the LAW *and* ECONOMICS *of* CYBER SECURITY

BERNOLD NIEUWESTEEG

The Law and Economics of Cyber Security

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De rechtseconomie van internetveiligheid

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Acknowledgements

It is late 2011. I knock on the door of prof. Michel van Eeten because I am curious about his research in cyber security. The conversation is good. As a consequence, in 2012, I write a master thesis studying the economics of data breach notification laws. In 2013, Michel emails me with the following message: "I do not know whether you want to pursue a PhD, but this might be something for you." In hindsight, this could not be more of an understatement. When following up on the email, prof. Michael Faure and prof. Louis Visscher introduce me the world of the European Doctorate of Law and Economics. Again, the conversation is good. Consequently, I start this adventurous research project that aims to connect the world of law and economics with the cyber security theatre in 2014. Now, it is the year 2018 and this work has been finished. Michel, Michael and Louis, during these seven fat years you provided me with indispensable guidance, inspiration and momentum. Thank you.

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The vast increase in digital insecurity - posed by ransomware, DDoS attacks and data breaches amongst others - requires an intelligent cyber security strategy. Government and industry can shape this strategy with legal instruments, such as regulations and contracts. However, very little is known regarding the social costs and benefits thereof. This is worrisome: cyber security expenditures will rise exponentially in the future as mankind becomes increasingly dependent on the digital world.

'The Law and Economics of Cyber Security' provides an in depth analysis into the root causes of this societal problem. The dissertation investigates novel legal instruments such as the possibility for insurance against cyber risks, the option to cover these risks by means of pooling and the EU data breach notification obligation in the GDPR. Furthermore, the study yields concrete policy recommendations for university, government and industry. In doing so, it combines fundamental analysis with concrete, actionable building blocks for an enhanced national cyber security strategy.

Bernold Nieuwesteeg is a Law and Economics researcher at Rotterdam Institute of Law and Economics (RILE), Erasmus University Rotterdam and has been a PhD researcher in the European Doctorate in Law and Economics (EDLE) Program. Bernold is partner at CrossOver, which offers cross company learning programs for mechanics, administrative personnel, social workers and trainees. He is a frequent contributor to the public policy debate in newspapers, conferences and public fora.

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