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SEARCHLIGHT 2025

Technical Notes

Who benefits?

Shining a Light on the Business of Child Sexual Exploitation and Abuse

HUMAN DIGNITY FOUNDATION

THE UNIVERSITY of EDINBURGH

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Who benefits?

Shining a Light on the Business of Child Sexual Exploitation and Abuse

Study F: Legal Challenges in Tackling AI-generated CSAM across the UK, USA, Canada, Australia and New Zealand: Who is Accountable According to the Law?

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1. Background

Child sexual exploitation and abuse (CSEA) is a violation of children's rights and dignity (Ngo, 2021). It is a "widespread, worldwide issue of concerning magnitude" that affects both girls and boys (Simon, Luetzow & Conte, 2020, p. 2). As such, CSEA may lead to several negative effects for victims, impacting on their physical, mental or psychological health; their emotional well-being, social skills, interpersonal relationships and economic status; as well as increase their vulnerability to future victimisation (Fisher et al., 2017). Within this, technology and the use of social media and other online environments are spaces which can be protective, but equally also raise the risk to children's safety (Simon, Luetzow & Conte, 2020). This vulnerability to victimisation is, in fact, considered to be higher for children than for adults (Quayle, 2016).

The rapid development of technology has led to the birth of new, immersive forms of technology, grouped under the umbrella term 'eXtended Reality' (XR) (Huang, 2022). Prominent among these is artificial intelligence (AI), defined widely by Bahoo, Cucculelli and Qamar (2023, p. 1) as "the system's ability to interpret data and leverage computers and machines to enhance humans' decision-making, problem-solving capabilities, and technology-driven innovativeness". As such, and following the increasing dissemination of child sexual abuse material (CSAM) noticed across the clear web (the web we access daily for our online activities) and dark web (hidden websites accessible only via specific software or computer configurations), AI can be a valuable tool in the efforts against CSEA. In fact, AI allows the invention of detection intelligence algorithms that can lead to high accuracy detection of CSAM online (Lee et al., 2020; Ngo, McKeever & Thorpe, 2023). However, on the downside, and mainly with regards to its content generative capabilities, AI can also be misused by offenders to create CSAM with varying levels of realism, which is often hardly distinguishable from real-life sexual abuse material (Internet Watch Foundation, 2023). Irrespective of whether AI-created CSAM involves children modelled after real-life children or artificial children (which are still modelled based on the combination of features of real-life children), there is widespread concern that it can be a pathway to higher levels of CSEA offending that may include the sexual exploitation and abuse of children in real life (Internet Watch Foundation, 2023).

2. Rationale

As seen above, AI can be both beneficial and detrimental, depending on the way it is used. Therefore, it requires a robust and clear legislative response, particularly with regards to the issue of accountability over AI-generated CSAM. This call comes amid a hotly contested debate, with some stakeholders promoting notions that CSAM created via generative AI does not actually hurt real children or that it may also serve to divert potential offenders from sexually exploiting and abusing real children, and others who fear that AI-generated CSAM may well be the first step on a pathway towards higher offending in CSEA against real children (Internet Watch Foundation, 2023).

Based on the above, examining the existing legislative context of the Five Eyes countries – which comprise Australia, Canada, New Zealand, the United Kingdom (UK) and the United States of America (USA) – becomes crucial in order to assess the readiness of their regulatory frameworks to protect against AI-created CSAM. These countries have been selected due to their democratic and open political systems, their high levels of technological advancement and literacy, as well as their progressive and advanced legislative systems, which often serve as the regulatory blueprints for other countries around the globe that wish to model their legislation after them.

3. Research questions and aims

Our key hypothesis is that: 'Given that XR environments, and first and foremost AI, constitute a new and evolving field of technology, we anticipate gaps in legislation across the Five Eyes nations on the matter of accountability over AI-generated CSAM'.

3.1 Research questions

Following this hypothesis, the overarching questions that this research aims to address are:

- Does existing criminal legislation relating to CSEA/CSAM allow for criminal liability for AI-generated CSAM? This may concern software creators, holders of datasets that may be used to train AI, people who use AI software to create CSAM, people who access AI-generated CSAM, or any other party.

- Is there any other legislation that provides mechanisms of accountability with regards to AI-generated CSAM (including, but not limited to, civil law, industry codes or standards)?

- What types of punishment does legislation include as a response to the above?

- Are there any proposals for law reform to strengthen provisions for accountability for AI-generated CSAM?

- Has there been any case law across the Five Eyes countries that has considered criminal liability or any other form of accountability for AI-generated CSAM offences?

3.2 Objectives

Our aim is to:

- Examine legislation and caselaw across the Five Eyes countries to identify the strengths of these regulatory contexts with regards to countering CSAM created via generative AI

- Examine the regulatory weaknesses and gaps that may hinder effective safeguarding of children and prevention of CSEA and CSAM production, dissemination or possession via generative AI

- Inform legislation to ensure its futureproofing in view of the increasing use of the content-generating aspects of AI

4. Study design and methods of data collection and analysis

Our methodology consisted of a legislative review of relevant laws and potentially caselaw across the Five Eyes countries. The review and analysis of the emerging pieces of legislation and caselaw was informed by the 'black-letter law' approach (McConville & Chui, 2007), also known as doctrinal legal research method. This approach focuses on the letter of the law, rather than the spirit of the law, taking a more "literal approach to reading the law" (Wright, 2018, p. 30). By critically analysing primary and secondary legal sources, the aim of this approach is to restrict the number of possible

outcomes, succinctly summarising and clarifying what the law instructs in a more systematised and narrower way than socio-legal analyses, which tend to look more at the broader societal, political and policy context of legislation (Wright, 2018). The identification of themes in our legislative analysis is guided by our research hypothesis and research questions.

Following the search, all identified legislation was collated and organised using Excel spreadsheets and then analysed, as mentioned above, using the doctrinal legal method and via the use of a data extraction Excel sheet.

Notably, the existence and non-existence of relevant legislative provisions or caselaw on the studied topic have equal research value and can lead to important conclusions regarding the strengths and weaknesses of the said legislation and regulatory frameworks of the five nations studied.

5. Study setting/information about the data source

With regards to the UK, an initial search of Lexis+UK, Practical Law, Google Scholar, Google and Westlaw UK was undertaken to identify relevant legislation and cases across the five countries. In addition, examining the website of the Crown Prosecution Service (CPS) was also helpful, particularly to identify caselaw connected to pieces of UK legislation. To identify potential law reforms, we conducted internet searches and canvased relevant government agency websites.

Regarding our research in Australia and New Zealand, to identify and obtain the current in force version of relevant legislation, we used official government sources in Australia and New Zealand. To identify relevant criminal case law, we searched the Lexis Nexis database, supreme court and/or other relevant court websites in Australia and New Zealand. Where cases were not identifiable via one of the above sources, we searched for and obtained copies of relevant cases via the Australasian Legal Information Institute or the New Zealand Legal Information Institute websites. To identify potential law reforms, we conducted internet searches and obtained discussion papers or reports from the relevant government agency websites.

With regards to the USA and Canada, an initial examination of legal databases and primary sources was undertaken to identify pertinent statutes, case law, and legislative materials relevant to CSAM and AI regulation. Key sources include Westlaw, Justice Laws Website operated by the Canadian Government,

CanLII Database (a non-profit initiative of the Federation of Law Societies of Canada), the National Conference of State Legislatures, and the Multistate AI Legislation Tracker, Legiscan. Additional sources including press releases, news articles, and policy reports.

It is worth noting that this study is not based on sensitive data, but rather the analysis of publicly available legislation and caselaw in the Five Eyes nations.

6. Sample and recruitment

6.1 Eligibility criteria – primary research studies

This legislative review involves a review of laws and potentially caselaw from the Five Eyes countries (USA, UK, Canada, Australia, New Zealand) on the topic of accountability with regards to generative-AI CSEA/CSAM from a criminal and civil law standpoint.

6.1.1 Inclusion criteria

Legislation and caselaw was eligible for inclusion if they focused on any area that intersect with accountability for CSEA/CSAM, particularly with regards to generative AI software.

There was no defined search period, as any legislation or caselaw applicable to the study topic was included. All legislative and caselaw sources were in English, given that the countries studied are Anglophone nations.

6.1.2 Exclusion criteria

The following legislation and caselaw was excluded:

- Those outside of stated countries
- Those making no mentioning of any topic that would relate to liability/accountability around pseudo-CSAM

6.2 Sampling

Purposive sampling (Bryman, 2012), which entails the selection of

documents according to some set of pre-specified inclusion criteria, was used, supplemented by snowball sampling, as certain pieces of legislation might include sections that update other laws that fit under the inclusion criteria.

6.2.1. Size of sample

Regarding the UK, 30 pieces of legislation and 31 cases were examined. Our collaborators at Norton Rose Fulbright in Sydney examined 22 pieces of legislation in Australia and 3 in New Zealand. Child USA examined 279 statutes, 52 pieces of pending legislation and 65 cases in the USA and Canada.

7. Ethical and regulatory considerations

This study has successfully received ethical approval from the Moray House Research Ethics Committee – DELOC-KKG-0030424CL. This is a low-risk study given its scope; therefore, the study underwent a level 1 ethics approval process.

7.1 Safeguarding and researcher well-being

The risk for this study is minimal, given that there were no research participants and the research analyses publicly available legislation and caselaw.

7.2 Research approvals

We submitted an updated ethics approval application, due to the departure of one member of the research team from a collaborating university and the addition of a new member coming from Childlight Global Child Safety Institute.

7.3 Study advisory committee and peer review

The study advisory committee currently consists of four external professionals with international expertise on the studied topic coming from a range of organisations (police, non-government organisation and academia) based in the UK and Australia. More specifically, these affiliations are:

- School of Law, Queensland University of Technology

- Internet Watch Foundation (IWF)
- Codes and Standards (Class 1), Industry Compliance and Enforcement at the Australian eSafety Commissioner

The first meeting with the committee took place on 14 November 2024 via Microsoft Teams; for those members who were unable to attend written feedback was obtained. The feedback received has proven to be insightful. It revolves around the need to prioritise certain findings, particularly those that showcase crucial gaps in the UK, particularly in Scottish legislation. Simultaneously, the feedback received also revolves around the need to add to our discussion of other emerging technologies using AI, such as the so called 'nudifying apps'.

Because of the difficulty in coordinating the schedules of our committee members and to retain flexibility, the research team conducted a second round of review and feedback in the form of email communications, in February 2025 onwards.

7.4 Data management

The data from this research consists of legislative acts and caselaw, which are publicly available and accessible. Therefore, this data, in the form of extracted summaries, may be stored away from university premises by our external collaborators. We followed Childlight and university procedures for sharing and storing this data, found on the University of Edinburgh website – Data Protection Handbook v12.pdf.

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