

Sonia Livingstone, Damian Tambini and Nikola Belakova

Research for CULT Committee - recommendations for EU policy developments on the protection of minors in the digital age: in-depth analysis

Discussion paper [or working paper, etc.]

Original citation:

Livingstone, Sonia and Tambini, Damian and Belakova, Nikola (2018) Research for CULT Committee - recommendations for EU policy developments on the protection of minors in the digital age: in-depth analysis. IP/B/CULT/IC/2017-143. European Parliament, Policy Department for Structural and Cohesion Policies, Brussels, Belgium. ISBN 9789284625796

Originally available from European Parliament- <http://bit.ly/2sfS6tB>

This study was commissioned and managed by the Policy Department for Structural & Cohesion Policies, on behalf of the European Parliament Committee on Culture and Education

This version available at: <http://eprints.lse.ac.uk/90571/>

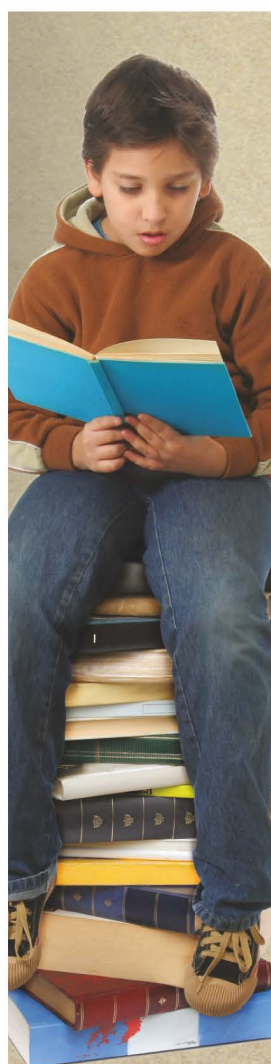
Available in LSE Research Online: November 2018

© 2018 European Union

LSE has developed LSE Research Online so that users may access research output of the School. Copyright © and Moral Rights for the papers on this site are retained by the individual authors and/or other copyright owners. Users may download and/or print one copy of any article(s) in LSE Research Online to facilitate their private study or for non-commercial research. You may not engage in further distribution of the material or use it for any profit-making activities or any commercial gain. You may freely distribute the URL (<http://eprints.lse.ac.uk>) of the LSE Research Online website.

DIRECTORATE-GENERAL FOR INTERNAL POLICIES

POLICY DEPARTMENT
STRUCTURAL AND COHESION POLICIES **B**



Agriculture and Rural Development

Culture and Education

Fisheries

Regional Development

Transport and Tourism

**Research for CULT
Committee - Recommendations
for EU policy developments on
protection of minors in the
digital age**

IN-DEPTH ANALYSIS



DIRECTORATE-GENERAL FOR INTERNAL POLICIES
Policy Department for Structural and Cohesion Policies
CULTURE AND EDUCATION

**Research for CULT Committee -
Recommendations for EU policy
developments on the protection of
minors in the digital age**

IN-DEPTH ANALYSIS

This document was requested by the European Parliament's Committee on Culture and Education.

AUTHORS

London School of Economics and Political Science: Sonia Livingstone, Damian Tambini and Nikola Belakova

Research manager: Katarzyna Iskra

Project and publication assistance: Lyna Pärt

Policy Department for Structural and Cohesion Policies, European Parliament

LINGUISTIC VERSION

Original: EN

ABOUT THE PUBLISHER

To contact the Policy Department or to subscribe to updates on our work for the CULT Committee please write to: Poldep-cohesion@ep.europa.eu

Manuscript completed in February 2018

© European Union, 2018

Print ISBN 978-92-846-2579-6

doi:10.2861/586399

QA-04-18-082-EN-C

PDF ISBN 978-92-846-2580-2

doi:10.2861/311624

QA-04-18-082-EN-N

This document is available on the internet in summary with option to download the full text at: <http://bit.ly/2sfS6tB>

For full text download only:

[http://www.europarl.europa.eu/thinktank/en/document.html?reference=IPOL_IDA\(2018\)617454](http://www.europarl.europa.eu/thinktank/en/document.html?reference=IPOL_IDA(2018)617454)

Further information on research for CULT by the Policy Department is available at:

<https://research4committees.blog/cult/>

Follow us on Twitter: @PolicyCULT

Please use the following reference to cite this study:

Livingstone, S., Tambini, D. and Belakova, N. (2018) *Research for CULT Committee – Recommendations for EU policy developments on protection of minors in the digital age*. Brussels: European Parliament, Policy Department for Structural and Cohesion Policies.

Please use the following reference for in-text citations:

Livingstone, Tambini and Belakova (2018)

DISCLAIMER

The opinions expressed in this document are the sole responsibility of the authors and do not necessarily represent the official position of the European Parliament.

Reproduction and translation for non-commercial purposes is authorised, provided the source is acknowledged and the publisher is given prior notice and sent a copy.

DIRECTORATE-GENERAL FOR INTERNAL POLICIES
Policy Department for Structural and Cohesion Policies
CULTURE AND EDUCATION

**Research for CULT Committee -
Recommendations for EU policy
developments on the protection of
minors in the digital age**

IN-DEPTH ANALYSIS

Abstract

This briefing paper provides information, analysis and recommendations regarding future EU policy developments on the protection of minors in the digital age to support the CULT Committee's deliberations. Focusing on developments since 2012, it identifies recent policy developments at EU level, evaluates existing EU initiatives and instruments, and recommends further action at EU level.

CONTENTS

LIST OF ABBREVIATIONS	4
EXECUTIVE SUMMARY	5
1. INTRODUCTION	7
1.1. Aims	7
1.2. Methodology	8
2. EU Policy Developments Since 2012	9
2.1. EU legal standards	9
2.2. EU policy documents and initiatives	9
2.3. Ongoing EU policy initiatives	9
3. EVALUATION OF EXISTING INITIATIVES AND INSTRUMENTS	11
3.1. General Data Protection Regulation (GDPR)	11
3.2. Audiovisual Media Services Directive (AVMSD)	12
3.3. European Strategy for a Better Internet for Children	14
4. RECOMMENDATIONS	17
4.1. Regulatory mechanisms	17
4.2. Research	18
4.3. User empowerment and media literacy	19
4.4. Enhancing stakeholder coordination and cooperation	19
REFERENCES	21
ANNEX: COUNCIL OF EUROPE AND INTERNATIONAL DEVELOPMENTS	27

LIST OF ABBREVIATIONS

AVMSD Audiovisual Media Services Directive

CoE Council of Europe

CSAM Child sexual abuse material

CULT Culture and Education Committee

EP European Parliament

EU European Union

GDPR General Data Protection Regulation

HSSF [Food] high in sugar, salt and fat

UN United Nations

VOD Video-on-demand

EXECUTIVE SUMMARY

The widespread use of digital technologies is changing the conditions of childhood across the EU and globally. An estimated one in three internet users worldwide is under the age of 18 (Livingstone, Carr and Byrne, 2015). While internet use varies considerably by age, circumstance and country, more children are going online, more frequently, via more devices and services, at an ever younger age, and for more activities – many of them now essential to daily life (Livingstone, Lansdown and Third, 2017; UNICEF, 2017).

Rapid technological development offers extraordinary new opportunities for children in relation to learning and information, entertainment and play, communication and participation (OECD, 2012a). Simultaneously, it poses risks to minors' safety, wellbeing and rights (OECD, 2012b).

The EU strategy for the protection of minors in the digital environment, especially regarding harmful content, conduct and contact, has focused on increasing public awareness (through education programmes), wider development and use of technological solutions and the fight against child sexual abuse online. It has relied heavily on mechanisms of self-regulation, including dispute procedures, voluntary codes of conduct and technical measures, co-regulation and user empowerment.

This briefing paper analyses and evaluates key EU policy developments on the protection of minors in the digital age to support the CULT Committee's deliberations, with the focus on developments since 2012 and future recommendations.

EU policy developments since 2012

- These have prioritised self-regulation, public awareness-raising, development of technological tools and solutions, and the fight against child sexual abuse online.
- The main legal standard introduced since 2012 is the General Data Protection Regulation (GDPR) (2016). The Audiovisual Media Services Directive (AVMSD) is currently undergoing revision. The European Strategy for a Better Internet for Children (2012) coordinates ongoing policy initiatives at European and Member State level.
- The fundamental regime for intermediary liability and the fundamental rights of children is unchanged, although there are ongoing discussions regarding takedown procedures, and an attempt to provide greater clarity to stakeholders (including internet intermediaries) about their responsibilities.
- Council of Europe and international developments are noted in the Annex.

Evaluation of existing initiatives and instruments

- Pressing challenges are identified in relation to each of three intersecting legal and policy instruments, with difficulties centred on the implementation of legislation, the effectiveness of self-regulation and the media literacy of the public.
- There is a lack of clarity about the responsibilities of various categories of service providers. Extension of the AVMSD to video-on-demand (VOD) providers may address some concerns, but other social media platforms continue to benefit from liability exemptions under the E-Commerce Directive.

- There is evidence that parents and children struggle to understand the available options and tools, as well as the risks they face and their responsibilities, in relation to different digital services and to the specific needs of each child.
- Existing initiatives and instruments are evaluated in relation to implementation of the GDPR, revision of the AVMSD and the four pillars of the European Strategy for a Better Internet for Children.

Recommendations

- We recommend that the Strategy for a Better Internet for Children includes the development of a comprehensive Code of Conduct for the converged digital environment that sets minimum standards for providers of services used by children, to replace the historically separate codes applicable to different sectors.
- This Code should be underpinned by strong backstop powers, including independent monitoring and evaluation, a trusted and sufficiently resourced body empowered to ensure compliance and significant sanctions at its disposal as needed. Additionally, EU standards of transparency, accountability, public trust, etc., must be met.
- It should include guidance to intermediaries regarding their responsibilities for child protection in the provision of services intended for and used by children, and clear consumer information and protections if services are not intended for children.
- We recommend the provision of dedicated European funding to ensure pan-EU data collection on a regular basis to ensure robust, up-to-date evidence to guide the development of EU policy on the protection of minors in the digital age.
- We propose that the EU should develop a Recommendation that promotes an integrated approach to media literacy defined broadly to support critical understanding, creative production and participation as well as protective actions and technical skills.
- In order to achieve effective coordination, we recommend that the Commission convene a permanent High Level Group on the protection of minors in the digital age. This would bring together the Code of Conduct to develop and implement new standards for service providers, the Recommendation on media literacy, and encourage Member States to develop more centralised advice on services deemed beneficial for children.
- All these actions must include the meaningful participation of children themselves (as is their right to be consulted) and those relevant experts able to represent children's best interests.

Note

This is the third of three briefing papers, of which the other two focus on evidence and regulatory dilemmas. Our approach combines analysis of legal standards, policy documents and legal and policy instruments with analysis of secondary information from expert studies and surveys.

1. INTRODUCTION

The rights of the child constitute an integral part of fundamental rights that the EU and Member States must respect by virtue of European and international law. The protection of minors online became an EU priority in the 2000s and the EU has now built a complex system of protections based on the *acquis*, Council of Europe and UN standards.¹ Self-regulation has been promoted because it is seen as cheaper, more effective in providing incentives for compliance, and flexible in responding to rapid technological change and in encouraging user empowerment in ways that fit cultural contexts (Katsarova, 2013).

However, there is growing evidence documenting the harmful consequences to children of particular experiences of content, contact or conduct (EU Kids Online, 2014). Several factors make the online risk of harm to minors challenging to address through regulation:

- many of the risks concern highly personal and sensitive matters that makes them difficult to identify, quantify and assess within public policy deliberations;
- complex, converging and fast-changing technologies developed and distributed by a diverse ecology of organisations ranging from global companies to small start-ups integrated within long value-chains (Page, Firth and Rand, 2016);
- the actors involved in achieving a sufficient response are multiple and without clear hierarchies, necessitating coordination among families, educators and businesses;
- the potential benefits and harms may occur across any aspect of children's lives, with consequences varying depending on a child's vulnerability and circumstances.

How should states and other relevant actors meet their responsibilities to protect minors online while also securing their rights to provision and participation (UNICEF, 2017)? Currently, the present approach fails to protect children. However, increased protection might undermine the ability of children to benefit from the opportunities of the digital age (Livingstone et al., 2017). Or it might produce adverse side effects for adult freedoms (Frau-Meigs, 2013) or inhibit social and market innovation.

1.1. Aims

This paper focuses on developments since the European Parliament's CULT Committee report (Costa, 2012), recognising that many of the challenges identified still exist,² and that the important recommendations of the report have been only partially implemented.

This paper has three objectives: (i) to analyse and identify policy developments at EU level; (ii) to provide an overview and evaluation of existing EU initiatives and instruments; and (iii) to recommend further action at EU level.

¹ Notably, the Directive 2011/92/EU on combating the sexual abuse and sexual exploitation of children and child pornography, and the Communication on 'Tackling crime in our digital age: Establishing a European Cybercrime Centre' (COM(2012)0140). For other legal standards up to 2012, see Costa (2012; European Commission, 2017c).

² Challenges include difficulties faced by parents and the education sector to keep up with technological change; delays and a lack of awareness of procedures for removing illegal online content; difficulties in adapting protection to a child's capacities; ineffective measures taken by Member States to prevent illegal content and contact; poor coordination of content classification categories by child age and level of risk; the failure of self-regulatory codes of conduct to meet EU or national requirements regarding transparency, accountability and redress.

1.2. Methodology

Our approach combines analysis of legal standards, policy documents and legal and policy instruments with analysis of secondary information from expert studies and surveys.

2. EU POLICY DEVELOPMENTS SINCE 2012

KEY FINDINGS

- Policy development since 2012 has prioritised self-regulation, public awareness-raising, development of technological tools and solutions, and the fight against child sexual abuse online.
- A crucial legal standard introduced since 2012 is the GDPR (2016). The AVMSD is currently being revised. The European Strategy for a Better Internet for Children (2012) coordinates ongoing policy initiatives at European and Member State level.
- The fundamental regime for intermediary liability and fundamental rights of children is unchanged, although there are ongoing discussions regarding takedown procedures, and an attempt to provide greater clarity to stakeholders (including internet intermediaries) about their responsibilities.
- For relevant international initiatives beyond the EU, see the Annex.

2.1. EU legal standards

- General Data Protection Regulation (GDPR) (2016/679).³
- Charter of Fundamental Rights of the European Union (2016/C202/02).⁴

2.2. EU policy documents and initiatives

- The Alliance to Better Protect Minors Online (European Commission, 2017e), replacing the CEO Coalition (European Commission, 2014).
- The European Commission's Communication on Online Platforms and the Digital Single Market Opportunities and Challenges for Europe (COM/2016/0288 final).⁵

2.3. Ongoing EU policy initiatives

- European Commission proposal (COM(2016)287)⁶ to revise the AVMSD 'in the light of changing market realities' (and regulatory failures: European Parliament, 2016).
- European Strategy for a Better Internet for Children (COM(2012)196 final; European Commission, 2012a), coordinated by the Safer Internet programme (evaluated in 2016; European Commission, 2016d), then by Better Internet for Kids (BIK) within the Digital Single Market Strategy for Europe (COM/2015/0192 final).⁷
- 'EU Human Rights Guidelines on Freedom of Expression Online and Offline' (Council of the European Union, 2014).⁸

³ See <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32016R0679>

⁴ See <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:12016P/TXT>

⁵ See <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52016DC0288>

⁶ See http://eur-lex.europa.eu/procedure/EN/2016_151

⁷ See <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A52015DC0192>.

⁸ This states that the EU will promote awareness-raising, media and internet literacy and internet safety for children and young people 'in the context of programmes of education and training on human rights' (para. 66).

3. EVALUATION OF EXISTING INITIATIVES AND INSTRUMENTS

KEY FINDINGS

- There is ongoing lack of clarity about the responsibilities of various categories of service providers, and the lack of a level playing field. Extension of the AVMSD to VOD providers may address some concerns, but other social media platforms continue to benefit from liability exemptions under the E-Commerce Directive.
- There is evidence that parents and children struggle to understand the available options and tools, as well as the risks they face and their responsibilities, in relation to different digital services and in relation to the specific needs of each child.
- Existing initiatives and instruments are evaluated in relation to implementation of the GDPR, the ongoing revision of the AVMSD, and the four pillars of the European Strategy for a Better Internet for Children.
- Pressing challenges are identified in relation to each of these three main (albeit intersecting) legal and policy instruments, with particular difficulties centred on the implementation of legislation, the effectiveness of self-regulation and the media literacy of the general public.

To evaluate the present system of protection of minors in the digital environment, we ask whether it is adequate or how it should be developed, bearing in mind that a series of changes are underway. While recognising that the various current and ongoing initiatives are interconnected, we organise our evaluation in terms of three main areas of policy (General Data Protection Regulation, Audiovisual Media Services Directive and European Strategy for a Better Internet for Children).

3.1. General Data Protection Regulation (GDPR)

To be transposed into national law by 25/5/18, the GDPR replaces the legal regime established by the EU Data Protection Directive (1995), which made no mention of children. It includes several provisions aimed at enhancing the protection of children's personal data online, including the so-called 'right to be forgotten' (Article 17 and Recital 65), and a stated age at which a child can consent to have their data processed by online service providers (Article 8) with the requirement of verifiable parental consent below that age. It obliges service providers to use a clear and plain language that children can easily understand in all information society services that require personal data processing (Article 12 and Recital 58).

There remain questions regarding the practicalities of interpretation, implementation, compliance and enforcement (LSE, 2018). For example, the implications of differing ages of consent for children to use information society services (Article 8) across Europe is unclear when children move across borders, and in terms of applicable jurisdiction when the provider is in a different country from the child. There is uncertainty over when consent should be the legitimate base for data processing, the practical effectiveness of and need for age verification, the extent to which risk impact assessments are required, whether and

when children's data can be profiled (Recital 71), and the practicalities of ensuring users understand terms and conditions and of gaining verifiable parental consent. Also unclear is whether Data Protection Authorities will have sufficient capacity to enforce the regulation.

Some research points to the scale of the challenge to be addressed. In the UK in 2017, only 38% of UK parents of 5-15s whose child has a profile on Facebook or Facebook Messenger knew that 13 is the minimum age requirement; awareness of the minimum age was lower among parents whose child used Instagram (21%), Snapchat (15%) or WhatsApp (7%) (Ofcom, 2017). UK research with youth juries (Coleman *et al.*, 2016) shows many children lack the ability to understand their rights regarding how their data are used by internet services and platforms, and when it was clearly explained to them how their data might be used, children felt exploited (House of Lords, 2017; Children's Commissioner, 2017).

Although the GDPR concerns privacy and data protection, the nature of its provisions and the likely associated consequences of its implementation have implications for child safety more widely. This is because the age of child consent to use information society services is being raised in many Member States. Also the requirement to explain services to older children and to gain the consent of parents for younger children may lead to improved services and greater media literacy. Further, the GDPR requires that providers conduct a risk assessment and take action to protect users of their services, including children.

The situation is ever changing, and as more devices for the home, including children's toys and clothes, include cameras, voice recording and become internet-enabled, there is increased concern about the misuse or abuse of children's data (e.g. Croll, 2016; House of Lords, 2017). It is hoped but not established that the GDPR is reasonably future-proofed.

3.2. Audiovisual Media Services Directive (AVMSD)

The current Commission proposal (COM/2016/0287 final) includes revision of content and advertising rules applicable to traditional TV broadcasting and VOD services and video-sharing platforms to ensure more efficient protection of minors online, and recognition of the importance of co-regulation at Member State level (European Commission, 2016c). This replaces the 'graduated' approach which subjects on demand services to lighter regulation with a single unified standard for the obligations of linear and non-linear audiovisual media services providers regarding content that might impair the physical, mental or moral development of minors for all providers.

Article 28a requires platforms to provide tools for users to report and flag harmful content, age verification, parental control systems and feedback mechanisms. National audiovisual regulators will have the power to enforce the rules and, depending on national legislation, impose fines. There is uncertainty about whether the proposals should be extended to social media and video-sharing platforms, or whether they will be effective. Advocates of child protection and adult freedom of expression may argue contrary positions.

It is unclear whether providers are aware of their responsibilities or how consistently they apply technological tools to help parents protect their children (e.g. content information, pins, scheduling, etc.). ERGA (2017) found that traditional linear TV stations as well as VOD service providers (often large companies with established brands) have implemented a range of protection measures even without a legal obligation. However, given the lag in public awareness and underdeveloped relationship with regulators, newer and smaller providers find it more difficult. Protection tools can 'become ineffective when the services are distributed over certain platforms or received and consumed on certain devices.'

Overall, providers of audiovisual content are subject to little auditing and transparency is often lacking in the measures they take to protect minors online (e.g. automated measures such as filters etc.). Also problematic is that the technological tools on different devices are complex and inconsistent, undermining user/parental awareness and literacy.⁹

Research documents the current challenge and possible solutions, for example, finding that online marketing to children and young people is widespread and that marketing techniques, for example, in online games provided by the big brands, are not always transparent to children.¹⁰ Lupiáñez-Villanueva et al. (2016) concluded that 'self-regulation does not necessarily guarantee sufficient protection of children online and across Europe children do not receive an equal level of protection.' The study found that the most popular games contained few protective measures but that, if provided, could be beneficial.¹¹

Also important is the question of retaining and indeed, strengthening, media literacy (European Commission, 2018a) in the revised AVMSD.¹² This would create scope for sharing best practices and giving incentives to Member States to improve provision to children, parents and the public. ERGA (2015b), among others, recommend further promotion of media literacy (including digital, critical and information literacies). There remains ambiguity and contestation over the scope, funding and evaluation of media literacy and associated media education and digital citizenship initiatives.¹³

The most recent EU-wide survey of students and teachers' digital competence and attitudes towards ICTs in education was in 2011 (European Schoolnet, 2013; Wastiau et al., 2013). Research into media literacy levels among children and the effectiveness of media education is also lacking. A 2014 EMEDUS report on formal media education in Europe (Hartai, 2014) concluded that 'we have absolutely no research and fact-based knowledge about the work that is being done in European classrooms.' A 2017 review revealed

⁹ ERGA (2017) concludes that, while existing cross-border and cross-media initiatives provide useful common guidelines for media providers, a lack of standardisation between the parties involved may result in 'confusion amongst consumers and could leave gaps in how protection measures are implemented.' ERGA recommend wider cooperation among stakeholders in the converged media value chain (not just broadcasters and VOD services providers) and work to promote common understanding about the available measures.

¹⁰ The UK communications regulator Ofcom (2017) finds that newer forms of advertising online are difficult for children to identify. While 60% of 12- to 15-year-olds are aware of personalised online advertising and that vloggers may be paid to endorse products or brands, they find it difficult to identify such adverts in practice, particularly on online: 'around half of 12-15s who use search engines understand that Google gets its revenue from companies paying to advertise on the site, [but] less than half correctly identify sponsored links on Google as advertising, despite these being distinguished by a box with the word 'ad' in it, and around a quarter of 8-11s and 12-15s believe that Google provides some kind of authenticating role.'

¹¹ 'Protective measures based on conscious cognition, such as a warning message ... [had] an effect in reducing the amounts children spent on in-app purchases, but had no effect in reducing the behavioral impact of advertisements in online games. Protective measures aimed at breaking the flow of the game, such as adding a distractive task, were found to be effective in reducing the amounts children spent on in-app purchases.'

¹² The AVMSD defined media literacy (Recital 47) and asserted that it should be promoted through continuing education of teachers and trainers, internet training for children and national campaigns aimed at citizens. It obliged the Commission to assess media literacy levels in all Member States when reporting on implementation of the Directive (Article 33). The revised AVMSD omitted mention of media literacy, but, following the decision of the CULT Committee, it was reinstated. The outcome now depends on current inter-institutional dialogue negotiations.

¹³ DG CONNECT (re-)established the Media Literacy Expert Group (European Commission, 2018b) that adopted this working definition: 'Media literacy includes all technical, cognitive, social, civic and creative capacities that allow a citizen to access the media, to have a critical understanding of the media and to interact with it. All these capacities allow the citizen to participate in the economic, social and cultural aspects of society as well as to play an active role in the democratic process. We understand the concept of "media" also in broad way: including all kind of media (broadcasting, radio, press) and through all kind of channels (traditional, internet, social media).'

sporadic media education across Europe, with challenges in provision and implementation unresolved (Frau-Meigs, Velez and Flores Michel, 2017).¹⁴

As new issues continue to arise (e.g. the need for critical information literacy given the rise of disinformation and 'fake news'), the need for media literacy is likely to grow.¹⁵

3.3. European Strategy for a Better Internet for Children

The Strategy brings together a number of important actions for the Commission working with Member States under the rubric of four main 'pillars':¹⁶

- Pillar 1: High-quality content online for children and young people, including stimulating the production of creative and educational online content for children and promoting positive online experiences for young children.
- Pillar 2: Stepping up awareness and empowerment, including digital and media literacy and teaching online safety in schools, scaling up awareness activities and youth participation, and simple and robust reporting tools for users.
- Pillar 3: Creating a safe environment for children online, including age-appropriate privacy settings, wider availability and use of parental controls, wider use of age rating and content classification, codes for online advertising and overspending.
- Pillar 4: Fighting against child sexual abuse and child sexual exploitation, including faster and systematic identification of child sexual abuse material disseminated online, notification and takedown of this material and international cooperation.

Pillar 1 is largely outside the remit of the present analysis, but we believe that the more and better high-quality content is online for children, the less they may stumble upon or look for or be vulnerable to potentially harmful content or conduct. For this reason, an approach that encompasses children's positive rights to provision and participation as well as protection will be more successful as well as more beneficial to children.

In terms of children's awareness and empowerment (pillar 2), the above discussion of media literacy and media education is pertinent. Provision for parents requires urgent attention, integrating awareness-raising activities and parental tools. A survey of parents in eight EU countries conducted for the EC (at the instigation of the European Parliament, 2012) found that parents 'perceived stricter regulation of businesses and more education for children on online risks as the most effective protective measures.' Parents accept their

¹⁴ DG Connect's 2nd Survey of Schools: ICT in Education (SMART 2015/0071) is now surveying pupils, headteachers, parents and education ministries about current provision and future needs across the EU28. However, it is focusing on the provision of hardware and connectivity rather than on media literacy or e-safety.

¹⁵ See European Parliament (2017) and European Commission (2018c).

¹⁶ BIK coordinates the Safer Internet Centres (European Commission, 2012b) encompassing national awareness centres, child helplines (within the INSAFE network) (see Dinh *et al.*, 2016, for a recent evaluation), hotlines for reporting illegal online material (within the INHOPE network) and youth panels. The Commission has supported self-regulatory initiatives such as the Safer Mobile Framework, the Safer Social Networking Principles for the EU (https://ec.europa.eu/digital-single-market/sites/digital-agenda/files/sn_principles.pdf) and the CEO Coalition to make the internet a better place for kids (https://ec.europa.eu/digital-single-market/sites/digital-agenda/files/ceo_coalition_statement.pdf). For the implementation report, see Technopolis (2014). For the history, see www.betterinternetforkids.eu/web/portal/policy/better-internet/policy-roadmap. The self-regulatory dimension of the Strategy is now coordinated by the Alliance to Better Protect Minors Online, established in 2017 (European Commission, 2016a). This is being independently evaluated (SMART 2017/0063).

own responsibility for protecting their children (Lupiáñez-Villanueva et al., 2016),¹⁷ but want parental pre-approval mechanisms built into the games their children play online.¹⁸

Recent comparative data across Europe is sparse, although 2014 data from seven countries suggested variable levels of parental mediation and little benefit from parental use of filtering tools (EU Kids Online, 2014). This may be because, as a 2017 benchmarking exercise on parental control tools concluded (Vulcano, Angeletti and Croll, 2016), no major improvements of these tools have been made in recent years.¹⁹

The strategy also seeks to empower children to respond constructively and to build their resilience. In 2010 and 2014 European cross-national research (EU Kids Online, 2014) shows uneven incidence of both risk and digital skills depending on the country and age of child.²⁰ There remain considerable gaps in children's knowledge, especially for younger and more vulnerable children (EU Kids Online, 2014).

In an effort to create a safe environment for children online (pillar 3), the Commission's Digital Single Market Strategy comprises an analysis of the role of online platforms in the market. In its 2016 Communication on Online Platforms and the Digital Single Market Opportunities and Challenges for Europe,²¹ the Commission proposes to 'maintain the existing intermediary liability regime while implementing a sectorial, problem-driven approach to regulation.' Specifically, 'with its proposal for an updated Audiovisual Media Services Directive to be presented alongside this Communication, the Commission will propose that video sharing platforms put in place measures to protect minors from harmful content and to protect everyone from incitement to hatred.'

While such actions are welcome, they place considerable burden on providers to self-regulate in a transparent and effective manner. It will be vital that the Commission does indeed 'explore the need for guidance on the liability of online platforms when putting in place voluntary, good-faith measures to fight illegal content online' and 'regularly review the effectiveness and comprehensiveness of such voluntary efforts with a view to determining the possible need for additional measures and to ensure that the exercise of users' fundamental rights is not limited.' Given rising doubts about the effectiveness of self-regulation, this strategy raises some concerns.²²

¹⁷ Parents 'were most concerned about their children being exposed to violent images and about being bullied online, but they were also fairly concerned about their children being exposed to data tracking, digital identity theft and advertisements for unhealthy lifestyles.'

¹⁸ Parents do not always consider they have adequate access to appropriate end-user tools. Ofcom's (2017) research found almost all UK parents mediate their child's internet use, variously employing technical tools, regularly talking to their children about staying safe online, supervising their child, and using rules about access and behaviour online. Following industry action (initiated by UK government), end-user filters were used by 40% of parents with broadband access, but their effectiveness is in doubt as 20% of parents of 5- to 15-year-olds who use filters, and a similar proportion of 12- to 15-year-olds, believed it is easy to bypass them.

¹⁹ The exercise revealed issues with configuration of the tools, which are often complex, requiring specific skills and ability. The effectiveness of these tools in filtering harmful content while allowing non-harmful content is low, especially for tools used on mobile phones (by comparison with on a PC), and they can be easily uninstalled or bypassed. While 'adult' content is better filtered than other content categories, user-generated content is poorly filtered. The tools are less effective with languages other than English and the choice of tools is limited for other European languages. The mobile tools offer limited functionalities regarding restriction and monitoring.

²⁰ UK research (Ofcom, 2017) found that most internet users aged 8-15 have been told by parents or teachers how to use the internet safely (see also Ofsted, 2015). A majority can take technical measures to keep themselves safe: almost 70% of 12- to 15-year-olds said they can block messages on social media (half had done this); almost half said they knew how to change their social media profile's visibility settings (a third had done this).

²¹ See <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52016DC0288>

²² In light of recent scandals about potentially harmful content on YouTube (e.g. Levin, 2017), an intense discussion is occurring internationally about the responsibilities of service providers and the role of states.

A Commission Staff Working Document on the mid-term review of the Digital Single Market (European Commission, 2017a) found that divergent and sometimes contradictory interpretations at national level of the regime on liability exemptions in the E-Commerce Directive, despite clarification provided by the Court of Justice. The resulting legal uncertainty might prevent online platforms from taking proactive voluntary measures insofar as these liability exemptions are unavailable to service providers that play an active role regarding illegal third party content that they transmit or host.²³

The fight against child sexual abuse material (CSAM) and child sexual exploitation online (pillar 4) involves a close cooperation among law enforcement, business and states. The Commission's Communication 'tackling illegal content online, towards enhanced responsibility of online platforms' (COM(2017)555 final) concerns the removal of illegal content online – incitement to terrorism, illegal hate speech or CSAM, as well as infringements of Intellectual Property rights and consumer protection online. Categories of content that can be considered illegal in the context of child protection (including harassment, grooming and deliberate exposure of harmful content) vary widely among Member States.

According to INHOPE (2017), the number of public reports has increased and average response times 'have improved incrementally as technology and reporting processes have become more efficient, resulting in CSAM being removed from the internet faster than ever.' In 2016, 74% of CSAM reported to the INHOPE network was removed within three days of the report, an improvement on 60% in 2011 and 58% in 2012 but a reduction from 80% in 2013 and 91% in 2015 (INHOPE, 2014, 2015). However, the draft implementation report to the European Parliament (Corazza Bildt, 2017) is critical of the Commission's evaluation of INHOPE's processes and effectiveness.²⁴ The INHOPE network is currently being independently evaluated (SMART 2017/0066).

The Code of Conduct on countering illegal hate speech online by the Commission with Facebook, Microsoft, Twitter and Google should be noted (European Commission *et al.*, 2016) as its first year saw notable progress, according to the Commission's evaluation (European Commission, 2017b), with challenges remaining.²⁵ While not concerned with children, this indicates what codes can achieve and is pertinent to current deliberations over moderation, transparency and blocking on YouTube (Wojcicki, 2017).

²³ In the public consultation on online platforms (Husovec and Leenes, 2016), some platforms expressed concern that taking proactive voluntary measures would prevent them from benefiting from the liability exemption, as they might no longer be considered as neutral, passive and technical. Civil rights associations, consumers, human rights experts, international organisations and national authorities have expressed concerns about the lack of transparency and public accountability around online platforms' procedures for removal of illegal or harmful content (European Commission, 2017a). The report adds that the public consultation showed that 'the majority of respondents demanded either clarification of existing or the introduction of new safe harbours, as the liability exemptions of the E-commerce Directive are known. The most commented safe harbour was that for hosting service providers (Article 14), in particular in relation to the concept of "passive and neutral role". When asked specifically about this concept, many respondents complained above all about the divergent interpretations at national level. Several respondents wanted clarification by means of soft-law measures such as recommendations issued by the Commission.' This public consultation on online platforms documents support for a differentiated approach to notice-and-action procedures, establishment of counter-notice mechanisms and the percentage of intermediaries/providers introducing voluntary proactive measures to remove certain categories of illegal content.

²⁴ Relatedly, the ERGA report on material jurisdiction in a converged environment (2015a) found that 'some models of taking "effective action" to remove or restrict access to illegal content, such as notice and takedown regimes, have generally proved effective. Others, such as deep packet inspection, have been considered too restrictive.' Common guidelines to ensure consistent application of procedures for 'notice and takedown' (i.e., removal or blocking) of CSAM are thus needed.

²⁵ On average, in 59% of cases, IT companies responded to notifications by removing the content, double the level recorded six months earlier. It was found that IT companies 'have strengthened their reporting systems and made it easier to report hate speech. They have trained their staff and they have increased their cooperation with civil society. The implementation of the Code of Conduct has strengthened and enlarged the IT companies' network of trusted flaggers throughout Europe'. However, the practices and quality of feedback to users on how their notifications have been assessed varied considerably, marking as an area for improvement handling times and better results in terms of reactions to the notifications.'

4. RECOMMENDATIONS

KEY FINDINGS

- We recommend that the Strategy for a Better Internet for Children includes the development of a comprehensive Code of Conduct for the converged digital environment that sets minimum standards for providers of services used by children, to replace the historically separate codes applicable to different sectors.
- This Code should be underpinned by strong backstop powers, including independent monitoring and evaluation, a trusted and sufficiently resourced body empowered to ensure compliance and significant sanctions at its disposal as needed. Additionally, EU standards of transparency, accountability, public trust, etc., must be met.
- It should include guidance to intermediaries regarding their responsibilities for child protection in provision of services intended for and used by children, and clear consumer information and protections if services are not intended for children.
- We recommend the provision of dedicated European funding to ensure pan-EU data collection on a regular basis to ensure robust, up-to-date evidence to guide the development of EU policy on the protection of minors in the digital age.
- We propose that the EU should develop a Recommendation that promotes an integrated approach to media literacy defined broadly to support critical understanding, creative production and participation as well as protective actions and technical skills.
- In order to achieve effective coordination, we recommend that the Commission should convene a permanent High Level Group on the protection of minors in the digital age. This would bring together the Code of Conduct to develop and implement new standards for service providers, the Recommendation on media literacy, and encourage Member States to develop more centralised advice on services deemed beneficial for children.
- All these actions must include the meaningful participation of children themselves (as is their right to be consulted) and those relevant experts able to represent children's best interests.

4.1. Regulatory mechanisms

We recommend that the Strategy for a Better Internet for Children includes the development of a comprehensive Code of Conduct for the converged digital environment that sets minimum standards for providers of services used by children, to replace the historically separate codes applicable to different sectors. These should be embedded in services, ideally from the moment of design (e.g. safety by design and privacy by design, child-friendly language, strong default privacy settings, age-appropriate services, etc.). The child's best interests should be a paramount guiding principle.

This Code should be underpinned by strong backstop powers, including independent monitoring and evaluation, and a trusted and sufficiently resourced body empowered to ensure compliance and significant sanctions at its disposal as needed. Additionally, EU standards of transparency, accountability, public trust, etc., must be met.

To ensure the Code is effective, failure to comply with the minimum standards should result in a graduated response that would include triggering liability risk under consumer protection law. High levels of compliance with the Code should result in inclusion in a 'Kitemark' list of sites and services recommended to children, and included in media literacy materials delivered by schools and provided to parents. Failure to comply with age verification, filtering and takedown standards etc. should result in loss of 'whitelist' status.

To ensure the Code has legitimacy, strong links to civil society independent of national governments and EU institutions will be vital. Wireless filter standards and other blacklists should be opened to enable expert groups from educators and parents' groups to provide input on which services are to be blocked on the model of 'trusted flaggers' for hate speech. This should include social network services that fail to operate effective self-regulatory and child protection mechanisms.

There is a need for a review of notice and takedown policies (European Commission, 2017d) to establish standards and a clear cost-benefit procedure for their operation:

- For child sexual abuse material, takedown should aim to disrupt and undermine business models for illegal content; for other categories of illegal content, takedown urgency should be commensurate with harm.
- Internet intermediaries including social media and video-sharing platforms should be guided on the full range of content and conduct harmful to children, including harassment and cyberbullying content.

These should be underpinned by a triennial review at EC level and a permanent High Level Group established to monitor and review its operation (including by independent testing). If it is not working, hosts and network providers should not benefit from safe harbour provisions of the E-Commerce Directive.²⁶

4.2. Research

To inform, update and evaluate the functioning of the emerging complex regulatory system,²⁷ and to guide policy for the protection of minors online, present glaring EU-wide evidence gaps must be overcome:²⁸

²⁶ The principles and safeguards that govern the exchange of personal data between the US and the EU and, by agreement, permit providers to enjoy protection from liability regarding the content they carry.

²⁷ In the past decade, Eurobarometer surveys have not researched EU children (Eurobarometer, 2007) or parents (Flash Eurobarometer, 2008) regarding online safety. The last pan-European investigation into children's internet use (EU Kids Online, 2014; Livingstone *et al.*, 2011), funded by EC Safer Internet, was in 2011 (with a partial update in EU Kids Online, 2014). A new survey is in progress, but it lacks the funding to cover all Member States.

²⁸ This would likely be most sustainably provided by the Connecting Europe Facility (see <https://ec.europa.eu/inea/en/connecting-europe-facility>).

- European funding should be dedicated to rigorous, cross-nationally comparative and regularly updated research on children, parents and educators' understanding of children's experiences, concerns, practices, rights, responsibilities and vulnerabilities as digital services users, taking into consideration the child's age, ethnic and socio-economic background, among other key factors.
- The established data collection instruments of the EU should include the topic of child online protection (e.g. European Social Survey) and periodic funds should be provided to analyse the results to inform policy development and implementation.

4.3. User empowerment and media literacy

Recognising that Member States are responsible for their own education systems, and that the EU can guide in setting joint goals and sharing good practices, we propose that the EU should provide a Recommendation that promotes an integrated approach to media literacy defined broadly to support critical understanding, creative production and participation as well as protective actions and technical skills.

This should encompass schools (from nursery years on), adult and informal educational institutions, public service broadcasters and other national media companies, national cultural and information institutions (libraries, museums, etc.), teacher training institutions, the major social media platforms (even if only voluntary), and relevant third sector organisations. This breadth of approach is vital if all children are to be reached throughout their development and, adults (especially parents) are also to be reached.

Additionally, the scope of media literacy must be reviewed as necessary to embrace new problems as they arise (current issues include fake news and misinformation, body image and self-esteem, data and privacy literacy; and critical analysis of commercial persuasion techniques). Whether or not it is integrated with media literacy education, it is also vital that sex and relationships education is integrated into school provision from a young age; without this it is doubtful that children will be empowered to understand the sexual nature of many online risks or to seek appropriate help.

Efforts to support and enhance the general public's levels of media literacy should be undertaken by all relevant public, privacy and third sector actors engaged in the protection of minors online. Media literacy should therefore be promoted through all relevant EU policies, including the implementation of the GDPR, AVMSD and BIK programme. Efforts should be especially targeted towards enhancing media literacy among children, parents, educators and the children's workforce. The reporting obligation on Member States in the AVMSD is a crucial mechanism whereby the above can be evaluated and implementation ensured, and so should be retained with appropriate follow-up action taken as needed.

Given the threats to sustainable, high-quality public service broadcasting content for children, efforts to ensure positive content for children are recommended, and this could be provided partially (though not only) online to reach young users who favour new platforms.

4.4. Enhancing stakeholder coordination and cooperation

It is recommended that EU policy promotes and sustains coordination and cooperation at the level of international and EU institutions, and within each Member State among relevant public, private and third sector stakeholders, and all relevant ministries. It is crucial that there is integration across a policy landscape, as currently efforts tend to be segregated (and sometimes mutually contradictory) across linear, non-linear and online media, content

and conduit services, privacy and data protection, advertising, positive content provision, educational resources, digital and media literacy education and awareness-raising.

Coordination and cooperation should include the active participation of children themselves (as is their right to be consulted) and those relevant experts able to represent children's best interests. It should also be inclusive, transparent, accountable, timely, independently evaluated and evidence-based.

This will require expert direction and leadership from a trusted organisation at both European and Member State levels. It should also be public-facing, with a single and well-publicised point of contact to reach and support the public.

In order to achieve effective coordination, we recommend that the Commission convene a permanent High Level Group on the protection of minors in the digital age. This would bring together the Code of Conduct to develop and implement new standards for service providers, the Recommendation on media literacy, and encourage Member States to develop more centralised advice on services deemed beneficial for children.

REFERENCES

- Children's Commissioner (2017) *Growing up digital: A report of the growing up digital taskforce*. London: Children's Commissioner for England, pp. 1–24. Available at: www.childrenscommissioner.gov.uk/wp-content/uploads/2017/06/Growing-Up-Digital-Taskforce-Report-January-2017_0.pdf (Accessed: 2 January 2018).
- Coleman, S., Pothong, K., Perez Vellejos, E. and Koene, A. (2016) *The internet on trial: How children and young people deliberated about their digital rights*. Nottingham: Horizon Digital Economy Research, pp. 1–30. Available at: <http://casma.wp.horizon.ac.uk/wp-content/uploads/2016/08/Draft-Internet-on-Trial-iRights-youth-juries-resport.pdf> (Accessed: 25 January 2018).
- Corazza Bildt, A.M. (2017) *Draft report on the implementation of Directive 2011/93/EU of the European Parliament and of the Council of 13 December 2011 on combating the sexual abuse and sexual exploitation of children and child pornography (2015/2129 (INI))*. Brussels: European Parliament Committee on Civil Liberties, Justice and Home Affairs, pp. 1–11. Available at: www.europarl.europa.eu/sides/getDoc.do?type=COMPARL&reference=PE-607.796&format=PDF&language=EN&secondRef=01 (Accessed: 3 January 2018).
- Costa, S. (2012) *Report on protecting children in the digital world (A7-0353/2012). 2012/2068(INI)*. Brussels: European Parliament Committee on Culture and Education, pp. 1–24. Available at: www.europarl.europa.eu/sides/getDoc.do?pubRef=-//EP//TEXT+REPORT+A7-2012-0353+0+DOC+XML+V0//EN (Accessed: 3 January 2018).
- Council of the European Union (2014) *EU Human Rights Guidelines on Freedom of Expression Online and Offline*. Foreign Affairs Council Meeting, Brussels, 12 May. Available at: www.consilium.europa.eu/uedocs/cms_data/docs/pressdata/EN/foraff/142549.pdf (Accessed: 5 February 2018).
- Council of Europe (2012) *Protection of children against sexual exploitation and sexual abuse*. Available at: www.coe.int/t/dg3/children/1in5/Source/Lanzarote%20Convention_EN.pdf (Accessed: 5 February 2018).
- Council of Europe (2017a) 1st Implementation Report (https://search.coe.int/cm/Pages/result_details.aspx?ObjectId=090000168075e9f8) (Accessed 5 February 2018).
- Council of Europe (2017b) *Internet literacy handbook*. Available at: <https://edoc.coe.int/en/internet/7515-internet-literacy-handbook.html> (Accessed 5 February 2018).
- Croll, J. (2016) *Let's play it safe: Children and youths in the digital world*. Available at: www.ictcoalition.eu/gallery/100/REPORT_WEB.pdf (Accessed: 5 February 2018).
- Dinh, T., Farrugia, L., O'Neill, B., Vandoninck, S. and Velicu, A. (2016) *INSAFE Helplines: Operations, effectiveness and emerging issues for internet safety helplines*. European Schoolnet, EU Kids Online and Kaspersky. Available at: www.lse.ac.uk/media@lse/research/EUKidsOnline/EUKidsIV/PDF/Helpline-insafe-report.pdf (Accessed: 5 February 2018).

- ERGA (European Regulators Group for Audiovisual Media Services) (2015a) *ERGA report on material jurisdiction in a converged environment*. Brussels, pp. 1–65. Available at: <https://ec.europa.eu/digital-single-market/en/news/erga-report-material-jurisdiction-converged-environment> (Accessed: 3 January 2018).
- ERGA (2017) *Protection of minors in the Audiovisual Media Services: Trends & practices*. Brussels, pp. 1–77. Available at: <http://erga-online.eu/wp-content/uploads/2016/10/ERGA-PoM-Report-2017-wordpress.pdf> (Accessed: 2 January 2018).
- EU Kids Online (2014) *EU Kids Online: Findings, methods, recommendations*. London: London School of Economics and Political Science, pp. 1–45. Available at: <https://lsedesignunit.com/EUKidsOnline/html5/index.html?page=1&noflash#> (Accessed: 3 January 2018).
- Eurobarometer (2007) *Safer internet for children: Qualitative study in 29 European countries*. European Commission, pp. 1–77. Available at: <http://ec.europa.eu/commfrontoffice/publicopinion/index.cfm/Survey/getSurveyDetail/search/children/surveyKy/654> (Accessed: 25 January 2018).
- European Commission (2012a) *European Strategy for a Better Internet for Children, Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions*. Available at: <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2012:0196:FIN:EN:PDF> (Accessed: 5 February 2018).
- European Commission (2012b) 'Safer Internet Centres.' Policies. Available at: <https://ec.europa.eu/digital-single-market/en/safer-internet-centres> (Accessed: 5 February 2018).
- European Commission (2014) 'Better Internet for Kids: CEO Coalition 1 year on.' News article, 10 February. Available at: <https://ec.europa.eu/digital-single-market/en/news/better-internet-kids-ceo-coalition-1-year> (Accessed: 5 February 2018).
- European Commission *et al.* (2016) 'Code of conduct on countering illegal hate speech online'. Available at: http://ec.europa.eu/justice/fundamental-rights/files/hate_speech_code_of_conduct_en.pdf (Accessed: 25 January 2018).
- European Commission (2016a) 'Commission to broker a new Alliance to better protect minors online', *Digital Single Market*. Available at: <https://ec.europa.eu/digital-single-market/en/news/commission-broker-new-alliance-better-protect-minors-online> (Accessed: 25 January 2018).
- European Commission (2016b) 'Commission updates EU audiovisual rules and presents targeted approach to online platforms.' Press release. Available at: http://europa.eu/rapid/press-release_IP-16-1873_en.htm (Accessed: 25 January 2018).
- European Commission (2016c) 'Proposal for a Directive of the European Parliament and of the Council amending Directive 2010/13/EU on the coordination of certain provisions laid down by law, regulation or administrative action in Member States concerning the provision of audiovisual media services in view of changing market realities (COM/2016/0287 final)'. Available at: <http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1464618463840&uri=COM:2016:287:FIN> (Accessed: 25 January 2018).

- European Commission (2016d) *Final evaluation of the multi-annual EU programme on protecting children using the Internet and other communication technologies (Safer Internet). Report from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions*. Available at: <https://ec.europa.eu/transparency/regdoc/rep/1/2016/EN/1-2016-364-EN-F1-1.PDF> (Accessed: 5 February 2018).
- European Commission (2017a) *Commission staff working document accompanying the document Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of Regions on the Mid-Term Review on the implementation of the Digital Single Market Strategy A Connected Digital Single Market for All*. Brussels: European Commission, pp. 1–90. Available at: <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=SWD:2017:155:FIN> (Accessed: 3 January 2018).
- European Commission (2017b) *Countering online hate speech – Commission initiative with social media platforms and civil society shows progress*. Available at: http://europa.eu/rapid/press-release_IP-17-1471_en.htm (Accessed: 25 January 2018).
- European Commission (2017c) *EU acquis and policy documents on the rights of the child (JUST.C2/MT-TC)*. Updated October 2017. Brussels: European Commission, Directorate-General Justice and Consumers, pp. 1–104. Available at: http://ec.europa.eu/newsroom/document.cfm?doc_id=40297 (Accessed: 3 January 2018).
- European Commission (2017d) *Tackling illegal content online: Towards an enhanced responsibility of online platforms. Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of Regions*. Available at: <https://ec.europa.eu/transparency/regdoc/rep/1/2017/EN/COM-2017-555-F1-EN-MAIN-PART-1.PDF> (Accessed: 5 February 2018).
- European Commission (2017e) *Alliance to better protect minors online. Policies*. Available at: <https://ec.europa.eu/digital-single-market/en/alliance-better-protect-minors-online> (Accessed: 5 February 2018).
- European Commission (2018a) *Media literacy, Digital Single Market*. Available at: <https://ec.europa.eu/digital-single-market/en/media-literacy> (Accessed: 25 January 2018).
- European Commission (2018b) *Media literacy expert group, Register of Commission expert groups and other similar entities*. Available at: <http://ec.europa.eu/transparency/regexpert/index.cfm?do=groupDetail.groupDetail&groupID=2541> (Accessed: 25 January 2018).
- European Commission (2018c) *Commission appoints members of the High Level Expert Group on Fake news and online disinformation. News article, 12 January*. Available at: <https://ec.europa.eu/digital-single-market/en/news/commission-appoints-members-high-level-expert-group-fake-news-and-online-disinformation> (Accessed: 5 February 2018).
- European Parliament (2012) *Strengthening the rights of vulnerable consumers*. Available at: www.europarl.europa.eu/sides/getDoc.do?type=TA&reference=P7-TA-2012-0209&language=EN&ring=A7-2012-0155 (Accessed: 5 February 2018).

- European Parliament (2016) *The Audiovisual Media Services Directive. Briefing*. Available at: www.europarl.europa.eu/RegData/etudes/BRIE/2016/583859/EPRS_BRI%282016%29_583859_EN.pdf (Accessed: 5 February 2018).
- European Parliament (2017) 'Fighting fake news: Transparency, responsibility and internet literacy needed.' Press release, 23 November. Available at: www.europarl.europa.eu/news/en/press-room/20171123IPR88715/fighting-fake-news-transparency-responsibility-and-internet-literacy-needed (Accessed 5 February 2018).
- European Schoolnet (2013) *Survey of schools: ICT in education*. Luxembourg: Publications Office of the European Union. Available at: <https://ec.europa.eu/digital-single-market/sites/digital-agenda/files/KK-31-13-401-EN-N.pdf> (Accessed: 25 January 2018).
- Flash Eurobarometer (2008) *Towards a safer use of the Internet for children in the EU – A parents' perspective*. Brussels, pp. 1–17. Available at: <http://ec.europa.eu/commfrontoffice/publicopinion/index.cfm/Survey/getSurveyDetail/search/children/surveyKy/733> (Accessed: 25 January 2018).
- Frau-Meigs, D. (2013) *Exploring the evolving mediascape: Towards updating strategies to face challenges and seize opportunities*. UNESCO/SWIS Report 2013. Paris: UNESCO, pp. 1–80. Available at: www.unesco.org/new/fileadmin/MULTIMEDIA/HQ/CI/CI/pdf/wsis/WSIS_10_Event/exploring_the_evolution_of_the_mediascape_Report_final_version_DFM.pdf (Accessed: 3 January 2018).
- Frau-Meigs, D., Velez, I. and Flores Michel, J. (eds) (2017) *Public policies in media and information literacy in Europe: Cross-country comparisons*. Abingdon, Oxon: Routledge. Available at: www.routledge.com/Public-Policies-in-Media-and-Information-Literacy-in-Europe-Cross-Country/Frau-Meigs-Velez-Flores-Michel/p/book/9781138644373 (Accessed: 25 January 2018).
- Hartai, L. (2014) *Report on formal media education in Europe*. European Media Literacy Education Study, pp. 1–176. Available at: <https://eavi.eu/wp-content/uploads/2017/02/Media-Education-in-European-Schools-2.pdf> (Accessed: 3 January 2018).
- House of Lords (2017) *Growing up with the internet*. HL 2016-17 (130). London: House of Lords. Available at: <https://publications.parliament.uk/pa/ld201617/ldselect/ldcomuni/130/13002.htm> (Accessed: 21 December 2017).
- Husovec, M. and Leenes, R. (2016) *Study on the role of online intermediaries: Summary of the public consultation – Final report*. Luxembourg: Publications Office of the European Union. Available at: <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32016R0679> (Accessed: 2 January 2018).
- INHOPE (2014) *INHOPE annual report 2013-2014*. Amsterdam: International Association of Internet Hotlines, pp. 1–23. Available at: www.inhope.org/Libraries/Annual_reports/Annual_report_2016.sflb.ashx (Accessed: 3 January 2018).
- INHOPE (2015) *INHOPE annual report 2015*. Amsterdam: International Association of Internet Hotlines, pp. 1–11. Available at: www.inhope.org/Libraries/Annual_reports/Annual_report_2016.sflb.ashx (Accessed: 3 January 2018).

- INHOPE (2017) *INHOPE annual report 2016*. Amsterdam: International Association of Internet Hotlines, pp. 1–21. Available at: www.inhope.org/Libraries/Annual_reports/Annual_report_2016.sflb.ashx (Accessed: 3 January 2018).
- Katsarova, I. (2013) *Protection of minors in the media environment: EU regulatory mechanisms*. Library of the European Parliament. Available at: [www.europarl.europa.eu/thinktank/en/document.html?reference=LDM_BRI\(2013\)1304_62](http://www.europarl.europa.eu/thinktank/en/document.html?reference=LDM_BRI(2013)1304_62) (Accessed: 2 January 2018).
- Levin, S. (2017) 'Google to hire thousands of moderators after outcry over YouTube abuse videos.' *The Guardian*, 5 December. Available at: www.theguardian.com/technology/2017/dec/04/google-youtube-hire-moderators-child-abuse-videos (Accessed: 25 January 2018).
- Livingstone, S., Carr, J. and Byrne, J. (2015) *One in three: Internet governance and children's rights*. Paper series No. 22. London: CIGI and Chatham House. Available at: www.cigionline.org/sites/default/files/no22_2.pdf (Accessed: 3 January 2018).
- Livingstone, S., Lansdown, G. and Third, A. (2017) *The case for a UNCRC General Comment on children's rights and digital media*. London: Children's Commissioner for England, pp. 1–63. Available at: www.childrenscommissioner.gov.uk/wp-content/uploads/2017/06/Case-for-general-comment-on-digital-media.pdf (Accessed: 2 January 2018).
- Livingstone, S., Haddon, L., Görzig, A., Ólafsson, K. et al. (2011) *Final report: EU Kids Online II*. London: London School of Economics and Political Science, pp. 1–56. Available at: [www.lse.ac.uk/media@lse/research/EUKidsOnline/EU%20Kids%20II%20\(2009-11\)/EUKidsOnlineIIRReports/Final%20report.pdf](http://www.lse.ac.uk/media@lse/research/EUKidsOnline/EU%20Kids%20II%20(2009-11)/EUKidsOnlineIIRReports/Final%20report.pdf) (Accessed: 3 January 2018).
- LSE (London School of Economics and Political Science) (2018) 'What does the European General Data Protection Regulation mean for children in the UK? Report on LSE Media Policy Project roundtable.' Available at: <http://blogs.lse.ac.uk/mediapolicyproject/files/2018/01/GDPR-Roundtable-LSE-final-pdf.pdf> (Accessed: 5 February 2018).
- Lupiáñez-Villanueva, F. et al. (2016) *Study on the impact of marketing through social media, online games and mobile applications on children's behaviour: Final report*. Brussels: European Commission, pp. 1–412. Available at: http://ec.europa.eu/consumers/consumer_evidence/behavioural_research/docs/final_report_impact_marketing_children_final_version_approved_en.pdf (Accessed: 25 January 2018).
- O'Neill, B. (2014) *First report on the implementation of the ICT principles*. Available at: www.ictcoalition.eu/gallery/75/ICT_REPORT_Final.pdf (Accessed: 5 February 2018).
- OECD (Organisation for Economic Co-operation and Development) (2012a) *Connected minds. Technology and today's learners*. Paris: OECD Publishing. doi:10.1787/9789264111011-en
- OECD (2012b) *The protection of children online: Recommendation of the OECD Council. Report on risks faced by children online and policies to protect them*. Paris: OECD Council, pp. 1–109. Available at: www.oecd.org/sti/ieconomy/childrenonline_with_cover.pdf (Accessed: 2 January 2018).

- Ofcom (2017) *Children and parents: Media use and attitudes report 2017*. London: Ofcom, pp. 1–306. Available at: www.ofcom.org.uk/research-and-data/media-literacy-research/childrens/children-parents-2017 (Accessed: 3 January 2018).
- Ofsted (2015) 'Child Internet Safety summit: Online safety and inspection.' 2 July. Available at: www.slideshare.net/Ofstednews/childinternetsafetysummitonlinesafetyinspection (Accessed: 25 January 2018).
- Page, M., Firth, C. and Rand, C. (2016) *The internet value chain: A study on the economics of the internet*. London: GSMA. Available at: www.gsma.com/publicpolicy/wp-content/uploads/2016/05/GSMA-The-internet-Value-Chain-WEb.pdf (Accessed: 25 January 2018).
- Technopolis (2014) *Benchmarking of safer internet policies in Member States and policy indicators*. Final report, November. Available at: www.technopolis-group.com/wp-content/uploads/2015/03/1786-Benchmarking-Safer-Internet-Policies.pdf (Accessed: 5 February 2018).
- UN (Internet Governance Forum) (2014) *The charter of human rights and principles for the internet*. Available at: www.ohchr.org/Documents/Issues/Opinion/Communications/InternetPrinciplesAndRightsCoalition.pdf (Accessed: 5 February 2018).
- UNICEF (2015) *Releasing children's potential and minimizing risks: ICTs, the Internet and violence against children*. Available at: http://srsq.violenceagainstchildren.org/sites/default/files/publications_final/icts/releasing_children_potential_and_minimizing_risks_icts_the_internet_and_violence_against_children.pdf (Accessed: 5 February 2018).
- UNICEF (2017) *Children in a digital world*. New York: UNICEF, pp. 1–215. Available at: www.unicef.org/publications/index_101992.html (Accessed: 3 January 2018).
- Vulcano, A., Angeletti, R. and Croll, C. (2016) *SIP-BENCH III – Benchmarking of parental control tools for the online protection of children: Executive summary*. Luxembourg: Publications Office of the European Union.
- Wastiau, P., Blamire, R., Kearney, C., Quittre, V., van de Gaer, E. and Monseur, C. (2013) 'The use of ICT in education: A survey of schools in Europe.' *European Journal of Education*, 48(1), 11–27.
- Wojcicki, S. (2017) 'Expanding our work against abuse of our platform.' Official YouTube Blog, 4 December. Available at: <https://youtube.googleblog.com/2017/12/expanding-our-work-against-abuse-of-our.html> (Accessed: 2 January 2018).

ANNEX: COUNCIL OF EUROPE AND INTERNATIONAL DEVELOPMENTS

Developments since 2012 relevant to the protection of minors in the digital age are noted below, in reverse date order:

Council of Europe

- Convention on the *Protection of children against sexual exploitation and sexual abuse*, CETS no. 201 (Council of Europe, 2012; 'Lanzarote').
- Strategy for the Rights of the Child (2016-20) ([CM\(2015\)175 final](#); [Council of Europe, 2017a](#)), in which the digital environment is a priority, with guidelines for Member States in development).
- Internet Governance Strategy (2016-19) (CM(2016)10 final).²⁹
- *Internet Literacy Handbook* (Council of Europe, 2017b).

International developments

- International Telecommunications Union (ITU) *Guidelines on child online protection* (2016), see <https://www.itu.int/en/cop/Pages/guidelines.aspx>
- UN (Special Rapporteur on the sale of children, child prostitution and child pornography) *Report on information and communication technologies and the sale and sexual exploitation of children* (2015), see http://ap.ohchr.org/documents/dpage_e.aspx?si=A/HRC/28/56
- UN (Office of the Special Representative of the Secretary-General on Violence against Children) *Releasing children's potential and minimizing risks: ICTs, the internet and violence against children* (UNICEF, 2015).
- UN (Internet Governance Forum, 2014) *The charter of human rights and principles for the internet*.
- The WeProtect Global Alliance (2013) for national and global action to end the sexual exploitation of children online.³⁰
- UN (Committee on the Rights of the Child) General comment no. 16 (2013) on State obligations regarding the impact of the business sector on children's rights, CRC/C/GC/16.³¹ This is manifest in a range of ongoing UNICEF-supported initiatives and guidance.³²
- The ICT Coalition (industry self-regulation, Europe) (2012),³³ evaluated in O'Neill (2014).

²⁹ See https://search.coe.int/cm/Pages/result_details.aspx?ObjectId=09000016805c1b60

³⁰ See www.weprotect.org/

³¹ See http://tbinternet.ohchr.org/_layouts/treatybodyexternal/TBSearch.aspx?TreatyID=5&DocTypeID=11

³² For example, www.unicef.org/corporate_partners/index_92014.html and www.unicef.org/csr/paper-series.html

³³ See www.ictcoalition.eu/

DIRECTORATE-GENERAL FOR INTERNAL POLICIES

POLICY DEPARTMENT **B** STRUCTURAL AND COHESION POLICIES

Role

The Policy Departments are research units that provide specialised advice to committees, inter-parliamentary delegations and other parliamentary bodies.

Policy Areas

- Agriculture and Rural Development
- Culture and Education
- Fisheries
- Regional Development
- Transport and Tourism

Documents

Visit the European Parliament website:

<http://www.europarl.europa.eu/supporting-analyses>

PHOTO CREDIT: iStock International Inc., Photodisk, Phovoir



ISBN 978-92-846-2579-6 (paper)
ISBN 978-92-846-2580-2 (pdf)

doi:10.2861/586399 (paper)
doi:10.2861/311624 (pdf)