## Nuclear Non-Proliferation in International Law

Volume II

Jonathan L. Black-Branch · Dieter Fleck Editors

# Nuclear Non-Proliferation in International Law

Volume II Verification and Compliance





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#### **Preface**

Nuclear non-proliferation continues to dominate political, diplomatic and legal discussions worldwide. Legal issues regarding the non-proliferation of nuclear weapons, the use of nuclear energy for peaceful purposes and nuclear disarmament must be viewed within their relevant context, which is what this book series endeavours to achieve. Volume I¹ was widely received with encouraging praise by academics and practitioners alike. This warm reception demonstrates the need for continued efforts to explore such issues further, from an abstract analytical perspective but also from a practical stance.

The present volume focuses on verification and compliance. The main body of contributions presented are the results of a research conference on Verification of Nuclear Non-Proliferation Obligations held in Cologne from 13-14 November 2014 in cooperation with the Cologne Institute of International Peace and Security Law. This follows in the tradition of gathering relevant experts to discuss areas pertinent to nuclear weapons, non-proliferation and contemporary international law through a series of Round Table Discussions, which have already led to a comprehensive report on Legal Aspects of Nuclear Disarmament, presented at the most recent conference of the International Law Association (Washington 2014).<sup>2</sup> The Cologne event was of major significance for clarifying issues regarding verification problems. It created a better understanding for verification tasks of the IAEA, the CTBTO and EURATOM, providing an instructive interdisciplinary approach to technical possibilities of verification and gaps in current legal regulation which may help to explore implications for treaty design and the implementation of the best practice rules. Moreover, it contributed to greater consensus related to existing legal controversies regarding countermeasures, remedies for wrongful acts and peaceful settlement of disputes.

We would like to express our sincere gratitude to Prof. Claus Kreß, Director of the Cologne Institute of International Peace and Security Law and his assistants,

<sup>&</sup>lt;sup>1</sup>J.L. Black-Branch and D. Fleck (eds.) Nuclear Non-Proliferation in International Law, Vol. I, with a foreword by Mohamed ElBaradei. T.M.C. Asser Press 2014.

<sup>&</sup>lt;sup>2</sup>See http://www.ila-hq.org/en/committees/index.cfm/cid/1025.

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for co-organizing this event in conjunction with the ILA Committee on Nuclear Weapons, Non-Proliferation and Contemporary International Law and the Nuclear Round Table Forum. We are particularly indebted to the Fritz Thyssen Foundation for kindly supporting the event, and in particular to Dr. Thomas Suermann and his team for hosting our conference, providing an intimate and professional environment in which to advance these important discussions.

Special acknowledgement must be expressed to our peer reviewers, who have offered their critical advice, encouragement and invaluable suggestions. The various authors appreciate the double anonymous review process and we wish to express our sincere gratitude on both our behalf as well as the contributing authors who benefited from their efforts.

A third volume is under preparation. It will be devoted to legal aspects of the use of nuclear energy for peaceful purposes.

Oxford, Cologne, April 2015

Jonathan L. Black-Branch Dieter Fleck

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### **Abbreviations**

ABACC Brazilian-Argentine Agency for Accounting and Control of Nuclear

Materials

AP Additional Protocol

ARSIWA Articles on Responsibility of States for Internationally Wrongful

Acts (2001)

CPPNM Convention on the Physical Protection of Nuclear Material

(30 March 1980)

CSA Comprehensive Safeguards Agreement

CTBT Comprehensive Nuclear Test-Ban Treaty (24 September 1996)
CTBTO Preparatory Commission for the Comprehensive Nuclear Test-Ban

Organization

CWC Convention on the Prohibition of the Development, Production,

Stockpiling and Use of Chemical Weapons and on Their Destruction

(13 January 1993)

DARIO Draft Articles on Responsibility of International Organizations (2011)

DPRK Democratic People's Republic of Korea
EAEC European Atomic Energy Community
ECSC European Coal and Steel Community

ESA EURATOM Supply Agency

EU European Union

EURATO European Atomic Energy Community

GICNT Global Initiative to Combat Nuclear Terrorism

GTRI Global Threat Reduction Initiative
IAEA International Atomic Energy Agency
IHL International Humanitarian Law
ICJ International Court of Justice
ILA International Law Association
ILC International Law Commission
INFCIRC Information Circulars, IAEA

x Abbreviations

INS Intense Neutron Sources
LOFs Locations Outside Facilities

LWR Light Water Moderated Fission Reactor

MOX Mixed Oxide Fuel

NAM Non-Aligned Movement NNWS Non-Nuclear-Weapon States

NPT Treaty on the Non-Proliferation of Nuclear Weapons (1 July 1968)

NSG Nuclear Suppliers Group NWFZ Nuclear-Weapon-Free Zone NWS Nuclear-Weapon States PrepCom Preparatory Committee

PSI Proliferation Security Initiative

SC Security Council

SIP Statement of Interdiction Principles SIR Safeguards Implementation Report

SLC State-Level Concept SNS Spallation Neutron Source

TEU Treaty on European Union (2012)

TFEU Treaty on the Functioning of the European Union (2012)

UN United Nations

UNMOVIC United Nations Monitoring, Verification and Inspection Commission

UNSCOM United Nations Special Commission

UNTS United Nations Treaty Series WMD Weapons of Mass Destruction