the measures are necessary to fight terrorism.⁷⁹ The Egyptian Telecommunication Regulation Law also infringes on user anonymity by forbidding the use of any encryption technologies without written permission from the telecommunications regulatory authority, the armed forces, or national security bodies.⁸⁰ Although the post-revolutionary government claimed to have been “looking into” changing this provision, it was still in force as of January 2012.

⁷⁶ Tom Standage and Martin Giles, *The Economist: Babbage Podcast*, 16 November 2011. Available at: <http://www.economist.com/blogs/babbage/2011/11/babbage-november-16th-2011>.

⁷⁷ Council of Europe, *Declaration on Freedom of Communication on the Internet*, Principle 7 (2003). Available at:

http://www.coe.int/t/information/society/documents/Freedom%20of%20communication%20on%20the%20Internet_en.pdf.

⁷⁸ Sofia Celeste, “Want to check your email in Italy? Bring your passport”, *The Christian Science Monitor*, 4 October 2005. Available at: <http://www.csmonitor.com/2005/1004/p07s01-woeu.html>.

⁷⁹ Lester Haines, “Syria orders cybercafe owners to ID customers”, *The Register*, 14 March 2008. Available at: http://www.theregister.co.uk/2008/03/14/syria_cybercafe_measure/.

⁸⁰ Egypt Telecommunication Regulation Law, Law No. 10 of 2003, Art. 64. Available at: http://www.tra.gov.eg/uploads/law/law_en.pdf.

In South Korea, popular websites are now required to collect the names and national identification numbers of users before they can post comments or upload content.⁸¹ This change was part of a package contained in the Cyber Defamation Law, passed in an attempt to combat cyber-bullying following two high-profile suicides. While cyber-bullying is a serious problem, this case illustrates the problem of passing new laws as a reaction to the worst cases. The Cyber Defamation Law had an immediate negative effect on Internet speech, among other things leading YouTube to block users registered as South Korean from uploading or commenting on videos. Although the YouTube ban is easily circumvented – South Korean users merely need to shift their registration setting to a different country – the move nonetheless demonstrates the skittishness of content providers in the face of overly intrusive legislation, and the way that laws challenging online anonymity can damage the web environment. As a general rule, governments need to take care when responding to dramatic incidents, and to resist knee-jerk calls for new legislation, without paying sufficient attention to whether or not proposed measures would erode fundamental freedoms.

It is also important for privacy protections to extend to personal information collected by private sector operators, in particular those operating for commercial gain. Once again, a key issue is informed consent, with consumers being presented with clear and easily understandable information on how their data will be used and shared before they provide it. Many data protection regimes give individuals a right to review and correct data, and the idea of a right to withdraw consent for the use of data, otherwise known as a right to be forgotten, is gaining currency.⁸² These rules should be subject to an effective complaints and enforcement mechanism to ensure that users continue to view the Internet as a safe space for candid conversation.

Further Research and Policy Issues

- What are the implications of recognition of a right of access to the Internet for network management, taking into account capacity and cost issues?
- Is it realistic to try to pursue broad international harmonisation in the area of Internet regulation, taking into account how difficult this is? Or are there particular areas where international harmonisation is more important and achievable? Or do we need to look to other policy approaches?
- Are there new and innovative policy ideas for striking an appropriate balance between preserving the open character of the Internet and providing protection to intellectual property rights in the online

⁸¹ Martin Williams, “Google Disables Uploads, Comments on Youtube Korea”, PC World, 13 April 2009. Available at:

http://www.pcworld.com/article/162989/google_disables_uploads_comments_on_youtube_korea.html.

⁸² David Zax, “Europe, Data, and the 'Right to Be Forgotten'”, technology review, 25 January 2012. Available at: <http://www.technologyreview.com/blog/helloworld/27525/?p1=blogs>.

environment?

- What role should be allocated to intermediaries in terms of preventing piracy, defamation and other illegal expressive conduct on the Internet? Do “notice and takedown” rules have any legitimate role here?
- How should approaches to allocating liability and damages for defamation be adapted so as to respect freedom of expression in an online context?
- In what circumstances can broad Internet filtering mechanisms be justified? Is it legitimate to distinguish between the treatment of content that can be considered to undermine the communicative capacity of the Internet – such as spam – and other types of content?
- When should clickwrap and browsewrap agreements be considered legally binding and when should arrangements that stimulate greater user engagement be required?
- Is the trend towards imposing lower barriers to government surveillance in the online world appropriate? What minimum level of procedural safeguards against abuse should be put in place?
- What minimum global standards are needed in relation to companies that collect and store personal information in order to ensure respect for freedom of expression and privacy?

Part III: Challenges in Providing Universal Access

If access to the Internet is a human right, States have a concomitant obligation to work towards ensuring universal access for their citizens. At the moment, there is a clear gap (commonly referred to as the digital divide) between Internet penetration in the developed and the developing world. However, as the Internet has become increasingly available in the developing world, country disparities are largely giving way to gaps between the world’s wealthy and urbanised citizens, and those who are poor and rural.

There are three major obstacles to universal access to the Internet. The first is a lack of infrastructure. Although this problem is obviously most pervasive in the developing world, it is also an issue that hinders Internet access in rural or isolated communities in the developed world. The second major challenge is affordability, whereby people that have access to functioning infrastructure are nonetheless unable to afford access to the Internet. The third major challenge is social, with factors such as a lack of computer literacy or of awareness about the potential benefits of the Internet contributing to unwillingness or inability to take advantage of going online.

There is a strong nexus between these three challenges, which in many instances reinforce one another. Most of the world's least connected societies are impacted to some degree by all three. As a result, there is no single solution to facilitating universal access. However, the advance of mobile Internet has the potential to mitigate each of these obstacles substantially, and it therefore represents what is probably the most promising technology going forward.

III.1 Infrastructure

A major obstacle to universal Internet access is the lack of availability due to infrastructural deficiencies. At a national level, technological advances as well as high levels of investment mean that nearly every country in the world is now connected to the Internet. For example, the construction of several massive submarine communications cables around Africa, beginning with the SAT-3/WASC and SAFE cables, brought high speed Internet to some of the world's poorest States.⁸³ However, the problem of connecting individual users to these networks remains significant.

III.1.1 Universal Access Schemes

In the developed world, several countries are currently in the final stages of implementing universal access schemes. In July 2010, Finland passed a law requiring telecoms operators to put in place the infrastructure for universal broadband access, with the goal that by 2015 99% of businesses and permanent residences will be no more than 2 km from a fibre optic or cable connection.⁸⁴ If telecom companies cannot provide this infrastructure through charging "reasonable fees", the law allows them to apply for financial aid from the Ministry of Transport and Communications, with the expectation that 5% of the population, representing some 120,000-130,000 households, will require subsidisation. Where subsidies are required, telecoms operators are expected to cover 34% of the costs, with the remainder coming from public sources, namely the government and the European Union (EU). The Finnish Telecommunications regulatory authority has budgeted €66 million (approximately USD86 million) for this, with an additional €24.6 million (USD32 million) coming from the EU's Rural Development Fund.⁸⁵ This works out to a connection cost of between €1,056 and €1,144 (USD1370) per rural household, with about €700 to €750 (USD900 to 975) coming from the government and the EU.

A similar scheme is being implemented in Argentina, which is investing nearly 8 billion pesos (USD1.85 billion) to extend broadband access to each of the country's

⁸³ "East Africa gets high-speed web", BBC News, 23 July 2009. Available at: <http://news.bbc.co.uk/2/hi/africa/8165077.stm>.

⁸⁴ Finland, Ministry of Transport and Communications, *Internet*. Available at: <http://www.lvm.fi/web/en/internet>.

⁸⁵ Finland, Finnish Communications Regulatory Authority, *Broadband 2015 Project* (3 September 2010). Available at: <http://www.viestintavirasto.fi/en/index/internet/laajakaista/laajakaista2015-hanke.html>.

10 million households (about half of which were already connected) by 2015.⁸⁶ The Canadian province of Nova Scotia also has a scheme for universal broadband access.⁸⁷ 93,500 households have been connected at a cost CAD75 million (USD74 million), divided between the government and the contracted service providers, which works out to just over CAD800 (USD790) per connection.

III.1.2 Universal Access v. Community Access

Given the high costs associated with universal access schemes, some States have chosen instead to pursue a policy of connecting communities to the Internet. However, even this can come at a high cost. Taiwan's Broadband Access to Every Village programme spent a total of NT96.5 million (USD3 million) to connect 46 remote villages, a rate of over USD65,000 per village.⁸⁸ Given that Taiwan is a relatively small and densely populated country, the costs for implementing a programme like that in Chad or Sudan would likely be exponentially higher. The difficulties of implementing either universal access or community access are further compounded in the developing world by the lack of widespread parallel communications infrastructure, such as cable or telephone networks, through which Internet could be carried.

Thus the infrastructural obstacles to providing broadband access universally, even on a community basis, are considerable, often requiring enormous investment. It is neither practical nor reasonable to expect, in the short term, that this kind of funding for Internet access will be available in the world's poorer countries. In the developed world, however, these types of investments will often be affordable, as evidenced by the fact that several jurisdictions have successfully implemented them.

Given the status of the right of access to the Internet, universal access schemes should be prioritised and those States which have the necessary resources should construct the infrastructure required to guarantee Internet availability to all. In most countries, a purely commercial approach will not suffice, due to high 'last mile' costs, so consideration should be given to a mix of public subsidies and private investment. Regulatory tools can also push telecoms companies to use profits from operations in urban areas to fund the infrastructure necessary to facilitate rural access.

The amount of public investment, and the pace at which universal access targets can be achieved, depend on a State's means and level of development. All States,

⁸⁶ Argentina, Secretaría de Comunicación Pública, *Plan Nacional de Telecomunicación Argentina Conectada* (18 October 2010). Available at: http://www.argentina.ar/_es/pais/C5121-plan-nacional-de-telecomunicacion-argentina-conectada.php [in Spanish].

⁸⁷ Canada, Nova Scotia, Department of Economic and Rural Development and Tourism, *Broadband for Rural Nova Scotia* (1 December 2011). Available at: <http://www.gov.ns.ca/econ/broadband>.

⁸⁸ Republic of China (Taiwan), National Communications Commission, *NCC once again forges a No. 1 for Taiwan - Broadband for Villages* (28 January 2008). Available at: http://www.ncc.gov.tw/english/news_detail.aspx?site_content_sn=226&is_history=0&pages=0&sn_f=448.

however, remain under an obligation to promote universal access, and this requires that both regulatory and financial measures be considered to further this goal.

III.2 Affordability

Another challenge, which is often tied to the lack of infrastructure, is the high cost of Internet access at the individual or family user level. This is particularly true in developing countries, where the basic infrastructure for access often requires billions of dollars of investment. The organisations that invest this money, usually private consortiums or public-private partnerships, naturally attempt to recoup their investment through charges on users. When Africa's first submarine fibre telecommunication link, the SAT-3 cable, came online in 2001, some of the proprietary companies were charging up to USD10,000 per month for broadband access. This obviously priced the service beyond the means of most Africans, and only 17% of the cable's capacity was utilised.⁸⁹

III.2.1 The Poorest Pay the Most

Although fees almost everywhere have dropped over time, prices for broadband in the world's poorest countries remain among the highest in the world. Of the 18 countries that charge more than USD100 per month for fixed broadband Internet – namely Guinea, Malawi, Zimbabwe, Ethiopia, Sao Tomé and Príncipe, Cuba, Swaziland, Togo, Comoros, Tajikistan, Kiribati, Uzbekistan, Laos, Papua New Guinea, Yemen, Vanuatu, Angola and Belize – half are in Africa and nearly all are extremely poor.⁹⁰ This means that broadband service, while technically available, is practically accessible to only a small elite in these nations.

To some extent these high prices are the result of geographic challenges. It is notable that 11 of the 18 \$100+ countries either are landlocked – Ethiopia, Swaziland, Zimbabwe, Malawi, Tajikistan, Uzbekistan and Laos – or are remote islands – Sao Tomé and Príncipe, Comoros, Kiribati, Vanuatu. Given that the major cable connections are underwater, landlocked countries generally have to rely on their neighbours to get access, for which they often pay an exorbitant price. For example, although Namibia's telecoms monopoly was a shareholder in SAT-3, they initially declined to connect to the cable due to the prohibitive cost imposed by South Africa's Telkom for connecting through their Melkbosstrand landing point.⁹¹ Remote island nations are similarly at a disadvantage since they lack the opportunity to pool infrastructural costs, as African nations have done in

⁸⁹ Balancing Act, "SAT3 Fibre: Regulators and Policy Makers ask for 'Transparency on... Pricing and Good Governance'", Issue 316. Available at: <http://www.balancingact-africa.com/news/en/issue-no-316/telecoms/sat3-fibre-regulator/en>.

⁹⁰ International Telecommunications Union, *Measuring the Information Society* (Geneva: 2011), p. 73. Available at: <http://www.itu.int/net/pressoffice/backgrounders/general/pdf/5.pdf>.

⁹¹ Balancing Act, "SAT3 Fibre: Regulators and Policy Makers ask for 'Transparency on... Pricing and Good Governance'", Issue 316. Available at: <http://www.balancingact-africa.com/news/en/issue-no-316/telecoms/sat3-fibre-regulator/en>.

constructing the undersea cables that serve that continent. In both cases, these high costs are usually passed on to consumers.

III.2.2 The Role of Competition

Poor regulatory structures and a lack of competition also play a role in boosting user prices for access to the Internet. The confiscatory rates charged when SAT-3 came online must be understood in light of the fact that, at the time, it was the only broadband link to Africa, and that access in each country was generally controlled by a single company, often a government monopoly. The impact of competition on broadband prices can be dramatic. In July 2010, Nitel, the Nigerian company that controls access to SAT-3, was charging USD800 per month for 1mb/s broadband. That month its first rival in the broadband market, MainOne, came online and began offering the same service for USD500 per month. Nitel responded by slashing its prices in half to USD400 per month.⁹² By the end of 2010, prices for fixed broadband in Nigeria had dropped to USD54 per month.⁹³

Another example of the role competition can play is in South Korea, which has the world's highest rate of Internet penetration at 94% of all households.⁹⁴ This is largely the result of a period of growth between 2000 and 2002, when the number of Internet subscribers increased by 200% and the household penetration rate went from 27% to 69%. Although government policies to encourage digitisation played a role in increasing demand, the main driver for this rapid expansion was intense private sector competition, with the main players using aggressive marketing and low prices in an attempt to sign up as many users as possible. This level of competition is an extreme example, as it drove South Korea's third and fourth biggest service providers into receivership, while the second largest barely avoided the same fate.⁹⁵ The fact that this expansion nearly ended in monopoly demonstrates the need for States to engage in long term planning on how best to grow the Internet sector, rather than approaching regulation on an ad hoc basis. However, South Korea's rapid digitisation is also an example of the impact of competition in the Internet access market, and it presents a strong argument in favour of liberalisation and a relaxation of controls on new players entering the market, although of course policies need to take into account the particular situation in each country. With increasing numbers of undersea cables offering African users a wider choice of broadband providers, national regulatory policies that foster competition should lead to a moderation of extreme prices.

⁹² "Telecom Namibia, Botswana and Angola may link to SAT-3 cable" *Engineering News* (5 September 2006). Available at: <http://www.engineeringnews.co.za/article/telecom-namibia-botswana-and-angola-may-link-to-sat3-cable-2006-09-05>.

⁹³ International Telecommunications Union, *Measuring the Information Society*, note 90, p. 73.

⁹⁴ Ovum Consulting, "Broadband Policy Development in the Republic of Korea" (2009), p. 5. Available at: www.infodev.org/en/Document.934.pdf.

⁹⁵ *Ibid.* p. 6.

An important part of fostering competition is to eliminate excessively onerous limitations on who can enter the market. This is not to suggest that ISPs should be unregulated. Indeed, with the recognition that they are providing their users with a human right comes a responsibility to provide service that is reasonably priced, reliable and fairly distributed. However, within these parameters, regulatory policy should aim for healthy competition in an environment which is conducive to increasing access. This idea was expressed in the 2005 Joint Declaration by the special mandates on freedom of expression:

No one should be required to register with or obtain permission from any public body to operate an Internet service provider, website, blog or other online information dissemination system, including Internet broadcasting. This does not apply to registration with a domain name authority for purely technical reasons or rules of general application which apply without distinction to any kind of commercial operation.⁹⁶

III.2.3 Communal Access Points

Communal access points, such as Internet cafés, can also play an important role in making the Internet financially accessible. Peru presents an interesting model of this, with over 33,000 Internet “cabanas” having proliferated across the country. Working independently, these cabanas are how 85% of Peru’s Internet users get online. The World Bank has described the cabanas’ business structure as “the most viable model” for universal access in developing countries, and a similar strategy has met with some success in Brazil.⁹⁷

III.3 Social Issues and Demand

The third major obstacle to universal access is a lack of popular demand or interest in the Internet. This is a social rather than a physical or economic issue. The most widespread social problem limiting access to the Internet is low levels of Internet literacy.

Internet literacy, or the ability to use the Internet comfortably and effectively, is often linked with generational and economic factors. It is commonly thought that exposure to the Internet from a young age is the best way to acquire these skills. However, generational and economic factors are far from insurmountable, as the rapid expansion of Internet use in South Korea and the success of India’s computer industry demonstrate.

A more significant impediment than the lack of Internet literacy is, in many cases, a lack of basic literacy. Access to education is, of course, a challenge in its own right, a discussion of which goes beyond the scope of this analysis. However, the centrality

⁹⁶ Adopted 21 December 2005. Available at: <http://www.osce.org/fom/27455>.

⁹⁷ Amir Hatem Ali, “The Power of Social Media in Developing Nations: New Tools for Closing the Global Digital Divide and Beyond” (2011) 24 *Harv. Hum. Rts. J.* 185, pp. 205-208.

of the Internet to the modern global economy means that States should consider introducing web literacy into school curricula wherever they are able to do so.

Lack of education is not the only social issue that limits the spread of access to the Internet. This was exemplified by problems encountered in the e-Sri Lanka project. That programme, which was funded by the World Bank, allowed private individuals to apply for funding to set up Internet cafés (nenasalas) across Sri Lanka. Successful applicants received free computers and two years of free Internet, followed by two years of subsidised Internet. In return, the nenasalas would agree to provide tech-literacy training to the rural communities they served. As a supplementary measure, the government provided vouchers to the poor for subsidised Internet use. As of 2010, 600 nenasalas had been established, but despite the vouchers and the training, the level of public use of the facilities was low, and the programme has not had a noticeable impact on computer literacy rates. A World Bank report on the failures of this programme blamed the lack of interest partly on technical mistakes (for example, some of the computers provided had browsers which did not support either Tamil or Sinhalese fonts) and partly on a lack of Internet content that was relevant to local villagers.⁹⁸ This raises an issue about connecting societies that can be understood as one of critical mass.

III.3.1 Critical Mass

When a large number of people within a community are using the Internet (or for that matter a particular Internet service), connecting to the Internet becomes more appealing. The success of the social media platform Facebook is largely built on this idea. Users want to join Facebook because many of their friends and colleagues are on Facebook. Indeed, it is only when that is the case that Facebook offers users significant functionality. In other words, once a critical mass of users within a particular community is signed up, the service will continue to expand based on that momentum. But before a critical mass of users has been achieved in a particular community, however that might be defined, it is difficult to attract users to the service from that community because it only offers them limited social utility.

An analogous force applies to the Internet as a whole. Returning to the South Korean example, because there are so many South Koreans online, Korean users generate an enormous amount of Internet content, which is written in Korean and which is relevant to South Koreans. The high South Korean web presence also creates a virtuous circle, whereby international content providers or e-commerce businesses have an incentive to branch into the South Korean market, which in turn creates a richer online experience for South Korean users, attracting more of them to the web. Conversely, when dealing with communities with very low Internet penetration, such as the rural villages targeted in the e-Sri Lanka project, it is more difficult to garner interest since there is very little online content which is relevant to the target market. In their follow up in Sri Lanka, the World Bank recognised that relevant web

⁹⁸ Amir Hatem Ali, *ibid.*, p. 203.

content was essential to spurring public interest and amended their project to include this.

III.3.2 Linguistic and Cultural Factors

Various factors can either compound or alleviate social obstacles to increasing access to the Internet. Among the clearest is language. Communities that have a language that is widely spoken, such as English or Spanish, will have an easier time finding accessible content. This partially explains why English-speaking countries in the developing world, such as Jamaica, have relatively high rates of Internet use.⁹⁹ With 15.5 million speakers worldwide, most of whom live in Sri Lanka, attracting Sinhalese speakers to the Internet presents a more significant challenge.¹⁰⁰

Another interesting case is India, where only 11% of people speak English, a number that roughly corresponds to country's total number of Internet users.¹⁰¹ As a means of increasing interest, the Indian government is now allowing domestic domain name registration in Tamil, Hindi and Gujarati. Private sector firms have taken similar steps. In 2010, Google expanded into fourteen Indian languages, leading to a rapid growth in the blogosphere in those dialects.¹⁰²

Although linguistic issues can be a factor, their importance should not be overstated. Two of the most wired nations in the world, South Korea and Estonia, speak unique languages.¹⁰³ However, there is no denying that languages which are unique and concentrated among rural or poor communities, such as the indigenous South American language of Aymara, present a barrier to expanding Internet access to the regions where they are spoken, one that can best be alleviated through the creation of new content.

Related to the linguistic issue are cultural considerations, whereby communities which have been exposed to, and to a certain extent assimilated by, larger cultures will have an easier time finding relevant content. For example, users with an interest in western music will find a greater volume of content online than users interested in traditional local music. Although "Westernisation" is the most obvious process of this kind, it is not the only example. Exposure to Chinese or Arabic cultures, for instance, can similarly place people within a larger community of web users. This is not to suggest that a policy of cultural assimilation should be pursued

⁹⁹ 1.58 million users among 2.8 million people (56% of the population) according to World Bank Development Indicators. World Bank indicators place Jamaica 92nd in the world in per capita gross domestic product at purchasing power parity.

¹⁰⁰ M. Paul Lewis (ed.), *Ethnologue: Languages of the World, Sixteenth edition* (2009: Dallas, Texas: SIL International). Available at: <http://www.ethnologue.com/>.

¹⁰¹ Rajini Vaidyanathan, "Is 2012 the year for India's internet?", BBC News, 3 January 2012. Available at: <http://www.bbc.co.uk/news/business-16354076>.

¹⁰² Stephanie Nolen, "Will 'dot Bharat' help make the Internet more accessible to Indians?", *The Globe and Mail*, 10 November 2011. Available at: <http://www.theglobeandmail.com/news/world/worldview/will-dot-bharat-help-make-the-internet-more-accessible-to-indians/article2231739/>.

¹⁰³ M. Paul Lewis, note 100. Estonian has only 1 million speakers globally.

as a means of increasing access to the Internet. On the contrary, one of the great values of the Internet is its potential to connect diasporas and to protect traditional cultures. However, it is important to be aware of, and to take into account, the specific challenges of spurring interest among smaller or unique cultures.

III.3.3 Success Stories

Success stories may help us understand better how to foster a critical mass of users. The obvious place to start is South Korea. Although the rapidity of South Korea's digitisation can be attributed in part to the price war discussed earlier, national policies, particularly towards education, governance and commerce, paved the way. Starting in 2000, there was a drive to connect all schools to the Internet. Education services were offered online, including free tutorials for the national aptitude test and real-time online classes. South Korea also pioneered the use of e-government as early as the 1980s, pushing an increasing number of government services online in the late 1990s and early 2000s. The government reformed legislation to promote e-commerce early on, to create a positive environment for doing business online, including through strengthened security for online payment systems and for privacy.

Educational services were a significant component of the overall programme in South Korea. The popularity of gaming and business activities were also important drivers, and these in turn promoted the use of Internet for shopping, emailing and socialising, as well as more generally for the acquisition of information.¹⁰⁴

In Estonia, which also enjoyed rapid success in getting its population online, the government led the way in digitisation, most obviously by offering government services online. The Estonian government also created public-private partnerships as vehicles to foster a domestic information-technology industry, partly fuelled by the demand generated by the government's programme of digitisation. The Estonian model is not one that many developing nations can easily follow, however, since the country had several advantages. Prior to the collapse of the Soviet Union, Estonia was already home to several high tech research labs, giving the country a solid technological base to build on. Estonia also started out with a very high literacy rate. However, the Estonian case illustrates how government leadership in terms of providing digital services can play a strong role in promoting wider access to the Internet, both by creating demand for domestic information technology services and by encouraging citizens to use the Internet as a speedier and more efficient way of interacting with the State.

¹⁰⁴ Ovum Consulting, *Broadband Policy Development in the Republic of Korea* (2009). Available at: www.infodev.org/en/Document.934.pdf.

III.3.4 Interconnected Challenges

The three challenges examined so far – infrastructure, affordability and demand – are highly interconnected. There is a clear relationship between infrastructural deficiencies (which limit supply and require substantial investment to improve) and high prices, and both of these issues are linked to demand. High popular demand, in turn, can spur private sector investment in infrastructure. In an open regulatory environment, demand will also attract new providers fostering competition and lower prices, and creating a market for public access points. The relationships between these factors help explain why Internet access remains more expensive and difficult to spread in the developing world than in the developed world. However, as the next chapter demonstrates, the spread of mobile technology has the potential to impact on all three of these obstacles to universal access, providing a practical way forward for the developing world.

III.4 Mobile Internet: A Game Changer?

According to the International Telecommunications Union (ITU), cellular technology has been “the most rapidly adopted technology in history.”¹⁰⁵ By the end of 2011, there were nearly 6 billion cellular telephone subscriptions globally, including 79% penetration in the developing world. Although most of these are not broadband enabled, today there are more than twice as many mobile broadband subscriptions as fixed broadband subscriptions.¹⁰⁶ Although, like most new technologies, the use of mobile broadband has initially been concentrated in the developed world, several developing countries now have substantial populations of mobile Internet users. In South Africa, 27% of rural residents use mobile Internet, while among urban dwellers, that number rises to 39%.¹⁰⁷

The technical aspects of how to set up a national cellular network are beyond the scope of this Report, and it is important to note that this provides some margin of error for understanding the potential benefits of mobile Internet. However, there are indications that mobile Internet has the potential to extend Internet access to rural and poorer parts of the world far more efficiently than would be possible using fixed line connections, and that its development could substantially mitigate the obstacles described in the preceding chapters.

III.4.1 Potential Advantages: Infrastructure

First and foremost, the nature of the infrastructure required for mobile Internet could alleviate many of the challenges associated with extending Internet

¹⁰⁵ International Telecommunications Union, *The World in 2009: ICT Facts and Figures*. Available at: http://www.itu.int/ITU-D/ict/material/Telecom09_flyer.pdf.

¹⁰⁶ *Ibid.*

¹⁰⁷ Eleanor Seggie, “More South Africans accessing Internet from mobile phones”, Engineering News Online, 2 February 2011. Available at: <http://www.engineeringnews.co.za/article/more-south-africans-accessing-internet-from-mobile-phones-2011-02-02>.

infrastructure to rural and sparsely populated regions. The spread of fixed-line Internet access in developing countries has been stymied by the lack of existing telephone or cable networks, which could also carry Internet. While mobile Internet does require some infrastructure, the costs and difficulties of constructing this are less than for a fixed-line broadband network, particularly in relation to “last-mile” costs.¹⁰⁸ This cost efficiency is subject to a multiplier effect due to the fact that many poorer areas of the world are already equipped with mobile networks. In other words, where no fixed-line network exists, it often makes more sense to build Internet provision into an existing mobile network, or even to construct a new mobile network, than to create a fixed-line network purely for broadband.

In addition, there are indications that mobile broadband infrastructure is hardier, an advantage in areas that are prone to natural disasters. During Haiti’s devastating earthquake in January 2010, the country’s only fibre-optic undersea cable was disconnected. While the earthquake also impacted cellular communications, the damage done did not eliminate communications entirely, and it was quicker and easier to repair that system.¹⁰⁹

III.4.2 Potential Advantages: Affordability

The reduced infrastructure costs go some way to explaining why, in many parts of the world, mobile Internet is already a cheaper option for getting online. Although mobile Internet prices are higher in the developing world, in countries such as Kenya, Sri Lanka and Vietnam, a mobile Internet connection is cheaper than an entry-level fixed broadband plan.¹¹⁰ In addition, in many countries basic mobile Internet plans offer faster connection speeds than basic broadband packages.¹¹¹

The introduction of mobile Internet also depresses fixed broadband Internet prices by diversifying the marketplace. In Morocco, competition from 3G mobile broadband has been credited with contributing to a 44% decrease in prices for fixed broadband between 2008 and 2010.¹¹² This in turn led to a 50% increase in Internet penetration between 2008 and 2010, making Morocco one of the most connected countries in Africa.¹¹³

¹⁰⁸ “Optimising Spectrum for Future Service Needs”, GSM Association, 15 July 2006. Available at: http://www.itu.int/osg/spu/stn/spectrum/workshop_proceedings/Background_Papers_Final/Roberto%20Ercole%20-%20spectrum%20workshop%20nov%202003.pdf.

¹⁰⁹ Harry Goldstein, “Engineers Help NGOs Get Online After Haiti Quake”, IEEE Spectrum, 22 January 2010. Available at: <http://spectrum.ieee.org/telecom/wireless/engineers-help-ngos-get-online-after-haiti-quake>.

¹¹⁰ International Telecommunications Union, *Measuring the Information Society*, note 90, p. 81.

¹¹¹ *Ibid.*, p. 80.

¹¹² *Ibid.*, p. 76.

¹¹³ *Ibid.*, p. 18.

A similar success story can be seen in Nigeria where, between 2007 and 2009, Internet penetration quadrupled to over 40 million users.¹¹⁴ This is despite the fact that, as discussed earlier, Nigeria's Internet prices were previously some of the highest in the world. Although broadband prices remain out of reach for most Nigerians, mobile Internet is available for as little as 1000 naira (USD6) per month.¹¹⁵

III.4.3 Potential Advantages: Demand

Mobile Internet also has the potential to increase demand due to its social accessibility. Rather than presenting people with a new and unfamiliar product – namely a computer – mobile phones give users access to the Internet through a device with which many people are already familiar, due to the fact that mobile phones are already ubiquitous in many parts of the world. This could help in establishing the critical mass needed to popularise Internet use among smaller communities by reducing entry barriers. There are also 'literacy' benefits to this; users will find it much easier to make the small additional literacy jump relating to going online than to learn how to use a completely new product.

Unlike the e-Sri Lanka project, which required users to take the time to go to an Internet café and learn how to get online, mobile Internet has the potential to deliver Internet access into one's pocket, allowing users to try the service out on their own time.¹¹⁶ This ties into another advantage of mobile Internet, which is its convenience, allowing users to go online anywhere. Rather than blocking off a portion of their day to browse the Internet in cyber cafés or at home, users can log on when they are waiting for buses, or in line at a government office, or in any other situation where they have spare time. The increased demand that comes from this convenience seems to be demonstrated by the way mobile Internet use has exploded in Nigeria, Morocco and particularly Kenya, which is now Africa's fastest growing Internet market and where mobile broadband now accounts for 98.8% of Internet connectivity.¹¹⁷

III.4.4 From 3G to 4G

In many developing countries, mobile Internet is being embraced as a substitute, rather than as a compliment, to fixed-broadband connections.¹¹⁸ With the upcoming rollout of fourth generation (4G) mobile wireless technology, it seems possible that what was traditionally the chief drawback of mobile Internet, its slow speed, may

¹¹⁴ Kunle Aziz, "Of Internet boom and need to check cyber threats", National Mirror, 1 August 2011. Available at: <http://nationalmirroronline.net/business/infotech/17591.html>.

¹¹⁵ "Handsets and Tablets Plans", Glo Mobile. Available at: <http://www.gloworld.com/handsetsntablets.asp>.

¹¹⁶ More research is necessary to fully understand the technical requirements of spreading Internet access to existing mobile phone customers in the developing world.

¹¹⁷ International Telecommunications Union, *Measuring the Information Society*, note 90, pp. 17, 91.

¹¹⁸ *Ibid.*, p. 91.

become a thing of the past.¹¹⁹ The ability of 4G networks to operate on a greater number of frequency bands means that lower-frequency wavelength signals can be sent out. These signals travel further using the same amount of power, broadening and expanding geographic coverage.¹²⁰ Although the high price of 4G compatible handsets mean that, for the time being, the technology will remain out of reach for most people in the developing world, it is reasonable to expect that, like most new technologies, the price will come down in time.¹²¹ There is also the issue of the spectrum needs of mobile Internet, particularly using 4G networks, and competition among different uses for scarce spectrum.

This is not to suggest that mobile Internet, even with the rollout of 4G, should be seen as a silver bullet to the problem of universal access. One potential pitfall is that the increasing use of mobile Internet is challenging the ability of many mobile networks to keep up.¹²² Limits on data capacity, a regular feature of existing mobile Internet plans, become problematic as increasing numbers of users rely on mobile connections as their primary source of online access.

Nonetheless, mobile Internet has tremendous potential to extend Internet access quickly and efficiently. A 2011 report by the ITU, *Measuring the Information Society*, recognised this potential, and recommended that developing nations take steps to ensure that the potential of mobile Internet was properly utilised, including the allocation or assignment of 3G spectrum (including the 3G “extension band” which can be freed up by the switch to digital television). In order to deal with potential capacity and spectrum shortages, the ITU report recommended that countries continue to develop fibre-optic infrastructure as well, in order to ensure a reliable backbone for heavy traffic areas.¹²³ The ITU also recommended that governments adopt regulatory approaches that encourage open competition between Internet providers.

To help further promote universal access to the Internet, the ITU also recommends that countries require operators to channel some of their profits from densely populated areas to support infrastructure development in less profitable, rural zones. This is a good policy, which has served as the cornerstone of existing universal access initiatives.

¹¹⁹ “Super-fast mobile devices coming after UN approves 4G”, CBC News, 19 January 2012. Available at: <http://www.cbc.ca/news/technology/story/2012/01/19/tech-internet-imt-advanced.html>.

¹²⁰ “Broader 4G wireless access will accelerate economic development and improve quality of life in rural and developing regions of the world, say IEEE wireless experts”, Express Computer, 1 June 2011. Available at: <http://www.expresscomputeronline.com/20110615/news21.shtml>.

¹²¹ Doug Aamoth, “Verizon 4G: Fast But Expensive”, Time Techland, 3 December 2010. Available at: <http://techland.time.com/2010/12/03/verizon-4g-fast-but-expensive/>.

¹²² Tony Gray, “Increasing mobile network capacity without the technology upgrade”, Telecoms.com. Available at: <http://www.telecoms.com/16718/increasing-mobile-network-capacity-without-the-technology-upgrade/>.

¹²³ International Telecommunications Union, *Measuring the Information Society*, note 90, pp. 17, 91.

With the understanding of access to the Internet as a human right, this idea should be reconceived at an international level. It has been noted, by the ITU and others, that the poorest areas of the world pay some of the highest rates for the worst Internet service. Pricing a human right such that it is accessible to only a narrow elite is obviously unacceptable. But given the high costs associated with extending access, and the relative poverty of most of the countries where Internet penetration is lowest, this is not a problem that can be solved domestically. Careful attention should be given to the need for redistribution of resources for access not only within countries, but on a global scale, to ensure that the push towards universal access is a global effort, rather than one which is disproportionately bankrolled by the world's poor.

Further Research and Policy Issues

- Can we identify universal baseline standards, of either a procedural or substantive nature, regarding the right of access to the Internet that apply to all States regardless of their level of development?
- Can we develop standards for what minimum levels of investment and prioritisation are required to advance the right of access to the Internet in different countries?
- What sorts of specific policy prescriptions can be developed in relation to promoting the right of access to the Internet globally, regionally and at the country level?
- Are there better practices – such as public-private partnerships for last mile connectivity or requiring more profitable areas (i.e. urban areas) to subsidise less profitable ones – that can be promoted universally?
- What types of infrastructure provide the most cost effective route to universal access?
- What international policy measures are needed to prevent landlocked countries from being overcharged for Internet access? Are other policy or other measures needed to create more of a level playing field among countries in relation to Internet access? Are there creative ideas to help ensure that profits made by companies based in richer countries from their activities in poorer countries can be returned to the poorer countries?
- Are there standard regulatory prescriptions that promote competition among service providers while also ensuring adequate consumer protection and a responsible market environment?
- What policies should be applied to promote communal access points, for example in relation to location, public funding and ownership structures? What can we learn from the successes of Peru and Brazil, and the challenges in Sri Lanka, in terms of promoting communal access points for other countries?
- Given limited public resources, what sorts of interventions are most effective in breaking down social barriers to Internet access? Are public

education initiatives useful and cost effective?

- Can we map common types of challenges among countries which are, in relation to those challenges, similarly situated?
- What is the best way of fostering a “critical mass” of Internet users where one does not yet exist?
- What capacity bottleneck challenges are likely to arise if significantly more emphasis is placed on using mobile networks to access the Internet? What can be done to reduce these challenges?
- What policy and/or regulatory measures can be used to increase access to the Internet via mobile technologies?
- What are the implications of significantly increasing mobile Internet access in terms of the regulatory issues discussed in Part II?

Conclusion

The benefits of a free flow of information and ideas over an Internet which is accessible to a rapidly growing number of people globally have long been extolled, and by almost everyone. Analysing these issues from a human rights perspective, however, gives rise to a set of conclusions that, if largely in line with a benefits-based analysis, are different in important ways.

It is possible to distinguish two aspects of such an analysis: the relevance of human rights to regulation of the Internet and the idea of a right of access to the Internet. More thought has been given to the former, in part because it is relatively clear and uncontroversial that human rights guarantees, and in particular the right to freedom of expression, apply to regulation of the Internet, as an expressive medium. At the same time, much more thought needs to be given to how to design regulatory approaches which strike an appropriate balance between protecting recognised interests – such as intellectual property, reputation and combating crime – and freedom of expression over the Internet. It has become commonplace to note that one cannot simply apply traditional regulatory approaches to the Internet, but less thought has been given to how to design new approaches which do work in the online world.

The implications of recognising a right of access to the Internet are even more profound, requiring a fundamental rethink of the social, political and economic issues surrounding its spread and use. In *The Economist's* “Babbage” podcast of 29 February 2012, Jan Piotrowski, their Online Science Correspondent, defended a decision by AT&T, an important communications provider in the United States, to introduce new pricing structures for mobile Internet, stating:

AT&T is a business, it has every right to be greedy. The idea is its purpose is to make money for its investors and for its shareholders, not to be an altruistic giver of services. So long as other companies can undercut it, in one way or another, it should probably be allowed to do whatever it wants.¹²⁴

Without taking a position for or against the pricing changes, this quote is illustrative of precisely how issues around Internet access need to be reconsidered. While many would accept Piotrowski's argument as applied to a manufacturer of cars or widgets, it would find less acceptance as applied to the provision of educational or medical services. That is because the latter are not merely products, they are vehicles for protecting recognised human rights. Recognising a right of access to the Internet has significant implications for how we view the businesses environment through which such access is provided.

The purpose of this Report is not to provide answers to all the questions that arise as a result of analysing regulation of or access to the Internet from a human rights perspective. Rather, it seeks to frame the issues so as to help ensure that we are asking the right questions. It seeks to move the debate forward by providing an outline of the major regulatory, legal and policy issues that require further research, and by posing some of the key questions that such research, along with policy development work, should seek to answer.

Nonetheless, some conclusions can be drawn from the research conducted here. The first of these is that access to the Internet is a human right which gives rise to a progressive obligation upon all States to promote it as such. States have a responsibility to ensure that their regulatory regime is appropriately adapted to deal with issues of online speech, and that any restrictions on access to the Internet are consistent with the strict requirements of proportionality and necessity imposed by international law, and are set and maintained in an environment of transparency. Severe restrictions, such as online censorship or cutting off access to users entirely, should generally be understood as violations of the right to freedom of expression.

Access to the Internet has become essential for the full realisation of the right to freedom of expression in democratic countries, and is a fundamental ingredient in fostering the political speech which gives rise to democratisation in others. The low penetration rates in many countries, and pricing schemes that place access beyond the means of all but the wealthiest families, are a major global problem, as is the lack of demand in many parts of the world due to the absence of proper education or cultural content online. Mobile Internet holds great promise as a tool for extending access. It is not, however, a silver bullet and concerted global effort will be required in order to ensure that the Internet truly becomes a world-wide web.

¹²⁴ Jan Piotrowski and Martin Giles, The Economist: Babbage Podcast, 29 February 2012. Available at: <http://www.economist.com/blogs/babbage/2012/02/babbage-february-29th-2012>.

Today, the invention of the printing press is recognised as one of the seminal events of human history, allowing for an unprecedented democratisation of knowledge and ideas. As the Internet connects more and more of the world into a networked global society, humanity appears to have reached a similarly important moment. It is vitally important that policy makers the world over come to grips with the implications of this change, in order to ensure that all of humanity fully enjoys the benefits that accompany this momentous advance.