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Final recommendations for policy, methodology and research

Report

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Final recommendations for policy, methodology and research

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McLaughlin,

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- *Disadvantaged children and online risk* (Livingstone, S., Görzig, A., and Ólafsson, K., 2011)
- *EU Kids Online Final Report* (Livingstone, S., Haddon, L., Görzig, A., and Ólafsson, K., 2011)
- *Risks and safety on the internet: The perspective of European children. Full findings* (Livingstone, S., Haddon, L., Görzig, A., and Ólafsson, K., 2011)
- *Risky communication online* (Livingstone, S., and Ólafsson, K., 2011)
- *Digital literacy and safety skills* (Sonck, N., Livingstone, S., Kuiper, E., and de Haan, J., 2011)
- *Social networking, age and privacy* (Livingstone, S., Ólafsson, K., and Staksrud, E., 2011)
- *Patterns of risk and safety online. In-depth analyses from the EU Kids Online survey of 9-16 year olds and their parents in 25 countries* (Hasebrink, U., Görzig, A., Haddon, L., Kalmus, V. and Livingstone, S., 2011)
- *Cross-national comparison of risks and safety on the internet: Initial analysis from the EU Kids Online survey of European children* (Lobe, B., Livingstone, S., Ólafsson, K. and Vodeb, H., 2011)
- *Who bullies and who is bullied online? A study of 9-16 year old internet users in 25 European countries* (Görzig, A., 2011)
- *Riesgos y seguridad en internet. The Spanish report* (Garmendia, M., Garitaonandia, C., Martínez, G. and Casado, M.A., 2011)
- *Risks and safety on the internet: The Ireland report* (O'Neill, B., Grehan, S. and Ólafsson, K., 2011)
- *Risks and safety on the internet: The UK report* (Livingstone, S., Haddon, L., Görzig, A. and Ólafsson, K., 2011)
- *Comparing children's online opportunities and risks across Europe: Cross-national comparisons for EU Kids Online* (2nd edn) (Hasebrink, U., Livingstone, S., Haddon, L. and Ólafsson, K., 2009)
- *What do we know about children's use of online technologies? A report on data availability and research gaps in Europe* (2nd edn) (Staksrud, E., Livingstone, S., Haddon, L. and Ólafsson, K., 2009)
- *Best practice research guide: How to research children and online technologies in comparative perspective* (Lobe, B., Livingstone, S., Ólafsson, K. and Simões, J.A., 2008)

EU Kids Online II: Enhancing Knowledge Regarding European Children's Use, Risk and Safety Online

This project has been funded by the EC Safer Internet Programme, http://ec.europa.eu/information_society/activities/sip/from_2009-2011 (contract SIP-KEP-321803). Its aim is to enhance knowledge of European children's and parents' experiences and practices regarding risky and safer use of the internet and new online technologies in order to inform the promotion among national and international stakeholders of a safer online environment for children.

Adopting an approach which is child-centred, comparative, critical and contextual, EU Kids Online II has designed and conducted a major quantitative survey of 9-16 year olds experiences of online risk in 25 European countries. The findings will be systematically compared to the perceptions and practices of their parents, and they will be disseminated through a series of reports and presentations during 2010-12.

For more information, and to receive project updates, visit www.eukidsonline.net

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EXECUTIVE SUMMARY

The *EU Kids Online* project

- The EU Kids Online project aims to enhance knowledge of European children's and parents' experiences and practices regarding risky and safer use of the internet and new online technologies, and thereby to inform the promotion of a safer online environment for children. The project is coordinated by the London School of Economics and Political Science (LSE), with research teams and stakeholder advisers in each of the 25 countries and an International Advisory Panel. The network has been funded by the European Commission's Safer Internet Programme in order to strengthen the evidence base for policies regarding online safety.
- The EU Kids Online survey has generated a substantial body of new data – rigorously collected and cross-nationally comparable – on European children's access, use, opportunities, risks and safety practices regarding the internet and online technologies. Significantly, findings come from interviews conducted directly with children aged between 9 and 16 from 25 countries across Europe
- Countries included in *EU Kids Online* are Austria, Belgium, Bulgaria, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Lithuania, the Netherlands, Norway, Poland, Portugal, Romania, Slovenia, Spain, Sweden, Turkey and the UK.
- A central objective of the EU Kids Online project has been to inform an evidence-based, proportionate policy framework in relation to children and the internet. Drawing on the full range of findings and reports produced This report summarises the final recommendations of EU Kids Online and includes recommendations on policy, methodological lessons learned as well as recommendations further research.
- Recommendations summarised here are presented in the order discussed in the full report. Also included are recommendations for policy stakeholder groups such as government, industry, parents, educators, awareness-raising, civil society, child welfare and children.

Main recommendations

1. Children have the right to protection and safety online but they must also take responsibility for keeping safe and respecting the rights of others on the internet.

- New means of internet access, less open to adult supervision, are increasingly evident in young people's internet use. Nearly half of all children in Europe go online in their own bedroom where it is unrealistic to expect parents to monitor their safety.
- Children and young people need to be encouraged to develop self-governing behaviour in which they take greater responsibility for their own safety in the use of the internet.
- Awareness-raising should emphasise empowerment rather than restriction, and appropriate, responsible behaviour with regard to technology use.

2. It is important that policy makers continue to emphasise children's online opportunities.

- Going online is now thoroughly embedded in children's daily lives: children now spend on average 88 minutes per day online. 15-16 year olds spend 118 minutes online per day, twice as long as 9-10 year olds (58 minutes).
- For children who still lack access, efforts are vital to ensure digital exclusion does not compound social exclusion. For children with access, efforts are required to ensure their quality and breadth of use is sufficient and fair.

3. A new focus is needed on internet safety for younger users.

- With the average age of first internet use at 7 countries such as Denmark and Sweden, and 9 overall, there needs to be a new policy focus on much younger children for whom the internet is an everyday experience and a greater concentration of effort at primary school and even pre-school level.
- It is important to balance protection of younger users with opportunities. It is important not just to make the online world safe by stopping their use of internet

services, but also to ensure their participation in safe ways.

4. Safety messages should be adapted to new modes of access.

- 33% of children now go online via a mobile phone or handheld device. Laptops, mobile phones, game consoles and other mobile devices allow children to go online anywhere, anytime, away from parental supervision. Emerging services (such as location-based ones) may lead to new risks.
- Industry providers should provide maximum protection for younger users across all platforms whilst ensuring that the added opportunities of greater internet access are not constrained.
- To be effective, industry self-regulation (e.g. Principles for the safer use of connected devices and on-line services by children) needs to be informed by all stakeholders in internet safety and be independently verified.

5. Educational support and digital literacy is needed for those who do not progress very far up the 'ladder of opportunities'.

- Not only do younger children and girls not progress as far up the 'ladder of opportunities' as teenagers and boys, many never reach the final set of activities at all. Only half of 9-10 year olds progress further than the most basic content-related activities.
- Promoting more creative and skilled applications is essential to ensure all children avail of online opportunities. This is particularly the case in those countries that do not progress beyond the most basic internet activities.
- Schools play a pivotal role in digital skills development, mitigating forms of digital exclusion. However, teachers are often inadequately resourced and trained to carry out the functions entrusted. Country differences in online skills point to the need for targeted educational interventions where there is evidence of a digital divide.
- Since opportunities and risks online go hand in hand, efforts to increase opportunities may also increase risks, while efforts to reduce risks may restrict children's opportunities. A careful balancing act, which recognises children's online experiences 'in the round', is vital.

6. Positive online content for children should be made a policy priority.

- Provision of appropriate content online should be a priority, particularly for younger children and in small language communities.
- The "European Award for Best Children's Online Content" is a valuable step in this direction, but such provision could also be supported by high profile national initiatives.

7. Digital safety skills are needed to build resilience online.

- Inequalities in digital skills persist – in terms of SES, age and, to a lesser degree, gender, so efforts to overcome these are needed.
- Digital skills for all ages remain important but younger age groups need to be a particular priority for parents and teachers. Secondary level schools to date have been the main providers of ICT skills training but new interventions are required at the primary level.
- Encouraging children to do more online will also improve their digital skills as well as their overall confidence and/or increasing children's beliefs in their abilities to use the internet. Similarly, teaching safety skills is likely to improve other skills, while teaching instrumental and informational skills will also improve safety skills.
- Given uneven digital skills, particularly safety skills, across Europe and the discussion among stakeholders about the need to identify more precisely the kinds of skills required, an inventory and agreed framework for digital safety training would provide a valuable resource for educators, awareness-raising and civil society groups.
- Schools are uniquely placed to reach the maximum number of children. They are regarded by parents as the most trusted source of information and, as the second most common location for going online, also provide children with a very important point of access.

8. Social networking service providers need to ensure that maximum protection is provided for the accounts of minors

- If SNS age restrictions cannot be made effective, the de facto use of SNS by young children should be addressed so as to ensure age-appropriate protection.

- Privacy/safety settings and reporting mechanisms should be far more user-friendly. If they remain difficult to use, privacy/safety settings should be enabled by default.
- Digital skills to protect privacy and personal data should be strongly supported among children of all ages.
- It should also be noted that one in three parents (51% of parents of 9-12 year olds, 15% of parents of 13-16 year olds) did not wish their child to use SNS.
- The review of data protection legislation at a European level needs to be considered from the point of view of children's privacy.

9. Awareness-raising in relation to online risks should be balanced and proportionate, and targeted at those most at risk of harm.

- Children are concerned about a wide range of online risks. Efforts to manage these risks, and to support children in coping with them, should maintain a broad and updated view of these risks.
- As 9% of 9-10 year olds have been bothered or upset by something on the internet in the past year, it is important to promote awareness-raising and other safety practices for ever younger children.
- Awareness raising among teenagers (and their parents and teachers) remains a priority since upsetting experiences rise with age and the array of risks keeps changing.

10. Parental awareness of risks and safety online needs to be enhanced.

- Without being alarmist or sensationalist, parents need to be alerted to the nature of the risks their children may encounter online. Awareness raising should try to encourage dialogue and greater understanding between parents and children about young people's online activities.
- Increasing parental understanding of risks is particularly important in those countries where awareness of children's risk experience is lowest.

11. Responses to young people's exposure to online sexual content needs to be proportionate and should focus on those most likely to be distressed or harmed by such exposure.

- Although public concern over online sexual content is justified, the extent of children's exposure should not be exaggerated, and nor should it be assumed that all children are upset or harmed by such exposure – the present findings do not support some of the moral panics surrounding this issue.
- Although the internet makes sexual content more readily available to all, with many children reporting exposure via accidental pop-ups, the regulation of more established media (television, video, magazines, etc.) remains important.
- Private access also matters – children who go online via their own laptop, mobile phone or, especially, a handheld device are more likely to have seen sexual images and/or received sexual messages. Similarly, those who go online in their bedroom, at a friend's house or 'out and about' are more likely to see sexual content online. The early advice that parents should put the computer in a public room must be revised, and new safety tools are needed.
- It seems that popular discourses centred on teenage boys' deliberate exposure to sexual content makes it harder for parents and others to recognise the distress that inadvertent exposure may cause girls, younger children and those facing psychological difficulties in their lives.

12. Sensitive responses to bullying are required with equal attention to online and offline occurrence.

- In countries where there is more bullying overall, there tends to be more bullying online. This suggests that as internet use increases, so will bullying online. Thus anti-bullying initiatives should accompany efforts to promote internet use.
- Online and offline bullying should be seen as connected, part of a vicious cycle in which perpetrators reach their victims through diverse means and victims find it hard to escape.
- Yet, those who bully may also be vulnerable, and they are often victims themselves, so sensitive treatment is required.
- Although children have a range of coping responses, this risk does upset them, and more support is needed – fewer than half tell a parent or other adult, and fewer than half know to block the person or delete their messages, so further awareness-raising is vital.

13. Parents need to be more aware of the practice of offline meetings with contacts first made online.

- It is important to distinguish making new contacts online – a common occurrence – from going to meet new online contacts offline. It is equally important to recognise that for the most part, meeting online contacts offline is harmless, probably even fun.
- But for a minority of children, meeting online contacts offline is harmful, and these children tend already to be the more vulnerable.
- Since their parents are often unaware of what has happened, awareness raising efforts should be increased so that parents of younger and/or more vulnerable children recognise the risk, but without this undermining the chance for most children to have fun making new friends.

14. Policy makers need to be alert to new risks that affect children and young people, especially arising from peer-to-peer contact.

- As well as conducting surveys, qualitative work based on listening to children is vital to learn what new risks they are experiencing.
- Addressing risks associated with peer-to-peer conduct (user-generated content and personal data misuse) poses a critical challenge to policy makers.
- While younger children have fewer resources to cope with online risk, they are also more willing to turn to parents for help; meanwhile, teenagers face particular risks that worry them and that they may struggle with alone, so they need particular coping strategies and support.

15. Awareness-raising should highlight effective coping strategies in safety messages, emphasizing social supports such as talking to parents, friends and teachers, as well as the use of online tools.

- Policy makers have long advised children to tell someone if they've been upset online, and it seems such messages have been heard.
- Children try some proactive strategies more than others and few are fatalistic: this suggests a desire to cope as best they can and a readiness to adopt new technical tools if these are accessible.
- When asked which strategies really helped the problem, children told us that reporting the problem to an ISP was effective with sexual images but less so

for sexual or bullying messages: this suggests that better solutions are needed for peer-to-peer risks.

- Mostly, children said the approach they chose helped in up to two thirds of cases, but this leaves room for provision of better support and/or tools.
- Generally, it seems that efforts to promote children's digital citizenship – in terms of online safety and good practice – are bearing some fruit, and should be extended. There may be many reasons why solutions children try, when upset, do not help the situation, but one possibility is that the technical tools are flawed or difficult to use, and another is that adults – professional or personal – are unprepared or unable to help children.
- The 'knowledge gap' phenomenon - in which the information-rich learn from available advice and guidance more rapidly than the information-poor - means that efforts to promote digital citizenship will disproportionately benefit the already-advantaged. Targeting less privileged or more vulnerable children is a priority.
- Overwhelmingly, children tell a friend, followed by a parent, when something online upsets them. Rarely do they tell a teacher or any other adult in a position of responsibility. Their apparent lack of trust in those who may have more expert solutions is a concern.

16. Practical mediation skills for parents should be a part of the overall effort to build awareness among parents of risks and safety online.

- Parents appear to have got the message that it is valuable for them to engage with their child's internet use, and they employ a wide range of strategies, depending partly on the age of the child. But there are some parents who do not do very much, even for young children, and there are some children who wish their parents to take more interest. Targeting these parents with awareness raising messages and resources is thus a priority.
- Cynicism that what parents do is not valued, or that children will evade parental guidance, is ungrounded: the evidence reveals a more positive picture in which children welcome parental interest and mediating activities while parents express confidence in their children's abilities. It is important to maintain this situation as the internet becomes more complex and more embedded in everyday life.
- Parental restrictions carry a significant cost in terms of children's online opportunities and skills, but they may be appropriate if children are vulnerable to harm.

Parental efforts to empower children online seem to enhance their opportunities and skills, though there is little evidence that they reduce risk or harm. There are no easy answers, therefore, so parents should be supported in judging what best suits their child.

17. Filtering technologies and parental control software need to be far more usable and transparent and take into account the needs of parents in order to improve uptake.

- Across the 25 countries surveyed by EU Kids Online, less than one third (28%) of parents were found to filter the websites visited by their child. It is clear that many parents find them such software either too complicated or ill-suited to their needs.
- To be effective, parental controls need to incorporate all of the issues that concern parents about their children's internet use. Thus, in addition to filtering out adult or unsuitable online content for children, controls may also need to include features such as the amount of time spent online, filtering of user-generated content and blocking of commercial content.
- While there continues to be debate about the appropriateness of parental controls in all situations, they continue to be a valuable resource particularly for those who may lack skills or knowledge in advising on and guiding their children's internet use.
- Parental controls are also available as an integral element of some internet services and do not need to be separately installed. An industry-wide agreement on the design and features of safety and parental controls built into web-based services could provide parents with better opportunities to consider adopting them. Training in the use of tools should also be made readily available to deal with lack of confidence and knowledge on the part of parents

18. Levels of teacher mediation are high but could be higher, as a large minority of children are not reached by teacher guidance. Since schools have the resources to reach all children, they should take the biggest share of the task of reaching the 'hard to reach'.

- The youngest children (9-10 years) report the least mediation from teachers: as this age group now uses the internet widely, primary schools should increase critical and safety guidance for pupils.

- The benefits of supporting peer mediation are easily neglected but could be constructively harnessed, especially as children are most likely to tell a friend if something bothers them online. Peer mentoring schemes have a valuable role to play.
- When something has bothered them on the internet, 36% of children said a parent helped them, 28% a friend and 24% a teacher. Probably, the ideal is for children to have a range of people to turn to, depending on the circumstances. As noted already in relation to coping, a minority of children has no-one to tell when something upsets them.

19. Industry needs to be much more proactive in promoting internet safety awareness and education. In order to increase trust, the management of safety, identity and privacy settings of internet services used by children needs to be transparent and independently evaluated.

- The overwhelming majority of parents would like to receive information and advice about internet safety. Most, however, get it from firstly from family and friends (48%) rather than from the providers of internet services. Traditional media (32%) and the child's school (27%) are the next most common sources of information about internet safety. Internet service providers (22%) and websites (21%) are much less evident as sources of advice.
- There is considerable scope, therefore, for industry to improve its own awareness raising and provision of safety advice. Internet safety advice should be provided in an accessible and user-friendly way at the point of access on web services used by young people. Internet service providers (ISPs) should also play a more prominent role in providing online safety resources especially for parents as the primary account holders.
- Traditional media sources – press, radio and television – also have a major role to play in promoting online safety awareness as supporting greater media literacy among the adult population. They are best positioned to reach all adults and, crucially, are influential in forming parents' attitudes towards opportunities and risks on the internet.
- Evidence repeatedly shows that children still struggle with user tools, safety devices, privacy settings and policies, reporting mechanisms, etc. even though the industry claims they have been improved and made easier. Independent evaluation of progress by the industry is crucial, both to measure whether

improvements have been made (against benchmarks) but more importantly, whether those improvements work - i.e. are they actually sufficient for children to manage their safety, privacy, identity and risk online?

20. Cross-national recommendations

- Children in wealthier countries (measured by GDP) encounter more online risk but, arguably, these countries are also well placed to provide more accessible and user-friendly safety resources for children and parents. Also, countries with more press freedom, such as Nordic and Baltic countries, are more likely to have children who encounter online risk
- This may be because of lower internet regulation and strategies that ensure safety without introducing censorship are thus needed.
- At the country level, there is no systematic relation between level of parental filtering in a country and children's risk experiences, although there is a small relationship at the individual level – children whose parents use a filter are less likely to have encountered sexual content, suggesting filters can play a useful role.
- Degree of broadband penetration, and length of time in which most people have had internet access, are associated with greater online risks, but not greater online activities among children – this suggests that, while children are motivated to use the internet everywhere in Europe, higher quality access is bringing more risks than are adequately dealt with by policymakers (whether industry, state or education).
- In countries with 15+ years of schooling on average, children are more likely to have better digital skills, as are children from countries where more schools use computers in the classroom. Education clearly has a positive role to play in supporting digital skills, literacies and citizenship, and should be supported across all countries.

Recommendations for policy stakeholder groups

Government

- For children who lack convenient broadband access, governments should ensure that digital exclusion does not compound social exclusion.
- It is important that while all should benefit from public information resources, special efforts need to be made to ensure these reach the disadvantaged or information-poor.
- Especially in countries where children do not 'progress' far up the ladder of opportunities, initiatives to support effective access, broad-ranging use and digital literacy are vital.
- If industry self-regulation is to meet the needs of children and families, it requires a firm steer from government to ensure that it is inclusive, effective and accountable.
- If schools, youth and child welfare services are to raise awareness, provide information and guidance and effectively support children and parents, they require strong encouragement, resources and recognition, especially in some countries.
- In many countries, there is already evidence that stakeholder efforts are bearing fruit; the imperative now is to maintain and extend such efforts to address future challenges.

Industry

- To reduce user confusion and impractical skill burdens, privacy settings, parental controls, safety tools and reporting mechanisms should be age-appropriate for children and far more usable (whether for children or parents) than at present and/or enabled by default.
- To increase user trust, the management of safety, identity and privacy underpinning services used by children should be transparent, accountable and independently evaluated; while 'safety (or privacy) by design' may obviate the need for user-friendly tools, it makes the need for transparency and redress even more pressing.
- As children gain internet access (and, it seems, increased access to sexual/inappropriate content) via more diverse and personal platforms, ensuring consistent and easy-to-use safety mechanisms on all devices is vital.

- Especially in 'new use, new risk' countries, children are exposed to pornography or other inappropriate content and contact by accident (e.g. popups, inadequate online search processes or weak safety measures) – these need strengthening.

Parents

- As internet use is increasingly private and/or mobile, putting the computer in a public room is no longer the sole solution; rather, parents should get online themselves, talk to their child about the internet and even share an online activity with them.
- Those who encounter risk are not necessarily those who experience more harm, so parents should be encouraged to worry less about the former than the latter, where possible guiding their children so that harms are avoided or managed.
- Without undermining parents' trust in their children, parents should be more aware of and more empowered to respond constructively to children's (including teens') rare but sometimes upsetting experiences of harm.
- Parents should be encouraged to make more use of the array of parental controls, though this will require greater availability of easy-to-use, carefully tailored, affordable tools.

Educators

- Since schools are uniquely positioned to reach all children, in a calm learning environment, with up to date technology and resources, they should take a major responsibility for supporting children and their parents in gaining digital literacy and safety skills.
- Such efforts should become established as a core dimension of the curriculum, and initiatives developed at secondary school level should now be extended to primary and even nursery schools.
- Encouraging children to a wider diversity of online activities while teaching critical literacy and safety skills enhances online benefits, digital citizenship and resilience to harm, and so should be encouraged; particular efforts are needed for less privileged and younger children.
- Since children tell a friend followed by a parent but rarely a teacher or other responsible adult when something online upsets them, teachers' relations with children should enable more trust, and they could also harness the potential of peer mentoring.

Awareness-raising

- It is vital to keep listening to children to recognise the changing array of risks they face, to address children's own worries and to support children's ability to cope, whether this involves avoiding, resolving or reporting problems.
- Messages should be matched to different groups – teens may worry about pro-anorexia content, young children can be upset by pornography, those who bully may also be bullied. Reaching the 'hard to reach', while difficult, is a priority given that vulnerable children are particularly susceptible to online harm.
- There is little warrant for exaggerated or panicky fears about children's safety online – what's important is to empower all children while addressing the needs of the minority at significant risk of harm

Civil society

- Much more great (diverse, stimulating, high quality) online content of all kinds is needed, especially for young children and in small language communities; while children's books, films and television programmes are publicly celebrated and supported, far less attention is given to online provision for children who are, too often, left to find content for themselves.
- Promoting children's online opportunities, including their right to communicate and their need to take some risks is important to counter simplistic calls for restricting children's internet use. The ambition must be, instead, to maximise benefits (as defined by children as well as adults) while reducing harm (which is not necessarily the same as reducing risk).
- A critical lens should be sustained when examining public anxieties, media reporting, industry accountability or new technological developments to ensure that these do not undermine children's interests. Further, critical analysis of regulatory and technological developments should not assume that all users are adults, that parents can and will always meet the 'special needs' of children, or that children's interests are somehow antithetical to the public interest.

Child welfare

- Now that the internet has entered into the array of long-established sources of risk in childhood (including other media, risks in the home or community), online risk should be included in risk assessment processes, recognising that increasingly online and offline are intertwined in a potentially vicious circle.
- Children who are vulnerable offline are especially vulnerable online, as *EU Kids Online* evidence shows; for some children, psychological difficulties or social problems may result in the migration of risk from offline to online settings; this should be recognised by child welfare professionals, youth workers, law enforcement, clinicians etc., and these may require specialist training.
- However, offline vulnerabilities do not fully explain online experiences of harm, and thus child welfare professions should be alert to new risks of harm online that cannot be predicted from what is already known of particular children offline.

Children

- Children generally grasp the ethical codes of courtesy, consideration and care that guide social interaction offline, but they have more to learn – or to be taught – about the importance of such codes online; becoming empowered and responsible digital citizens will be increasingly important as the internet becomes ever more embedded into daily life.
- Children can be creative, experimental and imaginative online in ways that adults (parents, teachers, others) insufficiently value – wider recognition for children's experiences would support more sophistication in use and build self-efficacy more generally.
- Contrary to popular belief, children do not wish to be always online, but often lack sufficient alternative options – for play, travel, interaction or exploration – in their leisure hours; these too, should be enabled and resourced.

1. INTRODUCTION

This report presents the final recommendations of EU Kids Online and includes recommendations on policy, methodological lessons learned and recommendations for further research. by the EU Kids Online network over the period 2009-11,¹ recommendations were drafted and circulated to members of the network (see Annex 1) and International Advisory Panel (Annex 2) for comment and feedback. Recommendations were also discussed in national stakeholder meetings and comment invited on the most important areas for policy action.

1.1. The policy agenda

In recent years, the policy agenda concerned with both online opportunities (focused on access to education, communication, information and participation) and with the risks of harm posed to children by internet use has gained momentum in many countries. Stakeholders – governments, schools, industry, child welfare organisations and families – seek to maximise online opportunities while minimising the risk of harm associated with internet use.

In relation to risks, the main focus of this research, the agenda remains highly contested. This is partly because the evidence-base that informs it is patchy, in some countries more than others. It is also because the benefits of particular policy actions, whether focused on state intervention, industry self-regulation, educational initiatives or parent (and child) safety awareness, are as yet unproven. Last, it is contested because children's safety give rise to considerable public anxiety, even moral panic over childhood freedom and innocence, all compounded by an uncertainty, perhaps fear, of the power of new and complex technologies.

The *EU Kids Online* project investigates children's online experiences, informed by research considerations (theoretical and methodological) and by the policy agenda

of the EC Safer Internet Programme. One challenge of an evidence-based policy designed to reduce harm is to understand how children's online activities intersect with their wider online and offline environment so as to understand which factors increase or decrease the risk of harm.

EU Kids Online has classified the risks of harm to children from their online activities as follows. The classification distinguishes content risks (in which the child is positioned as recipient), contact risks (in which the child in some way participates, if unwillingly) and conduct risks (where the child is an actor) (see Table 1).²

Table 1: Risks relating to children's internet use (exemplars only)

	Content Receiving mass-produced content	Contact Participating in (adult-initiated) online activity	Conduct Perpetrator or victim in peer-to-peer exchange
Aggressive	Violent / gory content	Harassment, stalking	Bullying, hostile peer activity
Sexual	Pornographic content	'Grooming', sexual abuse or exploitation	Sexual harassment, 'sexting'
Values	Racist / hateful content	Ideological persuasion	Potentially harmful user-generated content
Commercial	Embedded marketing	Personal data misuse	Gambling, copyright infringement

Each of these has been discussed, to a greater or lesser degree, in policy circles, and some have been the focus of considerable multi-stakeholder initiatives. Nonetheless,

¹ See www.eukids.online.net for a full list of reports and deliverables.

² Hasebrink, U., Livingstone, S., Haddon, L., & Olafsson, K. (2009) *Comparing children's online opportunities and risks across Europe: Cross-national comparisons for EU Kids Online*. LSE, London: EU Kids Online. 2nd ed. At <http://eprints.lse.ac.uk/24368/> Note: not all cells in the table were included in the EU Kids Online survey, just those in bold face.

the nature of the harm at stake is not always clear. In other words, although society tends to be anxious about children's exposure to pornography or racism or the circulation of sexual messages, the nature of the harm that may result and which, presumably, motivates the anxiety, nonetheless often goes ill-defined.

Measuring the incidence, distribution, severity and consequence of any harm to children resulting from these and other risks has proved a significant challenge. Until now, no research has examined online risks in a methodologically rigorous, cross-nationally comparative, ethically sensitive manner, especially by conducting research directly with children. This, then, has been our task, in order to inform an evidence-based, proportionate policy framework in relation to children and the internet.

1.2. The policy context

The policy agenda of the EC Safer Internet Programme (SIP) is the principal reference point for *EU Kids Online* as a policy framework regarding for children's use of the internet. The aims of the Safer Internet Programme are to empower and protect children and young people online by awareness-raising initiatives and by fighting illegal and harmful online content and conduct.³ Measures under the SIP include support for: INSAFE's network of Awareness Centres across the 27 European countries of the European Union, responsible for promoting and developing information/awareness-raising material; the INHOPE network of Hotlines across Europe which receives and processes reports of illegal content found on the Internet; youth panels who are consulted on safer Internet issues and information material; as well as support for a variety of NGOs active in the field of child welfare online, cooperation with law enforcement agencies and with academic researchers and support for enhancing the knowledge base.

Internet safety policy in Europe supports a number of self-regulatory measures towards internet safety and security, balancing opportunities and advantages of widespread internet use with actions to minimise its risks and

downsides. This can pose a number of dilemmas for policy makers and legislators. Insufficient evidence on the scale of the problems faced has to date limited the building of consensus on policy objectives. At a fundamental level, *The Digital Agenda for Europe* provides the roadmap for policy to maximise the social and economic potential of ICT and specifically the internet in order to create a flourishing digital economy by 2020.⁴ The *Digital Agenda* includes measures to promote the building of digital confidence, digital literacy skills and inclusion, and to promote cultural diversity and creative content.

Digital competence, including an understanding of how to be safe online, is also recognised in other aspects of European policy. It is one of eight key competences of a European framework for lifelong learning.⁵ It underpins the policy supporting media literacy for all.⁶ The European Commission has adopted policy guidelines calling on EU countries and industry to promote media literacy across Europe through activities that help people access, understand and critically evaluate all media they are exposed to, including TV and film, radio, music, print media, the internet and digital communication technologies. Its key features include using social networking sites safely, greater awareness of the risks associated with the spread of personal data, and the ability to protect one's privacy.

The increased hazards of the internet age have also received high level policy and political attention. For over ten years, the European Commission's Safer Internet Programme has led efforts to promote safer use of the internet and ICT, to educate users and to fight against illegal content and harmful conduct online.⁷ The current programme (2009-13) encompasses newer web 2.0

³ See: http://ec.europa.eu/information_society/activities/sip/index_en.htm

⁴ *A Digital Agenda for Europe* (2010). Brussels: European Commission. At: http://ec.europa.eu/information_society/digital-agenda/index_en.htm

⁵ *Key Competencies for Lifelong Learning*. At: http://europa.eu/legislation_summaries/education_training_youth/lifelong_learning/c11090_en.htm

⁶ *Media Literacy*. At: http://ec.europa.eu/culture/media/literacy/index_en.htm

⁷ *Safer Internet Programme 2009-13*. At: http://ec.europa.eu/information_society/activities/sip/policy/programme/current_prog/index_en.htm

internet services, such as social networking, and illegal content and harmful conduct such as grooming and bullying. Its objectives remain to increase public awareness, to increase support for reporting mechanisms, to establish and support information contact points, while continuing to foster self-regulatory initiatives in the field. As affirmed in the Prague Declaration (2009), the EU has committed to more direct co-ordinated inter-governmental action to combat illegal content and to minimise risks to internet users.⁸ As a result, the European Commission has made proposals for adoption of a new directive on combating sexual abuse, sexual exploitation of children and child pornography (European Commission 2010).⁹

The range of risks assessed in the EU Kids Online survey has featured in policy circles, to a greater or lesser degree, and a number of them have been the focus of considerable multi-stakeholder initiatives. The first phase of the EU Kids Online project (2006-2009) identified some major gaps in evidence and research. The findings in this report now allow some degree of evaluation of the effectiveness of initiatives to date and seek to inform an evidence-based, proportionate policy framework in relation to keeping children safe on the internet.

1.3. Cross country comparisons

The 25 countries participating in the *EU Kids Online* project comprise a range of European countries varying in geography and politics from each part of the European continent, primarily members of the European Union but also including an EEA country, Norway, and Turkey as exceptions. Countries vary in size, with both large and small population sizes included. Countries have different levels of internet and experience different levels of exposure to risk. In this project, for ease of analysis countries have been grouped into four categories or 'ideal types' comprising

- Lower use, lower risk countries

⁸ Council of Ministers of the European Union (2009) Prague declaration A new European approach for safer Internet for children. Brussels, European Union.

⁹ European Commission (2010) Proposal for a DIRECTIVE OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on combating the sexual abuse, sexual exploitation of children and child pornography, repealing Framework Decision 2004/68/JHA. Brussels.

- Lower use, some risk countries
- Higher use, some risk countries
- Higher use, higher risk (as well as new use, new risk) countries

In this classification, higher levels of use are always associated with higher levels of risk and something of a consistent rule would appear to be: 'the more use, the more risk'. This is important for policy makers for in comparing countries across Europe, trends towards greater embeddedness of the internet in daily life can be identified and signal the need for greater attention to digital literacy, coping strategies and better mediation.

The availability of digital literacy education across Europe is quite varied. According to the Education, Audiovisual and Culture Executive Agency (EACEA), internet safety education is present in the school curriculum in 24 countries/regions.¹⁰ However, the means of its implementation varies considerably. In eleven of 30 countries surveyed, internet safety was not part of the school curriculum. In some countries, schools had local autonomy over whether to include it as part of their overall provision. Internet literacy is also a very recent development for most systems and, in 80% of countries, internet safety was first introduced as recently as 2007. Teachers responsible for teaching internet safety do not always have specific training and in many cases it is general subjects teachers who are given the task. There is also substantial variation both as to the content and the curriculum framework within which it is implemented.

1.4. Multi-stakeholder involvement

There is a growing consensus that a multi-stakeholder approach towards internet safety is the only viable policy approach. Governments, industry, civil society groups, education, parents and children themselves all share some responsibility for keeping safe in the online worlds. How this is achieved and managed in each European country inevitably varies.

At a European level, coordination is achieved through Insafe, the European network of national Awareness Centres designed to raise internet safety awareness at a

¹⁰ Eurydice (2009) *Education on Online Safety in Schools in Europe*. Brussels, Education, Audiovisual and Culture Executive Agency.

national level.¹¹ Awareness Centres typically work with a broad range of partners such as schools, libraries, youth groups and industry to promote internet safety. In practice, however, there is a lot of variation.

Countries also vary in terms of government interest in internet safety, the existence of statutory or other regulatory bodies with responsibility for its promotion, as well as the support offered by schools, NGOs and other groups concerned with child protection and children's welfare. Government involvement, for instance, can include specific initiatives directed at internet safety, media education, or the distribution of internet access. Alternatively, it can refer to broader social policy with respect to children, family and youth affairs. Legislative provision varies substantially across Europe and adds to the complexity of dealing on a pan-European level on matters that will include data protection and privacy, copyright, protection of minors and so on.

The involvement of industry in internet safety policy is also of critical importance. With the fast pace of change in internet and mobile technologies, industry is deemed to be in the best position to keep up with the latest technologies and trends of use. Industry-led codes and agreements have been the preferred means to deal with any issues of risk, safety, and child protection that might arise. The *European Framework for Safer Mobile use by Young Teenagers and Children* is an example of a self-regulatory agreement signed by mobile operators in 2007 setting down principles and measures that members commit to implementing at a national level.¹² The Commission monitors its implementation, noting compliance and evaluating its effectiveness through a series of commissioned reports.¹³ Similarly, *Safer Social Networking Principles for the EU* is a voluntary agreement incorporating guidelines for the use of social networking sites by children signed by most of Europe's major social

network providers.¹⁴ The principles provide for awareness-raising in relation to internet safety, developing age-appropriate services, default settings to ensure maximum levels of privacy and protection, easy to use report mechanisms, and procedures to deal with user reports of illegal or harmful content. Again, implementation reports monitor progress in complying with the principles. In 2011, it was found, for instance, that most social networking sites do provide safety tips and tools to control their content and profile settings. However, major gaps were found in default privacy settings, searchability, and reporting procedures.¹⁵

At the ISP level, a similar approach towards industry-wide voluntary self-regulation operates. At a national level, Internet Hotlines report illegal content. Industry associations frame acceptable use policies and negotiate on behalf of the sector with government regulatory agencies and law enforcement. Internationally, the INHOPE Association has acted to support and enhance the performance of Internet Hotlines around the world through exchange of information and expertise, establishing best practice in responses to reports of illegal content and liaising with government, law enforcement and regulatory bodies.¹⁶

1.5. Main themes of policy discussion

In our interim report on policy recommendations (O'Neill and McLaughlin, 2010)¹⁷ five main policy priorities were identified as new areas of focus for the multiple stakeholders involved in policy making. Arising from the preliminary descriptive findings of the EU Kids Online survey, the five key themes were:

- **Parental awareness:** given the lack of awareness that many parents have regarding the online world, awareness-raising should prioritise alerting parents to

¹¹ See: <http://www.saferinternet.org>

¹² *European Framework for safer mobile use by younger teenagers and children*. At: http://ec.europa.eu/information_society/activities/sip/self_reg/phones/index_en.htm

¹³ See GSMA (2010) Third implementation review of the European Framework for Safer Mobile Use by Younger Teenagers and Children. Brussels, GSMA Europe. Available at: http://www.gsmeurope.org/documents/GSMA_Exec_Summary_P011.pdf

¹⁴ *Safer social networking: the choice of self-regulation*. At: http://ec.europa.eu/information_society/activities/social_networking/eu_action/selfreg/index_en.htm

¹⁵ Donoso, V. (2011). Assessment of the Implementation of the Safer Social Networking Principles for the EU on 14 Websites: Summary Report. Luxembourg: European Commission, Safer Internet Programme.

¹⁶ INHOPE. At: <https://www.inhope.org/en/about/about.html>

¹⁷ O'Neill, B., and McLaughlin, S. (2010). *Recommendations on Safety Initiatives*. LSE, London: EU Kids Online.

the nature of the risks children may encounter whilst encouraging greater understanding of young people's online activities.

- **Focus on younger users:** with evidence that children are going online at ever younger ages, a new policy focus must be on awareness-raising and developing supports for much younger internet users.
- **Industry support for internet safety:** as children and young people do not always know how to find and use safety features of online services, industry support for online safety needs to be reinforced.
- **Digital citizenship:** as children and young people increasingly use the internet independently of adult supervision, greater emphasis needs to be placed on empowering children to self-govern and manage their online experience responsibly.
- **Positive content:** less than half of children in Europe were satisfied with the quality of online content. More attention needs to be given to the creation of content for children.

In this report, these themes are developed further and presented as recommendations supported by relevant findings from research conducted by EU Kids Online. Specific recommendations are presented relating to uses and activities of children online (Chapter 2), incidences of risk and experiences of harm (Chapter 3) and recommendations on social mediation (Chapter 4). In Chapter 5, policy recommendations relating to Europe-wide action arising from cross-national comparisons are outlined as are nationally-specific recommendations as identified by each of the national teams in the EU Kids Online project. Finally, Chapter 6, Conclusions summarises and outlines final recommendations targeted to individual sectors and policy actors.

Stakeholder forums, organised by national teams of EU Kids Online were invited to provide feedback on the findings of the research and draft policy recommendations.¹⁸ A summary of comments made and observations concerning the most important policy issues in each country is provided within each section. Draft final recommendations were also circulated to members of the network and to the international advisory panel and modified in the light of this feedback.

¹⁸ Jorge, A., Cardoso, D., Ponte, C., & Haddon, L. (2011). *Stakeholders' Consultation 2. General Report* London, LSE: EU Kids Online.

2. USES AND ACTIVITIES ONLINE

The EU Kids Online survey presents new findings about how, where and when children, aged 9 to 16, use the internet across 25 European countries. 'Using the internet' refers to any and all devices by which children go online, as well as all places in which child access the internet. Findings are based on what children themselves say about their online activities. The full findings are presented in *Risks and Safety on the Internet: The Perspective of European Children* (S. Livingstone, Haddon, Görzig, & Ólafsson, 2011).

With the rapid pace of change in internet technologies and changing patterns of use by ever younger users, evidence is vitally important to guide policy makers on the most important issues of safety that may arise. Three key areas stand out in findings of EU Kids Online:

- changing patterns of use
- online activities of young people
- digital skills

Understanding *how, where* and *for how long* children use the internet is important for policy. Findings assist policy makers in determining the extent to which children may be exposed to risk and the kinds of safeguards that may be required.

Understanding *children's activities* is important in order to get an overview of the opportunities as well as risks that children experience and to better understand the interplay between benefits and harm, recognising that this may vary for different groups of children.

Finally, *digital literacy* and *safety skills* are regarded by policy makers as key to increasing opportunities while managing or reducing online risks. It is important to identify where there are skills gaps, therefore, to enable policy makers and educators to target those most in need.

2.1. Changing patterns of use

Main findings

Going online is now thoroughly embedded in children's lives. Children's use is increasingly individualised, privatised and mobile requiring new responses by policy makers to changing patterns of use. Findings from EU Kids Online provide evidence of frequency of use, age of first internet use, where and how

children access the internet, as well as how much time they spend online. The emerging picture gives policy makers a clear indication of just how central a feature the internet has become in children's lives.

Where children use the internet

The most common location of internet use is at home (87%). For most children, this means accessing the internet from a PC in a public room (62%), but nearly half (49%) go online in a private room where it is difficult for parents to monitor their internet usage.

Older children, boys and children whose parents have higher educational attainment are more likely to have private access from their own bedroom.¹⁹ Parents' internet use also appears to be an important predictor for children's use of the internet in the bedroom.

The increasing privatisation of internet use does not necessarily mean its individualisation. Accessing the internet in a friends' home is the third most common location of use (53%), indicating that going online is very much part of leisure-based interaction with peers.

The location of internet use remains important from a policy point of view as different conventions of use apply in different locations. Safety messaging has traditionally advised that PCs used by children should be located in a public area of the home. New modes of access and the proliferation of portable devices and laptops mean that this advice has to be augmented.

How children access the internet

There is increasing diversity and overlap between the devices used by children in accessing the internet. Most (58%) still access the internet via a shared, home personal computer but a third now have their own PC (35%). Moreover, 24% access the internet via their own laptops and 12% with a handheld or portable device, such as a Blackberry, iPod Touch or iPhone. A quarter of children also access the internet via a games console.

¹⁹ Hasebrink, U., Görzig, A., Haddon, L., Kalmus, V. and Livingstone, S. (2011) *Patterns of risk and safety online. In-depth analyses from the EU Kids Online survey of 9-16 year olds and their parents in 25 countries*. LSE, London: EU Kids Online.

Use is embedded in children's daily lives

60% of children, according to the survey, go online daily or almost every day. In some countries such as Sweden, Bulgaria, Estonia, Denmark, Norway and the Netherlands, this is as high as 80%. Across Europe, 93% of 9-16 year old users go online at least weekly. Such high figures, particularly for daily use, associated with the communication and networking functions of the internet, reinforce the policy significance of children's presence online and the need to ensure that appropriate safeguards are in place.

Children are going online at ever younger ages

The average age of first internet use is dropping across Europe. On average, children were 9 years of age when they first went online. This varies by age however: while 15-16 year olds say they were 11 on first use, younger users now say they were 7 when they started going online. There is variation across Europe: average age of first use is 7 in Denmark and Sweden and 10 in countries such as Greece, Italy, Turkey, Cyprus, Denmark, Austria and Portugal.

Which children are fully online?

Children from households with higher educational levels have access to more locations, platforms, have more private access and more sophisticated mobile access.²⁰ Gender also matters and boys tend to have better access. Private use in the child's bedroom is also strongly differentiated by age – for younger children use is generally in a public room; for teenagers it occurs more often in private and on more diverse platforms. Parents also influence the context in which the internet is used: in households where the internet is, by various measures, more integrated into parents' lives, children can more easily avoid direct parental monitoring by virtue of accessing the internet in private spaces. If parents access the computer from home or from multiple-sites then children are also more likely to have gone online earlier.

Excessive use of the internet

While the question of 'addiction' remains contested, the phenomenon of 'excessive use' of the internet has

received a lot of attention. According to findings of the EU Kids Online survey, 30% of 11-16 year olds report one or more of the experiences indicative of excessive internet use. This rises to 50% in Estonia and over 40% in Portugal, Bulgaria, Ireland and the UK.

30% of 11-16 year olds – especially those with some psychological problems - report one or more experiences linked to excessive internet use 'fairly' or 'very often' (e.g. neglecting friends, schoolwork or sleep to go online).

Stakeholder comments

Stakeholders in various forums organised by national representatives of EU Kids Online noted that **the variety of devices used and the varying levels of usage were interesting and central findings.** Stakeholders in the UK commented that, while the fact that children are accessing the internet through more devices is not so surprising, it does raise issues particularly in relation to the advice to be given to parents. If parents are not in a position to oversee and supervise their children's internet use, how then should advice to parents change? The increasingly complex issues concerning controls or filters on what can be accessed online were also raised. With very diverse ways of accessing the internet now being used by children, where should those controls be located?

The young age of many internet users was thought to be an important and, in some instances, surprising finding. The trend towards younger use, it was agreed, has major implications for education. Most internet safety to date have been targeted towards teenagers. Developing internet safety for younger years will require new investment.

Awareness-raising as a whole is very reliant on teachers taking on board internet safety within the classroom. Teachers have a degree of autonomy over what to include in the curriculum and need to be incentivised in promoting greater levels of internet safety education.

Another area of comment among stakeholders in some countries (Ireland, Portugal) was the relationship between actual levels of use and claims of excessive use. In these countries, despite the fact that use was below the European average, the fact that relatively high numbers expressed some experience of excessive internet warranted further investigation.

One further observation made concerning younger users was that the age range researched by EU Kids Online is

²⁰ Helsper, E. and Lenhart, A. (2011). 'Which children are fully online', in S., Haddon, L., and Goerzig, A. (eds.) *Children, risk and safety online: Research and policy challenges in comparative perspective*. Bristol: The Policy Press.

itself rather arbitrary and that future research may need to study the experiences of even younger users.

Policy recommendations

1. Encourage children to be responsible for their own online safety as much as possible

The widely promoted internet safety message of locating the PC used by children in a public space within the home remains important as 87% of children still access the internet in this way. But this is being overtaken by alternative means of internet access that are less open to adult supervision.

As 49% of children go online in their own bedroom, it is unrealistic to expect parents to watch over their child's shoulder to keep them safe. Instead, conversation and/or shared activities between child and parent must take priority. This will be aided if the remaining parents who do not use the internet are encouraged to go online.

It is important to focus awareness-raising on developing self-protection and self-responsibility among children. The objective for internet safety should be to promote and encourage self-governing behaviour. Therefore, the focus of internet safety messaging should be on empowerment rather than restriction of children's usage, emphasising responsible behaviour and digital citizenship.

2. Ensure digital exclusion does not compound social exclusion

Going online is now thoroughly embedded in children's daily lives: children now spend on average 88 minutes per day online. 15-16 year olds spend 118 minutes online per day, twice as long as 9-10 year olds (58 minutes).

For children who still lack access, efforts are vital to ensure digital exclusion does not compound social exclusion. For children with access, efforts are required to ensure their quality and breadth of use is sufficient and fair.

3. Focus internet safety on younger users

The traditional focus of internet safety training has been centred around the secondary school and on teenagers.

However, the average age of first internet use is 7 in Denmark and Sweden, rising to eight in other Northern European countries and nine for Europe overall. There needs to be a new policy focus on much younger children and a greater concentration of effort at primary school level and on younger age groups for whom the internet is an everyday experience.

Children, as enshrined in international conventions and enforced by law, have the right to be safe, have the right to privacy and the right to protection from all forms of abuse, neglect and exploitation. It is important, however, to balance protection and opportunities. Children also have the right to participation and to have a say in matters affecting their own lives. Therefore, in addressing the needs of younger users, it is important not just to make the online world safe by stopping their use of internet services, but to ensure their participation in safe ways.

4. Adapt safety messages to new modes of access

Children no longer solely rely on the home PC for internet access. 33% go online via a mobile phone or handheld device. Laptops, mobile phones, game consoles and other mobile devices allow children to go online anywhere, anytime, away from parental supervision. Emerging services (such as location-based ones) may lead to new risks. There is a responsibility therefore on industry providers to provide maximum protection for younger users across all platforms whilst ensuring that the added opportunities of greater internet access are not constrained. Self-regulatory initiatives governing online services such as the European Framework for *Safer Mobile Use by Young Teenagers and Children*,²¹ the *Safer Social Networking Principles for the EU*,²² and the proposed new industry agreement on *Principles for the safer use of connected devices and on-line services by children*²³ are essential instruments in setting high level

²¹ *European Framework for safer mobile use by younger teenagers and children*. At:

http://ec.europa.eu/information_society/activities/sip/self_reg/phones/index_en.htm

²² *Safer social networking: the choice of self-regulation*. At:

http://ec.europa.eu/information_society/activities/social_networking/eu_action/selfreg/index_en.htm

²³ *Principles for the safer use of connected devices and on-line services by children*. At:

principles and codes of practice. To be effective, they need to be informed by all stakeholders in internet safety and be independently verified.

2.2. Activities online

Children were also asked in the EU Kids Online survey what they do when they go online. This is important because it gives an insight into the kinds of activities that children undertake and enjoy, balancing the benefits of internet use against the risks studied in the research. Research shows that the more children use the internet, the more they gain digital literacy, the more opportunities they take up and the more risks they encounter.²⁴ It is not always easy however to distinguish between those activities which are beneficial and those which may lead to harm. Opportunities and risks are integrally linked and, accordingly, a comprehensive map of the activities undertaken by children is needed to better understand the relationship between them. For policy makers, knowing more about what children do online provides guidance on the development of appropriate safeguards and assists in the development of a more balanced approach to online safety.

Range of online activities

Children's online activities fall into a series of categories ranging from content-based activities, contact/communication-based activities to conduct or peer participation activities. **This reflects a ladder of opportunities or series of steps children progress from the most basic activities to more complex and demanding ones.**

- The most popular internet activities are using the internet for **schoolwork and playing games alone** against the computer. 14% don't get further than this, including nearly a third of 9-10 year olds and a sixth of 11-12 year olds. In Turkey, these content-based activities account for the activities of a quarter of children.

- Next in popularity is **watching video clips** online (e.g. YouTube). These are all ways of using the internet as a mass medium – for information and entertainment. Half of 9-10 year olds only get this far, along with a third of 11-12 year olds. Also, a third of children in Austria, Greece, Ireland and Turkey do just these activities.
- Most children use the internet interactively for **communication (social networking, instant messaging, email) and reading/watching the news**. This captures the activities of two thirds of 9-10 year olds but just a quarter of 15-16 year olds. Half of children in Austria, Germany, Greece, Ireland, Italy, Poland and Turkey only reach this step.
- More sophisticated, contact-based activities include **playing with others online, downloading films and music and sharing content peer-to-peer** (e.g. via webcam or message boards). Across Europe, over half of 9-16 year old internet users reach this point, although only one third of 9-10 year olds and less than half of 11-12 year olds do. Children in Sweden, Lithuania, Cyprus, Belgium and Norway are most likely to reach this step.
- Finally, the most **advanced and creative** step is only reached by a quarter of children. It includes visiting chatrooms, file-sharing, blogging and spending time in a virtual world. Less than one fifth of 9-12 year olds and only a third even of 15-16 year olds do several of these activities. Across all ages, around a third of children reach this step in Sweden, Cyprus, Hungary and Slovenia.

Of the 17 activities surveyed, children undertake about half of these (7.2). There are gender differences, where both older and younger boys undertake a higher variety of activities than girls of the same age.²⁵

Quality of online content

Overall, 44% of 9-16 year olds said they were satisfied with the online provision available to them but just 34% of younger children said there were lots of good things for children of their age to do online. Teenagers were much more satisfied with 55% saying there were good things online for their age group. There were some surprising country differences regarding the quality of online provision. 55% of children in the UK were very satisfied presumably because they can access all

http://ec.europa.eu/information_society/events/cf/daa11/item-display.cfm?id=5997

²⁴ Livingstone, S., & Helsper, E. (2010). Balancing opportunities and risks in teenagers' use of the internet: the role of online skills and internet self-efficacy. *New Media & Society*, 12(2), 309-329.

²⁵ Hasebrink, U., Görzig, A., Haddon, L., Kalmus, V. and Livingstone, S. (2011) *Patterns of risk and safety online. In-depth analyses from the EU Kids Online survey of 9-16 year olds and their parents in 25 countries*. LSE, London: EU Kids Online, p.27.

English-language content. However, in some countries with small language communities (Lithuania, Greece, Bulgaria and Hungary), over half of children said they were very satisfied.

Stakeholder comments

Online activities were a topic of discussion in nearly all stakeholder meetings. The need to balance opportunities and risks was widely recognised with many arguing for greater emphasis to be given to online opportunities.

There were some mixed comments in relation to positive online content. The Flemish public broadcaster was in favour of more support for online content creators. It also encouraged the introduction of labels for positive (child-approved) content and for dangerous/harmful content. The Interactive Software Federation of Europe was more critical about the production of positive content and regarded the definition of 'positive content' as a little unclear. They also had doubts as to whether the production of positive online content could be sufficiently profitable for commercial organisations.

Policy recommendations

5. Educational and digital literacy initiatives should be prioritised for those children and countries that do not 'progress' very far up the ladder of opportunities.

Not only do younger children and girls not progress as far up the 'ladder of opportunities' as teenagers and boys, many never reach the final set of activities at all.²⁶ Only half of 9-10 year olds progress further than the most basic content-related activities. Accordingly, promoting more creative and skilled applications is essential to ensure all children avail of online opportunities. This is particularly the case in those countries that do not progress beyond the most basic internet activities.

6. Educational and digital literacy initiatives should be prioritised for those children and countries that do not 'progress' very far up the ladder of opportunities.

²⁶ Lobe, B., Livingstone, S., Ólafsson, K. and Vodeb, H. (2011) *Cross-national comparison of risks and safety on the internet: Initial analysis from the EU Kids Online survey of European children*, London: EU Kids Online, LSE.

Schools play a pivotal role in digital skills development, enabling children to progress along a 'ladder of opportunities', mitigating elements of a digital divide. However, teachers are often inadequately resourced and trained to carry out the functions entrusted. Country differences in online skills point to the need for targeted educational interventions where there is evidence of a digital divide.

Since opportunities and risks online go hand in hand, efforts to increase opportunities may also increase risks, while efforts to reduce risks may restrict children's opportunities. A careful balancing act, which recognises children's online experiences 'in the round', is vital.

6. Make positive content a policy priority

Provision for younger children online should be a priority, especially in small language communities. The "European Award for Best Children's Online Content"²⁷ is a valuable step in this direction, but such provision could also be supported by high profile national initiatives.

2.3. Digital literacy and safety skills²⁸

Digital literacy and digital skills are central to internet safety policy. Increased take up and use of the internet leads to greater levels of skills and internet safety, enabling users to better protect themselves against risks and potentially harmful situations online.²⁹ In the EU Kids Online survey, digital literacy was based on self-reporting of online activities, self-efficacy and knowledge of specified digital skills.

²⁷

http://ec.europa.eu/information_society/activities/sip/events/competition/index_en.htm

²⁸ See: De Haan, J., Duimel, M. and Kuiper, E. (forthcoming) 'Digital skills in the context of media literacies', in S. Livingstone, L. Haddon and A. Goerzig (eds) *Children and youth online: Risks and opportunities in comparative perspective*, Bristol: The Policy Press.

²⁹ Livingstone, S., & Helsper, E. (2010). Balancing opportunities and risks in teenagers' use of the internet: the role of online skills and internet self-efficacy. *New Media & Society*, 12(2), 309-329.

Significant gaps in digital literacy and safety skills among children in Europe are revealed in EU Kids Online research.

- One third of children say that they know more about the internet than their parents but a further third say they do not.
- Teenagers are the most confident but most 9-10 year olds (63%) are less confident than their parents in their internet use. Boys are also more confident than girls.
- On average, children say that have four of eight skills asked about in the survey. Roughly half can change privacy settings on a social networking profile, compare websites to assess if the information is true, delete their history, or block junk mail.
- The older the children are, the broader the range of activities and the higher number of self-reported skills. Boys report a slightly bigger range of activities than girls. And children whose parents are higher educated undertake a broader range of activities.

Stakeholder comments

Stakeholders agreed that digital literacy skills, particularly those related to online safety, are of huge importance and needs to be made a policy priority, both at national and at European level. In some instances, the skills asked about in the survey were thought to be too basic and not fully representative of the level of digital literacy required. A particular cause for concern was that even such basic skills appeared to be so uneven.

Stakeholders in the Netherlands expressed surprise that in a country as computer literate as the Netherlands where high quality access to the internet has been embedded for over a decade, skills appeared to be so average. In Romania, the low level of digital skills and the more traditional mode of access from a shared PC in the home were identified as a further digital divide in Europe. Stakeholders in the UK recommended further research on younger children's use of SNS, focusing on whether those with digital skills actually practice them on social networking sites.

Topics for further research, analysis and discussion recommended by stakeholders were: the age at which certain digital skills should be introduced (Belgium); the importance of integration of safety education within ICT skills training and the national curriculum (Estonia, Hungary); more precise specification of the kinds of digital skills children should have (Finland).

Policy recommendations

7. Promote digital safety skills to build resilience online

Inequalities in digital skills persist – in terms of SES, age and, to a lesser degree, gender, so efforts to overcome these are needed.

Digital skills for all ages remain important but younger age groups, given the growing numbers of much younger children going online, are a particular priority for parents and teachers. Secondary level schools to date have been the main providers of ICT skills training but as highlighted in the current findings new interventions are required at the primary level.

Encouraging children to do more online will also improve their digital skills as well as their overall confidence and/or increasing children's beliefs in their abilities to use the internet.³⁰ Similarly, reaching safety skills is likely to improve other skills, while teaching instrumental and informational skills will also improve safety skills.

Given uneven digital skills, particularly safety skills, across Europe and the discussion among stakeholders about the need to identify more precisely the kinds of skills required, an inventory and agreed framework for digital safety training would provide a valuable resource for educators, awareness-raising and civil society groups. Schools are uniquely placed to reach the maximum number of children. They are regarded by parents as the most trusted source of information and, as the second most common location for going online, also provide children with a very important point of access.

2.4. Social networking

Use of social networking

While not the most popular online activity, social networking is arguably the fastest growing online activity among young people. 62% of European 9- to 16- year-olds visited social networking sites (SNS) in the last month. Certainly, social networking sites have attracted widespread attention among children and young people,

³⁰ Hasebrink, U., Görzig, A., Haddon, L., Kalmus, V. and Livingstone, S. (2011) *Patterns of risk and safety online. In-depth analyses from the EU Kids Online survey of 9-16 year olds and their parents in 25 countries*. LSE, London: EU Kids Online, p.30.

policy makers and the wider public. By integrating chat, messaging, contacts, photo albums and blogging functions, social networking sites integrate online opportunities and risks more seamlessly than any other online service.

According to EU Kids Online, **59% of 9-16 year olds have a social networking profile. This includes 26% of 9-10 year olds, 49% of 11-12 year olds, 73% of those aged 13-14 and 82% of 15-16 year olds.**

There is considerable variation across Europe: SNS is most popular in the Netherlands (80%), Lithuania (76%) and Denmark (75%) and least in Romania (46%), Turkey (49%) and Germany (51%). Despite popular media stories that children have hundreds of contacts, in fact half (51%) have fewer than 50 contacts, and 20% have fewer than 10.

Among social networking site users, **43% keep their profile private** so that only their friends can see it. A further **28% report that their profile is partially private** so that friends of friends and networks can see it. Notably, **26% report that their profile is public so that anyone can see it.**

Age verification and privacy settings

The fact that 38% of 9-12 year olds have a social networking profile, including a high proportion of 'underage' users active on sites designated as suitable for over 13s, is of particular importance for policy makers. In most countries (15 of 25), younger children are more likely than older children to have their profiles public. Moreover, children whose profiles are public are more likely than those with private profiles to display personal information. Remembering that 38% of 9-12 year olds and 77% of 13-16 year olds have their own profile, there is.

Facebook is the most popular SNS in Europe, used by one third of all 9-16 year old internet users (and by 57% of social networking youngsters). Age restrictions then are only partially effective. One in five 9-12 year olds have a Facebook profile, rising to over 4 in 10 in some countries.

Companies signing up to the Safer Social Networking Principles for the EU undertake to make the profiles of under-18s private by default yet in the most recent evaluation of the principles' implementation, only two companies (Bebo and MySpace) had complied.³¹ The

³¹ Donoso, V. (2011). Assessment of the Implementation of the Safer Social Networking Principles for the EU on 14 Websites: Summary Report. Luxembourg: European Commission, Safer Internet Programme.

European Commission has confirmed its intention to seek a firm commitment from companies to remedy this, noting that it is not just a matter of protecting minors from unwanted contacts but also a matter of protecting children's online reputation.³²

How to respond to the question of age restrictions remains a thorny problem: if companies removed age restrictions, they would be better able to identify younger users and target appropriate protective measures. This could include upgrading control features, user tools and safety information. Of particular importance is the need to ensure age-specific privacy settings are activated by default and easy-to use reporting mechanisms are provided.

Stakeholder comments

Findings on social networking attracted comments from stakeholders in many countries. In some cases (Cyprus, Finland), the high numbers of young children with social networking profiles was found to be surprising. The fact that the numbers were lower than anticipated in other locations (e.g. Romania) was also noted. There was much debate about the fact that, in many instances, participating in SNS involves children lying about their age to gain access to over-13 sites.

The proliferation of SNS use, according to UK stakeholders, raises a number of major dilemmas: on the one hand, SNS can be seen as a positive opportunity to engage young people. However, safety protocols for all aspects of social networking, according to stakeholders, are not fully thought through. How are teachers, sports coaches, etc., to deal with friend requests for example? The widening use of SNS in such contexts prompts the need for better guidelines and codes of practice.

Privacy issues were also highlighted as another area for further analysis. The lack of basic digital literacy skills, particularly in relation to privacy settings, was highlighted by stakeholders in many countries (e.g. Belgium, Portugal, Romania and the United Kingdom). In Portugal, it was pointed out that parents also need training in online privacy, since they are the ones who often violate their

³² European Commission. (2011). Press release. Digital Agenda: only two social networking sites protect privacy of minors' profiles by default. Brussels: European Commission.

children's privacy by posting photos of their children online. In Romania, where there is a particularly high proportion of young people with SNS profiles set to public (44%), stakeholders queried whether adequate information about privacy was made available in the mother tongue language of users or whether young people simply relied on whatever default settings were made available.

UK stakeholders also highlighted privacy concerns in relation to new and emerging technologies such as location-based services. The responsibility of industry to provide maximum protection in this regard is particularly important, given the lack of knowledge and/or low level of engagement shown by many parents. In Ireland, the high proportion (63%) with SNS profiles set to private was seen as an encouraging, if surprising, finding. It was suggested by many that the role and popularity of SNS for young people should be a topic of further research and debate.

Policy recommendations

8. Social networking service providers should ensure that maximum protection is provided for the accounts of minors

- If SNS age restrictions cannot be made effective, the de facto use of SNS by young children should be addressed so as to ensure age-appropriate protection.
- Privacy/safety settings and reporting mechanisms should be far more user-friendly. If they remain difficult to use, privacy/safety settings should be enabled by default.
- Digital skills to protect privacy and personal data should be strongly supported among children of all ages.
- It should also be recognised that one in three parents (51% of parents of 9-12 year olds, 15% of parents of 13-16 year olds) wish their child not to use SNS.
- The review of data protection legislation at a European level³³ needs to be considered from the point of view of children's privacy.

³³ http://ec.europa.eu/justice/policies/privacy/index_en.htm

See also Article 29 Data Protection Working Party 'Opinion 5/2009 on online social networking', At:

http://ec.europa.eu/justice/policies/privacy/docs/wpdocs/2009/wp163_en.pdf

3. RISK AND HARM

Online risks have been the subject of sustained public debate and policy discussion for over a decade. Broadening access to the internet, it is recognised, brings many benefits but also increases risks. Children, in particular, may be especially vulnerable as they may not have the skills, experience or coping strategies to deal with risky situations encountered online. This is the tight balancing act that policy makers must perform: in managing risks, how to promote greater uptake of online opportunities in a way that is safe but does not restrict young people's access or hinder the development of those opportunities.

A central objective of EU Kids Online is to inform this policy agenda through better knowledge of children's online experiences. Research to date about children's use of internet technologies has been patchy. Researching online risks is difficult to undertake and may be ethically sensitive. Much of the research to date has come from the United States. There is a growing body of evidence and research available in a European context, though to date it has been uneven in nature and not fully comparable.³⁴ The EU Kids Online survey represents the first representative, cross-nationally comparable data derived from children themselves about the content, contact and conduct risks experienced in 25 countries across Europe.

An important distinction in the EU Kids Online approach is that risks do not necessarily lead to harm. The factors that shape children's online experiences include many activities that can be seen as positive opportunities – learning, social interaction, and developing new skills. Some activities can be seen as more risky: using chatrooms to interact online with strangers; accessing video content or file-sharing sites; using new internet tools etc. These, however, are not in themselves inherently harmful. Children and teenagers actively explore and learn to negotiate new boundaries by encountering new experiences. In EU Kids Online, the factors hypothesized to increase the risk of, but not necessarily result in harm, include: encountering pornography, bullying/being bullied, sending/receiving sexual messages and going to offline

meetings with people first met online. These risk factors have been prominent in policy debates and new evidence, it is intended, will guide future policy initiatives in these specific areas as well as more generally in promoting better coping strategies and greater resilience.

3.1. What upsets children online

Before being asked about specific risks they may have encountered online, children were first asked for an overall view of whether there were things on the internet that would bother children their age. Children were then asked if they had encountered something that 'bothered them', defined as something that 'made you feel uncomfortable, upset or feel that you shouldn't have seen it'.

- 55% of all children consider that there are things on the internet that will bother children about their own age.
- 12% of European 9-16 year olds say that they have been bothered or upset by something online. However, most children do not report being bothered or upset.
- 8% of parents think their child has been bothered by something online – parents of girls, and parents from higher SES homes, are a little more likely to think this.
- In over half of cases (59%) where children have been bothered, their parents are unaware that something has happened.

41% of European 9-16 year olds have encountered one or more of the risks asked about, but just 12% say that they have been bothered or upset. Risks are therefore not necessarily experienced by children as upsetting or harmful.

3.2. Comparing risk and harm

Four in ten children encountered one or more forms of online risk asked about in the past year:

- The most common risk is that of communicating online with someone the child has not met face-to-face before – characteristic of 30% of 9-16 year olds.

³⁴ EU Kids Online *Repository of research on children and the Internet in Europe*. At: <http://www2.lse.ac.uk/media@lse/research/EUKidsOnline/EU%20Kids%20I%20%282006-9%29/repository.aspx>

- The next most common is exposure to one or more of the types of potentially harmful user-generated content asked about (concerned with hate, pro-anorexia, self-harm, drug-taking or suicide). This was experienced by 21% of 11-16 year olds.
- Less common is children's exposure to sexual images online (14% of 9-16 year olds) or to sexual messages (15% of 11-16 year olds).
- Less common still is the misuse of personal data (misuse of the child's password, information or money) – 9% of 11-16 year olds.
- This is followed by going to meetings offline with people first met online (9% of 9-16 year olds).
- Least common is 'cyberbullying' – being sent nasty or hurtful messages online is reported by 6% of 9-16 year olds.

However, a key element of the framework for EU Kids Online is that risk is not the same as harm. Risks carry the possibility of harm but are not inherently harmful in and of themselves. It is important therefore that a balanced and proportionate response to risk is communicated through internet safety awareness-raising.

- Being bullied online is the risk that upsets children them most, even though it is among the least common. Between half and two thirds were upset or very upset by what happened.
- Meeting new people offline – the risk that the public worries about the most – very rarely upsets children. Of those 9-16 year olds who had met an online contact offline, one in six was bothered by what happened and about half of those (i.e. approximately 1 in 12 of those who had gone to a meeting) said that they were very or fairly upset by what happened.
- Of the 9-16 year olds who had been exposed to online sexual images, one in three was bothered by the experience and, of those, half (i.e. one sixth of those exposed to sexual images online) were either fairly or very upset by what they saw.

EU Kids Online findings reveal that children who are most vulnerable in the offline world are also those most at risk in the online environment. So, for example, children who are bullied and/or bully others online have similar demographic and psychological profiles to those who are bullied and/or bully offline. Findings suggest that those bullying others online are themselves the victims of bullying. Accordingly, targeting support at victims of bullying is the best way to counteract the occurrence of online bullying.

There is also wide variation between countries in relation to risk and harm. As a result, safety messaging on online risks should be informed by the evidence available and is more effectively communicated within the national context within which risks occur.

Stakeholder comments

Stakeholders expressed some surprise overall at the lower than anticipated level of risk found in the survey. The fact that risky behaviour did not lead to concrete harm more often was also found to be somewhat surprising. NGOs at the Italian stakeholder meeting were particularly surprised with the low figures for online risks, which they felt contrasted with their own experience and data. Surveys on 'sexting' and pornography among Italian teenagers had shown much higher incidence. This was also reported in the Polish stakeholder meeting where concern was expressed that there should not be complacency with regard to the levels of risks reported.

Stakeholders in the Netherlands, on the other hand, argued that EU Kids Online findings did place into perspective the incidence of risk. For most children, stakeholders agreed, the internet is a positive factor in their lives; it carries risks but these should not be exaggerated. Overall, it was argued that internet safety policy should be targeted at high risk children. The cross over between offline and online risk was also commented on, noting that more bullying takes place offline rather than online (Estonia) and that consumption of pornography was not just on the internet but also via TV, film and DVD (the Netherlands).

Policy recommendations

9. Awareness-raising in relation to online risks should be balanced and proportionate, and targeted at those most at risk of harm

- Children are concerned about a wide range of online risks. Efforts to manage these risks, and to support children in coping with them, should maintain a broad and updated view of these risks.
- As 9% of 9-10 year olds have been bothered or upset by something on the internet in the past year, it is important to promote awareness-raising and other safety practices for ever younger children.
- Awareness-raising among teenagers (and their parents and teachers) remains a priority since upsetting experiences rise with age and the array of risks keeps changing.

3.3. Parental awareness of risks

In the EU Kids Online survey, parents were also asked if their child had experienced something on the internet that had bothered them in some way. Children overall are more likely to report a problem than their parents (12% vs. 8%). The gap is relatively small overall. In some countries, there was a much wider discrepancy between children's and parents' perceptions: in Romania, for instance, only 7% of children but 21% of parents say the child has been bothered by something online. These are overall perceptions of risks on the internet. More specifically, the same parent/child pair responses were also compared in relation to individual risks.

Comparing children and adults' accounts when children reported that they had seen sexual images, a wide gap in parental awareness was apparent. 40% of parents were not aware and 26% said they did not know if their child had seen such images. Parents were least aware when younger children and girls had come across sexual content online.

For those children who had been bullied online, 71% of their parents were unaware or unsure whether this was the case.

In the case of children who had been sent sexual messages, 52% of parents denied this had occurred and a further 27% did not know. Gaps in some countries were particularly pronounced.

Parents also generally underestimate the number of occasions where children meet contacts offline that they first met online. In the case where children admitted they had met someone face to face that they first met on the internet, most parents (61%) denied this had occurred or did not know.

Stakeholder comments

One of the main findings that stakeholders commented on most was that concerning parents' lack of awareness of children's experiences of risks. Stakeholders in many countries (Estonia, Italy, Portugal, Hungary, Romania, and Belgium, amongst others) commented that parents seemed to be disconnected from what was happening to their children online. This was of concern especially in the case of younger children. Awareness raising targeted at alerting parents was highlighted as an important policy implication.

Stakeholders found the comparison of parent and child data in relation to parental mediation of particular interest

and an aspect that could be explored further. The question was raised in the Estonian stakeholder meeting as to whether those children that had been victims of cyber bullying were also those who had low levels of parental mediation. Low parental awareness and levels of parental involvement in mediation were also highlighted as topics that attracted media attention (Italy). Supporting the development of parental mediation skills was agreed as an important policy recommendation.

Policy recommendations

10. Parental awareness of risks and safety online needs to be enhanced.

- Without being alarmist or sensationalist, parents need to be alerted to the nature of the risks their children may encounter online. Awareness raising should try to encourage dialogue and greater understanding between parents and children about young people's online activities.
- Increasing parental understanding of risks is particularly important in those countries where awareness of children's risk experience is lowest.

3.4. Sexual risks

Sexual content is accessible to young people in a wide variety of contexts, offline and online, ranging from adult websites, peer to peer networks, virtual worlds, gaming communities, and via social networking and other social media platforms. The topic of sexual content online has attracted much media attention and is frequently the subject of a moral panic about the widespread availability of pornography on the internet, sexualisation in popular culture generally and fears of predatory behaviour and grooming enabled by internet technologies.³⁵

Seeing sexual images and sending/receiving sexual messages were the two kinds of sexual content asked about in the EU Kids Online survey.

The main findings were:

- **Offline pornography exceeds online** - 14% of 9-16 year olds have seen sexual images online, and again 4% (about 25% of those who had seen an image) were upset by this; however, 23% have seen sexual

³⁵ McLaughlin, S. (2009) "Online Sexual Grooming of Children and the Law" *Communications Law: Journal of Computer Media and Telecommunications Law* 14(1): 1-8.

images altogether (including on websites, television, videos, magazines, etc.).

- **A minority of content is sexually explicit** – among 11-16 year olds, 11% have seen nudity, 8% have seen someone having sex, 8% of seen genitals, and 2% have seen violent sex. Also, 2% have been asked to talk about sexual acts with someone online and 2% have been asked for an image of their genitals.
- **Sexual content is not just found on websites but is now circulated among peers** - 15% of 11-16 year olds in Europe have received sexual messages, and 4% (about 25% of those who had received a message) said they had been upset by this. Also, 3% say they have sent sexual messages to someone.
- **Age and gender make a difference** - more older than younger children report exposure to sexual content, and more boys than girls have seen sexual images; a third of teenage boys say they have seen these, a quarter online.
- **Risks migrate** – those who have encountered a range of risks offline are more likely to encounter sexual content online.
- **Vulnerability matters** – those who report more psychological difficulties are also more likely to have seen sexual images or received sexual messages online, and they are more often upset by the experience.
- **Risk and harm are not the same** – older children and boys encounter more sexual content, but younger children and girls are upset when they do encounter this. Also, 'sensation seekers' encounter more content and yet are less upset about it – possibly the very act of seeking and finding new content builds resilience for some.
- **Parents are insufficiently aware** - among children who have seen sexual images online, 40% of their parents are unaware of this, rising to half of parents of girls and younger children, the groups more upset by what they see. Among those who have received sexual messages, 52% of their parents are unaware of this and again this is more common among parents of girls and younger children.

Children's exposure to sexual content online is highest among children in Northern European countries (Norway, Denmark, Sweden, the Netherlands and Finland) and Eastern European countries (the Czech Republic, Lithuania, Estonia and Slovenia), with around one-third having seen sexual images either online or offline. It is least in the larger countries and older members of EU (Germany, UK) as well as Southern Europe and

predominantly Catholic countries (Italy, Spain, Ireland and Portugal).³⁶

Policy recommendations

11. Responses to young people's exposure to online sexual content needs to be proportionate and focused on those most likely to be distressed or harmed by such occurrences.

- Although public concern over online sexual content is justified, the extent of children's exposure should not be exaggerated, and nor should it be assumed that all children are upset or harmed by such exposure – the present findings do not support some of the moral panics surrounding this issue.
- Although the internet makes sexual content more readily available to all, with many children reporting exposure via accidental pop-ups, the regulation of more established media (television, video, magazines, etc.) remains important.
- Private access also matters – children who go online via their own laptop, mobile phone or, especially, a handheld device are more likely to have seen sexual images and/or received sexual messages. Similarly, those who go online in their bedroom, at a friend's house or 'out and about' are more likely to see sexual content online. The early advice that parents should put the computer in a public room must be revised, and new safety tools are needed.
- It seems that popular discourses centred on teenage boys' deliberate exposure to sexual content makes it harder for parents and others to recognise the distress that inadvertent exposure may cause girls, younger children and those facing psychological difficulties in their lives.

³⁶ Lobe, B., Livingstone, S., Ólafsson, K. and Vodeb, H. (2011) *Cross-national comparison of risks and safety on the internet: Initial analysis from the EU Kids Online survey of European children*, London: EU Kids Online, LSE.

3.5. Online bullying

Being bullied online is another 'conduct' risk that attracts a lot of attention in both policy debates and in the media. The use of different definitions and methodologies for measuring bullying has made comparisons difficult. In the EU Kids Online survey, children were asked if they had been treated, or had treated other people, in a hurtful or nasty way on the internet, whether as a single, repeated or persistent occurrence.³⁷

- Across Europe, 6% of 9 to 16 year old internet users report having been bullied online, and 3% admit to having bullied others.
- Being bullied online is relatively uncommon. Most is in fact face to face (13%); 6% is on the internet; and 3% by mobile phone or text. Social networking sites (SNS) and instant messaging (IM) are the most common online platforms for bullying wherein children are the targets of nasty or hurtful messages.
- Bullying online is one of the risks most likely to lead to harm. Of the 6% who have been bullied online, one third have been very upset by this with girls being more upset than boys (37% vs. 23% 'very upset').
- In some countries such as Estonia (43%) and Romania (41%), bullying is much more common than in others.
- Half (56%) of online bullies said they had also bullied people face-to-face, and half (55%) of online victims said they have also been bullied face-to-face. So it is not that bullying takes place either online or offline but that instead bullying migrates from one to the other, making it hard for the victim to escape.
- Which children bully or are bullied? Children who bully and who are bullied online report rather more psychological difficulties than children with no experience of bullying online. Also, those who bully tend to be higher in sensation seeking, while those who are bullied are more often ostracised by their peers.
- Children cope fairly well with being bullied online – a third (36%) try to fix the problem, most tell someone (77%, usually a friend but often a parent), and nearly half (46%) block the person sending the hurtful messages.

³⁷ See: Görzig, A. (2011). *Who bullies and who is bullied online? A study of 9-16 year old internet users in 25 European countries*, London: EU Kids Online, LSE.

Policy recommendations

12. Sensitive responses to bullying are required with equal attention to online and offline manifestations

- In countries where there is more bullying, there tends to be more bullying online. This suggests that as internet use increases, so will bullying online. Thus anti-bullying initiatives should accompany efforts to promote internet use.
- Online and offline bullying should be seen as connected, part of a vicious cycle in which perpetrators reach their victims through diverse means and victims find it hard to escape.
- Yet, those who bully may also be vulnerable, and they are often victims themselves, so sensitive treatment is required.
- Although children have a range of coping responses, this risk does upset them, and more support is needed – fewer than half tell a parent or other adult, and fewer than half know to block the person or delete their messages, so further awareness-raising is vital.

3.6. Making new contacts online

Maintaining relationships and making new contacts online is another topic that has attracted much interest from policy makers and the general public alike. Concern about contacts with strangers online or meeting contacts offline first met online has been widely expressed. These kinds of relationships and meetings, however, can mean very different things and range from having contact with 'friends of friends' to new methods making friendships beyond one's family or peer circle. Whether such contacts are 'risky' or have the potential to lead to harm, depends on the circumstances involved.

Online communication allows many children the opportunity to more easily make new friends and to interact socially than in the offline world. EU Kids Online has found that 50% of 11-16 year olds say 'I find it easier to be myself on the internet than when I am with people face-to-face'.

Most public anxiety centres on the phenomenon of 'meeting strangers' via the internet. For children, this may mean 'making new friends' and regarded as a valuable opportunity while adults view it as a risk.

87% of 11-16 year olds say that they are in touch online with people they first met face-to-face. But 39%

are in touch with people they met on the internet who are friends or family of people they know. And 25% are in touch with people they met online who have no connection with their existing social circle.

30% of European 9-16 year olds have had contact online with someone they haven't met face to face, but only 9% have gone to an offline meeting with such a person. On a country level, there is no obvious relation between making contacts online and meeting them offline.

Among those who have met online contacts offline, half have met one or two people in the past year, half have met more. Also, 57% met a friend of a friend (someone in their social circle) while 48% met someone unconnected with their life before meeting them online.

Among those children who did meet an online contact offline, 61% of their parents were not aware of this, rising to 68% among the younger children. Parents were least aware of such meetings in Ireland, UK, Cyprus and Portugal.

11% of those who went to such meetings (i.e. 1% of all children surveyed) were bothered or upset by what happened. The vast majority were not upset by such meetings. Those who were upset were more likely to be the more vulnerable children, i.e., those who are more vulnerable offline are more likely to experience harm from the risks they face online. In the case of meeting new online contacts offline, harm more often results among children who are younger, who have lower self-efficacy and who have more psychological difficulties.³⁸

Policy recommendations

13. Parents need to be more aware of the phenomenon of offline meetings with contacts first made online

- It is important to distinguish making new contacts online –a common occurrence – from going to meet new online contacts offline. It is equally important to recognise that for the most part, meeting online contacts offline is harmless, probably even fun.
- But for a minority of children, meeting online contacts offline are harmful, and these children tend already to be the more vulnerable.

³⁸ Hasebrink, U., Görzig, A., Haddon, L., Kalmus, V. and Livingstone, S. (2011) *Patterns of risk and safety online. In-depth analyses from the EU Kids Online survey of 9-16 year olds and their parents in 25 countries*. LSE, London: EU Kids Online, p.53.

- Since their parents are often unaware of what has happened, awareness raising efforts should be increased so that parents of younger and/or more vulnerable children recognise the risk, but without this undermining the chance for most children to have fun making new friends.

3.7. Newer risks

Public anxiety often focuses on pornography, 'sexting', bullying and meeting strangers, especially for young children. But there are other risks that worry children, including many teenagers, including harmful user-generated content on the internet as well as personal data misuse.

Overall 21% of children (11-16) had seen some form of harmful content whether this was hate messages, or so-called pro-anorexia/bulimia sites, or sites promoting self-harm, suicide or drug-taking. There is a marked age difference, rising from 12% of 11-12 year olds to 29% of 15-16 year olds.³⁹

There is considerable cross-national variation in children's exposure to potentially harmful user-generated content. In the Czech Republic and in Norway, four in ten children aged 11-16 have seen potentially harmful user-generated content of one or more of the five types asked about, more than double the European average of 21%. Fewer than one in six have seen it in Portugal, France, Belgium or Hungary.

Children often report that personal data misuse is a matter of concern to them. In the EU Kids Online survey, 9% of children experienced some form of data misuse. The most common misuse was someone using the child's password or pretending to be them (7%), followed by someone misusing their personal information (4%).

³⁹ Livingstone, S., Haddon, L., Görzig, A. and Ólafsson, K. (2011) *Risks and safety on the internet: The perspective of European children. Full findings*. LSE, London: EU Kids Online.

Policy recommendations

14. Policy makers need to be alert to new risks that affect children and young people, especially arising from peer-to-peer contact

- As well as conducting surveys, qualitative work based on listening to children is vital to learn what new risks they are experiencing.
- Addressing risks associated with peer-to-peer conduct (user-generated content and personal data misuse) poses a critical challenge to policy makers.
- While younger children have fewer resources to cope with online risk, they are also more willing to turn to parents for help; meanwhile, teenagers face particular risks that worry them and that they may struggle with alone, so they need particular coping strategies and support.

3.8. Coping strategies and building resilience

A sizeable minority – 12% or one in eight children – report that they have been bothered by something on the internet in the past year. While the majority of children say there are lots of good things for children their age on the internet, in keeping with the EU Kids Online methodology of following up on the smaller number who have experienced harm, it is appropriate for policy to focus on this subset who are adversely affected and examine how they can better cope with such situations.

In general, children higher in self-efficacy are more likely to experience less harm, while children with greater emotional problems experience more harm.⁴⁰ Coping strategies may be seen as either 'passive' (stop using the internet for a while, hope the problem would go away); 'communicative' (talking to someone) or 'proactive' (trying to fix the problem). **Where the latter involves more skills and was practiced by those who engaged in more online activities, passive approaches were more common among younger children, children with little self-efficacy, higher level of psychological difficulties and those engaged in few online activities – and those feeling more upset.**

⁴⁰ Hasebrink, U., Görzig, A., Haddon, L., Kalmus, V. and Livingstone, S. (2011) *Patterns of risk and safety online. In-depth analyses from the EU Kids Online survey of 9-16 year olds and their parents in 25 countries*. LSE, London: EU Kids Online, p.53.

In relation to seeing sexual images online, of those that had been bothered by the experience, most (53%) sought some form of social support and told someone about it, mostly friends and, in some cases, parents. A quarter of those that had been bothered simply hoped the problem would go away by itself. About a quarter used some of the tools provided by internet service providers such as deleting the content, blocking the person that had sent it, changing filter settings or using a 'report abuse' button.

With regard to bullying, over three quarters (77%) of those that had been affected sought some form of social support. Just over half (52%) spoke to a friend about what had happened, and 42% told one of their parents about it. Use of internet tools was more prominent: just under half blocked the person (46%) and/or deleted the messages (42%); one in five (18%) changed their filter or contact settings and one in ten (9%) reported the problem to an online source.

In coping with sexual messaging online, most of those who had been bothered by the experience spoke to some about it (60%), mostly friends (38%) and, in nearly a third of cases, parents (30%). Blocking the person (40%) and/or deleting the messages (38%) were the most common internet solutions. A quarter (24%) changed their filter or contact settings.

The numbers who had been bothered by an offline meeting with someone they had first met online are small (1% of the sample). Of these, most told someone about it (62%), again mostly friends (35%) and, in some cases, parents (28%). The most common online coping strategies were to delete messages (37%) or to block the person who had sent the messages (34%).

Stakeholder comments

Stakeholders were very interested in finding out more about the coping strategies used by children, especially those especially those found to be most effective. It was widely agreed that developing coping strategies and teaching children how to become resilient is to be preferred over more restrictive or protective approaches. There is considerable scope here for providing useful data to guide local policy initiatives. Further analysis of the experiences of children that had been harmed, profiling the population and cross-referencing it against other sources was also thought to be important.

Stakeholders were also interested in the relationship between coping and socio-economic status as well as the general socio-cultural environment. The question was asked, for instance, if the policy environment and the general level of awareness in different countries had an

effect on coping strategies or their effectiveness. The use of online coping strategies should be promoted with recommendations to industry to ensure that user-friendly mechanisms are provided (Belgium).

The relationship between offline and online coping was also thought to be of interest: do those who cope effectively in the offline world also practice good online coping strategies in the online world; can online strategies be transferred to offline situations (e.g. bullying)? (Finland).

While many children do seek social support and there are encouraging findings about the numbers of children who try to solve problems when they encounter them, an issue of concern to policy makers is the relatively large number – up to a third in some cases – who do nothing and hope the situation will go away. Promoting effective coping strategies and ensuring supports are available when needed requires constant reinforcement. Given the relatively low take-up of online reporting mechanisms, there is considerable scope for further development. There is also a responsibility on industry providers to ensure that safety and reporting mechanisms are prominently promoted, accessible and easy to use.

Policy recommendations

15. Awareness-raising should highlight effective coping strategies in safety messages, emphasizing social supports such as talking to parents, friends and teachers, as well as the use of online tools.

- Policy makers have long advised children to tell someone if they've been upset online, and it seems such messages have been heard.
- Children try some proactive strategies more than others and few are fatalistic: this suggests a desire to cope as best they can and a readiness to adopt new technical tools if these are accessible.
- When asked which strategies really helped the problem, children told us that reporting the problem to an ISP was effective with sexual images but less so for sexual or bullying messages: this suggests that better solutions are needed for peer-to-peer risks.
- Mostly, children said the approach they chose helped in up to two thirds of cases, but this leaves room for provision of better support and/or tools.
- Generally, it seems that efforts to promote children's digital citizenship – in terms of online safety and good practice – are bearing some fruit, and should be

extended. There may be many reasons why solutions children try, when upset, do not help the situation, but one possibility is that the technical tools are flawed or difficult to use, and another is that adults – professional or personal – are unprepared or unable to help children.

- The 'knowledge gap' phenomenon - in which the information-rich learn from available advice and guidance more rapidly than the information-poor - means that efforts to promote digital citizenship will disproportionately benefit the already-advantaged. Targeting less privileged or more vulnerable children is a priority.
- Overwhelmingly, children tell a friend, followed by a parent, when something online upsets them. Rarely do they tell a teacher or any other adult in a position of responsibility. Their apparent lack of trust in those who may have more expert solutions is a concern.

4. SOCIAL MEDIATION

Analysis of findings in EU Kids Online focuses not just on the level of the individual user (taking into account age and gender) but also encompasses the social domain in which internet use takes place, as well as the national or country-level context. While the increasingly individualised and privatised nature of children's internet use is highlighted within the survey's findings, online activity is also embedded within various forms of social interaction which may mediate the child's use. In the survey, children were asked about several types of mediation as practiced by parents, teachers and friends. Effective mediation of children's internet use has been an important topic within policy discussion. The role of parental mediation in particular has received much policy attention and features prominently in internet safety campaigns and awareness-raising strategies.

This section briefly reviews the main findings in relation to mediation by parents, teachers and peers, highlighting where new emphases may be required and where findings suggest different strategies that could be adopted to promote more effective mediation.

4.1. The practice of parental mediation

A typology of different forms of parental mediation of the internet was developed and used in the analysis, including: active mediation of the child's use of the internet; active mediation of internet safety; restrictive mediation or setting rules that restrict the child's use; and technical mediation, or the use of filters or parental control software.

Main findings

Many parents do take an active role in their children's use of the internet: most talk to their children about what they do on the internet (70%), and stay nearby when the child is online (58%).

Over half of parents take positive steps such as suggesting how to behave towards others online (56%) and talk about things that might bother the child (52%). A third of parents have helped their child when something arose in the past.

Most parents are actively involved in internet safety: 68% explain why some websites are good or bad; and 63% suggested ways to use the internet safely.

Most parents also set some *restrictive* rules: 85% set rules about disclosure of personal information online for their children; 63% have rules about the uploading of photo or video content and 57% have set rules for downloading of music or films on the internet.

Technical mediation with the exception of using virus and spam filters (73%) is relatively low: just 28% use parental controls or filtering software; and 24% use software that tracks websites accessed by a child.

One in eight parents (13%) do not practice any of the forms of mediation asked about.

The fact that the vast majority of parents do actively mediate their children's internet use is a positive finding and provides a solid basis for encouraging more and better forms of parental mediation. Given that the home remains the most important point of access for children to go online as well as the fact that parents are a very important source of safety information confirms the pre-eminent role parents occupy in ensuring internet safety. Moreover, comparing parents, teachers and peers, it is parents that children turn to first for social support when something bothers them on the internet. However, it cannot be assumed that all parents have the necessary skills, knowledge or technical expertise. As noted by stakeholders, parents need practical mediation skills in order to be effective in supporting their children online. The general lack of awareness about risks online among parents gives rise to concerns for their ability to provide this support. This is especially urgent in the case of parents of younger children.

Stakeholder comments

Stakeholders while recognising the importance of parental mediation noted that it is made more difficult with the proliferation of different ways of going online. Some countries (Estonia) had taken specific steps to developing parental mediation skills especially parents of younger internet users. In Italy, the comment was made that levels of parental awareness and of mediation suggested another digital divide with some countries experiencing quite high levels and others, including Italy, with relatively low levels of parental input or knowledge of young people's online activities.

Policy recommendations

16. Practical mediation skills for parents should be a part of the overall effort to build awareness among parents of risks and safety online

- Parents appear to have got the message that it is valuable for them to engage with their child's internet use, and they employ a wide range of strategies, depending partly on the age of the child. But there are some parents who do not do very much, even for young children, and there are some children who wish their parents to take more interest. Targeting these parents with awareness raising messages and resources is thus a priority.
- Cynicism that what parents do is not valued, or that children will evade parental guidance, is ungrounded: the evidence reveals a more positive picture in which children welcome parental interest and mediating activities while parents express confidence in their children's abilities. It is important to maintain this situation as the internet becomes more complex and more embedded in everyday life.
- Parental restrictions carry a significant cost in terms of children's online opportunities and skills, but they may be appropriate if children are vulnerable to harm. Parental efforts to empower children online seem to enhance their opportunities and skills, though there is little evidence that they reduce risk or harm. There are no easy answers, therefore, so parents should be supported in judging what best suits their child.

4.2. Use of parental controls

Parental controls have been developed as a technical solution to the challenge of parental mediation. Tools which allow parents to block or filter some types of websites, to keep track of websites accessed by young people or which set limits on the amount of time spent on the internet have been widely promoted as an important element in responsible supervision of children's internet use. The use of parental controls or filtering technologies, however, is much less prominent than other forms of mediation and despite the considerable policy attention such technologies have received, they are only used in less than one third of cases. This is much lower than the 59% of parents in the Eurobarometer survey of 2008 who

declared that they were using filtering or monitoring software.⁴¹

The main form of technical mediation is software to prevent spam/junk mail or viruses and is used by 73% of parents. This is a security rather than an internet safety measure.

A quarter of parents (28%) across Europe use tools to block or filter websites and/or track the websites visited by their children (24%). There is considerable variation by country in the use of filtering technologies. Only in the UK and Ireland are parental controls used by over 40% of households, according to the child. In thirteen countries, usage is less than one in five and in Romania it is just 5%.

Stakeholder comments

Stakeholders agreed that there is a need for more user-friendly parental control software. In Cyprus stakeholders commented that parents are often the weakest link in safer internet practice. Many have insufficient skills or knowledge, particularly in relation to installation of filters and parental control software. More user-friendly tools and training are required to improve the uptake of such controls. Stakeholders in UK and Ireland commented that with new platforms for internet access, desktop-based filter solutions may be inadequate. New internet technologies and diverse forms of access raised questions as to where filters should be placed, such as at the router or network level. Stakeholders in the Netherlands also observed that filtering on its own is not enough and is not a substitute for media education.

Policy recommendations

17 Filtering technologies and parental control software need to be far more usable and transparent and take into account the needs of parents in order to improve uptake.

- Across the 25 countries surveyed by EU Kids Online, less than one third (28%) of parents were found to filter the websites visited by their child. It is clear that many parents find them such software either too complicated or ill-suited to their needs.

⁴¹ Eurobarometer. (2008). *Towards a Safer Use of the Internet for Children in the EU: A Parents' Perspective*. Luxembourg: European Commission Safer Internet Programme.

- To be effective, parental controls need to incorporate all of the issues that concern parents about their children's internet use. Thus, in addition to filtering out adult or unsuitable online content for children, controls may also need to include features such as the amount of time spent online, filtering of user-generated content and blocking of commercial content.
- While there continues to be debate about the appropriateness of parental controls in all situations, they continue to be a valuable resource particularly for those who may lack skills or knowledge in advising on and guiding their children's internet use.
- Parental controls are also available as an integral element of some internet services and do not need to be separately installed. An industry-wide agreement on the design and features of safety and parental controls built into web-based services could provide parents with better opportunities to consider adopting them. Training in the use of tools should also be made readily available to deal with lack of confidence and knowledge on the part of parents

4.3. How do teachers mediate children's online risk?

Teachers are well positioned to offer support for both mediation of internet safety and digital skills training for all children. While most European countries do include internet safety in the curriculum, for many it is not a core or central element and it would seem that a substantial number of children are missing out.⁴² Schools can also support and reinforce internet safety awareness raising activities by industry and civil society groups

Internet safety advice is given to children first by parents (63%), then teachers (58%) and then peers (44%). There are demographic and national variations in this profile but in each case there is room for further development.

Most teachers, though not as much as parents, have also engaged with children about matters of internet safety. Just over half of teachers talk to children about what they do on the internet and overall, four in five children report

some mediation of their online activities from their teachers. Given the central role of schools in formal internet safety education, this is less than might be expected. One in five children do not receive any input from teachers about the internet. Considerable national variation is also evident and nearly half of the countries surveyed are below the European average of 73% for school-based internet mediation. In the UK, for example, 83% of children say their teachers are active in giving internet safety advice, while in countries such as France and Romania, the average is just 40%.

While parents are the main agents of mediation, the role of teachers is also very important and overtakes that of parents for older children and for children from lower SES homes.⁴³ Just over half (53%) say that their teachers talk to them about what they do on the internet. One quarter (24%) say their teachers have helped when something bothered them on the internet. There is also a positive correlation between teachers' mediation children's digital skills across all ages.

However, one in five children who use the internet report that their teachers have not engaged with them in any way in relation to their internet use. Teachers engage least with 9-10 year olds about the internet.

Parents identify schools as the preferred source of information about internet safety. Schools play a central role in the delivery of training in digital skills and safety advice. The fact that it is the second most common location for going online (63%) also means that schools provide children with important access opportunities. Schools and the wider educational community are therefore uniquely placed to address all children on internet safety but need to be resourced to do so.

Stakeholder comments

Stakeholders in most countries acknowledged the very important responsibility that teachers share in the provision of internet safety education. Alongside parental mediation, the role of the teacher, it was agreed, was crucial in providing a trusted source of digital skills, including internet safety. Stakeholders from Estonia and Finland commented that there is a vital need for teacher training and support for schools if they are to fulfil the

⁴² Eurydice (2009) *Education on Online Safety in Schools in Europe*. Brussels, Education, Audiovisual Culture and Executive Agency.

⁴³ Hasebrink, U., Görzig, A., Haddon, L., Kalmus, V. and Livingstone, S. (2011) *Patterns of risk and safety online. In-depth analyses from the EU Kids Online survey of 9-16 year olds and their parents in 25 countries*. LSE, London: EU Kids Online, p.59.

expectations for education. Media skills in general are largely absent from teacher training programmes and many teachers lack confidence in delivering internet safety.

The implications for teachers of much younger children using the internet were highlighted in the stakeholders' meeting in the Netherlands. Internet safety education, it was argued, needs to happen at a much younger age. In practice, it tends to be with older groups and, most often, at secondary school level. In Poland, despite wide circulation of reports to teachers, there was very little response and, it was suspected, very little interest. The UK advocated that internet safety messages should be incorporated into mainstream citizenship and personal development modules. Recognising that the internet is embedded in daily life, safety education can only be enhanced by making a mainstream element available across the curriculum.

Policy recommendations

18. Levels of teacher mediation are high but could be higher, as a large minority of children are not reached by teacher guidance. Since schools have the resources to reach all children, they should take the biggest share of the task of reaching the 'hard to reach'

- The youngest children (9-10 years) report the least mediation from teachers: as this age group now uses the internet widely, primary schools should increase critical and safety guidance for pupils.
- The benefits of supporting peer mediation are easily neglected but could be constructively harnessed, especially as children are most likely to tell a friend if something bothers them online. Peer mentoring schemes have a valuable role to play.
- When something has bothered them on the internet, 36% of children said a parent helped them, 28% a friend and 24% a teacher. Probably, the ideal is for children to have a range of people to turn to, depending on the circumstances. As noted already in relation to coping, a minority of children has no-one to tell when something upsets them.

4.4. Industry role in promoting internet safety

Internet safety, as is widely recognised, is a shared responsibility across diverse stakeholders (parents, children themselves, educators, regulatory authorities and governments, civil society and child welfare organisations, and industry interests). While much of the emphasis in awareness raising is on children and their parents taking responsibility for their own safety online, effective cooperation between the different stakeholders is vital to the creation of a safer internet environment. Supporting cross-national and inter-sector cooperation has primarily resided with the European Commission through sponsorship of coordination initiatives. An evaluation of the Safer Internet Plus programme in 2008 recommended further engagement with industry in embedding cooperation at all levels of the sector in the promotion of safety.⁴⁴ Further developments in this regard have included self-regulatory agreements for safer social networking and proposals for a new industry agreement on the safer use of connected devices and on-line services by children. Underpinning such industry agreements is the commitment by industry to also raise awareness among users of safety education and safer internet practice.

Children receive internet safety advice firstly from parents, then teachers and then peers. Information received from other sources is much less in evidence. **20% of children and young people reported receiving internet safety advice via traditional mass media (20%); less than 12% received advice from websites; and 6% reported getting information from an internet service provider. One third 34% don't get any advice from one of these sources.**

Few parents reported getting internet safety advice from industry sources: about one in five reported getting such information from internet service providers (22%) and websites (21%). When asked where they would like to get safety information from, the child's school was the most preferred (43%). Traditional media sources were the next most popular (32%). About one quarter (26%) would like to receive safety information from their internet service provider or from websites, and one in five (20%)

⁴⁴ European Commission. (2008). Safer Internet Plus (2005-2008) Final Evaluation. from http://ec.europa.eu/information_society/activities/sip/docs/prog_evaluation/report_sip_en_2005_2008.pdf

would like such information from the government or local authorities.

Stakeholder comments

Stakeholders commented that the media have a very important role to play in creating awareness around internet issues. Parental attitudes to the internet are a major factor, for instance, in facilitating and supporting online opportunities for young people. The Irish stakeholder's forum identified the media as contributing to a 'fear factor' among many parents, leading to a very restrictive and protective role being adopted. Media reportage contributes to this, to some extent, and sets the agenda for how stories about the internet are covered. On the other hand, media sources can also promote a different kind of message about the importance of the internet for young people and support positive opportunities.

Policy recommendations

19. Industry needs to be much more proactive in promoting internet safety awareness and education. In order to increase trust, the management of safety, identity and privacy settings of internet services used by children needs to be transparent and independently evaluated.

- The overwhelming majority of parents would like to receive information and advice about internet safety. Most, however, get it from firstly from family and friends (48%) rather than from the providers of internet services. Traditional media (32%) and the child's school (27%) are the next most common sources of information about internet safety. Internet service providers (22%) and websites (21%) are much less evident as sources of advice.
- There is considerable scope, therefore, for industry to improve its own awareness raising and provision of safety advice. Internet safety advice should be provided in an accessible and user-friendly way at the point of access on web services used by young people. Internet service providers (ISPs) should also play a more prominent role in providing online safety resources especially for parents as the primary account holders.
- Traditional media sources – press, radio and television – also have a major role to play in promoting online safety awareness as supporting greater media literacy among the adult population. They are best positioned to reach all adults and,

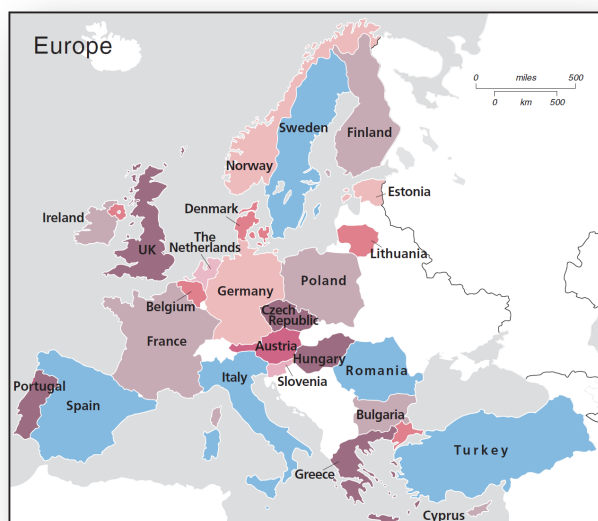
crucially, are influential in forming parents' attitudes towards opportunities and risks on the internet.

- Evidence repeatedly shows that children still struggle with user tools, safety devices, privacy settings and policies, reporting mechanisms, etc. even though the industry claims they have been improved and made easier. Independent evaluation of progress by the industry is crucial, both to measure whether improvements have been made (against benchmarks) but more importantly, whether those improvements work - i.e. are they actually sufficient for children to manage their safety, privacy, identity and risk online?

5. NATIONAL POLICIES AND CROSS NATIONAL COMPARISONS

Findings of the EU Kids Online survey represent 'internet using' children from 25 countries across Europe. The 25 countries included (Figure 1) comprise widely differing contexts varying in geography and politics, from each part of the European continent, primarily members of the European Union, and also including Norway and Turkey. All countries, with the exception of Turkey, are members of Insafe. Countries vary in size, and include both large and small population sizes. They also differ in terms of internet usage with countries both above and below the European average, and, in terms of online risk factors, represent countries of high, medium and low risk.⁴⁵

Figure 1: Countries surveyed by EU Kids Online

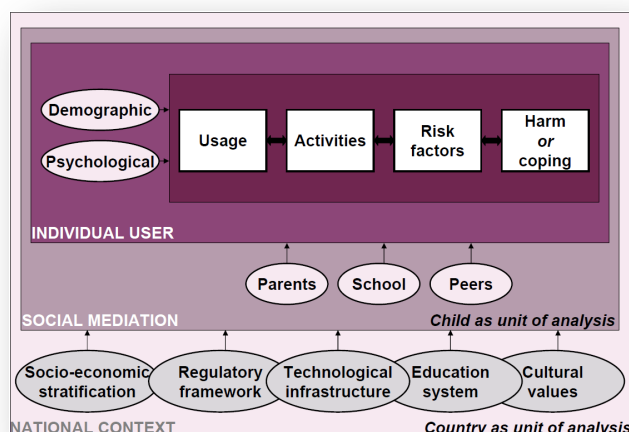


The EU Kids Online survey is based on a random stratified sample of 25,142 children – or about 1,000 in each country – aged 9-16 who use the internet, plus one of their parents. Inherent in the survey's findings,

⁴⁵ Livingstone, S., & Haddon, L. (2009) *EU Kids Online: Final report. EC Safer Internet Plus Programme Deliverable D6.5*, LSE, London: EU Kids Online.

therefore, are many layers of complexity from the level of the individual user through levels of social mediation to the national context in which factors such as SES, the technological infrastructure, the regulatory framework, the educational system and prevailing cultural values are hypothesized to influence and shape children's patterns of use. A map of the research field is presented in Figure 1:

Figure 2: Relating online use, activities and risk factors to harm to children



From a policy perspective, there are a number of levels therefore at which discussion on implications for policy makers may be discussed. There are, firstly, implications and topics of policy debate at a pan-European level that reflect the Europe-wide focus of frameworks such as the EC Safer Internet Programme and Insafe and which relate to all children in Europe. Secondly, there are findings that draw on comparisons between countries and which highlight questions of regional difference within Europe. Thirdly, drawing on the country as the unit of analysis points to questions of policy on internet risk and safety at the national level and highlights priorities or topics of policy concern specific to individual countries.

Publication of findings from the EU Kids Online survey follows this pattern. Accompanying the publication of full

findings from the EU Kids Online Survey⁴⁶ and the analysis of patterns of risk and safety across Europe,⁴⁷ individual country summaries of findings for all 25 participating countries are published on the project website.⁴⁸ In many cases, full country reports have also been produced and are also available from the project website.

In this chapter, Section 5.1 focuses on policy recommendations arising from cross-national comparisons of findings from EU Kids Online⁴⁹ where 5.2 presents policy recommendations at the individual country level.

5.1. Cross-national comparisons and policy recommendations

In earlier research conducted by EU Kids Online, a country classification of online use and risk was produced, based on an analysis of over 400 empirical studies conducted over the previous decade.⁵⁰ This analysis (Table 1) classified countries according to levels of use of the internet by children and the likelihood, based on a variety of different empirical studies, of children encountering online risk. Hasebrink et al (2009) concluded that Northern European countries tended to be 'high use, high risk', Southern European countries tend to be 'low use, variable risk' and Eastern European countries could be characterised as 'new use, new risk'.

⁴⁶ Livingstone, S., Haddon, L., Görzig, A., & Ólafsson, K. (2011). *Risks and safety on the internet: The perspective of European children*. Full Findings. LSE, London: EU Kids Online.

⁴⁷ Hasebrink, U., Görzig, A., Haddon, L., Kalmus, V. and Livingstone, S. (2011) *Patterns of risk and safety online. In-depth analyses from the EU Kids Online survey of 9-16 year olds and their parents in 25 countries*. LSE, London: EU Kids Online.

⁴⁸ See: www.eukidsonline.net

⁴⁹ Lobe, B., Livingstone, S., Ólafsson, K. and Vodeb, H. (2011) *Cross-national comparison of risks and safety on the internet: Initial analysis from the EU Kids Online survey of European children*, London: EU Kids Online, LSE.

⁵⁰ Hasebrink, U., Livingstone, S., Haddon, L. and Ólafsson, K. (eds.) (2009) *Comparing children's online opportunities and risks across Europe: Cross-national comparisons for EU Kids Online* (2nd edn). LSE, London: EU Kids Online.

Table 2: Country Classification EU Kids Online I (from literature review)

Risk	Level of usage		
	Low	Medium	High
Low	CY IT	FR DE	
Medium	EL	AT BE IE PT ES	DK SE
High		BG CZ	EE NL SI NO UK PL

Source: Hasebrink et al (2009)

An updated version of this country classification, now based on directly comparable measures derived from each country, was presented in Lobe et al (2011). The classification is generated by a cluster analysis of countries in terms of their levels and types of usage and patterns of risk as found in the EU Kids Online survey.

Table 3: Country Classification of online use and risk based on EU Kids Online survey

Risk	Level of usage	
	Lower	Higher
Lower	Lower use, lower risk AT, BE, DE, FR, EL, HU, IT Lower use, some risk ES, IE, PT, TK	
Higher		Higher use, some risk CY, FI, NL, PL, SI, UK Higher use, higher risk (+ New use, new risk) BG, CZ, DK, EE, LT, NO, RO, SE

Source: Lobe et al (2011)

What is emphasised in both versions of this classification is that high use of the internet is rarely if ever associated with low risk and high risk is never associated with low use. The underlying rule remains the same: 'the more use, the more risk'. In a similar vein, this entails for policy makers the dilemma that promoting greater use and more

online opportunities will inevitably increase the likelihood of greater exposure to risk.

While each country is differentiated in terms of both levels of use and experiences of risk, Table 2 also proposes four main categories or ideal types with which to describe the broader European landscape.

Group 1 (lower use, some risk) identifies countries with lower than average use of the internet, but with experience of some risks. So, for example, Spain, Ireland, Portugal and Turkey have the lowest internet usage but report experiences of some excessive use of the internet and problems with user-generated content.

Group 2 (lower use, lower risk) comprise countries that are below average for both internet use and for online risks. It may be expected that as levels of use rise in these countries, so too will risk.

Group 3 (higher use, higher risk) comprises in the main wealthier countries of Northern Europe as well as countries in Eastern Europe that might be better labelled 'new use, new risk' (e.g. Czech Republic, Estonia, Lithuania and Romania).

Group 4 (higher use, some risk) includes some countries previously considered lower risk (e.g. Cyprus), and some previously higher risk but now qualified as high only on some risks (e.g. Netherlands, Poland, Slovenia, the UK).

In comparing the two country classifications, it is interesting to note that countries such as Greece, Italy and Cyprus have increased their usage without a corresponding increase in risk – an ideal situation from a policy point of view – while the UK and Poland have reduced their level of risk while maintaining high levels of use.

It is clear that use of the internet is always accompanied by some risks. What will guide policy makers more directly are patterns in which particular risks predominate or where actual harm is reported. Such factors are presented more fully below in 5.2

Explanatory factors for country differences are those highlighted in Figure 2 and include Socio-economic stratification, the regulatory framework, the technological infrastructure, the educational system and prevailing cultural values. Lobe et al (2011) analysed a number of secondary national data sources to complement the overall analysis of country differences. Their analysis concludes:

- There is a positive and significant effect of GDP per capita on the level of risk within a country.

- Countries with greater press freedom (as an indicator of the regulatory framework) are more likely to have higher levels of children's use of the internet as well as to encounter greater levels of online risk.
- Similarly, countries with higher broadband penetration are more likely to experience online risk though there are exceptions.
- Children's daily use of the internet is highest in those countries that have enjoyed internet access for longer, e.g. the UK and Nordic countries where penetration rates have exceeded 50% for at least 6 years.
- Educational factors such as expected years of schooling or the availability of computers in schools do not have an effect levels of online usage or risk. However, they are a significant factor in children's digital literacy and safety skills.

Policy recommendation

- Children in wealthier countries (measured by GDP) encounter more online risk but, arguably, these countries are also well placed to provide more accessible and user-friendly safety resources for children and parents. Also, countries with more press freedom, such as Nordic and Baltic countries, are more likely to have children who encounter online risk – this may be because of lower internet regulation and strategies that ensure safety without introducing censorship are thus needed.
- At the country level, there is no systematic relation between level of parental filtering in a country and children's risk experiences, although there is a small relationship at the individual level – children whose parents use a filter are less likely to have encountered sexual content, suggesting filters can play a useful role.
- Degree of broadband penetration, and length of time in which most people have had internet access, are associated with greater online risks, but not greater online activities among children – this suggests that, while children are motivated to use the internet everywhere in Europe, higher quality access is bringing more risks than are adequately dealt with by policymakers (whether industry, state or education).
- In countries with 15+ years of schooling on average, children are more likely to have better digital skills, as are children from countries where more schools use computers in the classroom. Education clearly has a

positive role to play in supporting digital skills, literacies and citizenship, and should be supported across all countries.

5.2. National recommendations

Following the grouping of countries into four broad classifications according to levels of use and risk. In this section, recommendations for individual countries are presented, grouped according to the classification into the 4 main categories of use and risk. Country recommendations have been produced by national team members of EU Kids Online informed by evidence from the national dataset and by stakeholder consultation.

Group 1: 'Lower use, Lower Risk Countries'

Austria

EU Kids Online study shows that the online behaviour and online experience of Austrian children more or less confirms to the European average. However, some striking trends that have been identified deserve more attention.

One of the most serious issues that needs to be addressed is the fact that Austrian parents tend to underestimate the risks associated with their children's online activities. In comparison with other countries, they need to be more active in supporting their children to use the internet safely. The study has further revealed that there is considerably higher number of youngsters in Austria possessing smart phones. This enables them to go online wherever they are and at the same time creates a more intimate environment for using the internet, including popular social networking services. Parents are often unaware of the actual online functionalities smart phones are offering to their children and simultaneously have fewer opportunities to control them.

In this respect there is a need for action in the following areas:

- Make media literacy and online safety a political issue at the highest level.
- Develop targeted actions, for instance through media campaigns, to boost parents' interest in their children's online activities and improve their understanding of the online world.
- Empower schools to prepare young people for digital citizenship and encourage them to continue supplementing their lesson plans with elements of media education.

- Industry partners should play a more active role in awareness raising as they have the communication channels and experience through which they can easily reach the target groups with an online safety message.

Belgium

With regard to online use and activities, the living room is still the most popular location for internet use; private access in the bedroom is less common in Belgian families. More initiatives on the use of internet at school would be welcome in Belgium given the relatively low figure on internet use at school, and the lower percentage of children using the internet for schoolwork). More attention to digital literacy is highly recommended, especially in primary education, Since "digital literacy" in secondary schools has only recently been implemented from a cross-curricular perspective (i.e. not as a separate subject), it is important to monitor how schools and teachers implement it in their classes. More guidelines and practical tools to support schools and teachers need to be developed. Creative internet use is higher in Belgium compared to the EU average. The use of webcams, filesharing-sites and blogs are all more popular in Belgium. Children in Belgium rank about average taking into account all types of internet activities.

Although Belgian stakeholders believe that Belgian parents mainly mediate their children's internet use in a restrictive way, the survey results show that also less restrictive forms of mediation and communication are common practice in Belgian households. Given the importance of teachers and peers in the development of digital skills and their potential positive impact on the development of children's adequate coping strategies (resilience), policy makers should encourage teacher and peer mediation.

In addition, Belgian stakeholders emphasise the importance of:

- surveying/monitoring the child's perception of online risks, opportunities and mediation from parents, peers and teachers in order to have a better view on how initiatives on safer internet use have an impact on the child's behaviour and perceptions;
- taking cultural and political differences into account when developing initiatives on awareness raising, digital literacy and internet safety, given Belgium's two main language communities;
- equipping important stakeholders (other than parents and teachers) working in the area of youth services (social workers, youth movements, etc.) with the

necessary skills; often their ICT skills are insufficient and they feel insecure about how to guide children in the online world.

France

There are a number of distinctive features about French children's use of the internet compared to children and young people in Europe overall:

- French children access the internet less often with a mobile or handheld device. Going online from their bedroom is also below the European average.
- Fewer children in France have a social networking profile compared to children in Europe overall. They are also less likely to a profile set to public access
- In terms of risks, fewer French children say they have been bothered or upset by something on the internet, though more parents in France believe they have. Children in France also report the least exposure to harmful user generated content (25th of 25 countries).
- On the other hand, French children are more likely to say they have received sexual messages or seen sexual or pornographic images. They are below the European average for reporting being bothered or upset about such messages or images.
- French parents are, like German parents, among the most restrictive parents and among the highest in Europe for the use of technical safety tools. As it happens, French children are more likely to complain about parental restrictive mediation and think that it limits their activities on the internet. But, they are also above the European average in saying they don't take into account parental recommendations for safe internet use.
- Teachers' mediation of internet use is low in France compared to other Northern Europe countries, as is peer mediation, either for helping when having a problem or for internet safety advice. Both of these areas require further support and are the subject of policy recommendations in the French context.

Germany

EU Kids Online has categorised Germany as a 'low use, low risk' country. This finding is consistent with the earlier classification based on earlier empirical evidence (see Hasebrink et al. 2009). Lower use of the internet goes along with a comparatively low level of digital skills. Although, according to these results, on average children in Germany use the internet less and encounter less risk

than their peers in other European countries, the patterns of social and individual influences on risk and harm are quite the same as in other countries; this means that many of the general recommendations that have been developed on the basis of the European sample also hold for this country.

With regard to specific observations that have been emphasised during the stakeholder meetings in Germany, one aspect is the fact that as a rule parents in Germany overestimate the risk and harm their children experience on the internet. Combined with the low level of digital skills one can conclude that German parents should be encouraged to realise the positive aspects of the internet and to support their children in discovering the opportunities provided by the internet.

Recently the political discourse on safer internet issues in Germany has got an important new platform. In 2010 the Federal Ministry of Families, Seniors, Women, and Youth has initiated a multi-stakeholder-forum called 'Dialogue Internet' (see <http://www.dialog-internet.de/>), which includes expert working groups as well as a broad public discourse using Facebook, StudiVZ, Twitter, and YouTube. The working groups, with representatives of Insafe, internet providers and online companies, organisations for children's rights, youth protection and media education, as well as researchers, deal with a broad spectrum of topics, which goes beyond safer internet issues: a) media literacy, b) participation, c) youth protection, negative content, d) chats and social media, e) data and consumer protection. The EU Kids Online findings are being used in all these groups as an important empirical basis for the discussions.

The current version of the recommendations that have been developed so far includes the following general principles:

- Attention for age-related differences in online use;
- Transparency and visibility of relevant initiatives including a monitoring of on-going projects, networks and initiatives;
- Sustainability of projects;
- Increased networking and collaboration between the different projects;
- Encouragement of peer-to-peer approaches in the fields of media literacy and youth protection.

With regard to concrete measures the strategy of 'white lists' get particular attention in the German debates.

Greece

Greece has been classified as a 'lower use, lower risk' country by the EU Kids Online II findings, where lower levels of internet use among children result in lower exposure to online risks. In this respect, the fact that, overall, few children in Greece report excessive use of the internet (i.e. 5% of them reported having gone without eating or sleeping because of the internet; 12% felt bothered when not being able to get online; 20% caught themselves surfing while not really interested; 8% spent less time than appropriate with either family, friends or doing schoolwork because of the time spent online; and 15% tried unsuccessfully to spend less time online) is no cause for alarm.

Greece is also among those countries with the lowest risk encountered online (along with Turkey, Portugal and Italy), whether that refers to seeing online sexual images (14%), having been sent nasty online messages (4%), seeing or sexting (11%), having contact online with someone not met face-to-face before (20%), gone to meet someone face-to-face that was first met online (6%), encountering potentially harmful user-generated content (19%), or having experienced any kind of misuse of personal data (7%). Following that, the percentage of Greek children that reported feeling at least a bit upset as a result of the above risks is rather small, indicating that for the large majority of them, such online activities are harmless - something to be taken into consideration when planning risk management. Having said that, as often argued by the EU Kids Online network, and following a developmental path, rising levels of internet use are expected to be accompanied by rising levels of opportunities as well as risk, hence children in Greece need to be advised of how best to balance their newfound digital skills without compromising the rest of their activities and life practices. Policy recommendations should, then, be proactive and non-alarmist, in an attempt to ease the hype created by the media and a pervasive fear-ridden public agenda.

The 'low use, low risk' feature is reinforced in the case of broadband penetration, which in Greece is low and coupled with low levels of online risk encounters. At the same time, though, 'low risk' can be the result of parental mediation of children's internet use, which in Greece is highly effective according to both parents and children. As parental use of filtering and blocking has no (statistically) significant effect on the degree of risks, according to the latest EU Kids Online findings, policy making should therefore concentrate on active, rather than restrictive, mediation. Children need to be taught how to develop

resilience and appropriate digital skills (including self-monitoring) and practice caution when online.

Even considerably lower than parental mediation, and with greater disagreement between children and parents, levels of parental monitoring are still significant (51% of children as opposed to 60% of parents report monitoring rules), which may also explain the occurrence of less online risk. Add to this the rather high percentage of teacher's mediation of children's internet use (70%), and the fact that only 4% of Greek children report ignoring what their parents say regarding their internet use, and it transpires that a considerable amount of parental –and adult- mediation of different kinds is being effectively practiced in Greece.

With 52% of children in Greece using the internet in their own bedroom and 66% of them accessing it on their mobiles, we would be right to think that Greek children's internet usage and access is largely done outside the scope of parental –and other adult control. However, this is not the case, as previously discussed. As a result, policy management of risk in the country should concentrate more a) on parents and educators in order to help them become more effective in teaching children digital literacy and self-protection skills, and b) on promoting self-regulatory and co-regulatory management of online practices for children. In fact, as the level of digital skills of children in Greece (a mixture of critical and safety skills) is among the lowest in Europe, policy makers need to prioritize the development of such skills as a matter of urgency.

Italy

Italy presents some distinctive features in terms of access and use that pose particular challenges to policy initiatives aimed at promoting safer internet uses.

On the one hand, Italy is noteworthy in the high proportion of children who access the Internet from their private bedroom without adults' supervision, and the lowest proportion in Europe of school access. On the other side, however, the gap between children's online experiences and parental awareness of what children do online is very high for all the risks investigated in the EU Kids Online. This suggests that, while the home represents the natural context of mediation, schools can be recognized as an appropriate setting for education and awareness of both children and their parents, especially when parents are not themselves internet users. Parents should be encouraged in their active mediation of children's internet

use, insofar as children indicate in peers and parents their most important sources of safety information.

Though internet use is increasing, Italy remains largely a 'low risk' country, as risks estimates for Italian children are among the lowest in Europe. This is not, however, the product of a planned risk reduction strategy: Italian children are less exposed to online risks, compared to children in most European countries, because they engage in fewer online activities and tend to benefit from a smaller range of opportunities. In terms of digital literacy, Italian children are less equipped and lack basic safety skills. Reducing their exposure to risks may therefore result in a persistent digital exclusion. On the other hand, children should be encouraged to look for positive content online, and should be given all the necessary tools to learn how to cope with risks. Again, schools would be the most appropriate context for the delivery of digital literacy skills, and media education need to be a priority of national curricula since primary education.

Hungary

Online risks for children in Hungary has for the last few years been a widely debated topic, often accompanied by moral panic from various stakeholders, including the media.

According to EU Kids Online data, Hungary is considered to be a 'lower use, lower risk' country. The two are not independent from each other, and this implies some clear policy guidelines.

The results reveal that those children who are the most vulnerable on the internet are vulnerable in the offline world as well. This means that the policy focus should move to the training and education of those professionals (teachers, social workers, etc.) dealing with children both in the realm of "traditional" offline and online risks. Differences in parents' readiness, the generally low level of digital literacy, and inadequate knowledge of online risks and threats means that schools are in an influential position. However, in many cases schools and teachers are not prepared to deal with this problem. In this situation the role of civil organizations providing education and training in online safety becomes more important. Fortunately there are some good practices in Hungary, but their activities could be more institutionalized. Teaching of online safety skills should also be part of the regular curriculum.

One in four parents do not use the internet, so a clear skills gap exists between children and parents.

Unfortunately, such children lack parental support and are disadvantaged in other dimensions as well (having parents with low level of education, living in rural areas, etc. At the same time, many of those children whose parents are active Internet users also lack a balanced view on the nature of online risks.

From the parents' point of view therefore, it is of crucial importance to strengthen active approaches to mediation. However, a lack of confidence on the part of parents and insufficient knowledge of online risks results in ignoring the problem or overreliance on restrictive mediation. In this respect, joint efforts of government, content and service provider companies and civil organizations should focus on how to communicate effectively in a straightforward manner about the desirable role parents can play in supporting their children's online activities.

Group 2: 'Lower use, some risk' Countries

Ireland

Children's use of the internet in Ireland falls into that group of countries classified as 'lower use, some risk'. This is despite the fact that a number of findings highlight above average patterns for Irish children: for instance, use of the internet at home (IE 87% vs. EU 62%); mobile internet access (IE 46% vs. EU 31%) and going online via gaming consoles (IE 44% vs. EU 26%). However, fewer children in Ireland access the internet from their own room compared to the European average (IE 37% vs. EU 49%). Daily use of the internet is below the European average and time spent online is 50% below that of the United Kingdom - 61 minutes compared to 99 minutes per day.

Irish children's online activities are fewer in number and at the lower end of the 'ladder of opportunities' highlighting an important area for educators and policy makers to focus on. In terms of risk, children in Ireland are more risk averse than most European countries: just 39% of children on average have experienced one of the risk factors asked about, placing Ireland very much on the lower end of the spectrum for experience of risk. This, combined with the fact that restrictive mediation in Ireland at 91% is actually the highest in Europe, suggests that internet use overall is conservative, and that as online access becomes more pervasive, children and young people may be less prepared and inadequately skilled to deal with the range of activities and risks they may encounter.

From a policy point of view, therefore, a number of priorities emerge, which include:

- A focus on supporting digital literacy initiatives that target both skills development and also encourages the broadening of online internet activities. A number of pilot projects in Irish schools that seek to foster digital creativity should be expanded as part of a national digital literacy initiative. Given the importance of the IT sector in Ireland's economy with many of the world's leading technology firms locating their European headquarters in Ireland, it is essential that infrastructure for education and policies to support maximising information society opportunities for all go to the top of the policy agenda.
- Awareness raising also has to foster better public awareness of digital literacy. In particular, parental awareness and capacity to provide social support in the digital world should be emphasised. As in many other countries, public debate is often informed by sensationalist media reporting. The current high levels of restrictive mediation suggest that parents fill ill-equipped to support young people online. Here, the media, including public service broadcasting, can play a positive role supporting content creation.
- Finally, greater coordination between the various public agencies and non-governmental organisations is required in order to successfully bridge the skills and knowledge gaps revealed in the EU Kids Online survey. The responsibility for promoting media literacy, for instance, currently vested in the broadcast regulator needs to be expanded to encompass the online world. Similarly, educational agencies such as the National Centre for Technology in Education need to be adequately resourced to provide the necessary expertise, infrastructural development and leadership in developing initiatives in an area of strategic national importance.

Portugal

Portuguese children are the leaders of internet access with laptops, which is a direct consequence of national policies providing laptop access for all children. However, they are among those who use internet less frequently and in narrower ways, which can account for the relatively low level of risk reported. In spite of these results, older children in Portugal report excessive use, which may have more to do with anxieties related to the limitation of the internet access than to amount of time itself. These limitations can also explain their use of the internet in public spaces like libraries, twice the European average.

At the level of mediation, children as well as parents seem to be eager to receive more information from teachers

they do at the present. This is particularly important given that in Portugal only about a third of the parents use the internet frequently, restrictive mediation is the most practiced by parents, and that many children use the internet in their bedroom. Teachers' readiness to deal with issues on internet safety and support children and their families is an urgent issue, as well as an investment on children's digital skills: although Portuguese children declare an average level of skills, they show less capacity to use those skills in coping with risks.

This scenario poses challenges for the future, as children will access the internet at younger ages in mostly a mobile way. Besides teachers, other support workers in public access points should be prepared to provide support and promote a more participatory use of the internet, rather than just providing access. Despite the low incidence of risk, children from more disadvantaged households seem to be bothered more by risks they may encounter. This also requires greater attention by adults outside the home to support and enrich their internet use.

Spain

Spain has been categorised as a 'medium use, medium risk' country in EU Kids Online findings. As far as frequency of going online or the age when children first go online are concerned Spanish minors are very close to the European average, even though below 'high use' countries. Nevertheless, time spent online is remarkably lower and the percentage of children who use the internet in their own bedroom is one of the lowest in Europe.

If we consider that 84% of Spanish minors use the internet at home, this fact has an obvious effect for risk prevention policies: parents hold the best position in order to mediate their children's use of the internet. In fact, children's use in a private environment is a challenge for parents' mediation: 42% among minors surveyed stated they used the internet in their own bedroom where parents' supervision is nearly impossible. This is one of the lowest percentages in Europe, where the average is 54% and in some countries (such as Denmark) is nearly 74%. Such difference between Europe and Spain shows that this data can increase in the short term, which underlines the need for promoting communication between parents and their children as a basic requirement for safer use of the internet.

As far as connecting devices are concerned, most minors use two different devices and one of them is mobile. The increase in the use of mobile technologies, which allows young people to surf on their own and makes monitoring

more difficult, emphasizes the need for self-regulatory and/or co-regulatory management of online technologies and providers of services for younger users.

Risk incidence is below the European average for all types considered. Even though this is a positive fact in itself, we must consider that it can be due to the lower use in Spain. Still it is noteworthy that most parents whose children were exposed to some kind of risk did not know this fact.

In short, on the one hand the low risk incidence needs to be qualified by the lower use in Spain regarding other European countries. But on the other hand, a more ambitious policy is still needed in order to raise awareness related to the use of the internet among parents.

Turkey

According to EU Kids Online, Turkey is categorized as a “low use, low risk” country. Moreover, among all European countries, Turkish parents have the lowest levels of internet use and are the least knowledgeable about the Internet. Since many Turkish children are heavily dependent on out-of-home internet access, parents may not be able to regulate their children’s online activities. Compared to other European countries, Turkish children are also the least knowledgeable about safer Internet usage skills. Furthermore, 9-12 year olds register themselves on Facebook as older than they really are in violation of Facebook policy and U.S. law governing the age at which individuals can provide private information about themselves without parental consent. Because of their lack of internet skill and understanding of privacy issues, they generally leave their privacy settings on default values.

Turkish children and their families need educational initiatives to improve internet safety skills as well as digital literacy skills. These initiatives should be provided not only by the government but also by NGOs, the media, and all educational institutions, including universities. Easy to use software tools, instructional materials, and online Web portals for safer internet use must be provided by internet service providers and other organizations at no cost to parents. The Ministry of Education must include essential internet-related content into the curriculum.

Unfortunately, today in Turkey, government efforts have been focused on restricting access to achieve the goal of creating a safer internet. These restrictions are applied through broad, though, disproportionate and arbitrary use of existing legal measures, particularly Turkish Law No. 5651, ‘Regulation of Publications on the Internet and

Suppression of Crimes Committed by Means of Such Publication’. One of the law’s most commonly used methods of limiting access has been through ‘blocking’ of websites deemed inappropriate. At least 14,907 websites have been blocked under the provisions of this law as of August 2011.⁵¹ Such actions definitely are a result of a panic reaction, and the consequences are felt by the entire society. As stated in several EU reports and meetings, government intervention in restricting/censoring the internet is definitely not an appropriate way of providing a safer internet for the citizens. Turkey must develop more democratic solutions to provide a safer online environment for its citizens.

Group 3: ‘Higher use, some risk’ countries

Cyprus

Online technologies have been on the rise in Cyprus only in the last decade. At the same time, policy efforts through schools and online safety organizations have attempted to ensure that children are aware of the dangers and can protect themselves when using the Internet.

The EU Kids Online survey has highlighted the major areas in which policy action is needed in Cyprus. Most children in Cyprus appear to go online on a computer in their own bedroom rather than in a common area where parents can more easily check what they are doing online. More significantly however, EU Kids Online has identified that parents in Cyprus are not aware of what their child may be encountering when online, especially in cases where a child has encountered harmful or disturbing material. Most parents expressed their wish to be more actively involved in what their children are doing on the internet and likewise children in Cyprus mentioned that they’d welcome more parental involvement. Therefore, more child-parent communication should be encouraged either through schools or other safety organizations with access to both target groups.

In addition, the vast majority of Cypriot children have a social networking profile. Even though EU Kids Online showed that most child keep their profile private, they still accept invitations from strangers while at the same time

⁵¹ Gulden Gursay Ataman (2011) ‘How far are freedom of expression and the right to access to information undermined by the restrictions on the Internet in Turkey?’ [online]

displaying abundant information about themselves. Children need to be educated on how to safely use social networking sites and learn how to protect themselves in the cases where they encounter something harmful. EU Kids Online has raised the concern that cyberbullying goes unrecognized by Cypriot parents and that this can have detrimental effects on children. It is important then, that parents get more involved in their children's online activities and learn how to identify and control suspicious behaviors that may occur from exposure to cyberbullying, before it is too late to act.

Noteworthy also is the fact that parents are unaware of children going to meetings with people they have first met online. It is critical, therefore, that all relevant stakeholders, including law enforcement agencies find ways to reach out to parents and help them understand the dangers of such meetings and help them find ways of communicating with their children about their online activities.

Finland

According to EU Kids Online children and young people in Finland use the internet mainly for online games, watching video clips and communicating with each other. Using the internet for schoolwork, on the other hand, is less common than in most other European countries. Finland is one of the countries where internet risks are encountered more often than in other European countries though few children say that they have not been bothered or upset by something on the internet. The most prevalent risk is seeing sexual images on- and offline. At the same time, young people in Finland seem to have more digital skills than any other country in the survey.

According to both parents and children parents are very active in their mediation of internet safety. Interestingly, there are big differences between parents' and children's opinions especially on the question of whether parents monitor the child's internet use. Parents claim to be much more active than children think they are suggestion that discussion about children's internet usage in families is insufficient.

The principal recommendation in Finland is that media education and pedagogical use of ICT should be part of school curriculum. It is important to enhance children's reasonable, positive and productive use of ICT and media. Social support should be strengthened and family interaction should be highlighted. The role of parents in guiding use of the internet and social networking seems to be effective especially among younger children. Therefore

it is important to reinforce parental awareness of internet safety and understanding of internet environments such as social networking that requires new kinds of privacy management. Also, there is a clear need for creative and positive online content appropriate for young children.

The Netherlands

Members of the national team made four main recommendations from the Netherlands:

Online report button: In addition to parents who should be the main contact when children encounter problems online, youngsters might also seek help through the internet, whether or not anonymously. In the Netherlands, such an initiative is the website *Helpwanted*, where young people can report online sexual abuse. Additionally, diverse organizations including the police are developing an online report button for internet problems. It is important that young people can get help offline, as well as online, and do not feel ashamed to be open about harm they experienced online.

Professionalization of digital literacy at schools: The Netherlands already has a high-level ICT infrastructure at schools, but lacks professionalized teachers in ICT. Teachers acknowledge that time spent on digital media literacy is at the expense of time spent on teaching their own subject. In the Netherlands, media literacy is not included in the curriculum and the current policy is not to broaden the core learning objectives at school. Nevertheless, the Netherlands Institute for Curriculum Development (SLO) developed a learning programme about media literacy that schools can voluntarily use. Currently, they are also working on a policy instrument to support schools in implementing this programme. It is important that schools get this support, as they are best positioned to reach all children from different social background and teach them the necessary digital skills from a young age onwards.

Age classification of online content: It might be recommended to develop age labelling for websites aimed at children, similar to television parental guidelines ('Kijkwijzer'-pictograms in the Netherlands) or the international Pan European Game Information (PEGI) for games. Ideally, such an initiative should be co-regulated by government and media parties in a European or international setting. Recently, the Dutch government commissioned a 3-year pilot, called *Mediasmarties*, to provide parents with an overview of online content that is suitable for children of different age categories (between 1 and 11 years old). In this way, the available positive

content for children at the internet becomes more visible to be of use for parents and educators, but also for childcare and schools.

Improving digital literacy skills of parents: Research from Sonck and De Haan (2011) did not find great effects from active parental mediation on reducing online risks and harm with European children.⁵² Not all parents actively mediate children's internet use because they are not aware of possible problems or they lack digital skills. This emphasizes the importance of awareness raising about online risks with parents and improving their digital literacy skills.

Poland

According to EU Kids Online findings Poland is a 'high use, some risk' country, although previously it was in the 'high use, high risk' category. With the exception of seeing sexual images online, Polish children are below the European average for encountering online risks. In terms of children's attitude to the internet, more Polish children believe that the internet is good for them than the numbers who think there are things that may bother them. Polish parents underestimate risks and experiences of harm, however, with above average numbers unaware that their children had been exposed to sexual content online or met online contacts face to face.

These findings demand a wide online safety education initiative for Polish parents, who are not only behind their children in internet use but are below the European average for thinking they should do more for children's safety online. Hence, the main recommendation is to intensify education of Polish parents on (1) how to use the internet safely and (2) how to monitor and mediate children's safety online. Such education should be available for all parents of children and teenagers of school going age. Increasing Polish children's online safety through engaging their parents would seem to be a promising approach as several findings indicate that Polish children are open to parental mediation and advice. Polish children would like more parental interest (while relatively low number of Polish parents think they should do this). Most Polish children take heed of their parents' advice on safe use of the internet; those who have experienced risks mostly rely on parents' support. And

finally, parents' support, not teachers' and peers' support, seems to help Polish children best to cope with the consequences of negative online experience.

Children in Poland moved from the sector of "high risk, high use" to the medium levels of risk prevalence largely due to better digital skills and online experience, as well as widely used antivirus software on children's personal computers at their homes. However, some Polish children (more than on average in EU) are exposed to sexual content online. These children might be better protected if their parents used parental controls blocking inappropriate content and monitoring their children's activity online. Polish parents are very low on technical mediation use and hence it is recommended that they learn how to use technical mediation. It is also recommended that providers of online safety tools increase their efforts to reach parents and increase their interest in use of their products to protect children against online risks.

EU Kids Online has found that in 2010 most Polish children used the Polish SNS "Nasza Klasa". However, with the increasing popularity of Facebook and Twitter together with mobile internet and increasing use of smart phones and iPads, it might be expected that children may encounter new risks and experience harm more often. Polish children may fall back into the category "new use, new risks", because they are not sufficiently resilient or lack the safety skills for SNS use. Users of SNS in Poland are above average in setting their SNS profiles to public, showing their address and phone number, and showing more identifying features. Polish children are above the European average in experimenting with their self-presentation online, but they very rarely show a false age on SNS profile. It can be expected that new SNS opportunities will encourage younger children to experiment more, placing them at greater risk. This new situation bringing requires immediate and intensive education on safe SNS use for Polish children, especially on: (1) What SNS communication and profile settings really mean? (2) How to use SNS? (3) How to protect against unwanted online contacts? (4) What are possible consequences of experimenting with self-presentation in SNS.

The next finding important for the policy implications for Poland is related to children's digital skills and number of the internet activities. Polish children are relatively high on digital skills; higher on digital skills than on activities undertaken online. This finding suggests that Polish children probably do not fully use their digital literacy. One reason is the kind of device the Polish children use to connect to the internet. In most cases it is a personal computer in the privacy of their bedrooms. A relatively low

⁵² Sonck, Nathalie & De Haan, Jos (Oct. 2011). *Children and Internet Risks. EU Kids Online research with 9-16-year old internet users in the Netherlands*, The Hague: The Netherlands Institute for Social Research, SCP-report.

number of Polish children use internet via mobiles, smart phones, iPads or other handheld devices, probably because of their high prices in Poland. To better utilise Polish children's digital skills, greater availability of the internet via mobile devices with a cost reduced for school children and teenagers should be promoted.

In Poland, despite wide circulation of the EU Kids Online II reports to teachers and stakeholders, there was very little response and, it was suspected, very little interest. Polish stakeholders seem to delegate the responsibility for safety of children on the internet to NGOs even though the Safer Internet programme has actually put a lot of effort into making children, parents, teachers, and law enforcement more aware of ways how to protect children against internet risks. Stakeholders should increase their own interest in children's online safety as Poland belongs to those countries that are still at risk of falling into the category of "high use, high risk".

Slovenia

According to EU Kids Online findings Slovenia is a 'high use, some risk' country, although previously it was in the 'high use, high risk' category. Persistent national awareness centre work with many initiatives taken to Slovenian schools and youth clubs might have contributed to this. However, there are some areas that still need immediate attention. Slovenian children start to use the internet at around the age of eight which is amongst the youngest in Europe. Almost three quarters of children use the internet in a daily basis, for about an hour and a half daily. Even though excessive use is below the European average, it still requires some attention, particularly with regard to younger children. Risk areas that remain critical are negative user generated content, exposure to sexually explicit content online and meeting new people online. Slovenian children are above the European average when it comes to experiencing harm online and below average when it comes to coping.

With regards to opportunities the findings show that Slovenian children have amongst the highest number of digital literacy and safety skills in Europe. They also engage in the above average number of online activities. Looking at the ladder of opportunities, almost two thirds of Slovenian children are in the more advanced steps in the "ladder". One third of them are advanced and creative users.

According to EU Kids Online findings, over half of parents practice some form of parental mediation, including talking to their child. However, the parallel Slovenian study

showed that a considerably lower percentage of parents mediate children's media use, including TV and internet (only a quarter) and even a lower share of parents talk to their children about daily internet practices. Similarly, only a quarter of children in this study state that their parents are mediating their internet use. Slovenian parents are also amongst those less confident when using the internet. Therefore, the main policy priorities in Slovenia should be educating parents in competent and effective internet use and mediation, followed by encouragement to communicate about internet use with their children. The findings of this study show that Slovenian parents mostly get skills and digital safety information from traditional media and from children's schools. Preferred sources for this information are mostly from other parents and family but less so from educational institutions such as schools. Looking at the fact that the majority of children get safety information from their parents it would be wise and reasonable to take the following steps:

- To initiate a national campaign, addressing the parent to parent and within-family (as oppose to school to parent, and school to children) digital literacy and safety skills education, with the help of the national awareness centre and similar institutions;
- To encourage parents to talk (as oppose to use blocking and filtering software alone) to their children on a daily bases about their internet use (just as talking about how was in school today, for example);
- To provide effective and targeted awareness tools to younger children, especially those from six years on who are entering the internet arena. Children in this age group find themselves in a digital skills gap due to lack of parental knowledge as well as lack of digital literacy related topics in school syllabi for younger children.

United Kingdom

The UK has seen a considerable amount of multi-stakeholder policy development in recent decades, with landmarks including the Home Secretary's Taskforce for Child Protection on the Internet (2006-8), The Byron Review: Children and New Technology (2008) and the establishment of the UK Council for Child Internet Safety (chaired by Home Office/Department for Education) in 2008. With multiple workstrands, an annual summit for all stakeholders, a strong strategy statement, and an active Evidence Group, the UK has seen concerted progress in this domain. Nonetheless, the EU Kids Online findings reveal that, by comparison with other European countries,

the UK is distinctive in several respects, and from this we may draw out some policy recommendations.

EU Kids Online has categorised the UK as a 'high use, some risk' country, an improvement on previous findings which identified it as 'high use, high risk'. It seems that the above efforts are bearing fruit, with risk estimates for UK children both lower than in several other European countries and also fairly low in absolute terms. This should not be grounds for complacency, however, for it shows the level of effort required to reduce risk exposure among children. The EU Kids Online findings also reveal where new risks are emerging – notably, the UK is among the highest for estimates of excessive internet use, so new efforts are required.

The UK is noteworthy in the very high proportion of children who access the internet at school, making the school a particularly appropriate setting for the delivery of digital literacy skills, including but not only internet safety skills. Since the importance accorded to this task in UK schools, especially primary schools (vital as ever younger children go online) is in some doubt, this should be a priority for all UK schools. It is positive, therefore, that most UK children, more than in many other countries, say their teachers have guided them in internet use.

UK children are more likely than many to go online via a mobile or handheld device, putting them in the vanguard of new risks associated with personal internet access and, equally, making protective oversight by their parents more difficult.

Social networking use in the UK is distinctive insofar as the UK has many 9-12 year olds who put a false age on their (usually Facebook) profile, but most children report having their privacy settings set to 'private'. However, UK children have more online contacts than most, including some that are not known to them face to face.

Levels of parental mediation of children's internet use are fairly high, as for the rest of Europe, with the UK distinctive mainly in that half of children use computers with some filtering software installed. Since this has been a focus of safety promotions, it represents a success for such initiatives, though still half of children do not have such filtering software installed. There are differing views about filtering across Europe, however, with concerns about both government intervention and restrictive software meaning that not all favour this strategy.

In planning for risk management, it must be borne in mind that risk reduction is not always an optimal strategy – children encounter a fair number of risks that, at least as they see it, are not problematic, upsetting or harmful.

Although addressing levels of risk remains important, it is the case that children learn to cope by encountering some degree of risk and, it seems, many do cope successfully – at least if one takes seriously children's accounts of whether online risk results in being upset or harmed. The European study (of which this UK report is part) explores how children cope with online risk, revealing that while a minority are upset by online risks, many benefit from the advice and tools available to them to cope with such upsetting circumstances.

Group 4: 'Higher use, higher risk' countries

Bulgaria

Bulgaria has been classified in the group of countries with higher use and higher risk as well as in the specific category of Eastern European countries called 'new use new risk'. Bulgaria is also the country where regular research in the field is missing. Therefore, it is a challenge for professionals dealing with risk assessment and risk prevention of internet use to formulate policy recommendations.

According to the EU Kids Online research, Bulgarian children are usually found on the top of most of the cross country comparative graphs: 85% of them use the Internet at home and 61% of these users have access in their own room (the average is 49%); Bulgarian children are in 3rd place after Greece and Slovenia in using the Internet via mobile phones; they are top of the list for average daily usage and 83% go online every day (only in Sweden children are 84%). In relation to skills, Bulgarian children are a little above average with 4.7 skills (average 4.2), but the highest in excessive use (44% - only Estonia being before with 50%). Bulgarian children are also those spending the most time per day in the Internet – 120 minutes and although they start to go online at 9 years of age in common with most European children, they learn to do everything in shorter time than the others. They are also those who feel bothered most when they cannot be on the Internet.

This speedy catching-up is alarming when it is not backed-up by the appropriate educational and regulatory environment. At the same time, Bulgarian schools are among the few European schools where computers are not used on regular basis in class rooms and where the broadband Internet is still not wide spread.

Bulgarian children are classified among the "Digital natives" because their parents are those who are very much behind their children in use of the Internet (only 50% of the parents use it regularly). They also feel

strongly that they should do much more. Parental control and mediation is rather low and the awareness of parents of the online activities of their children is the thing that has to be tackled more seriously.

In this context, recommendations for Bulgaria focus on the following four aspects:

- The education system from elementary school up needs to change dramatically. This begins with the education of teachers: all professional teachers should have high computer and internet literacy in order to be able to respond to the needs of children; internet literacy, including internet safety literacy should be a compulsory specialty in teachers' curriculum; furthermore teachers should regularly update their knowledge.
- Internet providers should be obliged to provide information on filtering and other protection software to private users.
- Media should be much more engaged in passing the message of internet safety of children targeting specifically parents.
- Mobile operators should not be allowed to openly advertise openly services that can be risky for children.

Czech Republic

The Czech Republic is one of the countries with very frequent Internet use and – perhaps naturally – with a relatively high incidence of online risks in comparison to other European countries. This represents a challenge for schools, parents and other responsible subjects to balance the present wide variety of opportunities and ensure a safer online environment for children.

Active parental mediation is relatively strong in the Czech Republic in comparison to other European countries, while restrictive parental mediation is relatively weak. Czech parents do not restrict their children too much as far as Internet usage is concerned. However, Czech children often state that their parents limit their internet use too much and children also ignore parental recommendations concerning the internet – 54% of children claimed that they tend to ignore parental mediation in this area (what parents say about the internet). It seems that Czech children demand a lot of freedom in the online world, a fact that could lead to certain risky consequences. Additionally, the Czech Republic is a country with relatively high intergenerational differences in the perception of online risks. Parents often underestimate the risk of the online behaviour of their

children and at the same time Czech children use the Internet very intensively.

Czech stakeholders recommend educating children and also their parents about risks on the Internet. Children should be more educated in schools because they often tend to ignore parental advice. Parents should receive education from different sources; for example Czech mobile operators could help here. Parent-child communication about internet use should be improved, while the causes of current poor communication in this respect are probably low parental awareness and a lack of general knowledge about the issue.

Denmark

Danish children's' uses of online opportunities are characterized by "more of everything" compared to the European average: early access, high frequency of use, long time spent online, access through many platforms. This picture of extensive use is followed by a relatively high percentage of children who encounter one or more of the risks that are defined in the EU Kids survey. This is the typical pattern: more use results in more exposure to potential risk. Only some of the children who meet risks feel somewhat or very bothered and the figures at the national level are so small that it is difficult to say anything when we divide the findings by e.g. age and gender and according to various risk areas, experiences of harm and coping strategies. So, the actual extent of experienced harm at various levels and the coping strategies need to be investigated in more detail.

The extensive online access of young Danes' is mirroring the level of integration of digital media and online activities in the Danish society – at the level of institutions, groups and of the individual person. Denmark has a long tradition of digital communication and hence the vast majority of young Danes do not remember a "pre-internet" time or a time when they had to rely on the stationary phone or even on only accessing the internet outside their homes. In consequence, getting new devices such as smart phones do not revolutionize their everyday life with media but adds to the overall picture of multiple access opportunities and of on-going and instant access and connectivity. In Denmark we also have a long tradition for institutional, public awareness. Compared to some other countries this awareness has not to a very large degree been driven by digital media panic or concerns about the risk and harm aspects of children's online activities even if concerns of course has been raised in specific contexts and by those organisations that specifically deal with children's welfare. A main driving principle has been

information and dissemination of best practice experiences at all levels. In this context it is interesting that Denmark is the top country in terms of how many children find that there are things on the internet that are not good for children their age. The vast majority answered yes to this indicating that they have indeed listened to “campaigns” from parents, schools, the Media Council information material, and perhaps also public debate.

The EU Kids Online data point towards a number of areas of specific interest in a Danish context in terms of specific concerns and of positive indicators of awareness and good practices.

Among the areas of specific concern is the fact that despite the extent of young Danes’ online activities and the level of integration in the Danish society, young Danes according to the EU Kids Online data are “only” placed in the middle area of countries regarding the number of different activities they engage in and, perhaps more notably, the extent of digital literacy skills. Even if we consider that not all skills are practically measurable it is an area that should be investigated further with the goal of improving the average number of skills.

Parents’ perception of their own engagement in their children’s online activities is another area of concern even if it is of course also positive that parents are aware of their own limitations. The majority of Danish children find that it is ok that their parents inform, mediate and advise and do also feel that their parents are competent users. So, parents cannot use the excuse of belonging to the digital immigrant generation for not engaging more in this part of their children’s lives and upbringing. The parental concern of too little investment of time in their children’s online activities probably mirrors the offline situation plus the fact that Danish parents feel very confident with their children’s coping capabilities.

Young Danes are among the top countries when it comes to having profiles on one or more social networking sites, also on those they are actually too young to use (e.g. Facebook). That means many young children have profiles with the consent of their parents. As such this is not a problem but crossed with the fact that Danish children do not seem to worry much about privacy and selectivity regarding social networking activities, it is an area of concern that there may be an open access for negative content and communication, not least for the youngest children.

Another area of concern in common with other countries is the fact that children often engage in online activities that have not been designed for their age group. The

youngest children in the survey are most troubled by and find it more difficult to cope with negative online experiences of all kinds. In some areas older children are more exposed to risks but they are also more capable of “shaking them off”. We need to know more about the specific connections between encountering the various risks, experiencing harm and capability of coping for the younger children and think of specific ways of preventing negative experiences and of giving the young children tools to deal with them when it happens.

A concern in a Danish context – which is probably also shared across Europe – is that we do not reach the most vulnerable children with this survey, as they are not likely to have participated. This also an area where more detailed studies are needed followed by initiatives directed specifically to this group, also with the intention of looking into positive online opportunities especially for this group.

A last example of specific concern is the adaption of new platforms for online activity. The ease with which new platforms and new opportunities are adopted into young Danes’ everyday lives challenges the ways in which online opportunities are experienced and perceived. The data indicate that adding the smart phone to the number of online access technologies means increased exposure to risks in terms of how many and how often risks are encountered. But, we do not know enough about the experience of well-known risks and harms on mobile platforms. We need more research about the adoption of new technologies in terms of opportunities, exposure to risks, experience of harm and for coping strategies.

To sum up, it is obvious that policy initiatives in Denmark must focus on the specific areas of concerns but not least build on and continue the positive notions of awareness, and on the fact that children trust their parents – and teachers – to be experienced and “fair” in terms of advice and mediation.

Estonia

The most important policy recommendations, reinforced by stakeholders in Estonia, concern educational policies. There is an urgent need for teacher training in the area of media education; to implement this, a restructuring of the curriculum of teacher education may be necessary. Media literacy education should be positioned in teachers’ pre-service training in the manner that facilitates making use of the opportunities provided by the new media in two ways – from the perspective of the communication environment of an individual child and as an excellent channel and environment of education. Moreover, online

safety issues should become of paramount importance in computer education.

Given that Estonian children demonstrate high levels of cyberbullying as well as offline bullying, these problems should be treated as a complex issue. Less differentiation between the online world and the offline world is called for in further policy implications. Also, as children seem to be more capable of using self-regulation on the internet than in offline relationships, counselling and teaching should emphasise transferring online coping strategies to offline situations.

Considering that Estonian children start using the internet at a very early age, a high proportion of children attending kindergartens, and relatively low levels of parental mediation and parental awareness of children's online safety issues, kindergartens are to be seen as important institutions for reaching parents for awareness raising activities that should be employed more intensively in the near future.

As creating positive internet content may be a problem for smaller language communities such as Estonia, where the market size sets limits to the diversity and quality of commercial production, public service, NGO and government initiatives are essential for content production and the related fund-raising.

Lithuania

Lithuanian children are very active internet users. 86% of Lithuanian children use the Internet, 72% do it every day, and 76% have their own social profiles. Lithuanian children have good digital skills and they very positively value the internet and its opportunities. On the other hand intensive internet use is associated with different kinds of risks (e.g. online bullying, pornography, meeting online contacts offline and other) and potential harm. There is a need to protect children from these risks and to lessen the possibility of potential harm resulting from encounter with risks.

Safety recommendations can be made in two areas - internet-related and risk-related:

In relation to internet use digital literacy should be raised. Schools could play the main role in education both for children and parents in such subjects as internet safety, online risks, and instrumental management with online risks. Internet providers and media should take an active role in these activities too. As younger children are the most vulnerable and their internet use starts at an early

age internet safety information for parents and children should be provided even at preschool level.

On the other hand, raising awareness should be based not only on emphasizing threats and risks. Lithuanian children value the internet and benefit very positively from its use. It is very important that opportunities and benefits of using the internet are emphasized and children learn to use the internet for educational and self-enhancement purposes. In order to achieve these goals people working in educational field should have sufficient digital literacy and update it regularly.

It is more and more evident that the online world and online communication is related to offline reality. This means that some considerable steps need to be taken not only in relation to the internet but also in relation to overall risks. Educational institutions in their curriculum (e.g. during lectures on ethics), media, governmental institutions and NGO's should pay more attention to such risks as bullying, pornography, violent acts etc., its harm and ways of coping with/avoiding it (both offline and online).

Norway

Norway has a well-established network of stakeholders working in the area of safer internet use. While building on existing work, some new areas should be given particular attention in future awareness-raising efforts. As revealed in the EU Kids Online survey, Norwegian children belong to a high-risk/high use group. Their usage is also increasingly privatized, meaning they use the Internet from their own computer, laptop or smart-phone. Based on the user and risk patterns that can be observed, the following specific recommendations are offered for Norway:

- Focus on digital inclusion in order to secure that the few children that are not afforded online opportunities can do so in the future. It is expected that this will also have a positive effect on risk management and development of coping skills and resilience. This also entails a policy emphasis on the opportunities afforded by the Internet for children when relating to parents and teachers.
- Focus on general safe use issues for young children, including pre-school age.
- Focus on enhancing critical thinking abilities amongst children, teaching them how to critical approach both online content as well as what other users tell them.
- Focus on children's own role and responsibilities as digital users and digital citizens, in particular in areas

where children themselves contribute to risky and potential harmful behaviour – such as bullying and harassing other users online.

- Focus on children's use of harmful user generated services, such as the use of hate sites, self-harm sites, pro-anorexia sites and suicide sites, and the issues associated with this. This should include involvement of health care services in work of national internet safety.
- Focus on excessive use issues, especially by creating information for parents aiding their management of children's time spent online.

Romania

Romania is one of the countries with the most time spent online, also one of the countries where children report the fewest internet skills. Intense use, coupled with low levels of skills, is likely to lead to more risky and harmful experiences online. Not surprisingly, Romanian children report high levels of risk of being bullied online and of sending/receiving sexual messages and, subsequently, report high levels of being bothered and upset after these experiences (children at least a bit upset by the experience). Last, Romanian children aged 11-16 also experience above average data misuse.

In terms of handling bad experiences, Romanian children seem rather ill-equipped: they talk little about their harmful experiences, and they tend to adopt passive attitudes in dealing with these experiences more than other children (hoping the problem will go away by itself, stop using the internet).

Also, their risky experiences go unrecognized by their parents for bullying and sending/receiving sexual messages, while for meeting new online contacts offline, Romanian parents report not knowing if their child has gone to such meetings more than most European parents. Both parents and children express the highest need that the parents take more interest in what children do online in order to ensure their internet safety.

As one of the countries with a high use-high risk profile, Romania requires more intense adequate policy approaches: parental awareness of children's risks online needs to be enhanced, appropriate measures should be taken to increase children's self-protection and self-responsibility online, with an emphasis of children developing more digital skills and more effective coping strategies (preferably integrated into the national educational curriculum), that also stress the importance of social support (children being encouraged to talk more

about their experiences online). Also, safety awareness centres should work towards disseminating information about the most prominent risks and about effective parental controls and mediation strategies, while also making them available in an easily accessible and user-friendly manner.

Sweden

Sweden lacks national directives concerning young people's online safety, making it hard to coordinate research, policy development and the allocation of resources. The EU Kids Online findings in Sweden show that media is one of the parents' primary sources of information. This constitutes a problem because young people's internet use is often portrayed in a sensationalist manner. There is therefore a risk that parents worry more than is called for. Both children and parents in Sweden want more information about internet safety from school. Compulsory school is in fact an arena in which information can reach all children, and via the children also their parents. A national directive could therefore give schools and teacher education the responsibility to educate children in internet security issues.

Findings from EU Kids Online together with an overview of other research on actual cases of internet risks/harm (cf. e.g. Shannon, 2007; Ybarra et al., 2008)⁵³ should be the basis for new guidelines for children, so called Safe Use Guides, and for adults, such as tips on monitoring and restricting children's use. Current guidelines are largely obsolete and are in many cases built on assumptions rather than scientific knowledge.

It is important that education on internet safety focuses on a critical approach in general rather than on specific media. This would increase the chances for children and adults being prepared for a continuously changing media landscape, offline as well as online.

Future research should focus not only on if, and how often, risk occurs but also on the child's subjective

⁵³ Shannon, D. (2007). *Vuxnas sexuella kontakter med barn via Internet* [Adults' sexual contacts with children online]. Stockholm, Sweden: Brottsförebyggande rådet.

Wolak, J., Finkelhor, D., Mitchell, K. J., & Ybarra, M. L. (2008). Online "Predators" and their victims. Myths, realities, and implications for prevention and treatment. *The American Psychologist*, 63, 111–128.

experience. The rich description that is the result of the EU Kids Online project provides a backdrop against which we must now project children's own views.

6. RECOMMENDATIONS FOR POLICY STAKEHOLDERS

In this final chapter, we reformulate recommendations made over the course of this report as recommendations for individual policy stakeholder groups, highlighting actions required in distinct sectors and by specific policy actors including government, industry, parents, educators, awareness-raising, civil society, child welfare and finally children themselves.

Government

- For children who lack convenient broadband access, governments should ensure that digital exclusion does not compound social exclusion.
- It is important that while all should benefit from public information resources, special efforts are made to ensure these reach the disadvantaged or information-poor.
- Especially in countries where children do not 'progress' far up the ladder of opportunities, initiatives to support effective access, broad-ranging use and digital literacy are vital.
- If industry self-regulation is to meet the needs of children and families, it requires a firm steer from government to ensure that it is inclusive, effective and accountable.
- If schools, youth and child welfare services are to raise awareness, provide information and guidance and effectively support children and parents, they require strong encouragement, resources and recognition, especially in some countries.
- In many countries, there is already evidence that stakeholder efforts are bearing fruit; the imperative now is to maintain and extend such efforts to address future challenges.

Industry

- To reduce user confusion and impractical skill burdens, privacy settings, parental controls, safety tools and reporting mechanisms should be age-appropriate if for children and far more usable (whether for children or parents) than at present and/or enabled by default.

- To increase user trust, the management of safety, identity and privacy underpinning services used by children should be transparent, accountable and independently evaluated; while 'safety (or privacy) by design' may obviate the need for user-friendly tools, it makes the need for transparency and redress even more pressing.
- As children gain internet access (and, it seems, increased access to sexual/inappropriate content) via more diverse and personal platforms, ensuring consistent and easy-to-use safety mechanisms on all devices is vital.
- Especially in 'new use, new risk' countries, children are exposed to pornography or other inappropriate content and contact by accident (e.g. popups, inadequate online search processes or weak safety measures) – these need strengthening.

Parents

- As internet use is increasingly private and/or mobile, putting the computer in a public room is no longer inappropriate; rather, they should get online themselves, talk to their child about the internet and even share an online activity with them.
- Those who encounter risk are not necessarily those who experience more harm, so parents should be encouraged to worry less about the former than the latter, where possible guiding their children so that harms are avoided or managed.
- Without undermining parents' trust in their children, parents should be more aware of and more empowered to respond constructively to children's (including teens') rare but sometimes upsetting experiences of harm.
- Parents should be encouraged to make more use of the array of parental controls, though this will require greater availability of easy-to-use, carefully tailored, affordable tools.

Educators

- Since schools are uniquely positioned to reach all children, in a calm learning environment, with up to date technology and resources, they should take a major responsibility for supporting children and their parents in gaining digital literacy and safety skills.
- Such efforts should become established as a core dimension of the curriculum, and initiatives developed at secondary school level should now be extended to primary and even nursery schools.
- Encouraging children to a wider diversity of online activities while teaching critical literacy and safety skills enhances online benefits, digital citizenship and resilience to harm, and so should be encouraged; particular efforts are needed for less privileged and younger children.
- Since children tell a friend followed by a parent but rarely a teacher or other responsible adult when something online upsets them, teachers' relations with children should enable more trust, and they could also harness the potential of peer mentoring.

Awareness-raising

- It is vital to keep listening to children to recognise the changing array of risks they face, to address children's own worries and to support children's ability to cope, whether this involves avoiding, resolving or reporting problems.
- Messages should be matched to different groups – teens may worry about pro-anorexia content, young children can be upset by pornography, those who bully may also be bullied. Reaching the 'hard to reach', while difficult, is a priority given that vulnerable children are particularly susceptible to online harm.
- There is little warrant for exaggerated or panicky fears about children's safety online – what's important is to empower all children while addressing the needs of the minority at significant risk of harm

Civil society

- Much more great (diverse, stimulating, high quality) online content of all kinds is needed, especially for young children and in small language communities; while children's books, films and television programmes are publicly celebrated and supported, far less attention is given to online provision for

children who are, too often, left to find content for themselves.

- Promoting children's online opportunities, including their right to communicate and their need to take some risks is important to counter simplistic calls for restricting children's internet use. The ambition must be, instead, to maximise benefits (as defined by children as well as adults) while reducing harm (which is not necessarily the same as reducing risk).
- A critical lens should be sustained when examining public anxieties, media reporting, industry accountability or new technological developments to ensure that these do not undermine children's interests. Further, critical analysis of regulatory and technological developments should not assume that all users are adults, that parents can and will always meet the 'special needs' of children, or that children's interests are somehow antithetical to the public interest.

Child welfare

- Now that the internet has entered into the array of long-established sources of risk in childhood (including other media, risks in the home or community), online risk should be included in risk assessment processes, recognising that increasingly online and offline are intertwined in a potentially vicious circle.
- Children who are vulnerable offline are especially vulnerable online, as *EU Kids Online* evidence shows; for some children, psychological difficulties or social problems may result in the migration of risk from offline to online settings; this should be recognised by child welfare professionals, youth workers, law enforcement, clinicians etc., and these may require specialist training.
- However, offline vulnerabilities do not fully explain online experiences of harm, and thus child welfare professions should be alert to new risks of harm online that cannot be predicted from what is already known of particular children offline.

Children

- Children generally grasp the ethical codes of courtesy, consideration and care that guide social interaction offline, but they have more to learn – or to be taught – about the importance of such codes online; becoming empowered and responsible digital

citizens will be increasingly important as the internet becomes ever more embedded into daily life.

- Children can be creative, experimental and imaginative online in ways that adults (parents, teachers, others) insufficiently value – wider recognition for children's experiences would support more sophistication in use and build self-efficacy more generally.
- Contrary to popular belief, children do not wish to be always online, but often lack sufficient alternative options – for play, travel, interaction or exploration – in their leisure hours; these too, should be enabled and resourced.

ANNEX 1: THE NETWORK

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ANNEX 2: INTERNATIONAL ADVISORY PANEL

International Advisory Panel

- María José Cantarino, Corporate Responsibility Manager, Telefonica, Spain.
- Kuno Sørensen, Save the Children Denmark, European NGO Alliance on Child Safety Online.
- Prof. David Finkelhor and Janis Wolak, Crimes against Children Research Center, University of New Hampshire, USA.
- Will Gardner, CEO of Childnet International, UK.
- Dr Ellen Helsper, Department of Media and Communications, London School of Economics, UK.
- Amanda Lenhart, Pew Internet & American Life Project.
- Prof Eileen Munro, Department of Social Policy, London School of Economics, UK.
- Annie Mullins, Global Head of Content Standards, Vodafone, UK.
- Kjartan Ólafsson, University of Akureyri, Iceland.
- Janice Richardson, project manager at European Schoolnet, coordinator of Insafe, Brussels, Belgium.
- Agnieszka Wrzesień, Project Coordinator, Polish Safer Internet Node, Nobody's Children Foundation.



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