

## Chapter 3

# Combating the Exploitation of Children in Cyberspace: Technical Mechanisms to Protect Children From Sexual Content

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### **ABSTRACT**

*Information and communication technologies (ICTs) have developed at an increasingly fast rate over the last two decades. Recent rapid advances in ICTs have provided both children and adults with benefits and opportunities in terms of socialization, education, and entertainment. In particular, the development of ICTs has provided children and adolescents using the internet and associated technologies with new spaces to interact and form social relationships with others, such as chatrooms, peer-to-peer (P2P) websites, and social networking sites.*

### **PROTECTING CHILDREN IN CYBERSPACE**

The internet is a neutral tool for disseminating data, which can be used for good or for ill. On the one hand, for example, it has enormous potential as a source of education for people of all ages and capacities. On the other hand, the internet can be used to set online traps to exploit users for criminal purposes. Among those who are most vulnerable to such traps are children. (O'Neill & Dinh, 2018)

he World Summit on the Information Society (WSIS) included discussion of how best to protect children from online predators, while also encouraging the positive

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use by young people of information and communications technologies (ICT). In the Geneva Declaration of Principles and Plan of Action, agreed by world leaders in December 2003, “all actors in the information society” are urged to take action and preventive measures against the use of ICT for any form of child abuse. This principle was echoed in the Tunis Commitment and the Tunis Agenda that resulted from the second phase of WSIS in November 2005 (see box).

New types of risk in cyberspace are growing with the emergence of new devices, such as mobile internet access, peer-to-peer (P2P) file sharing, instant messaging, chat rooms, multi-player interactive games and web cameras. The impact on children was highlighted at a meeting arranged by the organization End Child Prostitution, Child Pornography, and Trafficking of Children for Sexual Purposes (ECPAT), based in Thailand, and the United Nations Children’s Fund (UNICEF) during WSIS in Tunis. At this meeting, ECPAT presented its new report, “Violence against Children in Cyberspace,” which had been compiled as part of a United Nations study on violence against children. “This report gives the global community no excuse for saying that we didn’t know’ or ‘we couldn’t foresee’ the exponentially increasing violence caused to children in relation to new information and communication technologies,” says UN study leader Professor Paulo Pinheiro in the report’s introduction (Livingstone & Görzig 2014).

Cyber Security is the sum of the technical, organizational and administrative means used to prevent unauthorized use, misuse and retrieval of electronic information and communications and information systems contained therein, with a view to ensuring the availability and continuity of the work of the information systems and enhancing the protection, confidentiality and privacy of personal data and taking all measures Necessary to protect citizens and consumers from risks in cyberspace (unicef-irc.org).

Cyberspace is a virtual domain on computer systems, the Internet, and a vast reservoir of data and information. Computers are connected to computers, telephones and other smart devices without limits. The term cybercrime in the 1980s appeared in a fantasy novel The scientific writer of the American - Canadian William Gibson, and describes the current era as the digital age (Digital Age)

It includes great technological developments that serve all aspects of public and private life, and are reflected in the service of the entire international community. Today, this era is moving through information and communication technology, which has been accompanied by a large criminal movement. Cybercrime has spread dangerously throughout the world, Under the threat of these crimes using viruses (viruses), spyware, and other tools, which can be described metaphorically used or synthetic (Synthetic Viruses) (Dash,2012).

Electronic networks have become essential in our modern age, and are indispensable in institutions, governments and even in homes. There are many types of computer

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