Is Internet Access a Human Right – for Everyone, or only for Persons with Disabilities?

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It is a common allegation that Internet access is a human right, and this is reflected in media reports. The most explicit basis is found in the Convention on the Rights of Persons with Disabilities (CRPD). Acknowledging that private actors are essential in providing Internet services, the CRPD Article 21(c) explicitly urges them to provide information and services in accessible and usable formats. It is not unusual for human rights treaties to specify the role of private actors with such explicit wording. A review of relevant international law sources, including the International Covenant on Civil and Political Rights (ICCPR) and the International Covenant on Economic, Social and Cultural Rights (ICESCR), finds that there is no basis in international law for stating that Internet access is a human right. On the other hand, rights and obligations relating to Internet access and accessibility are clearly outlined in the CRPD, indicating that access to the Internet is a human right – with corresponding State obligations – for persons with disabilities. The article then identifies States’ compliance with its CRPD obligations in the realm of


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the Internet, and finds significant weaknesses in public policies, but the adoption of a treaty on copyright exceptions applying to use by persons with disabilities is a positive recent development.

Convention on the Rights of Persons with Disabilities, International Telecommunications Union, right to enjoy the benefit of scientific progress, universal access, Web Content Accessibility Guidelines

1 INTRODUCTION

Several media, including the BBC and the New York Times, claim that Internet access is recognized as a human right, the New York Times based on a resolution on the promotion, protection and enjoyment of human rights on the Internet. Contrary to this, it has been held that “technology is an enabler of rights, not a right itself”. Another basis for these views is a 1997 statement where the heads of the various UN bodies “embrace the objective of establishing universal access to basic communication and information services for all”. Note that “universal access” is different from “universal service”, as the former is about access within a reasonable distance from peoples’ homes. Moreover, the 2003 Declaration of Principles from the two sessions of the World Summit on the Information Society (WSIS) has been referred to. The

2 BBC, “Internet access is ‘a fundamental right’” (2010) (news.bbc.co.uk/2/shared/bsp/hi/pdfs/04_03_10_BBC_internet_poll.pdf). The survey was conducted among 27,000 people in 26 States on all continents; 50 per cent ‘strongly agree’ and 29 per cent ‘somewhat agree’ in the statement “Access to the Internet should be a fundamental right for all people.” The statement received the strongest support in Mexico and South Korea, and the weakest in Pakistan.
4 UN Human Rights Council 2012 (see note 2); see also UN Special Rapporteur on the promotion and protection of the right to freedom of opinion and expression, A/HRC/17/27, Report of the Special Rapporteur on the promotion and protection of the right to freedom of opinion and expression, Frank La Rue (2011) para. 85.
6 UN Administrative Committee on Coordination, ACC Statement on Universal Access to Basic Communication and Information Services (1997), para. 7 (www.unites.org/accl97.htm).
8 UN, WSIS-03/GENEVA/DOC/4-E Declaration of Principles, Building the Information Society: A global challenge in the new Millennium (2003); UN, WSIS-05/TUNIS/DOC/7, Tunis Commiment (2005).
most explicit paragraph says that States “shall strive unremittingly ... to pro-
mote universal, ubiquitous, equitable and affordable access to ICTs, including
universal design and assistive technologies, for all people, especially those
with disabilities, everywhere ...”? Finally, there are references to States where
Internet access has allegedly been considered to be a human right: Estonia,
Finland and Spain (specifying Internet access as part of universal services),
Greece (adopting a constitutional amendment stating that the State must fa-
cilitate electronic communication), and France and Costa Rica (in decisions
by their respective constitutional courts; see more below).10

At a first glance, none of these bases are sufficient for confirming that
Internet access is a human right. There are two manners through which a hu-
man right can be established, either by a treaty provision or by international
customary law, fulfilling the requirements of State practice and opinio juris.
These two requirements for constituting customary law are not met. First,
the Internet-related legislation is primarily establishing objectives of public
policies, defining the Internet as part of the universal services, not by explicit
human rights language. Second, no international court has confirmed Internet
access as a human right per se.

Hence, the questions this article seeks to answer are three:

- Can Internet access as an individual human right be inferred from the
  existing human rights treaty provisions?
- What specific State obligations relating to Internet access can be inferred
  from the relevant treaty provisions?
- How have the States actually complied with these obligations?

The International Covenant on Civil and Political Rights (ICCPR) and the
International Covenant on Economic, Social and Cultural Rights (ICESCR)
contain provisions on freedom of expression and public participation, and on
participation in cultural life and access to scientific applications, respectively.
Most explicit recognition is made in the Convention on the Rights of Persons
with Disabilities (CRPD), which explicitly refers to the Internet. These provi-
sions will also be analysed by reviewing national constitutional court juris-
prudence. This article takes as its premise that for persons with disabilities,
Internet use will be most important for the overall exercise of substantive
human rights, such as freedom of expression and participation in the conduct

9 UN 2005 (see note 7) para. 18; see also para. 9.
10 Stephanie Borg Psaila, Right to access the Internet: The countries and the laws that pro-
claim it (2011) (www.diplomacy.edu/content/right-access-internet-countries-and-laws-pro-
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2 Access:

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of public affairs, as well as in the enjoyment of economic, social and cultural
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After clarifying the terms access, accessibility and usability, relevant pro-
visions of the ICCPR, ICESCR and CRPD will be clarified in order to identify
whether or not there exists a basis for identifying a human right to Internet
access, and the scope of the corresponding obligations. This will be followed
by a review of the relevant legislation in the US and the EU, in order to iden-
tify which aspects of Internet access that are considered obligatory for the
State to provide. The USA and the EU have been chosen as the USA has been
identified as the “most accessible national e-government”, including Internet
accessibility for persons with disabilities,12 and also has the most comprehen-
sive legislation concerning such accessibility. The EU has several initia-
tives to promote an inclusive society by the means of ICT. A brief review of two
WIPO treaties, one still being negotiated, on exceptions and limitations in the
use of material protected by copyright by persons with disabilities, will also
be provided.

While there are important global standards on web content accessibility
– which are also referred to in the CRPD, as will be seen below – this article
will not analyse these standards in depth. These standards are merely vol-
untary and do not assist in identifying the scope of the obligations for States
concerning Internet access. Moreover, the article will not analyse protection
of human rights in the information society, including surveillance or hacking
and the right to privacy, or censoring by public bodies of certain Internet sites
or the Internet as such. The legal basis for any restrictions is found in ICCPR
Article 19.3 (“must have a basis in legislation and be necessary for the respect
of others’ rights or reputations, or for the protection of national security, pub-
lic order (ordre public), or public health or morals”), as elaborated further by
the UN Human Rights Committee.13

2 ACCESS, ACCESSIBILITY AND USABILITY

Castells (2001) refers to two central gaps in the digital divide, one relating
to unequal access to information and communication technology (ICT) and
one referring to unequal ability to make effective use of such technology. He

Employment and Opportunities for People with Disabilities, Washington D.C. (2011); Amnesty
egovt01nt.htm); see also European Commission, SEC(2008) 2916, Commission Staff Working
Document Accompanying document to the Communication “Towards an accessible information
society” (2008).
13 UN Human Rights Committee, General comment No. 34: Article 19: Freedoms of opinion
and expression, CCPR/C/GC/34 (2011) paras. 21-52.

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refers to the unequal ability as being more important than unequal access in bridging the digital divide. ICT is defined as "a range of digital technological applications, such as computer hardware and software, digital broadcast technologies, mobile telephony and, most prominent, the internet".14

Having access to ICT or to the Internet is a necessary, but not sufficient, condition for enjoying accessibility. The term accessibility refers not to the actual physical connection, but to the ability to use ICT (e-accessibility) and the Internet (web accessibility).15

There are different definitions of accessibility. Jaeger emphasizes accessibility as meaning equal access for everyone, distinguishing between usability ("interaction with the site") and accessibility ("equal access").16 This definition of accessibility implies that the main emphasis is to provide Internet connection. The International Telecommunications Union (ITU) has contributed to this inconsistent use of terms by stating that (physical) access and (user-friendly) accessibility are the same, defining accessibility as "non-discriminatory access to ... services for all users ..."17 Note, however, that the ITU has since developed much more advanced understandings of what facilitates and what impedes accessibility.18

A better approach is to define accessibility as the ability to use ICT or the Internet. In a global standard on web content accessibility, the main principles – when read together – imply that the term accessibility is operationalized as adequate usability.19 The essence of usability is whether the user can adequately perceive, react to and interact with the web sites. A site that is not usable – for some categories of persons – is not adequately accessible.

Hence, it is easy to agree with van Dijk that in the digital divide research, "even the most basic terms and concepts are still ill defined. The most impor-

17 ITU, note 6, 63.
19 Ben Caldwell et al., Web Content Accessibility Guidelines (WCAG) 2.0 (2008) (www.w3.org/TR/WCAG20). It builds on four principles: perceivable, operable, understandable, and robust – where the last means that the technology must be compatible also with more advanced technologies. Moreover, there are 12 guidelines and 62 'success criteria', all identifying 'Techniques and Failures', specifying what the WCAG Working Group deems sufficient – or merely advisory – for meeting each of the success criteria. As noted by Alison Adam and David Kreps, "Disability and Discourses of Web Accessibility", 12 Information, Communication & Society 2009, 1055, the standards are "increasingly complex and difficult to understand ...".

21 Ibid., 48
22 Caldwell, note 18, 48
24 Borg Pasila, note 9
25 Mira Burri-Nenov, Communications: Between Law and Policy 2008, 7

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tant is the concept of access itself ...". He argues that access is constituted by four phases or dimensions, where the two former apply primarily to developing countries, while the two latter apply primarily to developed countries: motivational access, material access (both physical and conditional), skills access and usage access. Conditional access is about payment, membership and passwords, as well as restrictions resulting from protection of intellectual property rights. From this understanding, access must encompass much more than merely whether a household has an Internet connection, personal computers (PCs) or assistive technologies (AT). AT is defined as "hardware and/or software that acts as a user agent, or along with a mainstream user agent, to provide functionality to meet the requirements of users ...". Equally important are the skills and the motivation to use the technology.

Public measures relating to information technologies can be identified in two broad realms. First, facilitating adequate physical access either by broadband and PCs or hand-held devices. Second, promoting and facilitating adequate accessibility or usability, to ensure that all categories of persons are able to enjoy the benefits of ICT and Internet connection on the same level. Both the access and the accessibility must be adequately affordable. Note that the term facilitating is applied above. This is simply because in most contexts, market actors and not the State provide broadband and the other ICT equipment. This article seeks to identify the extent to which the undertaking of these measures actually constitutes State obligations – and if so, in relation to what kind of right-holders.

Currently, the term physical access is not commonly applied in studies on Internet and the digital divide. Rather, the emphasis is on the term universal services, meaning access in peoples’ homes, but as noted by Feijoo, there is no agreed definition of universal service. Internet as part of universal services is recognized in the legislations of Estonia, Finland and Spain; and as acknowledged by Burri-Nenova, "universal service is a tool for the achievement of other societal goals". In this article access refers to an Internet connection in homes (also termed universal services), while accessibility or usability refers to how services available on the Internet can benefit persons with

21 Ibid., 48
22 Caldwell, note 18, Appendix A: Glossary.
24 Borg Piaia, note 9.
disabilities in the same manner as persons without disabilities (also termed universal design).

As this article will highlight Internet use by persons with disabilities, it is most relevant to specify that the share of those having access to and that are using the Internet is lower among persons with disabilities than among the overall population. Among persons with disabilities who actually use the Internet, their average weekly use is higher (30 hours) than for persons without disabilities (18 hours). It should be noted that the average use as reported by persons with disabilities differs from the average use as reported by all citizens, with a higher proportion playing games and searching for health and government information on the Internet, but a lower proportion taking online courses, as compared to the average citizen. In the context of disability, Adam and Kreps present four discourses on web accessibility, regretting that “major works in the field offer no discussion of disability …”. Moreover, in a 2011 book, Jaeger writes that “many developers of websites and related technologies simply do not consider persons with disabilities when they create or update products”. The most relevant human rights provisions will now be elaborated, first those applying to everyone, and then those applying only to persons with disabilities.

26 Kessler Foundation and National Organization of Disability, The ADA, 20 Years Later (2010) 155; US Department of Commerce, Exploring the Digital Nation – Computer and Internet Use at Home (2011) 16; US Census Bureau, Computer and Internet Use in the United States: 2010; Reported Activity of People Using the Internet, by Selected Individual Characteristics: 2010; www.census.gov/hhes/computer/publications/2010.html – Table 4. The first survey, covering 1000 people, found that 85 per cent of adults without disabilities access the Internet, whereas only 54 per cent of adults with disabilities access the Internet “from home, work or another location”. The survey carried out by the US Department of Commerce reports that while 20 per cent of all U.S. households with no disability have no computer, the figure for households with a disability is 46 per cent, and while 72 per cent of households with no disability have broadband, only 43 per cent of households with a disability have broadband. Concerning actual Internet use, 80 per cent of computer-owning households with a disability use broadband, compared to 90 per cent of computer-owning households with no disability. Similar figures are reported by the US Census Bureau.


28 Kerry Dobransky and Eszter Hargittai, “The Disability Divide in Internet Access and Use”, Information, Communication and Society, 2006, 328; see also US Census Bureau, note 25, Table 5.

29 Adam and Kreps, note 18, 1044.

3 **INTERNATIONAL COVENANT ON CIVIL AND POLITICAL RIGHTS**

ICCPR Article 19.2 reads:

> Everyone shall have the right to freedom of expression; this right shall include freedom to seek, receive and impart information and ideas of all kinds, regardless of frontiers, either orally, in writing or in print, in the form of art, or through any other media of his choice.

The most important part of this provision for the purpose of this article is the phrase ‘any other media’. For some categories of persons the standard media do not enable individuals to seek information or express opinions. Hence, ICT that is adapted to such specific needs will facilitate the opportunity to exercise the freedom of expression. The recently adopted General Comment on freedoms of opinion and expression confirms that communication practices have been substantially changed due to new ICT, including the Internet and mobile-based electronic information dissemination systems. The same paragraph states that States parties should take all necessary steps to ensure access of individuals to such ICT. The General Comment does not, however, refer to a self-standing human right to Internet access.

ICCPR Article 25(a) recognizes the human right of everyone to take part in the conduct of public affairs. In order to exercise this right, “[p]ositive measures should be taken to overcome specific difficulties, such as illiteracy, language barriers, poverty, or impediments to freedom of movement …”. Being deaf and/or blind represents language barriers. Moreover, as specified by the CRPD Article 30.4: “Persons with disabilities shall be entitled … to recognition and support of their specific cultural and linguistic identity …” Hence, it is reasonable to state that persons with disabilities have a distinct identity, and both sign language and the Braille symbols constitute minority languages.

The clearest recognition of Internet access as a human right is specified by the French Conseil Constitutionell, when reviewing a legislative proposal seeking to exclude persons from Internet access due to their suspected terrorism affiliations. The Conseil Constitutionell explicitly related Internet access to the freedom of expression provision (Article 11) of the 1789 Déclaration des Droits de l’Homme et du Citoyen:

> In the current state of the means of communication and given the generalized development of public online communication services and the impor-

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31 UN Human Rights Committee, note 12, para. 15.
32 UN Human Rights Committee, General Comment No. 25: The right to participate in public affairs, voting rights and the right of equal access to public service (Art. 25), CCPR/C/21/Rev.1/Add.7 (1996) para. 12.

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tance of the latter for the participation in democracy and the expression of ideas and opinions, this right implies freedom to access such services.\textsuperscript{33}

We see that the emphasis is on the freedom to access such services, not the Internet infrastructure \textit{per se}. The relevant French legislation was later revised, specifying that disconnection from Internet access could only be for one year, based on a judicial decision.

The emphasis on provision of services was more explicit in a case by the Costa Rican Constitutional Court, finding that the authorities by delaying the liberalization of the telecom market had violated three constitutional provisions, including Article 46,\textsuperscript{34} which reads: “Consumers and users are entitled to … receive adequate and truthful information.” Subsequently, the Minister for Environment and Telecom said that this ruling requires the authorities to revise their telecom plans in order to reach the goal of 100 per cent access for ICT, and this was presented under the heading “Accesso a Internet es un Derecho Fundamental.”\textsuperscript{35} It is noteworthy that a developing country has such high ambitions, based on an understanding that access to Internet is a “fundamental right”.

Despite this explicit statement, there is no basis to state that the ICCPR can be read as including a self-standing right to Internet access. What is evident, however, is that both freedom of expression and the right to take part in the conduct of public affairs will be facilitated by both improved physical access – by universal services – and by enhanced accessibility, so that all categories of persons are able to enjoy the benefits of ICT on the same level as others. This requires States to take all necessary measures to facilitate the exercise of civil and political human rights.

4 International Covenant on Economic, Social and Cultural Rights

The two first subparagraphs of Article 15.1 of the ICESCR read:

The States Parties to the present Covenant recognize the right of everyone:

(a) To take part in cultural life;
(b) To enjoy the benefits of scientific progress and its applications.

These provisions will be analysed separately. As specified by the Committee on Economic, Social and Cultural Rights, the right to take part in cultural life

\textsuperscript{34} Sala Constitucional, \textit{Sentencia No} 2010-12790 (2010) para. 5.

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includes the right to learn about different cultures and forms of expression and dissemination through any technical medium of information or communication.\textsuperscript{36} Moreover, the right to take part in cultural life applies particularly to linguistic minorities – as also recognized by ICCPR Article 27 – which implies that the right to cultural diversity is encompassed in the right to take part in cultural life.\textsuperscript{37} There are, however, no references to disability as an expression of cultural diversity in the 2005 Convention on Cultural Diversity or in the Operational Guidelines to the Convention.\textsuperscript{38}

Informational diversity, autonomy and quality have been defined as the three core values of the information society.\textsuperscript{39} To enjoy the right to participate in cultural life, the States should ensure that adequate communication tools are made available to linguistic minorities – which includes persons who are deaf and persons who are blind, as further specified in CRPD Article 30.

The right to participate in cultural life and to enjoy the benefits of scientific progress and its applications are interlinked.\textsuperscript{40} The relationships between the rights to culture and to the enjoyment of scientific progress and applications have not, however, been clarified by human rights bodies,\textsuperscript{41} but within her new mandate and title, the UN Special Rapporteur in the field of cultural rights has made relevant clarifications.\textsuperscript{42}

The most illuminating document in order to understand the scope of Article 15.1(b) is the revised Guidelines on State reporting on their implementation of the ICESCR, requiring the States to indicate “measures taken to ensure affordable access to the benefits of scientific progress and its applications for everyone, including disadvantaged and marginalized individuals and

\textsuperscript{36} UN Committee on Economic, Social and Cultural Rights, \textit{General comment No. 21: Right of everyone to take part in cultural life (art. 15, para. 1 (a), of the International Covenant on Economic, Social and Cultural Rights), E/C.12/GC/21} (2009), para. 15(b).
\textsuperscript{37} Ibid., para. 32.
\textsuperscript{40} UN Committee on Economic, Social and Cultural Rights, note 34, para. 2; UN Human Rights Council, \textit{A/HRC/RES/17/15, Promotion of the enjoyment of the cultural rights of everyone and respect for cultural diversity} (2011) para. 2.
\textsuperscript{42} UN Special Rapporteur in the field of cultural rights, \textit{A/HRC/20/26, The right to enjoy the benefits of scientific progress and its applications} (2012) paras. 16–18; see also subpara. 75(b).
groups”. While none of these paragraphs specifically refer to Internet access, the emphasis on disadvantaged and marginalized individuals and groups must be noted. As with general comments, Guidelines on State reporting are not binding, but express what the relevant supervisory bodies consider the most relevant elements of the respective provisions.

The most recent Amnesty International Annual Report emphasizes the human right to Internet access by an explicit reference to ICESCR Article 15.1, noting gender gaps in such access (Amnesty International 2013: 12).

Hence, there is a basis for stating that the States are at least obliged to identify how vulnerable individuals and categories of persons, including minorities, can have better and affordable access to scientific progress and its applications, and to take positive measures to facilitate such access. Such facilitation is important in order to ensure that vulnerable persons are able to enjoy basic social and cultural rights on an equal level with others. From the wording of the ICESCR and subsequent interpretations it cannot be concluded, however, that the States are under a positive obligation to actually provide these scientific applications.

5 CONVENTION ON THE RIGHTS OF PERSONS WITH DISABILITIES

The CRPD explicitly refers to the Internet, most comprehensively in Article 21:

States Parties shall take all appropriate measures to ensure that persons with disabilities can exercise the right to freedom of expression and opinion, including the freedom to seek, receive and impart information and ideas on an equal basis with others and through all forms of commu-


44 Amnesty International, note 10, 10-11; see also UN Special Rapporteur on freedom of opinion and expression, note 3, paragraph 22.

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cation of their choice, as defined in article 2 of the present Convention, including by: [...] 

c) Urging private entities that provide services to the general public, including through the Internet, to provide information and services in accessible and usable formats for persons with disabilities; 

d) Encouraging the mass media, including providers of information through the Internet, to make their services accessible to persons with disabilities. 

Hence, Internet access is understood as being important in order to enable persons with disabilities to exercise the right to freedom of expression and opinion. While the measures listed in Article 21 relate primarily to the States, it must be noted that paragraphs c) and d) contain explicit specifications on what private entities and mass media are expected to do. The term "urging" does not, however, imply that the State can instruct the private entities and provide some form of enforceable sanctions if the private entities do not make their services accessible and in usable formats for persons with disabilities. Moreover, the phrase "all forms of communication of their choice" must be understood to have a wide application. 

The question is what Article 21 actually requires from the State authorities. It cannot be read as to include a general requirement on the part of the State to provide the hardware to allow persons with disabilities to seek, receive and impart information and ideas on an equal basis with others. Whether or not it requires the State to provide a connection to the web is not possible to answer from Article 21 alone. While there is a reference to Article 2 of the CRPD, it must be noted that Article 2's definition of communication does not explicitly include the Internet, but refers in general to information and communication technology. 

In order to better understand the scope of these provisions, we will turn to the Guidelines on State reporting.45 The reporting requirements in Article 21 do add a certain guidance beyond what is provided for in the CRPD, but as noted above, Guidelines on State reporting are not binding. 

First, the State shall report on measures taken to ensure that information is accessible to persons with disabilities "without additional cost."46 To illustrate this, we can take two examples relating to lack of adequate sight. A blind person requires a Braille interface machine at a cost of approximately 3000 USD; a visually impaired person needs magnified screens at a cost of approximately 2000 USD in order to have access to Internet information. From the re-

46 Ibid., 12.
requirement that there shall be no additional costs it must be inferred that blind
or visually impaired persons shall be provided with such assistive technology.
Second, the States are required to report on the “[d]egree of accessibility
of mass media and percentage of public websites that comply with the Web
Accessibility Initiative (WAI) standards”. The WAI standards are operationalized
as the Web Content Accessibility Guidelines. It must be considered
challenging to get a full overview of the accessibility of all public and mass
media sites – even if private sites are not mentioned.

Hence, Article 21 initially sets out a demanding requirement by applying
the phrases “shall take all appropriate measures” and “an equal basis with
others”. Moreover, the requirements in the Guidelines on State reporting are
specific and demanding. The reality, however, is that most means of communica-
tion and communication technology are provided by private actors. While
it is highly relevant that also the conduct of such actors falls within the scope
of Article 21, the terms “urges” and “encourages” make it unclear how the
State is to act in relation to private entities in order to ensure that the rights of
persons with disabilities are exercised on an equal basis with others.

We will therefore analyse CRPD Article 9, which is a comprehensive ar-
ticle on accessibility. CRPD Article 9.1(b) reads (extract):

To enable persons with disabilities to live independently and participate
fully in all aspects of life, States Parties shall take appropriate measures to
ensure to persons with disabilities access, on an equal basis with others, to
the physical environment, to transportation, to information and communica-
tions, including information and communications technologies and
systems, and to other facilities and services open or provided to the public,
both in urban and in rural areas. These measures, which shall include the
identification and elimination of obstacles and barriers to accessibility,
shall apply to … [i]nformation, communications and other services, in-
cluding electronic services …

Two significant aspects of this provision must be noted. First, it identifies
appropriate measures the States are to take, by using the verb “shall”. While
there is a mutual relationship between Article 9 and Article 21, Article 21
acknowledges the rights, while Article 9 identifies state obligations for
improved accessibility. Note that in the ITU’s Persons with Disabilities Initiative,
it is CRPD Article 9, and not CRPD Article 21, that is referred to.49

Second, the scope of the provision is wide, as Article 9.1 does not refer to
the Internet, but rather to “information and communications technologies and

48 Caldwell, note 18.
   phtml).

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systems”. What is included in this phrase is not evident, but we saw above that ICT is defined as “a range of digital technological applications …” (Selwyn and Facer 2010: 20). The latter term, “systems”, must be understood as any infrastructure and devices that facilitate electronic communication.

While the initial part of CRPD Article 9.1 applies the term “access”, understood as physical access, the term “accessibility” is applied when introducing the measures towards the end of Article 9.1, in the context of “elimination of obstacles and barriers to accessibility …”. As was clarified in section 2 above, ICT accessibility is about all people being able to enjoy the benefits of ICT on the same level as others.

Two subparagraphs of Article 9.2 are also relevant. First, Article 9.2(g) reads: “States Parties shall also take appropriate measures to ... [p]romote access for persons with disabilities to new information and communications technologies and systems, including the Internet.” The terms “appropriate” and “promote” are relatively imprecise – even if the use of the verb “shall” specifies that measures have to be taken.

Second, Article 9.2(h) reads: “Promote the design, development, production and distribution of accessible information and communications technologies and systems at an early stage, so that these technologies and systems become accessible at minimum cost.” We see that this provision is more specific. The formulation “[p]romote the design, development, production and distribution” of Article 9.2(h) must be read to imply that the State is to provide some form of assistance to producers in order to speed up the development of new technologies. The phrase “accessible at minimum cost” of Article 9.2(h) must be read to imply that the State is to provide some form of assistance to consumers, in order to allow persons with disabilities to purchase technologies and systems at lower prices than market prices (economic accessibility or affordability).

Moreover, as the introductory sentence of Article 9.2 includes the term “also”, it is clear that the overall obligations concerning accessibility are found in Article 9.1 and that Article 9.2 merely specifies these obligations. Article 9.1 also specifies that systems and services must be provided in both urban and in rural areas.

The Guidelines on State reporting, Article 9, specify that there shall be reporting on legislative and other measures to ensure access, on technical standards and guidelines, and on national accessibility plans established with clear targets and deadlines. Here, too, the use of both the terms access and accessibility must be understood to refer to somewhat different realms of policy. The wording of Guidelines on State reporting on Article 9 neither goes beyond the wording of Article 9 of the CRPD nor specifies the substantial elements of this rather far-reaching provision. Moreover, a draft general comment on Article 9 does not give additional interpretative guidance beyond

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50 UN Committee on the Rights of Persons with Disabilities, note 43, 8–9.

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what is provided in the Guidelines on State reporting – but it argues that initial adaptation of technology reduces costs.51

To exemplify the scope of Article 9, we use the phrase “elimination of obstacles and barriers to accessibility” as found in the second sentence of Article 9.1. By requiring elimination of any such obstacles to accessibility, the States need to adopt strict legislation and engage with actors providing electronic communications services to ensure that all obstacles are actually eliminated. Hence, even if the adoptions of legislation, standards and plans are measures taken for the purpose of facilitating the realization of human rights and not necessarily providing the goods and facilities, the purpose of these measures is to achieve substantive equality, in accordance with the phrase “access on an equal basis with others”, as is found in the first sentence of Article 9.1. Hence, both when addressing access and when addressing accessibility, Article 9 has a comprehensive scope.

While Article 30 of the CRPD does not explicitly address the Internet, its paragraph 1(a) recognizes the right of persons with disabilities to – on an equal basis with others – “enjoy access to cultural materials in accessible formats”. Such cultural material encompasses material that is only available on the Internet. Hence, this paragraph gives an additional basis for understanding the scope of the rights as outlined in Article 21 of the CRPD, but its substantial elements do not go beyond the scope of Article 21. As will be made clear in section 8 below, copyrighted cultural material is to be made available for persons with visual impairments and also for persons with other disabilities.

Finally, CRPD Article 4.1(g) is a general obligations provision, applying the term “undertake” and not “shall” in the introductory part, stating that States are to “promote the availability and use of new technologies, including information and communications technologies, mobility aids, devices and assistive technologies … at an affordable cost”. Information and communication technology is also explicitly mentioned in the definition of communication in CRPD Article 2, and neither the wording of CRPD Article 4.1(g) nor the reporting guidelines applying to Article 4 add anything beyond the comprehensive scope of CRPD Articles 9 and 21.

There is a need to better identify the scope of these seemingly wide-ranging provisions. The initial observation is that it is Article 21 that is the crucial provision, as it identifies the scope of the human right, while Articles 4 and 9 identify the scope of the public measures to be taken in order to allow persons with disabilities to participate fully in all aspects of life on an equal basis with others. Therefore, as the Internet or other technologies listed in Articles 4 and 9 of the CRPD serve to facilitate access to information and communications for persons with disabilities in both urban and rural areas, this access will enable the exercise of the rights recognized in Articles 21 and 30.1(a).

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51 UN Committee on the Rights of Persons with Disabilities, CRPD/C/11/3, Draft General Comment on Article 9 of the Convention – Accessibility (2013), paras. 12 and 19.

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As the scope of both the rights and the corresponding obligations is extensive, it is surprising that no State has made any reservations with regard to the Internet, as only one reservation is registered (UN 2013). This reservation is specified to apply only to CRPD Article 9.2(d) and 9.2(e), which is about public signage in Braille and professional sign language interpreters.

It cannot, however, be expected that States with limited financial resources will be able to "ensure to persons with disabilities access ... to ... information and communications technologies and systems ... both in urban and in rural areas", as formulated in the introductory part of CRPD Article 9.1. Neither can it be expected that most States will be able to "ensure that persons with disabilities can exercise the ... freedom to seek, receive and impart information and ideas on an equal basis with others and through all forms of communication of their choice ...", as specified in the introductory part of CRPD Article 21.

The key to understanding the scope of the obligations is the phrase "on an equal basis with others ...". This phrase must be read as implying that a State cannot be expected to provide full access to information and communications technologies and systems for all persons with disabilities. Rather, States must undertake several facilitating measures to ensure both households' physical and affordable access to Internet and the physical and affordable access to technologies that allows persons with disabilities to benefit from the Internet on an equal basis with others. Moreover, the equal access requirement must be understood to have a geographical dimension. Hence, in a district where no households have Internet, persons with disabilities cannot expect that the State shall install adequate technology, but that it has in place legislation and systems to ensure that adequate technology is provided in a non-discriminatory manner. If necessary, the State must assist in order to make the technologies affordable. By specifying that appropriate measures are to be taken "in urban and in rural areas ..." the State cannot neglect – or allow private entities to neglect – certain regions.

Therefore, the obligations relating to Internet access (physical connections) and accessibility (adequate usability) must be understood by taking the specific context into consideration. The CRPD implies that the State must facilitate the spread of broadband by either providing the infrastructure or by giving licenses to corporate actors to allow them to build adequate infrastructure. As broadband access is crucial for persons with disabilities if they are to exercise their human rights – including freedom of expression and opinion and the right to participate in the conduct of public affairs – persons with disabilities should be allowed to be connected at reduced rates.

It is evident that States are not under a human rights obligation to install broadband. States are, however, under an obligation to provide public information in a manner that is accessible to persons with disabilities, and to specify how private and public actors providing all forms of communication equipment are to ensure usability. The extent of the other obligations, primar-
ily relating to economic accessibility, will of course depend on the States’ financial capacities.

Hence, there is a basis for stating that the CRPD must be read as recognizing a human right to the Internet — including access to information and communications technologies and systems — for persons with disabilities. Access to technologies and systems must imply that States are under an obligation to provide not only accessible web sites, but also the technological tools enabling the individuals to make use of these web sites and services on an equal basis with others. Hence, in order to allow persons with disabilities to live independently and participate fully in all aspects of life in the information age, Internet access is crucial.

In order to review compliance with these obligations, we will assess US and EU policies and legislation. As was specified above, the USA has the most comprehensive policies on accessibility for persons with disabilities and the EU can direct the policies of its member states.

6 US LEGISLATION AND POLICIES REGARDING ACCESS TO THE INTERNET FOR PERSONS WITH DISABILITIES

The USA is a global leader in promoting access to the Internet for persons with disabilities. A study finds, however, that public access, implying the provision of Internet access in public buildings — in other words universal access, but not universal service — has been prioritized above household access. Moreover, public bodies have only played a small part in the “special content and application development to stimulate underserved Americans, minorities, the disabled and illiterates”. Finally, in the first years of the new millennium the US Administration decided to terminate two major public programmes on enhanced Internet access.

Nevertheless, in the 1990s, several relevant laws were enacted. Five national laws are relevant: the 1973 Rehabilitation Act (as amended), the 1990 Americans with Disabilities Act (ADA, as amended), the 1996 Assistive Technology Act, the 1996 Telecommunications Act, and the 1996 E-Government Act. The emphasis of the analysis below will be on the first two of these.

The Rehabilitation Act was amended in 1998, with Section 508.1.A(ii) on development, procurement, maintenance, or use of electronic and information technology reading:

52 West, note 11.
53 ITU and Dahms, note 6 and accompanying text.
54 Van Dijk, note 19, 194.
55 Ibid., 193.
56 Ibid.

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Each Federal department or agency ... shall insure ... that the electronic and information technology allows ... individuals with disabilities who are members of the public seeking information or services from a Federal department or agency to have access to and use of information and data that is comparable to the access to and use of the information and data by such members of the public who are not individuals with disabilities.

In other words, this provision only applies to federal information transmitted by electronic and information technology. The term “comparable” must be understood to set a lower standard than the term “equal”. Something that is comparable can be suboptimal, but nevertheless appropriate.

In a study on Section 508, the core of accessibility is defined based on whether a site “provides equal access to all users ...”.57 Hence, by using the term “equal”, Jaeger goes beyond the wording of Section 508 itself, finding that there is a lack of awareness of the situation of persons with disabilities.

Title II of the ADA applies to state and local government services, while ADA Title III applies to public accommodations and commercial facilities. The scope of Title III for commercial facilities was for the first few years interpreted rather restrictively.58 The ADA was revised in 2010 and Title II includes a list of tools under “Auxiliary aids and services”, including accessible electronic and information technology.59 As made clear by the US Department of Justice in its “Guidance and Section-by-Section Analysis” of the revised ADA, the only amendments to the definitions of auxiliary tools and services in the 2010 version were those that reflected changed terminology; no substantive new technology was added to the definition.60 Moreover, requirements for Internet sites are conspicuously absent from the 2010 ADA Standards for Accessible Design.61

57 Jaeger, note 15, 27.
58 For the first ruling stating that also commercial websites must be accessible to the blind under both state laws and the ADA, see the US District Court for Northern California, National Federation of the Blind v. Target Corporation (No. C 06-1802 MHP), October 2, 2007 Memorandum and Order. Note that the case ended in a settlement in 2008 and the National Federation for the Blind has subsequently commended Target’s leadership in promoting Web accessibility; for earlier cases, see Kyle David, Web Accessibility: Section 508 Compliance (undated) (www.kyledavidgroup.com/web-accessibility-section-508-compliance).
59 See Americans with Disabilities Act Title II Regulations, § 35.104 Definitions, which includes “Brailled materials and displays; screen reader software; magnification software; optical readers; secondary auditory programs (SAP); large print materials; accessible electronic and information technology”.
Another Act adopted in 2010, the Twenty-First Century Communications and Video Accessibility Act, requires that:

a manufacturer of equipment used for advanced communications services … shall ensure that the equipment and software that such manufacturer offers for sale or otherwise distributes in interstate commerce shall be accessible to and usable by individuals with disabilities.62

Hence, the requirements lie directly with the manufacturers, and there are specific time schedules for accessibility and usability that must be complied with.

On 30 July 2009, the USA signed the CRPD. One year earlier, the National Council on Disability, which is a federal agency mandated to advise policymakers on any matter affecting people with disabilities, issued a comprehensive study examining the degree to which US law is consistent with the CRPD.63

In CRPD Article 9, it was observed: "Although Internet websites operated by local, state, or federal governments are required to be accessible under Title II of the ADA and the Rehabilitation Act, the case law has been uneven in applying Title III of the ADA to privately owned and operated websites."64 While most of the assessment focuses on the lack of compliance with Title III, the conclusion, which applies to both Title II and Title III, is that "a more forceful implementation of existing law and/or measures by Congress could readily bring U.S. law on a level with the CRPD."65 CRPD Article 21 simply states that US law is consistent with the requirements, noting that "enforcement of these rights is generally left to individual complainants".66 In other words, it is the citizens who are to ensure that those operating Internet sites are actually making them accessible to persons with disabilities. This must be said to fall short of the CRPD Article 21(c) requirement of "urging private entities … to provide information and services in accessible and usable formats for persons with disabilities".

In summary, while US law requires federal web sites to be equally accessible to persons with disabilities and persons without disabilities, and with strict deadlines for compliance from manufacturers, especially under the

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62 3304 Twenty-First Century Communications and Video Accessibility Act of 2010, Section 104, amending the Communications Act Section 716(a)(1). Moreover, Section 716(a)(1)(A) says that there shall be — within one year after the enactment of the Act — regulations on "performance objectives to ensure the accessibility, usability, and compatibility of advanced communications services and the equipment used for advanced communications services by individuals with disabilities". Section 105 is on relay services for deaf-blind individuals.
64 Ibid., 12
65 Ibid.; see more detailed assessment at pp. 56–58.
66 Ibid., 19; see more detailed assessment at pp. 80–82.
Twenty-First Century Communications and Video Accessibility Act, there are certain weaknesses in the US legislation. First, there is a lack of adequate accountability mechanisms to ensure that necessary changes in federal and commercial web sites are actually undertaken. Second, the requirements are too weak for the state and local authorities to ensure that a high percentage of public web sites are actually equally – or comparably – accessible. This is particularly interesting as the only statistically significant variable in explaining different disability access between various US states has been found to be the strength of state technical assistance policy, including specific accessibility standards. Third, the emphasis that the enforcement of the rights relating to accessibility is to be undertaken by individuals is inadequate. US legislation does, however, stand out, for instance by the strict requirements on manufacturers set down by the 2010 Twenty-First Century Communications and Video Accessibility Act.

7 EU LEGISLATION AND POLICIES REGARDING ACCESS TO THE INTERNET FOR PERSONS WITH DISABILITIES

Article 26 of the EU Charter of Fundamental Rights recognizes “the right of persons with disabilities to benefit from measures designed to ensure their independence, social and occupational integration and participation in the life of the community”. Moreover, a study on the digital divide finds: “Officially and ideologically, the [EU] is very much occupied in building an all-inclusive society.”

There are a number of studies, policies, directives, and declarations addressing “requirements of users with special social needs, due to disability …”. As verbs such as “should” or “may” are applied, this indicates the limited political will to ensure that persons with disabilities are actually able to effectively enjoy their human rights.

68 van Dijk, note 19, 195.
69 European Commission, note 11.
73 EU Ministers, note 71, para. 34.
74 European Commission, note 70, para. 22.
Moreover, no EU-wide specific legislation on e-accessibility or on web accessibility exists. More seriously, the European Commission finds that among its member States, there is “considerable fragmentation” regarding the completeness of policy instruments. An EU study uses the terms “very unfairly” (in comparison to the US, Canada and Australia) and “very weak” (in relation to certain policy yardsticks), with the UK having the best scores.

The EU has left the actual distribution of the Internet technologies to the market, seeking to promote innovation by funding research. Moreover, a study has found that public bodies' redistribution of tools to improve Internet accessibility “has declined considerably”. Accessibility in accordance with international standards was found for 5.3 per cent of all tested government sites and no commercial websites. While Article 26 of the EU Charter recognizes “the right of persons with disabilities to benefit from measures designed to ensure ... integration and participation in the life of the community”, the actual content of these measures is left to the States.

While ambitions have been expressed over the last decade on when full accessibility shall be achieved (ibid.), the time frame for ensuring web accessibility has been consistently delayed. When assessing EU member States' policies, it is observed that existing web sites are given “some time” to adapt, unlike new sites, which are given an “immediate deadline”. The phrase “some time” is in the case of Norway (not a member of the EU, but of the European Economic Area) determined by law to be 12 years.

The Norwegian government's report to the Storting (Norwegian parliament) proposing that Norway should ratify the CRPD referred to three expressed concerns that Norway's Act relating to a prohibition against discrimination on the basis of disability has a more restrictive scope than the CRPD.

The response from the Norwegian government was that Section 12 of the

75 European Commission, note 69, 5.
76 Ibid.
77 European Commission, note 11, 7.
78 van Dijk, note 19, 196
79 European Commission note 11, 17. These figures were based on manual testing; for automated testing, the figures were higher (12.5 and 3.9 per cent, respectively).
80 Ibid., 20.
81 Norway's Act of June 20 2008 No 42 relating to a prohibition against discrimination on the basis of disability, which entered into force 1 January 2009, contained a requirement in Section 11 that new ICT solutions are to be universally designed as from 1 July 2011, while existing ICT solutions shall have universal design only from 1 January 2021. This requirement is repeated in the new version of the Act, adopted 21 June 2013 (No. 61; entered into force 1 January 2014), Section 14.

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(now repealed) 2008 Anti-Discrimination and Accessibility Act (Sections 15, 16 and 17 in the 2013 Act) specify the requirements regarding individual accommodation that made the Norwegian legislation compliant with the CRPD.\textsuperscript{83} Also Section 9 (current Section 13) on universal design and Section 11 (current Section 14) on universal design of ICT were referred to in the argumentation by the Norwegian government, but as noted above,\textsuperscript{84} the 12-year requirement for existing sites cannot be considered appropriate.\textsuperscript{85} The assessment of Norwegian legislation in relation to CRPD Article 30 refers to Section 17 ("making copies for use by the disabled") of the Norwegian Copyright Act, included in the Act in 2005.\textsuperscript{86} In this realm, Norway preceded the international developments, as we will see in Section 8 below.

Based on this review we see that European States are far from complying with the requirements of the CRPD. Even if technologies and systems might be generally available, few concrete initiatives have been taken to ensure that persons with disabilities have the same access to the Internet as persons without disabilities. States are actually far from complying with the most basic requirement, namely to make governmental web sites accessible for persons with disabilities. The non-ambitious Norwegian requirements are particularly grave in light of Norway’s financial capacities. It must also be noted that no independent assessment of existing Norwegian compliance with the CRPD has been undertaken.

8 Copyright exceptions for material used by persons with disabilities

Within one policy realm there is progress, however. The World Intellectual Property Organization (WIPO) has initiated negotiations on two international legal instruments aimed at providing exceptions and limitations for material protected by copyrights. The first relates exclusively to visually impaired persons and persons with print disabilities, and has just been adopted: the 2013 Marrakesh Treaty to Facilitate Access to Published Works for Persons Who Are Blind, Visually Impaired, or Otherwise Print Disabled. The second relates to educational, teaching and research institutions and persons with other

\textsuperscript{83} Ibid.
\textsuperscript{84} See note 80 and accompanying text.
\textsuperscript{85} EU 2010, note 70.
\textsuperscript{86} Norwegian Ministry of Foreign Affairs, note 81, 23. Moreover, on pp. 18-19 there is an assessment of Norwegian legislation in relation to CRPD Article 21, referring to efforts to make Norwegian legislation compliant with the EU audiovisual media services directive; see note 70 above.
disabilities, with ambitions to submit its recommendations to the WIPO General Assembly at its 30th session, by mid-2015. These instruments represent important aspects of implementation of CRPD Article 30.3, which reads:

States Parties shall take all appropriate steps, in accordance with international law, to ensure that laws protecting intellectual property rights do not constitute an unreasonable or discriminatory barrier to access by persons with disabilities to cultural materials.

The “in accordance with international law” condition has restricted the implementation of this provision in national legislation. None of the existing copyright treaties specify that ensuring access of copyrighted material to persons with disabilities is a justified exception. Such exemptions and limitations have, however, been recognized in national legislation and regulations, and in the EU copyright directive (European Commission 2001: Article 4.3(b)).

The most relevant provision in the Treaty on Visually Impaired Persons reads:

Contracting Parties shall provide in their national copyright laws for a limitation or exception to the right of reproduction, the right of distribution, and the right of making available to the public as provided by the WIPO Copyright Treaty (WCT), to facilitate the availability of works in accessible format copies for beneficiary persons. The limitation or exception provided in national law should permit changes needed to make the work accessible in the alternative format. (WIPO 2013, Article 4.1(a)).

The exceptions thus apply to reproduction, distribution, and making available of copyrighted material in general – provided that they are to be used by persons with disabilities.

87 WIPO Standing Committee on Copyright and Related Rights, SCCR/24/8 PROV. Provisional working document towards an appropriate international legal instrument (in whatever form) on limitations and exceptions for educational, teaching and research institutions and persons with other disabilities containing comments and textual suggestions (2012).
89 The most important copyright treaties are the Berne Convention for the Protection of Literary and Artistic Works (last amended 1979), the 1996 WIPO Copyright Treaty (WCT), the 1996 WIPO Performances and Phonograms Treaty (WPPT) and the 1994 TRIPS Agreement (Part II, Section 1).
90 Norwegian Copyright Act, note 85 and accompanying text; see also Australia Copyright Act as amended by Act No. 28 of 2007, VB – Division 3 ("Reproduction and communication of works by institutions assisting persons with a print disability") and Division 4 ("Reproduction and communication of works etc. by institutions assisting persons with an intellectual disability").
91 Norwegian Regulation of 23 November 2007, § 1-11 ("Eksemplarferiestilling til bruk for funksjonshemmede", "Reproduction for use by persons with disabilities"); see also Norwegian Copyright Act, note 85 and accompanying text.
The negotiations on the other legal instrument which is intended to cover other disabilities (WIPO Standing Committee on Copyright and Related Rights 2012b) have not revealed any diverging approaches concerning how copyrighted material is to be made accessible for persons with disabilities. Facilitating the availability of copyrighted works in accessible formats will imply enhanced accessibility for persons with disabilities.

9 Conclusion

The article does not find that there is a general human right to Internet access.92 For persons with disabilities, Article 21 and Article 30.1(a) of the CRPD must be read as specifying an individual human right, both as regards physical access and accessibility or usability, to ensure that persons with disabilities can communicate, participate and enjoy cultural material on an equal basis with others. The State obligations are further specified in Articles 4 and 9 of the CRPD. The ability of persons with disabilities to exercise other human rights depends upon their having at least minimum access to the Internet, as such access will be crucial for their overall human rights enjoyment. While disadvantaged ethnic groups are frequently referred to in other studies,93 this article finds that the most systematically disadvantaged category of persons regarding Internet access is persons with disabilities.

There is no human rights obligation on the States to ensure full Internet access to everyone, termed “universal services”, but this could be a policy objective, in order for states to be competitive in the information society. Regarding the obligations deriving from the CRPD, these are more substantial, including the adoption of a wide range of measures to facilitate Internet access and accessibility, including measures to ensure adequate economic accessibility or affordability for persons with disabilities.

There are increased efforts to make ICT, the Internet and copyrighted material more accessible to persons with disabilities. There is, however, a lack of efforts by governmental bodies to ensure that information and communications technologies and systems are actually accessed by persons with disabilities on an equal basis with others, as required by CRPD Article 9.1. As the lack of access to information impedes the possibilities for persons with disabilities to participate in society on an equal basis with others, the most important measure is strict requirements on providers of ICT in general and the Internet in particular.

92 See also Cerf, note 4.
Detailed surveys on accessibility and use of the Internet have been undertaken in the USA. They find that persons with disabilities have on average fewer computers than the population in general; those persons who have access are frequent users, but tend to use the Internet less strategically than the population in general; and Internet use will considerably improve quality of life for persons with disabilities.

It must be acknowledged that hardly any States pursue a policy of providing personal ICT and Internet access for free for certain categories of persons. Rather, States rely on infrastructure development and product development by the private sector as a means to provide ICT to households. In line with CRPD Article 9 and the (non-binding) ICESCR Guidelines on State reporting, emphasizing “affordable access to the benefits of scientific progress and its applications for everyone, including disadvantaged and marginalized individuals and groups,” the understanding that accessibility is only about setting long-term deadlines for making governmental Internet sites accessible and urging private entities to make their Internet sites accessible for persons with disabilities is simply inadequate. Moreover, it seems naïve to assume that the political objective of full Internet access to all households in all districts (“universal service”) will be achieved by leaving all infrastructure development to private actors.

There are specific aspects of Internet access which are crucial for an inclusive information society, which will be categorized under three headings: physical, affordable and informational. In this context it must be remembered that connections and hardware have become cheaper, while software and services are more expensive, also due to intellectual property rights and other forms of conditional access. Facilitating access constitutes substantive obligations on the States that are parties to the CRPD – while the relevant paragraphs of the ICESCR are much vaguer.

First, with regard to physical access, in some countries the primary means for access to the Internet will be by visiting privately owned Internet cafés or public buildings such as libraries. There are, however, certain persons who are not physically able to visit such locations easily. Hence, national policies must be adopted which analyse the actual access to Internet of vulnerable and marginalized persons, and identify measures to make the Internet available to them, including by facilitating Internet access. To achieve this, international assistance and support is crucial. One central resource is infoDev, which presents itself as “a global partnership program within the World Bank Group which works at the intersection of innovation, technology, and entrepreneurship to create opportunities for inclusive growth, job creation and poverty reduction.” Since access to information and communication technology is

94 UN Committee on Economic, Social and Cultural Rights, note 42, para. 70(a).
95 van Dijk, note 19, 210.
specified as a target under Millennium Development Goal number eight.\textsuperscript{97} and as the Tunis Commitment of the WSIS expressed high ambitions, international assistance should come as a natural consequence. The body that was assigned the responsibility for implementing the WSIS has, however, not been able to mobilize for Internet access.\textsuperscript{98}

Second, with regard to economic access, Internet connections and the computers themselves are not to be provided for free by the State to individual households. The assistive or auxiliary technologies that persons with disabilities depend upon in order to be able to effectively use the Internet must, however, be accessible at least at a subsidized rate – depending on the financial capacity of the State in question. Moreover, to facilitate recruitment of persons with disabilities to apply for – and successfully gain – employment in both the public and the private sectors, a public programme must be set up to enable any employers to obtain appropriate and subsidized auxiliary ICT equipment, so that the cost of purchasing such equipment does not discourage employers from hiring persons with disabilities.

Third, with regard to information access, based on the findings that Internet usage by persons with disabilities is less strategic that Internet usage by others, the State must, as a part of national strategies for an inclusive information society, ensure the availability of courses on the use of the Internet. This should preferably be done in cooperation with organizations for the disabled, in order to get persons with disabilities involved in defining the objectives and contents of the courses.

There is no need to invent new human rights when seeking to accommodate an inclusive information society. The author agrees that “[t]he human rights standards developed on the basis of the United Nations Charter and the Universal Declaration of Human Rights constitute a set of internationally adopted norms, relevant to all spheres of life, including the Information Society”.\textsuperscript{99} Hence, challenges arising in the information society can be met by a better understanding of – and application of – existing recognized human rights.

\textsuperscript{97} Target 8 (indicators 8.14-8.16) is telephone lines, cellular subscribers and Internet users per 100 persons.
