

Chapter 2

Children's Rights Online: Challenges, Dilemmas and Emerging Directions

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2.1 Positioning Children's Rights Within Debates over Internet Governance

Although it is widely held that a more inclusive and trusted Internet can support a competitive knowledge economy, a digitally skilled labour force, civic participation and a pluralistic media sector, governments and regulators have tended to avoid intervening directly to achieve these aims, believing that industry is best positioned to respond to the fast pace of change in information and communication technologies (ICT).¹ This reflects a wider policy shift away from top-down government measures towards flexible, dispersed and indirect forms of governance, encompassing industry self-regulation as well as elements of cooperation or co-regulation with relevant state agencies.²

In these debates, the interests of children figure unevenly and can prove surprisingly contentious. Only partial progress has been made in supporting children's rights online and there have been a number of significant hurdles.³ In the early days of the Internet, public policy concern for children centred on inappropriate content, since it seemed that pornography of all kinds was pushed via pop-ups and other uninvited means into users' emails and web searches, along with efforts to prevent grooming and related paedophilic contact risks. In the US, early legislative responses were heavy-handed, risking contravention of fundamental rights to freedom of expression (as established by the Universal Declaration of Human Rights 1948 and as afforded legal protection in the US by the First Amendment).⁴ But approaches to Internet governance have since shifted from the (largely, but not entirely discredited) view that 'cyberspace' is a distinct sphere in need of distinct regulation to the growing acceptance that what is illegal or inappropriate offline is or should be illegal or inappropriate online. This approach, now concerned with a range of risks far beyond that of pornography, has largely guided European policies, is our main focus in this chapter.⁵

Yet, even the effort to apply offline regulation and governance practices online tends to conflict with liberal and libertarian efforts to keep the Internet open and free (e.g. Open Rights Group).⁶ Consequently, advocacy for children's

¹ Green 2010; Lembke 2003; Marsden 2011.

² Lunt and Livingstone 2012; Schulz and Held 2004; Tambini et al. 2008.

³ Livingstone and Bulger 2013; Preston 2009.

⁴ Early battles included the successful fight against the US Communications Decency Act 1996 (Nesson and Marglin 1996) and, in 2007, the striking down as unconstitutional of the Child Online Protection Act (COPA) 1998 (McNamee 2010). See also www.ftc.gov/privacy/coppafaqs.shtm.

⁵ European Commission 1996, 2009a, 2010. For research in other parts of the world, see OECD 2011, ITU 2010 and Livingstone & Bulger 2013 for global reports, Gasser et al. 2010, on developing countries, and Palfrey et al. 2008 on the US.

⁶ See also Dutton and Peltu 2007; Thierer 2011.

empowerment and protection online has seemed to swim against the tide of a dominant liberal discourse which posits that the Internet should not be regulated if this undermines freedom of expression, that it cannot easily be regulated through law, and/or that there are higher priorities than those of children's interests. These include, from media reform activists, principles of 'net neutrality' and Internet 'generativity'⁷ and, from business interests, policies for market freedom and economic competitiveness. In this context, children's rights and protection measures are readily viewed as a threat to adult rights or as a secondary complication in the larger debate over citizens' rights versus the rights of the state or commerce. At worst, they figure as covert efforts to promote the state's power to survey, censor or even criminalise private citizens' acts.⁸

As Alderson explains, "Rights are collective not individual, 'ours' not 'mine'. Anyone's claim to a right automatically states concern for everyone else's equal claim to it."⁹ Can society find a way to advance children's rights online without unduly trampling on business or (adult) citizens' interests? As the Internet and surrounding debates have matured, there is growing acceptance that diverse forms of governance, including but not only national or international intervention, are required to facilitate online opportunities while also reducing or managing the associated risks. This conclusion has been reached not only by child rights advocates but also those concerned with citizen and consumer rights and those concerned to sustain a secure and trusted online infrastructure for commerce, civil society and the state.¹⁰ After all, as Lessig influentially observed,¹¹ early utopian cheerleading for the so-called freedom of the Internet has had to recognise that the Internet is already governed through its design, code and practises of use—although much of this remains experimental and open to negotiation, given the competing interests at stake.

⁷ Powell and Cooper 2011; Zittrain 2008.

⁸ Livingstone 2011. Indeed, although there is now widespread acceptance of the need for Internet governance, meaning that the libertarian position (for which expression even of illegal content may be claimed as an unqualified right) receives little support, there is still a need to address the concerns of critics who, often with justification, have learned to be sceptical of the stated good intentions of the state or commerce; too often, it has come about that, using the defence of child protection, or the tools thereby developed, various acts of state or commercial intrusion or censorship occur, whether deliberately (by politically motivated governments or for commercial exploitation) or inadvertently (by incompetent systems of Internet filtering or surveillance).

⁹ Alderson 2000, p. 442.

¹⁰ Mansell 2012.

¹¹ Lessig 2000.

2.2 Applying the UN Convention on the Rights of the Child to the Internet

In the absence of a formal statement of online rights, this chapter argues that the UN Convention on the Rights of the Child (UNCRC), which sets out the basic standards that apply without discrimination to all children and specifies the minimum entitlements and freedoms that governments should implement, offers a sound guide to policy action. This international treaty recognises the human rights of children, defined as persons up to the age of 18 years.¹² It complements the Universal Declaration of Human Rights¹³ and clarifies that children ‘count’ in terms of human rights; indeed, ‘the child, by reason of his physical and mental immaturity, needs special safeguards and care, including appropriate legal protection, before as well as after birth’ (Preamble). Ratified in 1989, the UNCRC is one of the most universally recognised international legal instruments and incorporates the full range of human rights—civil, cultural, economic, political and social rights—in its 54 articles and two Optional Protocols.

A cornerstone of the UNCRC is the statement that ‘in all actions concerning children, whether undertaken by public or private social welfare institutions, courts of law, administrative authorities or legislative bodies, the best interests of the child shall be a primary consideration’ (Article 3) although the question of determining what are the child’s ‘best interests’ remains a vexed one.¹⁴ Moreover, although few would claim that the framework offers strong guarantees (see critics of its implementation around the world¹⁵: its three core principles of the ‘*provision* of basic needs, *protection* against neglect and abuse and children’s *participation* in their families and communities’¹⁶ have widespread support. Thus, they provide a consensual starting point for considering the rights of the child online, as extended by the Oslo Challenge,¹⁷ adopted by UNICEF on the tenth anniversary of the UNCRC to recognise the importance of the media and information environment as a relevant context for the realisation of children’s rights.¹⁸ The UNCRC’s assertion

¹² See www2.ohchr.org/english/law/crc.htm.

¹³ See www.un.org/en/documents/udhr/index.shtml. Note that children ‘are entitled to special care and assistance’ (Article 25) and that ‘Parents have a prior right to choose the kind of education that shall be given to their children’ (Article 26). Beyond this, there is no implication that children should be treated in any way differently from adults as regards fundamental rights.

¹⁴ Freeman 2007.

¹⁵ Guggenheim 2005; Holzscheiter 2010; O’Neill 1988; Purdy 1992; Veerman 2010. Article 4 requires governments to undertake all relevant legislative, administrative and other measures to implement the rights of the child, to submit evidence and to have progress on their implementation as a subject of public review (Article 44), while making the principles of the Convention widely known to adults and children alike (Article 42).

¹⁶ Alderson 2000, p. 440 (emphasis added).

¹⁷ See www.unicef.org/magic/briefing/oslo.html.

¹⁸ Hamelink 2008; Livingstone 2009b. Consider the world of traditional mass media, where children’s rights have long been debated. The Children’s Television Charter applies the principles

that children are rights-bearing individuals is particularly pertinent in Internet governance discourses that tend to oppose adult rights and child protection. And its particular articles specifying children's rights dovetail with the emerging challenges that the Internet poses to children and families.¹⁹

At present, children's rights are commonly referred to but little examined in relation to the Internet.²⁰ Nor, must it be said, are they necessarily supported by the advent of the digital media and information environment. Indeed, while the rapid development of the Internet as a mass phenomenon has presented children with unprecedented opportunities to achieve their rights to learn, express themselves and participate in their communities in meaningful ways, it has also created new and sometimes threatening conditions in which children are abused or exploited, with varying incidence and severity. Early in the history of the Internet, governments recognised the seriousness of the child protection issues involved and, through the second Optional Protocol on the sale of children, child prostitution and child pornography,²¹ gave effect to international legislation outlawing online child abuse images.²² There are, however, many aspects of children's use of online, digital and mobile technologies that give rise to concern or which require attention by policy makers to assess their impact on children and to ensure children's interests are incorporated.

So, how might the key provisions of the UNCRC apply to the Internet? In what follows, we consider the application of the so-called three Ps—protection, provision and participation rights—to the online environment. As will be seen, two broad strategies have emerged—a regulatory approach that transposes individual rights and preventative measures into appropriate legal or other (self- or co-) regulatory instruments, and a broader policy approach that focuses on child well-being, emphasising appropriate provision for children and support for their participation.

(Footnote 18 continued)

of the UNCRC to television and may, surely, also be applied to the Internet (Livingstone 2009b). Relatedly, the concept of 'child-friendly journalism' has been promoted by the Brazilian News Agency for Children's Rights (ANDI), founded on legislative recognition of children's rights (including communicative rights), proactive production of positive content and an accountability system in which all stakeholders play an active role (see www.andi.org.br/).

¹⁹ McLaughlin 2013.

²⁰ In Europe, the Directorate-General for Justice is charged with coordinating efforts regarding children's rights; see http://ec.europa.eu/justice/fundamental-rights/rights-child/index_en.htm. There are, however, many other European Commission efforts relevant here, including the European Commission Communication, 'Towards an EU Strategy on the Rights of the Child' (2006), 'An EU Strategy for Youth' (2009) and 'An EU Agenda for the Rights of the Child' (2011). Advancing these concerns is not always straightforward, however—witness the struggle in formulating the 2011 Directive on combating sexual abuse and sexual exploitation of children and child pornography about whether the blocking of illegal child abuse images should be discretionary or mandatory in member states. See the overview in European Parliament 2012. Little is said regarding the digital environment in any of these documents.

²¹ See www2.ohchr.org/english/law/crc-sale.htm.

²² Flint 2000; Jones 1998.

2.3 Protection Rights

To date, most national and international effort has gone into children's protection rights, including protection against all forms of abuse and neglect (Article 19), and sexual exploitation and sexual abuse (Article 34). Present measures offer a robust legal framework for classifying illegal content and activity on the Internet involving the sexual abuse of children that member states have, or are in the process of, transposing into national law.²³ Additionally, children have the right to be protected from trafficking (Article 35) and from 'all other forms of exploitation prejudicial to any aspects of the child's welfare' (Article 36). These rights point to some serious risks of harm, many of which are now mediated, even exacerbated by mass use of the Internet. The production and circulation of illegal child abuse images, the incidence of sexual grooming for abuse and the conduct of child trafficking and other forms of exploitation—all have their online dimension and, many would argue, all have been amplified, worsened, by the Internet's astonishing convenience, anonymity and means to evade law enforcement.²⁴ Protecting children against online sexual abuse has justifiably been one of the most important policy goals of online child protection since the earliest days of the Internet, and the subject of extensive international efforts in law enforcement, detection through various technological means, self-regulatory initiatives on the part of industry through an international network of hotlines, and wide international cooperation on 'notice and take down' procedures to make the Internet a safer place.

Less clear-cut is the imperative for initiatives designed to protect children from material injuries to the child's well-being (Article 17(e)). Alongside Article 18, enjoining governments to support parents in their caregiving role, this is a wide domain in which the protection of children has been addressed through self-regulatory initiatives to promote the use of parental controls and filters on devices and platforms, the development of advisory classification and labelling schemes. To varying degrees in different countries and cultures, children's widespread exposure to online pornography, 'race' hate, self-harm and violent content attest to the only partial success thus far in protecting children.²⁵ On the other hand, theory and evidence also make it clear that risk is distinct from harm: not all those who

²³ Relevant to the digital dimension of Article 34, which requires governments to protect children from all forms of sexual abuse and sexual exploitation, is the 2007 Council of Europe's *Convention on the Protection of Children against Sexual Exploitation and Sexual Abuse* (the 'Lanzarote Convention'), which criminalises the use of new technologies to sexually harm or abuse children. Other European legal instruments include the 1996 *Communication on Illegal and Harmful Content on the Internet*, the 2006 *Recommendation on the Protection of Minors* and the 2011 *Directive on Combating the Sexual Abuse and Sexual Exploitation of Children and Child Pornography*. Child protection online setting is also implied by Article 19's call for 'appropriate legislative, administrative, social and educational measures to protect the child' and which promote governmental action in Internet safety provision.

²⁴ Ainsaar and Loof 2012; Muir 2005; Quale and Taylor 2011; Webster et al. 2012.

²⁵ Livingstone et al. 2011b.

encounter risk are harmed by it, for risk refers only to the probability of harm. Moreover, the factors that account for risk encounters are not the same as those that explain harm.²⁶ Thus, the wholesale elimination of risk is neither feasible nor desirable; society does not wish to keep children forever in a 'walled garden', recognising that they must explore, make mistakes and learn to cope in order to develop into resilient adults and responsible digital citizens. This leaves policy makers with the difficult balancing act of supporting and empowering children online, given that increased use and higher levels of digital skills also mean increased exposure to risk and, for some, actual harm.²⁷

Also difficult in an online environment is addressing children's right to be protected from 'arbitrary or unlawful interference with his or her privacy, family, or correspondence, nor to unlawful attacks on his or her honour and reputation' (Article 16). Relatedly, Article 8's obligation to respect the right of the child to preserve his or her identity raises new challenges for legislators to keep pace with new technologies that may threaten the security and privacy of children's personal information online. It is noteworthy, for instance, that children's primary concerns regarding the Internet centre on privacy, (cyber-)bullying and online reputation.²⁸ Yet efforts to address these problems are sporadic and of uncertain efficacy.²⁹ Many children lack the competence to manage the settings provided to protect their privacy or reputation, and only a minority use the available tools to report bullying or racist insults online,³⁰ although they are learning to keep their social networking profiles private and to take care in disclosing personal information.³¹ Whether responsibility to protect children from such online harms lies with industry, parents, child welfare or law enforcement agencies remains hotly contested. The concept of a 'right to be forgotten',³² as proposed in the new *Regulation for a European Data Protection Framework*,³³ promises to tackle some of the risks to young people's reputation from online preservation of information and give them the right to have their personal data removed. Ensuring the availability of user-friendly and age-appropriate privacy controls to enable young people to exercise their rights to privacy is also addressed by self-regulatory codes of practise (e.g. *Safer Social Networking Principles for the EU*; see also Vice President Kroes' CEO coalition³⁴), although the continued updating and independent evaluation of such codes and guidelines remains uncertain.

²⁶ Schoon 2006.

²⁷ O'Neill et al. 2011.

²⁸ Lusoli and Miltgen 2009.

²⁹ Anthonyamy et al. 2012; Eurobarometer 2011; Lusoli et al. 2011.

³⁰ Livingstone et al. 2012b.

³¹ Livingstone et al. 2011a.

³² Mayer-Schönberger 2009; Rosen 2012.

³³ European Commission 2012b.

³⁴ Announcing a coalition of chief executive officers (CEOs) of major Internet companies on 1 Dec 2011, European Commission Vice President Neelie Kroes established five work streams to

2.4 Provision Rights

Article 17 is not only concerned with protection from harm, but it also recognises 'the important function performed by the mass media' and encourages the production by industry of information and material of social and cultural benefit to the child from a diversity of sources so as to promote the social and moral well-being of the child. Meeting such a right is, however, expensive for governments, especially in small language communities (and if supported by advertising this extends market logic to public services). At present, it seems that sufficient provision is lacking—a simple example: only 34 % of European 9- to 10-year-olds say there are lots of good things for children of their age to do online.³⁵ In response, the European Commission launched a European Award for Best Children's Online Content³⁶ and initiated efforts to stimulate industry investment in positive content for children.³⁷

Also little developed as yet is the extent to which other aspects of the UNCRC can and should apply online. Article 31 requires governments to provide for children's rights to recreation and leisure as appropriate to their age—here it is relevant that the majority of children in the digital age seek recreation and leisure online. Even more importantly, Article 28 underpins the child's right to an education that will support the development of their full potential. Again, in relation to the Internet, such a right clearly entails online resources and support for information and learning valuable to children, along with the acquisition of the necessary digital skills that develop the 'child's personality, talents and mental and physical abilities' and prepare young people 'for responsible life in a free society' (Article 29). Increasingly, educators argue that digital competence as an essential skill for life-long learning represents a vital contemporary extension of the right to education, requiring governments and other agencies to make appropriate provision for the development of children's full potential in the digital age.³⁸

Yet in much of the world, within and beyond the Global North, even basic provision of hardware and connectivity has proved challenging. Consider efforts to overcome the digital divide, now reframed in a more nuanced fashion in terms of digital inclusion and digital literacy.³⁹ Over and again, interventions intended to support greater provision tend to exacerbate rather than ameliorate social

(Footnote 34 continued)

make the Internet better for children; see <http://europa.eu/rapid/pressReleasesAction.do?reference=IP/11/1485&format=HTML&aged=0&language=EN&guiLanguage=en>.

³⁵ Livingstone et al. 2011b.

³⁶ Awarded at the Digital Agenda Assembly, Brussels, by Commissioner Neelie Kroes (17 June 2011); see http://ec.europa.eu/information_society/activities/sip/events/competition/winners/index_en.htm. The prize was awarded again on 11 February 2014.

³⁷ European Commission 2012a.

³⁸ Ala-Mutka et al. 2008; Council of Europe 2006; OECD 2012a.

³⁹ Helsper 2012.

inequality as they are taken up disproportionately by the already advantaged—the so-called ‘knowledge gap’ problem.⁴⁰ Meanwhile, market developments are likely to continue targeting the relatively better-off, again exacerbating inequalities in provision. Delivering skills to ensure children truly gain the benefits of full participation in the network society is proving beyond the capacity of many governments. And the result is that, even within Europe, Internet use for many children remains narrow, unimaginative, centred on the reception of mass communication, with only a minority (typically the already-advantaged) attaining the interactive, creative, participatory and civic vision that has been held out for the Internet.⁴¹

2.5 Participation Rights

While protecting children's rights is frequently interpreted as ‘protecting’ children from harm, the UNCRC—uniquely within international treaties—also places equal emphasis on provision, as discussed above, and on children's rights to social, cultural and political participation. Children's participation rights include the right to be consulted in all matters affecting them, with due weight being given to children's views in accordance with the age and maturity of the child (Article 12). They also have the right to freedom of expression (Article 13), ‘the right of the child to freedom of thought, conscience and religion’ (Article 14) and ‘the rights to freedom of association and to freedom of peaceful assembly’ (Article 15). Each of these finds expression in the digital world, although each receives far less attention than children's rights to protection online.

Article 13 is particularly relevant to the Internet in its reference to fundamental freedom of expression, holding that children should have the 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 the child's choice.’ Note that, relevant to problems of cyberbullying, sexting and more, this is a contingent freedom, for the child must also respect ‘the rights or reputations of others’ (which the evidence shows a significant minority do not do), while parents too bear responsibility for the child's upbringing (Article 18). Article 15's reference to freedom of association is also particularly relevant to the Internet, given that children may now meet anyone and go anywhere online. Here it is obvious that efforts to protect children can come into conflict with their rights to freedom of thought, expression, assembly and association. The best interests of the child may be served by restricting their access to content that is potentially harmful for their development, but this also depends on the age and maturity of the child, with judgements varying according to cultural context. Does it extend to banning

⁴⁰ Warschauer and Matuchniak 2010.

⁴¹ Pruulmann-Vengerfeldt and Runnel 2012.

or restricting social networking services in school settings (as is common practise in many countries)? Tricky issues include determining when rights must be limited by responsibilities, and who is best placed to determine what is in the child's best interests. Youth themselves may be expected to have a view on this question, and although they are occasionally consulted,⁴² it is not obvious that they are carefully listened to in this as in other policy domains.

2.6 Unanswered Questions Regarding Children's Rights Online

The creation of a body of rights specifically for children remains controversial.⁴³ Some contend that human rights codes already address the needs of children and adults alike; indeed, this is even implied within the vision offered by the UNCRC where children are represented as competent and resilient agents. Yet, as the argument in favour of a dedicated convention maintains, it is because they are children—to varying degrees immature, vulnerable, in need of care and protection—that their rights are frequently ignored, denied or abused, and this is the case online as offline. Hence the UNCRC sets out the rights of the child as a distinct subset of human rights, outlining fundamental obligations of society to meet the needs of children, on the assumption that greater awareness of rights better enables their realisation.⁴⁴

But the UNCRC provides little guidance when these rights are contradictory, as is often the case, especially in the online environment where norms are fragile and expectations are immense. For example, an online encounter that for many is harmless, part of their right to participate, may at the same time be harmful for a minority, part of their right to protection. Evidence shows that opportunities and risks are positively correlated—the more one enables provision and participation, the more the need for protection; similarly, the more one seeks to protect, the more one risks undermining participation.⁴⁵ This clash, potential and actual, between children's need for protection and for freedom is most evident in the heavily contested policy debate over the use of filtering software, whether applied by parents as end users or, to protect children even from insufficient or negligent parenting, applied centrally (e.g. by governments or at server level).⁴⁶

⁴² E.g., Nordic Youth Forum 2012.

⁴³ Griffin 2009; Guggenheim 2005.

⁴⁴ Archard 2004; Foley et al. 2012.

⁴⁵ Livingstone et al. 2012a.

⁴⁶ See CEO coalition discussion earlier. At present, parental tools (filters, monitoring software, age ratings, etc.) are still flawed in design and operation (e.g. they over-block legitimate content, and work poorly for user-generated content, Deloitte and European Commission 2008).

Nor is the UNCRC clear on when rights are met or on how they must be met. A strong claim would be that any evidence of a child being harmed shows their protection rights are not met, but given the conflict between protection and participation, a weaker case may fairly be advanced. Defining a basic level of provision when norms regarding digital infrastructure are rising rapidly is also problematic; in many contexts, mere connectivity would be a huge benefit, but in the privileged West, lacking super-fast broadband may be disadvantageous. Last, asserting a child's right to participation in matters that concern him or her as an individual may be relatively straightforward, but how should society enable such rights for children in general? Should all children participate in civic deliberation regarding their school or community, for instance, or is the participation of some sufficient to meet the needs of all? Evidence shows that the often-valiant efforts to mediate such participation via the Internet can struggle to engage more than the few already privileged and already engaged, rendering children's actual levels of online deliberation or e-participation less than hoped.

2.7 Persistent Policy Challenges

Although children's need for protection is recognised in the Audiovisual Media Services Directive,⁴⁷ the situation is less clear in relation to the converging digital and online media landscape (regarding the regulation of media content, converged platforms, privacy, data protection, Internet security, e-commerce and so forth). Three practical problems significantly impede effective Internet governance, contributing to the tendency to side-line consideration of children's online rights. First, it is difficult to draw the line in relation to judgements of 'inappropriate' content or contact. While the challenge of defining risk is hardly new (for which representations harm children has long proved contentious⁴⁸), public norms of offence or acceptability typically rest on 'community standards', which are unclear and contested in the cross-national context that characterises the borderless Internet.⁴⁹ Second, there are considerable difficulties of jurisdiction, given the global and networked nature of the Internet. Especially challenging here are the lack of trusted and authoritative international regulatory institutions, numerous differences in legal systems and significant practical difficulties of compliance and enforcement. Third, there is the problem of addressing the rights of children in particular (rather than those of citizens and consumers in general) in the absence of reliable means of age verification (i.e. knowing whether a user is a child or not). This problem arises both from the lack of reliable databases and a widespread

⁴⁷ European Union 2010.

⁴⁸ Millwood Hargrave and Livingstone 2009.

⁴⁹ As Holzscheiter observes, the UNCRC also 'poses serious problems in translation into different cultural contexts'; Holzscheiter 2010, p. 17.

distrust of the companies or governments that maintain them. Whether or not addressing children separately from adults is the desirable way forward is also contested.⁵⁰

How, then, should the public policy objective of supporting children's rights online be achieved? Nationally and internationally, most efforts to secure children's interests online adopt a multi-stakeholder approach, combining legislation (albeit, for the most part, the application of general laws to the Internet), industry self-regulation (achieved through codes of practice and consumer-facing service provision) and the expectation of responsible action on the part of citizens (parents and children, often supported by schools and non-governmental organisation [NGO] actions). Policy frameworks such as Europe's *Safer Internet Programme*,⁵¹ and the continuing policy discussions of child online protection at fora such that the Internet Governance Forum (IGF) and the International Telecommunication Union (ITU) have made substantial contributions to a better and safer online world,⁵² putting Internet safety on the political agenda of many governments. Internet safety policy in the European Union has evolved within an environment that has moved away from top-down, state-led models of regulation in favour of collaborative and cooperative arrangements between the state and industry. Particularly, other than in relation to illegal harms, most emphasis is on a combination of education/awareness-raising and industry self-regulation.⁵³

⁵⁰ Palfrey et al. 2008.

⁵¹ Founded in 1999, the Directorate-General Information Society's *Safer Internet Programme* (renamed: Better Internet for Children) has provided an overarching framework for European initiatives for combating illegal content, promoting safer use of Internet and communication technologies and for awareness-raising activities, following a prescient 1996 *Communication on Illegal and Harmful Content on the Internet*. This established an international network of hotlines for reporting illegal child abuse images and a parallel network of awareness-raising centres, together with a programme to build the knowledge base regarding emerging trends in children's use and consequences of online technologies. See http://ec.europa.eu/information_society/activities/sip/policy/program5me/current_prog/index_en.htm.

⁵² Child online protection features prominently in the work of international bodies such as the Internet Governance Forum (IGF), the Organisation for Economic Cooperation and Development (OECD) and the Council of Europe, as well as many national governments around the world. The International Telecommunication Union (ITU), as the lead United Nations (UN) agency with responsibility for the Internet, has actively raised the profile of cyber-security, and the role of child Internet safety within that, both in developed countries and across the developing world where burgeoning Internet adoption in Asia, Latin America and Africa greatly expands the reach of the Internet and the potential risks for children. Linking Internet safety with confidence and trust in the infrastructure of the Internet was a theme that emerged from the World Summit on the Information Society (WSIS) in 2005 when the ITU assumed leadership of Action C5: 'building confidence and security in the use of ICTs'. Its Global Cyber-security Agenda acts as the framework for international cooperation aimed at enhancing confidence and security in the information society, a central pillar of which is its Child Online Protection initiative (ITU 2009), designed to tackle the legal, technical and institutional challenges posed by cyber-security. See *Global Security Agenda*, accessed on 5 Sept 2010 at www.itu.int/osg/csd/cybersecurity/gca/index.html.

⁵³ European Commission 2009b; GSMA 2007; ICT Coalition 2012.

But policy remains largely a reactive response to a phenomenon that is not entirely understood, demanding a tight balancing act between supporting the innovation and diffusion of new online technologies while attempting to manage their diverse and unpredictable social consequences. Protectionist approaches tend to overshadow efforts to promote the role of ICTs in enhancing children's development and participation (as also important to the 2005 Tunis Commitment, for example).⁵⁴ Moreover, there is little independent monitoring or evaluation of policy effectiveness. For example, rather than the hoped-for concerted action by the industry according to transparent codes of practice, we are witnessing the semi-coordinated activity of consumer and complaint services, sporadically informed by child welfare organisations and with uncertain benefit. As a result, considerable responsibility falls on consumers (here, parents, teachers and children) to be aware of risks and to educate themselves to manage online risks appropriately,⁵⁵ and this can mean that a burden falls disproportionately hard on those least able to bear it,⁵⁶ as explored below.

2.8 Can Children's Rights Online Be Left to Parents?

A popular solution to the governance of an inappropriate or harmful (as opposed to illegal) content, contact and conduct is to say that parents bear the primary responsibility for their children's online experience. Parents are generally best placed to judge what their child should see or do (online as offline), and parental mediation is surely the most adaptable and flexible form of governance; it might even be claimed that if only parents would take on this responsibility, managing their children's Internet access effectively, no other measures would be needed. This responsibility may be construed in terms of parental empowerment, and a fair amount of resources are devoted to raising awareness among parents and educating them in the ways of the Internet, along with the development (and marketing) of software solutions to support their role.⁵⁷ But, many parents experience this task as something of an imposition—burdening them with a technically and socially difficult task for which they are ill-equipped and under-resourced⁵⁸ and which often falls disproportionately on mothers.⁵⁹ The evidence confirms that while many parents do their best, not all are entirely competent or reliable, leaving some children's rights and safety at risk.⁶⁰ Nor do all act as expected by child welfare

⁵⁴ See WSIS 2005.

⁵⁵ Helberger 2008; O'Neill 2010.

⁵⁶ Livingstone 2009a.

⁵⁷ Criddle 2006; Thierer 2009.

⁵⁸ Livingstone 2009a; Oswell 2008.

⁵⁹ Olsen 1992.

⁶⁰ Clark 2013; Duerager and Livingstone 2012.

experts, for the application of top-down domestic restrictions clash with the values of the modern 'democratic family' in which parents and children ground their relationship in trust rather than control.⁶¹

The question of parental versus state responsibility for children's rights has long cultural roots, with the US keener to leave matters to parents than Europe. In connection with the US's decision not (yet) to ratify the UNCRC, Bartholet observes that the Convention 'makes children's best interests "primary" in all matters concerning children' (Article 3), [while] in the US 'the emphasis is on parents' rights to make decisions related to their children and on states' rights to protect children's best interests, with states limited in their ability to do so by parents' rights'.⁶² This has consequences in relation to the Internet for questions of parental surveillance versus state (or industry) management of children's online experiences. For example, it seems that US parents find it more acceptable than European parents to check their children's social networking or mobile phone contacts and conversations, with or without permission.⁶³

Particularly problematic for policy makers hoping to rely on parental mediation is the fact that those parents whose children are most at risk are precisely those least likely to mediate their child's Internet use effectively. For the majority of children, it seems that parental mediation is fairly constructive, although both parents and children prefer active mediation to top-down restrictive strategies. Further, there is little evidence that children's exposure to risks is effectively reduced by parental efforts (except insofar as restricting Internet use prevents both risks and opportunities).⁶⁴ For a few, whether by acts of omission or commission, parents may actively threaten or undermine children's well-being (and such arguments lead to calls for children's right to privacy from their parents, since 'there is a privacy problem when parents monitor their children'.⁶⁵ Indeed, for the 'at risk' minority, a generic policy of reliance on parenting may precisely exacerbate their vulnerability, since the main source of online vulnerability appears to be vulnerability offline.⁶⁶

2.9 Conclusion: Children's Rights and Responsibilities in a Digital Age

The rapid and enthusiastic way in which children are going online offers a strong endorsement of the policies, infrastructural investment and initiatives undertaken

⁶¹ Giddens 1991.

⁶² Bartholet 2011, p. 85.

⁶³ Mathiesen 2012.

⁶⁴ Duerager and Livingstone 2012.

⁶⁵ Shmueli and Blecher-Prigat 2011, p. 793.

⁶⁶ Livingstone et al. 2012a; OECD 2011; Palfrey et al. 2008.

to make the Internet so widely accessible and available.⁶⁷ Yet, the evidence shows that children and young people, frequently the pioneers of Internet adoption, not only gain (potentially, at least) extraordinary new opportunities but also routinely encounter content or contact that is problematic and engage in behaviour that is risky and potentially harmful.⁶⁸ In developing Internet governance policies to underpin children's rights to protection, provision and participation in the digital era, it seems that the differences between once-rival perspectives are reducing: freedom of expression advocates are often as committed to protecting children from harm online as child protection advocates are keen not to undermine adult (or children's) rights to free expression.⁶⁹ However, it is still the case that each side fears the over-extended or ineffective implementation of the policies advocated by the other, to the point where adult or child rights are undermined by poor or unaccountable regulation. We suggest that common ground alone is insufficient to overcome the challenges facing Internet governance in the interests of children. Moreover, even if common ground were attained, positively providing for children's rights and ensuring their full participation would remain expensive and demanding, requiring a concerted determination to act by governments that is only unevenly in evidence.

What is needed is a new framework for child protection, provision and participation online that results in a clear and effective policy that is born of real needs, targets specific and evidence-based risks, and includes measurable goals on which policy implementation is independently evaluated. In this chapter, we hope to have established that the UNCRC provides a valuable framework for formulating Internet governance policy in the interests of children. The work of applying its provisions to the digital realm is receiving increasing attention by researchers (Van der Hof, Groothuis, this volume) and policy makers—most notably in the *Communication on the European Strategy for a Better Internet for Children*, which brings within the Digital Agenda the priorities of the EU Agenda on the Rights of the Child,⁷⁰ although much remains to be done. As researchers, our evidence-based priorities are as follows⁷¹:

⁶⁷ As affirmed in the 2009 Prague Declaration, ministers of the European Union have committed to direct coordinated, intergovernmental action to combat illegal content and to minimise risks to Internet users. As a result, the European Commission has made proposals for the adoption of a new directive on combating sexual abuse, sexual exploitation of children and child pornography (European Commission 2010). Also, it is committed through the *Digital Agenda*, Europe's digital policy successor to i2010 (European Commission 2010), to creating a flourishing digital economy by 2020. This includes a set of measures to promote the building of digital confidence (p. 6); guaranteeing universal broadband coverage with fast and ultrafast Internet access (pp. 18–19); enhancing digital literacy, skills and inclusion (p. 28); and promoting cultural diversity and creative content (p. 30). See *Digital Agenda for Europe*, accessed on 5 Sept 2010 at http://ec.europa.eu/information_society/digital-agenda/index_en.htm.

⁶⁸ Livingstone et al. 2011b.

⁶⁹ Powell et al. 2010, p. 5.

⁷⁰ European Commission 2012a.

⁷¹ Livingstone et al. 2011b; O'Neill et al. 2011.

- The protection of children in the digital world from diverse forms of sexual, violent and other abuses continues to be an urgent priority for governments, parents and caregivers, industry and civil society, requiring inclusive, effective and accountable forms of governance to be ensured by all stakeholders.
- Provision of appropriate support and resources is vital to enable all children to reach their full potential within a complex and fast-changing digital environment, including those who are vulnerable or disadvantaged or with special needs.
- Educators are particularly important in supporting provision and digital literacy (or 'digital citizenship') for young people, being uniquely placed to reach all children and so counteracting the risks of a digital divide.
- Children's participation rights, their right to be heard and their involvement in the life of their communities can and should be greatly enhanced through fostering opportunities for safer and better online participation.
- Children's rights are necessarily counterbalanced and limited by responsibilities—obligations requiring action by the state, including the allocation of resources, investment in education and careful negotiation when one set of rights are or appear to be in conflict with others.

But how shall this be achieved? In February 2012, the OECD recommended a framework for the empowerment and protection of children online that encompasses the rights discussed in this chapter.⁷² Citing the evidence for online risk produced by EU Kids Online,⁷³ the European Parliament's Committee on Culture and Education proposed similarly, in April 2012, to call on the European Commission for 'a single framework directive on the rights of minors in the digital world, in order to integrate all the provisions regarding minors envisaged in the previous provisions of the EU'.⁷⁴ We support these initiatives. To advance this cause, we also support the call not only for policy but also for a governance body charged with its implementation that is inclusive in engaging multiple stakeholders and that is widely trusted not to overstep its remit in governing the Internet in ways that inappropriately limit the rights of others—adults or children. Such a body should probably be international in scope and should have the responsibility and authority to encourage (and enforce) action at a national level.⁷⁵ It is hard to see otherwise how children's needs and rights in the globalised, commercialised and technologically complex Internet can be ensured in a coherent, consistent and effective manner.

⁷² OECD 2012b.

⁷³ Livingstone et al. 2011b.

⁷⁴ Until this is taken forward, the current policy of the European Commission is widening its focus: the Digital Agenda includes a 'new strategy for safer Internet and better Internet content for children and teenagers' (Kroes 2012). It is to be hoped that, in times of austerity, a 'better' Internet does not seem less pressing than a 'safer' one.

⁷⁵ eNACSO 2012a, b.

References

- Ainsaar M, Loof L (eds) (2012) Online behaviour related to child sexual abuse: literature report. Council of the Baltic Sea States. ROBERT, European Grooming Project
- Ala-Mutka K, Punie Y, Redecker C (2008) Digital competence for lifelong learning. JRC technical reports. European Commission, Luxembourg
- Alderson P (2000) UN Convention on the Rights of the Child: some common criticisms and suggested responses. *Child Abuse Rev* 9:439–443
- Anthony P, Greenwood P, Rashid A (2012) Can privacy policies be traced to privacy controls on social networking sites? A qualitative study. *Computer* 99:1
- Archard D (2004) *Children: rights and childhood*, 2nd edn. Routledge, London
- Bartholet E (2011) Ratification by the United States of the Convention on the Rights of the Child: pros and cons from a child's rights perspective. *Ann Am Acad Polit Soc Sci* 633(1):80–101
- Clark LS (2013) *The parent app: understanding families in the digital age*. Oxford University Press, Oxford
- Council of Europe (2006) Recommendation Rec (2006)12 of the committee of ministers to member states on empowering children in the new information and communications environment
- Criddle L (2006) *Look both ways: help protect your family on the internet*. Microsoft Press, Redmond, Washington
- Deloitte and European Commission (2008) *Safer internet: protecting our children on the net using content filtering and parental control techniques*. European Commission Safer Internet Programme, Luxembourg
- Duerager A, Livingstone S (2012) How can parents support children's internet safety? EU Kids Online, London School of Economics and Political Science, London. <http://eprints.lse.ac.uk/42872/>
- Dutton WH, Peltu M (2007) The emerging internet governance mosaic: connecting the pieces. *Inf Polity* 12(1):63–81
- eNACSO (2012a) CEO coalition to make the internet a better place for kids. eNACSO's response to the working groups' interim reports
- eNACSO (2012b) *The next click*. European NGO Alliance for Child Safety Online, Brussels
- Eurobarometer (2011) Special eurobarometer 359. Attitudes on data protection and electronic identity in the European Union. Directorate-general justice, Information Society & Media and Joint Research Centre, Brussels
- European Commission (1996) *Illegal and harmful content on the internet*. COM(96) 487. Brussels
- European Commission (2009a) *Commission recommendation on media literacy in the digital environment for a more competitive audiovisual and content industry and an inclusive knowledge society*. Brussels
- European Commission (2009b) *Safer social networking principles for the EU*. European Commission safer internet programme. Luxembourg
- European Commission (2010) *A digital agenda for Europe*. <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2010:0245:FIN:EN:PDF>
- European Commission (2012a) *Communication on the European strategy for a better internet for children*. Brussels
- European Commission (2012b) *Safeguarding privacy in a connected world. A European data protection framework for the 21st century*. <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2012:0009:FIN:EN:PDF>
- European Parliament (2012) *EU framework of law for children's rights*. DG for internal policies, citizens' rights and constitutional affairs. Brussels
- European Union (2010) *Audiovisual media services directive 2010/13/EU*. Brussels
- Flint D (2000) The internet and children's rights: suffer the little children. *Comput Law Secur Rev* 16(2):88–94

- Foley M, Hayes N, O'Neill B (2012) Journalism education and children's rights: new approaches to media development in CEE/CIS countries. *Ir Stud Int Aff* 23:1–12
- Freeman M (2007) Article 3: the best interests of the child. In: Alen A, Lanotte JV, Verhellen E, Ang F, Berghmans E, Verheyde M (eds) *A commentary on the United Nations Convention on the Rights of the Child*. Martinus Nijhoff Publishers, Leiden
- Gasser U, Maclay C, Palfrey J (2010) *Working towards a deeper understanding of digital safety for children and young people in developing nations*. Berkman Center for Internet and Society, Cambridge
- Giddens A (1991) *Modernity and self-identity: self and society in the late modern age*. Polity Press, Cambridge
- Green L (2010) *The internet: an introduction to new media*. Berg, Oxford
- Griffin J (2009) *On human rights*. Oxford University Press, Oxford
- GSMA (2007) *European framework for safer mobile use by younger teenagers and children*. GSMA Europe, Brussels
- Guggenheim M (2005) *What's wrong with children's rights?*. Harvard University Press, Cambridge
- Hamelink CJ (2008) Children's communication rights: beyond intentions. In: Drotner K, Livingstone S (eds) *The international handbook of children, media and culture*. Sage Publications, London, pp 508–519
- Helberger N (2008) The media-literate viewer. In: van Eijk N, Hugenholtz PB (eds) *Dommering-bundel: opstellen over informatierecht aangeboden aan Prof Mr E. J. Dommering*. Otto Cramwinckel Uitgever, Amsterdam, pp 135–148
- Helsper E (2012) Which children are fully online? In: Livingstone S, Haddon L, Görzig A (eds) *Children, risk and safety online: research and policy challenges in comparative perspective*. The Policy Press, Bristol, pp 45–58
- Holzscheiter H (2010) *Children's rights in international politics: the transformative power of discourse*. Hampshire, Palgrave Macmillan, Houndmills
- ICT Coalition (2012) *Principles for the safer use of connected devices and online services by children and young people in the EU*. www.gsma-documents.com/safer_mobile/ICT_Principles.pdf
- ITU (2009) *Child online protection*. ITU, Geneva
- ITU (2010) *Child online protection statistical framework and indicators*. www.itu.int/pub/D-IND-COP.01-11-2010
- Jones LM (1998) Regulating child pornography on the internet: the implications of Article 34 of the United Nations convention on the rights of the child. *Int J Child Rights* 6(1):55–79
- Kroes N (2012) Digital agenda: new strategy for safer internet and better internet content for children and teenagers. http://europa.eu/rapid/press-release_IP-12-445_en.htm?locale=en
- Lembke J (2003) *Competition for technological leadership: EU policy for high technology*. Edward Elgar Publishing, Cheltenham
- Lessig L (2000) *Code: and other laws of cyberspace*. Basic Books, New York
- Livingstone S (2009a) *Children and the internet: great expectations, challenging realities*. Polity Press, Cambridge
- Livingstone S (2009b) A rationale for positive online content for children. *Commun Res Trends* 28(3):12–17. <http://eprints.lse.ac.uk/48922/>
- Livingstone S (2011) Regulating the internet in the interests of children: emerging British, European and international approaches. In: Mansell R, Raboy M (eds) *The handbook on global media and communication policy*. Blackwell, Oxford, pp 505–524
- Livingstone S, Bulger M (2013) A global agenda for children's rights in the digital age: recommendations for developing UNICEF's research strategy. UNICEF Office of Research, Florence. <http://www.unicef-irc.org/publications/702>
- Livingstone S, Ólafsson K, Staksrud E (2011a) *Social networking, age and privacy*. EU Kids Online, London School of Economics and Political Science, London. <http://eprints.lse.ac.uk/35849/>

- Livingstone S, Haddon L, Görzig A, Ólafsson K (2011b) Risks and safety on the internet: the perspective of European children, full findings. EU Kids Online, London School of Economics and Political Science, London. <http://eprints.lse.ac.uk/33731/>
- Livingstone S, Haddon L, Görzig A, Ólafsson K (2012a) EU Kids Online final report. EU Kids Online, London School of Economics and Political Science, London. <http://eprints.lse.ac.uk/39351/>
- Livingstone S, Ólafsson K, O'Neill B, Donoso V (2012b) Towards a better internet for children. EU Kids Online, London School of Economics and Political Science, London. <http://eprints.lse.ac.uk/44213/>
- Lunt P, Livingstone S (2012) Media regulation: governance and the interests of citizens and consumers. Sage Publications, London
- Lusoli W, Miltgen C (2009) Young people and emerging digital services. An exploratory survey on motivations, perceptions and acceptance of risks, JRC technical reports. European Commission, Institute for Prospective Technological Studies, Luxembourg
- Lusoli W, Bacigalupo M, Lupiañez F, Andrade N, Monteleone S, Maghiros I (2011) Pan-European survey of practices, attitudes and policy preferences as regards personal identity data management JRC technical reports. European Commission, Luxembourg
- Mansell R (2012) Imagining the internet: communication, innovation, and governance. Oxford University Press, Oxford
- Marsden CT (2011) Internet co-regulation: European law, regulatory governance and legitimacy in cyberspace. Cambridge University Press, Cambridge
- Mathiesen K (2012) The internet, children, and privacy: the case against parental monitoring. Springer
- Mayer-Schönberger V (2009) Delete: the virtue of forgetting in the digital age. Princeton University Press, Princeton, NJ
- McLaughlin S (2013) Rights v. Restrictions. Recognising children's participation in the digital age. In: O'Neill B, Staksrud E, McLaughlin S (eds) Towards a better internet for children policy pillars, players and paradoxes. Nordicom, Göteborg, pp 301–319
- McNamee J (2010) Internet blocking: crimes should be punished and not hidden. European Digital Rights, Brussels
- Millwood Hargrave A, Livingstone S (2009) Harm and offence in media content: a review of the empirical literature. Intellect Press, Bristol. <http://eprints.lse.ac.uk/49000/>
- Muir D (2005) Violence against children in cyberspace: a contribution to the United Nations study on violence against children. ECPAT International, Bangkok
- Nesson C, Marglin D (1996) The day the internet met the first amendment: time and the communications decency act. Harv J Law Technol 10(1):113
- Nordic Youth Forum (2012) Youth have their say on internet governance. Nordicom, Gothenburg
- O'Neill B (2010) Media literacy and communication rights: ethical individualism in the new media environment. Int Commun Gaz 72(4–5):323–338
- O'Neill B, Livingstone S, McLaughlin S (2011) Final recommendations for policy, methodology and research. EU Kids Online, London School of Economics and Political Science, London. <http://eprints.lse.ac.uk/39410>
- O'Neill O (1988) Children's rights and children's lives. Ethics 98(3):445–463
- OECD (2011) The protection of children online. Risks faced by children online and policies to protect them. OECD Working Party on Information Security and Privacy, Paris
- OECD (2012a) Connected minds: technology and today's learners. www.oecd-ilibrary.org/education/connected-minds_9789264111011-en
- OECD (2012b) Recommendation of the council on the protection of children online. <http://webnet.oecd.org/oecdacts/Instruments/ShowInstrumentView.aspx?InstrumentID=272&InstrumentPID=277&Lang=en&Book=False>
- Olsen F (1992) Children's rights: some feminist approaches to the United Nations Convention on the Rights of the Child. Int J Law Fam 6:192–220

- Oswell D (2008) Media and communications regulation and child protection: an overview of the field. In: Livingstone S, Drotner K (eds) *International handbook of children, media and culture*. Sage Publications, London, pp 469–486
- Palfrey J, Boyd D, Sacco D (2008) *Enhancing child safety and online technologies: final report of the internet safety technical task force to the multi-state working group on social networking of state attorneys general of the United States*. Berkman Center for Internet and Society, Cambridge, MA
- Powell A, Cooper A (2011) Discourses of net neutrality: comparing advocacy and regulatory arguments in the US and the UK. *The inf soc* 27:311–325
- Powell A, Hills M, Nash V (2010) *Child protection and freedom of expression online*. Oxford Internet Institute forum discussion paper no 17, Oxford
- Preston CB (2009) All knowledge is not equal: facilitating children's access to knowledge by making the internet safer. *Int J Commun Law Policy* 13:115–132
- Pruulmann-Vengerfeldt P, Runnel P (2012) Online opportunities. In: Livingstone S, Haddon L, Görzig A (eds) *Children, risk and safety online: research and policy challenges in comparative perspective*. The Policy Press, Bristol, pp 45–58
- Purdy LM (1992) *In their best interest? The case against equal rights for children*. Cornell University Press, Ithaca, NY
- Quale E, Taylor M (2011) Social networking as a nexus for engagement and exploitation of young people. *Inf Secur Tech Rep* 16:44–50
- Rosen J (2012) The right to be forgotten. *Stanford Law Rev Online* 64:88
- Schoon I (2006) *Risk and resilience: adaptations in changing times*. Cambridge University Press, New York
- Schulz W, Held T (2004) *Regulated self-regulation as a form of modern government: an analysis of case studies from media and telecommunications law*. John Libbey Publishers for University of Luton Press, Luton
- Shmueli B, Blecher-Prigat A (2011) Privacy for children. *Columbia Hum Rights Law Rev* 42:758–795
- Tambini D, Leonardi D, Marsden CT (2008) *Codifying cyberspace: communications self-regulation in the age of internet convergence*. Routledge, London
- Thierer A (2009) *Parental controls and online child protection: a survey of tools and methods*. The Progress and Freedom Foundation, Washington, DC
- Thierer A (2011) *Kids, privacy, free speech and the internet: finding the right balance*. Mercatus Centre working paper 11. Mercatus Center, Arlington, VA
- Veerman PE (2010) The ageing of the UN Convention on the Rights of the Child. *Int J Child Rights* 18(4):585–618
- Warschauer M, Matuchniak T (2010) New technology and digital worlds: analyzing evidence of equity in access, use, and outcomes. *Rev Res Educ* 34(1):179–225
- Webster W, Davidson J, Bifulco A, Gottschalk P, Caretti V, Pham T et al (2012) *European online grooming project. Final report*. European Commission safer internet plus programme, Brussels
- WSIS (2005) *Tunis commitment*. www.itu.int/wsis/documents/doc_multi.asp?lang=en&id=2266%7C2267
- Zittrain J (2008) *The future of the internet and how to stop it*. Penguin, London

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