Formal (Public) Response from Sonia Livingstone, 
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To the Federal Communication Commission's 
Notice of Inquiry in the matter of Empowering Parents and Protecting 
Children in an Evolving Media Landscape (MB Docket No. 09-194), adopted 
October 22, 2009

A. Children’s Media Use

Access (both quality and quantity) to the internet precedes any kinds of opportunities, and 
thus it matters that 25% of 6-17 year old children are still not online in Europe. Particularly 
low access persists in certain countries (notably Italy, Greece, Cyprus) and among certain 
population segments (esp. less well-off and/or rural households) – as well, of course, 
among younger children. However, e-inclusion policies largely focus on adults and surveys 
of use generally exclude children. When they address children, the focus is usually on 
schools, though many children lack sufficiently flexible access at school to explore the 
potential of the internet; to really grasp the benefits, home access is vital. Moreover, the 
evidence suggests that children’s internet use is encouraged by their parents’ internet use, 
so parents not yet online should be encouraged to use the internet.

At the same time, educational investment in ICT remains vital. Generally, greater internet 
use is associated with higher levels of education at both country and individual levels. So, 
improving educational achievement in general may be expected to increase the extent and 
sophistication of internet use. Beyond this, it is evident that there are many gaps in 
provision or insufficient or outdated provision of ICT in schools. This creates difficulties in 
ensuring that digital literacy in general, and internet safety in particular, is addressed as it 
arises across the curriculum (not simply in ICT classes) by teachers who have been 
recently and appropriately trained, and with adequate resources at their disposal.

Further, to embed the wider take up of online opportunities, media education should be 
recognised and resourced as a core element of school curricula and infrastructure. And 
schools must overcome the tendency to regard children’s use of the internet at home as 
beyond their remit. For crucially, the resources of the school outstrip those of many 
parents, making schools the most efficient, effective and fair way of advising all children.

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1 See Livingstone, S. (2009). Maximising opportunities and minimising risks for children online: From evidence 
to policy. InterMedia.
B. Benefits of Electronic Media for Children

B1. A matter of children’s rights

Online opportunities, whether provided at home or at school, are not only a matter of inclusion or the national skills base but also one of rights. The UN Convention on the Rights of the Child asserts children’s rights to express their views freely in all matters affecting them, through any medium of the child’s choice, plus freedom of association and peaceful assembly, protection of privacy and access to mass media that disseminate information and material of social and cultural benefit to the child, with particular regard to the linguistic needs of minority/indigenous groups and to protection from material injurious to the child’s well-being.

Such an agenda that can and should occupy researchers, policy makers and industry alike, especially since the evidence suggests that while each child begins climbing a ‘ladder of online opportunities’ with enthusiasm, not so very many are, in practice, creative, productive, critical or civically engaged. Ensuring that all children get the opportunity to advance from simple to more complex activities requires encouragement, resources and support.

B2. Positive online content provision

There appears to be growing policy support for the positive online provision of accessible and high quality contents and services for children, however defined, that help them develop to their fullest potential, affirm their sense of self, community and place, promote an awareness and appreciation of other cultures, and extend their capacities to be creative, to learn and to participate. Currently not all children benefit from such opportunities, for reasons of socio-demographic inequalities or national provision (e.g., in small language communities), while good online resources can be difficult to locate (by children) and difficult to sustain (by providers).

However, there are growing indications that positive online provision (provided it is valued and enjoyed by children), both directly benefits their development and, significantly for our present discussions, also reduces online risks by encouraging valuable and valued activities. This provides added justification for devoting more attention and resources to the development of online opportunities for children, especially as part of public rather than commercial provision.

C. Risks of Electronic Media for Children

C1. Potential Risks

Given the continually expanding knowledge base, EU Kids Online\(^2\) identified and coded nearly 400 distinct empirical studies in 21 countries concerned with children’s online experiences (Staksrud et al. 2009).\(^3\) Second, the network classified these findings in terms of varieties of online opportunities and risks, developing a three C’s approach: content,


contact and conduct (see Hasebrink et al, 2009). This classification derives from the three modes of communication afforded by the internet:

- **Content:** one-to-many (child as recipient of mass distributed content);
- **Contact:** adult-to-child (child as participant in an interactive situation predominantly driven by adults);
- **Conduct:** peer-to-peer (child as actor in an interaction in which s/he may be initiator or perpetrator).

The most common risks, in terms of the three C's, are as follows.

- **With regard to content,** it appears that seeing pornography and seeing violent or hateful content are among the most common risks, although not encountered by a majority of the children and teenagers and with some gender differences in these experiences. Boys appear more likely to seek out offensive or violent content, to access pornographic content or be sent links to pornographic websites. Girls appear more likely to be upset by this. Not every use of pornographic or violent content constitutes a (emotional) problem and there can be disagreement about these risks between parents and children. Generally, there is more policy attention paid to pornographic than to violent content, and arguably efforts to reduce children’s exposure to violent online content could be strengthened.

- **Prominent contact-related risks** are receiving unwanted sexual comments and meeting an online contact offline. The latter is the least common but arguably most dangerous risk. Although we have little empirical research on commercial risks, this may be added to the list, since research shows that young children find it difficult to separate commercial and non-commercial content, and since this is difficult for many of all ages in the digital environment.

- **Conduct risks** are often associated with self exposure. Giving out personal information (such including textual information or images on blogs or social networking profiles) is very common, and may be detrimental to the reputation of young people or it can expose them as possible victims for adults or adolescents with a sexual interest in children. Sending and receiving hostile messages within the peer group occurs fairly frequently, though less common is the use of various information and communication technologies to support deliberate, repeated, and hostile behaviour by an individual or group that is intended to harm others (i.e. cyber-bullying). The common forms of potentially offensive internet activities are personal intimidation, exclusion, humiliation, ridicule, and so forth.

### C2. Balancing Opportunities and Risks

One temptation is to seek all means of keeping children safe. But it is inherent to childhood and especially adolescence to take risks, push boundaries and evade adult scrutiny – this is how children gain resilience. On the one hand, genuine and unacceptable risks should be addressed and where possible prevented, but on the other hand, children learn to cope with the world through testing their capacities and adjusting their actions in the light of lessons learned. Balancing all these rights can be demanding, but all should be

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borne in mind to prevent safety proposals restricting children’s rights and to prevent the promotion of online benefits neglecting possible risks.

Balancing empowerment and protection is a crucial task. Research suggests that increasing online access, use and opportunities tends also, if inadvertently, to increase online risks. Similarly, strategies to decrease risks can restrict children’s internet use or opportunities more broadly, even at times contravening children’s rights to communicate. As shown in the EU Kids Online Final Report, the classification of countries by use and risk\(^5\), this association appears to hold not only for individuals but also across countries. Thus, it seems that going online for beneficial reasons (however defined) also results in an increase in risk. This can be redressed partly through media literacy and partly through interface design.

As noted above, research suggests that each child climbs a ‘ladder of online opportunities’, beginning with information-seeking (of any kind), progressing through games and communication, taking on more interactive forms of communication and culminating in creative and civic activities.\(^6\) One implication is that communication and games playing may not be ‘time-wasting’ but, instead, can provide a motivational step on the way to ‘approved’ activities. Another is that online resources should be designed so as to encourage children to progress from simpler to more complex and diverse activities. The evidence is that while many children communicate, search and play online, not so very many are, in practice, creative, productive, critical or civically engaged. Ensuring that all children get the opportunity to advance from simple to more complex activities needs encouragement, resources and support.

As also noted above, there is growing support for the positive online provision of accessible and high quality contents and services for children that help children to develop to their fullest potential, affirm their sense of self, community and place, promote an awareness and appreciation of other cultures, and extend their capacities to be creative, to learn and to participate. Currently not all children benefit from such opportunities, for reasons of socio-demographic inequalities or national provision (e.g., in small language communities), while good online resources can be difficult to locate (by children) and difficult to sustain (by providers). However, there are growing indications that positive online provision (provided it is valued and enjoyed by children), both directly benefits their development and also reduces online risks by encouraging valuable and valued activities.

**C3. Protecting Children from the Risks**

a. Education and the Role of Schools

EU Kids Online found that greater internet use is associated with higher levels of education at both country and individual levels. Improving educational achievement in general may therefore be expected to increase the extent and sophistication of internet use. Beyond this, and to embed the wider take up of online opportunities, media education should be recognised and resourced as a core element of school curricula and infrastructure.

Schools are best placed to teach children the digital and critical literacy skills required to maximise opportunities and minimise risks. Schools are also best placed to reach all children, irrespective of socioeconomic status and other forms of inequality. For both these

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reasons, schools have a key role to play in encouraging and supporting creative, critical and safe uses of the internet, crucially throughout the curriculum but also at home or elsewhere.

In certain European countries, there are difficulties in ensuring that digital literacy in general, and internet safety in particular, is addressed as it arises across the curriculum (not simply in ICT classes) by teachers who have been recently and appropriately trained, and with adequate resources at their disposal. Further, in many European countries, schools have tended to regard children’s use of the internet at home or elsewhere (outside school) to be beyond their remit. Nonetheless, the resources of the school outstrip those of many parents, making schools the most efficient and effective way of advising children on use of the internet in any location.

b. Parental responsibilities

No-one doubts that parents are responsible for their children’s safety, online as offline, and this is a responsibility they accept. For television and other familiar media, they are used to doing it. But for the internet, it’s still a struggle, resulting in a ‘regulation gap’ between parental willingness and parental competence. Analysis of the 2008 Eurobarometer survey (ibid.) showed that parental anxiety over children’s internet use is reduced if parents are internet users, and that parents who use the internet mediate their children’s use more. So, there are grounds to encourage all parents to get online.

Still, many lack the skills, knowledge or motivation to mediate their children’s use. It seems likely that different styles of parental mediation may be more effective in different cultural contexts, depending on cultural values and preferred styles of parenting, important to note when targeting parental awareness-raising messages. Further, though many parents do use filtering technology, it is unclear whether it is being used effectively or appropriately, or whether, as often claimed, children can and do ‘get around’ this. Indeed, since many parents find it difficult to know where to obtain guidance on, say, choosing a filter, assessing a website, reporting a problem, or setting rules, a well-promoted, reputable, easy-to-use, publicly-funded ‘one-stop shop’ or parent portal in each country – as, for instance, promised by the UK Council for Child Internet Safety, would seem an excellent idea7.

Parents act within a broader social, economic and technological context that is shaped by factors not of their making. Thus the limits of policies that rely on parents should be recognised, and other stakeholders must play a central role to support and complement the activities of parents. This is particularly the case since, although some research is suggestive on this point, it has not been clearly established that parental mediation is effective in reducing children’s exposure to risk or increasing their resilience to cope. So, while policy should empower parents to improve their use of all the available solutions, it should not rely on them, nor expect them to provide the stop gap solution where other regulatory strategies are insufficient.

EU Kids Online finds that high levels of parental anxiety regarding their children’s internet use occur across Europe. However, since anxiety appears reduced if parents are themselves internet users and, further, since parents who use the internet mediate their children’s internet use more, there are good grounds to encourage all parents to use the

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internet to support their children. The European parenting group, COFACE, outlines useful principles for supporting parents in their responsibility to keep their children safe online.

Use of filtering technology has increased in recent years but filters remain difficult to choose and use and much problematic content (e.g. user-generated) is inadequately dealt with. Moreover, little is known of how consistently and appropriately parents employ these tools or whether, as popularly claimed, children can and do ‘get around’ them. Cultural differences mean that social and technical tools may be preferred by or more useful to parents in some countries compared with others. Generally, it seems clear that many parents find it difficult to know where to obtain guidance on supporting their child online, choosing a filter, assessing a website, reporting a problem, or setting rules. Therefore, a well-promoted, reputable, easy-to-use, publicly-funded ‘one-stop shop’ or parent portal in each country is greatly needed.

However, the most recent work by EU Kids Online suggests that different styles of parental mediation may be more effective in different cultural contexts, depending in part of parental values and preferred styles of parenting. Thus, when designing parental awareness-raising and mediation strategies, local contexts matter.

c. Raising awareness

Described by the European Commission’s Safer Internet Programme as “actions that can contribute to the trust and confidence of parents and teachers in safer use of the Internet by children”, awareness-raising is clearly a central focus of EC’s Safer Internet Action Plan, implemented across Europe through the Insafe network of national awareness-raising nodes.

The use of picture and video sharing gives rise to new awareness issues with regard to personal information risks. Users’ awareness of these risks should be a priority. Awareness materials should contain specific information on the implications of picture and video files being publicly accessible in terms of discoverability, communication of location identifying information, and syndication. It should also include the potential risks of posting pictures or videoclips to sharing sites, blogs, mblogs etc. as a permanent digital record which, once uploaded, may circulate freely in networks beyond the users’ control.

Such awareness-raising should focus on both the collection and dissemination of pictures and videos by adults or adolescents with a sexual interest in children, as well as their use in other forms of online abuse such as bullying and stalking. Information should also include the risks associated with producing and uploading image or video-based content which has been requested by a user whose identity the child or young person is unsure of. Users need to be able to recognise the risks regarding personal blogging, social networking, down/uploading, and so forth. Awareness materials should contain specific information on the potential risks of posting personal information to online public and searchable spaces, potential for identification of offline location, and content syndication. Awareness materials should further contain information about the need to be cautious of users met through automatic linking, and that automatic linking does not verify the identity of users beyond the key matching criteria.

Children should also be made aware that that their blog, site or profile may be automatically hyperlinked to others who may use this information to initiate contact for ill

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intentioned purposes such as grooming or bullying. They should also be advised that services exist which enable blog discussions to be monitored, and that these may be used to enable users with ill intent to join discussions and appear to be knowledgeable about specific topics.

Users need to be aware of the fact that cyber-bullying can have far-reaching consequences for the victim. While some victims react less emotionally to cyber-bullying, others feel threatened or harassed (Hasebrink et al. 2009, ibid.). Children should be made aware that high-risk behaviour on the internet (handing passwords to peers, online posting of personal information, etc.) increases the risk of being bullied. Because of the anonymous nature of some internet communication services children believe that they can’t be traced and consequently can’t be punished. Also parents and schools should be made more aware of cyberbullying and related risks.

At the individual level, the priority now must be awareness-raising among younger children (and their parents and teachers) as they (rather than teenagers) are the fastest growing user group and little is known of their activities, skills or risks online. It seems that the internet is already a normal tool for European children at the age of ten years and is increasingly becoming an attractive tool for many between 6 and 10 years old. It is likely that even younger children are getting online, but this is barely been researched (Staksrud et al, 2009, ibid.). This emphasises the need to research younger children and to develop measures supporting safer internet use for all age groups.

Additionally, research finds that, although girls and boys use the internet to a similar degree, strong differences in patterns of use and, therefore, patterns of risks persist, suggesting that awareness-raising and strategies to encourage coping and resilience should address girls and boys differently. Further, since it seems that online risks are disproportionately experienced by children from lower socioeconomic status households, where parents may be less resourced to support them, there is value in specifically targeting less privileged families, schools and neighbourhoods.

Much awareness-raising has focussed on drawing the attention of children, parents and teachers to the risks of internet use. This effort must continue as internet use across Europe deepens and diversifies. It must also be extended as new risks emerge, especially on mobile, networked or other new platforms, in relation to peer-to-peer and user-generated content and services, and in relation to risks yet little researched (self-harm, stealth marketing, privacy/personal data abuse, addiction, and so forth). It must also address the question of how children cope with risk once encountered. In short, anticipating risks so as to prevent them is necessary but insufficient, since children also need guidance on what to do after they have experienced a problem online. Most children do not report problems to adults for fear of losing internet access or being punished, and realistic advice on what to do is in short supply, as are evaluations of which coping strategies are effective. The benefits of peer-to-peer awareness campaigns and initiatives involving young adults as mediators, based on the trust among young people, should be capitalised upon and extended.

In terms of present policy, it is important to recognise (i) that some children perpetrate online risks, whether from malice, playfulness or mere accident, (ii) that those who tend to experience online risks may also turn to generating further risks (perhaps hitting back at those who hurt them), (iii) that those who create risks may themselves also be victims, and

(iv) that those who are vulnerable online are likely to lack adequate social and parental support offline.

d. Filters

Filtering has been deployed in the EU by Internet Service Providers (ISP) and mobile networks, and on home computers. Internet hotlines can block access to (illegal) child abuse images. For legal but potentially harmful material, user-operated filtering systems are preferred though they are not (yet) technically designed to filter chat traffic and content that uses non-web protocols.

In a number of European countries (Belgium, Denmark, Estonia, Germany, Greece, Ireland, Italy, the Netherlands, Slovenia and the UK), ISPs seem to play an active role in safeguarding safety online for children by offering safety packages as part of their service, and also by participating in local projects to raise public awareness, collaborating with safety nodes and producing and distributing online safety awareness-raising material for schools. These safety packages include a wide range of services such as antivirus and anti-spyware protection, defence against phishing attacks with URL filtering and anti-spam functions, detection of Wi-Fi intrusion, improved personal firewall preventing intrusions by hackers and blocking networks viruses targeting loopholes in the network, among other things (Hasebrink et al. 2009, ibid.). Other countries are less active in all these respects and hence further efforts are needed.

D. Media Literacy

D1. Media literate children?

If one cannot rely on parents, can one instead hope to empower and thus rely on children themselves? Policies to promote media literacy are increasingly prominent on the European agenda, recognising that technologically convergent and complex, highly commercialised and globalised online environments place considerable demands on individuals, here children, to manage competently and benefit from optimally, even sufficiently.

The EC defines media literacy as ‘the ability to access, analyse and evaluate the power of images, sounds and messages which we are now being confronted with on a daily basis and are an important part of our contemporary culture, as well as to communicate competently in media available on a personal basis. Media literacy relates to all media, including television and film, radio and recorded music, print media, the Internet and other new digital communication technologies.’

Media literacy, like print literacy before it, should be recognised as a key means, even a right, by which citizens participate in society and by which the state regulates the manner and purposes of citizens’ participation. It concerns the relationship among textuality, competence and power. Indeed, literacy is a concept grounded in a centuries-old struggle between enlightenment and critical scholarship, setting those who see literacy as democratising, empowering of ordinary people against those who see it as elitist, divisive, a source of inequality. Debates over literacy are, in short, debates about the manner and purposes of public participation in society. Without a democratic and critical approach to media literacy, the public will be positioned merely as selective receivers, consumers of

online information and communication. The promise of media literacy, surely, is that it can form part of a strategy to reposition the media user - from passive to active, from recipient to participant, from consumer to citizen.

There are many reasons to welcome the growing efforts to promote media literacy at national and international levels, as this must surely aid efforts to maximise opportunities and minimise risks. But some express reservations that media literacy and safety awareness agendas are getting confused, even though the former has the wide ambition of overcoming the participation gap, supporting critical and creative literacies, and harnessing the benefits of the internet for all; while the latter is more instrumental, narrowly focused on a particular agenda of child safety to complement to self- and co-regulatory initiatives.

On the one hand, research charts many ways in which children (and adults) are gaining knowledge, confidence and sophistication in their navigation of and contribution to the online environment. On the other hand, many appear to use the internet narrowly, lacking confidence or knowledge, unsure what the possibilities are, anxious about the risks. For example, the interactive and creative online opportunities on offer can support learning, participation, communication, self-expression and fun. Yet some of these – for example, blogging or creating webpages – are only practised by a minority of young internet users across European countries, leaving the full potential of media education for enhancing pupils’ creative digital skills far from being realised. Thus, media education should turn more attention to fostering children’s creative participation in online environments.

Research also shows that children (again, like adults) vary considerably in their ability to access, judge and navigate among the range of media contents and services. Many have a weak understanding of how contents are produced, disseminated, financed or regulated, undermining decisions about trustworthiness, authenticity or risk. Further, systems of selection, control and protection are little understood or used. Indeed, research in many countries suggests that media literacy programmes, like any other form of knowledge transfer, is generally under-resourced and uneven in its implementation, and unequal in its adoption by those of differential social status. As knowledge gap theories argue, low media literacy is also associated with other forms of social deprivation, so that media literacy initiatives are more effective at reaching the already information-rich than reaching the information poor. At an individual level, media literacy is also inconsistently translated into everyday practices, with a persistent gap between what people know and how they act.

D2. Teaching Media Literacy to All Stakeholders

In terms of media literacy programmes and initiatives, it is now vital to conduct thorough evaluations of the diverse media literacy initiatives being developed. It is not yet known, crucially, whether media literacy brings real benefits in terms of protection against harm, take up for communication rights, enhancing active citizenship or creative and cultural expression and learning. Nor is it known which strategies work best for which groups or under which circumstances.

It does seem, for instance, that peers have a substantial influence on how children take up the opportunity for creative online activities; also, young people discover new things to do with the internet mostly through their friends (Kalmus, 2007).18 This suggests the value of peer-to-peer teaching, and this could be more effectively resourced and integrated as part of media education in schools. Also, several entertainment and communication related online activities lead to the take-up of more ‘approved’ opportunities, e.g., searching for additional information or creative activities. Thus, instead of considering online games or instant messaging as a waste of time or even restricting using them, both parents and teachers could encourage a wider array of child-centred activities on the internet, to stimulate interest and self-directed learning.

Given the lack of critical knowledge of the online environment, especially its political, commercial and safety dimensions, teachers should also give a higher priority to guiding children in making informed choices online. As the online environment – in terms of platforms, contents and services, as well as regulatory and cultural conditions of use – continues to change, this education must be continually revised and updated.

As noted elsewhere, it must be recognised the encouraging creative participation will also bring risks, hence risks and opportunities must be addressed together. Furthermore, as with safety awareness and parental mediation, the limits of children’s media literacy must be recognised. This is not to denigrate their abilities but rather to recognise the demands of a complex technological, commercial and, increasingly, user-generated environment. Hence the importance also of co-and self-regulation to complement and support children’s media literacy.

D3. Regulation

Across Europe, all kinds of self-and co-regulatory initiatives are underway, including the EC’s Safer Internet Programme’s support for hotlines and awareness-raising, the Council of Europe’s call for ‘public service value’ in online provision, the 2009 Safer Social Networking Principles for the EU,19 and the endorsement of the importance of media literacy in the EC’s Audiovisual Media Services Directive. Since EU Kids Online has found that substantial proportions of children are encountering, often accidentally, pornographic, violent, hostile or racist content.20 Since many lack the tools and skills by which they (or their parents) can prevent such exposure, such initiatives are important: potentially, age-verification, take-down, opt-in and opt-out, safe search procedures, moderation, filtering preferences, kitemarks, user-defaults, privacy settings, report abuse buttons etc. will make a real difference.

Cyberpsychology: Journal of Psychosocial Research on Cyberspace, 191.
19 See http://ec.europa.eu/information_society/activities/social_networking/docs/sn_principles.pdf
In the spirit of self- or co-regulation favoured by European stakeholders, although some of these initiatives are encouraged top-down, some are initiated and many rely on the active cooperation of media and communications organisations, established and new, as well as on national regulatory agencies. At the present time, there is especially much to be done in certain countries where effective regulation (self-or co-) is largely lacking, awareness-raising is still in the early stages, NGOs are not yet very engaged, and internet access is racing ahead of regulatory frameworks, commercial practice and public knowledge of how to manage it. Moreover, such regulatory initiatives are still be evaluated independently, and the processes underpinning self-regulation are not always transparent.

Nonetheless, such initiatives are much to be welcomed. As each is developed, it must be researched to match anticipated with actual user behaviour. It must be evaluated for its usability, its risk reduction outcomes and, also important, any trade-off in restricting freedoms. Then it must be translated into guidance for users, for internet literacy depends on online ‘legibility’ – namely a transparent, interpretable, conventionalised environment for users.

An analogy is sometimes drawn between internet safety and road safety - as children must learn to navigate both. Teaching children how to cross roads – a task for schools, parents and communities – is well understood and widely supported. The same applies to learning to swim, as Tanya Byron argued in her influential review. But society teaches children to cross roads safely (and adults to drive safely) only in an environment in which roads have been designed with safety as well as freedom in mind – they have traffic lights, width restrictions, road bumps, marked crossing points, and more. This design is not only physical but also social: the rules of the road are known, accepted and enforced; their very existence enables children to take care of themselves and to make sensible judgements about the behaviour of others. Children are also taught what to do, how to complain, report or get help if needed - this takes institutional provision.

In short, children can only be taught effectively how to manage the internet if the online environment is to some degree regulated, by a combination of law enforcement, interface and website design, search processes, content and service providers, provision of online safety resources, and more. Only in such a context can those of us who research children’s online understandings and practices see the way ahead to conducting research and developing policy recommendations in a way that is feasible and realistic.

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21 Although the efforts of Insafe (www.saferinternet.org) and eNacso (http://www.redbarnet.dk/enacso) should be recognised here.

