2016 8th International Conference on Cyber Conflict (CyCon 2016)

Tallinn, Estonia 31 May – 3 June 2016



IEEE Catalog Number: CFP1626N-POD

ISBN:

978-1-5090-0715-8

Copyright © 2016, NATO CCD COE Publications All Rights Reserved

***This publication is a representation of what appears in the IEEE Digital Libraries. Some format issues inherent in the e-media version may also appear in this print version.

 IEEE Catalog Number:
 CFP1626N-POD

 ISBN (Print-On-Demand):
 978-1-5090-0715-8

 ISBN (Online):
 978-9949-9544-9-0

ISSN: 2325-5366

Additional Copies of This Publication Are Available From:

Curran Associates, Inc 57 Morehouse Lane Red Hook, NY 12571 USA

Phone: (845) 758-0400 Fax: (845) 758-2633 E-mail: curran@proceedings.com

E-mail: curran@proceedings.cor Web: www.proceedings.com



TABLE OF CONTENTS

Introduction	1
Assessing Cyber Power Jelle van Haaster	7
Hard Power in Cyberspace: CNA as a Political Means Ragnhild Endresen Siedler	23
Winning and Losing in Cyberspace Jason Healey	37
Towards a Theory of Cyber Power: The Israeli Experience with Innovation and Strategy Lior Tabansky	51
The Cyber-Doom Effect: The Impact of Fear Appeals in the US Cyber Security Debate Sean T. Lawson, Sara K. Yeo, Haoran Yu, Ethan Greene	65
Determining Extremist Organisations' Likelihood of Conducting Cyber Attacks Steve S. Sin, Laura A. Blackerby, Elvis Asiamah, Rhyner Washburn	81
The Social Side of 'Cyber Power'? Social Media and Cyber Operations Drew Herrick	99
Influence Cyber Operations: The Use of Cyberattacks in Support of Influence Operations Pascal Brangetto, Matthijs A. Veenendaal	113
Is the International Law of Cyber Security in Crisis? Kubo Mačák	127
Conceptualising Cyber Arms Races Anthony Craig, Brandon Valeriano	141
Arms Control in Cyberspace – Architecture for a Trust-Based Implementation Framework Based on Conventional Arms Control Methods Markus Maybaum, Jens Tölle	159

Malware Counter-Proliferation and the Wassenaar Arrangement Trey Herr	175
Weapons Systems and Cyber Security – A Challenging Union Robert Koch, Mario Golling	191
UAV Exploitation: A New Domain for Cyber Power Kim Hartmann, Keir Giles	205
Assessing the Impact of Aviation Security on Cyber Power Martin Strohmeier, Matthias Schäfer, Matt Smith, Vincent Lenders, Ivan Martinovic	223
Countering Advanced Persistent Threats through Security Intelligence and Big Data Analytics Mirco Marchetti, Fabio Pierazzi, Alessandro Guido, Michele Colajanni	243
Anonymity Networks and Access to Information During Conflicts: Towards a Distributed Network Organisation Paolo Palmieri	263
We Know Where You Are! Siddharth Prakash Rao, Silke Holtmanns, Ian Oliver, Tuomas Aura	277
Biographies	295