

# Executive Summary

- The internet and video games are very popular with children and young people and offer a range of opportunities for fun, learning and development.
- But there are concerns over potentially inappropriate material, which range from content (e.g. violence) through to contact and conduct of children in the digital world.
- Debates and research in this area can be highly polarised and charged with emotion.
- Having considered the evidence I believe we need to move from a discussion about the media ‘causing’ harm to one which focuses on children and young people, what they bring to technology and how we can use our understanding of how they develop to empower them to manage risks and make the digital world safer.
- There is a generational digital divide which means that parents do not necessarily feel equipped to help their children in this space – which can lead to fear and a sense of helplessness. This can be compounded by a risk-averse culture where we are inclined to keep our children ‘indoors’ despite their developmental needs to socialise and take risks.
- While children are confident with the technology, they are still developing critical evaluation skills and need our help to make wise decisions.
- In relation to the internet we need a shared culture of responsibility with families, industry, government and others in the public and third sectors all playing their part to reduce the availability of potentially harmful material, restrict access to it by children and to increase children’s resilience.
- I propose that we seek to achieve gains in these three areas by having a national strategy for child internet safety which involves better self-regulation and better provision of information and education for children and families.
- In relation to video games, we need to improve on the systems already in place to help parents restrict children’s access to games which are not suitable for their age.
- I propose that we seek to do that by reforming the classification system and pooling the efforts of the games industry, retailers, advertisers, console manufacturers and online gaming providers to raise awareness of what is in games and enable better enforcement.
- Children and young people need to be empowered to keep themselves safe – this isn’t just about a top-down approach. Children will be children – pushing boundaries and taking risks. At a public swimming pool we have gates, put up signs, have lifeguards and shallow ends, but we also teach children how to swim.

## Key Arguments and Recommendations

### *Context, evidence and a child-centred approach*

1. Technology offers extraordinary opportunities for all of society including children and young people. The internet allows for global exploration which can also bring risks, often paralleling the offline world. Video gaming offers a range of exciting interactive experiences for children, however some of these are designed for adults. There is a generational digital divide between parents and children which means that many parents do not feel empowered to manage risks in the digital world in the same way that they do in the 'real' world.
2. New media are often met by public concern about their impact on society and anxiety and polarisation of the debate can lead to emotive calls for action. Indeed, children's use of the internet and video games has been seen by some as directly linked to violent and destructive behaviour in the young. There are also concerns about excessive use of these technologies by children at the expense of other activities and family interaction. As we increasingly keep our children at home because of fears for their safety outside – in what some see as a 'risk-averse culture' – they will play out their developmental drives to socialize and take risks in the digital world.
3. I have sought to put the child at the centre of this Review, both in terms of process and in the way that I have surveyed the evidence on the potential effects of the internet and video games on our children. The research debate on 'media effects', especially in relation to violent content in video games, is highly divided. On the internet, the technology and how children use it moves so fast that it is difficult for research to keep up. Of course, the harmful nature of illegal contact with children online is clear and this is being addressed by the work of Child Exploitation and Online Protection Centre (CEOP). But my remit has been to look at the grey areas – of legal, adult material such as 18 rated video games, and the risks to children online from a huge range of potentially harmful or inappropriate (but legal) content, contact with others and their own conduct. Chapter 1 explores some of context around this debate and sets out how I have approached defining the boundaries of this very broad remit.
4. The voices of children, young people and parents and the evidence of harm in relation to the internet and video games are discussed in detail in Chapters 3 and 6 respectively. Overall I have found that a search for direct cause and effect in this area is often too simplistic, not least because it would in many cases be unethical to do the necessary research. However, mixed research evidence on the actual harm from video games and use of the internet does not mean that the risks do not exist. To help us measure and manage those risks we need to focus on what the child brings to the technology and use our understanding of children's development to inform an approach that is based on the 'probability of risk' in different circumstances.
5. We need to take into account children's individual strengths and vulnerabilities, because the factors that can discriminate a 'beneficial' from a 'harmful' experience online and in video games will often be individual factors in the child. The very same content can be useful to a child at a certain point in their life and development and may be equally damaging to another child. That means focusing on the child, what we know about how children's brains develop, how they learn and how they change as they grow up. This is not

straightforward – while we can try to categorise children by age and gender there are vast individual differences that will impact on a child’s experience when gaming or online, especially the wider context in which they have developed and in which they experience the technology. In Chapter 2 I discuss these influences in detail.

6. Despite this diversity, evidence from the child development and brain development literature indicates that age-related factors and understanding the ways in which children learn can provide a very useful guide to identifying and managing potential risks to children when using the internet or playing video games. This is particularly because of the development of a key part of the brain throughout childhood – the frontal cortex, which mediates their experience and behaviour. This evidence helps us understand why age classifications on games matter. It also helps us appreciate ways in which children’s experience of the internet can present risks. We can use these findings to help us navigate a practical and sensible approach to helping our children manage risks. This is no different to how we think about managing risk for children in the offline world, where decreasing supervision and monitoring occurs with age as we judge our children to be increasing in their competence to identify and manage risks. So, when we teach our children to cross the road safely we do it in stages:
  - We hold their hand when they cross the road.
  - We teach them to think, look both ways and then cross.
  - When we see that they are starting to understand this we let them cross walking beside us, without holding on to them.
  - Eventually we let them do it alone, maybe watching from a distance at first, but then unsupervised.
  - And throughout this, the environment supports them with signs and expected behaviour from others in the community – the green man, zebra crossings, speed limits and other responsible adults.
7. Going online and playing video games may be more complex and diverse than crossing the road, but it illustrates that we should change the nature of our approach and interventions in the digital world with children’s growing competencies and changing vulnerabilities.

## The Internet (Chapters 3-5)

### *The evidence*

8. I have approached classification of the online risks to children in terms of content, contact and conduct in line with a model developed by the EU Kids Online project (Hasenbrink, Livingstone, et al, 2007), which reflects the changing nature of how the internet is used (so called ‘Web 2.0’). Findings from the evidence set out in Chapter 3 show that the potential risks online are closely correlated with potential benefits. Data is beginning to reveal risks to young people in terms of increased exposure to sexually inappropriate content, contributions to negative beliefs and attitudes, stranger danger, cyberbullying and access to inappropriate content from sites which may promote harmful behaviours. Moreover, there are issues relating to commercial content and contact with young people.

9. What is clear is that while internet risks can reflect ‘offline’ concerns (e.g. bullying) the problems can be qualitatively different and sometimes have the potential to be more damaging. This is due to the nature of the internet, with its anonymity, ubiquity and communication potential. Research is beginning to reveal that people act differently on the internet and can alter their moral code, in part because of the lack of gate-keepers and the absence in some cases of the visual cues from others that we all use to moderate our interactions with each other. This is potentially more complex for children and young people who are still trying to establish the social rules of the offline world and lack the critical evaluation skills to either be able to interpret incoming information or make appropriate judgements about how to behave online.

### Three strategic objectives for child safety on the internet

10. The internet is a vast many-to-many network which allows users to communicate freely with others all over the world – ideas can be spread quickly, cheaply and freely. One consequence of this is that there is no obvious single point at which editorial control can be exercised. This means that it is very difficult for national Governments to reduce the availability of harmful and inappropriate material. However, the majority of material accessed by internet users is hosted on a relatively small number of highly popular sites, the rest of it occupying a ‘long tail’ of less popular material. This means that we should focus our efforts on reducing the *availability* of harmful and inappropriate material in the most popular part of the internet.
11. Parents also have a key role to play in managing children’s *access* to such material. There is a range of technical tools that can help parents do this (eg. safe search), but they only work effectively if users understand them. So restricting children’s *access* to harmful and inappropriate material is not just a question of what industry can do to protect children (e.g. by developing better parental control software), but also of what parents can do to protect children (e.g. by setting up parental control software properly) and what children can do to protect themselves (e.g. by not giving out their contact details online).
12. Just like in the offline world, no amount of effort to reduce potential risks to children will eliminate those risks completely. We cannot make the internet completely safe. Because of this, we must also build children’s *resilience* to the material to which they may be exposed so that they have the confidence and skills to navigate these new media waters more safely.
13. Through the right combination of successes against these three objectives – reducing availability, restricting access and increasing resilience to harmful and inappropriate material online – we *can* adequately manage the risks to children online. A number of efforts are already being made in pursuit of these objectives, and the strengths and weaknesses of these are explored in Chapter 3. But we need a more strategic approach if industry, families, government and others in the public and third sectors are going to work effectively together to help keep children safe.

14. To deliver these reforms are needed in the structures of how government, industry and others engage on 'e-safety'. I am recommending:
- **A UK Council on Child Internet Safety, established by and reporting to the Prime Minister.**
  - **That this Council should lead the development of a strategy with two core elements: better regulation – in the form, wherever possible, of voluntary codes of practice that industry can sign up to – and better information and education, where the role of government, law enforcement, schools and children's services will be key.**
  - **That the Home Office and DCSF should chair the Council, with the roles of other Government departments, especially DCMS, properly reflected in working arrangements.**
  - **That the Council should have a properly resourced cross-government secretariat to secure a joined-up Government approach to children and young peoples' safety online.**
  - **That the Council should appoint an advisory group, with expertise in technology and child development, should listen to the voices of children, young people and parents and should have a sustained and rolling research programme to inform delivery.**
15. Sometimes questions have been raised over how, or if, the criminal law applies to particular types of harmful and inappropriate material, and thus whether there is a role for law enforcement in the response. In areas such as websites that promote suicide, or where serious cyber-bullying occurs, there is some confusion about how offline laws and enforcement mechanisms can and should be applied to online activity. To assist the development of a coherent strategy, I recommend that:
- **The Council investigates where the law around harmful and inappropriate material could be usefully clarified (including suicide websites) and explores appropriate enforcement responses.**

### ***The Internet: Specific Areas for Better Regulation (Chapter 4)***

16. I am also making recommendations to industry about specific tools and technology that can be promoted and developed to help support parents and children to manage online risks. These are suggestions for priority agenda items for the Council to pursue based on issues that have been raised during the course of my Review. A full rationale for each approach is set out in Chapter 4. My recommendations are:
- **That through the Council, the relevant industries should develop an independently monitored voluntary code of practice on the moderation of user generated content, including making specific commitments on take-down times.**

- **That through the Council, industry should ensure that computers sold for use in the home in the UK should have Kitemarked parental control software which takes parents through clear prompts and explanations to help set it up and that ISPs offer and advertise this prominently when users set up their connection.**
  - **That through the Council, search providers should agree to make it obvious to users what level of search is on (e.g. safe or moderate) and give users the option to 'lock it' on and that every search engine have a clear link to child safety information and safe search settings on the front page of their website – this is particularly important as most parents are comfortable using search functions.**
  - **That through the Council, the relevant industries should work with Government and the third sector to support vulnerable children and young people, especially in signposting users to support services when they discuss harmful behaviours, improving the skills of moderators and raising awareness of online risks with those who work with vulnerable children.**
  - **That the advertising industries take steps to 'futureproof' the current system for regulating advertising to take account of new forms of online advertising which are currently out of remit and that Government reviews progress in this area in a year's time when it has the conclusions of the assessment of the impact of the commercial world on children's wellbeing.**
  - **That the advertising industry works with media owners to raise awareness amongst advertisers of their obligations under the CAP Code to advertise responsibly to those under 18 on the internet and that the Council keeps this under review.**
17. There are other areas where the Council should keep developments and potential responses under review: research and practice on age verification (which should not be seen as a 'silver bullet') and changing risks to children from mobile internet access as technology advances.

### ***Better Information and Education about E-safety (Chapter 5)***

18. In addition to the specific recommendations that I have outlined for reducing availability of and restricting access to harmful and inappropriate material online, I believe that crucial and central to this issue is a strong commitment to changing behaviour through a sustained **information and education strategy**. This should focus on raising the knowledge, skills and understanding around e-safety of children, parents and other responsible adults. The underpinning evidence and an assessment of the wide-ranging activity already underway in this area are set out in Chapter 5.
19. The internet is much used and valued by children, young people and parents, and the importance of the internet to the child increases with age. But parents are anxious about the generational digital divide in knowledge and experience about the internet. Higher skill levels mean children are increasingly confident about using the internet although they may not have the maturity and wider awareness to be safe online. Parents either underestimate or do not realise how often children and young people come across potentially harmful and inappropriate material on the internet and are often unsure about what they would do about it. There is evidence to suggest that the parents of children from more socially

disadvantaged backgrounds are less able to protect against the risks of the internet and require additional support.

20. As highlighted above, I am recommending that the national strategy for child internet safety which is to be developed by the UK Council for Child Internet Safety includes an information and education strategy. This would incorporate two strands of activity:
- **A properly funded public information and awareness campaign on child internet safety to change behaviour – which is led by Government but involves the full range of Council members.**
  - **Sustainable education and children’s services initiatives to improve the skills of children and their parents around e-safety.**
21. An effective social marketing campaign, combining blanket and targeted messages delivered through a wide range of media channels and involving children and young people themselves, is fundamental to the success of this strategy. It needs to be supported by mechanisms which pull together the huge range of information and advice currently provided which can overwhelm parents. To that end I also recommend that:
- **The Council works to develop an authoritative ‘one stop shop’ for child internet safety within the DirectGov information network, based on extensive research about what different groups of users want.**
22. One of the strongest messages I have received during my Review was about the role that schools and other services for children and families have to play in equipping children and their parents to stay safe online. To empower children and raise the skills of parents I make recommendations to Government in the following areas: delivering e-safety through the curriculum, providing teachers and the wider children’s workforce with the skills and knowledge they need, reaching children and families through Extended Schools and taking steps to ensure that Ofsted holds the system to account on the quality of delivery in this area.
23. In relation to Schools I recommend:
- **That the Government ensures that e-safety best practice is well reflected in guidance and exemplar case studies across the curriculum as part of the support being provided to help schools to implement the new curriculum. I also recommend that the independent review of the primary curriculum being led by Sir Jim Rose should take full account of e-safety issues.**
  - **That the TDA take steps to ensure that new teachers entering the profession are equipped with e-safety knowledge and skills. I recommend specific ways of achieving this, including revising the statutory ICT test, providing guidance for initial teacher training providers on how to assess trainee e-safety skills against the Professional Standards for Teachers and that TDA’s survey of new teachers should include elements on e-safety.**
  - **That the Government takes this opportunity to encourage school leaders and teachers to focus on e-safety by identifying it as a national priority for continuous professional development (CPD) of teachers and the wider school workforce**

- **That in all schools, action is taken at a whole-school level to ensure that e-safety is mainstreamed throughout the school’s teaching, learning and other practices. In particular I recommend that:**
  - **Government should encourage schools to use Becta’s self review framework assessment to drive continual improvement in schools’ use of ICT including with regard to e-safety.**
  - **100% of schools should have Acceptable Use Policies that are regularly reviewed, monitored and agreed with parents and students. Guidance on this should be incorporated in Becta’s revised self review framework.**
  - **that all schools and local children’s services use an accredited filtering service.**

24. To support the delivery of e-safety skills through Extended School services I recommend:

- **That Becta work with TDA and their partners to encourage and support schools to offer family learning courses in ICT, media literacy and e-safety so that parents and children can together gain a better understanding of these issues. TDA should take opportunities to collect and disseminate case studies on e-safety for extended activities and should work with Becta to make sure that after school ICT clubs and activities provide good coverage of the e-safety elements of the curriculum.**
- **That UK online centres should work with the Extended Schools to expand the provision of services and training for parents to achieve basic media literacy.**

25. To ensure that the system delivers better outcomes for children in this area I recommend:

- **That Ofsted take steps to hold schools to account and provide Government with a detailed picture of schools performance on e-safety. In particular I recommend that:**
  - **Ofsted provide the Government with a snap shot report on school responses to question 4b of the SEF (regarding e-safety) by summer 2008.**
  - **Ofsted should comment on the state of internet safety training in schools as part of its forthcoming long report on ICT due for publication in 2008.**
  - **Ofsted uses its annual ICT school surveys to evaluate the extent to which schools teach learners to adopt safe and responsible practices in using new technology.**
- **That Ofsted undertake a thematic study on the teaching of e-safety and media literacy across what schools offer.**
- **If by 2011 evidence indicates widespread concerns in relation to school delivery of e-safety I recommend that Ofsted consider an assessment on performance in regard to e-safety in all school inspection reports.**

26. In addition to the school workforce a whole range of adults interact with children including youth workers, childcare workers, staff in Sure Start Children Centres, social workers and people running activities as part of Extended Schools. Therefore I recommend that:
- **Work to implement the Staying Safe Action Plan promotes Becta’s LSCB toolkit.**
  - **The Government’s forthcoming Childrens Workforce Action Plan includes measures to ensure that people who work with children and young people have appropriate understanding of e-safety and how children and young people can be supported, and protected online.**
27. Those adults who work with particularly vulnerable children need to be familiar with the broad spectrum of online risks facing children, and how they can support and empower children and young people to address them. Hence I recommend that:
- **The Joint Chief Inspectors’ Review of Safeguarding should provide a comprehensive assessment of children’s internet safety across all children’s services in its 2010 report to Government.**
28. While the extensive network of agencies that engage with children can play a key role in e-safety, parenting and the home environment remain paramount. Any comprehensive package of reform to minimise risks to children on the internet must help parents – who are in the best position to know and understand the individual differences between their children – develop their skills around e-safety. The evidence suggests that there is a need to put in place a range of policies and initiatives to increase the quality, availability and delivery of parenting support and family support regarding e-safety. In particular, this support should focus on measures that raise parents’ e-skills and confidence to enable them to protect their children effectively themselves. I recommend that:
- **The National Academy of Parenting Practitioners (NAPP) creates a parent training module on e-safety, and includes elements on e-safety in existing courses on managing child behaviour.**
  - **The Children’s Plan also commits the Government to providing two parenting experts in every local authority. I recommend that provision is made to train all parenting experts on e-safety.**

## Video Games (Chapters 6-8)

### *The evidence*

29. Globally, the video games industry is thriving and the popularity of video gaming amongst children and young people is widespread. Games are diverse and developing rapidly, especially with the growth of online gaming and increasing convergence with other media, such as film. We need to take a sophisticated approach to classifying games and managing children’s access to them in the context of this diversity and convergence. We also need to recognise that there is no single solution to the problem of children and young people playing games that might not be appropriate for them.

30. Children see the benefits of games but also recognise that there are some risks. Parents are concerned about the opportunity costs related to their children’s gaming habits and about the content of some games, but they are less aware of the potential risks of online gaming. Very few people are genuinely addicted to video games but lots of time spent playing can result in missed opportunities for other forms of development and socialisation.
31. When it comes to content, parents want better information on which to base their decisions – but importantly, they do see it as their role because only they can take into account the characteristics of their children and the context in which they play. This is reinforced in the research evidence, where context and what the child brings to the gaming experience is key to understanding potential risks and harms.
32. The evidence on video games is discussed in Chapter 6. There are some possible negative effects of violent content in games, but these only become ‘harmful’ when children present other risk factors:
- There is some evidence of short term aggression from playing violent video games but no studies of whether this leads to long term effects.
  - There is a correlation between playing violent games and aggressive behaviour, but this is not evidence that one causes the other.
33. However, we need to approach unequivocal claims of direct causes with caution – there is a strong body of ethnographic research which argues that context and the characteristics of each child will mediate the effects of playing video games. This means considering the media effects evidence in light of what we know about child development. We can use this to hypothesise about potential risks to children from playing some games, for example:
- Arousal brought on by some games can generate stress-like symptoms in children.
  - Games are more likely to affect perceptions and expectations of the real world amongst younger children because of their less developed ability to distinguish between fact and fiction (due to the immaturity of the frontal cortex).
  - The interactive nature of games may also have a more profound effect than some other media, again especially amongst younger children (e.g. up to around 12 years old) who tend to use narratives to develop their values and ideas and who learn through ‘doing’.
34. There are new risks presented in online gaming, many of which are similar to the potential risks to children of other internet use. These games offer new opportunities for social interaction between children and there are a number of potential benefits for children and young people from playing video games, including cognitive and educational gains and simply having fun. Interestingly the evidence to prove these benefits can be as contested as the evidence of negative effects.

## **Stepping up efforts to ensure age-appropriate gaming**

35. A number of measures have already been put in place, particularly by the video games, retail, advertising and online industries, to help inform parents and children of the age-appropriateness of games and to restrict inappropriate access by children and young people. But more could be done, especially to simplify and reform the age classification system and to raise awareness of parents about age-ratings on games and the tools available to them to help control what their children play. These are explored in Chapter 7 on hard-copy games and Chapter 8 in relation to online gaming.
36. To help achieve this I am recommending:
- **Sustained, high profile and targeted efforts by industry to increase parents' understanding and use of age-ratings and controls on consoles.**
  - **That the statutory requirement to age classify games be extended to include those receiving 12+ ratings.**
  - **In the context of this Review, where my remit has been to consider the interests of children and young people I recommend a hybrid classification system in which:**
    - **BBFC logos are on the front of all games (i.e. 18,15,12,PG and U).**
    - **PEGI will continue to rate all 3+ and 7+ games and their equivalent logos (across all age ranges) will be on the back of all boxes.**

**There are other perspectives on the different possible approaches, and implementation of change will require full public consultation.**

- **That the retail industry works together to develop and implement a more consistent approach to the sale of video games and better in-store information for parents, children and young people.**
- **That there should be focused efforts to monitor enforcement of the statutory age ratings at the point of sale.**
- **That the advertising and video games industries work together to improve guidance on the appropriate targeting and content of video games adverts in line with age classifications. I also make suggestions for specific measures they should consider.**
- **That console manufacturers work together to raise standards in parental controls on consoles, delivering clear and easy to use prompts and better information for parents on where console controls meet agreed standards.**
- **That the BBFC and PEGI work together to develop a joint approach to rating online games and driving up safety standards for children and young people in the games, under the auspices of the UK Council for Child Internet safety.**

37. Alongside this work I am also clear that we need to ensure we get the most out of video games for children’s learning and development, building on research into educational benefits. To this end I also recommend that:

- **Government supports a dialogue between the games industry and the education sector to identify opportunities for the benefits of game-based learning to be evaluated in educational environments.**

## Conclusion

38. In the final chapter of the report I have set out an indicative timeline for the implementation of my recommendations and for future reviews of progress. Everyone has a role to play in empowering children to stay safe while they enjoy these new technologies, just as it is everyone’s responsibility to keep children safe in the non-digital world. This new culture of responsibility spans parents, children and young people supported by Government, industry and the public and third sectors.

*“Kids don’t need protection we need guidance. If you protect us you are making us weaker we don’t go through all the trial and error necessary to learn what we need to survive on our own...don’t fight our battles for us just give us assistance when we need it.”*

(Children’s Call for Evidence)