Information Technology and Law Series

Volume 31

Editor-in-Chief

Simone van der Hof, eLaw (Center for Law and Digital Technologies), Leiden University, Leiden, The Netherlands

Series Editors

Bibi van den Berg, Institute for Security and Global Affairs (ISGA), Leiden University, The Hague, The Netherlands Gloria González Fuster, Law, Science, Technology & Society Studies (LSTS), Vrije Universiteit Brussel (VUB), Brussels, Belgium Eleni Kosta, Tilburg Institute for Law, Technology, and Society (TILT), Tilburg University, Tilburg, The Netherlands Eva Lievens, Faculty of Law, Law & Technology, Ghent University, Ghent, Belgium Bendert Zevenbergen, Center for Information Technology Policy, Princeton University, Princeton, USA More information about this series at http://www.springer.com/series/8857

Simone van der Hof · Ilina Georgieva · Bart Schermer · Bert-Jaap Koops Editors

Sweetie 2.0

Using Artificial Intelligence to Fight Webcam Child Sex Tourism





Editors Simone van der Hof Center for Law and Digital Technologies (eLaw), Leiden Law School Leiden University Leiden, The Netherlands

Bart Schermer Center for Law and Digital Technologies (eLaw), Leiden Law School Leiden University Leiden, The Netherlands Ilina Georgieva Faculty Governance and Global Affairs Institute of Security and Global Affairs (ISGA) Leiden University The Hague, The Netherlands

Bert-Jaap Koops Tilburg Institute for Law, Technology, and Society (TILT), Tilburg Law School Tilburg University Tilburg, The Netherlands

 ISSN 1570-2782
 ISSN 2215-1966 (electronic)

 Information Technology and Law Series
 ISBN 978-94-6265-287-3
 ISBN 978-94-6265-288-0 (eBook)

 https://doi.org/10.1007/978-94-6265-288-0
 ISBN 978-94-6265-288-0
 ISBN 978-94-6265-288-0

Library of Congress Control Number: 2018968089

Published by T.M.C. ASSER PRESS, The Hague, The Netherlands www.asserpress.nl Produced and distributed for T.M.C. ASSER PRESS by Springer-Verlag Berlin Heidelberg

© T.M.C. ASSER PRESS and the authors 2019

No part of this work may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, microfilming, recording or otherwise, without written permission from the Publisher, with the exception of any material supplied specifically for the purpose of being entered and executed on a computer system, for exclusive use by the purchaser of the work. The use of general descriptive names, registered names, trademarks, service marks, etc. in this publication does not imply, even in the absence of a specific statement, that such names are exempt from the relevant protective laws and regulations and therefore free for general use.

This T.M.C. ASSER PRESS imprint is published by the registered company Springer-Verlag GmbH, DE part of Springer Nature

The registered company address is: Heidelberger Platz 3, 14197 Berlin, Germany

Series Information

The *Information Technology and Law Series* was an initiative of ITeR, the national programme for Information Technology and Law, which was a research programme set up by the Dutch government and The Netherlands Organisation for Scientific Research (NWO) in The Hague. Since 1995 ITeR has published all of its research results in its own book series. In 2002 ITeR launched the present internationally orientated and English language *Information Technology and Law Series*.

This well-established series deals with the implications of information technology for legal systems and institutions. Manuscripts and related correspondence can be sent to the Series' Editorial Office, which will also gladly provide more information concerning editorial standards and procedures.

Editorial Office

T.M.C. Asser Press P.O. Box 30461 2500 GL The Hague The Netherlands Tel.: +31-70-3420310 e-mail: press@asser.nl

Simone van der Hof, *Editor-in-Chief* Leiden University, eLaw (Center for Law and Digital Technologies) The Netherlands

Bibi van den Berg Leiden University, Institute for Security and Global Affairs (ISGA) The Netherlands

Gloria González Fuster Vrije Universiteit Brussel (VUB), Law, Science, Technology & Society Studies (LSTS) Belgium

Eleni Kosta Tilburg University, Tilburg Institute for Law, Technology, and Society (TILT) The Netherlands

Eva Lievens Ghent University, Faculty of Law, Law & Technology Belgium

Bendert Zevenbergen Princeton University, Center for Information Technology Policy USA

Foreword

Two factors in the developing world, namely rising Internet usage rates and persistent poverty, have fostered the emergence of a new and rapidly growing form of online child sexual exploitation. Webcam Child Sex Tourism (WCST), as it was coined some 5 years ago, was identified as a practice whereby men from wealthier parts of the world pay money to children in developing countries to perform sexually explicit shows in front of a webcam.

At a time when WCST was not really present on the radar of law enforcement as a criminal activity, Terre des Hommes, working with former teenage prostitutes in the Philippines, picked up numerous signals that the phenomenon was spreading like an epidemic in the slums of Manila and Cebu. Recognizing the latter's significance, we realized that focusing exclusively on rescuing victims—our traditional role—was insufficient. A shift in our strategy was required, namely to move the focus of our work from the "supply" side of the problem to the "demand" side. The euphemistically named "clients" or "customers" are perpetrators who recognized years ago the potential of the Internet to live-stream sex shows involving children, evidence of which would disappear the moment the connection was broken, rendering arrest or prosecution virtually impossible.

The demand for live online sexual contact with children has grown exponentially over the past 5 years. Terre des Hommes now maintains the only way to take on this sordid industry is to go after the users themselves by tracking them online.

Therefore, in 2013, Terre des Hommes initiated the Sweetie Project. It aimed to draw attention to the scale of the online sexual exploitation of children and demonstrate that the identification of potential child abusers is relatively simple. By using computer animation technology, a virtual 10-year old Philippine girl was created, which allowed researchers to identify one thousand predators from no less than 71 countries within 10 weeks, using information obtained online in the public domain such as Facebook or Yahoo accounts. This fact alone illustrates that the

average online abuser feels largely unthreatened by any exposure of their criminal activity.

"The moment you go online, pretending to be a child from the Philippines, they jump at you, hundreds of them," as one of the researchers on the Sweetie Project stated at the time. According to an estimate by the FBI confirmed by the UN, there are some 750,000 individuals online at any given moment, seeking to engage children in sexual activities. However, at the time of our first research efforts we could only document six successful prosecutions worldwide. Obviously, law enforcement is ill equipped trying to apply twentieth-century-based laws and practices to this twenty-first-century form of serious crimes against children.

At the culmination of the Sweetie Project, the files of the 1,000 perpetrators were handed over to the Dutch desk at Europol for distribution to member states and beyond. Sweetie became world news for months. As far as we know, arrests and convictions have taken place in countries such as Australia, Belgium, Denmark, the Netherlands, Poland, and the UK. The issue is now in the public domain, laws are under review in some countries and law enforcement has acknowledged the seriousness of what is generally now described as "the live streaming of child sex abuse." However, there is growing concern expressed by several police forces that "we cannot arrest our way out of this problem." It is simply too big.

Terre des Hommes advocates a more proactive approach, preventive in nature, to tackle the demand side of WCST. With this in mind, we developed "Sweetie 2.0" software to intercept, identify, and deter individuals who use the internet to sexually abuse children. The updated chatbots enable their administrators to monitor larger parts of the Internet to locate and identify (potential) predators, and to subsequently send them messages that warn of the legal consequences should they proceed. According to research conducted by forensic psychologists, some 25% of men (one in four!) who begin by watching child pornography will then move on to hands-on child sexual abuse. Early intervention, the objective of Sweetie 2.0, could play a significant role in preventing this outcome.

Applying such investigation tools, however, raises serious legal questions. Will law enforcement be allowed to apply these innovative new technologies? What about issues of entrapment or the protection of privacy? Can live-streaming be regarded as a criminal offense in the first place? Not simple questions; difficult to answer and compounded by differences in judicial practice between countries.

It is, therefore, with great pleasure that we welcome this book, the outcome of a joint research initiative by Leiden University's Center for Law and Digital Technologies (eLaw) and Tilburg University's Institute for Law, Technology, and Society (TILT). The team involved took on the study of this new and challenging phenomenon in order to unravel these complicated legal issues in a concise and readable(!) manner, and to provide much needed answers where possible and prudent.

Foreword

It is no mean feat, for which we at Terre des Hommes are genuinely grateful. We hope you enjoy reading it with the same enthusiasm with which it was conceived and put together.

The Hague, The Netherlands

Hans Guyt Team Leader, Sweetie Project Terre des Hommes NL

Contents

1	Legal Aspects of Sweetie 2.0 Bart Schermer, Ilina Georgieva, Simone van der Hof and Bert-Jaap Koops	1
2	Sexual-Orientated Online Chat Conversations—Characteristics and Testing Pathways of Online Perpetrators	95
3	Sweetie 2.0 Technology: Technical Challenges of Makingthe Sweetie 2.0 ChatbotHans Henseler and Rens de Wolf	113
4	Substantive and Procedural Legislation in Australia to Combat Webcam-Related Child Sexual Abuse Gregor Urbas	135
5	Substantive and Procedural Legislation in Belgiumto Combat Webcam-Related Sexual Child AbuseSofie Royer, Charlotte Conings and Gaëlle Marlier	183
6	Substantive and Procedural Legislation in the Republic of Croatia to Combat Webcam-Related Child Sexual Abuse Ines Bojić and Zvjezdana Kuprešak	243
7	Substantive and Procedural Legislation in England and Wales to Combat Webcam-Related Child Sexual Abuse Alisdair A. Gillespie	291
8	Substantive and Procedural Legislation in Estonia to Combat Webcam-Related Child Sexual Abuse	345
9	Substantive and Procedural Legislation in Israel to Combat Webcam-Related Child Sexual Abuse Asaf Harduf	383

10	Substantive and Procedural Legislation in the Netherlandsto Combat Webcam-Related Child Sexual AbuseBart W. Schermer, Bert-Jaap Koops and Simone van der Hof	425
11	Substantive and Procedural Legislation in the Philippinesto Combat Webcam-Related Child Sexual AbuseMichael Anthony C. Dizon	455
12	Substantive and Procedural Legislation in the United States of America to Combat Webcam-Related Child Sexual Abuse Jonathan Unikowski	491