

AUSTRALIA AND CYBER-WARFARE

AUSTRALIA AND CYBER-WARFARE

Gary Waters, Desmond Ball and Ian Dudgeon



E P R E S S



E P R E S S

Published by ANU E Press
The Australian National University
Canberra ACT 0200, Australia
Email: anuepress@anu.edu.au
This title is also available online at: http://epress.anu.edu.au/cyber_warfare_citation.html

National Library of Australia
Cataloguing-in-Publication entry
Author: Waters, Gary, 1951-
Title: Australia and cyber-warfare / Gary Waters ; Desmond Ball ; Ian Dudgeon.
ISBN: 9781921313790 (pbk.) 9781921313806 (pdf.)
Series: Canberra papers on strategy and defence ; no. 168
Subjects: Information warfare--Australia.
Command and control systems--Australia.
Military telecommunication.
Other Authors/Contributors:
Ball, Desmond, 1947-
Dudgeon, Ian.
Australian National University. Strategic and Defence Studies Centre.
Dewey Number: 355.033094

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical, photocopying or otherwise, without the prior permission of the publisher.

The *Canberra Papers on Strategy and Defence* series is a collection of publications arising principally from research undertaken at the SDSC. Canberra Papers have been peer reviewed since 2006. All Canberra Papers are available for sale: visit the SDSC website at http://rspas.anu.edu.au/sdsc/canberra_papers.php for abstracts and prices. Electronic copies (in pdf format) of most SDSC Working Papers published since 2002 may be downloaded for free from the SDSC website at http://rspas.anu.edu.au/sdsc/working_papers.php. The entire Working Papers series is also available on a 'print on demand' basis.

Strategic and Defence Studies Centre Publications Program Advisory Review Panel: Emeritus Professor Paul Dibb; Professor Desmond Ball; Professor David Horner; Professor Hugh White; Professor William Tow; Professor Anthony Milner; Professor Virginia Hooker; Dr Coral Bell; Dr Pauline Kerr

Strategic and Defence Studies Centre Publications Program Editorial Board: Professor Hugh White; Dr Brendan Taylor; Dr Christian Enemark; Miss Meredith Thatcher (series editor)

Cover design by Teresa Prowse

Front cover image:

Title: Globe with hand, computer graphic, composition

Artist/photographer: Suk-Heui Park

Image no: 74859163.JPG

Licence holder: Getty Images (royalty-free licence from Matton Images at http://www.mattonimages.co.uk/images/jpg/pc_74859163.html)

Printed by University Printing Services, ANU

This edition © 2008 ANU E Press

Contents

Abstract	ix
Contributors	xi
Acronyms and Abbreviations	xiii
Foreword by Professor Kim C. Beazley	xix
1. Introduction: Australia and Cyber-warfare <i>Gary Waters and Desmond Ball</i>	1
2. The Australian Defence Force and Network Centric Warfare <i>Gary Waters</i>	5
3. Information Warfare—Attack and Defence <i>Gary Waters</i>	33
4. Targeting Information Infrastructures <i>Ian Dudgeon</i>	59
5. Protecting Information Infrastructures <i>Gary Waters</i>	85
6. An Australian Cyber-warfare Centre <i>Desmond Ball</i>	119
Bibliography	149
Index	167

List of Tables

Table 1—NCW Domain and Milestone Overview	23
Table 2—Techniques used to commit cyber-crimes	48