



## UvA-DARE (Digital Academic Repository)

### Preventing nuclear terrorism

*International law and nuclear security governance*

Herbach, J.D.

#### Publication date

2019

#### Document Version

Other version

#### License

Other

[Link to publication](#)

#### Citation for published version (APA):

Herbach, J. D. (2019). *Preventing nuclear terrorism: International law and nuclear security governance*. [Thesis, fully internal, Universiteit van Amsterdam].

#### General rights

It is not permitted to download or to forward/distribute the text or part of it without the consent of the author(s) and/or copyright holder(s), other than for strictly personal, individual use, unless the work is under an open content license (like Creative Commons).

#### Disclaimer/Complaints regulations

If you believe that digital publication of certain material infringes any of your rights or (privacy) interests, please let the Library know, stating your reasons. In case of a legitimate complaint, the Library will make the material inaccessible and/or remove it from the website. Please Ask the Library: <https://uba.uva.nl/en/contact>, or a letter to: Library of the University of Amsterdam, Secretariat, Singel 425, 1012 WP Amsterdam, The Netherlands. You will be contacted as soon as possible.

# Preventing Nuclear Terrorism

International Law and Nuclear  
Security Governance

Jonathan Herbach

Preventing Nuclear Terrorism: International Law and Nuclear Security Governance

Jonathan Herbach

**Preventing Nuclear Terrorism:  
International Law and Nuclear Security  
Governance**

**Jonathan Herbach**

© 2019, J. Herbach

All rights reserved

Preventing Nuclear Terrorism: International Law and Nuclear Security Governance

## ACADEMISCH PROEFSCHRIFT

ter verkrijging van de graad van doctor  
aan de Universiteit van Amsterdam  
op gezag van de Rector Magnificus  
prof. dr. ir. K.I.J. Maex  
ten overstaan van een door het College voor Promoties ingestelde commissie  
in het openbaar te verdedigen in de Agnietenkapel  
op dinsdag 5 maart 2019, te 14.00 uur  
door Jonathan David **Herbach**  
geboren te Menomonie

**Promotiecommissie:**

*Promotores:*

prof. dr. T.D. Gill  
prof. mr. dr. E.P.J. Myjer

Universiteit van Amsterdam  
Universiteit Utrecht

*Overige leden:*

prof. dr. P.A.L. Ducheine  
prof. mr. dr. H.G. van der Wilt  
mr. dr. C.M. Brölmann  
prof. dr. T. Marauhn  
prof. dr. D. Fleck

Universiteit van Amsterdam  
Universiteit van Amsterdam  
Universiteit van Amsterdam  
Justus-Liebig-Universität Gießen  
Former Director of International  
Agreements and Policy of the  
German Ministry of Defence

Faculteit der Rechtsgeleerdheid

## **Acknowledgements**

This book took shape over a period of four years, but my research and work in the area of nuclear security goes back even longer. I was fortunate enough to get involved in the Nuclear Security Summit process, starting in the run-up to the 2014 Summit in The Hague and continuing through the final Summit in 2016 in Washington, DC. It was a crash course in multilateral diplomacy, and it jump started my interest specifically in the topic of international law applicable to nuclear security. I am particularly grateful to the Ministry of Foreign Affairs of the Netherlands for giving me the opportunity to be part of such a unique experience.

The idea behind this research was nurtured by Professor Eric Myjer, whose encouragement convinced me to pursue this as a topic of PhD study. I owe him a debt of gratitude, not only for supervising my work but also for introducing me to the area of international arms control law, which set me on my current career path. My gratitude also goes to Professor Terry Gill. His guidance as my co-supervisor and his always pertinent, challenging questions noticeably enhanced the quality of the book.

The perseverance necessary to see this project through was only possible with the support of my wife, Petra. She put up with, if not always enthusiastically, the many late nights sitting at the computer and not infrequent outbursts of exasperation, knowing what achieving this goal meant to me. Also, my mother's weekly words of encouragement have been a crucial source of support. Thank you, as well, to the group of family and friends who stood behind me and kept me on the ball by regularly inquiring about my progress.

Lastly, I would be remiss if I did not express my thanks to colleagues I have had the privilege to work with over the years and the friends I have made travelling the world for this research. They have inspired me to push myself, to see things differently and have provided me with invaluable insights that fundamentally shaped my thinking for this book.



Acknowledgements	i
------------------	---

## **Table of Contents**

1. General Introduction to the Study	1
<b>Part I: Theoretical Framework</b>	
2. International Law and Governance of Global Issues	15
3. Nuclear Security in Context: International Law of Arms Control	37
<b>Part II: The Legal Framework for Nuclear Security: Substance</b>	
4. Historical Background	57
5. Interpreting the Legal Framework for Nuclear Security	75
6. Elements of Legally Binding Instruments Applicable to Nuclear Security	83
7. Legally Non-Binding Instruments	119
<b>Part III: The Legal Framework for Nuclear Security: Organization</b>	
8. The Role of International Organizations and Informal Groupings of States in Nuclear Security	141
<b>Part IV: The Path Forward and Conclusions</b>	
9. Strengthening the International Legal Framework for Nuclear Security	163
Appendix 1: Abbreviations	181
Bibliography	183
Summary (English)	199
Samenvatting (Nederlands)	205