

## THE DIGITAL DIVIDE REVISITED: THE GRAND CANYON OF THE ONLINE ENVIRONMENT?

*by*

KEVIN M. ROGERS\*

*The second stage of the World Summit on Information Society (WSIS) in November 2005 resolved to tackle the problem of bridging the digital divide. There have been a number of initiatives aimed at bridging the digital divide, perhaps one of the more publicised is that of the \$100 laptop for each of the world's poorest children, as announced by Kofi Annan, the General Secretary of the United Nations during the WSIS summit.*

*However, the aim of this paper is to suggest that if the bridging of the digital divide is to truly realised then there needs to be a greater espousing of mobile (or 'm') commerce. Whilst 'traditional' Internet links are not to be rejected, only by increasing access to m-commerce will the inequality being seen on an international level be reduced. Predominantly, contemporary Internet usage requires inter alia connectivity to a server and electricity supply, solid appreciation of the English language and literacy and a good understanding of computers. These requirements are rarely fulfilled in societies within poor socio-economic contexts. Accordingly, the development of m-commerce, which does not always require physical telecommunications links, detailed knowledge of computer systems or even the English language, is essential not only to reducing the disparity in Internet connectivity, but also it will be shown that m-commerce usage can improve the lifestyles and economic well-being of the most impoverished people.*

---

\* Lecturer in Law, School of Law, University of Hertfordshire, United Kingdom; Member, England and Wales Law Society's Electronic Law Committee

## BACKGROUND [1]

The phrase 'digital divide' has become one of the buzz words of recent years. Whether one 'tackles', 'bridges', 'challenges' or 'closes' the digital divide, the fact remains that vast numbers of people around the world have no, or very limited access to the new virtual community which has developed over the past ten years over and above the existing international sovereignty structure. Statistics are thrown around indicating the severity of the problem. For instance, in 2005 only four million Indians purchased a personal computer. Although this sounds a large number, India has a population of over one billion people.<sup>1</sup> While in February 2006, the Financial Times reported that over half the world's population live more than three miles from a telephone line, "...never mind an internet connection".<sup>2</sup> Furthermore, the European Commission produced a report early in 2006 where they pointed to Africa having a continent wide broadband penetration of 0.1%, compared with 27.7% broadband penetration for Europe.<sup>3</sup> At the same time, a United Nations Conference Paper pointed to the statistic that a person in a high-income country is 22 times more likely to be an Internet user than a person in a low-income country.<sup>4</sup>

These figures can be compared with the British obsession with 'text-ins': who should be evicted from the Big Brother House? Who was your man-of-the-match in the game? What is the answer to a particular multi-choice question? The BBC reported that events like these led to a record 3.3 billion texts being sent in the month of May 2006 alone.<sup>5</sup>

However, it is suggested that it is somewhat naive to limit statistics regarding the digital divide solely to third world countries, and to limit it fur-

<sup>1</sup> Marketplace *Indian's Digital Divide* Monday 26<sup>th</sup> June 2006. Retrieved June 26, 2006, from <http://marketplace.publicradio.org/shows/2006/06/26/PM200606263.html>.

<sup>2</sup> Tansley, D *Mind the Gap: 2006 will witness the deepening of the digital divide* The Financial Times, 13<sup>th</sup> February 2006.

<sup>3</sup> European Commission Communication *Towards a Global Partnership in the Information Society: Follow-up on the Tunis Phase of the World Summit on the Information Society (WSIS) COM (2006) 181 Final*.

<sup>4</sup> United Nations Conference on Trade and Development *Digital Divide remain wide despite increased connectivity worldwide, UNCTAD finds* 6<sup>th</sup> July 2006. Retrieved November 15, 2006, from [http://www.unctad.org/en/docs/iteipc20065\\_en.pdf](http://www.unctad.org/en/docs/iteipc20065_en.pdf).

<sup>5</sup> BBC News *Texting levels reach record high* 26<sup>th</sup> June 2006. Retrieved June 27, 2006, from <http://news.bbc.co.uk/go/pr/fr/-/1/hi/technology/5117656.stm>. It is estimated that by the end of 2006, some 36.5 billion texts would have been sent by UK mobile phones in this year alone. This is an increase from 32 billion in 2005.

thermore simply to whether a person has access to a computer. The digital divide is wider than is often thought and extends into areas as education, software, language, wealth and skills. For instance, in the European Union around 37% of people have no basic computer skills (this includes countries like Greece, Italy and Portugal where over half of the population have no basic computer skills).<sup>6</sup> It is for these reasons that the outlook for closing the digital divide is bleak and defining the problem is significantly more complex than it may appear.

## TOWARDS A UNIVERSAL DEFINITION [2]

The digital divide explains the difference between those who can benefit from digital technologies and those who cannot. However, as touched on, this can include a wide range of people in a wide range of counties. Therefore, pinpointing a specific, encompassing definition of the problem is somewhat complex. Gonzalez states:

“One of the main difficulties in dealing with such a general term as ‘digital divide’ is that it has become an instant soundbite that encompasses any sort of inequality in the use of information and communication technologies. There is a danger that these instantly popular phrases become an empty-buzz world bereft of any meaning.”<sup>7</sup>

Bill Thompson, writing for the BBC commented:

“For some people...the ‘digital divide’ is not a real issue, and the focus on getting people connected, or providing them with hardware, is just a way of misrepresenting what really matters – ensuring that everyone has fair access to the necessities of life in the networked world and overcoming wider problems of social exclusion.”<sup>8</sup>

Yet, definitions aside it is essential that an effective method is found to bridge the digital divide, and as hinted at above, the closure of the gap will enable (in the words of Wild and Weinstein) “...*developing markets to supple-*

---

<sup>6</sup> PublicTechnology.net Press Release *More than a third of EU population have no basic computer skills* 22<sup>nd</sup> June 2006. Retrieved June 27, 2006, from <http://www.publictechnology.net/print.php?sid=5260>.

<sup>7</sup> Gonzalez, A. G. (2005). The Digital Divide: It's the Content, Stupid: Part 1. *Computer and Telecommunications Law Review*. 11 (3), p. 73.

<sup>8</sup> Thompson, B (BBC News) *How to rethink the digital divide* 9th January 2006. Retrieved June 9, 2006, from <http://news.bbc.co.uk/go/pr/fr/-/1/hi/technology/4594498.stm>.

ment economic growth and ... [eliminate]... poverty.”<sup>9</sup> Any discussion surrounding the digital divide is not simply ensuring that as many people as possible have access to a computer and the benefits of the Internet, but there needs to be an acknowledgement of consequences of successful bridging. The issue was discussed in some detail at the World Summit on Information Society (WSIS)<sup>10</sup> and although it was sidetracked somewhat by the extensive discussions on Internet governance and the eventual establishment of an Internet Governance Forum (IGF), the Report which immediately followed the second stage recognised the necessity of closing the digital divide:

“We recognise the existence of the digital divide and the challenges that this poses for many countries, which are forced to choose between many competing objectives in their development planning and in demands for development funds whilst having limited resources...We recognise the scale of the problem in bridging the digital divide, which will require adequate and sustainable investments in ICT infrastructure and services, and capacity building, and transfer of technology over many years to come...We will call upon the international community to promote the transfer of technology on mutually-agreed terms, including ICTs, to adopt policies and programmes with a view to assisting developing countries to take advantage of technology in their pursuit of development though, *inter alia*, technical cooperation and the building of scientific and technological capacity in our efforts to bridge the digital and developing divides.”<sup>11</sup>

After the first stage in Geneva, WSIS outlined a number of goals (along the line of the Millennium Development Goals of the United Nations). These included the target of having 50% of the world’s population connected to the telecommunications system by 2015, and ensuring (in the same timescale) that every village of the world has an Internet connection.<sup>12</sup>

---

<sup>9</sup> Weinstein, S., Wild, C. (2006). Closing the digital divide: who will invest in universal access? *Hertfordshire Law Journal*. 4 (1), p. 4.

<sup>10</sup> The first stage being held in Geneva in 2003 and the second hosted by Tunisia in November 2005.

<sup>11</sup> WSIS *Tunis agenda for the Information Society* 18th November 2005. WSIS-05/TUNIS/DOC/6 (Rev.1)-E. Retrieved November 2, 2006, from <http://www.itu.int/wsis/docs2/tunis/off/6rev1.html>.

<sup>12</sup> WSIS Plan of Action (Stage 1) Document WSIS-03/GENEVA/DOC/5-E 12<sup>th</sup> December 2003. Retrieved October 11, 2006, from [http://www.itu.int/dms\\_pub/itu-s/md/03/wsis/doc/S03-WSIS-DOC-0005!!PDF-E.pdf](http://www.itu.int/dms_pub/itu-s/md/03/wsis/doc/S03-WSIS-DOC-0005!!PDF-E.pdf). See also: BBC News *Annan calls for digital bridges* 16<sup>th</sup> November 2005. Retrieved October 11, 2006, from <http://news.bbc.co.uk/1/hi/technology/4443392.stm>.

Therefore, when considering a definition for the digital divide it is essential to consider the real benefits for individuals, not merely to define negatively, but to demonstrate the real socio-economic advantages that are achieved when the digital divide is successfully bridged.

### **THE INCENTIVE TO BRIDGE [3]**

There has been some considerable scepticism surrounding the digital divide, since the phrase was first coined the US Department of Commerce, who published a report in July 1995 entitled 'Falling through the Net' and analysed the numerical difference between white and black families in America connected to the Internet.<sup>13</sup> For instance, an article by Tim Jackson in the Financial Times in March 2001, written at the time where the government had set up a scheme to place 12,000 low-income households on to the Internet, displayed doubt at the digital divide and the methodology to bridge it:

"I'm not sure how much I believe in the "digital divide". And if it does exist I doubt the value of many of the proposed remedies for it...While 2% of the [British] population remains illiterate, money will probably be more effectively spent on promoting literacy and numeracy than on promoting computers and internet connections."<sup>14</sup>

Clearly the context in this example is United Kingdom-based, but the sentiments could be applied internationally. Why should money be spent to bridge the digital divide when there are inherent problems with literacy, education and physical needs which have yet to be resolved. Clive Witchells, writing in the Guardian in 2005, suggested that:

"...some people argue that the digital divide is a symptom of inequality, not the cause of it. What people in the developing world really need are water, food, jobs, decent healthcare and sanitation."<sup>15</sup>

However, the reasons for improving digital access are clear enough. At the United Nations General Assembly, held shortly after the second stage of WSIS, it was stressed that the Internet:

"...could help the poorest in the world gain access to information, edu-

---

<sup>13</sup> The Report is available at: <http://www.ntia.doc.gov/ntiahome/fallingthru.html> [15th November 2006].

<sup>14</sup> Jackson, T *The Dubious Divide* The Financial Times, 20<sup>th</sup> March 2001.

<sup>15</sup> Witchells, C *Bridging the Digital Divide* The Guardian, 17<sup>th</sup> February 2005.

cation and markets, as well as to harness their full development potential... [Furthermore that]...technology could enhance economic and human development and open up prospects for partnership and investment."<sup>16</sup>

It is suggested that instead of being a secondary concern that aid organisations and governments should be considering, by encouraging technological growth in poorer areas conditions will actually be improved. However, this presumes a number of factors, and unless these factors are adequately addressed, bridging the digital divide will remain purely an academic exercise, with limited effect.

First, that not all people are computer literate. As has been noted,<sup>17</sup> computer literacy cannot be taken for granted, indeed some people have no or very limited computer skills. Second, there is a presumption that a person is fluent in the English language. At present, around 90% of web pages are written in the English, which excludes those non-English speakers. Furthermore, even amongst those English speakers, illiteracy remains a considerable problem. Third, although the United Nations is correct in pointing to the benefits of using the Internet, connectivity is almost presumed; again as noted<sup>18</sup> this is not the case. In July 2006, the United Nations Conference on Trade and Development commented that in lower-middle class income countries, for 20 hours of lower-quality internet connectivity it costs, on average, one-third of a monthly salary. Furthermore, it was noted that there are approximately 1 billion people in 800,000 villages worldwide who have no Internet connection at all.<sup>19</sup> Fourth, there is the issue of affordability. Despite Kofi Annan's announcement of the sub-\$100 laptop, finance still needs to be found by in order to make this purchase, even though it seems their running costs will be relatively cheap as they are designed to be low-energy and powered by a wind-up crank, therefore not requiring a local electricity source.

These elements will require addressing if Internet access is to be improved. As Gonzalez notes, there is "...a strong link between economic wealth

---

<sup>16</sup> United Nations General Assembly GA/10451 *General Assembly endorses outcome of World Summit for Information Society* 27<sup>th</sup> March 2006. Retrieved June 9, 2006, from <http://www.un.org/News/Press/docs/2006/ga10451.doc.htm>.

<sup>17</sup> *Supra* n. 6.

<sup>18</sup> *Supra* n. 2.

<sup>19</sup> eGov Monitor *Digital Divide remains wide despite increased connectivity worldwide*, UNCTAD 6<sup>th</sup> July 2006. Retrieved July 7, 2006, from <http://www.egovmonitor.com/node/6638>.

and internet access within a population.”<sup>20</sup>The digital divide is not personified merely by a lack of access to a computer, but by a series of other issues, all linked to the economic well-being of the country. This is not a new finding, the Organisation for Economic Co-operation and Development (OECD) published a *Guide to Measuring the Information Society* in 2005, in which they produced guidelines for measuring the update of information technology. The Report noted:

“The economic and social issues associated with the digital divide hold true both within the context of individual countries and across countries. Indeed, early interest in ICT-related inequalities within countries accelerated when the linkages between ICT and economic development started to become apparent. The ideas of ‘ICT for development’ has been the driving force for much activity internationally, including the two World Summits on the Information Society in Geneva (2003) and Tunis (2005). Thus, the digital divide matters to the extent that ICT represents both: an historic opportunity for the evolution of our economies and societies; and has the potential to accentuate already existing and sizeable imbalances.”<sup>21</sup>

It seems, however, that the currently undecided issue is the perennial ‘chicken-and-egg’ discussion: which should be dealt with first, access to technology or the teaching of the skills needed to access this technology? Perhaps, as this paper will go on to suggest, a third contention should be included; one that will circumvent large amounts of this discussion concerning the problems with connectivity to the Internet.

#### **TUNING INTO WIRELESS [4]**

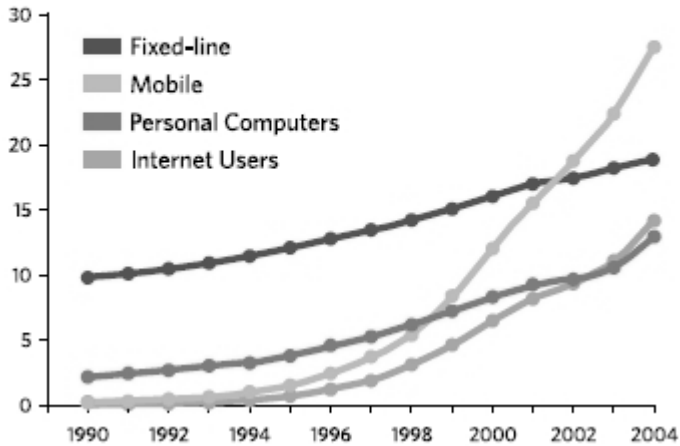
Access to mobile commerce is increasing at a rapid pace. Wild and Weinstein suggest that by 2007, mobile technology will be used by some 2 billion people, while also pointing to the World Bank’s view that already 77% of the world’s population live within range of a mobile network.<sup>22</sup> As the following illustration demonstrates, over a 14-year period, people connected to mobile networks has seen the sharpest growth, pitched against fixed-line communication, personal computers and Internet users:

<sup>20</sup> *Supra* n. 7, page 74.

<sup>21</sup> OECD Report *Guide to Measuring the Information Society* (2005), point 264, page 68. Retrieved November 10, 2006, from <http://www.oecd.org/dataoecd/41/12/36177203.pdf>.

<sup>22</sup> *Supra* n. 9, page 2.

Proportion of world population with telephone subscriptions, personal computers and internet connections, 1990-2004 (Percentage)



This growth shown in this Report<sup>23</sup> is continuing to rise. It is strongly contended that the reason for the growth of mobile communications is in part due to their ease of use, coupled with the complexity of establishing fixed network systems in the most rural and isolated of places. As an indication of this, Vodafone published a report examining the impact of mobile communications in the developing world. It highlighted that developing countries make up some 20% of the world's mobile phone usage. It also reported that in South Africa (a population of 44.8 million people), approximately 76% of people have access to a mobile, while 67% of people have access to a fixed line connection. The favoured m-commerce trend can be seen more clearly in Tanzania (a country with a population of 35.4 million people) where 97% of people have access to a mobile phone, while only 28% have access to a method of fixed-line communication.<sup>24</sup>

The report also points to a link between the increases in income for an individual who has had a mobile phone for over three years. For example,

<sup>23</sup> United Nations *Millennium goals Development Report*, (2006). Retrieved October 11, 2006, from <http://mdgs.un.org/unsd/mdg/Resources/Static/Products/Progress2006/MDGReport2006.pdf#search=%22Millennium%20Development%20Goals%20Report%202006%22>.

<sup>24</sup> Vodafone Report *Impact of mobile phones in the developing world* (2005). Retrieved November 10, 2005 from [http://www.vodafone.com/assets/files/en/SIM\\_Project\\_download\\_2.pdf](http://www.vodafone.com/assets/files/en/SIM_Project_download_2.pdf).



59% of Egyptian businesses and 62% of South African businesses reported that use of mobile phones had increased their company's profits. Mobile phones have also helped people in isolated locations to obtain medical advice and stay in contact with their family.<sup>25</sup>

The consequences of mobile commerce are being realised – particularly in the developing world. As the Vodafone Report states:

“The evidence highlights the extent to which mobile is a leap-frog technology, bringing communications to whole communities that previously had little or no access to fixed line telephones...Mobile is easier, cheaper and more flexible to deploy than fixed line communications, and mobile coverage delivers a basic infrastructure of communication to communities that road, rail and other communications infrastructure cannot reach as easily.”<sup>26</sup>

The evidence currently available is pointing towards a communication method that avoids the problem of fixed-line connections to the Internet (including cost, language and literacy weaknesses, isolated locations etc.) as a potential answer to bridging the digital divide. This has been seen in several news reports. For instance, in March 2006, The Times reported that there was one mobile phone for every nine Africans. They also profiled the story of Kabiru Gakungi from Kenya. Mr Gakungi is a herbalist and sells homebrew medicine, with the aid of a mobile phone: “*This phone has become my office*” he was reported as saying. It costs around £16 per month for air-time, yet he is able to run a successful business – even though his home has no running water or electricity. The article even notes that people are making a living out of charging-up mobile phones, as roadside vendors charge mobiles with car batteries.<sup>27</sup> Furthermore, Vodafone point to examples of two people in South Africa finding employment with the help of mobile communication and also farmers in West Tanzania can have their customers contact them through mobile communication to ensure that they have the correct amount of meat available.<sup>28</sup> The examples can continue – and more examples are mentioned by Wild and Weinstein.<sup>29</sup>

However, some of the problems that exist alongside the advantages of

---

<sup>25</sup> Ibid.

<sup>26</sup> Ibid. Page 4.

<sup>27</sup> Rice, X *Phone revolution makes Africa upwardly mobile* The Times (4<sup>th</sup> March 2006).

<sup>28</sup> Supra, n.24, page 2.

<sup>29</sup> Supra, n.9, pages 7-8.

mobile technology are that it is fairly costly to use. This is particularly the case in some developing countries, where some government have control over the telecommunication operators and accordingly hold a monopoly over the market, therefore ensuring they can keep the costs of use artificially high. However, monopolies are on the decrease. In 1997 there were 32 countries where monopolies were held by the state. This decreased to 22 countries in 2000, to 14 countries in 2004.<sup>30</sup> A secondary problem is that of the cost of the handset themselves, although the cost of handsets and accessories is decreasing. Indeed earlier this year, The Times reported that Safaricom were selling what was believed to be the cheapest mobile phone (designed by Motorola) at £20.<sup>31</sup> Furthermore, Freeplay Energy Plc recently announced that a wind-up mobile phone charger will soon be available in Africa. Approximately forty-five seconds of winding will lead to three minutes of talk-time and several hours of standby time.<sup>32</sup>

It is clear that the advantages of newer mobile technology far outweigh the negative aspects of the system and far outweigh the assistance provided by fixed line technology in bridging the digital divide. As BBC technology reporter Jo Twist stated recently:

“Mobile technology has, for some time, been making a difference in remote, undeveloped areas of the world where it is difficult and costly to build fixed-line infrastructure and net access. One reason for its success is its ease of use and its ability to conveniently overcome language and literacy issues. Net access in the traditional sense, via a computer, still needs some level of know-how, such as typing and reading skills. The mobile, in its simplest form, requires voice only.”<sup>33</sup>

Mobile technology is attracting a wider market, particularly in the African continent. The adoption of this technology is welcomed as the requirements needed for a fixed-line Internet connection, including electricity, a sound infrastructure in which the technology can be transported and a cer-

---

<sup>30</sup> United Press International *Mobile Industry is key to African future* (4<sup>th</sup> February 2006). Retrieved November 10, 2006, from [http://pda.physorg.com/lofi-news-mobile-africa-african\\_10545.html](http://pda.physorg.com/lofi-news-mobile-africa-african_10545.html).

<sup>31</sup> *Supra* n. 27.

<sup>32</sup> Freeplay Energy Plc Press Release *5 years African order for the Freecharge Mobile Phone Charger* (15<sup>th</sup> May 2006). Retrieved July 5, 2006, from [http://www.freeplayenergy.com/index.php?section=investor\\_relations&subsection=financialnews&page=11](http://www.freeplayenergy.com/index.php?section=investor_relations&subsection=financialnews&page=11).

<sup>33</sup> Twist, J *Pocket answer to digital divide* BBC Technology (18<sup>th</sup> November 2005). Retrieved November 10, 2006, from <http://news.bbc.co.uk/go/pr/fr/-/1/hi/technology/4446966.stm>.

tain level of literacy are not required to the same degree. M-commerce is – it is strongly contended – the key method in which the digital divide can be successfully bridged. However, in order m-commerce to really get off the ground, intergovernmental and stakeholder support is required.

## **THE INTERNET GOVERNANCE FORUM MEETS THE DIGITAL DIVIDE? [5]**

The first Internet Governance Forum (IGF) was held in Athens at the beginning of November 2006. It was an initiative that arose from the two-stage WSIS process. The second stage held in Tunisia in November 2005 saw the long-standing debate over who should govern the Internet reach an apparent culmination. The vast majority of parties involved (over 10,000 people from over 170 countries) announced their acquiescence to the final agreement, which allowed ICANN (Internet Corporation for Assigned Names and Numbers) to maintain responsibility for domain name allocation, while introducing a non-binding multi-stakeholder Internet Governance Forum to be set up alongside.<sup>34</sup>

The build-up to this agreement was incredibly tense, particularly between the American contingent, who wanted to ‘retain control’ of the Internet through ICANN and those countries who wanted a more representative governmental approach. John Dolittle, a Republican from the House of Representatives, stated:

Turning the Internet over to countries with problematic human-rights records, muted free-speech laws, and questionable taxation practices will prevent the Internet from remaining the thriving medium it has become today.<sup>35</sup>

Furthermore, Senator Norm Coleman stated there is no:

*...rational justification for moving Internet Governance to the United Nations...we cannot stand idly by as some governments seek to make the Internet an instrument of censorship and political suppression. We must stand fast against all attempts to alter the Internet's nature as a free and open global system.*<sup>36</sup>

---

<sup>34</sup> World Summit on the Information Society *Tunis Agenda for the Information Society* Document WSIS-05/TUNIS/DOC/6 18<sup>th</sup> November 2005. Retrieved December 12, 2005, from <http://www.itu.int/wis/docs2/tunis/off/6rev1.html>.

<sup>35</sup> Reuters Press Release *More Lawmakers back US control of the Internet* (21<sup>st</sup> October 2005). Retrieved October 24, 2005, from [http://www.boston.com/news/nation/washington/articles/2005/10/21/more\\_lawmakers\\_back\\_us\\_control\\_of\\_internet/](http://www.boston.com/news/nation/washington/articles/2005/10/21/more_lawmakers_back_us_control_of_internet/).

<sup>36</sup> BBC News Press Release *US resists radical Net overhaul* 20<sup>th</sup> October 2005. Retrieved October 20, 2005, from <http://news.bbc.co.uk/go/pr/fr/-/1/hi/technology/4357360.htm>.

Since the decision, there has been considerable criticism of the IGF. However, despite criticisms that it is purely a talking-shop (the Chairman of the IGF Nitin Desai himself parallels the power of the IGF to the power found within a Town Hall<sup>37</sup>), it remains the only forum where all Internet stakeholders have an opportunity to get together and provide some input into the operation of the Internet. It is disappointing to note, however, that funding for this initiative is less than what is normally provided for a United Nations meeting – to the extent that delegates had to pay their own travel expenses.<sup>38</sup> The meeting considered some issues relating to the digital divide, and in particular spent considerable time discussing access<sup>39</sup> to the Internet (alongside the other three themes of openness, security and diversity).

The IGF discussed the issue of Internet languages. It was noted that some 90% of the world's 6,000 languages are not represented on the Internet.<sup>40</sup> Vint Cerf believed that there were problems with extending the languages available online, particularly in relation to domain names. The reasoning is in part technical<sup>41</sup>, but also due to many countries having more than one official language, as well as the fundamental issues of illiteracy.<sup>42</sup>

During the Access panel discussion the issue of mobile communications and the effect this could have on the digital divide was mooted. Jim Dempsey (Policy Director for the American NGO Centre for Democracy and Technology and Global Internet Policy Initiative) stated, in response to a question about how and how long it would take to connect another one billion people to the Internet that:

“I think that the next 500 million will be easy because they will all come from China, which has certainly a dedicated effort to develop the Internet. I think that the other 500 million of the second billion will be spread around

---

<sup>37</sup> Ibid.

<sup>38</sup> McCarthy, K (2006) *Blueprint for first global internet forum laid out* (13<sup>th</sup> September 2006). Retrieved September 15, 2006, from [http://www.theregister.co.uk/2006/09/13/igf\\_blueprint](http://www.theregister.co.uk/2006/09/13/igf_blueprint).

<sup>39</sup> The session transcript on the access discussion can be found at: <http://www.intgovforum.org/IGF-Panel5-011106.txt> [14th November 2006].

<sup>40</sup> Waters, D *Tough Talk on net language issue* BBC News Website (1<sup>st</sup> November 2006). Retrieved November 1, 2006, from <http://news.bbc.co.uk/go/pr/fr/-/1/hi/technology/6106048.stm>.

<sup>41</sup> Water, D *International net domains 'risky'* BBC News Press Release (30<sup>th</sup> October 2006). Retrieved October 30, 2006, from <http://news.bbc.co.uk/go/pr/fr/-/1/hi/technology/6099370.stm>.

<sup>42</sup> Ibid.

the world. I'm afraid to say that I worry particularly about Africa being left behind here. I do think that the wireless technologies, including wireless broadband offer perhaps the greatest promise in that regard..."<sup>43</sup>

It was also noted by other speakers that there are currently some 2.5 billion mobile phone users worldwide, and this is expected to reach 3 billion in the next couple of years (clearly use of mobile technology is far-exceeding earlier predictions). As such, this technology is in a perfect position to provide Internet connection to many of the most isolated people in the world. However, the alternative view, put forward by members of the Senegalese contingent was that the costs for such technology were still prohibitive for individuals for the poorest places in the world, even though it does remain one of the cheapest forms of technology.

After a somewhat inauspicious start (including the Internet connection to the Conference crashing at the start due to overuse and almost double the number of people expected turning up, which caused a security headache!), the post-IGF response was positive and the use of mobile commerce as a mechanism for bridging the digital divide was firmly put on the map. Viviane Reding (European Commissioner for Information Society and Media) stated in Athens that:

"The benefits of the Internet must be shared by all the world's citizens, not just those in Northern Europe, Northern America and South-East Asia. In other words, the digital divide needs to be bridged. Much of this will have to go with improving access to the necessary hardware, software and connectivity in developing countries. Internet is for all. This is why the European Union, which is already the world's largest donor of development aid, will continue to work on bridging the digital divide. Mobile telephony and satellite communications offer promising solutions in that respect."<sup>44</sup>

Despite the negativity received by the IGF prior to the conference, reaction seems to have swung in the opposite direction. Coalition and working parties were set up to look at issues, such as spam, the establishment of an Internet Bill of Rights, protection of freedom of expression online and rais-

---

<sup>43</sup> *Supra* n. 39.

<sup>44</sup> Public Technology.Net Press Release *First Internet Governance Forum: EU Commissioner speaks out* (31<sup>st</sup> October 2006). Retrieved November 6, 2006, from <http://www.publictechnology.net/print.php?sid=6585>.

ing funds so that developing countries could be connected to the online environment. The next IGF will be held in Rio de Janeiro, Brazil in November 2007.<sup>45</sup>

However, the fact remains that the IGF has no real power, is unable to make decisions or compel governments to act in a certain way regarding the Internet. Accordingly, any 'progress' made in bridging the digital divide will merely remain as words or recommendations until the IGF are provided with real power.

## **CONCLUSION [6]**

While the Internet continues to develop, vast numbers of people are being left behind; the fact that only one billion of the world's population are connected to the Internet is indicative of this. Until this is readdressed, the so-called digital divide will continue to widen, leaving many people excluded from the online world. Although bridging the digital divide may be seen as a secondary consideration compared to fundamental humanitarian needs, it has been noted that by enabling people to get connected to the online environment facilitates opportunity to raise revenue and generate an income.

It has been contended through the course of this paper, that mobile technology, which is currently used by some 2.5 billion people worldwide is the main method – at present – of bridging the digital divide. It is easier to use than the more conventional Internet system, literacy and technological skills are not needed and communication can be on a verbal basis, and not written. Mobile communication also removes the need for a fixed infrastructure, which is particularly beneficial in isolated locations and is a much more flexible, and in many cases cheaper form of technology.

This was noted by the inaugural Internet Governance Forum held in Athens in October/November 2006. This forum attracted Internet stakeholders from around the world, and although originally derided as a talking shop, made several useful recommendations, including setting up a working group to examine how to fund the connection of developing countries to the Internet. However, it is suggested that if these proposals are to come to fruition, the IGF needs some real power, and cannot remain merely a

---

<sup>45</sup> India will host the 2008 Forum, Egypt in 2009, while it is expected that either Azerbaijan or Lithuania will host the IGF in 2010.

non-binding discussion forum. Mobile commerce has been identified as the key method to bridge the divide, however words need to turn into action and action into finance to see this inequality eradicated. If, with the benefit of hindsight, the IGF is to be deemed a success, ensuring online access for all will be a key, arguably the key, component of this success.