# Chapter 9 Between Economic Development and Human Rights: Balancing E-Commerce and Adult Content Filtering



#### Adam Szafrański, Piotr Szwedo and Małgorzata Klein

Abstract Notwithstanding its many positive attributes, the internet also poses serious risks for the human rights of some of the most vulnerable users: children. As is the case with their peers in the developed world, minors in developing countries also face the threat of online adult content exposure. Efforts to address this have been under way in the United Kingdom, Poland, and United States (cf., Utah) relying on different regulatory methods. Whilst, both, self-regulation and State regulation may comply with international requirements on the freedom of services and the freedom of expression, they must still be scrutinised properly. The present contribution shall examine regulatory means in relation to addressing the issue of child exposure to adult content in the developed and developing parts of the world. In sum, statutory regulation appears more suited to serving the interests of developing countries than soft law and self-regulatory approaches, as public and mandatory measures may bring greater transparency and may usually make it possible to challenge individual decisions or abstract regulations before national courts.

A. Szafrański

Faculty of Law and Administration, University of Warsaw, ul. Krakowskie Przedmieście 26/28, 00-927 Warsaw, Poland e-mail: adam.szafranski@uw.edu.pl

P. Szwedo (⊠) Faculty of Law and Administration, Jagiellonian University, ul. Gołębia 24, p. 3, 31-007 Kraków, Poland e-mail: piotr.szwedo@uj.edu.pl

M. Klein Faculty of Geography and Regional Studies, University of Warsaw, ul. Krakowskie Przedmieście 30, 00-927 Warsaw, Poland e-mail: gosia.przepiorka@gmail.com

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# 9.1 Introduction: Growing Internet Access in Developing Countries

The importance of internet access for development is evident. It is stressed by Sustainable Development Goals (SDGs); Goal 9 which calls on States to '[b]uild resilient infrastructure, promote sustainable industrialization and foster innovation.' Target 9.c. calls on States to 'significantly increase access to information and communications technology and strive to provide universal and affordable access to the internet in least developed countries by 2020'.<sup>1</sup>

The United Nations' Broadband Commission for Digital Development in 2015 published a report on global internet access entitled 'The State of Broadband 2015: Broadband as a Foundation for Sustainable Development'.<sup>2</sup> Based on the data presented in that report and on statistics concerning internet user volumes in each country, the following table has been prepared to illustrate the levels of internet access in the developing world (Fig. 9.1).

For now it is China who is the global leader in internet penetration, according to user numbers. In 2015 more than half of the Chinese population had internet access,

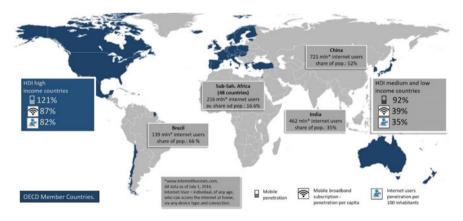


Fig. 9.1 Internet access in the world

<sup>&</sup>lt;sup>1</sup>Resolution adopted by the United Nations General Assembly on 25 September 2015, 70/1, *Transforming our world: the 2030. Agenda for Sustainable Development.* 

<sup>&</sup>lt;sup>2</sup>ITU, UNESCO, *The State of Broadband 2015, Broadband as Foundation of Sustainable Development*, available at http://www.broadbandcommission.org/documents/reports/bb-annualreport2015. pdf, visited 18 September 2018.

namely, there were 706 million users, of which 11% were under age.<sup>3</sup> Moreover, the penetration of internet use in developing countries is forecast to rise—for instance, by 2018 84% of the Chinese population between the ages of 12 and 17 will likely have internet access.<sup>4</sup> According to data presented by Mander, 27% of global internet users are between the ages of 16 and 24, but in developing countries the figures for that age group are even higher, reaching 39% for India, 36% for Vietnam, 34% for China and 33% for Brazil.<sup>5</sup>

According to the Barbosa et al. study on internet risk and safety in Brazil, new internet users are mostly children—53% of the parents in families who took part in the study survey were not internet users. The same study found that 'the proportion of Brazilian parents/guardians who were internet users and accessed the internet via mobile phones was much lower than the proportion of their children, 6 and 18%, respectively'.<sup>6</sup>

Still, it is sub-Saharan Africa, with an expected population of 1.5 billion by 2050, that has the biggest potential of becoming the latest new-user champion. Even though in 2012 only 9.6% of sub-Saharan Africa's population had internet access, with investment in undersea cables, faster internet services are becoming available through mobile phones. It is particularly important given that the number of young people in Africa aged 9–18 who are mobile phone users has been skyrocketing regardless of their financial status or location. Suffice it to say that in 2008 there were 246 million mobile phone subscribers in sub-Saharan Africa. That number doubled by mid-2010.<sup>7</sup>

Figures indicate that even though today the societies of developing countries are still far behind when it comes to internet penetration, the situation is quickly changing and within approximately 5 years, a billion new users reaching adulthood from the developing States will become connected. By 2020 there should be c. 4 billion people online.<sup>8</sup> The remaining 3 billion will need to overcome some greater challenges, such as creating online content in their native tongues, financing the broadband network in more remote and therefore less profitable for the provider parts of the world, and accessing affordable devices. All the same, these challenges will only slow down the growth of the online global community—not stop it. This tendency is supported by the growing availability of mobile phones and developments in telecommunications technology including Long-Term Evolution (LTE). Global figures on mobile cellular phones already exceed 7 billion.<sup>9</sup> In 2015 the UK Office of Communications (Ofcom)

<sup>&</sup>lt;sup>3</sup>Statista, *Projected internet user penetration in China from 2014 to 2018, by age*, available at http://www.statista.com/statistics/369636/china-internet-user-penetration-by-age-forecast/, visited 18 September 2018.

<sup>&</sup>lt;sup>4</sup>Ibidem.

<sup>&</sup>lt;sup>5</sup>Mander [1].

<sup>&</sup>lt;sup>6</sup>Barbosa et al. [2].

<sup>&</sup>lt;sup>7</sup>Porter et al. [3].

<sup>&</sup>lt;sup>8</sup>ITU, UNESCO, The State of Broadband 2015, fn. 2 supra, at 14.

<sup>&</sup>lt;sup>9</sup>*Ibidem*, at 16.

reported that in 2015 that for the first time, smartphones had overtaken laptops as the most popular device for getting online.<sup>10</sup>

Internet access brings many benefits to the developing world; one could mention better access to health information through telemedicine,<sup>11</sup> easier education by e-learning,<sup>12</sup> administration through e-government instruments,<sup>13</sup>limiting corruption, and increasing transparency and accountability through electronic management systems.<sup>14</sup> M-commerce and e-commerce are probably among the most important advantages of the internet which give economic operators from developing countries an opportunity to be more competitive in the global trading system.<sup>15</sup> Also, for that reason, Sustainable Development Goal target 17.10 calls for the promotion of a 'universal, rules-based, open, non-discriminatory and equitable multilateral trading system', and target 9.c (mentioned earlier) calls for universal and affordable internet access. Nevertheless, internet access is Janus-like and comes with certain risks, including increased risk of adult content exposure to children due to insufficient restrictions and regulation in those countries.

# 9.2 Adult Content Exposure as a Risk

Galloping internet accessibility comes with certain threats, including those concerning children's safety. As one author has put it, the 'internet is Janus-faceted when it concerns children. Within this context, a number of developing countries are facing the challenge of finding the right balance between the promotion of internet access for children and online child safety and protection'.<sup>16</sup> Adult content exposure is one such risk, as it is also in these parts of the world, where different forms of human trafficking and sexual exploitation occur most often, and children and teenagers are common among the victims.<sup>17</sup> Therefore, developing country governments, main actors in development aid, and those who fight against human trafficking and sexual exploitation should not lose those risks from sight, and should pay closer attention to protecting the rights of the youngest consumers in the quickly changing e-commerce markets in the developing world.

The body of research concerning the potentially harmful effects of pornography, albeit growing, remains limited. Its potential of leading to addiction is still an object of research and debate.<sup>18</sup> Some academics challenge the adequacy of the use of term

<sup>&</sup>lt;sup>10</sup>Martellozzo et al. [4, p. 10].

<sup>&</sup>lt;sup>11</sup>Grimwood [5, p. 524].

<sup>&</sup>lt;sup>12</sup>Sife et al. [6].

<sup>&</sup>lt;sup>13</sup>(Darha) Ndou [7].

<sup>&</sup>lt;sup>14</sup>Dutta [8].

<sup>&</sup>lt;sup>15</sup>World Trade Organisation (WTO) [9].

<sup>&</sup>lt;sup>16</sup>Berson and Berson [10, p. 194].

<sup>&</sup>lt;sup>17</sup>Ghosh [11]; Jordan Greenbaum [12].

<sup>&</sup>lt;sup>18</sup>Duffy et al. [13].

'addiction',<sup>19</sup> but in 2011, the American Society of Addiction Medicine (ASAM) expanded its definition to refer to behaviour 'which is not solely related to problematic substance use [...] Research shows that the disease of addiction affects neurotransmission and interactions within reward circuitry of the brain, leading to addictive behaviors that supplant healthy behaviors, while memories of previous experiences with food, sex, alcohol and other drugs trigger craving and renewal of addictive behaviors'.<sup>20</sup> Even if susceptibility to such dependence varies, neuroscience<sup>21</sup> and psychology<sup>22</sup> seem to confirm that pornography watching may lead to addiction<sup>23</sup> termed 'clinically identifiable illness'.<sup>24</sup> According to studies conducted by Voon '[p]eople who are addicted to pornography show similar brain activity to alcoholics or drug addicts',<sup>25</sup> even if 'it's probably too early to put compulsive porn users in a box with people who suffer from drug or alcohol problems'.<sup>26</sup> As addictions start usually in young age, children constitute the most vulnerable group, which requires specific attention and protection.

Moreover, there is sufficient scientific proof to conclude that child access to pornography is harmful. It may negatively skew their sexual understanding and may lead them to 'risky behaviours'.<sup>27</sup> Types of pornography which are increasingly entering the internet mainstream promote aggression and the degradation of women. According to research provided by Bridges & al. 88.2% of pornographic scenes contain physical aggression and 48.7% of them contain verbal aggression. Perpetrators of aggression were usually male, whereas targets of aggression were overwhelmingly female.<sup>28</sup> Pornographic content, especially that contains violence, may cause children 'distress when they accidentally come across online pornography', and is 'particularly harmful for vulnerable groups'.<sup>29</sup>

Indeed, the phenomenon is similar in developing countries. 47% of Brazilian parents who participated in the Barbosa study were concerned about 'a possibility of the child seeing inappropriate content online' and 20% of the children were 'bothered' by seeing pornography online.<sup>30</sup> The negative impact of pornography on children was also confirmed India and Taiwan.<sup>31</sup> It is where different forms of human trafficking and sexual exploitation of children occur most often. Also, according to

<sup>&</sup>lt;sup>19</sup>Ley et al. [14].

<sup>&</sup>lt;sup>20</sup>American Society of Addiction Medicine (ASAM) [15].

<sup>&</sup>lt;sup>21</sup>Hilton and Watts [16]

<sup>&</sup>lt;sup>22</sup>Ford et al. [17].

<sup>&</sup>lt;sup>23</sup>Cline [18].

<sup>&</sup>lt;sup>24</sup>Reed [19, p. 249]; Delmocino [20, p. 239].

<sup>&</sup>lt;sup>25</sup>Withnall [21].

<sup>&</sup>lt;sup>26</sup>Weir [22].

<sup>&</sup>lt;sup>27</sup>Horvath [23, pp. 7–11].

<sup>&</sup>lt;sup>28</sup>Bridges [24].

<sup>&</sup>lt;sup>29</sup>Hargrave and Livingstone [25, p. 13].

<sup>&</sup>lt;sup>30</sup>Alexandre Barbosa et al., *Risks and Safety on the Internet*, fn. 6 *supra*, at 15.

<sup>&</sup>lt;sup>31</sup>Miranda A. H. Horvath, Llian Alys, Kristina Massey, Afroditi PIna, Mia Scally & Joanna R. Adler (2013), *Basically... porn is everywhere*, fn. 26, at 37.

*Google*, the top six porn-watching countries are all low-income countries: Pakistan, Egypt, Vietnam, Iran, Morocco and India. According to *Pornhub* statistics, massive pornography viewing takes place in India, Mexico and Brazil.<sup>32</sup> Furthermore, Colin Rowntree, co-founder of Boodigo, a porn search engine, informs us that '[w]e are definitely witnessing an increase in "locally [in developing countries] grown" porn'. Cragg (2000), cited by Hargrave and Livingstone, gathered the comprehensive opinion of a group of experts who agreed that viewing pornography is harmful to children. Some specific negative effects of adult content for children include 'addiction to pornography, deviant or criminal sexual behavior, aggression and negative attitudes towards women'.<sup>33</sup>

There are no clear statistics on pornography watching by children in developing countries, nevertheless in the EU, on average 23% of children report seeing naked images in media, mostly on the internet<sup>34</sup> and governments should engage in providing safe internet use.<sup>35</sup> Moreover, much adult-content material is produced in developing countries, such as the Philippines, Mexico, Cambodia, Thailand, Gambia, Nigeria, Kenya, and the Dominican Republic.<sup>36</sup>

#### 9.3 Reaction to the Risk: Adult Content Filtering

Many states, including the US, China and France, even if for different reasons, are already implementing various methods of digital censorship. The debates on adult-content filtering in the UK have already inspired lawmakers in Poland and Utah, and may be expected to motivate regulators in the developing world. Several years ago Little and Preston wrote that: '[i]n many developing countries, the drive to train a new generation in technology skills as a foray into global commerce has produced an epidemic of pornography addiction that parents have no idea how to address. Protecting children from internet pornography is a global problem without a global answer. The borderless nature of the internet makes coordinating responses extremely difficult. Individual countries are scrambling to find solutions'.<sup>37</sup>

American authors insisted that internet regulation could be mostly satisfied by Internet Corporation for Assigned Names and Numbers (ICANN) but they were also critical about a lack of genuine leadership of the US in that respect. This situation has recently changed in the state of Utah, which adopted the Current Resolution on

<sup>&</sup>lt;sup>32</sup>Pornhub Insights [26].

<sup>&</sup>lt;sup>33</sup>Andrea Millwood Hargrave, Sonia Livingstone, *Harm and Offence in Media Content*, fn. 28 *supra*, at. 123.

<sup>&</sup>lt;sup>34</sup>Livingstone et al. [27, pp. 49–50].

<sup>&</sup>lt;sup>35</sup>Miranda A. H. Horvath, Llian Alys, Kristina Massey, Afroditi PIna, Mia Scally & Joanna R. Adler (2013), *Basically... porn is everywhere*, fn. 26, at 11.

<sup>&</sup>lt;sup>36</sup>Stolen Innocence [28]; EPCAT [29]; Palet [30]; Gupta [31]; Samuels [32].

<sup>&</sup>lt;sup>37</sup>Little and Preston [33].

the Public Health Crisis, signed in March 2016.<sup>38</sup> The Resolution has not yet an 'enforcement muscle' and follows a 2013 Joint Resolution Regarding the Impact of Adult Images on Children's Development. Criticised from different standpoints, including that it is based on weak scientific evidence,<sup>39</sup> or that it limits freedom of speech,<sup>40</sup> this has not discouraged Utah lawmakers to take further steps in order to limit the access to pornography especially for children.<sup>41</sup> Utah regulation was inspired by regulatory measures taken in the UK and was also based on economic arguments.<sup>42</sup> The American Academy of Matrimonial Lawyers hints the relationship between interest in pornographic sites and the rise of divorce rates in the US.<sup>43</sup> Internet users in developing countries are increasingly becoming more aware of its harmful content, and seek regulatory tools or technical solutions to protect children from such content.<sup>44</sup>

As UK regulations inspired lawmakers in Poland and Utah it may be legitimately expected that those attempts will inspire developing countries. Purely private initiatives do not seem to be sufficient (Sect. 9.4.1 *infra*). Even larger and more powerful countries have difficulties in controlling illegal online conduct where offenders minimise their dependence on intermediaries, thereby eliminating a government's means of regulating them.<sup>45</sup> What is more, internet censorship may potentially constitute a violation of international trade law regulating freedom of services (Sect. 9.4.2 *infra*). Also, disproportionate censorship may potentially amount to a violation of the freedom of expression (Sect. 9.4.3 *infra*). For that reason legal tools must approach this issue 'with a scalpel rather than a sledgehammer.'<sup>46</sup>

### 9.4 Mitigating the Risk Through Regulation

'[The] [i]nternet is not a lawless prairie'.<sup>47</sup> It is regulated by private and public legal instruments of national and international origin, at the national and international level. Limiting access to the internet has implications for international trade as it affects the provision services. Liberalisation of trade in services was regulated on an almost universal plane by the General Agreement on Trade in Services (GATS)<sup>48</sup> and,

<sup>&</sup>lt;sup>38</sup>Utah [34].

<sup>&</sup>lt;sup>39</sup>Utah [35]; Allen [36].

<sup>&</sup>lt;sup>40</sup>Phillips [**37**].

<sup>&</sup>lt;sup>41</sup>Bolton [38].

<sup>&</sup>lt;sup>42</sup>Ibidem.

<sup>&</sup>lt;sup>43</sup>Manning [39].

<sup>&</sup>lt;sup>44</sup>Brent A. Little, Cheryl B. Preston, Symposium: I Think I Can, fn. 36 supra, at 79–80.

<sup>&</sup>lt;sup>45</sup>*Ibidem*, at 79.

<sup>&</sup>lt;sup>46</sup>Ibidem.

<sup>&</sup>lt;sup>47</sup>Hampson [40].

<sup>&</sup>lt;sup>48</sup>General Agreement on Trade in Services, 15 April 1994, Marrakesh Agreement Establishing the World Trade Organization, 1869 U.N.T.S. 183, (1994).

regionally, by regional economic organisations including the EU and NAFTA. Both layers are oriented towards the successive elimination of trade barriers but remain interlinked with other sub-fields of international co-operation (and corresponding areas of international law), such as that of human rights protection.

Internet access is filtered for a variety of motives including political. It is rigorously monitored, and critical sites based overseas on occasion blocked in many countries, including, China, Iran, Myanmar, North Korea, Syria, Tunisia, Turkey, Uzbekistan, and Vietnam to mention but a few.<sup>49</sup> Further motivation may pertain to what societies perceive as immoral or illegal; examples of such perceptions are numerous and usually concern pornography, gambling, or criminal activities.<sup>50</sup> In the US, moral censorship of online gambling was also based on morality considerations but have also included the protection of children (see Section 4.2 *infra*). The Children's Internet Protection Act requires that public libraries use internet filters as condition for receipt of federal subsidies.<sup>51</sup> The US Supreme Court ruled that regulation is not unconstitutional under the First Amendment.<sup>52</sup>

Other than a diversity of motives, there is also a diversity of internet censorship methods. The first technique is based on website blocking. It may also be effectuated by forbidding Internet Service Providers (ISPs) in the country from allowing access to any site appearing on an official list of banned sites. Another technique effectuated in China relates to filtering through internet search engines; sites which have been blacklisted do not appear in the result lists at all. A more sophisticated method is that of selective filtering, whereby it is not the whole website that is blocked, such as Amazon—only selected subpages. Such selective filtering is less restrictive than the other two methods.

Whereas public institutions regulate some aspects of internet activities, alternative or cumulatively private standards are set. In the UK, with regard to the Internet Watch Foundation, private actors called upon ISPs to get involved in securing the internet for children through self-regulation and Codes of Conduct.<sup>53</sup> In some aspects of economic law 'soft regulations' may be more efficient or desirable than hard law. For many economic operators, being stigmatised by public or business opinion may be more harmful than a regular public sanction. That is why in civic societies NGOs wield considerable power in shaping the public sphere. One such group, 'Save the Children Europe Group', called upon the EU to coordinate work on possible inter-

<sup>&</sup>lt;sup>49</sup>Erixon et al. [41, p. 4]; Faris and Villeneuve [42, p. 6].

 <sup>&</sup>lt;sup>50</sup>Fredrik Erixon, Brian Hindley, Hosuk Lee-Makiyama, *Protectionism Online*, fn. 47 *supra*, at 4.
<sup>51</sup>Children's Internet Protection Act, § 1701, 114 Stat. 2763A-335.

<sup>&</sup>lt;sup>52</sup>Supreme Court of the United States, United States, et al., Appellants, v. American Library Association, Inc., et al., No. 02-361. Argued 5 March 2003 and decided on 23 June 2003.

<sup>&</sup>lt;sup>53</sup>Save the Children Europe Group, child Position paper on pornography and Internet-related sexual exploitation ofChildren. https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&ved=2ahUKEwibw6C vicfcAhWFJZoKHSEXDQkQFjAAegQIARAC&url=https%3A%2F%2Fec.europa.eu%2Fjustice %2Fgrants%2Fresults%2Fdaphne-toolkit%2Fen%2Ffile%2F1032%2Fdownload%3Ftoken%3Dgv OsFz\_E&usg=AOvVaw1uX37WytXXoFIwCTang6H1, visited 18 September 2018, at 24.

net child abuse.<sup>54</sup> Such initiatives resulted in the adoption in 2003 of a Council Framework Decision on combatting the sexual exploitation of children and child pornography, which was later replaced by the 2011/92 Directive. Though the ban of child pornography is a rather well-settled rule, awareness of children's access to pornography is relatively recent in terms of possible regulations. It has rather been perceived as a moral or educational issue. Unprecedented access to internet pornography by minors has shown negative effects for their development and, generally, for society.<sup>55</sup> Despite different moral assessments of pornography as such, regulating child access to adult content becomes a social need. As such the aim of regulation is twofold. Law not only regulates human behaviour but also plays a strong educational function in that respect; it can be a 'whistleblower' signalling possible dangers. One could ask whether technological solutions or private standards alone would be sufficient. Just as smoking bans have further raised awareness about the harmful effects of smoking tobacco, and have helped many people to quit smoking, similarly regulating access to pornography would raise awareness of its potentially negative effects<sup>56</sup> especially on children.<sup>57</sup>

### 9.4.1 The Method: Self-regulation v. State Regulation

The production of child pornography, especially in developing states, is a phenomenon which requires the involvement of the international community. The example of the law in Madagascar, and the implementation therein of the Protocol to the Convention on the Rights of the Child on the Sale of Children, Child Prostitution and Child Pornography, demonstrate that developing countries would likely follow the standards set by developed countries and the international community related to children protection in the internet.<sup>58</sup> Art. 3 para. 1(c) of the Protocol requires that State-Parties penalise '[p]roducing, distributing, disseminating, importing, exporting, offering, selling or possessing for the above purposes child pornography'. This stipulation was introduced into Malagasy Penal Code which provides that: '[t]aking, recording or transmitting a picture of a minor with a view to circulating it, where that image has a pornographic character, is punished' (art. 346).<sup>59</sup> The cited regulation is almost identical to that of the French Penal Code (art. 227-23).<sup>60</sup> Similarly art.

<sup>&</sup>lt;sup>54</sup>*Ibidem*, at 4.

<sup>&</sup>lt;sup>55</sup>Greenfield [43].

<sup>&</sup>lt;sup>56</sup>Kühn and Gallinat [44].

<sup>&</sup>lt;sup>57</sup>Ybarra and Mitchell [45]; Curtis [46].

<sup>&</sup>lt;sup>58</sup>*Office of the United Nations High Commissioner for Human Rights (OHCHR)*, Report of the Special Rapporteur on the sale of children, child prostitution and child pornography, Najat Maalla M'jid-Addendum-Mission to Madagascar, A/HRC/25/48/Add.2, 23/12/2013, available at http://ap. ohchr.org/documents/dpage\_e.aspx?si=A/HRC/25/48/Add.2, visited 18 September 2018.

<sup>&</sup>lt;sup>59</sup>Madagascar, Penal Code of 17 June 1972, Journal officiel no. 871, later amended.

<sup>&</sup>lt;sup>60</sup>Penal Code, resulting from various acts adopted on 22 July 1992, later amended.

347 of the Malagasy Code provides that: '[t]he manufacture, transport, distribution by whatever means and however supported, of a message bearing a pornographic or violent character or a character seriously violating human dignity, or the trafficking in such a message, is punished' clearly copies art. 227-24 of the French Code. Both regulations appear to respond to the needs of the 'pre-digital era' and mostly reflected dissemination of such content via television, printed media or cinemas. It was a source of debate about age classification of films in France.<sup>61</sup>

What is more, recent, and still subject to debate, is the open access of children to online adult (pornographic) content on the internet. Many countries have introduced blocking systems to reduce child pornography traffic on the internet, and to make access to illegal content more difficult. More problematic is the free access to the content that is not illegal per se. An example of such regulatory need arises in relation to the protection of children against lawful adult content. Child protection advocates seek to implement default pornographic filtering to all users unless they are adults and signal their intention to unfiltered access to internet content (optin). Default filtering or blocking systems were developed more than a decade ago. Their primary goal was to combat illegal child pornography. Comparable systems of blocking legal pornography are relatively new. In the UK a pioneer default filtering method was introduced only recently. Some authors claim that the UK system is the most advanced in Europe.<sup>62</sup> No doubt, it serves as a reference point for other States willing to limit children's access to pornography online. Some commentators however criticise the UK model for over-blocking<sup>63</sup> and, therefore, hampering the development of the internet services sector. Nevertheless, it serves as a foundational reference point in other countries seeking to regulate this problem, namely, in Poland and the US (in relation to Utah). It may be genuinely expected that the UK model may serve as inspiration for other countries, including developing States, seeking to regulate this problem, including Madagascar (briefly mentioned earlier). India, is a further example, which in July 2015 introduced a government order of blocking more than 800 adult content websites but as the ban affected all internet users, it was partly withdrawn. The national debate which also involved the Indian Supreme Court demonstrates that also developing countries seek to balance the freedom to access internet content with public morals and public order.<sup>64</sup>

UK regulation has been developing over the last 20 years. In 1996, the Internet Watch Foundation (IWF) was created. Its aim is to identify pages and internet services containing sexually abusive images and illegal pornography. The Police, the Director of Public Prosecutions, and the most important UK ISPs all played a part in setting up the IWF. Although the IWF is supported by public bodies, it remains a private/sectoral institution. ISPs that joined the organisation have agreed to comply with high standards elaborated by the IWF. The IWF's objective is to oversee the internet, to cooperate with police, prosecutors, and ISPs in order to detect illegal

<sup>&</sup>lt;sup>61</sup>Le Roy [47].

<sup>&</sup>lt;sup>62</sup>Waglewski [48, Vol. 1, p. 14].

<sup>&</sup>lt;sup>63</sup>Vincent [49]

<sup>&</sup>lt;sup>64</sup>Nair [50].

pornography and to prevent abuses in this matter. The activity of the IWF resulted in the largest UK ISP-namely, BT-setting up the Cleanfeed Content Blocking System, which since 2004 has worked as a filter of pages marked as suspect by the IWF. The IWF provides a list of pages and the Cleanfeed Content System blocks access to the detected illegal content. BT states on its home page that it was the first telecommunications operator in the world to introduce the blocking system against child pornography and offered other operators free access to the system.<sup>65</sup> The filter does not protect children against all pornographic content, but does block pages with illegal pornography and images of child abuse. According to public opinion, the Cleanfeed Blocking System was perceived as successful, but, above all, it was praised by the UK Government with the express approval of the Prime Minister. As a result of political pressure, other ISPs and children's advocacy groups followed BT's example. Political pressure was quite intense: the Home Office threatened to introduce legislation compelling blocking unless ISPs voluntarily complied. Ultimately governmental plans for legislation were abandoned in 2009 as an Ofcom survey established that already 98.6% of home connections were subject to blocking systems.66

The next step in child protection took place in 2014 when a large group of Telecommunication Operators (including BT, TalkTalk, Virgin, and Sky), by means of support from the Prime Minister, embarked to survey over 19 million internet home users in order to know if they were interested in blocking children's access to pornography. Lack of interest was interpreted as a default allowance for the blockade. The free of charge blocking system had to work on all devices connected to the internet: laptops, PCs, mobile phones, and tablets. It must be noted that in the UK governmental support was political but not statutory. The market regulated the matter on its own. Lastly, in 2015 the broadband provider Sky, under its Sky Broadband Shield scheme started to block adult content by default, that is unless users opt-out. BT decided to ask its customers whether they wished to activate parental controls but without obliging them to do so.

For many years governments have relied on the goodwill of the internet industry's ability to self-regulate.<sup>67</sup> Political pressure and civil society movements have led to the establishment of self-regulatory systems with little supervision by public authorities. Polish attempts to regulate the problem have been based on hard law. It can also be more easily introduced in States having less experience in private sector self-regulation and less established democratic traditions. The *Committee on Administration and Digitisation* of the Polish Parliament drafted a resolution calling for the government to design a law concerning default filtering—parental control. In its resolution, deputies called upon the government to draw up an act obliging telecommunications operators to use filtering of pornography in order to protect children. Such approach meant that ISPs are not obliged on a self-regulatory basis, but by

<sup>&</sup>lt;sup>65</sup>The BT Story, available at http://www.btplc.com/Thegroup/Ourcompany/TheBTstory/index.htm, visited 18 September 2018.

<sup>&</sup>lt;sup>66</sup>McIntyre [51, pp. 277, 283].

<sup>&</sup>lt;sup>67</sup>Carr and Hilton [52, p. 306].

binding law. By contrast, the UK system was founded on a self-regulatory model, as it received important political backing. The UK system, although it may raise issues with transparency and possible judicial supervision, it is less strict and is more likely to be adaptable to the changing digital environment. However regulations on internet censorship may constitute a barrier in trade and therefore need to be further evaluated under international trade (Sect. 9.4.2) and human rights (Sect. 9.4.3) standards. Passing this test seems to be more difficult if regulations are statutory and public than private or of soft law character. This evaluation would also be useful for regulatory models to be chosen by developing states in the future.

#### 9.4.2 Freedom of Services

Internet censorship may constitute a violation of the freedom to provide services under international trade law. For that reason different blocking methods have to be evaluated and justified on legitimate grounds stemming from the applicable international norms. Only when they meet such threshold, should they serve as models for developing countries.

Services are the fastest growing sector of the global economy and account for two-thirds of global output, one-third of global employment and nearly twenty percent of global trade.<sup>68</sup> Much of this growth is due to the impact digital developments have had on the services sector. For instance, many traditional goods, such as printed materials and music records and CDs, are now available online and may be downloaded across borders. This situation complicates the goods/services distinction and the applicability of respective WTO agreements. There is scope within WTO law for its integration with other values; this is primarily effectuated through the list of exceptions provided in art. XX of the General Agreement on Tariffs and Trade (GATT)<sup>69</sup> and XIV of the GATS. Both articles contemplate that measures may be 'necessary for the protection of human, animal or plant life or health'. As psychological research has demonstrated exposure to internet pornography among children and adolescents may be harmful (Sect. 9.2 supra), one could invoke, as per the Utah 2016 Resolution, public health as grounds for trade restrictive measures. Moreover, the US-Gambling case has shown possible synergies between public morality exceptions and the protection of minors against 'special health and youth protection risks' (US-Gambling, panel report para 3.211, see Sect. 9.4 infra). Apart from the 'human health', the 'public morals' grounds within the GATS may be raised. Art. XIV(a) provides that 'nothing in this Agreement shall be construed to prevent the adoption or enforcement by any Member of measures: (a) necessary to protect public morals or to maintain public order'. The importance of this clause becomes more apparent especially in times of a growing services market when an increasing amount of services may be provided online.

<sup>&</sup>lt;sup>68</sup>Brown [53, p. 2].

<sup>&</sup>lt;sup>69</sup>General Agreement on Tariffs and Trade (1947), 55 U.N.T.S. 194.

The free trade-morality conflict emerged in the area of internet services in the US-Gambling case before the WTO Dispute Settlement Body. The case concerned the provision of online gambling services from Antigua and Barbuda to US consumers. One of the arguments raised by the US before the WTO concerned the availability of online gambling to children given that: 'the internet can be used anonymously, the danger exists that access to internet gambling will be abused by underage gamblers. The American Psychiatric Association has similarly warned that "[y]oung people are at special risk for problem gambling and should be aware of the hazards of this activity, especially the danger of internet gambling, which may pose an increased risk to high school and college-aged populations".<sup>70</sup> It is not hard to see the parallels between the arguments on the negative effect and dangers connected to online gambling, and the availability of adult content to minors. The possible addiction to online gambling may represent a comparable danger to children as in the case of pornography: '[R]emote gambling also presents special health and youth protection risks in part because it is available to anyone, anywhere-including compulsive gamblers and children—who can gamble 24 h a day with a mere 'click of the mouse.' Isolation and anonymity compound the danger'.<sup>71</sup> The WTO Appellate Body took a position on that issue. This judicial authority plays the highest role in settling international economic disputes and is sometimes called 'The World Trade Court.<sup>72</sup> It found that US regulations are 'measures ... necessary to protect public morals or to maintain public order<sup>73</sup> and are therefore justified. For that reason one could therefore conclude that preventative measures aiming to protect minors from inappropriate content on the internet may be justified under this exception. This conclusion by the Appellate Body provides important guidance for countries wishing to regulate child internet access to adult content, including for 'emerging and developing economies'.

## 9.4.3 Freedom of Expression

Adult content filtering should be balanced against other fundamental human rights protected under international law. Freedom of expression is guaranteed by universal and regional human rights agreements. The International Covenant on Civil and Political Rights in Article 19(2) provides that '[e]veryone 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

<sup>&</sup>lt;sup>70</sup>United States—Measures Affecting the Cross-Border Supply of Gambling and Betting Services, panel report, circulated 10 November 2004, WT/DS285/R, para. 3.18.

<sup>&</sup>lt;sup>71</sup>*Ibidem*, para. 3.211.

<sup>&</sup>lt;sup>72</sup>Claus-Dieter Ehlermann, "Six Years on the Bench of the "World Trade Court"—Some Personal Experiences as a Member of the Appellate Body of the World Trade Organization, 36 Journal of World Trade, 605.

<sup>&</sup>lt;sup>73</sup>United States—Measures Affecting the Cross-Border Supply of Gambling and Betting Services, Appellate Body report, adopted 20 April 2005, WT/DS285/AB/R, para. 327.

or in print, in the form of art, or through any other media of his choice'.<sup>74</sup> This *quasi*-universal regulation (currently 168 ratifications) would also have to be taken into account when regulating adult content filtering in different countries. As in other cases of international human rights treaties, they are binding upon states that have ratified it, nevertheless, they were designed to affect the legal status of individuals.

Freedom of expression is also safeguarded in regional instruments including the European Convention on Human Rights (ECHR). Human rights, as expressed in the ECHR, also have some normative implications at the EU level and some persuasive effect for the case law of the Court of Justice of the European Union (CJEU). Article 10 of the ECHR provides that '[e]veryone has the right to freedom of expression. This right shall include freedom to hold opinions and to receive and impart information and ideas without interference by public authority and regardless of frontiers'.<sup>75</sup> A very similar right is expressed in Article 11 of the EU's own Charter of Fundamental Rights.<sup>76</sup>

Until now, the European Court on Human Rights (ECtHR) did not have an opportunity to express its opinion on default filtering. Nevertheless, certain cases may provide guidance in understanding the relevant limits of freedom of speech. An illustrative example is the seizure of the Little Red Schoolbook which gave rise to the Handyside case. In this case, UK authorities decided to seize a book entitled 'The Little Red Schoolbook' and to prohibit the distribution of it. The book was addressed to children above the age of 12 and encouraged them to question societal norms on sex, drugs, alcohol, and tobacco. The distributor contested the prohibition decision before UK courts. After exhausting the domestic legal justice system, it was submitted to the ECtHR.<sup>77</sup> The court did not find a violation of article 10 of the ECHR. It stated that the main objective of the judgment was to protect minors and their morals.<sup>78</sup> This limitation was therefore justified. According to article 10 para. 2 of the ECHR the exercise of the freedom of expression may be subjected to such formalities, conditions. and restrictions as are prescribed by law and are necessary in a democratic society for the protection of morals. Therefore, in that case, considerations of public morality justified restrictions to the freedom of expression. In the context of national legal systems, 'in the Handyside case the Court noted that there was no uniform European Concept of 'morality' and made it clear that States would enjoy a wide margin of appreciation in assessing whether measures were required to protect moral standards<sup>79</sup> Similarly, A. H. Robertson finds that: '[t]here is more

<sup>&</sup>lt;sup>74</sup>International Covenant on Civil and Political Rights, Adopted and opened for signature, ratification and accession by General Assembly resolution 2200A (XXI) of 16 December 1966, 999 U.N.T.S 171.

<sup>&</sup>lt;sup>75</sup>Convention for the Protection of Human Rights and Fundamental Freedoms, Sept. 4, 1950, Rome, 231 UNTS 222.

<sup>&</sup>lt;sup>76</sup>Charter Of Fundamental Rights of The European Union, 18 December 2000, Official Journal of the European Communities, 2000/C 364/01.

<sup>&</sup>lt;sup>77</sup>Case of Handyside v. the United Kingdom, Judgment, December 7, 1976.

<sup>&</sup>lt;sup>78</sup>*Ibidem*, para. 52.

<sup>&</sup>lt;sup>79</sup>Ovey and Robin [54, p. 285].

scope for the margin of appreciation (in morality)'.<sup>80</sup> As had been the case in the US-Gambling dispute settled before WTO Appellate Body, it was stated that the main objective of the judgment was to protect minors and their morals.<sup>81</sup>

Pursuant to article 10 of the ECHR, freedom of expression may be limited if it is necessary in a democratic society. The term 'necessary in a democratic society' establishes a proportionality requirement. In the EU and ECHR legal orders, proportionality is understood in a formal way. The standard is composed of four stages: there must be a legitimate aim for the measure at hand, the measure must be suitable to achieve the aim, the measure must be necessary to achieve the aim, and lastly, the measure must intend the correct balance between restrictions and freedoms or rights.<sup>82</sup> The protection of children against adult content may be categorised as a legitimate aim. When deciding on adult content filtering, it is not only morals that are relevant, but first of all, the rights of children (to be free from harm). The ECHR does not make specific provision for children although they are included by operation of the term 'everyone' throughout the text of the ECHR. There is, however, a separate international agreement ratified by almost every state in the world: the UN Convention on the Rights of the Child. According to article 34, States Parties 'undertake to protect the child from all forms of sexual exploitation and sexual abuse'.<sup>83</sup> It also relates to measures preventing child pornography. However, child sexual abuse may also sensibly consist in child exposure to images, which is inappropriate for their age as it may be detrimental to their sexual and broader development, and may lead to 'risky behaviours'. Therefore default filtering could be justified not only in relation to abstractions such as public morals but also by the need to safeguard child's psychosexual and broader development, and defend its right to a healthy human environment. The second stage is the criterion of adequateness, which is more problematic. Until now, pure technical solutions have been evaluated as ineffective. But even though the UK system may not be perfect, it plays other important roles. First, it has an educational function—it informs children about the inappropriateness of adult content. It overlaps with the educational function of law or regulatory measures as such. It also limits free access to pornography by making it more difficult, if not impossible, as well as prevent incidental access to it. The third stage in the proportionality test is the compulsion and possibility of achieving the same goal by other, less restrictive, means. In fact, parents may now buy or even use free of charge software, which is already in use in schools or libraries. However, many parents do not use such means for reasons including the lack of proper knowledge, awareness and/or computer skills. Easy access to pornography among children is a socially incontestable fact. In Poland 83% of 8 year olds and 91% of 11 year olds use the internet regularly, and 40% of 8 year olds and 65% of 11 year olds do so without parental

<sup>&</sup>lt;sup>80</sup>Robertson and Merrills [55, p. 152].

<sup>&</sup>lt;sup>81</sup>Case of Handyside v. The United Kingdom, para. 52.

<sup>&</sup>lt;sup>82</sup>Christoffersen [56 p. 31]; Khosla [57, p. 298].

<sup>&</sup>lt;sup>83</sup>Convention on the Rights of the Child, General Assembly Resolution 44/25 of 20 November 1989.

supervision.<sup>84</sup> Given that 75% of US teens own mobile devices<sup>85</sup> it can be assumed a great deal of their online activity takes place not necessarily tied to one place for long spells of times, and therefore less likely to be consistently monitored.<sup>86</sup> According to research cited earlier, in the EU, on average 23% of children report seeing naked images in media, mostly in internet.<sup>87</sup> As pornography watching may negatively impact on child development, and given extensive possession of smartphones which makes it more difficult for parents to monitor access, the necessary balance between restricting access and the limitation of rights (freedom of expression) appears to be duly struck.

The freedom of expression is also incorporated in article 9 para. 2 of the African Charter on Human and Peoples' Rights<sup>88</sup> and in art. 13 of the American Convention on Human Rights.<sup>89</sup> It is not uncommon for courts from different legal orders to have regard to the jurisprudence of their counterparts<sup>90</sup> and to reproduce their reasoning.

## 9.5 Conclusions: Implications for Developing Countries

There is relative consensus around the need to prevent child pornography. It is a challenge that has highlighted in challenges and possibilities in regulating the worldwide web. In their efforts to do so, developing countries due to their accession to international treaties appear to look to the developed West for standards of regulation. Child protection against exposure to online adult content may follow a similar but slightly different path. Many initiatives are taken by internet companies, such as Google, to provide 'safe search' mode for their users. However, in many developing countries private initiatives may not be sufficient, and there be weaker civil society traditions to put adequate pressure on operators. ISP self-regulation will probably not be adequate and legislative means may be required. Such preventative measures should comply with, and be proportional to, the requirements of applicable norms of international trade and of human rights, including the freedom of expression. Internet regulation may affect the provision of digital services and therefore would require justification. The rationale may stem from relevant exceptions concerning public morals and public health in trade law. As the harmful impact of adult content exposure on child development becomes recognised, children's rights as human

<sup>&</sup>lt;sup>84</sup>Czapiński and Panek [58]; Batorski [59].

<sup>&</sup>lt;sup>85</sup>Lenhart et al. [60, p. 9].

<sup>&</sup>lt;sup>86</sup>Owens et al. [61, p. 100].

<sup>&</sup>lt;sup>87</sup>Sonia Livingstone, Leslie Haddon, Anke Görzig & Kjartan Ólafsson, *Risks and safety on the internet*, fn. 33 *supra*, at 49–50.

<sup>&</sup>lt;sup>88</sup>African Charter on Human and Peoples' Rights, 27 June 1981, 1520 UNTS 217.

<sup>&</sup>lt;sup>89</sup>American Convention on Human Rights, San José, 22 November 1969, 1144 UNTS 123.

<sup>&</sup>lt;sup>90</sup>Council of Europe (COE), European Court of Human Rights (ECHR), *References to the Inter-American Court of Human Rights in the case-law of the European Court of Human Rights*, Research Report, available at http://www.echr.coe.int/Documents/Research\_report\_inter\_american\_court\_ ENG.pdf, visited 18 September 2018.

rights should serve as justifying grounds to take the measures necessary that may present possible limitations on trade in services, and that may infringe freedom of expression. With expanding knowledge, it is very likely that legislative models will be adapted from developed countries to the developing world. State regulation may also provide judicial control of decisions based on proscribed law, more public control, and more transparency, than what may be possible via self-regulatory soft-law means.

#### References

- Mander, J. (2015, March 23). Over a quarter of the world's internet users are aged 16–24. *Globalwebindex*. Available at http://www.globalwebindex.net/blog/over-a-quarter-of-the-worlds-internet-users-are-aged-16-24, visited 18 September 2018.
- 2. Barbosa, A., et al. (2013). *Risks and safety on the Internet, Comparing Brazilian and European Results*. LSE: EU Kids Online. London, LSE: EU Kids Online, 14.
- 3. Porter. G., et al. (2012). Mobile phones, Livelihoods and the poor in sub-Saharan Africa: Review and prospect. *Geography Compass*, 6(5), 241.
- 4. Martellozzo, E., Monaghan, A., Adler, J. R., Davidson, J., Leyva, R., Miranda, A.H., et al. (2018). *I wasn't sure it was normal to watch it*. The impact of online pornography on the values, attitudes, beliefs and behaviours of children. Report for National Society for the Prevention of Cruelty to Children and Children's Commissioner. Available at https://www.nspcc.org.uk/globalassets/documents/research-reports/mdx-nspcc-occ-pornography-report.pdf, visited 18 September 2018.
- 5. Grimwood, K. (2001, September 8). Telemedicine in developing countries. *British Medical Journal*, 524.
- 6. Sife, A. S., Lwoga, E. T., & Sanga, C. (2018). *New technologies for teaching and learning. Challenges for higher learning institutions in developing countries.* Available at http://ijedict. dec.uwi.edu/viewarticle.php?id=246/&layout=html, visited 18 September 2018.
- 7. Valentina (Darha) Ndou. (2004). E-government for developing countries, opportunities and challenges. *Electronic Journal of Information Systems in Developing Countries, 18*(1), 1–24.
- Dutta, S. (2018). An uneven path of accountability: A comparative study of MGNREGA in two states of India. WZB Discussion Paper, No. SP, 2015-201, at 17. Available at https://www. econstor.eu/bitstream/10419/108736/1/820319341.pdf, visited 18 September 2018.
- World Trade Organisation (WTO). (2013). E-commerce in developing countries. Opportunities and challenges for small and medium sized enterprises. WTO, Geneva. Available at https:// www.wto.org/english/res\_e/booksp\_e/ecom\_brochure\_e.pdf, visited 18 September 2018.
- 10. Berson, I. R., & Berson, M. J. (2010). *Childhood in a digital world*. Information Age Pubishing, Charlotte, NC.
- Ghosh, B. (2009, December). Trafficking in women and children in India: Nature, dimensions and strategies for prevention. *The International Journal of Human Rights*, 13(5), 720, 731–733;
- Jordan Greenbaum, V. (2014, October). Commercial sexual exploitation and sex trafficking of children in the United States. Current Problems in Pediatric and Adolescent Health Care, 44(9), 245, 247.
- Duffy, A., Dawson, L., & das Neir, R. (2016). Pornography addiction in adults: A systematic review of definitions and reported impact. *The Journal of Sexual Medicine*, 13(5), 760–777.
- Ley, D., Prause, N., & Finn, P. (2014, June). The emperor has no clothes: A review of the pornography' addiction' model. *Current Sexual Health Reports*, 6(2), 94–105.
- American Society of Addiction Medicine (ASAM). (2018). ASAM releases new definition of addiction. Available at http://www.asam.org/docs/pressreleases/asam-definition-of-addiction-2011-08-15.pdf, visited 18 September 2018.

- Hilton, D. L. Jr., & Watts, C. (2011). Pornography addictions: A neuroscience perspective. Surgical Neurology International, 2, 19.
- Ford, J. J., Durtschi, J. A., & Franklin, D. L. (2012). Structural therapy with a couple battling pornography addiction. *The American Journal of Family Therapy*, 40(4), 336–348. available at http://www.tandfonline.com/doi/abs/10.1080/01926187.2012.685003 visited 18 September 2018.
- 18. Cline, V. B. (1993). *Pornography's effects on adults and Children*. Morality in Media, New York.
- Reed, M. D. (1994) Pornography addiction and compulsive sexual behavior. In G. Zillmann, J. Bryant, A. C. Huston (Eds.), Media, children and the family. Social scientific, psychodynamic and clinical perspectives. New York and London: Routledge, p. 249;
- Delmocino, D. L. (2002). Sex on the superhighway: Understanding and treating cybersex addiction. In P. Carnes, K. M. Adams (Eds.), Clinical management of sex addiction. New York-Hove: Brunner-Routledge.
- Withnall, A. (2013, September 22). Pornography addiction leads to same brain activity as alcoholism or drug abuse, study shows. *The Independent*. Available at http://www.independent. co.uk/life-style/health-and-families/health-news/pornography-addiction-leads-to-same-brainactivity-as-alcoholism-or-drug-abuse-study-shows-8832708.html, visited 18 September 2018.
- Weir, K. (2014, April). Is pornography addictive? *Monitor on Psychology*. Available at http:// www.apa.org/monitor/2014/04/pornography.aspx, visited 18 September 2018.
- 23. Horvath, M. A. H., Alys, L., Massey, K. Pina, A., Scally, M., & Adler, J. R. (2013). Basically... porn is everywhere: A rapid evidence assessment on the effects that access and exposure to pornography has on children and young people. Project Report. Office of the Children's Commissioner for England, London, UK, Middlesex University's Research Repository at http:// eprints.mdx.ac.uk/10692/, at 7–11, visited 18 September 2018.
- Bridges, A. J., Wosnitzer, R., Scharrer, E., Sun, C., & Liberman, R. (2010). Aggression and sexual behavior in best-selling pornography videos: A content analysis update. *Violence Against Women*, 16(10), 1065–1085.
- 25. Hargrave, A. M., & Livingstone, S. (2006). *Harm and offence in media content. A review of the evidence*. Bristol/Portland: Intellect.
- Pornhub Insights. (2018, January 6). Pornhub's 2015 year in review. Available at http://www.pornhub.com/insights/pornhub-2015-year-in-review, visited 18 September 2018.
- Livingstone, S., Haddon, L., Görzig, A., & Ólafsson, K. (2018). Risks and safety on the internet: The perspective of European children: Full findings and policy implications from the EU Kids Online survey of 9–16 year olds and their parents in 25 countries. EU Kids Online, Deliverable D4. EU Kids Online Network, London, UK. Available at http://eprints.lse.ac.uk/33731/ 1/Risks%20and%20safety%20on%20the%20internet%28lsero%29.pdf, visited 18 September 2018.
- Stolen Innocence. (2018). Available at http://www.globalinitiative.net/stolen-innocence-theonline-exploitation-of-children/, visited 30 July 2018.
- EPCAT. (2018). Protection of Children against Sexual Exploitation. Available at https://www. unicef.org/protection/files/FBO\_Guide\_for\_Religious\_Leaders\_and\_Communities\_ENG. pdf, visited 18 September 2018.
- Palet, L. S. (2018). *The rise of porn in the developing world*. Available at http://www.ozy.com/ fast-forward/the-rise-of-porn-in-the-developing-world/64784, visited 18 September 2018.
- Gupta, A. (2009). Growth of the Porn Industry in India. Available at http://www.desiblitz.com/ content/growth-of-the-porn-industry-in-india, visited 18 September 2018.
- Samuels, T. (2009, August 30). Africa goes hardcore. *The Guardian*. Available at https:// www.theguardian.com/commentisfree/2009/aug/30/pornography-corporate-responsibilitydeveloping-world, visited 18 September 2018.
- 33. Little, B. A., & Preston, C. B. (2008). Symposium: I Think I Can, I Think ICANN: Regulating the Internet... or Not: ICANN Can: Contracts and Porn Sites–Choosing "To Play Internet Ball in American Cyberspace". *Pacific McGeorge Global Business & Development Law Journal*, 21, 79.

- 9 Between Economic Development and Human Rights: Balancing ...
- 34. Utah. (2016). Current resolution on the Public Health Crisis, signed 29 March 2016.
- 35. Utah. (2013). Joint resolution regarding the impact of adult images on children's development, adopted 14 March 2013.
- Allen, S. (2018, April 22). Utah's Anti-Porn Law is pure pseudoscience. *The Daily Beast*. Available at http://www.thedailybeast.com/articles/2016/04/22/utah-s-anti-porn-law-is-purepseudoscience.html, visited 18 September 2018.
- Phillips, A. (2016, April 22). Porn has been declared ,public health crisis' in Utah. Here's why. The Washington Post. Available at https://www.washingtonpost.com/news/the-fix/wp/ 2016/04/22/anti-porn-advocates-are-changing-the-game-and-it-starts-with-utah-declaring-ita-public-health-crisis/, visited 18 September 2018.
- Bolton, D. (2016). Porn could be blocked from the internet in Utah under UK-inspired laws. Independent, 24 May 2016. Available at http://www.independent.co.uk/life-style/gadgetsand-tech/news/porn-could-be-blocked-from-the-internet-in-utah-under-uk-inspired-lawsa7044621.html, visited 18 September 2018.
- 39. Manning, J. C. (2006). The impact of Internet Pornography on Marriage and the Family: A review of the research. *Sexual Addiction and Compulsivity*, 13, 131, 141.
- 40. Hampson, N. C. N. (2011). The Internet is Not a Lawless Prairie: Data Protection and Privacy in Italy. *Boston College International and Comparative Law Review*, *34*, 477.
- Erixon, F., Hindley, B., & Lee-Makiyama, H. (2009). Protectionism online: Internet Censorship and International Trade Law. ECIPE Working Paper, 12/2009, http://www.ecipe.org/app/uploads/2014/12/protectionism-online-internet-censorship-and-international-trade-law.pdf, visited 18 September 2018.
- 42. Faris, R., & Villeneuve, N. (2008). *Measuring global internet filtering*. In R. Deibert, Palfrey, J., Rohozinski, R., Zittrain, J. (Eds.), *Access denied: The practice and policy of global internet filtering*. MIT Press, Cambridge.
- Greenfield, P. M. (2004). Inadvertent exposure to pornography on the Internet: Implications of peer-to-peer file-sharing networks for child development and families. *Applied Developmental Psychology*, 25, 741, 743–744.
- 44. Kühn, S., & Gallinat, J. (2018). Brain structure and functional connectivity associated with pornography consumption. The Brain on Porn, *JAMA Psychiatry*, *71*, 827. Also available at http://archpsyc.jamanetwork.com/article.aspx?articleid=1874574#References, visited 18 September 2018.
- 45. Ybarra, M. L., & Mitchell, K. J. (2005). Exposure to Internet pornography among children and adolescents: A national survey. *Cyber Psychology & Behavior*, 8, 473. Also available at http:// innovativepublichealth.org/wp-content/uploads/2009/04/cpb.2005.8.pdf, visited 18 September 2018.
- Curtis, R. D. (2018). Panel on Porn as health crisis defends controversial resolution. *Utah Political News*. Available at http://utahpoliticalcapitol.com/2016/07/28/panel-on-porn-as-health-crisis-defends-controversial-resolution/, visited 18 September 2018.
- Le Roy, M. (2012, June 30). Protection des mineurs et oeuvres cinématographiques, un état des lieux. Cinéma. Available at http://www.inaglobal.fr/cinema/article/protection-des-mineurs-etoeuvres-cinematographiques-un-etat-des-lieux, visited 18 September 2018.
- Waglewski, P. (2013). Rozwiązania prawne regulujące dostęp do bezpiecznego Internetu, wolnego od pornografii na przykładzie wybranych krajów Unii Europejskiej. Biuro Analiz Sejmowych.
- Vincent, J. (2018). One in five sites blocked by the UK's over-zealous 'pornography filters'. Available at http://www.independent.co.uk/life-style/gadgets-and-tech/one-in-fivesites-blocked-by-the-uks-overzealous-pornography-filters-9579838.html, visited 18 September 2018.
- Nair, H. V. (2015, July 8). Supreme Court says India can't ban porn: CJI says a total ban on sex sites would violate privacy and personal liberty. Daily Mail. http://www.dailymail.co.uk/ indiahome/indianews/article-3153957/Supreme-Court-says-India-t-ban-porn-CJI-says-totalban-sex-sites-violate-privacy-personal-liberty.html, visited 18 September 2018.

- McIntyre, T. J. (2013). Child abuse images and cleanfeeds: Assessing Internet blocking systems. In I. Brown (Ed.), Research handbook on Governance of the Internet. Edward Elgar Publishing, pp. 277, 283.
- Carr, J., & Hilton, Z. (2009). Child protection and self-regulation in the internet industry: The UK Experience. *Children et Society*, 23, 306. Available at http://onlinelibrary.wiley.com/doi/ 10.1111/j.1099-0860.2009.00235.x/pdf, visited 18 September 2018.
- 53. Brown, C. A. (2017). Non-discrimination and trade in services: The role of tax treaties. Singapore: Springer.
- 54. Ovey, C., & Robin, C. A. (2002). *White, European Convention on Humans Rights* (3rd Ed.). Oxford University Press.
- 55. Robertson, A. H., & Merrills, J. G. (1993). *Human Rights in Europe, A study of the European Convention on Human Rights* (3rd Ed.). Manchester University Press.
- 56. Christoffersen, J. (2009). Fair balance: Proportionality, subsidiarity and primarity in the European Convention on Human Rights. Martinus Nijhoff Publishers.
- 57. Khosla, M. (2010). Proportionality: An assault on Human Rights? A Replay. International Journal of Constitutional Law, 8(2), 298.
- Czapiński, J., & Panek, T. (Eds.) (2018). Social diagnosis 2013. Objective and Subjective Quality of Life in Poland, 7(3).
- Batorski, D. (2018). Poles and communication technology—Access conditions and modes of use. Available at http://ce.vizja.pl/en/issues/volume/7/issue/3.1#art367, visited 18 September 2018.
- Lenhart, A., Purcell, K., Smith, A., & Zickur, K. (2010). Social media & mobile Internet use among teens and young adults. Pew Internet & American Life Project, *PewInternet*. Retrieved, from http://www.pewinternet.org/files/old-media/Files/Reports/2010/PIP\_Social\_ Media\_and\_Young\_Adults\_Report\_Final\_with\_toplines.pdf, visited 31 July 2018.
- Owens, E. W., Behun, R. J., Manning, J. C., & Reid, R. C. (2012). The impact of internet pornography on adolescents: A review of the research. *Sexual Addiction & Compulsivity, 19*, 1–2, 99–122. https://doi.org/10.1080/10720162.2012.660431, visited 18 September 2018.