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Ambassador Oyarzun Marchesi,

On behalf of the UK Mission to the United Nations, I would like to submit the following documents for publication on the 1540 website as examples of effective practices for implementation.

The UK was proud to provide funding support to relevant NGO and academic sector experts for developing these guidelines, case studies and best practices for implementing 1540. We commend these documents as tools available for all states striving to implement their 1540 obligations.

- VERTIC: [Legislative Guide to National Implementation of UN Security Council Resolution 1540 \(2004\)](#)
- VERTIC: [Sample Act for National Implementation of the 1972 Biological and Toxin Weapons Convention and Related Requirements of UN Security Council Resolution 1540](#)
- VERTIC: [Regulatory Guidelines for National Implementation of the 1972 Biological and Toxin Weapons Convention and Related Requirements of UN Security Council Resolution 1540](#)
- VERTIC INDONESIA: [National Legislation Implementation Kit on Nuclear Security](#)
- King's College London and Association of University Legal Practitioners: [Higher Education Guide and Toolkit on Export Controls and the ATAS Student Vetting Scheme](#)

If you have any further queries, do not hesitate to contact our Mission.

Jonathan Dowdall
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CC. 1540 Group of Experts and the US Coordinator for WG4 on Transparency and Outreach.



Legislative Guide to National Implementation of UN Security Council Resolution 1540 (2004)

VERTIC is an independent, not-for-profit non-governmental organization. Our mission is to support the development, implementation and effectiveness of international agreements and related regional and national initiatives, with particular attention to issues of monitoring, review, legislation and verification. The National Implementation Measures (NIM) Programme advises States on national implementation of the obligations in: the Biological Weapons Convention, the Chemical Weapons Convention, the international instruments to secure nuclear and other radioactive material and UN Security Council Resolution 1540.

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Although every care has been taken to prepare this Guide, VERTIC hereby disclaims any liability or responsibility arising from its use in any way. VERTIC would be grateful for any errors or omissions that are brought to our attention.

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I. INTRODUCTION

1. United Nations Security Council Resolution 1540 (UNSCR 1540)

UNSCR 1540 was adopted on 28 April 2004 as a response to the threat to international peace and security caused by the proliferation of weapons of mass destruction, as well as their means of delivery.¹ The resolution was adopted under Chapter VII of the UN Charter: “Action with Respect to Threats to the Peace, Breaches of the Peace, and Acts of Aggression”.

UNSCR 1540 addresses several areas of national law including, for example, criminal law, export-import and transfers control, regulatory systems for dual-use materials and requisite enforcement measures. Each State will decide the type of implementing measures it requires in accordance with its constitutional processes. The scope of measures that a State adopts and enforces to give effect to the resolution will depend on its specific situation with respect to the activities covered by the resolution. However, harmonization of national legal frameworks will be essential for effective implementation of global measures to restrain proliferation of nuclear, chemical and biological weapons and to establish effective national controls over related materials.

Under UNSCR 1540, all States are required to refrain from providing any form of support to non-State actors that attempt to develop, acquire, manufacture, possess, transport, transfer or use nuclear, chemical or biological weapons and their means of delivery. National legislation must also be adopted and enforced to prohibit activities involving the proliferation of such weapons and their means of delivery to non-State actors, in particular for terrorist purposes, as well any attempts to engage in such activities, participate in them as an accomplice, assist or finance them. This may be achieved by amending penal measures to criminalize and punish these activities.

UNSCR 1540 also calls for the establishment of a national legal framework to prevent the proliferation of nuclear, chemical and biological weapons and their means of delivery. This framework must also cover related materials. The resolution specifies that this framework should include the following elements:

- a system to account for and secure such items in production, use, storage or transport;
- effective physical protection measures;
- effective border controls and law enforcement measures; and
- effective national export and trans-shipment controls.

For the purpose of implementing UNSCR 1540, States should refer to the definitions provided by the Security Council, as follows:

- *Related materials*: materials, equipment and technology covered by relevant multilateral treaties and arrangements, or included on national control lists, which could be used for the design, development, production or use of nuclear, chemical and biological weapons and their means of delivery;
- *Means of delivery*: missiles, rockets and other unmanned systems capable of delivering nuclear, chemical, or biological weapons, that are specially designed for such use; and
- *Non-State actor*: individual or entity, not acting under the lawful authority of any State in conducting activities which come within the scope of this resolution.

¹ UN Security Council, S/RES/1540 (2004), available at <http://www.un.org/en/sc/1540/resolutions-and-presidential-statements/sc-resolutions.shtml>.

UNSCR 1540 also identifies certain types of national measures that States Parties to the related treaties must implement to give effect to their obligations under those agreements: the 1968 Treaty on the Non-proliferation of Nuclear Weapons (NPT), the 1972 Biological and Toxin Weapons Convention (BWC) or the 1993 Chemical Weapons Convention (CWC). The resolution stipulates that its provisions do not conflict with or alter the rights and obligations of States Parties to these treaties.

The Security Council reiterated its decisions and the requirements of UNSCR 1540 in Resolutions 1673 (2006), 1810 (2008), 1977 (2011) and 2055 (2012).² The mandate of the 1540 Committee, established by UNSCR 1540, and discussed in further detail in the next section, was also extended by Resolution 1977 (2011) until 25 April 2021.

2. The 1540 Committee and its Group of Experts

The committee established pursuant to operative paragraph 4 of UNSCR 1540 is known as the 1540 Committee, and is a subsidiary body of the Security Council. The 1540 Committee has four working groups: Monitoring and National Implementation; Assistance; Transparency and Media Outreach; and Cooperation with International Organizations, including with the Security Council Committees established under Resolutions 1267 (1999) and 1373 (2001) respectively. A Senior Political Affairs Officer of the UN Department of Political Affairs (UNDPA) serves as Secretary of the Committee, while the UN Office for Disarmament Affairs (UNODA) provides substantive and logistical support. The current Group of Experts was established per resolutions 1977 (2011) and 2055 (2012) “to assist the Committee in carrying out its mandate...” Currently, up to nine experts may serve at a given time. The Committee and its experts receive and examine reports to monitor implementation; promote greater awareness of UNSCR 1540, including through outreach and dialogue with UN Member States; and facilitate capacity building and assistance by providing a clearing house function. In the spirit of transparency, information notes regarding outreach events and reports of country visits are posted on the 1540 Committee website.³

UN Member States submit National Reports to the 1540 Committee followed as needed by updates known as ‘additional information’ reports. These reports are issued as Security Council documents and posted on the 1540 Committee website.⁴ In addition, UN Member States submit voluntary National Implementation Action Plans to the Committee,⁵ as encouraged by the Security Council in operative paragraph 8 of UNSCR 1977 (2011).

The 1540 Committee and its experts develop UNSCR 1540 national matrices using the information provided by Member States to various intergovernmental organizations, to the Committee or using information from governmental websites. The approved matrices are available on the 1540 Committee website.⁶ The newly revised matrix template⁷ has 389 fields covering national activities related to the operative paragraphs of UNSCR 1540. National matrices are used as a reference tool for facilitating technical assistance and the Committee’s constructive dialogue with States on their implementation of the resolution. The matrix can also be used as a checklist for identifying whether gaps exist in national legislative, regulatory

² The resolutions are available at <http://www.un.org/en/sc/1540/resolutions-and-presidential-statements/sc-resolutions.shtml>.

³ Available at <http://www.un.org/en/sc/1540/index.shtml>.

⁴ The reports are available at <http://www.un.org/en/sc/1540/national-implementation/national-reports.shtml>.

⁵ The National Action Plans are available at <http://www.un.org/en/sc/1540/national-implementation/national-action-plans.shtml>.

⁶ The approved matrices are available at <http://www.un.org/en/sc/1540/national-implementation/1540-matrix/committee-approved-matrices.shtml>.

⁷ The matrix template is available at <http://www.un.org/en/sc/1540/national-implementation/1540-matrix/matrix-template.shtml>.

or enforcement measures. The 1540 Committee specifically looks at whether States have implemented national measures to cover the measures required under several operative paragraphs in UNSCR 1540, especially paragraphs 2, 3, 6, 8 (b) and 10.

3. Legislative Assistance

UN Member States can request assistance through the 1540 Committee, using a template available online, and sent via a Note Verbale addressed to the Chair of the 1540 Committee.⁸ Requestors of assistance can also browse the offers of assistance posted online on the 1540 Committee website from other UN Member States⁹ or from various international and regional organizations.¹⁰ The assistance providers can be contacted directly or through the 1540 Committee. The 1540 Committee's Group of Experts may also provide informal guidance with the assistance process.¹¹

Legislative assistance is provided by the International Atomic Energy Agency (IAEA),¹² Organisation for the Prohibition of Chemical Weapons (OPCW),¹³ UN Office on Drugs and Crime (UNODC)¹⁴ and other providers, within their respective mandates.

VERTIC¹⁵ can also provide assistance to governments, at no cost, in the development of laws and regulations for national implementation of:

- UNSCR 1540 (2004);
- 1972 Biological Weapons Convention (BWC);
- 1993 Chemical Weapons Convention (CWC);
- certain international instruments to secure nuclear and other radioactive material, including:
 - 1980 Convention on the Physical Protection of Nuclear Material (CPPNM) (and 2005 amendment);
 - 2005 International Convention for the Suppression of Acts of Nuclear Terrorism (ICSANT); and
 - 2003 Code of Conduct on the Safety and Security of Radioactive Sources (Code of Conduct) and Guidance on the Import and Export of Radioactive Sources; as well as of
- CBRN provisions in other relevant international instruments, including:
 - 2010 Convention on the Suppression of Unlawful Acts Relating to International Civil Aviation (Beijing Convention);

⁸ The template is available at <http://www.un.org/en/sc/1540/assistance/assistance-template.shtml>. The communication can be sent to: Secretariat of the 1540 Committee, 730 Third Avenue, TB-08040E, United Nations, New York, NY 10017, United States; Fax: +1 212 963 1300; Email: sc-1540-Committee@un.org.

⁹ Further information is available at <http://www.un.org/en/sc/1540/assistance/offers-of-assistance/states.shtml>.

¹⁰ Further information is available at <http://www.un.org/en/sc/1540/assistance/offers-of-assistance/assistance-programmes.shtml>.

¹¹ Further information is available at <http://www.un.org/en/sc/1540/committee/expert-group.shtml>. The experts can also be contacted by email at 1540experts@un.org.

¹² Further information about legislative assistance from the IAEA is available at <http://ola.iaea.org/ola/legislative-assistance.html>.

¹³ Further information about legislative assistance from the OPCW is available at <http://www.opcw.org/our-work/national-implementation/>.

¹⁴ Further information about legislative assistance from the UNODC is available at http://www.unodc.org/unodc/en/terrorism/UNODC_Role.html.

¹⁵ Further information about legislative assistance from VERTIC is available at http://www.vertic.org/pages/homepage/programmes.php#wb_142 or NIM@vertic.org.

- 1988 Convention for the Suppression of Unlawful Acts against the Safety of Maritime Navigation (as amended by the 2005 Protocol); and
- 1988 Protocol for the Suppression of Unlawful Acts against the Safety of Fixed Platforms Located on the Continental Shelf (as amended by the 2005 Protocol).

VERTIC also complements the 1540 Committee's matrices, discussed in the previous section, with legislation surveys related to national implementation of the BWC, CWC and certain international instruments to secure nuclear and other radioactive material. The following types of legislation are reviewed in order to prepare the surveys: penal and criminal procedure codes, laws on counterterrorism and organised crime, laws to prevent proliferation of weapons of mass destruction, customs codes, licensing laws, import/export and trade laws (including trade in strategic or dual-use goods legislation), money laundering laws, laws on mutual criminal assistance and extradition, laws on the management and transport of hazardous or dangerous substances, aircraft and ship/airport and port security laws, rail security laws, and laws on surveillance and intelligence gathering. VERTIC surveys are available on request to State officials.

4. Objectives of this *Legislative Guide to National Implementation of UN Security Council Resolution 1540 (2004)*

While the effective implementation of UNSCR 1540 requires a series of legislative and regulatory measures and enforcement programmes, this *Legislative Guide to National Implementation of UN Security Council Resolution 1540 (2004)* (Guide) specifically addresses the main obligations of UNSCR 1540 with regard to the required legislative actions to be taken by UN Member States.

The Security Council adopted Resolution 1977 on 20 April 2011 in which it, *inter alia*, requested the 1540 Committee, with its Group of Experts, to:

...identify effective practices, templates and guidance, with a view to develop a compilation, as well as to consider preparing a technical reference guide about resolution 1540 (2004), to be used by States on a voluntary basis in implementing resolution 1540 (2004), and in that regard, encourages the 1540 Committee, at its discretion, to draw also on relevant expertise, including, civil society and the private sector... (operative paragraph 12)

Toward this objective, VERTIC developed this *Guide* as guidance for States when they are engaged in the process of implementing UNSCR 1540. It identifies and organizes in one document the model laws, implementation kits and handbooks that have already been developed by the IAEA, OPCW, VERTIC and other legislative assistance providers to assist States in implementing the international legal instruments to prohibit and prevent the proliferation of nuclear, chemical and biological weapons and related materials.

This *Guide* is divided into four parts:

- Part II covers biological weapons and materials;
- Part III covers chemical weapons and materials;
- Part IV covers nuclear weapons / nuclear and other radioactive material; and
- Part V briefly discusses other international instruments relevant to UNSCR 1540.

A 'Quick Reference' at the end of each Part sets forth a list of the materials discussed in that Part and web links where available.

II. BIOLOGICAL WEAPONS AND RELATED MATERIALS

1. Overview

The Biological Weapons Convention prohibits the development, production, stockpiling, acquisition or retention of biological weapons in a State Party's territory and anywhere under its jurisdiction or control. States Parties have agreed that the prohibition of the use of biological weapons – originating in the 1925 Protocol for the Prohibition of the Use of Asphyxiating, Poisonous or other Gases, and of Bacteriological Methods of Warfare (1925 Geneva Protocol) – also falls under the scope of the BWC. Under the BWC, almost any disease-causing micro-organism (such as bacteria, viruses, fungi, prions or rickettsia) or toxin (a non-living, poisonous substance derived from animals, plants or micro-organisms, or similar synthetically produced substances) can potentially be used as a biological or toxin weapon, but only if there is criminal or terrorist intent behind such use. This must be addressed when drafting, implementing and enforcing national measures to meet the obligations of the BWC and UNSCR 1540.

UNSCR 1540 and the BWC are complementary to one another: a State's effective implementation of the BWC goes a long way toward ensuring that the obligations mandated by UNSCR 1540 are met. This is true whether the implementing State is party to the BWC or not and, indeed, there is nothing preventing a non-State Party from implementing the BWC into its national law and adhering to the Convention.

In particular, Article III requires all States Parties to the BWC to refrain from transferring biological weapons to anyone and from assisting, encouraging or inducing anyone to manufacture or acquire them. Article IV of the BWC obliges States Parties, in accordance with their constitutional processes, to take any necessary measures to prohibit and prevent the development, production, stockpiling, acquisition or retention of biological weapons in its territory and anywhere under its jurisdiction or control. States must also now adopt measures for the safety and security of biological agents and toxins – also known as 'biosafety' and 'biosecurity' measures^{16 17} – to fulfil their obligations to give effect to the BWC.

The Second Review Conference of the BWC (1986) decided by consensus that Confidence-building Measures (CBMs) should be introduced "in order to prevent or reduce the occurrence of ambiguities, doubts and suspicions and in order to improve international co-operation in the field of peaceful biological activities..." BWC States Parties are now politically obligated to submit CBMs each year, the relevant modalities and forms for which were most recently revised at the Seventh Review Conference in 2011.¹⁸ Form E –

¹⁶ 'Laboratory biosafety' is the term used to describe the containment principles, technologies and practices that are implemented to prevent unintentional exposure to pathogens and toxins, or their accidental release. 'Laboratory biosecurity' refers to institutional and personal security measures designed to prevent the loss, theft, misuse, diversion or intentional release of pathogens and toxins. Biosafety Laboratory Manual, Third Edition (WHO, Geneva, 2004), p. 47.

¹⁷ The final report of the 2008 Meeting of the States Parties to the BWC emphasized the States Parties' non-binding understanding of biosafety and biosecurity: "Having considered national, regional and international measures to improve biosafety and biosecurity, and recognising the need to take into account respective national circumstances and legal and regulatory processes, States Parties noted their common understanding that in the context of the Convention, *biosafety* refers to principles, technologies, practices and measures implemented to prevent the accidental release of, or unintentional exposure to, biological agents and toxins, and *biosecurity* refers to the protection, control and accountability measures implemented to prevent the loss, theft, misuse, diversion or intentional release of biological agents and toxins and related resources as well as unauthorized access to, retention or transfer of such material". Available at www.unog/BWC.

¹⁸ With regard to the fields pertaining to accounting/securing/physically protecting biological weapons, including related materials, in the new revised matrix template (discussed in Part I, Section 2 of this

Declaration of legislation, regulations and other measures – obliges States Parties to report on legislation, regulations and other measures in the following areas:

- the development, production stockpiling, acquisition or retention of microbial or other biological agents, or toxins, weapons, equipment and means of delivery specified in Article I of the BWC;
- exports of micro-organisms and toxins;
- imports of micro-organisms and toxins; and
- biosafety and biosecurity.

Of note, the Seventh Review Conference in 2011 called upon States Parties to strengthen the implementation of the BWC and “to adopt, in accordance with their constitutional processes, legislative, administrative, judicial and other measures, including penal legislation” as well as measures to “ensure the safety and security of microbial or other biological agents or toxins in laboratories, facilities, and during transportation, to prevent unauthorized access to and removal of such agents or toxins”.

Legislative drafters may find the following documents (Sections 2 to 4) useful for implementing not only the BWC but also the biological weapons and materials-related provisions of UNSCR 1540.

2. VERTIC: Sample Act for National Implementation of the 1972 Biological and Toxin Weapons Convention and Related Requirements of UN Security Council Resolution 1540

The *Sample Act* was developed by VERTIC to assist countries in drafting legislation to implement the BWC and the biological weapons-related provisions of UNSCR 1540. It is a tool which legislative drafters may freely use, while taking into consideration the national legal framework, level of biotechnological development and other domestic circumstances.

The *Sample Act* is divided into five parts. Part A contains a brief introduction and defines terms that have a particular meaning in the legislation. Part B ensures that non-state actors who misuse biological agents and toxins to harm or kill are committing an offence punishable by law. Part C establishes a robust and comprehensive system, including biosecurity measures, for the prevention of biological and toxin weapons proliferation. Part D provides for enforcement and oversight through two proposed agencies. Finally, Part E enables a National Authority or appropriate minister to issue any regulations necessary under the legislation.

The *Sample Act* is available in Arabic, Azeri, Bahasa Indonesian, English, French, Georgian, Portuguese, Russian and Spanish on the VERTIC website.¹⁹ Civil law versions are also available in French and Spanish.

3. ICRC-VERTIC: Model Law – The Biological and Toxin Weapons Crimes Act

The ICRC-VERTIC *Model Law* is intended for States with a common law legal tradition, although States with different legal traditions may find some of the provisions relevant. It is also intended for States with little or no biotechnology industry. It does not formulate internal regulations (see Section 4 below) nor does it cover separate administrative measures that arise from implementation of the BWC and UNSCR 1540.

Guide), information required in that section may also be available in the State’s CBMs report, if submitted to the BWC Implementation Support.

¹⁹ Available at <http://www.vertic.org/pages/homepage/programmes/national-implementation-measures/biological-weapons-and-materials/legislation-drafting-tools.php>.

The main emphasis in the *Model Law* is placed on the prohibition, backed up by penal sanctions, of the weapons and acts defined in the BWC and the 1925 Geneva Protocol. Part II of the *Model Law* spells out criminal offences including acts committed by State agents, and provides definitions for terms of prohibition mentioned in the BWC and 1925 Geneva Protocol. Part II also sets up an optional licensing scheme.

Part III of the *Model Law* provides for measures of domestic enforcement through the powers of inspectors. Part IV provides for an information collection system for reporting internally, to other States Party to the BWC and to the 1540 Committee.

Parts V and VI provide for regulation-making powers and contain the procedural elements normally found in similar common law legislation.

The ICRC-VERTIC *Model Law* is available in Arabic, English and Spanish on the VERTIC website.²⁰

4. VERTIC: Regulatory Guidelines for National Implementation of the 1972 Biological and Toxin Weapons Convention and Related Requirements of UN Security Council Resolution 1540

VERTIC developed the *Regulatory Guidelines* as guidance for States when they are engaged in the process of preparing any regulatory and administrative measures that may be necessary to supplement their primary legislation for national implementation of the BWC, as well as the biological weapons-related provisions of UNSCR 1540. They are not a set of model regulations, but rather suggestions, tips and links to examples of proven practice, which States are free to review and utilize, taking into account their own legal framework and traditions, level of biotechnological development and other national circumstances.

Part I of the *Regulatory Guidelines* focuses on biosecurity, corresponding to Part C of VERTIC's *Sample Act* (see Section 2 above). Part II of the *Regulatory Guidelines* focuses on enforcement, corresponding to Part D of VERTIC's *Sample Act*.

The *Regulatory Guidelines* are available in Arabic, English, French, Portuguese, Russian and Spanish on the VERTIC website.²¹

Quick Reference 1: Implementation of the biological weapons and materials-related obligations of UNSCR 1540 (and of the BWC) (all materials are available on the VERTIC website²²)

- VERTIC: Sample Act for National Implementation of the 1972 Biological and Toxin Weapons Convention and Related Requirements of UN Security Council Resolution 1540 (available in Arabic, Azeri, Bahasa Indonesian, English, French, Georgian, Portuguese, Russian and Spanish)
- ICRC-VERTIC: Model Law – The Biological and Toxin Weapons Crimes Act (available in Arabic, English and Spanish)
- VERTIC: Regulatory Guidelines for National Implementation of the 1972 Biological and Toxin Weapons Convention and Related Requirements of UN Security Council Resolution 1540 (available in Arabic, English, French, Portuguese, Russian, Spanish)

²⁰ Available at <http://www.vertic.org/pages/homepage/programmes/national-implementation-measures/biological-weapons-and-materials/legislation-drafting-tools.php>.

²¹ Available at <http://www.vertic.org/pages/homepage/programmes/national-implementation-measures/biological-weapons-and-materials/legislation-drafting-tools.php>.

²² Available at <http://www.vertic.org/pages/homepage/programmes/national-implementation-measures/biological-weapons-and-materials/legislation-drafting-tools.php>.

III. CHEMICAL WEAPONS AND RELATED MATERIALS

1. Overview

UNSCR 1540 and the Chemical Weapons Convention are complementary to one another: a State's effective implementation of the CWC goes a long way toward ensuring that the obligations mandated by UNSCR 1540 are met. This is true whether the implementing State is party to the CWC or not and, indeed, there is nothing preventing a non-State Party from implementing the CWC into its national law and adhering to the Convention.

In particular, Article VI requires States Parties to the CWC to adopt the necessary measures to ensure that toxic chemicals and their precursors are only developed, produced, otherwise acquired, retained, transferred, or used for peaceful purposes within their territory or anywhere under their jurisdiction or control. States Parties must accordingly regulate and oversee activities involving the chemicals listed in Schedules 1, 2 and 3 of the Convention's Annex on Chemicals.

Article VII of the CWC requires all States Parties to adopt the necessary measures to fulfil their obligations under the Convention, especially appropriate penal legislation. They must then inform the OPCW of the measures they have taken (an Article VII (5) submission).

Legislative drafters may find the following document useful for implementing not only the CWC but also the chemical weapons and materials-related obligations of UNSCR 1540.

2. OPCW: National Legislation Implementation Kit for the Chemical Weapons Convention

The OPCW has published a *National Legislation Implementation Kit for the Chemical Weapons Convention*.²³ It includes illustrative provisions for:

- definitions;
- National Authority;
- control regime for scheduled chemicals and discrete organic chemicals;
- international inspections;
- forfeiture, confidentiality and legal assistance;
- penal provisions; and
- final provisions.

Quick Reference 2: Implementation of the chemical weapons and materials-related obligations of UNSCR 1540 (and of the CWC)

- OPCW: National Legislation Implementation Kit for the Chemical Weapons Convention (available on the OPCW website in Arabic, English, French, Russian and Spanish²⁴)

²³ The *Kit* is available at <http://www.opcw.org/our-work/national-implementation/implementing-legislation/models-checklists-questionnaires/>.

²⁴ Available at <http://www.opcw.org/our-work/national-implementation/implementing-legislation/models-checklists-questionnaires/>.

IV. NUCLEAR WEAPONS / NUCLEAR AND OTHER RADIOACTIVE MATERIAL

1. Overview

Prohibiting and preventing the proliferation of nuclear weapons and related materials under UNSCR 1540 is arguably a more complex undertaking than dealing with their biological and chemical counterparts, discussed in Parts II and III of this *Guide*.²⁵

First, a number of international instruments specifically addressing nuclear weapons and related materials need to be considered. They include:

- the Nuclear Non-proliferation Treaty (NPT) and related safeguards agreements: Comprehensive Safeguards Agreement (INFCIRC/153 (Corrected)); Additional Protocol (INFCIRC/540 (Corrected)); INFCIRC/66/Rev. 2;
- the Convention on the Physical Protection of Nuclear Material (CPPNM) (and 2005 amendment);
- the International Convention for the Suppression of Acts of Nuclear Terrorism (ICSANT); and
- the Statute of the International Atomic Energy Agency (IAEA).

Second, UNSCR 1540 does not explicitly cover so-called radiation dispersal devices (RDDs or ‘dirty bombs’), which utilize radioactive material beyond nuclear material as defined in the main non-proliferation instruments. However, the following documents provide guidance that can contribute to the security objectives set forth in the resolution:

- Code of Conduct on the Safety and Security of Radioactive Sources (Code of Conduct);
- Supplementary Guidance on the Import and Export of Radioactive Sources; and
- Regulations on the Safe Transport of Radioactive Material, IAEA document TS-R-1.

Third, there are other international instruments that have provisions relevant to the non-proliferation of nuclear weapons and material,²⁶ and therefore to the implementation of UNSCR 1540, including:

- Convention on the Suppression of Unlawful Acts Relating to International Civil Aviation (Beijing Convention);
- Convention for the Suppression of Unlawful Acts against the Safety of Maritime Navigation (as amended by the 2005 Protocol); and
- Protocol for the Suppression of Unlawful Acts against the Safety of Fixed Platforms Located on the Continental Shelf (as amended by the 2005 Protocol).

²⁵ A table analyzing the scope and application of the instruments discussed in this Part is included as Annex I of the VERTIC report *Illicit Trafficking of Nuclear and other Radioactive Material – The Legislative Response* (available at http://www.vertic.org/media/assets/Publications/ITR_WEB.pdf).

²⁶ These international instruments use the term ‘BCN weapon’ to refer to a biological weapon, chemical weapon or nuclear weapon. Implementation of these instruments in national law would also strengthen national implementation of the Biological and Chemical Weapons Conventions, discussed in Parts II and III of this *Guide*. The *National Legislation Implementation Kit on Nuclear Security*, discussed in Section 4 of this Part, includes a Model Law with provisions for national implementation of these instruments.

Legislative drafters may find the following documents (Sections 2 to 4) useful, not only for implementation of the instruments listed above, but also for the nuclear weapons and materials-related provisions of UNSCR 1540.

2. IAEA: Nuclear Security Series

2.1. Introduction

The IAEA continues to expand its Nuclear Security Series to address “Nuclear security issues relating to the prevention and detection of, and response to, theft, sabotage, unauthorized access and illegal transfer or other malicious acts involving nuclear material and other radioactive substances and their associated facilities”.²⁷ Many of these documents (20 have been published so far) have relevance to the implementation of UNSCR 1540, including *Combating Illicit Trafficking in Nuclear and other Radioactive Material* (Nuclear Security Series No. 6) (2007), *Nuclear Security Recommendations on Physical Protection of Nuclear Material and Nuclear Facilities* (Nuclear Security Series No. 13) (2011) and *Objective and Essential Elements of a State’s Nuclear Security Regime* (Nuclear Security Series No. 20) (2013).²⁸

2.2. Combating Illicit Trafficking in Nuclear and other Radioactive Material (Nuclear Security Series No. 6)

The IAEA published *Combating Illicit Trafficking in Nuclear and other Radioactive Material* in 2007.²⁹ The Agency introduces the publication by noting that “...illicit trafficking and theft of nuclear material can lead to nuclear proliferation and the possible construction of improvised nuclear devices or radiological dispersal and exposure devices...” and that, therefore, “...measures to detect and respond to such acts are essential components of a comprehensive nuclear security programme”.³⁰

Drafters of national legislation may find the third chapter particularly useful as it describes in detail the various international legal instruments which are relevant to dealing with criminal or unauthorized acts involving nuclear and other radioactive material. The publication also makes two important points about the role of national legislation: first, “...the provisions of these instruments should be reflected in the national laws and regulations of all States” and, second, “...harmonization of national laws and regulations could contribute to the detection of criminal or unauthorized acts by reducing delay and confusion in the handling of incidents of a cross-boundary character, and by enhancing the coordination of needed response actions”.³¹

2.3. Nuclear Security Recommendations on Physical Protection of Nuclear Material and Nuclear Facilities (INFCIRC/225/Rev. 5) (Nuclear Security Series No. 13)

The publication *Nuclear Security Recommendations on Physical Protection of Nuclear*

²⁷ IAEA Nuclear Security Series, available at http://www-ns.iaea.org/security/nuclear_security_series.asp?s=5&l=35.

²⁸ Though UNSCR 1540 does not explicitly cover so-called radiation dispersal devices (RDDs or ‘dirty bombs’), which utilize radioactive material beyond nuclear material as defined in the main non-proliferation instruments, legislative drafters may nevertheless find the following publications in the Nuclear Security Series useful: *Security of Radioactive Sources*, IAEA Nuclear Security Series No. 11 (IAEA, Vienna, 2009); *Nuclear security recommendations on radioactive material and associated facilities*, IAEA Nuclear Security Series No. 14 (IAEA, Vienna, 2011).

²⁹ Available at <http://www-pub.iaea.org/books/IAEABooks/7806/Combating-Illicit-Trafficking-in-Nuclear-and-Other-Radioactive-Material>.

³⁰ *Combating Illicit Trafficking in Nuclear and other Radioactive Material*, IAEA Nuclear Security Series No. 6 (IAEA, Vienna, 2007), p. 1.

³¹ *Ibid.* at pp. 9-10.

Material and Nuclear Facilities (Recommendations) dates its origins to 1975. The fifth and latest revision was released in 2011 as Nuclear Security Series No. 13.³² Though the *Recommendations* are not legally-binding, they “receive a legal status in some situations by virtue of their adoption in state regulatory frameworks and by reference within other regimes, such as in the Nuclear Suppliers Guidelines”.³³ They do not apply to other radioactive material or to activities beyond those defined as ‘nuclear material and facilities’.

The *Recommendations* set out a series of measures that should be enacted in national law relating to the physical protection of nuclear material and facilities. The basis for these measures is the suggested fundamental principle that: “the State is responsible for establishing and maintaining a legislative and regulatory framework to govern physical protection”.³⁴

As recommended by the IAEA, the framework should establish “applicable physical protection requirements and include a system of evaluation and licensing or other procedures to grant authorization”.³⁵ A national law should also, in the view of the IAEA, provide for a “system of inspection of nuclear facilities and transport to verify compliance with applicable requirements and conditions of the license or other authorizing document, and to establish a means to enforce applicable requirements and conditions, including effective sanctions”. On this latter point, the recommendations suggest that “sanctions against the unauthorized removal and against sabotage should be part of the State’s legislative or regulatory system”.³⁶

2.4. Objective and Essential Elements of a State’s Nuclear Security Regime (Nuclear Security Series No. 20)

The IAEA published *Objective and Essential Elements of a State’s Nuclear Security Regime* in 2013.³⁷ It is now the IAEA’s first-tier publication in the Nuclear Security Series, which also includes recommendations, implementing guides and technical guidance. The publication has the purpose to “... assist Member States in enhancing nuclear security by providing national policy makers, legislative bodies, competent authorities, institutions, and individuals involved in the establishment, implementation, maintenance or sustainability of a State’s nuclear security regime with the objective and essential elements of the nuclear security regime”.³⁸

Objective and Essential Elements of a State’s Nuclear Security Regime confirms that the “essential elements” for nuclear security include:

- State responsibility;
- identification and definition of nuclear security responsibilities;
- legislative and regulatory framework;
- international transport of nuclear material and other radioactive material;
- offences and penalties including criminalization;
- international co-operation and assistance;
- identification and assessment of nuclear security threats;
- identification and assessment of targets and potential consequences;

³² Available at <http://www-pub.iaea.org/books/IAEABooks/8629/Nuclear-Security-Recommendations-on-Physical-Protection-of-Nuclear-Material-and-Nuclear-Facilities-INFCIRC-225-Revision-5>.

³³ *Prevention of the inadvertent movement and illicit trafficking of radioactive materials* (IAEA TECDOC-1311) (IAEA, Vienna, 2002), p. 4.

³⁴ *Nuclear Security Recommendations on Physical Protection of Nuclear Material and Nuclear Facilities*, IAEA Nuclear Security Series No. 13, INFCIRC/225/Rev. 5 (IAEA, Vienna, 2011), p 7.

³⁵ *Ibid.* at pp. 7-8.

³⁶ *Ibid.* at p. 9.

³⁷ Available at http://www-pub.iaea.org/MTCD/Publications/PDF/Pub1590_web.pdf.

³⁸ *Objective and Essential Elements of a State’s Nuclear Security Regime*, IAEA Nuclear Security Series No. 20 (IAEA, Vienna, 2013), pp. 2-3.

- use of risk informed approaches;
- detection of nuclear security events;
- planning for, preparedness for, and response to, a nuclear security event; and
- sustaining a nuclear security regime.³⁹

The documents discussed in Sections 3 and 4 below give States more specific guidance on implementing a nuclear security regime at the national level, through a legislative and regulatory framework (Essential Element 3) and the criminalization of offences involving nuclear and other radioactive material and nuclear facilities (Essential Element 5).

3. IAEA: Documents on National Implementation

3.1. The International Legal Framework for Nuclear Security (IAEA International Law Series No. 4)

The IAEA published *The International Legal Framework for Nuclear Security*, part of the Agency's International Law Series, in 2011.⁴⁰ The objective of the publication is to "...bring together the legally binding primary international instruments and the internationally accepted non-binding instruments that constitute the international legal framework for nuclear security".⁴¹

Section 2 of the publication provides the legislative history of a number of legally and non-legally binding nuclear security instruments, operating under the auspices of the IAEA, the United Nations (including the Security Council) and the International Maritime Organization. Section 3 gives an overview of the most salient features of the instruments, including their objectives and scope, as well as obligations of States Parties to the legally binding instruments or recommendations to States for the non-legally binding instruments. Section 4 describes the IAEA's mandate and functions pursuant to these instruments.

3.2. Handbook on Nuclear Law (2003)

In addition to giving an overview of the elements of nuclear law (Part I), the IAEA's *Handbook on Nuclear Law* (2003)⁴² provides detailed information on how to implement legislative and regulatory measures for: radiation protection (Part II), nuclear and radiation safety (Part III), nuclear liability and coverage (Part IV) and non-proliferation and physical protection (Part V). Legislative drafters may find Part V on 'Non-proliferation and physical protection' particularly useful in their efforts to implement UNSCR 1540. Part V includes chapters on safeguards, export and import controls and physical protection (Chapters 12 to 14).

The primary objective of 'safeguards' (Comprehensive Safeguards Agreement (INFCIRC/153 (Corrected) and Additional Protocol (INFCIRC/540 (Corrected))) is to "...help ensure that nuclear material is not diverted for use in the production of nuclear weapons or other nuclear explosive devices, safeguards being the primary means of verifying compliance by States with undertakings not to use safeguarded items for unauthorized purposes".⁴³ 'Export and import controls' have two objectives: "...to ensure that transfers of nuclear material, equipment and technology (whether into or out of the State) take place in a secure, safe and environmentally responsible manner" and "...to ensure that such transfers do not directly or

³⁹ Ibid. at pp. 4-10.

⁴⁰ Available at http://www-pub.iaea.org/MTCD/publications/PDF/Pub1486_web.pdf.

⁴¹ *The International Legal Framework for Nuclear Security*, IAEA International Law Series No. 4 (IAEA, Vienna, 2011), p. 2.

⁴² Available at http://www-pub.iaea.org/MTCD/publications/PDF/Pub1160_web.pdf.

⁴³ *Handbook on Nuclear Law*, Carlton Stoiber, Alec Baer, Norbert Pelzer, Wolfram Tonhauser (IAEA, Vienna, 2003), p. 125.

indirectly assist any non-nuclear-weapon State or any unauthorized person in developing or acquiring nuclear explosive devices or using nuclear material for unauthorized purposes”.⁴⁴ And, finally, the primary objective of ‘physical protection’ is to “...prevent the illegal or unauthorized acquisition of nuclear material and interference with the authorized uses of nuclear material and facilities through acts such as theft, diversion, threats and sabotage”.⁴⁵

National legislation which is developed toward the objectives in the three areas above would also go a long way towards implementation of the nuclear weapons and materials-related obligations of UNSCR 1540, which requires measures to account for, secure, physically protect and control transfers of nuclear material in order to prevent non-state actors from developing nuclear weapons.

3.3. Handbook on Nuclear Law - Implementing Legislation (2010)

The IAEA published the *Handbook on Nuclear Law—Implementing Legislation* in 2010.⁴⁶ Though mostly structured along the lines of the *Handbook on Nuclear Law* (2003) – discussed in Section 3.2 above – the 2010 version has a revised Chapter 1 which proposes initial provisions to be included in a comprehensive nuclear law, and expands the scope of Chapter 14 beyond physical protection to include nuclear security and illicit trafficking. The 2010 version also provides illustrative model provisions. These are “...an example of language developed by persons experienced in nuclear law and technology that reflects relevant international legal instruments and IAEA guidance documents in a clear, consistent and succinct manner. It is expected that this text, even if used as a basis for further drafting by a State, will be adjusted to reflect domestic legislative practice and the needs of the particular State”.⁴⁷

Chapters 12 and 13 in the *Handbook on Nuclear Law* (2010) – like the 2003 version – cover safeguards and export and import controls. Chapter 14 has been expanded to cover nuclear security, physical protection and illicit trafficking.

The IAEA suggests that legislation to address the areas in Chapter 14 should include:

- (a) a physical protection regime for nuclear and other radioactive material and related facilities;
- (b) provisions regarding authorization (licensing), inspection and enforcement measures relevant to nuclear material and nuclear facilities (and other radioactive material);
- (c) measures for the prevention and detection of, and response to, incidents of theft or other unauthorized acquisition of or illicit trafficking in nuclear and other radioactive material or sabotage of related facilities;
- (d) criminal offences for violations of applicable laws and regulations, with stringent penalties, particularly for malicious acts; and
- (e) national arrangements necessary to implement international cooperation in protecting radioactive material, recovering stolen or lost material and dealing with offenders.⁴⁸

The *Handbook on Nuclear Law* (2010) proposes a series of model provisions to cover the basic elements in (a) to (e) above in national legislation.

In addition, the *Handbook* proposes a series of model provisions to implement the criminal offences in the CPPNM (and the amendment thereto), the International Convention for the Suppression of Terrorist Bombings and ICSANT. These provisions were jointly developed by

⁴⁴ Ibid. at pp. 138-9.

⁴⁵ Ibid. at p. 148.

⁴⁶ Available at http://www-pub.iaea.org/MTCD/publications/PDF/Pub1456_web.pdf.

⁴⁷ *Handbook on Nuclear Law – Implementing Legislation*, Carlton Stoiber, Abdelmadjid Cherf, Wolfram Tonhauser, Maria De Lourdes Vez Carmona (IAEA, Vienna, 2010), p. 3.

⁴⁸ Ibid. at p. 135.

the IAEA and the Terrorism Prevention Branch of the United Nations Office on Drugs and Crime.

Effective implementation of the objectives in Chapters 12 to 14 of the *Handbook on Nuclear Law* (2010) – through robust legislative measures – would go a long way toward ensuring that the obligations mandated by UNSCR 1540 are met. The resolution requires States to implement measures to account for, secure, physically protect and control transfers of nuclear material in order to prevent non-state actors from developing nuclear weapons.

4. Indonesia-VERTIC: National Legislation Implementation Kit on Nuclear Security

At the request of the Indonesian government, VERTIC developed the *National Legislation Implementation Kit on Nuclear Security* (Kit) further to a commitment made by Indonesia to the second Nuclear Security Summit (NSS II), which took place during 26-27 March 2012 in Seoul, Republic of Korea. Indonesia presented the *Kit* as its gift to the third Nuclear Security Summit (NSS III) in The Hague during 24-25 March 2014.

The *Kit* has two objectives:

- to help States develop comprehensive national legislation on nuclear security, in accordance with their own respective legal cultures and internal legal processes; and
- to provide States with references to a wide array of consolidated elements and provisions contained in relevant international legal instruments and guidance documents that together establish the global framework for nuclear security.

The *Kit* includes a Model Law (Part III) and a useful description of the process for developing nuclear security legislation (Part IV). The Model Law proposes legislative provisions to implement a number of international instruments to help States strengthen and complement their existing legislative frameworks for nuclear security, including:

- 1980 Convention on the Physical Protection of Nuclear Material as amended by the 2005 Amendment to the Convention on the Physical Protection of Nuclear Material (CPPNM/A);
- 2005 International Convention for the Suppression of Acts of Nuclear Terrorism (ICSANT);
- 2003 Code of Conduct on the Safety and Security of Radioactive Sources (Code of Conduct) and 2012 Guidance on the Import and Export of Radioactive Sources (Guidance);
- 2010 Convention on the Suppression of Unlawful Acts Relating to International Civil Aviation (Beijing Convention);
- 1988 Convention for the Suppression of Unlawful Acts against the Safety of Maritime Navigation as amended by the Protocol of 2005 to the Convention for the Suppression of Unlawful Acts against the Safety of Maritime Navigation (SUA 2005); and
- 1988 Protocol for the Suppression of Unlawful Acts against the Safety of Fixed Platforms Located on the Continental Shelf as amended by the Protocol of 2005 to the Protocol for the Suppression of Unlawful Acts against the Safety of Fixed Platforms Located on the Continental Shelf (SUA PROT 2005).

Duplication of national implementation obligations among the instruments above, especially in the areas of preparatory offences, jurisdiction, criminal proceedings and international co-operation, has been harmonized in the Model Law.

Effective implementation of the Model Law in the *Kit* would go a long way toward ensuring that the obligations mandated by UNSCR 1540 are met, particularly in the areas of national regulation of nuclear security; physical protection and security of nuclear and other

radioactive material and nuclear facilities; transport, import, export and transit controls; criminalization of offences related to nuclear and other radioactive material and nuclear facilities; and criminal proceedings and international co-operation.

The *Kit* is available on the VERTIC website in Arabic, English, French, Russian and Spanish.⁴⁹

Quick Reference 3: Implementation of the nuclear weapons and materials-related obligations of UNSCR 1540 (and of certain international instruments to secure nuclear and other radioactive material)

- IAEA: Combating Illicit Trafficking in Nuclear and other Radioactive Material (Nuclear Security Series No. 6)(available on the IAEA website⁵⁰)
- IAEA: Nuclear Security Recommendations on Physical Protection of Nuclear Material and Nuclear Facilities (Nuclear Security Series No. 13)(available on the IAEA website⁵¹)
- IAEA: Objective and Essential Elements of a State's Nuclear Security Regime (Nuclear Security Series No. 20)(available on the IAEA website⁵²)
- IAEA: The International Legal Framework for Nuclear Security (International Law Series No. 4)(available on the IAEA website⁵³)
- IAEA: Handbook on Nuclear Law (2003)(available on the IAEA website⁵⁴)
- IAEA: Handbook on Nuclear Law - Implementing Legislation (2010)(available on the IAEA website⁵⁵)
- Indonesia-VERTIC: National Legislation Implementation Kit on Nuclear Security (available on the VERTIC website⁵⁶)

⁴⁹ Available at <http://www.vertic.org/pages/homepage/programmes/national-implementation-measures/nuclear-and-other-radioactive-material/legislation-drafting-tools.php>.

⁵⁰ Available at http://www-pub.iaea.org/MTCD/publications/PDF/pub1309_web.pdf.

⁵¹ Available at http://www-pub.iaea.org/MTCD/Publications/PDF/Pub1481_web.pdf.

⁵² Available at http://www-pub.iaea.org/MTCD/Publications/PDF/Pub1590_web.pdf.

⁵³ Available at http://www-pub.iaea.org/MTCD/publications/PDF/Pub1486_web.pdf.

⁵⁴ Available at http://www-pub.iaea.org/MTCD/publications/PDF/Pub1160_web.pdf.

⁵⁵ Available at http://www-pub.iaea.org/MTCD/publications/PDF/Pub1456_web.pdf.

⁵⁶ Available at <http://www.vertic.org/pages/homepage/programmes/national-implementation-measures/nuclear-and-other-radioactive-material/legislation-drafting-tools.php>.

V. OTHER RELEVANT INTERNATIONAL INSTRUMENTS

1. Overview

There are two other international instruments which may be of some relevance to States when they are implementing UNSCR 1540. The first is the International Health Regulations (IHR),⁵⁷ which were revised and then adopted by the Fifty-eighth World Health Assembly on 23 May 2005. They entered into force on 15 June 2007. The other is the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal (Basel Convention),⁵⁸ which was adopted on 22 March 1989 and entered into force on 5 May 1992.

2. International Health Regulations (2005)

The scope and purpose of the IHR are “to prevent, protect against, control and provide a public health response to the international spread of disease in ways that are commensurate with and restricted to public health risks, and which avoid unnecessary interference with international traffic and trade”.⁵⁹ To fulfill this purpose, the IHR introduce new ways of managing public and global health risk, namely:

- their scope is not limited to any specific disease or manner of transmission, but cover “illness or medical condition, irrespective of origin or source, that presents or could present significant harm to humans”;
- State Parties are obliged to develop certain minimum core public health capacities;
- States Parties are obliged to notify the World Health Organization (WHO) of events that may constitute a public health emergency of international concern according to defined criteria;
- there are provisions authorizing WHO to take into consideration unofficial reports of public health events and to obtain verification from States Parties concerning such events;
- there are procedures for the determination by the Director-General of a “public health emergency of international concern” and the issuance of corresponding temporary recommendations, after taking into account the views of an Emergency Committee;
- the human rights of persons and travellers are protected; and
- National IHR Focal Points and WHO IHR Contact Points must be established for urgent communications between States Parties and WHO.⁶⁰

Notably, the IHR cover public health risks of potential international concern that may be biological, chemical or radionuclear in origin or source, or transmitted by the environment through radionuclear releases, chemical spills or other contamination.⁶¹ The IHR are, therefore, relevant to national implementation of UNSCR 1540 as they address *how*, as a public health matter, States can respond to incidents potentially involving nuclear, biological or chemical weapons or materials, and *how* to reflect this response in national legislation.

As with the international legal instruments discussed in Parts II, III and IV of this *Guide*, the IHR must be implemented in national legislation in order for them to be effective. Toward

⁵⁷ The IHR are available at http://whqlibdoc.who.int/publications/2008/9789241580410_eng.pdf.

⁵⁸ The text of the Convention is available at

<http://www.basel.int/TheConvention/Overview/TextoftheConvention/tabid/1275/Default.aspx>.

⁵⁹ International Health Regulations (WHO, Geneva, 2005), p. 1.

⁶⁰ Ibid. at pp. 1-2.

⁶¹ *International Health Regulations (2005) – Toolkit for implementation in national legislation: Questions and answers, legislative reference and assessment tool and examples of national legislation* (WHO, Geneva, 2009), p. 7.

this objective, WHO published a series of documents in January 2009 to assist States Parties in this process:

- *International Health Regulations (2005) – A brief introduction to implementation in national legislation*⁶²
- *International Health Regulations (2005) – Toolkit for implementation in national legislation: The National IHR Focal Point (NFP)*⁶³
- *International Health Regulations (2005) – Toolkit for implementation in national legislation: Questions and answers, legislative reference and assessment tool and examples of national legislation*⁶⁴

States should contact ihrinfo@who.int for more information about national implementation of the IHR.

3. Basel Convention

The Basel Convention has the objective to “protect human health and the environment against the adverse effects of hazardous wastes”.⁶⁵ Its three principal aims, in line with this objective, are:

- the reduction of hazardous waste generation and the promotion of environmentally sound management of hazardous wastes, wherever the place of disposal;
- the restriction of transboundary movements of hazardous wastes except where it is perceived to be in accordance with the principles of environmentally sound management; and
- a regulatory system applying to cases where transboundary movements are permissible.⁶⁶

The Basel Convention may have some relevance to national implementation of UNSCR 1540 as it addresses *how* States Parties can control transfers of, for example, infectious and toxic waste which could be a proliferation concern.

‘Hazardous waste’ is defined in Article 1(1)(a) of the Basel Convention to include waste in Annex I, such as:

- clinical wastes from medical care in hospitals, medical centers and clinics;
- wastes from the production, formulation and use of biocides and phytopharmaceuticals; and
- waste chemical substances arising from research and development or teaching activities which are not identified and/or are new and whose effects on man and/or the environment are not known.

According to Article 1(1)(a), this waste must also have the characteristics listed in Annex III such as being poisonous, infectious, toxic or ecotoxic. Wastes that are not listed in Annex I but which are included in State Party legislation in relation to export, import or transit are covered under Article 1(1)(b). Notably, radioactive waste subject to other international instruments for radioactive material is excluded from the Basel Convention under Article 1(3).

⁶² Available at http://www.who.int/ihr/Intro_legislative_implementation.pdf.

⁶³ Available at http://www.who.int/ihr/NFP_Toolkit.pdf.

⁶⁴ Available at http://www.who.int/ihr/Toolkit_Legislative_Implementation.pdf.

⁶⁵ <http://www.basel.int/TheConvention/Overview/tabid/1271/Default.aspx>, visited August 2013.

⁶⁶ Ibid.

As with the international legal instruments discussed in Parts II, III and IV of this *Guide*, as well as the IHR in Section 2 above, the Basel Convention must be implemented in national legislation in order for its provisions to be effective.⁶⁷ Toward this objective, *Model National Legislation* was developed by the Legal Working Group and approved for use in decisions by the Conference of the States Parties.⁶⁸ To complement the *Model National Legislation*, a *Checklist for the Legislator* was prepared by the Secretariat of the Basel Convention, in cooperation with the Committee for Administering the Mechanism for Promoting Implementation and Compliance.⁶⁹

States should contact the Basel Convention Secretariat for more information about national implementation of the Convention.⁷⁰

Quick Reference 4: Implementation of other international instruments with some relevance to UNSCR 1540 (IHR, Basel Convention)

- IHR:
 - WHO: International Health Regulations (2005) – A brief introduction to implementation in national legislation⁷¹
 - WHO: International Health Regulations (2005) – Toolkit for implementation in national legislation: The National IHR Focal Point (NFP)⁷²
 - WHO: International Health Regulations (2005) – Toolkit for implementation in national legislation: Questions and answers, legislative reference and assessment tool and examples of national legislation⁷³
- Basel Convention:⁷⁴
 - Model National Legislation
 - Checklist for the Legislator

⁶⁷ See Article 4(4) of the Basel Convention: “Each Party shall take appropriate legal, administrative and other measures to implement and enforce the provisions of this Convention, including measures to prevent and punish conduct in contravention of the Convention”.

⁶⁸ The Model National Legislation is available at:

<http://www.basel.int/Implementation/LegalMatters/LegalFrameworks/Tools/tabid/2750/Default.aspx>.

⁶⁹ The Checklist for the Legislator is available at:

<http://www.basel.int/Implementation/LegalMatters/LegalFrameworks/Tools/tabid/2750/Default.aspx>.

⁷⁰ Secretariat of the Basel Convention, 11-13, Chemin des Anémones - 1219 Châtelaine, Switzerland; Tel.: +41 (0)22 917 8218; Fax: +41 (0)22 917 8098

⁷¹ Available at http://www.who.int/ihr/Intro_legislative_implementation.pdf.

⁷² Available at http://www.who.int/ihr/NFP_Toolkit.pdf.

⁷³ Available at http://www.who.int/ihr/Toolkit_Legislative_Implementation.pdf.

⁷⁴ Both documents are available at

<http://www.basel.int/Implementation/LegalMatters/LegalFrameworks/Tools/tabid/2750/Default.aspx>.



**A Sample Act for National Implementation of the
1972 Biological and Toxin Weapons Convention
and Related Requirements of
UN Security Council Resolution 1540**

INTRODUCTION

This “Sample Act” was developed to assist countries in drafting legislation to implement the 1972 Biological and Toxin Weapons Convention and the biological weapons-related provisions of UN Security Council Resolution 1540. It is a tool which legislative drafters may freely use, while taking into consideration their country’s legal framework, level of biotechnological development, and other national circumstances.

Legislation to prevent and prohibit biological and toxin weapons activities should include offences and penalties for any misuse of biological agents and toxins by non-State actors, as well as provisions enabling a State to effectively regulate legitimate activities. These two approaches together form a robust deterrent against those who would spread fear and panic, injury and death through the intentional release of disease.

Part A of the Sample Act contains a brief introduction and defines terms that have a particular meaning in the legislation. Part B ensures that non-State actors who misuse biological agents and toxins to harm or kill are committing an offence punishable by law. Section 5, in particular, prohibits biological weapons-related activities, terrorist acts involving the intentional release of pathogens, and certain activities involving controlled biological agents and toxins, including internal and international transfers, without proper authorisation. Section 6 ensures that any preparations towards harming or killing with pathogens, including attempts, assistance, financing, or threats are offences punishable by law.

Part C of the Sample Act establishes a robust and comprehensive system, including biosecurity measures, for the prevention of biological and toxin weapons proliferation. Sections 9 and 10 provide the building blocks of prevention, through the establishment of lists of biological agents and toxins and equipment and technology, which a State may wish to control through an oversight system. Sections 11 to 14 develop a web of deterrence through licensing of activities related to controlled agents and toxins, notification of internal transfers, import/export permits for international transfers of controlled agents and toxins and equipment and technology, and strict oversight of carriers approved to transport these items.

Part D provides for enforcement and oversight through two proposed agencies in sections 15 and 16. The first is a Responsible Authority, an interagency body responsible for overall policy coordination and enforcement of the legislation and any regulations at the national level. The second is the Biological Emergency Response and Investigation Support System (BERISS), which is responsible for co-ordinating the public health and law enforcement response in the event of a natural, accidental or intentional disease outbreak. Part D also requires licensed individuals, entities and carriers to comply with reporting requirements and facility inspections in sections 17 and 18, and provides for law enforcement investigations, by specially trained officers, of suspected violations of the legislation in section 22. Penalties for the offences in Parts B, C and D are found in section 26. Sections 27 and 28 establish jurisdiction and modalities for legal cooperation and assistance with other States and international organisations. Finally, Part E enables the Responsible Authority or appropriate minister to issue any regulations necessary under the legislation.

VERTIC (www.vertic.org) is in a position to assist with the development of national implementing legislation, including in capitals, if requested. This service is free of charge.

For further details, please contact:

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Website: www.vertic.org

VERTIC is an independent, non-profit making, non-governmental organization located in London, United Kingdom. VERTIC promotes effective and efficient verification as a mean of ensuring confidence in the implementation of international agreements.

VERTIC's National Implementation Measures (NIM) Programme was developed to assist States in understanding what measures are required at the national level to comply with obligations in a wide range of nuclear, chemical and biological weapons treaties and UN Security Council resolutions and how to implement them.

VERTIC wishes to thank the governments of Canada (Global Partnership Program, DFAIT) and the United Kingdom (Strategic Programme Fund, FCO) for their financial and in-kind support for this programme. The views expressed by VERTIC do not necessarily reflect those of these governments or agencies.

Although every care has been taken to prepare this Sample Act, VERTIC hereby disclaims any liability or responsibility arising from its use in any way. VERTIC would be grateful for any errors or omissions that are brought to our attention.

Version: February 2012

**An [ACT, STATUTE, ORDINANCE, LAW] to
Implement the 1972 Biological and Toxin
Weapons Convention and Related Requirements
of UN Security Council Resolution 1540 of [YEAR]**

**Adopted by the [PARLIAMENT, NATIONAL
ASSEMBLY] of [COUNTRY NAME] and Signed into
Law on [DATE] by**

[HEAD OF GOVERNMENT, HEAD OF STATE]

ARRANGEMENT OF SECTIONS

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PART A PRELIMINARIES

1. Short title

This [ACT, STATUTE, ORDINANCE, LAW] may be cited as [THE BIOLOGICAL AND TOXIN WEAPONS CONVENTION IMPLEMENTATION [ACT, STATUTE, ORDINANCE, LAW] OF [YEAR]].

2. Purpose

The purpose of this [ACT, STATUTE, ORDINANCE, LAW] is to implement the 1972 Biological and Toxin Weapons Convention and the biological weapons-related provisions of UN Security Council Resolution 1540 by prohibiting any misuse of biological agents and toxins, promoting biosecurity and facilitating [COUNTRY NAME]'s compliance with its international obligations to prevent proliferation of biological and toxin weapons. Part B establishes prohibitions on the misuse of biological agents and toxins and related offences. Part C provides for the control of certain biological agents, toxins, equipment and technology and offences for related violations. Part D provides for penalties and enforcement of this [ACT, STATUTE, ORDINANCE, LAW]. Part E provides for regulations under this [ACT, STATUTE, ORDINANCE, LAW].

3. [ACT, STATUTE, ORDINANCE, LAW] to bind the State

This [ACT, STATUTE, ORDINANCE, LAW] is binding on [COUNTRY NAME].

4. Interpretation

(1) In this [ACT, STATUTE, ORDINANCE, LAW] –

- (a) “Biological or toxin weapon” means –
 - i. microbial or other biological agents, or toxins whatever their origin or method of production, of types and in quantities that have no justification for prophylactic, protective or other peaceful purposes;
 - ii. weapons, equipment or means of delivery designed to use such agents or toxins for hostile purposes or in armed conflict;
- (b) “Controlled agents and toxins” and “controlled agents and toxins list” shall have the meaning assigned to each in section 9 of this [ACT, STATUTE, ORDINANCE, LAW];
- (c) “Controlled equipment and technology” and “controlled equipment and technology list” shall have the meaning assigned to each in section 10 of this [ACT, STATUTE, ORDINANCE, LAW];
- (d) “Entity” means any government agency, academic institution, corporation, company, partnership, society, association, firm, sole proprietorship, or other legal entity;
- (e) “Person” means any natural person or, to the extent consistent with internal law as to criminal responsibility, any legal person;
- (f) “Responsible Authority” refers to the body established under section 15 of this [ACT, STATUTE, ORDINANCE, LAW];
- (g) “Territory” means any area within [COUNTRY NAME], or under its jurisdiction or control anywhere.

(2) The [RESPONSIBLE AUTHORITY] may make regulations defining “biological agent”, “toxin”, “equipment” and “technologies” for the purposes of this [ACT, STATUTE, ORDINANCE, LAW].

PART B PROHIBITIONS

5. Misuse of biological agents and toxins

(1) Every person commits an offence who knowingly –

- (a) develops, produces, otherwise acquires, stockpiles, possesses, transports, retains any biological or toxin weapon, or transfers, directly or indirectly, to anyone, any biological or toxin weapon;
- (b) uses any biological or toxin weapon;
- (c) engages in preparations to use any biological or toxin weapon;
- (d) constructs, acquires or retains any facility intended for the production of biological or toxin weapons; or
- (e) weaponises any biological agent or toxin.

(2) Every person commits an offence who intentionally releases biological agents or toxins for the purpose of harming and killing human beings, animals or plants in order to intimidate or coerce a government or civilian population to further political or social objectives.

(3) Every person commits an offence who –

- (a) develops, acquires, manufactures, possesses, stores, transports, transfers or uses controlled agents or toxins –
 - i. without a license granted by the [RESPONSIBLE AUTHORITY] under section 11 of this [ACT, STATUTE, ORDINANCE, LAW],
 - ii. in violation of the conditions of a license granted by the [RESPONSIBLE AUTHORITY] under section 11 of this [ACT, STATUTE, ORDINANCE, LAW], or
 - iii. in violation of any other provision of section 11 of this [ACT, STATUTE, ORDINANCE, LAW];
- (b) transfers controlled agents or toxins within the territory of [COUNTRY NAME] to individuals or entities that have not been granted a license by the [RESPONSIBLE AUTHORITY] under section 12 of this [ACT, STATUTE, ORDINANCE, LAW] or fails to notify the [RESPONSIBLE AUTHORITY] of the transfer;
- (c) imports, exports, re-exports, or transships any controlled agent or toxin or controlled equipment or technology through the territory of [COUNTRY NAME] –
 - i. without a transfer permit granted by the [RESPONSIBLE AUTHORITY] under section 13 of this [ACT, STATUTE, ORDINANCE, LAW], or
 - ii. without an end-user certificate under section 13 of this [ACT, STATUTE, ORDINANCE, LAW];
- (d) fails to transfer controlled agents or toxins, internally or internationally, through an approved carrier or fails to comply with any other provision of section 14;
- (e) constructs, acquires or retains any facility designed or intended for the manufacture of or research on any controlled agent or toxin, except in accordance with this [ACT,

STATUTE, ORDINANCE, LAW] and any regulations issued hereunder or any other [ACT, STATUTE, ORDINANCE, LAW];

- (f) tampers with any facility, package, or containment vessel containing controlled agents or toxins in order to cause their release; or
- (g) diverts or steals controlled agents or toxins from a facility or authorised transport vehicle, or uses or takes control of an authorised transport vehicle containing controlled agents or toxins so as to cause the release of those controlled agents or toxins.

6. Alternative criminal liability

Every person commits an offence who –

- (a) assists, encourages or induces, in any way, anyone to engage in any of the activities prohibited under section 5;
- (b) orders or directs anyone to engage in any of the activities prohibited under section 5;
- (c) attempts to commit any of the offences prohibited under section 5;
- (d) threatens to commit any of the offences prohibited under section 5; or
- (e) acts as an accomplice to or finances any of the activities prohibited under section 5.

7. Official defence barred

It shall not be a defence that a person charged with an offence set forth in this Part acted in an official capacity, under the orders or instructions of a superior, or otherwise in accordance with internal law.

PART C BIOSECURITY

8. Purpose

Part C controls the development, acquisition, manufacture, possession, transport, storage, transfer or use of certain biological agents and toxins, and controls the transfer of certain dual-use biological equipment and technology. The purpose of Part C is to ensure that such agents, toxins, equipment and technology are safely and securely controlled in [COUNTRY NAME]. In particular, this Part and its implementing regulations are intended to prevent theft, loss, diversion, illicit trafficking or other improper release of controlled agents and toxins.

9. Controlled agents and toxins¹

Option 1: [(1) The [RESPONSIBLE AUTHORITY] shall establish and maintain a list of biological agents and toxins that pose a severe threat to public health and safety and national security, based on the following criteria –

- (a) effect of exposure on human, animal, or plant health, or on animal or plant products;

¹ Two options are provided for preparing a list of the biological agents and toxins to be controlled by the [RESPONSIBLE AUTHORITY] through the licensing, reporting and inspections regimes in this Sample Act: a list based on criteria related to the threat to public health and safety and national security, or a list based on the World Health Organization's four risk group classifications. Examples of existing lists are available on request.

- (b) degree of contagiousness and method of transmission;
- (c) availability and effectiveness of pharmacotherapies and immunisations; and
- (d) other criteria deemed appropriate, if any, provided that the [RESPONSIBLE AUTHORITY] shall publicly disclose and explain the use of any such criteria.

(2) The biological agents and toxins on the list established under this section shall be referred to as “controlled agents and/or toxins”, and the list of such agents and toxins as the “controlled agents and toxins list”. The controlled agents and toxins list shall be included in the regulations issued pursuant to this section, and shall be periodically reviewed and modified as necessary by the [RESPONSIBLE AUTHORITY].]

Option 2: [(1) The [RESPONSIBLE AUTHORITY] shall establish and maintain a list of biological agents and toxins, based on the World Health Organization’s classification of infective micro-organisms by risk group.² This list, and the guidelines used to establish it, shall be included in the regulations issued pursuant to this section, and shall be periodically reviewed and modified as necessary by the [RESPONSIBLE AUTHORITY].

(2) The biological agents and toxins in Risk Group[s] [1,] [2,] [3,] [and] [4] on the list established under this section shall be referred to as “controlled agents and/or toxins”, and the list of such agents and toxins as the “controlled agents and toxins list”.]

10. Controlled equipment and technology

(1) The [RESPONSIBLE AUTHORITY] shall establish and maintain a list of dual-use biological equipment and technology.³

(2) The dual-use biological equipment and technology on the list established under this section shall be referred to as “controlled equipment and/or technology”, and the list of such equipment and technology as the “controlled equipment and technology list”. The controlled equipment and technology list shall be included under regulations issued pursuant to this section, and shall be periodically reviewed and modified as necessary by the [RESPONSIBLE AUTHORITY].

11. Licensing for controlled agents and toxins

Licensing

(1) Every individual or entity that develops, acquires, manufactures, possesses, stores, transports, transfers or uses controlled agents or toxins shall be in possession of a license from the [RESPONSIBLE AUTHORITY] pursuant to regulations issued under this [ACT, STATUTE,

² Laboratory Biosafety Manual (Third Edition), World Health Organization, 2004. The guidelines are:

Risk Group 1 (no or low individual and community risk): A micro-organism that is unlikely to cause human or animal disease.

Risk Group 2 (moderate individual risk, low community risk): A pathogen that can cause human or animal disease but is unlikely to be a serious hazard to laboratory workers, the community, livestock or the environment. Laboratory exposures may cause serious infection, but effective treatment and preventive measures are available and the risk of spread of infection is limited.

Risk Group 3 (high individual risk, low community risk): A pathogen that usually causes serious human or animal disease but does not ordinarily spread from one infected individual to another. Effective treatment and preventive measures are available.

Risk Group 4 (high individual and community risk): A pathogen that usually causes serious human or animal disease and that can be readily transmitted from one individual to another, directly or indirectly. Effective treatment and preventive measures are not usually available.

³ Examples of existing lists are available on request.

ORDINANCE, LAW]. The regulations shall require that individuals and entities obtaining a license under this section have a lawful purpose to develop, acquire, manufacture, possess, store, transport, transfer or use such controlled agents or toxins.

(2) A license granted under this section shall list each controlled agent or toxin that an individual or entity is authorised to develop, acquire, manufacture, possess, store, transport, transfer or use.

(3) The regulations issued under this [ACT, STATUTE, ORDINANCE, LAW] shall provide for revocation of a license by the [RESPONSIBLE AUTHORITY] in appropriate cases, including any violation of this [ACT, STATUTE, ORDINANCE, LAW].

(4) A license shall not be granted by the [RESPONSIBLE AUTHORITY] to those prohibited individuals and entities listed in the regulations issued under this [ACT, STATUTE, ORDINANCE, LAW].

Exemptions from licensing

(5) An exemption from a license under this section shall only be granted by the [RESPONSIBLE AUTHORITY] for public health or agricultural emergencies, evidentiary purposes, or for products licensed under food, drug, cosmetics, insecticide or similar laws.

Entity licenses and Compliance Officer

(6) An application for a license by an entity shall include information on ownership or control of the entity. Any entity seeking a license under this section shall also, as a condition of approval, identify, authorise and notify to the [RESPONSIBLE AUTHORITY] an individual in each of its facilities as a “Compliance Officer” for purposes of ensuring compliance with this [ACT, STATUTE, ORDINANCE, LAW] and the regulations issued hereunder. The Compliance Officer must possess adequate authority to act on behalf of the facility respecting compliance with this [ACT, STATUTE, ORDINANCE, LAW] and the regulations issued hereunder. The entity shall liaise with its facilities’ Compliance Officers and the [RESPONSIBLE AUTHORITY] for the purposes of enforcement of this [ACT, STATUTE, ORDINANCE, LAW] and shall have such other responsibilities as the regulations may provide.

(7) Any entity licensed under this section shall only allow access to controlled agents or toxins by individuals who are also licensed under this section to develop, acquire, manufacture, possess, store, transport, transfer or use controlled agents or toxins.

Notification of facilities

(8) The entity shall notify all of its facilities that develop, acquire, manufacture, possess, store, transport, transfer or use controlled agents or toxins, and licensed individuals working at those facilities, to the [RESPONSIBLE AUTHORITY]. The facilities that are notified to the [RESPONSIBLE AUTHORITY] shall be known as “notified facilities”.

Entity licenses, biosecurity and biosafety

(9) (a) Every entity seeking a license under this section shall, as a condition of approval, confirm that its notified facilities comply with the biosecurity regulations issued pursuant to this [ACT, STATUTE, ORDINANCE, LAW]⁴, to prevent access to controlled agents or toxins by unlicensed individuals. The regulations shall specify physical protection measures, including physical and personnel security plans, for facilities where controlled agents or toxins are

⁴ States may wish to consider preparing these regulations in line with the Laboratory Biosafety Manual (Third Edition), World Health Organization, 2004.

developed, acquired, manufactured, possessed, stored, transported, transferred or used. The regulations shall require personnel security background checks to ensure the reliability of individuals working in facilities where controlled agents or toxins are developed, acquired, manufactured, possessed, stored, transported, transferred or used. Requirements for physical and personnel security shall be commensurate with the risk the controlled agents and toxins pose to public health and safety.

(b) Every entity seeking a license under this section shall also, as a condition of approval, confirm that its notified facilities comply with the biosafety regulations issued pursuant to this [ACT, STATUTE, ORDINANCE, LAW]⁵, to prevent unintentional exposure to controlled agents and toxins, or their accidental release.

Record-keeping by the [RESPONSIBLE AUTHORITY]

(10) The [RESPONSIBLE AUTHORITY] shall maintain an accurate and current record of all licensed individuals and entities and notified facilities under this section, including the names and locations of the licensed individuals and entities and notified facilities, and information on the controlled agents or toxins each individual or entity is licensed to develop, acquire, manufacture, possess, store, transport, transfer or use.

Notice of theft, loss or release

(11) Individuals and entities (and their notified facilities) licensed under this section shall immediately notify the [RESPONSIBLE AUTHORITY], the [APPROPRIATE LAW ENFORCEMENT AGENCY] and the [[COUNTRY NAME] Biological Emergency Response and Investigation Support System (BERISS)] of the theft, loss or release of controlled agents or toxins. Licensed entities may establish procedures for the notification of theft, loss or release by their notified facilities.

Risk assessment for activities involving non-controlled agents and toxins

(12) Subsection (1) notwithstanding, any individual, entity or facility that develops, acquires, manufactures, possesses, stores, transports, transfers or uses non-controlled agents or toxins shall complete a risk assessment, in the manner prescribed in the regulations issued under this [ACT, STATUTE, ORDINANCE, LAW], for each activity that it undertakes which it reasonably believes may pose a threat to public health and safety and national security. This risk assessment shall be submitted to the [RESPONSIBLE AUTHORITY] within the time frame specified in the regulations.

12. Internal transfer controls for controlled agents and toxins

(1) Controlled agents and toxins shall only be transferred within the territory of [COUNTRY NAME] among individuals and entities (and their notified facilities) licensed pursuant to this [ACT, STATUTE, ORDINANCE, LAW] and any regulations issued hereunder.

(2) All proposed transfers of controlled agents or toxins within the territory of [COUNTRY NAME] are subject to advance notification to the [RESPONSIBLE AUTHORITY] in accordance with the regulations issued under this [ACT, STATUTE, ORDINANCE, LAW].

(3) Regulations issued by the [RESPONSIBLE AUTHORITY] shall specify additional technical and security requirements for transfer, including measures to track controlled agents and toxins

⁵ States may wish to consider preparing these regulations in line with the Laboratory Biosafety Manual (Third Edition), World Health Organization, 2004.

and to confirm receipt of the transfer by the transferee, such that strict accountability for controlled agents and toxins is maintained at all times.

13. International transfer controls

Import, export, re-export, and transshipment of controlled agents and toxins and controlled equipment and technology

(1) Every individual or entity that imports, exports, re-exports, or transships any controlled agent or toxin or controlled equipment or technology through the territory of [COUNTRY NAME] shall be in possession of a permit from the [RESPONSIBLE AUTHORITY OR NATIONAL IMPORT/EXPORT CONTROL AUTHORITY].

(2) The [RESPONSIBLE AUTHORITY OR NATIONAL IMPORT/EXPORT CONTROL AUTHORITY] shall issue regulations establishing the requirements and procedures to obtain a transfers permit for controlled agents or toxins or controlled equipment or technology.

(3) If the [RESPONSIBLE AUTHORITY] has reason to believe or suspect that an imported, exported, re-exported, or transhipped non-controlled agent or toxin or non-controlled equipment or technology might be used for purposes prohibited by this [ACT, STATUTE, ORDINANCE, LAW], the [RESPONSIBLE AUTHORITY] may obtain an injunction from appropriate judicial authorities to prevent the import, export, re-export, or transshipment.

Export procedures

(4) The [RESPONSIBLE AUTHORITY OR NATIONAL IMPORT/EXPORT CONTROL AUTHORITY] shall adopt procedures to ensure that controlled agents or toxins or controlled equipment or technology are only exported to individuals, entities or facilities in another State that are similarly regulated in respect of controlled agents or toxins or controlled equipment or technology.

(5) The procedures in subsection (4) shall include a requirement for an end-use certificate which shall contain, at a minimum –

- (a) A statement that the controlled agent or toxin or controlled equipment or technology will only be used for lawful purposes;
- (b) A statement that the controlled agent or toxin or controlled equipment or technology will not be retransferred;
- (c) The type and quantity of controlled agent or toxin, or a description of the controlled equipment or technology, to be transferred;
- (d) The end-use of the controlled agent or toxin or controlled equipment or technology to be transferred; and
- (e) The name(s) and location(s) of the end-user(s) and any intermediaries.

Transit

(6) The [RESPONSIBLE AUTHORITY OR NATIONAL IMPORT/EXPORT CONTROL AUTHORITY] shall issue regulations establishing the requirements and procedures for the transit of controlled agents or toxins or controlled equipment or technology through the territory of [COUNTRY NAME].

14. Transportation of controlled agents and toxins

Transfers by approved carriers only

(1) Internal and international transfers of controlled agents and toxins under sections 12 and 13 shall only be undertaken by carriers approved by the [MINISTRY OF TRANSPORTATION OR RESPONSIBLE AUTHORITY] under subsection (2).

Approved carriers

(2) The [MINISTRY OF TRANSPORTATION OR RESPONSIBLE AUTHORITY] shall maintain a roster of carriers approved to transport controlled agents and toxins internally and internationally. The roster shall only include those carriers that have demonstrated to the [MINISTRY OF TRANSPORTATION OR RESPONSIBLE AUTHORITY] that they comply with best practices for packaging and labelling; shipment tracking; and safety and security measures for their personnel, vehicles and facilities.

Transport guidelines

(3) Internal and international transportation of controlled agents and toxins shall be conducted in accordance with the hazardous material transport guidelines and packaging and labelling requirements issued by the [MINISTRY OF TRANSPORTATION] and any regulations issued by the [RESPONSIBLE AUTHORITY] under this [ACT, STATUTE, ORDINANCE, LAW]. Every carrier that imports, exports, re-exports, transships or transits controlled agents or toxins through the territory of [COUNTRY NAME] shall also comply with all applicable international regulations for the shipment of hazardous materials.

Notification of theft, loss or release of controlled agents or toxins

(4) Carriers approved under this section to transport controlled agents and toxins internally or internationally shall immediately notify the [RESPONSIBLE AUTHORITY], the [APPROPRIATE LAW ENFORCEMENT AGENCY] and the [[COUNTRY NAME] BIOLOGICAL EMERGENCY RESPONSE AND INVESTIGATION SUPPORT SYSTEM (BERISS)] of the theft, loss or release of controlled agents or toxins.

PART D ENFORCEMENT

15. Establishment, mandate and enforcement powers of the [RESPONSIBLE AUTHORITY]

Establishment

(1) This section establishes a [RESPONSIBLE AUTHORITY] for the enforcement of this [ACT, STATUTE, ORDINANCE, LAW] and any regulations issued hereunder.

Composition⁶

(2) The [RESPONSIBLE AUTHORITY] shall consist of –

- (a) a representative from the [Prime Minister's, Head of Government's] office, who shall also serve as the Chairperson of the [RESPONSIBLE AUTHORITY];

⁶ This list is only illustrative and should be tailored according to the country's constitutional and statutory regimes, circumstances, needs, etc.

- (b) a representative from the Ministry of Foreign Affairs;
- (c) a representative from the Ministry of Justice;
- (d) a representative from the Office of the Attorney-General;
- (e) a representative from the Ministry of Industry;
- (f) a representative from the Ministry of Environment;
- (g) a representative from the Ministry of Health;
- (h) a representative from the Ministry of Agriculture;
- (i) a representative from the Ministry of the Interior;
- (j) a representative from the Ministry of Transportation;
- (k) a representative from the [NATIONAL FORENSIC SCIENCE LABORATORY];
- (l) representatives from the [NATIONAL BORDER CONTROL AUTHORITIES (CUSTOMS, PORT AUTHORITIES)] ;
- (m) a representative from the [COUNTRY NAME] Chamber of Commerce; and
- (n) a representative from a biological industry association in [COUNTRY NAME].

Functions and duties of the [RESPONSIBLE AUTHORITY]

(3) The [RESPONSIBLE AUTHORITY] shall perform the following functions in a transparent and reviewable manner –

- (a) To be the [RESPONSIBLE AUTHORITY] for [COUNTRY NAME];
- (b) To supervise and monitor the enforcement of this [ACT, STATUTE, ORDINANCE, LAW] and any regulations issued hereunder;
- (c) To issue licenses and permits under this [ACT, STATUTE, ORDINANCE, LAW] and any regulations issued hereunder;
- (d) To provide international organisations and other States with relevant data and information in fulfilment of [COUNTRY NAME]'s international obligations;
- (e) To facilitate inspections under this [ACT, STATUTE, ORDINANCE, LAW];
- (f) To prepare guidelines for the conduct of biological research for lawful purposes;
- (g) To establish, liaise with and review the activities of the Biological Emergency Response and Investigation Support System (BERISS);
- (h) To liaise with the equivalent of the [RESPONSIBLE AUTHORITY] in other States;
- (i) To perform any other tasks assigned to it by appropriate authorities;
- (j) To report annually to the [PARLIAMENT, NATIONAL ASSEMBLY] on the activities of the Responsible Authority and the Biological Emergency Response and Investigation Support System (BERISS); and
- (k) To advise the [PRIME MINISTER, HEAD OF GOVERNMENT] on matters relevant to this [ACT, STATUTE, ORDINANCE, LAW], and to provide any information which the Prime Minister or other appropriate authorities may require.

(4) The [RESPONSIBLE AUTHORITY] may appoint a task force to advise it on any matter relating to this [ACT, STATUTE, ORDINANCE, LAW].

16. Establishment of [[COUNTRY NAME] Biological Emergency Response and Investigation Support System (BERISS)]

Establishment

(1) The [RESPONSIBLE AUTHORITY] shall establish a [BIOLOGICAL EMERGENCY RESPONSE AND INVESTIGATION SUPPORT SYSTEM (BERISS)] to facilitate communication and response to biological emergencies impacting human, animal or plant health, and to assist the [APPROPRIATE LAW ENFORCEMENT AGENCY] with investigations of biological incidents.

Composition of the BERISS co-ordination team

(2) BERISS shall be managed and co-ordinated by a team consisting of –

- (a) a representative from the [RESPONSIBLE AUTHORITY] who shall act as a liaison between the [RESPONSIBLE AUTHORITY] and BERISS;
- (b) a representative from the [MINISTRY OF HEALTH OR FOOD AND DRUG SAFETY AGENCY];
- (c) a representative from the Ministry of Agriculture;
- (d) a representative from the Ministry of Environment;
- (e) an emergency medicine practitioner;
- (f) a law enforcement officer from the [APPROPRIATE LAW ENFORCEMENT AGENCY] trained to respond to biological emergencies;
- (g) representatives from the [NATIONAL BORDER CONTROL AUTHORITIES (CUSTOMS, PORT AUTHORITIES)];
- (h) an epidemiologist;
- (i) a veterinary scientist;
- (j) a media relations specialist;
- (k) specialists in bacterial, toxicological, viral, Rickettsial, and prion diseases;
- (l) the National Focal Point for the WHO International Health Regulations; and
- (m) any other relevant expert(s) as BERISS sees fit.

(3) Members of the BERISS co-ordination team shall be required to receive appropriate security clearances enabling them to work with national security, law enforcement and public health officers.

Functions and duties

(4) The BERISS co-ordination team shall carry out the following duties in a transparent and reviewable manner –

- (a) manage and guide the national and local response to emergencies associated with biological agents and toxins in co-ordination with the [RESPONSIBLE AUTHORITY];
- (b) in co-ordination with other governmental agencies, as appropriate, establish public health and agricultural surveillance and reporting systems with respect to the development, acquisition, manufacture, possession, storage, transport, transfer or use of controlled agents and toxins;
- (c) ensure the effectiveness of a public emergency announcement system;
- (d) ensure the proper training and equipping of law enforcement officers from the [APPROPRIATE LAW ENFORCEMENT AGENCY], emergency/first responders and hospitals in responding to emergencies involving biological agents and toxins;
- (e) create threat-based medical and public health detection strategies to detect and determine outbreaks associated with biological agents and toxins;
- (f) receive and review classified biological threat intelligence;
- (g) receive and review public health information;
- (h) collect, maintain, and present evidence needed for review of forensic epidemiological investigations and for prosecutions;
- (i) transmit data and information regarding biological emergencies and incidents to the [RESPONSIBLE AUTHORITY];
- (j) liaise and co-operate with the World Health Organisation through the National Focal Point for the 2005 International Health Regulations; and

- (k) undertake other activities regarding preparation for and response to emergencies involving biological agents and toxins, including co-operation with law enforcement officers from the [APPROPRIATE LAW ENFORCEMENT AGENCY].

Regulations

(5) The [RESPONSIBLE AUTHORITY] shall be authorised to issue regulations providing for the establishment and operation of BERISS.

17. Record-keeping and reporting and related offences

Purpose

(1) The purpose of this section is to ensure that –

- (a) controlled agents and toxins are only developed, acquired, manufactured, possessed, stored, transported, transferred, or used for lawful purposes; and
- (b) facilities in which controlled agents and toxins are developed, acquired, manufactured, possessed, stored, transported, transferred, or used are physically secure.

(2) Any power under this section may be exercised only for the purposes in subsection (1).

Record-keeping and providing information

(3) Every individual, entity and carrier subject to this [ACT, STATUTE, ORDINANCE, LAW] and the regulations issued hereunder shall –

- (a) Keep and maintain the data, information and documents specified by the regulations at the individual, entity or carrier's place of business, or at such other place as may be designated by the [RESPONSIBLE AUTHORITY], in the manner and for the period that is specified by the regulations;
- (b) Prepare reports from such data, information and documents as may be specified by the regulations; and
- (c) Provide such reports to the [RESPONSIBLE AUTHORITY] or any other authority specified by the regulations, at such times and in a form specified by the regulations.

Notice for disclosure of information

(4) The [RESPONSIBLE AUTHORITY] may send a notice to any individual, entity or carrier whom the [RESPONSIBLE AUTHORITY] believes on reasonable grounds has data, information or documents relevant to the enforcement of this [ACT, STATUTE, ORDINANCE, LAW], requesting the individual, entity or carrier to provide the data, information or documents to the [RESPONSIBLE AUTHORITY].

(5) An individual, entity or carrier who receives a notice referred to in subsection (4) shall provide the requested data, information and documents that are under the individual, entity or carrier's care or control to the [RESPONSIBLE AUTHORITY] in the form and within the time specified in the notice.

Transmission of information by the [RESPONSIBLE AUTHORITY]

(6) The [RESPONSIBLE AUTHORITY] shall be authorised to transmit relevant data and information obtained under this [ACT, STATUTE, ORDINANCE, LAW] to other States and international organizations.

Offences

(7) Every person commits an offence who fails to provide any data, information or document to the [RESPONSIBLE AUTHORITY], or who makes a false or misleading statement in any data, information, document or report prepared pursuant to this section.

(8) Every person commits an offence who omits any matter, knowing that the omission makes any data, information, document or report prepared pursuant to this section false or misleading.

(9) Every person commits an offence who obtains data, information, documents or reports pursuant to this [ACT, STATUTE, ORDINANCE, LAW] or any regulations issued hereunder and, without written consent, communicates the data, information, documents or reports to any other person in any form, except –

- (a) for the purpose of the enforcement or application of this [ACT, STATUTE, ORDINANCE, LAW] or any regulations issued hereunder, including criminal investigations and intelligence assessments;
- (b) pursuant to an international obligation of [COUNTRY NAME]; or
- (c) to the extent that the data, information, documents or reports are required to be disclosed or communicated in the interest of public safety.

18. Inspections

Purpose

(1) Under this section, the [RESPONSIBLE AUTHORITY] is authorised to facilitate inspections of the individuals, entities (and their facilities) and carriers subject to regulation under this [ACT, STATUTE, ORDINANCE, LAW] to ensure their compliance with this [ACT, STATUTE, ORDINANCE, LAW] and any regulations issued hereunder, including compliance with all applicable biosecurity measures.

Designation of inspectors

(2) The [RESPONSIBLE AUTHORITY] may designate persons or classes of persons⁷ as inspectors for the purpose of the enforcement of this [ACT, STATUTE, ORDINANCE, LAW], and may set conditions for the conduct of inspection activities.

Carrying out of inspections

(3) An inspector may, with the consent of the person in control of any premises or under a warrant, enter the premises and exercise any power under subsection (4) to ensure –

- (a) that the provisions of this [ACT, STATUTE, ORDINANCE, LAW] and any regulations issued hereunder have been or are being complied with; or
- (b) that the conditions applicable to a license or permit issued under sections 11 or 13 have been or are being complied with by the license or permit holder.

Powers

(4) An inspector carrying out an inspection may –

- (a) search any premises;

⁷ States may wish to consider designating officials already responsible for biosafety and biosecurity in laboratories and other facilities, as well as law enforcement officers trained in biosecurity and biological emergency response, as members of an inspection team for the purposes of this section.

- (b) operate any photographic or video-recording equipment anywhere in or around the premises provided safety regulations in force at the premises permit doing so;
- (c) require the attendance of and question any person whom the inspector considers will be able to assist in the inspection;
- (d) inspect or examine, take samples of, detain or remove any substance or item considered relevant by the inspector to the enforcement of this [ACT, STATUTE, ORDINANCE, LAW];
- (e) require any person to produce for inspection, or to copy, any document that the inspector believes contains any information relevant to the administration of this [ACT, STATUTE, ORDINANCE, LAW];
- (f) use or cause to be used any equipment at the place to make copies of any data or any record, book of account or other document;
- (g) use or cause to be used any computer or data processing system to examine any data contained in or available to the computer or system;
- (h) reproduce or cause to be reproduced any record from the data, in the form of a printout or other intelligible output, and remove the printout or other output for examination or copying;
- (i) have operated any equipment, including electronic equipment located at the premises;
- (j) be accompanied by an expert, as appropriate, chosen by the inspector and authorised by the [RESPONSIBLE AUTHORITY]; and
- (k) require that any person in control of the premises take any other reasonable measures that the inspector considers appropriate.

(5) A power referred to in subsection (4) may only be exercised in a manner that the person in control of the premises believes, on reasonable grounds, to be in accordance with safety procedures applicable at the premises.

Inspection warrants

(6) An inspector may apply for a warrant where the consent of the person in control of any premises cannot be obtained or is refused under subsection (3).

(7) A [JUSTICE OF THE PEACE, MAGISTRATE] may issue a warrant authorising the inspector named in the warrant to enter the premises, subject to any conditions that may be specified in the warrant, if he is satisfied that there are reasonable grounds for believing that –

- (a) entry to the premises is necessary for the purpose under subsection (1); and
- (b) entry to the premises cannot be obtained, has been refused or there are reasonable grounds to believe that entry will be refused.

19. Obligations of inspectors

Identification certificates

(1) An inspector, expert, or a representative of the [RESPONSIBLE AUTHORITY] shall be given a certificate of designation.

(2) An inspector, expert, or a representative of the [RESPONSIBLE AUTHORITY] on entering any premises under this [ACT, STATUTE, ORDINANCE, LAW] shall produce the certificate of designation at the request of the person in control of the premises, at any reasonable time.

Notice of entry and seizure

(3) Every inspector shall, as soon as is practicable after completing the inspection, give the person in control of the premises a written notice stating that the premises have been entered, if, at any time between the time of entry of any premises to be inspected and the time the inspection is completed, there is no person appearing to be in control of the premises, and specify the following matters –

- (a) the time and date of entry;
- (b) the circumstances and purpose of entry; and
- (c) the name of every person entering.

(4) Every inspector shall provide copies of any documents under subsection (3) to the [RESPONSIBLE AUTHORITY].

(5) Every inspector shall, where applicable, have a warrant with him or her and produce it if required to do so, and where any thing is seized, give the person in control of the premises a written inventory of all things so seized.

Inspector report and referral for investigation

(6) Every inspector shall provide a report of their inspection to the [RESPONSIBLE AUTHORITY] and describe any suspected non-compliance with this [ACT, STATUTE, ORDINANCE, LAW] or the regulations issued hereunder. The [RESPONSIBLE AUTHORITY] may refer cases of suspected non-compliance to the [APPROPRIATE LAW ENFORCEMENT AGENCY] for investigation under section 22.

20. Obligations of persons in control of inspected premises and related offences

Assistance to inspectors

(1) The person in control of a premises entered under section 18, and every person present in the premises, shall give an inspector and any expert accompanying an inspector all reasonable assistance to enable the inspector and any accompanying expert to perform his duties, and shall furnish the inspector with any information related to the administration of this [ACT, STATUTE, ORDINANCE, LAW] that the inspector reasonably requests.

Written directions

(2) The [RESPONSIBLE AUTHORITY] may, by notice in writing, issue directions to any person for the purpose of facilitating an inspection under section 18.

Offences

(3) Every person commits an offence who fails to comply with any reasonable direction given by the [RESPONSIBLE AUTHORITY] under subsection (2).

(4) Every person commits an offence who obstructs, hinders, resists or deceives or makes any false or misleading statement to any inspector, or expert accompanying any inspector, who is exercising any function contemplated or any power provided for in section 18.

(5) Every person commits an offence who removes, alters or interferes in any way with any thing seized under section 18, except with the authorisation of an inspector.

21. Directions requiring security measures and related offence

(1) The [RESPONSIBLE AUTHORITY] may give directions in writing to an individual, or in the case of a facility, a Compliance Officer, requiring him to –

- (a) take such measures to ensure the security of controlled agents or toxins or controlled equipment or technology;
- (b) review and update any security plans; and
- (c) take any other measures that the [RESPONSIBLE AUTHORITY] may reasonably require.

(2) Where the [RESPONSIBLE AUTHORITY] has reasonable grounds for believing that adequate measures to ensure the security of controlled agents or toxins or controlled equipment or technology kept or used in any relevant premises are not being taken and are unlikely to be taken, it may give directions in writing to the individual or, in the case of a facility, the Compliance Officer, requiring him to destroy or dispose of the items. The directions shall specify how and by when the items must be destroyed or disposed of.

Offence

(3) Every person commits an offence who fails to comply with directions given by the [RESPONSIBLE AUTHORITY] under subsections (1) or (2).

22. Investigations

Purpose

(1) The purpose of this section is to promote co-operation among the [APPROPRIATE LAW ENFORCEMENT AGENCY], the [RESPONSIBLE AUTHORITY], and BERISS in investigating suspected violations of this [ACT, STATUTE, ORDINANCE, LAW].

Investigations

(2) In the event of a suspected violation of this [ACT, STATUTE, ORDINANCE, LAW], the [APPROPRIATE LAW ENFORCEMENT AGENCY] shall be authorised to lead an investigation of the suspected violation in co-ordination with the [RESPONSIBLE AUTHORITY] and BERISS.

(3) Any records kept pursuant to this [ACT, STATUTE, ORDINANCE, LAW] by the [RESPONSIBLE AUTHORITY], BERISS, an individual, entity, or carrier shall be made available to law enforcement officers with the [APPROPRIATE LAW ENFORCEMENT AGENCY] investigating suspected violations of this [ACT, STATUTE, ORDINANCE, LAW].

(4) Any samples collected during inspections or investigations shall be analysed in accordance with the regulations issued under this [ACT, STATUTE, ORDINANCE, LAW] or any other [ACT, STATUTE, ORDINANCE, LAW], and the results of the analysis may be used as evidence in judicial proceedings.

Training

(5) In order to be prepared for investigations under this section, law enforcement officers from the [APPROPRIATE LAW ENFORCEMENT AGENCY] shall receive training from BERISS in responding to biological emergencies, including –

- (a) general information about bioterrorism;

- (b) the national and international legal frameworks for the prevention and response to biological emergencies, as well as an understanding of the Biological and Toxin Weapons Convention and prohibited activities involving biological agents and toxins;
- (c) the proper use of Personal Protection Equipment;
- (d) other relevant safety procedures;
- (e) specialised investigative techniques such as joint interviews and record-keeping with public health personnel;
- (f) containment;
- (g) biological hazard assessment;
- (h) evidence collection and recovery such as sampling; and
- (i) evidentiary procedures such as chain of custody.

23. Seizure, forfeiture and destruction

(1) The [RESPONSIBLE AUTHORITY OR APPROPRIATE LAW ENFORCEMENT AGENCY] may seek a warrant authorising –

- (a) the seizure of any biological agent or toxin or equipment or technology associated with any activity prohibited under this [ACT, STATUTE, ORDINANCE, LAW]; or
- (b) the freezing or seizure of any funds associated with any activity prohibited under this [ACT, STATUTE, ORDINANCE, LAW].

(2) In exigent circumstances, seizure of any biological agent or toxin or equipment or technology associated with any activity prohibited under this [ACT, STATUTE, ORDINANCE, LAW], may be authorised by the [RESPONSIBLE AUTHORITY] without a warrant.

(3) Property seized under subsections (1) and (2) shall be forfeited to the Government after notice to potential claimants and an opportunity for a hearing. [At such hearing, the Government shall bear the burden of proof by a preponderance of the evidence that the seized property pertains to conduct prohibited under this [ACT, STATUTE, ORDINANCE, LAW]].

(4) The [RESPONSIBLE AUTHORITY] may provide for the destruction or other appropriate disposition of any biological agent or toxin or equipment or technology seized and forfeited under this section.

24. Injunctions

The [RESPONSIBLE AUTHORITY] may obtain an injunction from the appropriate judicial authorities against the conduct prohibited under Part B.

25. Continuing offence

[Where an offence under this [ACT, STATUTE, ORDINANCE, LAW] is committed or continued on more than one day, the person who committed the offence is liable to be convicted for a separate offence for each day on which the offence is committed or continued.]

26. Criminal and civil penalties

Criminal liability of individuals and entities

(1) In addition to any penalties that may apply under other provisions of law, including for violations of the criminal, licensing, transfer control laws of [COUNTRY NAME], the penalties in subsections (3)-(8) shall apply for violations by individuals and entities of Parts B, C and D of this [ACT, STATUTE, ORDINANCE, LAW] and the regulations issued hereunder.

Liability of entity directors, managers, secretaries and other officers

(2) Where an offence under this [ACT, STATUTE, ORDINANCE, LAW] is committed by an entity and proven to have been committed with the consent and connivance of, or to be attributable to any negligence on the part of, any director, manager, secretary or other similar officer of the entity, or any person who was purporting to act in such capacity, he as well as the entity shall be guilty of that offence and shall also be liable to be proceeded against and punished pursuant to this section.

Misuse of biological agents and toxins

(3) Every person who commits an offence under section 5 of this [ACT, STATUTE, ORDINANCE, LAW] is guilty of an offence and liable upon conviction to –

- (a) in the case of an individual, imprisonment for a term not exceeding [PERIOD] years or to a fine not exceeding [AMOUNT] or both; or
- (b) in the case of an individual, where the offence results in death, [LIFE IMPRISONMENT]; or
- (c) in the case of an entity, a fine not exceeding [AMOUNT].

(4) Every person who commits an offence under section 6 of this [ACT, STATUTE, ORDINANCE, LAW] is guilty of an offence and liable upon conviction to –

- (a) in the case of an individual, imprisonment for a term not exceeding [PERIOD] years or to a fine not exceeding [AMOUNT] or both; or
- (b) in the case of an individual, where the offence results in death, [LIFE IMPRISONMENT]; or
- (c) in the case of an entity, a fine not exceeding [AMOUNT].

(5) In the event of a criminal prosecution under subsection (3) or (4), there shall be a *prima facie* presumption that an individual or entity in possession of a license or permit duly granted under section 11 or 13 has a lawful purpose for developing, acquiring, manufacturing, possessing, storing, transporting, transferring or using the controlled agents or toxins listed in the license or permit.

Record-keeping and reporting

(6) Every person who commits an offence under section 17 of this [ACT, STATUTE, ORDINANCE, LAW] is guilty of an offence and liable upon conviction to –

- (a) in the case of an individual, imprisonment for a term not exceeding [PERIOD] years or to a fine not exceeding [AMOUNT] or both; or
- (b) in the case of an entity, a fine not exceeding [AMOUNT].

Obligations of persons in control of inspected premises

(7) Every person who commits an offence under section 20 of this [ACT, STATUTE, ORDINANCE, LAW] is guilty of an offence and liable upon conviction to –

- (a) in the case of an individual, imprisonment for a term not exceeding [PERIOD] years or to a fine not exceeding [AMOUNT] or both; or
- (b) in the case of an entity, a fine not exceeding [AMOUNT].

Directions requiring security measures

(8) Every person who commits an offence under section 21 of this [ACT, STATUTE, ORDINANCE, LAW] is guilty of an offence and liable upon conviction to –

- (a) in the case of an individual, imprisonment for a term not exceeding [PERIOD] years or to a fine not exceeding [AMOUNT] or both; or
- (b) in the case of an entity, a fine not exceeding [AMOUNT].

27. Application

(1) This [ACT, STATUTE, ORDINANCE, LAW] shall extend –

- (a) to acts or omissions prohibited under this [ACT, STATUTE, ORDINANCE, LAW], which are committed by any natural or legal person in the territory of [COUNTRY NAME];
- (b) to acts or omissions prohibited under this [ACT, STATUTE, ORDINANCE, LAW], which are committed by a[n] [COUNTRY NAME] national outside the territory of [COUNTRY NAME];
- (c) to acts or omissions prohibited by this [ACT, STATUTE, ORDINANCE, LAW], which are committed on board [COUNTRY NAME] sea vessels and aircraft;
- (d) to acts or omissions prohibited by this [ACT, STATUTE, ORDINANCE, LAW], which are committed by a stateless person or resident whose habitual residence is the territory of [COUNTRY NAME];
- (e) to acts or omissions prohibited by this [ACT, STATUTE, ORDINANCE, LAW], which are committed with the intent to harm [COUNTRY NAME] or its nationals or to compel [COUNTRY NAME] to do or abstain from doing any act; or
- (f) to acts or omissions prohibited by this [ACT, STATUTE, ORDINANCE, LAW], in which the victim of the offence is a national of [COUNTRY NAME].

(2) For the purposes of subsection (1)(c), “[COUNTRY NAME] sea vessels and aircraft” shall mean sea vessels and aircraft registered in [COUNTRY NAME] or belonging to, or in the possession of, [COUNTRY NAME].

28. Legal co-operation and assistance

(1) The offences set forth in Part B of this [ACT, STATUTE, ORDINANCE, LAW] shall be deemed to be included as extraditable offences in any extradition treaty existing between [COUNTRY NAME] and other States.

(2) Subsection (1) notwithstanding, the competent authorities of [COUNTRY NAME] for crime prevention, criminal proceedings, and implementation of this [ACT, STATUTE, ORDINANCE, LAW] may collaborate with other competent State authorities and international organizations, and co-ordinate their actions to the extent required by the implementation of this [ACT, STATUTE, ORDINANCE, LAW] or of the equivalent foreign statute(s), subject to the other State authorities or international organizations being bound to official secrecy.

(3) The competent authorities of [COUNTRY NAME] may request other State authorities and international organizations, under subsection (2), to provide relevant data or information. The competent authorities of [COUNTRY NAME] are authorised to receive data or information concerning, *inter alia* –

- (a) the development, acquisition, manufacture, possession, storage, transport, transfer or use of biological agents and toxins, whether controlled or non-controlled;
- (b) dual-use biological equipment and technology, whether controlled or non-controlled; or
- (c) persons involved with items under subsections (a) and (b).

(4) If a State has entered into the appropriate reciprocity agreement with [COUNTRY NAME], the competent authorities of [COUNTRY NAME] may provide, on their own initiative or on request, the data or information described in subsection (3) to that State so long as the other competent State authority provides assurances that such data or information shall –

- (a) only be utilised for purposes consistent with this [ACT, STATUTE, ORDINANCE, LAW] and
- (b) only be used in criminal proceedings on the condition that they are obtained in accordance with those provisions governing international judicial cooperation.

(5) The competent authorities of [COUNTRY NAME] may provide the data or information described in subsection (3) to international organizations if the conditions set forth in subsection (4) are fulfilled, in which case the requirement for a reciprocity agreement is waived.

(6) None of the offences in Part B of this [ACT, STATUTE, ORDINANCE, LAW] shall be regarded, for the purposes of extradition or legal co-operation and assistance under this section, as a political offence or as an offence connected with a political offence or as an offence inspired by political motives.

PART E REGULATIONS

29. Regulations

In addition to the regulations required elsewhere in this [ACT, STATUTE, ORDINANCE, LAW], the [RESPONSIBLE AUTHORITY], or a Minister who has authority in relation to this [ACT, STATUTE, ORDINANCE, LAW], may make such other regulations as are necessary to carry out the purposes and provisions of this [ACT, STATUTE, ORDINANCE, LAW].



**Regulatory Guidelines for National
Implementation of the 1972 Biological and Toxin
Weapons Convention and Related Requirements
of UN Security Council Resolution 1540**

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INTRODUCTION

VERTIC has developed these *Regulatory Guidelines* as guidance for States when they are engaged in the process of preparing any regulatory and administrative measures that may be necessary to *supplement* their primary legislation for national implementation of the 1972 Biological and Toxin Weapons Convention (BWC), as well as the biological weapons-related provisions of UN Security Council Resolution 1540. These *Guidelines* are not a set of model regulations, but rather suggestions, tips and links to examples of best practices, which States are free to review and utilize, taking into account their own legal framework and traditions, level of biotechnological development and other national circumstances. Regulations take time and care to develop and users of these *Guidelines* may wish to prioritise certain regulations over others starting with, for example, establishing a Responsible Authority.

For simplicity and consistency, the structure of these *Guidelines* follows Parts C and D of VERTIC's *Sample Act for National Implementation of the 1972 Biological and Toxin Weapons Convention and Related Requirements of UN Security Council Resolution 1540* (hereinafter *Sample Act*)(available at www.vertic.org). For most States, Parts A and B of the *Sample Act* will not require any supplemental regulations or administrative measures. Part E enables a State to promulgate any additional regulations that are not immediately identified under the *Sample Act*.

Part I of these *Guidelines* focuses on biosecurity (corresponding to Part C of VERTIC's *Sample Act*). The *Guidelines* provide guidance on the establishment of control lists for biological agents, toxins, and dual-use equipment and technology, including intangible technology. They also include guidance on the establishment of a licensing system for controlled agents and toxins, measures to monitor their internal and international transfers, measures to secure their transportation, and other laboratory biosafety/biosecurity measures.

Part II of these *Guidelines* focuses on enforcement (corresponding to Part D of VERTIC's *Sample Act*). The *Guidelines* include guidance on establishing a Responsible Authority for the BWC and the establishment of a mechanism to respond to any biological incidents, whether intentional or accidental, that could have a harmful or deadly impact on human, animal or plant health (e.g., Biological Emergency Response and Investigation Support System (BERISS)). They also provide guidance on record-keeping and reporting, national inspections, and investigations.

These *Guidelines* are not static, and VERTIC will continue to develop and revise them as necessary.

VERTIC is in a position to assist with the development of laws and regulations for national implementation of the BWC, if requested. This service is free of charge.

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VERTIC is an independent, non-profit making, non-governmental organization located in London, United Kingdom. VERTIC promotes effective and efficient verification as a mean of ensuring confidence in the implementation of international agreements.

VERTIC's National Implementation Measures (NIM) Programme was developed to assist States in understanding what measures are required at the national level to comply with obligations in a wide range of nuclear, chemical and biological weapons treaties and UN Security Council resolutions and how to implement them.

VERTIC wishes to thank the governments of Canada (Global Partnership Program, DFAIT) and the United Kingdom (Strategic Programme Fund, FCO) for their financial and in-kind support for this Programme. The views expressed by VERTIC do not necessarily reflect those of these governments or agencies.

Although every care has been taken to prepare these Regulatory Guidelines, VERTIC hereby disclaims any liability or responsibility arising from their use in any way. VERTIC would be grateful for any errors or omissions that are brought to our attention.

version: January 2011

PART I BIOSECURITY

States Parties are entitled under the BWC to conduct peaceful activities involving biological agents and toxins on their territories. Every day, researchers and technicians carry out research and development, vaccine production and diagnostic activities, in ways that are essential for promoting human, animal and plant health. In some cases, however, these activities may pose a risk to public, animal and plant health, the environment and security if they involve particularly lethal agents and toxins that are not effectively and consistently regulated. Biosecurity measures such as the ones discussed below, in Guidelines 1 to 6, will help ensure that accidental or intentional releases of such agents or toxins are prevented, and that the life scientists working with them will do so in a safe and secure manner and environment. The adoption of biosecurity measures by regulation ensures that governments will have the flexibility to modify them as new needs and risks arise or change.

1. Controlled agents and toxins

A robust biosecurity framework should start with a list of controlled agents and toxins (*Sample Act*, Section 9), which may only be used by licensed entities and individuals for prophylactic, protective or other peaceful purposes. This list should also serve as the basis for controlling internal and international transfers as discussed in Guideline 4 below.

There are two approaches to the adoption of a control list. The first consists of a State establishing and maintaining its own tailored list of biological agents and toxins, particularly those that pose a significant threat to the country's public health and safety and national security. In preparing this list, a regulator could consider:

- the effect of exposure on human, animal, or plant health, or on animal or plant products;
- the degree of contagiousness and method of transmission;
- the availability and effectiveness of pharmacotherapies and immunisations; and
- any other criteria that the regulator may deem appropriate.

The second approach is based on risk groups. The World Health Organization (WHO) has classified these groups in its *Biosafety Laboratory Manual*, Third Edition, 2004 (see Box 5 below), as follows:

- Risk Group 1 (no or low individual and community risk): A microorganism that is unlikely to cause human or animal disease.
- Risk Group 2 (moderate individual risk, low community risk): A pathogen that can cause human or animal disease but is unlikely to be a serious hazard to laboratory workers, the community, livestock or the environment. Laboratory exposures may cause serious infection, but effective treatment and preventive measures are available and the risk of spread of infection is limited.
- Risk Group 3 (high individual risk, low community risk): A pathogen that usually causes serious human or animal disease but does not ordinarily spread from one infected individual to another. Effective treatment and preventive measures are available.
- Risk Group 4 (high individual and community risk): A pathogen that usually causes serious human or animal disease and that can be readily transmitted from one individual to another, directly or indirectly. Effective treatment and preventive measures are not usually available.

Normally, a State would consider including biological agents falling under Risk Groups 3 and 4 in their controlled agents and toxins list.

The benefit of the options discussed above is that any list arising from them would reflect the public, animal and plant health, environmental, and security concerns of the individual State, which may differ to various degrees from the risks posed in other States. At the same time, however, many States have neither the resources nor the capacity to develop these lists without external inputs. There are, nevertheless, good examples of lists of controlled agents and toxins, which are included in Box 1 below.

Box 1: Examples of lists of controlled agents and toxins

- Australia Group Lists:
<http://www.australiagroup.net/en/controllists.html>
- European Union Council Regulation (EC) No 428/2009 of 5 May 2009, setting up a Community regime for the control of exports, transfer, brokering and transit of dual-use items
<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CONSLEG:2009R0428:20120615:EN:PDF>
- United Kingdom Anti-Terrorism, Crime and Security Act 2001, Part 7 (Security of Pathogens and Toxins):
<http://www.legislation.gov.uk/ukpga/2001/24/contents>
Schedule 5:
<http://www.legislation.gov.uk/ukpga/2001/24/schedule/5>
- United Kingdom Health and Safety Executive Approved List of Biological Agents:
<http://www.hse.gov.uk/press/2004/e04078.htm>
- United States Department of Health and Human Services (HHS) and Department of Agriculture (USDA) list of selected agents and toxins:
<http://www.selectagents.gov/index.html>

2. Controlled equipment and technology

States should also consider adopting and maintaining a list of biological equipment and technology, including intangible technology, which would be subject to international transfers control (internal control of these dual-use items is an onerous administrative burden and is therefore not recommended). This list would be known as the controlled equipment and technology list (*Sample Act*, Section 10). There are already publicly available lists that are widely used, which can make this process easier; examples are in Box 2 below.

Box 2: Examples of lists of controlled equipment and technology

- Australia Group Lists:
<http://www.australiagroup.net/en/controllists.html>
- European Union Council Regulation (EC) No 428/2009 of 5 May 2009, setting up a Community regime for the control of exports, transfer, brokering and transit of dual-use items
<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CONSLEG:2009R0428:20120615:EN:PDF>

3. Licensing for activities involving controlled agents and toxins

Licensing regulations (*Sample Act*, Section 11) will help ensure that activities involving especially dangerous biological agents and toxins are monitored and controlled by government, without unduly burdening the peaceful work of life scientists, researchers and technicians. Licensing enables a

government to have a database of who is holding or working with which controlled agents or toxins, and for what purpose. These regulations will require any legal or governmental entity or individual engaged in the development, acquisition, manufacture, possession, transfer, storage, or use of controlled agents or toxins to obtain a license from the relevant government authority. This may be, in some States, the Responsible Authority responsible for implementation of the BWC (see Guideline 7 below).

Licensing should also be considered for any work involving genetic modification of microorganisms¹.

States should include in their regulations the following elements:

- The name and full contact details of the governmental authority responsible for granting, denying, suspending or revoking licenses;
- The form of the license:
 - Licensee's name and full contact details (this will be an entity and/or individual(s));
 - Entity ownership information, including any changes in ownership;
 - Name and full contact details of any facility or facilities under the licensed entity's control where activities involving controlled agents or toxins take place;
 - Which controlled agents or toxins are being used by the licensee(s);
 - A description of the licensee's activities involving controlled agents or toxins;
 - The name of the Compliance Officer(s) in the licensed entity's facility or facilities who will be responsible for liaison between the entity and the facilities; the full contact details for the Compliance Officer(s); the responsibilities of the Compliance Officer(s);
- Conditions under which licenses will be granted, for example:
 - the licensee must demonstrate that they meet certain laboratory biosafety and biosecurity conditions (discussed in Guideline 6 below);
 - licensed individuals must be qualified to work with the controlled agents and toxins listed in the license;
 - the licensed entity must undertake personnel background checks of their licensed individuals (e.g., criminal, financial, previous employers, educational institutions);
- Conditions under which a license may be denied, suspended or revoked (violations of any applicable legislation or regulations, violation of the terms of a license, etc.);
- Individuals who are, by law, prohibited from receiving a license (e.g., convicted felons, individuals with drug or alcohol addictions, known terrorists, etc.);
- A database of licensees where the data in the form of the license (discussed above) is entered and maintained in a searchable and secure manner; the regulations should designate the governmental authority responsible for maintaining and updating the database (for most States this would be the same authority that is responsible for issuing licenses);
- Procedures for reporting theft, loss or release (whether intentional or accidental) to the governmental authority responsible for licensing including:
 - a form for reporting the theft, loss or release and procedures for including this in the licensing authority's database (described above) including:
 - the date and time when the theft, loss or release was first discovered;

¹ See, for example, the United Kingdom's Genetically Modified Organisms (Contained Use) Regulations 2000, and amendments (available at <http://www.legislation.gov.uk/uksi/2000/2831/contents/made>).

- the name of the individual(s) who discovered the irregularity, including contact details, functions and responsibilities;
 - the name of the controlled agent or toxin in question as well as a description of any activities involving the agent(s) or toxin(s);
 - steps being taken to recover the material;
- a time limit for reporting the theft, loss or release and clear instructions on where the form is to be sent and to whom (with full contact details);
 - a requirement that the licensee and Compliance Officer also inform local law enforcement authorities or the licensing authority who in turn would contact and liaise with law enforcement authorities;
 - in the event of a release, the additional requirement that public, animal or plant health officials, as well as the appropriate law enforcement authorities, are contacted immediately to facilitate outbreak containment (see Box 8 below).

4. Monitoring internal and international transfers of controlled agents and toxins and controlled equipment and technology

States should monitor internal and international transfers of controlled agents and toxins, as well as international transfers of controlled equipment and technology, included in any control lists (see Guidelines 1 and 2 above; *Sample Act*, Sections 12 and 13). This monitoring is normally accomplished through a system of transfers permits and a registry. For some States, this function would fall within the responsibility of an existing export-import control authority or could be assigned to the Responsible Authority for implementation of the BWC, discussed in Guideline 7 below.

States should clarify by regulation:

- the governmental authority responsible for granting, denying, suspending or revoking internal and international transfers permits, and its full contact details;
- the establishment of a secure and searchable registry of all internal and international transfers, which would contain the data contained in any forms submitted to the governmental authority for a transfers permit (see below), and the authority responsible for maintaining and updating the registry (for most States this would be the same authority that issues the transfers permits).

In addition to these, States may need more detailed regulations unique to internal and international transfers.

For internal transfers, States should include in their regulations:

- the form for a transfer with the following information:
 - names and full contact details of the transferring parties (senders/recipients), including details for the transferring entities, facilities and individuals, as well as a statement requiring copies of their licenses to engage in activities involving controlled agents and toxins to be attached (see Guideline 3 above);
 - the type and quantity of controlled agents or toxins to be transferred internally and a statement explaining why the internal transfer is taking place;
 - a description of any risks associated with the internal transfer, and steps taken to mitigate these risks;
 - details on the domestic carrier to be used, including their full contact details (so that the transfers authority can confirm that the carrier is approved (see Guideline 5 below);

- conditions under which internal transfers permits will be granted, for example:
 - the transferor must demonstrate that they will meet national packaging, labelling and shipping standards for controlled agents and toxins (see Guideline 5 below);
 - the recipient must be licensed or authorized under the regulations to handle controlled agents and toxins;
- conditions under which a permit may be denied, suspended or revoked (violations of any applicable legislation or regulations, violation of the terms of a license or permit, not being in possession of a valid license to engage in activities involving controlled agents and toxins, etc.);
- individuals who are, by law, prohibited from receiving a permit (e.g., convicted felons, individuals with drug or alcohol addictions, known terrorists, etc.);
- procedures for reporting theft, diversion, loss or release (whether intentional or accidental) to the governmental authority responsible for issuing permits including:
 - a form for reporting the theft, diversion, loss or release and procedures for including this in the transfers authority's registry (described above) with:
 - the date and time when the theft, diversion, loss or release was first discovered;
 - the name of the individual(s) who discovered the irregularity, including contact details, functions and responsibilities;
 - the names and full contact details for the sending and receiving parties, as well as for the domestic carrier;
 - the name(s) of the controlled agent(s) or toxin(s) in question;
 - steps being taken to recover the material;
 - a time limit for reporting the theft, diversion, loss or release and clear instructions on where the form is to be sent and to whom (with full contact details);
 - a requirement that the permit holder also inform local law enforcement authorities or the internal transfers authority who in turn would contact and liaise with law enforcement authorities;
 - in the event of a release, the additional requirement that public, animal or plant health officials, as well as the appropriate law enforcement authorities, are contacted immediately to facilitate outbreak containment (see Box 8 below).

For international transfers of controlled agents and toxins or controlled equipment and technology, a State should clarify by regulation:

- the types of transfers permits to be made available, such as ones for:
 - Import²
 - Export³
 - Re-export⁴
 - Transshipment⁵

² To bring into the physical jurisdiction or customs boundary of a State items coming from a foreign State.

³ The actual shipment or transmission of items out of the physical jurisdiction or customs boundary of a State.

⁴ Actual shipment or transmission of items from one foreign State to another where the items in question had themselves been imported and where those items were originally subject to export control laws or regulations of another State.

- Transit⁶
- the forms for the transfers permits (based on the type of transfer above) with the following information:
 - names and full contact details of the sending and receiving parties, at all steps of the transfer, including all details for the domestic entity, facility and individual, as well as a statement requiring copies of their licenses to engage in activities involving controlled agents and toxins (see Guideline 3 above);
 - the types and quantities of controlled agent(s) or toxin(s) or controlled equipment and technology to be transferred internationally as well as a statement explaining why the transfer is taking place;
 - details on any carriers to be used at all steps of the transfer as well as their full contact details (so that the governmental authority can confirm that the carriers are approved (see Guideline 5 below);
- any transfers restrictions, for example, prohibitions on any transfers to or from certain countries;
- conditions under which international transfers permits will be granted, for example, the transferor must demonstrate that the transfer will meet national and international packaging, labelling and shipping standards for controlled agents and toxins (see Guideline 5 below);
- conditions under which a permit may be denied, suspended or revoked (violations of any applicable legislation or regulations, violation of the terms of a license or permit, not being in possession of a valid license to engage in activities involving controlled agents and toxins, etc.);
- individuals who are, by law, prohibited from receiving a permit (e.g., convicted felons, individuals with drug or alcohol addictions, known terrorists, etc.);
- procedures for reporting theft, diversion, loss or release (whether intentional or accidental) to the governmental authority responsible for issuing permits including:
 - a form for reporting the theft, diversion, loss or release and procedures for including this in the transfers authority's registry (described above) with:
 - the date and time when the theft, diversion, loss or release was first discovered;
 - the name of the individual(s) who discovered the irregularity, including contact details, functions and responsibilities;
 - the names and full contact details for the sending and receiving parties, as well as for the domestic and international carriers;
 - the name(s) of the controlled agent(s) or toxin(s) or controlled equipment or technology in question;
 - a time limit for reporting the theft, diversion, loss or release and clear instructions on where the form is to be sent and to whom (with full contact details);
 - a requirement that the permit holder also inform local law enforcement authorities or the international transfers authority who in turn should contact and liaise with national law enforcement authorities as well as the authorities of the State to or from which the controlled agent or toxin, or controlled equipment or technology, was being transferred;

⁵ After goods have been unloaded or in any way removed from the means of transportation by which they came into a State, their loading, placing on board or within or upon the same or any other means of transportation with a view to being carried outside the boundaries of that State.

⁶ The carriage of goods across the territory and out of a State using the same means of transportation by which they entered that State and without their unloading.

- in the event of a release, the additional requirement that public, animal or plant health officials, as well as the appropriate law enforcement authorities, are contacted immediately to facilitate outbreak containment (see Box 8 below);
- a requirement that controlled agents or toxins or controlled equipment or technology may only be transferred to individuals, entities or facilities in States with equally robust legislation and regulations governing these sensitive materials;
- a requirement for an end-user certificate (prepared by the recipient party), to be included with the appropriate transfer form (discussed above), containing:
 - a statement that the controlled agent or toxin or controlled equipment or technology will only be used for lawful purposes;
 - a statement that the controlled agent or toxin or controlled equipment or technology will not be retransferred;
 - the type and quantity of controlled agent or toxin, or a description of the controlled equipment or technology, to be transferred;
 - the end-use of the controlled agent or toxin or controlled equipment or technology to be transferred; and
 - the name(s) and location(s) of the end-user(s) and any intermediaries;
- a description of risk (risk assessment) by the party requesting a permit with an evaluation of the safety and security of the transfer, to be included with the appropriate transfer form (discussed above).

The EU example of export control regulations, as well as related forms, are noted in Box 3 below.

Box 3: Examples of regulations and forms for sensitive goods export permits

- European Union Council Regulation (EC) No 428/2009 of 5 May 2009, setting up a Community regime for the control of exports, transfer, brokering and transit of dual-use items (*see especially the annexes*):
<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CONSLEG:2009R0428:20120615:EN:PDF>

5. Secure transport of controlled agents and toxins

Safe and secure transport of controlled agents and toxins (*Sample Act*, Section 14) is essential to avoid the risk of biological weapons proliferation, as well as accidental releases of infectious substances. A State's regulations, issued further to any legislation adopted to implement the BWC, should ensure that licensed entities and individuals, as a condition to receiving a transfers permit (discussed above in Guideline 4), undertake packaging, labelling and shipping of controlled agents and toxins in compliance with national and international safety and security standards.

A State may wish to designate by regulation its Ministry of Transport (or equivalent) as the authority responsible for certifying carriers.⁷ A State may also wish to specify in its regulations that only certified carriers are approved to transport controlled agents and toxins, and that they must be in possession of an official duplicate copy of a transfer permit for a particular shipment.

⁷ A State may also wish to include a representative of the Ministry of Transport in the Responsible Authority (see Guideline 7).

A State may also wish to clarify by regulation that the Ministry of Transport will establish the conditions under which carriers must transport controlled agents and toxins, including, for example, the technical specifications for transport vehicles and markings; safety and security measures at the transfer depots; the licensing, training and vetting of personnel; and shipment tracking (through electronic tagging, bar coding, signature and identification of recipient, etc.).

Examples of transport guidelines for infectious substances are already available to States for preparing national regulations governing the safe and secure transport of controlled agents and toxins (Box 4).

Box 4: Guidelines for secure transportation of controlled agents and toxins

- The International Air Transport Association's (IATA) *Guidance Document for Infectious Substances, DG Regulation on the Classification of Infectious Substances and Packing Instruction 650 (Toxic and Infectious Substances)*:
http://www.iata.org/whatwedo/cargo/dgr/Pages/infectious_substances.aspx
- The World Health Organization's (WHO) *Guidance on regulations for the Transport of Infectious Substances, 2008*:
http://www.who.int/ihr/biosafety/publications_WHO_HSE_EPR_2008_10/en/index.html

6. Laboratory biosafety and biosecurity

As a condition to receiving a license to engage in activities involving controlled agents and toxins (Guideline 3), a State should require entities, facilities and individuals to demonstrate to the licensing authority that they comply with applicable national and international biosafety⁸ and biosecurity⁹ standards for laboratories.

WHO has published a comprehensive resource, the *Biosafety Laboratory Manual* (see Box 5 below), which makes drafting laboratory biosafety regulations much clearer for States. Part I of this manual, in particular, goes into great detail on biosafety guidelines, which relate to the four risk groups discussed in Guideline 1. WHO has also identified the corresponding laboratory type, laboratory practices and safety equipment for each biosafety level. A table with this information can be found on page 1 of the *Biosafety Laboratory Manual*.

The licensing authority responsible for monitoring activities involving controlled agents and toxins should require entities, facilities and individuals to demonstrate that they are complying, where appropriate, with biosafety measures for activities at Biosafety Level 3 (BSL 3 – containment laboratory) or Biosafety Level 4 (BSL 4 – maximum containment laboratory). In practice, this would mean that BSL 1 to 3 measures must apply to a containment laboratory and BSL 1 to 4 measures to a maximum containment laboratory.

⁸ *Laboratory biosafety* is the term used to describe the containment principles, technologies and practices that are implemented to prevent unintentional exposure to pathogens and toxins, or their accidental release. (*Biosafety Laboratory Manual*, Third Edition, WHO, 2004).

⁹ *Laboratory biosecurity* refers to institutional and personal security measures designed to prevent the loss, theft, misuse, diversion or intentional release of pathogens and toxins. (*Biosafety Laboratory Manual*, Third Edition, WHO, 2004).

Box 5: Laboratory biosafety measures

- *Biosafety Laboratory Manual*, Third Edition, WHO, 2004. This manual is available in several languages at:
http://www.who.int/csr/resources/publications/biosafety/WHO_CDS_CSR_LYO_2004_11/en/
- *Biosafety in Microbiological and Biomedical Laboratories (BMBL)*, 5th Edition, Centers for Disease Control and Prevention, 2007:
<http://www.cdc.gov/od/ohs/biosfty/bmbl5/bmbl5toc.htm>

WHO has published another excellent resource, the *Biorisk Management - Laboratory Biosecurity Guidance* (see Box 6 below), which makes drafting laboratory biosecurity regulations clearer for States. The *Guidance* applies to human, veterinary and agricultural laboratories. Parts 4 (biorisk management), 5 (countering biorisks) and 6 (laboratory biosecurity programme) are particularly relevant to States engaged in preparing laboratory biosecurity regulations. Other useful resources are listed in Box 6.

Box 6: Laboratory biosecurity measures and biorisk management

- *Biorisk Management - Laboratory Biosecurity Guidance*, WHO, September 2006:
http://www.who.int/csr/resources/publications/biosafety/WHO_CDS_EPR_2006_6/en/
- *OECD Best Practice Guidelines on Security for Biological Resource Centres (BRCS)*, OECD, 2007: <http://www.oecd.org/dataoecd/6/27/38778261.pdf>
- *Handbook of Applied Biosecurity for Life Science Laboratories*, SIPRI, 2009:
http://books.sipri.org/product_info?c_product_id=382#
- *Laboratory Biorisk Management Standard*, European Committee for Standardization (CEN), February 2008: <ftp://ftp.cenorm.be/PUBLIC/CWAs/wokrshop31/CWA15793.pdf>
- Laboratory Biosecurity Training, Centers for Disease Control and Prevention (online course):
http://www.cdc.gov/od/ohs/biosecurity_training/page2790.html

PART II ENFORCEMENT

States will require a robust set of measures to ensure that the biosecurity regulations discussed in Part I above are effectively implemented and enforced. The guidelines below follow the structure of Part D of VERTIC's *Sample Act*, and provide States with further guidance on the establishment or designation of governmental bodies responsible for implementation of the BWC and biological incident response, as well as measures for monitoring compliance through record-keeping and reporting, inspections and investigations.

7. Responsible Authority

The Sixth Review Conference of the States Parties to the BWC encouraged its members to designate a national focal point for co-ordinating national implementation of the Convention, and for communicating with other States Parties and relevant international organizations.¹⁰ A similar arrangement is called for in the Chemical Weapons Convention (CWC), in Article VII, paragraph 4 (see Box 7).¹¹ In VERTIC's *Sample Act*, the establishment or designation of a Responsible (or National) Authority for the BWC is provided for in Section 15.

As a first step, a State should assess the scope of its national implementation requirements; it will then be in a better position to decide whether to designate an existing entity as the Responsible Authority for the BWC, or to create a new agency. A State could choose to adopt a centralized structure, within which one entity assumes all the responsibilities and functions related to implementation of the BWC, such as a government ministry or department. Alternatively, a State may choose to adopt a decentralized structure, whereby the Responsible Authority co-ordinates the implementation activities of all relevant governmental bodies and has overall responsibility for international co-operation with regard to the BWC. Governmental bodies that may already have responsibility for issues falling under the Convention might include: a national health authority responsible for licensing laboratories; a trade ministry that authorizes imports and exports of dual-use items; and a foreign ministry that may already be liaising with the BWC Implementation Support Unit or be involved in Geneva-based BWC meetings and conferences.

Some States have taken a different approach and combined their Biological and Chemical Weapons Conventions focal points into one governmental entity as a matter of efficiency and effectiveness, and have added responsibilities under the BWC to those of their existing CWC National Authority.

Each State is free to determine its Responsible Authority's functions and responsibilities, which are normally governed by law and regulation. Some functions and responsibilities, nevertheless, are particularly important.

At the international level, the Responsible Authority should:

- act as a national point of contact for the BWC Implementation Support Unit, and inform the Unit of its name and full contact details¹²;

¹⁰ *Final Document of the Sixth Review Conference of the States Parties to the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on Their Destruction*, 8 December 2006, BWC/CONF.VI/6.

¹¹ As at 20 January 2011, 182 out of 188 States Party to the Chemical Weapons Convention have designated or established their National Authority.

¹² BWC Implementation Support Unit (United Nations Office for Disarmament Affairs, Geneva Branch): [http://www.unog.ch/80256EE600585943/\(httpPages\)/16C37624830EDA5C12572BC0044DFC1?OpenDocument](http://www.unog.ch/80256EE600585943/(httpPages)/16C37624830EDA5C12572BC0044DFC1?OpenDocument).

- provide data and information relevant to the fulfilment of its international obligations to other States Parties and international organizations; this includes gathering any necessary information to prepare Confidence-Building Measure (CBM) returns for submission to the BWC Implementation Support Unit (see Guideline 9);
- share experiences and extend assistance to other States pertaining to implementation of the BWC;
- participate in BWC meetings such as Review Conferences and any other intersessional meetings.

At the national level, the Responsible Authority should:

- develop and promulgate lists of controlled agents and toxins and controlled equipment and technology (see Guidelines 1 and 2);
- process licenses for activities involving controlled agents and toxins (see Guideline 3);
- issue and monitor compliance with permits for internal and international transfers of controlled agents and toxins and controlled equipment and technology (see Guideline 4);
- create and maintain (or coordinate with if appropriate) a national system to respond to biological incidents (see Guideline 8);
- establish a national system to monitor and verify activities in authorized facilities (see Guidelines 9 and 10);
- propose and support the adoption of legislative and other administrative or regulatory measures to implement the BWC;
- supervise and monitor the enforcement of legislation and regulations;
- advise the prime minister or head of government on any BWC-related issues;
- report annually to the parliament or national assembly on its activities;
- coordinate and assist with any of the tasks above attributed to any other government bodies; and
- conduct or facilitate awareness-raising, education, outreach and training vis-à-vis the BWC, biosafety and biosecurity, national implementing legislation and other measures, and codes of conduct for scientists, with the academic and industry communities.

Certain government departments, ministries or agencies may have specific functions and expertise that are highly relevant to implementation of the BWC, and they could be tasked to co-operate with the Responsible Authority. This can be accomplished by assigning a representative to the Responsible Authority and by holding regular consultations and meetings. Accordingly, a State may require, by regulation, that representatives of the following ministries or agencies participate in the activities of the Responsible Authority¹³:

- Office of the Prime Minister or Head of Government;
- Office of the Attorney-General (or equivalent);
- Ministries of Agriculture, Defence, Environment, Foreign Affairs, Health, Industry, Interior, Justice and Transport;
- national border control authorities (customs, ports);
- national academy of science;
- national forensic science laboratory;
- national chamber of commerce; and
- national biotechnology industry association(s) or other professional scientific bodies.

Finally, the regulations for the establishment or designation of a Responsible Authority should prescribe:

¹³ This list is only illustrative and should be tailored according to the country's constitutional and statutory regimes, circumstances, needs, etc.

- the conduct of meetings of the Responsible Authority;
- the Responsible Authority's budget; and
- the composition, administrative functions and organization of the Responsible Authority's secretariat.

The *Model Decree on the Establishment of a National Authority for Implementing the CWC* prepared by the Organisation for the Prohibition of Chemical Weapons (OPCW) may be particularly useful to States engaged in drafting their regulations for a Responsible Authority for the BWC. VERTIC has also prepared a Fact Sheet on the topic (Box 7).

Box 7: Establishing a Responsible Authority

- *Model Decree on the Establishment of a National Authority for Implementing the Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on Their Destruction:* <http://www.opcw.org/our-work/national-implementation/implementing-legislation/models-checklists-questionnaires/>
- VERTIC Fact Sheet 10—*National Authority for the Biological Weapons Convention:* <http://www.vertic.org/pages/homepage/programmes/national-implementation-measures/biological-weapons-and-materials/fact-sheets.php>

8. Biological Emergency Response and Investigation Support System (BERISS)

In addition to a Responsible Authority, States should consider establishing a mechanism to respond to any biological incidents, whether intentional or accidental, that could have a harmful or deadly impact on human, animal or plant health. For the purposes of the *Sample Act* and these guidelines, VERTIC has named this mechanism the Biological Emergency Response and Investigation Support System (BERISS). The BERISS concept arose out of the recognition that few States explicitly require co-ordination and co-operation among their law enforcement, intelligence, and public health and agriculture communities in the event of disease outbreaks.

States that choose to have the BERISS mechanism, provided for in Section 16 of VERTIC's *Sample Act*, would normally require a new government entity to carry out the following responsibilities:

- Manage, co-ordinate and guide the national and local response to incidents associated with biological agents and toxins in co-ordination with the Responsible Authority;
- establish public health and agricultural surveillance and reporting systems with respect to activities involving controlled agents and toxins, in co-ordination with other governmental agencies;
- ensure the effectiveness of a public emergency announcement system;
- ensure the effective training and equipping of law enforcement officers, emergency/first responders and hospitals in responding to incidents involving biological agents and toxins;
- create threat-based medical and public health detection strategies to detect and determine outbreaks associated with biological agents and toxins;
- receive and review classified biological threat intelligence;
- receive and review public health information;
- collect, maintain, and present evidence needed for review of forensic epidemiological investigations and for prosecutions;
- transmit data and information regarding biological emergencies and incidents to the Responsible Authority;

- liaise and co-operate with the World Health Organisation through the National Focal Point for the 2005 International Health Regulations;
- undertake other activities regarding preparation for and response to emergencies involving biological agents and toxins, including co-operation with law enforcement officers;
- liaise with relevant international organisations that can provide advice and assistance; and
- maintain contacts with other State Parties developing their own systems in order to make use of best practice and experience.

Some of these functions may already be adequately covered by existing laws and regulations for law enforcement; human, plant, and animal health and quarantine; disease surveillance; disaster response; intelligence collection and surveillance; information sharing and data protection; security clearances and state secrets; and criminal procedure, including evidence collection and chain of custody. Accordingly, the regulations establishing BERISS and its responsibilities could make reference to these existing measures. However, additional regulations may be necessary to enable BERISS to prepare standard operating procedures and enter into co-operation and co-ordination agreements with intelligence officials, national and local law enforcement and health authorities, as well as with the Responsible Authority.

Regulations may be necessary to require that the following experts participate in the activities of BERISS:

- a representative from the Responsible Authority to act as a liaison with BERISS;
- representatives from the Ministry of Health (and perhaps the Food and Drug Safety Agency), and the Ministries of Agriculture and Environment;
- an emergency medicine practitioner;
- a law enforcement officer, preferably trained to respond to biological emergencies;
- representatives from the national border control authorities (customs and ports);
- an epidemiologist;
- a veterinary scientist;
- a phytosanitary expert;
- specialists in bacterial, toxicological, viral, rickettsial, fungal and prion diseases;
- a media relations specialist; and
- the National Focal Point for the WHO International Health Regulations.

Finally, regulations may be necessary to govern:

- the conduct of BERISS meetings;
- BERISS' budget; and
- the composition, administrative functions and organization of BERISS' secretariat.¹⁴

In order for BERISS to be effective, its staff will need to be trained in order to carry out their responsibilities in the event of a disease outbreak. Interpol's Bioterrorism Prevention Resource Centre (Box 8) is an excellent resource with links to sites about prevention and response and co-operation among public health and law enforcement authorities.

¹⁴ See Guideline 7.

Box 8: BERISS – training and co-operation

- Interpol's Bioterrorism Prevention Resource Centre (which includes links to materials on, *inter alia*, detection devices, governmental agencies, biocontainment laboratories, decontamination, agents – treatment and surveillance, personal protective equipment): <http://www.interpol.int/Crime-areas/Terrorism/CBRNE-programme/Bioterrorism>
- Interpol's Bioterrorism Prevention Programme (and *Bioterrorism Incident Pre-Planning & Response Guide*): <http://www.interpol.int/Crime-areas/Terrorism/CBRNE-programme/Bioterrorism>
- *Biorisk Management - Laboratory Biosecurity Guidance*, WHO, September 2006: http://www.who.int/csr/resources/publications/biosafety/WHO_CDS_EPR_2006_6/en/ (especially Sections 6.2 and 6.3)
- 2005 International Health Regulations (<http://www.who.int/ihr/en/>)

9. Record-keeping and reporting

A State should require, by law and regulation, that all licensed entities, facilities and individuals maintain records related to any of their activities involving controlled agents and toxins (*Sample Act*, Section 17). Licensees should be able to account for, at any time, any controlled agents or toxins in their possession, from the point when the controlled agent or toxin enters their facility to the point where it is destroyed or transferred elsewhere. This paperwork, whether in hard copy or electronic, should be maintained and archived in such a way that it is readily accessible in the event of an inspection (see Guideline 10) or request for information by the Responsible Authority, and so that the licensee can effectively prepare periodic reports to the Responsible Authority. The regulations should specify for how long these records must be kept. The manuals listed in Box 9 contain clear guidance on the documentation that should be prepared and maintained by licensees to account for any controlled agents or toxins in their possession.

Box 9: Records and archives

- *Biorisk Management - Laboratory Biosecurity Guidance*, WHO, September 2006: http://www.who.int/csr/resources/publications/biosafety/WHO_CDS_EPR_2006_6/en/ (especially Section 5.1)
- *OECD Best Practice Guidelines on Security for Biological Resource Centres (BRCS)*, OECD, 2007: <http://www.oecd.org/dataoecd/6/27/38778261.pdf> (especially Section 6.6)
- *Handbook of Applied Biosecurity for Life Science Laboratories*, SIPRI, 2009: http://books.sipri.org/product_info?c_product_id=382# (especially Sections 2.3.2 and 2.3.2.1)

States should also regulate record-keeping by carriers that are approved to ship, domestically or internationally, controlled agents and toxins (see Guideline 5). The regulations should require carriers to keep all copies of:

- duplicates of licensee permits for internal and international transfers of controlled agents and toxins or controlled equipment and technology;
- all documents related to the shipping of controlled agents and toxins or controlled equipment and technology (e.g., manifests, bills of lading, etc.);
- carrier certification documents from the Ministry of Transport or government agency responsible for this activity;
- irregularity reports (theft, diversion, loss, release).

The regulations should specify for how long these records must be kept.

States should promulgate regulations authorizing the Responsible Authority to request information from any licensee, apart from their periodic reporting, and specify:

- the official in the Responsible Authority authorized to send such a notice and their full contact details;
- a statement in the notice clarifying why it is being sent;
- the timeframe for the licensee to relay the requested information to the Responsible Authority;
- the contact details for the official to whom the information is to be sent; and
- the information that must be provided to the Responsible Authority along with the format for providing it.

States should promulgate regulations requiring licensees to report periodically to the Responsible Authority and specify:

- how frequently such reports must be prepared and submitted to the Responsible Authority;
- the information that must be contained in them and the format in which the reports must be submitted; and
- the full contact details of the officer responsible for receiving the reports.

Regulations should authorize the Responsible Authority to process reports from licensees, while requiring any data, for release outside the Responsible Authority, to be compiled in the aggregate to protect sensitive business information or research data. The Responsible Authority could be authorized to prepare annual reports to Parliament on implementation of national legislation and regulations to implement the BWC.

Finally, the Responsible Authority should be authorized to prepare and submit national submissions to international bodies, including the BWC Implementation Support Unit. Accurate record-keeping will facilitate the preparation and submission of seven politically-binding Confidence-Building Measures declarations (CBMs) to the Unit including:

- CBM A: Part 1: Exchange of data on research centres and laboratories / Part 2: Exchange of information on national biological defence research and development programmes;
- CBM B: Exchange of information on outbreaks of infectious diseases and similar occurrences caused by toxins;
- CBM C: Encouragement of publication of results and promotion of use of knowledge;
- CBM D: Active promotion of contacts;
- CBM E: Declaration of legislation, regulations and other measures;
- CBM F: Declaration of past activities in offensive and/or defensive biological research and development programmes;
- CBM G: Declaration of vaccine production facilities.¹⁵

These submissions are due before 15 April each year.

¹⁵ Additional information on CBMs and downloadable forms are available at:
[http://www.unog.ch/80256EE600585943/\(httpPages\)/CEC2E2D361ADFEE7C12572BC0032F058?OpenDocument](http://www.unog.ch/80256EE600585943/(httpPages)/CEC2E2D361ADFEE7C12572BC0032F058?OpenDocument).

10. Inspections

A State may wish to consider extending the compliance mechanism of record-keeping and reporting for national facilities handling controlled agents and toxins, discussed in Guideline 9, to include inspections (*Sample Act*, Sections 18 and 19).

A State may choose to designate the Responsible Authority as the agency in charge of national inspections, and give it the authority to organize an inspection team. If there are very few facilities handling controlled agents or toxins in its territory, a State may require the Responsible Authority to rely on existing inspectors in the fields of occupational health and safety; food and drug quality; agriculture; hospital, clinic and laboratory certification; or the like to carry out these responsibilities. The Responsible Authority would have to confirm, however, that these inspectors are qualified to operate in containment and maximum containment environments, else facilitate the appropriate training for the small number of inspectors that would be required.

If a State decides to have a domestic inspections capacity, it will need to clarify in the regulations:

- that inspectors are tasked to monitor compliance with licenses and permits issued under national law and regulations, and with the conditions of such licenses and permits; and
- that inspectors must have reasonable access to any facilities where controlled agents or toxins are handled, including all transfer points and carrier depots.

A State should promulgate regulations to confirm that an inspector may:

- search any premises;
- request a warrant to search facilities when access is denied (the regulations may specify warrant procedures unique to these inspections or make reference to existing entry warrant procedures for other types of inspections);
- operate any photographic or video-recording equipment anywhere in or around the premises provided safety regulations in force at the premises permit doing so;
- require the attendance of and question any person whom the inspector considers will be able to assist in the inspection;
- inspect or examine, take samples of, detain or remove any substance or item considered relevant by the inspector (the regulations may specify the procedures for sampling, including chain of custody and sample security);
- require any person to produce for inspection, or to copy, any document that the inspector believes contains any relevant information (licensees should be required to maintain accurate records for this purpose, and the ones below, as discussed under Guideline 9);
- use or cause to be used any equipment at the place to make copies of any data or any record, book of account or other document;
- use or cause to be used any computer or data processing system to examine any data contained in or available to the computer or system;
- reproduce or cause to be reproduced any record from the data, in the form of a printout or other intelligible output such as electronic copies, and remove the printout or other output for examination or copying;
- have operated any equipment, including electronic equipment located at the premises;
- be accompanied by an expert, as appropriate, chosen by the inspector and authorized by the Responsible Authority; and
- require that any person in control of the premises take any other reasonable measures that the inspector considers appropriate.

In order to ensure that facility inspections are professional and do not unduly interfere with legitimate life science and other activities involving controlled agents and toxins, a State should promulgate regulations governing the conduct of the inspections and the inspectors, including:

- inspector identification such as a certificate, with the following information:
 - inspector's name and title;
 - inspector's full contact details and photograph;
 - official seal of the Responsible Authority and name of the official that issued the certificate; and
 - expiry date;
- pre-arrival notification to the facility, including the form of the notice with the following information:
 - arrival date and approximate length of inspection;
 - statement of purpose for the inspection;
 - names of the inspection team members and team leader;
 - brief description of the protocol for the inspection (arrival/inspection/departure/report); and
 - full contact details for the office in the Responsible Authority in charge of inspections;
- inspection team pre-briefing on the facility and the host official(s), the controlled agents and toxins that are handled there, the activities that take place there;
- confidentiality agreements governing the conduct of inspectors and their responsibilities for protecting information that comes into their possession as a result of their duties;
- arrival and greeting protocols, or procedures in the absence of the responsible host official (the regulations may specify entry warrant and seizure procedures unique to these inspections or make reference to existing entry warrant and seizure procedures for other types of inspections);
- conduct while on the premises of a facility, including;
 - health and safety matters;
 - emergency procedures;
 - treatment of sensitive business information and research data;
- inspection procedures (also see inspector powers above);
- procedures in the event of suspected non-compliance with national law or regulations or the conditions of a license or permit, including referral for investigation (see Guideline 11); and
- departure protocols.

The regulations should require an inspection report and specify the form of the report with the following information:

- names of inspection team members and team leader;
- date of inspection, start and end time of inspection;
- name of inspected facility and of host official(s) with full contact details;
- description of the inspection, including:
 - the inspection activities;
 - documents reviewed;

- interviews with facility staff; and
- any irregularities between arrival and departure.

The regulations should also require the report to include recommendations to the Responsible Authority, with any suggested security or remedial measures or, in very serious cases, a referral for investigation (see Guideline 11). The regulations should allow the inspected facility to review and prepare a set of comments on the report for the Responsible Authority and specify the format in which these comments must be submitted.

In some cases, the Responsible Authority may decide to issue directions to a facility and require it to meet certain biosecurity standards, ensure that it has an updated security plan in place, or undertake additional measures in order to achieve full compliance with national law and regulations (*Sample Act*, Section 21). These directions could be issued on an *ad hoc* basis, or the regulations could specify the form of the directions with the following information:

- names of inspection team members and team leader;
- date of inspection, start and end time of inspection;
- name of inspected facility and of host official(s) with full contact details;
- the specific security measures to be taken and the timeframe for completion; and
- name and contact details of the official in the Responsible Authority who issued the directions.

Finally, regulations may be necessary to specify:

- the inspection team's budget, including salaries; and
- the composition, administrative functions and organization of the inspection team's secretariat.

11. Investigations

Inspections differ from investigations in a significant way: the Responsible Authority's presumption for an inspection is that a licensed facility is engaged in peaceful, legal activities involving controlled agents or toxins. The Responsible Authority should be authorized to call for an investigation, however, if it has reason to suspect that an entity, facility or individual handling controlled agents or toxins is not complying with national law or regulations, or with the conditions of a license or permit, or if a serious discrepancy was observed during a domestic inspection (Guideline 10)(*Sample Act*, Section 22). Moreover, the law enforcement authorities, in co-operation with the Responsible Authority and BERISS, should be authorized to lead the investigation and turn it into a criminal inquiry if necessary.

A State may need to promulgate regulations to facilitate co-operation among the law enforcement authorities, the Responsible Authority, BERISS, and the office of the prosecutor (or equivalent) in the event of an investigation. A co-operation agreement may be necessary to clarify each party's responsibilities.

This agreement could give law enforcement officials the authorization to lead the investigation, while requiring the Responsible Authority and BERISS to share relevant information, including facility reports and other documentation in the Responsible Authority or BERISS' possession (taking into consideration sensitive business information and research data). The agreement could require the Responsible Authority and BERISS to provide technical assistance during the investigation, which may differ significantly from other types of investigations with which law enforcement officials are more familiar. The agreement could also require BERISS to provide training to a specialized group of law enforcement officers, including:

- general information about bioterrorism;
- the national and international legal frameworks for the prevention and response to biological emergencies, as well as an understanding of the BWC and prohibited activities;
- the correct use of Personal Protection Equipment (PPE);
- other relevant safety procedures;
- specialised investigative techniques such as joint interviews and record-keeping with public health personnel;
- containment;
- biological hazard assessment;
- evidence collection and recovery such as sampling; and
- evidentiary procedures such as chain of custody.

The nature of an investigation involving controlled agents and toxins, or containment and maximum containment environments, will necessarily be different from other types of investigations. For techniques that are common to all of them, the regulations should make reference to an existing code of criminal procedure (or other law or set of regulations governing investigations) to avoid unnecessary duplication. For other techniques, however, the regulations may need to be more specific, particularly in relation to use of PPE in a crime scene; operating in a contained environment and designating it as a crime scene; biohazard assessment; and collecting, securing and maintaining chain of custody for samples and evidence, some of which may be contaminated and infectious. The regulations should also specify how any infectious or contaminated samples or evidence are to be destroyed, once they are no longer needed for an investigation or prosecution (*Sample Act*, Section 23).

Box 10: Investigations

- Interpol's Bioterrorism Prevention Resource Centre (which includes links to materials on, *inter alia*, detection devices, governmental agencies, biocontainment laboratories, decontamination, agents – treatment and surveillance, personal protective equipment): <http://www.interpol.int/Crime-areas/Terrorism/CBRNE-programme/Bioterrorism>
- Interpol's Bioterrorism Prevention Programme (and *Bioterrorism Incident Pre-Planning & Response Guide*): <http://www.interpol.int/Crime-areas/Terrorism/CBRNE-programme/Bioterrorism>
- *Biorisk Management - Laboratory Biosecurity Guidance*, WHO, September 2006 (particularly Sections 6.1 and 6.2): http://www.who.int/csr/resources/publications/biosafety/WHO_CDS_EPR_2006_6/en/

National Legislation Implementation Kit on Nuclear Security

**Presented by the Republic of Indonesia
to the Nuclear Security Summit
The Hague, the Netherlands
24–25 March 2014**

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I. Foreword

The *National Legislation Implementation Kit on Nuclear Security* (hereinafter, *the Kit*) was developed further to a commitment made by Indonesia to the second Nuclear Security Summit (NSS II), which took place during 26–27 March 2012 in Seoul, Republic of Korea. Indonesia is presenting the *Kit* as its gift to the third Nuclear Security Summit (NSS III) in The Hague during 24–25 March 2014.

The *Kit*, which is not legally binding and serves as a framework which States may choose whether to consider, has two objectives:

- ★ to help States develop comprehensive national legislation on nuclear security, in accordance with their own respective legal cultures and internal legal processes; and
- ★ to provide States with references to a wide array of consolidated elements and provisions contained in relevant international legal instruments and guidance documents that together establish the global framework for nuclear security.

1. Background

Nuclear security focuses on the prevention, detection and response to criminal or other intentional unauthorized acts involving or directed at nuclear or other radioactive material, nuclear facilities, or facilities involved with the management of radioactive sources. Nuclear security legislation better enables States to effectively prevent, detect and respond to such acts, within the framework of their national legal systems and through international co-operation.

States increasingly recognize that nuclear security in one State depends on the effectiveness and strength of the nuclear security regime in other States, and this applies equally to the effectiveness and enforceability of national implementing legislation. Establishing a comprehensive regime, including the establishment of effective legislative frameworks, therefore requires appropriate international co-operation to enhance nuclear security worldwide.

Since the first Nuclear Security Summit (NSS I) in Washington, DC in 2010, the importance of strong national legislation to enhance nuclear security worldwide has been acknowledged. In addition, a number of international legal instruments have been identified which establish the global legal framework for nuclear security. These instruments fall within the competence of various international bodies, including the United Nations (UN), International Atomic Energy Agency (IAEA), International Civil Aviation Organization (ICAO) and International Maritime Organization (IMO). They are:

- ★ 1980 Convention on the Physical Protection of Nuclear Material as amended by the 2005 Amendment to the Convention on the Physical Protection of Nuclear Material (CPPNM/A);¹
- ★ 2005 International Convention for the Suppression of Acts of Nuclear Terrorism (ICSANT);
- ★ 2003 Code of Conduct on the Safety and Security of Radioactive Sources (Code of Conduct) and 2012 Guidance on the Import and Export of Radioactive Sources (Guidance);²
- ★ 2010 Convention on the Suppression of Unlawful Acts Relating to International Civil Aviation (Beijing Convention);³
- ★ 1988 Convention for the Suppression of Unlawful Acts against the Safety of Maritime Navigation as amended by the Protocol of 2005 to the Convention for the Suppression of Unlawful Acts against the Safety of Maritime Navigation (SUA 2005);⁴ and
- ★ 1988 Protocol for the Suppression of Unlawful Acts against the Safety of Fixed Platforms Located on the Continental Shelf as amended by the Protocol of 2005 to the Protocol for the Suppression of Unlawful Acts against the Safety of Fixed Platforms Located on the Continental Shelf (SUA PROT 2005);⁵

1 The Kit refers to the consolidated text of the Convention, reflecting the 2005 Amendment. The 2005 Amendment is not yet in force. It will come into force once it has been ratified by two-thirds of the States Parties to the Convention.

2 The Code of Conduct and the Guidance are not legally binding. However, the IAEA General Conference urged “each State to write to the Director General that it fully supports and endorses the IAEA’s efforts to enhance the safety and security of radioactive sources, is working toward following the guidance contained in the IAEA Code of Conduct on the Safety and Security of Radioactive Sources, and encourages other countries to do the same” (GC(47)/RES/7.B). The IAEA General Conference also encouraged “States to act in accordance with the Guidance on a harmonized basis and to notify the Director General of their intention to do so as supplementary information to the Code of Conduct” (GC(48)/RES/10.D).

3 The Beijing Convention is not yet in force. It will come into force when twenty-two instruments of ratification, acceptance, approval or accession have been deposited.

4 The Kit refers to the consolidated text of the Convention, reflecting the text of the Protocol of 2005.

5 The Kit refers to the consolidated text of the Protocol, reflecting the text of the Protocol of 2005.

There are additional legal instruments, which are related to nuclear security. These include the Treaty on the Non-Proliferation of Nuclear Weapons (NPT), the Agreements between the International Atomic Energy Agency and States required in connection with the NPT (Comprehensive Safeguards Agreements),⁶ Model Protocol Additional to the Agreement(s) between State(s) and the International Atomic Energy Agency for the Application of Safeguards (Additional Protocol),⁷ as well as the nuclear weapon-free zone treaties and other regional agreements which require their respective States Parties to implement safeguards.⁸ These agreements can play an important role in relation to the licensing of certain activities involving nuclear material, as will be seen in Part III (Model Law) of this *Kit*.⁹

In addition, there is the 1996 Comprehensive Nuclear-Test-Ban Treaty (CTBT) to consider.¹⁰ There is an interplay between criminalisation in national law of Article I (1) of the CTBT which, at entry-into-force, will establish the obligation of States Parties to, in accordance with their constitutional processes, take any necessary measures to prohibit and prevent nuclear explosions, and the CPPNM/A which requires national measures to prevent the illegal acquisition of nuclear material for potential use in such nuclear explosions.

Finally, similarly to ICSANT, the 1998 International Convention for the Suppression of Terrorist Bombings (ICSTB) requires States Parties to criminalise activities involving a lethal device, which is designed, or has the capability, to cause death, serious bodily injury or substantial material damage through the release, dissemination or impact of radiation or radioactive material. States that may wish to implement the offences in the ICSTB and the CTBT, discussed in the previous paragraph, are referred to the footnotes in Section 6.3 of Part III of this *Kit*.

Ultimately, responsibility for establishing a robust national nuclear security regime lies entirely with States, which must ensure the security of any nuclear and other radioactive material, nuclear facilities and facilities involved with the management of radioactive sources, within their jurisdiction. Each State should aim to establish a nuclear security regime which is in line with the State's constitutional and national processes. Additionally, the implementation of the international legal instruments for nuclear security will necessarily involve a wide range of national stakeholders, including government agencies, industry, research institutions and universities, medical centres, etc.

2. Structure and content of the *Kit*

The *Kit* includes a Model Law (Part III) and a useful description of the process for developing nuclear security legislation (Part IV).

The Model Law in Part III was developed taking into account existing documentation on nuclear security, including:

- ★ *Combating Illicit Trafficking in Nuclear and other Radioactive Material* (IAEA Nuclear Security Series No. 6) (2007);¹¹

6 IAEA Document INFCIRC/153 (Corrected).

7 IAEA Document INFCIRC/540 (Corrected).

8 These are the 1967 Treaty for the Prohibition of Nuclear Weapons in Latin America and the Caribbean (Treaty of Tlatelolco), 1985 South Pacific Nuclear Free Zone Treaty (Treaty of Rarotonga), 1995 Treaty on the Southeast Asia Nuclear Weapon-Free Zone (Treaty of Bangkok), 1996 African Nuclear Weapon-Free Zone Treaty (Treaty of Pelindaba) and 2006 Treaty on a Nuclear-Weapon-Free Zone in Central Asia (Semipalatinsk Treaty).

9 See Part III (Model Law), Section 3.2, paragraph (3)(g).

10 The CTBT was adopted by the General Assembly of the UN on 10 September 1996 (UNGA Resolution 50/245). It will enter into force 180 days after the date of deposit of the instruments of ratification by all States listed in Annex 2 of the Treaty (Article XIV (1)).

11 See <http://www-pub.iaea.org/books/IAEABooks/7806/Combating-Illicit-Trafficking-in-Nuclear-and-Other-Radioactive-Material>.

- ★ *Nuclear Security Recommendations on Physical Protection of Nuclear Material and Nuclear Facilities* (INFCIRC/225/Revision 5) (IAEA Nuclear Security Series No. 13) (2011);¹²
- ★ *Computer Security at Nuclear Facilities* (IAEA Nuclear Security Series No. 17) (2011);¹³
- ★ *Objective and Essential Elements of a State's Nuclear Security Regime* (IAEA Nuclear Security Series No. 20) (2013);¹⁴
- ★ *The International Legal Framework for Nuclear Security* (IAEA International Law Series No. 4) (2011);¹⁵
- ★ *IAEA Handbook on Nuclear Law* (2003);¹⁶
- ★ *IAEA Handbook on Nuclear Law – Implementing Legislation* (2010);¹⁷
- ★ IAEA report by the Director General *Nuclear Security – Measures to Protect Against Nuclear Terrorism* (GOV/2006/46-GC(50)/13) (16 August 2006);¹⁸
- ★ UNODC *Legislative Guide to the Universal and Anti-Terrorism Conventions and Protocols* (2004);¹⁹
- ★ UNODC *Guide for the Legislative Incorporation and Implementation of the Universal Anti-Terrorism Instruments* (2006);²⁰
- ★ UNODC *Model Legislative Provisions against Terrorism* (2009);²¹
- ★ Preparatory Commission for the CTBTO *Guide to CTBT National Implementation Measures* (2013);²² and
- ★ VERTIC report *Illicit Trafficking of Nuclear and other Radioactive Material: The Legislative Response* (2012).²³

Part III of this *Kit* proposes a Model Law to implement a number of international instruments, listed in the background discussion above, to help States strengthen and complement their existing legislative frameworks for nuclear security.²⁴ In addition, duplication of national implementation obligations among these instruments, especially in the areas of preparatory offences, jurisdiction, criminal proceedings and international co-operation, has been harmonized in the model provisions.

The Model Law includes:

- ★ an overview (objective, scope and a description of the Model Law's sections) (Section 1);
- ★ definitions (Section 2);

as well as provisions for:

12 See <http://www-pub.iaea.org/books/IAEABooks/8629/Nuclear-Security-Recommendations-on-Physical-Protection-of-Nuclear-Material-and-Nuclear-Facilities-INFCIRC-225-Revision-5>.

13 See <http://www-pub.iaea.org/books/IAEABooks/8691/Computer-Security-at-Nuclear-Facilities>.

14 See http://www-pub.iaea.org/MTCD/Publications/PDF/Pub1590_web.pdf.

15 See http://www-pub.iaea.org/MTCD/publications/PDF/Pub1486_web.pdf.

16 See http://www-pub.iaea.org/MTCD/publications/PDF/Pub1160_web.pdf.

17 See http://www-pub.iaea.org/MTCD/publications/PDF/Pub1456_web.pdf.

18 See http://www.iaea.org/About/Policy/GC/GC50/GC50Documents/English/gc50-13_en.pdf.

19 See <http://www.unodc.org/pdf/terrorism/TATs/en/1LGen.pdf>.

20 See http://www.unodc.org/documents/terrorism/Publications/Guide_Legislative_Incorporation_Implementation/English.pdf.

21 See http://www.unodc.org/tldb/pdf/Model_Law_against_Terrorism.doc.

22 See http://www.ctbto.org/fileadmin/user_upload/legal/June_2013_Guide_to_CTBT_National_Implementation_Measures.pdf.

23 See http://www.vertic.org/media/assets/Publications/I/TR_WEB.pdf.

24 The authors of the *Kit* are mindful that certain international instruments listed in the Background discussion are not yet in force (the 2005 Amendment to the CPPNM and Beijing Convention), and that the Code of Conduct is not legally binding. The Model Law in Part III is structured in such a way that States may choose to implement some model provisions in their national law while not implementing others, in line with their international obligations, treaty implementation practice and domestic legal frameworks.

- ★ national regulation of nuclear security, including the establishment of a competent authority (Section 3);
- ★ physical protection and security of nuclear and other radioactive material and nuclear facilities; security of radioactive sources; notification of incidents (Section 4);
- ★ transport, import, export and transit of nuclear material and radioactive sources (Section 5);
- ★ offences and penalties (Section 6);
- ★ jurisdiction (Section 7); and
- ★ criminal proceedings and international co-operation (Section 8).

The relevant international authority or authorities (e.g., treaty, code, guidance) for each model provision are clearly indicated in an accompanying footnote.

The Model Law focuses on measures for the prevention, detection and response to criminal or other intentional unauthorized acts involving or directed at nuclear or other radioactive material, nuclear facilities, or facilities involved with the management of radioactive sources, and does not address the national implementation of the relevant international instruments related to nuclear liability, safety and safeguards. An effective legal framework to ensure the peaceful uses of nuclear energy should, however, address all of the aforementioned areas in a comprehensive manner. The authors of the Model Law especially acknowledge the synergies between safety and security, which have the common aim of protecting human health, society and the environment. Comprehensive measures taken for nuclear security can contribute to addressing nuclear safety and vice versa, thus relevant provisions such as those found in the IAEA Code of Conduct are included in the Model Law.

The Model Law does not contain miscellaneous and final clauses, which are often specific to national legislation. Chapter 15 of the *IAEA Handbook on Nuclear Law – Implementing Legislation (2010)*, however, provides examples.

Part IV of the *Kit* is a description of the process for developing nuclear security legislation. Although many, if not most, States have established procedures for developing national legislation, the somewhat unique aspects of nuclear security suggest that some guidance on the process for preparing a law on this subject could be useful to some States.

States ultimately have the discretion to draft and adopt nuclear security legislation adapted to their national circumstances and in line with their legislative and regulatory structures. The Model Law in Part III is not intended to be a ‘one size fits all’ proposition. It is a tool which legislative drafters may freely use, while taking into consideration their country’s legal framework, level of nuclear development, and other national circumstances. Some States may choose to adopt a stand-alone nuclear security law based on the *Kit*’s Model Law, while others may choose to extract model provisions and use them to amend separate laws. For example, the provisions in Section 5 could be used to amend strategic trade or import-export control laws, the offences and penalties in Section 6 of the Model Law could be used to amend a criminal or penal code, and so on. It should also be noted that additional implementing regulations will normally be required to provide more detail for a national nuclear security legal framework.

LEGAL NOTICE: This *Kit* does not constitute legal advice. Neither the Government of Indonesia nor VERTIC accept any liability with regard to any use of this document.

1. Overview of the [Act, Statute, Ordinance, etc.]

1.1 Objective and scope of the [Act, Statute, Ordinance, etc.]

- (1) The objective of this [Act, Statute, Ordinance, etc.] is to establish a comprehensive legislative framework for nuclear security, enabling the prevention, detection and response to unauthorized activities involving nuclear material, nuclear facilities and radioactive sources.
- (2) This [Act, Statute, Ordinance, etc.] applies-
 - (a) to items that are under regulatory control including nuclear material, nuclear facilities and facilities involved with the management of radioactive material; and
 - (b) to items that are not under regulatory control including lost, stolen, or illicitly trafficked nuclear or other radioactive material, as well as orphan sources.

1.2 Order of the [Act, Statute, Ordinance, etc.]

This [Act, Statute, Ordinance, etc.] is ordered as follows-

- (a) definitions (Section 2);
- (b) national regulation of nuclear security (Section 3);
- (c) physical protection and security of nuclear and other radioactive material and nuclear facilities; security of radioactive sources; notification of incidents (Section 4);
- (d) transport, import, export and transit of nuclear material and radioactive sources (Section 5);
- (e) offences and penalties (Section 6);
- (f) jurisdiction (Section 7); and
- (g) criminal proceedings and international co-operation (Section 8).

1.3 Description of the Sections of this [Act, Statute, Ordinance, etc.]

- (1) Definitions for the purposes of this [Act, Statute, Ordinance, etc.] are found in Section 2. The rather specific field of nuclear energy development has evolved on a global basis, in particular with the development of a number of international legal instruments and guidance documents. Nuclear security can no longer be considered only a domestic matter for individual States, as it inherently involves transnational issues: e.g., technology transfer, international terrorist threats, movement of materials and equipment, etc. Therefore, to ensure [State's] ability to participate in this globalized technology, its national legislation and regulations need to be consistent with this framework. Also, because of its unique technical dimensions, nuclear technology requires precise definitions on what activities and materials are covered. Therefore, Section 2 sets forth the most relevant definitions.
- (2) Sections 3 and 4 of this [Act, Statute, Ordinance, etc.] provide for national regulation of nuclear security and for the physical protection and security of nuclear and other radioactive material and nuclear facilities; the security of radioactive sources; and the notification of incidents. The [competent authority] for enforcement of this [Act, Statute, Ordinance, etc.] is established under Section 3. This

- Section also includes measures for licensing of activities involving nuclear material and radioactive sources, and for inspections, verification and monitoring and enforcement. Section 4 gives the [competent authority] broad authority to establish and implement a physical protection regime for nuclear material and facilities, as well as the authority to regulate the security of radioactive sources.
- (3) Section 5 of this [Act, Statute, Ordinance, etc.] provides for the regulation of transport, import, export and transit of nuclear material and radioactive sources. These measures are preventive in order to ensure that transported nuclear and radioactive sources are not unlawfully diverted or illicitly trafficked. If these measures are violated, they should be brought under the various provisions for criminalisation (Section 6), assertion of jurisdiction (Section 7) and criminal proceedings and international co-operation (Section 8). In view of the global character of the nuclear industry and the occasional necessity for international shipment of these materials, clear provisions are justified in the national legislation of [State].
 - (4) Section 6 of this [Act, Statute, Ordinance, etc.] provides for the criminalisation of offences involving nuclear and other radioactive material, nuclear facilities, and nuclear explosive devices. Acts involving nuclear explosive devices on or against aircraft, ships and fixed platforms are also criminalised. The provisions in Section 6 are intended to serve as a deterrent to unlawful activities involving nuclear and other radioactive material and nuclear facilities; however, they cannot be a substitute for the preventive measures that are provided for in Sections 3, 4 and 5 of this [Act, Statute, Ordinance, etc.].
 - (5) Section 7 of this [Act, Statute, Ordinance, etc.] provides for the assertion of jurisdiction over the offences in Section 6. The concept of jurisdiction involves measures by [State] to ensure that action will be taken to exercise legal control over persons who may have committed acts jeopardizing nuclear security. This is particularly important in the nuclear security field because of its inherent transnational character. Alleged perpetrators should not be able to avoid enforcement measures in one State by crossing international borders or asserting that their acts are immune from prosecution because they were, for example, political in character.
 - (6) Nuclear security is inherently transnational in character as States transfer nuclear material and radioactive sources, and related technology, to one another for nuclear energy, research and medical purposes, and for other needs important to the development, safety and security of [State] and its citizens. The measures in Section 8 (along with those in Sections 6 and 7) facilitate the enforcement of this [Act, Statute, Ordinance, etc.] through criminal investigations and prosecution and extradition, as well as through mutual legal assistance (MLA) and other forms of international co-operation with other States. This includes MLA in the event an investigation or other criminal proceeding is underway or assistance from [the competent authority] to another State with the recovery of nuclear material or radioactive sources in the event they were illegally acquired, diverted or trafficked.

2. Definitions

2.1 “Category 1 radioactive source”

“Category 1 radioactive source” means a source which, if not safely managed or securely protected, would be likely to cause permanent injury to a person who handled it, or were otherwise in contact with it, for more than a few minutes. It would probably be fatal to be close to this amount of unshielded material for a period of a few minutes to an hour. These sources are typically used in practices such as radiothermal generators, irradiators and radiation teletherapy.²⁵

²⁵ Code of Conduct, Annex I; Guidance, Paragraph 3(a). The competent authority should be empowered to adopt, in regulations, a detailed categorization of radioactive sources, based on internationally recognized guidance such as the Code of Conduct, Annex I, Table 1 and “Categorization of radioactive sources”, IAEA-TECDOC-1344.

2.2 “Category 2 radioactive source”

“Category 2 radioactive source” means a source which, if not safely managed or securely protected, could cause permanent injury to a person who handled it, or were otherwise in contact with it, for a short time (minutes to hours). It could possibly be fatal to be close to this amount of unshielded radioactive material for a period of hours to days. These sources are typically used in practices such as industrial gamma radiography, high dose rate brachytherapy and medium dose rate brachytherapy.²⁶

2.3 “Computer security”

“Computer security” means the security of computers and interconnected systems and networks.²⁷

2.4 “Device”

“Device” means-

- (a) any nuclear explosive device; or
- (b) any radioactive material dispersal or radiation-emitting device which may, owing to its radiological properties, cause death, serious bodily injury or substantial damage to property or to the environment.²⁸

2.5 “International nuclear transport”

“International nuclear transport” means the carriage of a consignment of nuclear material by any means of transportation intended to go beyond the territory of the State where the shipment originates beginning with the departure from a facility of the shipper in that State and ending with the arrival at a facility of the receiver within the State of ultimate destination.²⁹

2.6 “Management of radioactive sources”

“Management of radioactive sources” means the administrative and operational activities that are involved in the manufacture, supply, receipt, possession, storage, use, transfer, import, export, transport, maintenance, recycling or disposal of radioactive sources.³⁰

2.7 “Nuclear facility”

“Nuclear facility” means-

- (a) a facility (including associated buildings and equipment) in which nuclear material is produced, processed, used, handled, stored or disposed of, if damage to or interference with such facility could lead to the release of significant amounts of radiation or radioactive material;³¹

26 Code of Conduct, Annex I; Guidance, Paragraph 3(b). The competent authority should be empowered to adopt, in regulations, a detailed categorization of radioactive sources, based on internationally recognized guidance such as the Code of Conduct, Annex I, Table 1 and “Categorization of radioactive sources”, IAEA-TECDOC-1344.

27 See, for example, *Computer Security at Nuclear Facilities* (IAEA Nuclear Series No. 17) (2011), p. 5.

28 ICSANT, Article 1(4).

29 CPPNM/A, Article 1(c).

30 Code of Conduct, Paragraph 1.

31 CPPNM/A, Article 1(d).

- (b) any nuclear reactor, including reactors installed on vessels, vehicles, aircraft or space objects for use as an energy source in order to propel such vessels, vehicles, aircraft or space objects or for any other purpose;³² or
- (c) any plant or conveyance being used for the production, storage, processing or transport of radioactive material.³³

2.8 “Nuclear material”

- (1) “Nuclear material” means plutonium except that with isotopic concentration exceeding 80% in plutonium-238; uranium-233; uranium enriched in the isotope 235 or 233; uranium containing the mixture of isotopes as occurring in nature other than in the form of ore or ore-residue; any material containing one or more of the foregoing.³⁴
- (2) Whereby “uranium enriched in the isotope 235 or 233” means uranium containing the isotope 235 or 233 or both in an amount such that the abundance ratio of the sum of these isotopes to the isotope 238 is greater than the ratio of the isotope 235 to the isotope 238 occurring in nature.³⁵

2.9 “Orphan source”

“Orphan source” means a radioactive source which is not under regulatory control, either because it has never been under regulatory control, or because it has been abandoned, lost, misplaced, stolen or transferred without proper authorization.³⁶

2.10 “Radioactive material”

“Radioactive material” means nuclear material and other radioactive substances which contain nuclides which undergo spontaneous disintegration (a process accompanied by emission of one or more types of ionizing radiation, such as alpha-, beta-, neutron particles and gamma rays) and which may, owing to their radiological or fissile properties, cause death, serious bodily injury or substantial damage to property or to the environment.³⁷

2.11 “Radioactive source”

“Radioactive source” means radioactive material that is permanently sealed in a capsule or closely bonded, in a solid form and which is not exempt from regulatory control. It also means any radioactive material released if the radioactive source is leaking or broken, but does not mean material encapsulated for disposal, or nuclear material within the nuclear fuel cycles of research and power reactors.³⁸

2.12 “Sabotage”

“Sabotage” means any deliberate act directed against a nuclear facility or nuclear material in use, storage or transport which could directly or indirectly endanger the health and safety of personnel, the public or the environment by exposure to radiation or release of radioactive substances.³⁹

³² ICSANT, Article 1(3)(a).

³³ ICSANT, Article 1(3)(b).

³⁴ CPPNM/A, Article 1(a); ICSANT, Article 1(2); Beijing Convention, Article 2(f).

³⁵ CPPNM/A, Article 1(b); ICSANT, Article 1(2); Beijing Convention, Article 2(g).

³⁶ Code of Conduct, Paragraph 1.

³⁷ ICSANT, Article 1(1); Beijing Convention, Article 2(e).

³⁸ Code of Conduct, Paragraph 1.

³⁹ CPPNM/A, Article 1(e).

3.1 Establishment of the competent authority

- (1) The [competent authority] is hereby established as an independent public agency for the enforcement of this [Act, Statute, Ordinance, etc.] and any regulations issued hereunder. The [competent authority] shall be composed of [composition of a board] and [composition of the senior administration], and other officials as may be determined by the [board] [senior administration] in the regulations issued under this [Act, Statute, Ordinance, etc.].⁴⁰
- (2) The [competent authority] established under paragraph (1) shall be effectively independent of other bodies responsible for-
 - (a) promotion or utilization of nuclear energy;⁴¹ or
 - (b) management of radioactive sources or promotion of their use.⁴²
- (3) The budget of the [competent authority], based on an annual appropriation from the [national assembly/parliament], shall be sufficient enough to ensure that the [competent authority] has the financial and human resources necessary to fulfil its assigned responsibilities under this [Act, Statute, Ordinance, etc.].
- (4) The [competent authority] shall ensure effective co-operation and co-ordination of nuclear security responsibilities among licensees and other relevant government ministries and agencies, including law enforcement and intelligence agencies. Such co-operation and co-ordination shall extend to-
 - (a) the prevention, detection and response to unauthorized activities involving nuclear material, nuclear facilities and radioactive sources; and
 - (b) the development of design basis and other threat assessments, in relation to nuclear material, nuclear facilities and facilities involved with the management of radioactive sources.
- (5) In respect of nuclear material,⁴³ the [competent authority] shall-
 - (a) be responsible for the implementation and enforcement of this [Act, Statute, Ordinance, etc.] and any regulations issued hereunder;⁴⁴
 - (b) be responsible for the implementation of the physical protection regime for nuclear material provided for in this [Act, Statute, Ordinance, etc.] and any regulations issued hereunder;⁴⁵ and
 - (c) serve as the point of contact for the International Atomic Energy Agency and other States, in relation to matters within the scope of the Convention on the Physical Protection of Nuclear Material, as amended.⁴⁶
- (6) In respect of radioactive sources, the [competent authority] shall-
 - (a) be responsible for the implementation and enforcement of this [Act, Statute, Ordinance, etc.] and any regulations issued hereunder;⁴⁷
 - (b) have the powers and characteristics listed in paragraphs 20 to 22 of the Code of Conduct on the Safety and Security of Radioactive Sources;⁴⁸

40 CPPNM/A, Article 2A(2)(b) and (3) (Fundamental Principle D); Code of Conduct, Paragraph 19(a).

41 CPPNM/A, Article 2A(3) (Fundamental Principle D).

42 Code of Conduct, Paragraph 19(a).

43 States may wish to consider combining functions related to nuclear material to those related to radioactive sources in paragraph (6).

44 CPPNM/A, Article 2A(3) (Fundamental Principle A).

45 CPPNM/A, Article 2A(2)(b) and (3). See Section 4.1.

46 CPPNM/A, Article 5(1). The competent authority could also be designated as the point of contact for the Agency and other States, in relation to matters within the scope of the Conventions on Early Notification of a Nuclear Accident and Assistance in the Case of a Nuclear Accident or Radiological Emergency.

47 Code of Conduct, Paragraph 19(i).

48 Code of Conduct, Paragraph 19(a).

- (c) facilitate training of staff of the [competent authority], [State] law enforcement agencies and emergency services organizations, as well as training for manufacturers, suppliers and users of radioactive sources;⁴⁹ and
- (d) serve as the point of contact for the purpose of facilitating exports and imports in accordance with the Code of Conduct on the Safety and Security of Radioactive Sources and Guidance on the Import and Export of Radioactive Sources.⁵⁰
- (7) The [competent authority] shall additionally serve as the point of contact -
- (a) within the scope of the International Convention for the Suppression of Acts of Nuclear Terrorism, for-
- (i) the Secretary-General of the United Nations; and
- (ii) States Parties to that Convention;⁵¹
- (b) within the scope of the 2010 Convention on the Suppression of Unlawful Acts Relating to International Civil Aviation, on matters related to enforcement of this [Act, Statute, Ordinance, etc.], for-
- (i) the Council of the International Civil Aviation Organization;⁵² and
- (ii) States Parties to that Convention;
- (c) within the scope of the 1988 Convention for the Suppression of Unlawful Acts against the Safety of Maritime Navigation (as amended by the 2005 Protocol), on matters related to enforcement of this [Act, Statute, Ordinance, etc.], for-
- (i) the Secretary-General of the International Maritime Organization (IMO); and
- (ii) States Parties to that Convention;⁵³ and
- (d) within the scope of the 1988 Protocol for the Suppression of Unlawful Acts against the Safety of Fixed Platforms Located on the Continental Shelf (as amended by the 2005 Protocol), on matters related to enforcement of this [Act, Statute, Ordinance, etc.], for-
- (i) the Secretary-General of the International Maritime Organization (IMO); and
- (ii) States Parties to that Convention.^{54 55}
- (8) The [competent authority] may designate or establish further authorities to which it may assign specific duties with regard to the implementation of this [Act, Statute, Ordinance, etc.] and any regulations issued hereunder.

49 Code of Conduct, Paragraphs 10, 22(m).

50 Guidance, Paragraph 4. Details about the point of contact should be communicated to the IAEA.

51 ICSANT, Article 7(4).

52 Beijing Convention, Article 19.

53 SUA 2005, Article 8bis(15).

54 SUA PROT 2005, Article 1, para. 1.

55 In addition to serving as a point of contact for the UN, ICAO and IMO, States may consider making the competent authority the point of contact for certain nuclear weapon-free-zone treaties as well as the CTBTO, as follows:

“... within the scope of the [Treaty of Tlatelolco (Article 7); Treaty of Bangkok (Articles 8-9); Treaty of Pelindaba (Article 12)], on matters related to compliance and for liaison with-

(i) [the policy-making organ(s)] and
(ii) States Parties to that Treaty;

... within the scope of the 1996 Comprehensive Nuclear-Test-Ban Treaty, as focal point for liaison with-

(i) the Preparatory Commission for the Comprehensive Nuclear-Test-Ban Treaty Organisation;
(ii) States Signatories to the Comprehensive Nuclear-Test-Ban Treaty;

and after entry into force of the Treaty,

(i) the Comprehensive Nuclear-Test-Ban Treaty Organisation; and
(ii) States Parties to that Treaty”.

See 1996 Resolution Establishing the Preparatory Commission for the Comprehensive Nuclear-Test-Ban Treaty Organization, Annex, Paragraph 4 and CTBT, Article III (4).

3.2 Licensing

- (1) No person shall receive, possess, use, transfer, alter, or dispose of nuclear material without a license from the [competent [authority] [authorities⁵⁶]].⁵⁷
- (2) No person shall export, import, transport, or otherwise carry, send or move nuclear material into or out of [State], without a license from the [competent authority].⁵⁸
- (3) The [competent authority] shall make the issuance of a license under paragraphs (1) or (2) conditional on the applicant meeting the following requirements:
 - (a) accepting prime responsibility for the implementation of physical protection of nuclear material or of nuclear facilities;⁵⁹
 - (b) giving an assurance that it will give due priority to the security culture, to its development and maintenance necessary to ensure its effective implementation in the entire organization;⁶⁰
 - (c) giving an assurance that it will take a graded approach⁶¹ to physical protection requirements, taking into account the competent authority's current evaluation of the threat, the relative attractiveness, the nature of the material and potential consequences associated with the unauthorized removal of nuclear material and with the sabotage against nuclear material or nuclear facilities;⁶²
 - (d) having in place several layers and methods of physical protection (structural or other technical, personnel and organizational) that have to be overcome or circumvented by an adversary in order to achieve his objectives;⁶³
 - (e) having in place a quality assurance policy and quality assurance programmes to provide confidence that specified requirements for all activities important to physical protection are satisfied;⁶⁴
 - (f) having in place contingency (emergency) plans to respond to unauthorized removal of nuclear material or sabotage of nuclear facilities or nuclear material, or attempts thereof;⁶⁵
 - (g) giving an assurance that it will fully co-operate with the [competent authority] in the implementation of [State's] [Comprehensive Safeguards Agreement with the International Atomic Energy Agency] [Additional Protocol with the International Atomic Energy Agency] [Voluntary Offer Safeguards Agreement] [Item Specific Safeguards Agreement], as [it applies] [they apply] to any nuclear material or nuclear facility covered by the license;
 - (h) accepting prime responsibility for computer security related to activities covered by the license; and
 - (i) giving an assurance that it has conducted a design basis threat analysis or other appropriate threat assessment of computer security, taking into consideration any relevant threat assessments undertaken by the [competent authority] related to cyber and nuclear security.⁶⁶

56 In some States, licensing and other activities under a nuclear security framework may be carried out by more than one authority, in which case the legislative drafter could consider including 'competent authorities' here and throughout the law.

57 CPPNM/A, Articles 2A(3) (Fundamental Principle C), 7(1)(a).

58 CPPNM/A, Articles 2A(3), 7(1) (d).

59 CPPNM/A, Article 2A(3) (Fundamental Principle E).

60 CPPNM/A, Article 2A(3) (Fundamental Principle F). '[Nuclear] security culture' refers to "the assembly of characteristics, attitudes and behaviours of individuals, organizations and institutions which serves as means to support, enhance and sustain nuclear security". *Nuclear Security Recommendations on Physical Protection of Nuclear Material and Nuclear Facilities* (INFCIRC/225/Revision 5) (IAEA Nuclear Security Series No. 13) (2011), p. 52.

61 That is, "the application of physical protection measures proportional to the potential consequences of a malicious act". *Nuclear Security Recommendations on Physical Protection of Nuclear Material and Nuclear Facilities* (INFCIRC/225/Revision 5) (IAEA Nuclear Security Series No. 13) (2011), p. 51.

62 CPPNM/A, Article 2A(3) (Fundamental Principles G and H).

63 CPPNM/A, Article 2A(3) (Fundamental Principle I).

64 CPPNM/A, Article 2A(3) (Fundamental Principle J).

65 CPPNM/A, Article 2A(3) (Fundamental Principle K).

66 See *Computer Security at Nuclear Facilities* (IAEA Nuclear Security Series No. 17) (2011), Section 6.3.1.

- (4) No person shall undertake management of radioactive sources without a license from the [competent authority].⁶⁷
- (5) Exemptions from the licensing requirement in paragraph (4) shall be provided for in the regulations issued under this [Act, Statute, Ordinance, etc.].⁶⁸
- (6) The [competent authority] shall make the issuance of a license under paragraph (4) conditional on the applicant meeting the requirements in subparagraphs (3)(h) and (i).
- (7) The regime for license application and evaluation, the issuance of licenses, and the conditions for holding a licence shall be provided for in the regulations issued under this [Act, Statute, Ordinance, etc.].⁶⁹

3.3 National register of nuclear material and radioactive sources

- (1) The [competent authority] shall establish a national register of nuclear material.
- (2) The [competent authority] shall establish a national register of radioactive sources.⁷⁰
- (3) The national register in paragraph (2) shall include, at a minimum, all Category 1 and 2 radioactive sources located within the territory of [State].
- (4) The national registers in paragraphs (1) and (2) shall be further provided for in the regulations issued under this [Act, Statute, Ordinance, etc.].

3.4 Inspections, verification and monitoring, and enforcement

- (1) The [competent authority] shall implement a system of inspection of nuclear facilities and transport, through regulations issued under this [Act, Statute, Ordinance, etc.], to verify compliance with the applicable requirements and conditions of any license issued under Section 3.2, paragraphs (1) and (2).⁷¹
- (2) The [competent authority] shall implement a system of verification of the safety and security of radioactive sources through safety and security assessments; monitoring and verification of compliance with any license issued under Section 3.2, paragraph (4); inspections; and the maintenance of appropriate records by license holders. The verification system shall be provided for in the regulations issued under this [Act, Statute, Ordinance, etc.].⁷²
- (3) Where the [competent authority] has established that any person or licensee has committed a violation of relevant nuclear security regulations issued under this [Act, Statute, Ordinance, etc.], the conditions of a license issued under Section 3.2, or other requirements that do not constitute a criminal offense under Section 6 of this [Act, Statute, Ordinance, etc.], the [competent authority] may impose any of the following penalties: additional license conditions, license suspension, license revocation or imposition of a civil monetary penalty not to exceed [amount] for each such violation.⁷³

⁶⁷ Code of Conduct, Paragraph 19(c).

⁶⁸ Code of Conduct, Paragraph 19(d).

⁶⁹ CPPNM/A, Article 2A(3) (Fundamental Principle C); Code of Conduct, Paragraphs 19(c), 20(e), 22(c).

⁷⁰ Code of Conduct, Paragraph 11.

⁷¹ CPPNM/A, Article 2A(3) (Fundamental Principle C).

⁷² Code of Conduct, Paragraphs 19(h), 20(h), 22(i). Such a system should include record-keeping by the competent authority of records of persons with authorizations in respect of radioactive sources, with a clear indication of the type(s) of radioactive sources that they are authorized to use, and appropriate records of the transfer and disposal of the radioactive sources on termination of the authorizations (Paragraph 22(c)).

⁷³ CPPNM/A, Article 2A(3) (Fundamental Principle C); Code of Conduct, Paragraph 20(d).

3.5 Confidentiality; computer security

- (1) Any information which is in the possession of the [competent authority] pursuant to the implementation of this [Act, Statute, Ordinance, etc.] and any regulations issued hereunder, the unauthorized disclosure of which could compromise national security or the physical protection of nuclear material and nuclear facilities, or of radioactive sources, shall be protected as confidential.⁷⁴
- (2) [The competent authority] shall not provide to unauthorized persons any information which is otherwise prohibited by the national law of [State], or which would jeopardize the security of [State] or the physical protection of nuclear material.⁷⁵
- (3) Computer security measures shall be applied at all times to the information covered by this Section, and falling with this [Act, Statute, Ordinance, etc.] and any regulations issued hereunder. The [competent authority] shall be responsible for developing standards and guidelines for computer security in nuclear facilities and facilities involved in the management of radioactive sources.

4. Physical protection and security of nuclear and other radioactive material and nuclear facilities; security of radioactive sources; notification of incidents

4.1 Physical protection and security of nuclear and other radioactive material and nuclear facilities

- (1) The [competent authority] shall establish, implement and maintain an appropriate physical protection regime applicable to nuclear material and nuclear facilities under the jurisdiction of [State] with the aim of:
 - (a) protecting against theft and other unlawful taking of nuclear material in use, storage and transport;
 - (b) ensuring the implementation of rapid and comprehensive measures to locate and where appropriate, recover missing or stolen material, and to act in accordance with Section 8.3, paragraph (4) when the material is located outside the territory of [State];
 - (c) protecting nuclear material and nuclear facilities against sabotage; and
 - (d) mitigating or minimizing the radiological consequences of sabotage.⁷⁶
- (2) The physical protection regime for nuclear material and nuclear facilities in paragraph (1) shall be further provided for in the regulations issued under this [Act, Statute, Ordinance, etc.].
- (3) Upon seizing or otherwise taking control of radioactive material, devices or nuclear facilities, following the commission of an offence set forth in this [Act, Statute, Ordinance, etc.], the [competent authority] in possession of such items shall-
 - (a) take steps to render harmless the radioactive material, device or nuclear facility;
 - (b) ensure that any nuclear material is held in accordance with the safeguards agreements [State] has entered into with the International Atomic Energy Agency;⁷⁷ and

⁷⁴ CPPNM/A, Articles 2A(3) (Fundamental Principle L), 6; Code of Conduct, Paragraph 17; ICSANT, Article 7(2).

⁷⁵ ICSANT, Article 7(3).

⁷⁶ CPPNM/A, Article 2A(1), (2)(a), (2)(c), (3); ICSANT, Article 8. Article 10 of the Treaty of Pelindaba and Article 9 of the Semipalatinsk Treaty also oblige the States Parties of the two agreements to apply physical protection measures to nuclear material and nuclear facilities, as called for in the CPPNM/A.

⁷⁷ I.e., The Structure and Content of Agreements between the International Atomic Energy Agency and States required in connection with the Treaty on the Non-Proliferation of Nuclear Weapons, INFCIRC/153; Model Protocol Additional to the Agreement(s) between State(s) and the International Atomic Energy Agency for the Application of Safeguards INFCIRC/540.

- (c) have regard to physical protection recommendations and health and safety standards published by the International Atomic Energy Agency, as well as those provided for under this [Act, Statute, Ordinance, etc.] and any regulations issued hereunder, and under any other law and regulations of [State].⁷⁸
- (4) Upon the completion of any proceedings connected with an offence set forth in this [Act, Statute, Ordinance, etc.], the [competent authority] shall return any radioactive material, device or nuclear facility in its possession, under paragraph (3)-
- (a) to the State to which it belongs;
 - (b) to the State of which the natural or legal person owning such radioactive material, device or facility is a national or resident; or
 - (c) to the State from whose territory it was stolen or otherwise unlawfully obtained, and confirm the modalities of their return and storage with the competent authority of the other State.^{79 80}

4.2 Notifications related to incidents involving nuclear material

- (1) The [competent authority] shall be notified by [the licensee] [the manager of a nuclear facility] [a law enforcement official] within [period of time] of-
 - (a) actions involving nuclear material or nuclear facilities, or other actions falling under the authority of the [competent authority], that may engender a significant risk to individuals, society or the environment; or
 - (b) loss of control over, or incidents in connection with, nuclear material.
- (2) The [competent authority] shall notify affected States through the International Atomic Energy Agency concerning any loss of control over nuclear material, or any incidents, with potential trans-boundary effects.
- (3) Specific criteria for determining when notification to the [competent authority] is required under paragraph (1) shall be provided for in the regulations issued under this [Act, Statute, Ordinance, etc.].

4.3 Security of radioactive sources

- (1) The [competent authority] shall have the authority under this [Act, Statute, Ordinance, etc.] to issue regulations for the protection of individuals, society and the environment from the deleterious effects of ionizing radiation from radioactive sources.⁸¹
- (2) The [competent authority] shall have the authority under this [Act, Statute, Ordinance, etc.] to issue regulations, in order to establish policies, procedures and measures, for the control of radioactive sources.⁸²
- (3) The [competent authority] shall establish requirements for security measures to deter, detect and delay the unauthorized access to, or the theft, loss or unauthorized use or removal of radioactive sources during all stages of management.⁸³

78 ICSANT, Article 18(1).

79 ICSANT, Article 18(2).

80 See also ICSANT, Article 18(3)-(7) regarding those cases where the State is a State Party to ICSANT and (i) is prohibited by national or international law from returning or accepting radioactive material, devices or nuclear facilities; (ii) it is not lawful for the State to possess radioactive material, devices or nuclear facilities; or (iii) the radioactive material, devices or nuclear facilities referred to in paragraphs (3) and (4) do not belong to any of the States Parties or to a national or resident of a State Party or was not stolen or otherwise unlawfully obtained from the territory of a State Party, or if no State is willing to receive such items. These cases could be handled on a bilateral basis, not necessarily through national legislation.

81 Code of Conduct, Paragraph 19(b).

82 Code of Conduct, Paragraph 19(f).

83 Code of Conduct, Paragraph 19(g).

- (4) The [competent authority] shall have the authority to recover and restore appropriate control over orphan sources, and to deal with radiological emergencies, as provided for in the regulations issued under this [Act, Statute, Ordinance, etc.].⁸⁴

4.4 Notifications related to incidents involving radioactive sources

- (1) The [competent authority] shall be notified by [the licensee] [the manager of a facility involved with the management of radioactive sources] [a law enforcement official] within [period of time] of-
- (a) actions involved in the management of radioactive sources, or other actions that fall within the authority of the [competent authority], that may engender a significant risk to individuals, society or the environment;⁸⁵ or
- (b) loss of control over, and of incidents in connection with, radioactive sources.⁸⁶
- (2) The [competent authority] shall notify affected States through the International Atomic Energy Agency concerning any loss of control over radioactive sources, or any incidents, with potential transboundary effects.⁸⁷
- (3) Specific criteria for determining when notification to the [competent authority] is required under paragraph (1) shall be provided for in the regulations issued under this [Act, Statute, Ordinance, etc.].

4.5 Other measures to handle nuclear and other radioactive material out of regulatory control and orphan sources

In addition to the authority provided for in Sections 4.1, 4.2, 4.3 and 4.4, the [competent authority], in co-operation with other ministries, agencies and authorities, and through regulations issued under this [Act, Statute, Ordinance, etc.],⁸⁸ shall take any other measures that are necessary to ensure that there is an effective nuclear security framework in place to detect, prepare for and respond to any incidents involving nuclear or other radioactive material that is out of regulatory control or any orphan sources.

5. Transport, import, export and transit of nuclear material and radioactive sources⁸⁹

5.1 International nuclear transport⁹⁰

- (1) Nuclear material in international nuclear transport, whether in the territory of [State], or on board a ship or aircraft under the jurisdiction of [State] insofar as such ship or aircraft is engaged in the transport to or from [State], shall-
- (a) only be transported by a person licensed to transport nuclear material under Section 3.2, paragraph (2) of this [Act, Statute, Ordinance, etc.]; and

84 Code of Conduct, Paragraph 22(o).

85 Code of Conduct, Paragraph 19(e).

86 Code of Conduct, Paragraph 22(l).

87 Code of Conduct, Paragraph 12.

88 States are encouraged to consider *Nuclear security recommendations on nuclear and other radioactive material out of regulatory control* (IAEA Nuclear Security Series No. 15) (2011).

89 States may wish to consider including in Section 5 the concept 'transfer' of nuclear material and radioactive sources, further to the practice of some States to include this term in their national legislation for domestic and international movements of nuclear material and radioactive sources.

90 CPPNM/A, Articles 2A(3) (Fundamental Principle B), 3, 4(4).

- (b) be protected at the levels⁹¹ described in the regulations that are issued under this [Act, Statute, Ordinance, etc.]—
 - (i) during storage incidental to international nuclear transport; and
 - (ii) during international transport.
- (2) Nuclear material being transported from a part of [State] to another part of [State] through international waters or airspace shall be protected at the levels described in the regulations issued under this [Act, Statute, Ordinance, etc.].

5.2 Export of nuclear material⁹²

- (1) Nuclear material shall only be exported by a person licensed to export nuclear material under Section 3.2, paragraph (2) of this [Act, Statute, Ordinance, etc.].
- (2) The [competent authority] shall not license the export of nuclear material, or may prevent such export, unless it has received assurances that the material will be protected during the international nuclear transport at the levels⁹³ described in the regulations issued under this [Act, Statute, Ordinance, etc.]—
 - (a) during storage incidental to international nuclear transport; and
 - (b) during international transport.

5.3 Import of nuclear material⁹⁴

- (1) Nuclear material shall only be imported by a person licensed to import nuclear material under Section 3.2, paragraph (2) of this [Act, Statute, Ordinance, etc.].
- (2) The [competent authority] shall not license the import of nuclear material from a State not Party to the Convention on the Physical Protection of Nuclear Material, as amended, or may prevent such import, unless it has received assurances that the material will be protected during the international nuclear transport at the levels⁹⁵ described in the regulations issued under this [Act, Statute, Ordinance, etc.]—
 - (a) during storage incidental to international nuclear transport; and
 - (b) during international transport.

5.4 Transit of nuclear material⁹⁶

- (1) Nuclear material shall not pass in transit through [State], whether by land or internal waterways or through its airports or seaports, between States not Party to the Convention on the Physical Protection of Nuclear Material, as amended, unless the [competent authority] has received assurances from those States that the nuclear material will be protected during international nuclear transport at the levels⁹⁷ described in the regulations issued under this [Act, Statute, Ordinance, etc.]—

91 CPPNM/A, Annex I.

92 CPPNM/A, Articles 2A(3) (Fundamental Principle B), 4(1).

93 CPPNM/A, Annex I.

94 CPPNM/A, Articles 2A(3) (Fundamental Principle B), 4(2).

95 CPPNM/A, Annex I.

96 CPPNM/A, Articles 2A(3) (Fundamental Principle B), 4(3), 4(5).

97 CPPNM/A, Annex I.

- (a) during storage incidental to international nuclear transport; and
- (b) during international transport.

(2) The [competent authority] shall inform those States through which nuclear material may pass in transit, whether by land or internal waterways or through their airports or seaports, if [State] is the State that has received assurances that the material will be protected during the international nuclear transport at the levels⁹⁸ described in the regulations issued under this [Act, Statute, Ordinance, etc.].

5.5 General conditions for imports and exports of Category 1 and 2 radioactive sources

The [competent authority] shall ensure that authorised imports and exports of radioactive sources, into and from [State]-

- (a) are undertaken in a manner consistent with the provisions of the Code of Conduct on the Safety and Security of Radioactive Sources, this [Act, Statute, Ordinance, etc.] and any regulations issued hereunder;⁹⁹ and
- (b) are conducted in a manner consistent with existing relevant international standards and the laws of [State] relating to the transport of radioactive materials.¹⁰⁰

5.6 Import of Category 1 and 2 radioactive sources

- (1) Category 1 and 2 radioactive sources shall only be imported by a person licensed by the [competent authority] to import such radioactive sources under Section 3.2, paragraph (4) of this [Act, Statute, Ordinance, etc.].¹⁰¹
- (2) It shall be a condition for authorisation by the [competent authority] of an import of any Category 1 or 2 radioactive source(s) into [State], under paragraph (1), that the exporting State has authorized the export of such radioactive source(s).¹⁰²

5.7 Export of Category 1 and 2 radioactive sources

- (1) Category 1 and 2 radioactive sources shall only be exported by a person licensed by the [competent authority] to export such radioactive sources under Section 3.2, paragraph (4) of this [Act, Statute, Ordinance, etc.].¹⁰³
- (2) It shall be a condition for authorisation by the [competent authority] of an export of any Category 1 or 2 radioactive source(s) from [State], under paragraph (1), that-
 - (a) the importing State has authorized the import of such radioactive source(s);
 - (b) in the case of Category 1 radioactive sources, the importing State has consented to the import of such radioactive source(s); and

98 CPPNM/A, Annex I.

99 Code of Conduct, Paragraph 23.

100 Code of Conduct, Paragraph 28; Guidance, Paragraphs 9(a), 12(a), 14(c). See also "Regulations on the Safe Transport of Radioactive Material", IAEA document TS-R-1.

101 Code of Conduct, Paragraph 24; Guidance, Paragraph 13.

102 Code of Conduct, Paragraph 23. The competent authority could also consider (i) whether the recipient has been engaged in clandestine or illegal procurement of radioactive sources; (ii) whether an import or export authorization for radioactive sources has been denied to the recipient, or whether the recipient has diverted for purposes inconsistent with the Code of Conduct any import or export of radioactive sources previously authorized; or (iii) the risk of diversion of malicious acts involving radioactive sources (Guidance, Paragraph 13(c)).

103 Code of Conduct, Paragraph 25; Guidance, Paragraphs 6, 7, 10, 11.

- (c) the importing State has the appropriate technical and administrative capability, resources and regulatory structure needed to ensure that the source will be managed in a manner consistent with the provisions of the Code of Conduct on the Safety and Security of Radioactive Sources.¹⁰⁴
- (3) The importing State shall be notified of an export of a Category 1 or 2 radioactive source, at least seven calendar days in advance of shipment, by the person licensed by the [competent authority] to export such radioactive source(s) under Section 3.2, paragraph (4) of this [Act, Statute, Ordinance, etc.].¹⁰⁵

5.8 Import and export of Category 1 and 2 radioactive sources in exceptional circumstances¹⁰⁶

- (1) The [competent authority] may authorise an import or export of a Category 1 or 2 radioactive source in exceptional circumstances, in the event the procedures in Sections 5.6 and 5.7 cannot be followed.
- (2) In the case of an export of a Category 1 or 2 radioactive source from [State], under paragraph (1), the [competent authority] shall obtain the importing State's consent to the export.
- (3) The [competent authority] and the competent authority of the other State shall agree to alternative arrangements to ensure the safe and secure management of the radioactive source imported or exported under paragraph (1).
- (4) "Exceptional circumstances" for the purposes of this Section are-
- (a) cases of considerable health or medical need, as acknowledged by the importing State and by the exporting State;
 - (b) cases where there is an imminent radiological hazard or security threat presented by one or more radioactive sources; or
 - (c) cases in which the exporting facility or exporting State maintains control of radioactive source(s) throughout the period the source(s) are outside of the exporting State, and the exporting facility or exporting State removes the source(s) at the conclusion of this period.

5.9 Re-entry into [State] of disused radioactive sources¹⁰⁷

- (1) The [competent authority] shall allow for re-entry into the territory of [State] of disused radioactive sources if the [competent authority] had previously accepted their return to a manufacturer authorised to manage the disused sources.
- (2) The procedures for the re-entry of disused radioactive sources, under paragraph (1), shall be further provided for in the regulations issued under this [Act, Statute, Ordinance, etc.].

5.10 Transit and transshipment of radioactive sources through the territory of [State]¹⁰⁸

- (1) The [competent authority] shall ensure that the transport of radioactive sources through the territory of [State], whether in transit or transshipment, is conducted in a manner consistent with existing

104 Code of Conduct, Paragraph 25; Guidance, Paragraphs 6, 7, 8, 10, 11. The competent authority could also consider (i) whether the recipient has been engaged in clandestine or illegal procurement of radioactive sources; (ii) whether an import or export authorization for radioactive sources has been denied to the recipient or importing State, or whether the recipient or importing State has diverted for purposes inconsistent with the Code of Conduct any import or export of radioactive sources previously authorized; or (iii) the risk of diversion of malicious acts involving radioactive sources (Guidance, Paragraphs 7(c), 11(c)).

105 Guidance, Paragraphs 9(b), 12(b).

106 Code of Conduct, Paragraph 26; Guidance, Paragraphs 15 and 16.

107 Code of Conduct, Paragraph 27.

108 Code of Conduct, Paragraph 29.

relevant international standards relating to the transport of radioactive materials, including maintaining continuity of control during the transport.

- (2) The procedures for transit and transshipment, under paragraph (1), shall be further provided for in the regulations issued under this [Act, Statute, Ordinance, etc.].

5.11 Prevention of unauthorised transfer,¹⁰⁹ import, export, transit, or transport of nuclear material or radioactive sources

The [competent authority] is authorised under this [Act, Statute, Ordinance, etc.] to obtain an injunction from the appropriate judicial authority to prevent transfer, import, export, transit or transport of nuclear material or a Category 1 or 2 radioactive source, if the [competent authority] has reason to believe or suspect that the transfer, import, export, transit or transport is-

- (a) not licensed by the [competent authority]; or
 (b) otherwise in violation of this [Act, Statute, Ordinance, etc.].^{110 111}

6. Offences and penalties

6.1 Offences involving nuclear material

- (1) Any person¹¹² who intentionally commits an act without lawful authority which constitutes the receipt, possession, use, transfer, alteration, disposal or dispersal of nuclear material and which causes or is likely to cause death or serious injury to any person or substantial damage to property or to the environment, commits an offence and shall be punished upon conviction to imprisonment for a term not exceeding [period] [and/or] a fine not exceeding [amount].¹¹³
- (2) Any person who intentionally commits a theft or robbery of nuclear material commits an offence and shall be punished upon conviction to imprisonment for a term not exceeding [period] [and/or] a fine not exceeding [amount].¹¹⁴
- (3) Any person who intentionally embezzles or fraudulently obtains nuclear material commits an offence and shall be punished upon conviction to imprisonment for a term not exceeding [period] [and/or] a fine not exceeding [amount].¹¹⁵
- (4) Any person who intentionally commits an act which constitutes the carrying, sending, or moving of nuclear material into or out of [State] without approval from the [competent authority] commits an offence and shall be punished upon conviction to imprisonment for a term not exceeding [period] [and/or] a fine not exceeding [amount].¹¹⁶

109 States may wish to consider including in Section 5.11 the concept 'transfer' of nuclear material and radioactive sources, further to the practice of some States to include this term in their national legislation for domestic and international movements of nuclear material and radioactive sources.

110 The authors of this *Kit* are mindful that Section 5.11 is not derived from the international legal instruments discussed in Part II (1), but consider that States may find this additional provision useful.

111 As an additional nuclear security measure, a State may also wish to consider authorising the competent authority to obtain an injunction to prevent movements of nuclear material, specified equipment, non-nuclear material or related technology that may be in violation of the State's commitments under a Comprehensive Safeguards Agreement with the IAEA (INFCIRC/153), Additional Protocol with the IAEA (INFCIRC/540), Nuclear Suppliers Group Guidelines (INFCIRC/254/Rev.11/Part 1 and INFCIRC/254/Rev.8/Part 2) or Zangger Understandings (INFCIRC/209/Rev.2).

112 'Person' should be defined or understood under national law to include natural persons and legal entities. See, for example, Article 4 of the Beijing Convention, Article 5*bis* of SUA 2005 and Article 1, para. 1 of SUA PROT 2005. Also see the footnote in UN Security Council Resolution 1540 (S/RES/1540 (2004)): "Non-State actor: individual or entity, not acting under the lawful authority of any State in conducting activities which come within the scope of this resolution".

113 CPPNM/A, Article 7(1)(a) and (2).

114 CPPNM/A, Article 7(1)(b) and (2).

115 CPPNM/A, Article 7(1)(c) and (2).

116 CPPNM/A, Article 7(1)(d) and (2).

- (5) Any person who intentionally commits an act constituting a demand for nuclear material by threat or use of force or by any other form of intimidation commits an offence and shall be punished upon conviction to imprisonment for a term not exceeding [period] [and/or] a fine not exceeding [amount].¹¹⁷

6.2 Offences involving nuclear facilities

- (1) Any person who intentionally commits an act directed against a nuclear facility, or an act interfering with the operation of a nuclear facility, where the offender intentionally causes, or where he knows that the act is likely to cause, death or serious injury to any person or substantial damage to property or to the environment by exposure to radiation or release of radioactive substances, commits an offence and shall be punished upon conviction to imprisonment for a term not exceeding [period] [and/or] a fine not exceeding [amount].¹¹⁸
- (2) Paragraph (1) shall not apply if the act is undertaken in conformity with the law of [State].¹¹⁹
- (3) Any person who unlawfully and intentionally uses or damages a nuclear facility in a manner which releases or risks the release of radioactive material-
- (a) with the intent to cause death or serious bodily injury; or
 - (b) with the intent to cause substantial damage to property or to the environment; or
 - (c) with the intent to compel a natural or legal person, an international organization or a State to do or refrain from doing an act
- commits an offence and shall be punished upon conviction to imprisonment for a term not exceeding [period] [and/or] a fine not exceeding [amount].¹²⁰
- (4) Any person who demands unlawfully and intentionally a nuclear facility by threat, under circumstances which indicate the credibility of the threat, or by use of force commits an offence and shall be punished upon conviction to imprisonment for a term not exceeding [period] [and/or] a fine not exceeding [amount].¹²¹

6.3 Additional offences involving radioactive material and devices

- (1) Any person who unlawfully and intentionally possesses radioactive material or makes or possesses a device-
- (a) with the intent to cause death or serious bodily injury; or
 - (b) with the intent to cause substantial damage to property or to the environment
- commits an offence and shall be punished upon conviction to imprisonment for a term not exceeding [period] [and/or] a fine not exceeding [amount].¹²²
- (2) Any person who unlawfully and intentionally uses in any way radioactive material or a device-
- (a) with the intent to cause death or serious bodily injury; or
 - (b) with the intent to cause substantial damage to property or to the environment; or

117 CPPNM/A, Article 7(1)(f) and (2).

118 CPPNM/A, Article 7(1)(e) and (2).

119 CPPNM/A, Article 7(1)(e).

120 ICSANT, Articles 2(1)(b) and 5.

121 ICSANT, Articles 2(2)(b) and 5.

122 ICSANT, Articles 2(1)(a) and 5.

(c) with the intent to compel a natural or legal person, an international organization or a State to do or refrain from doing an act

commits an offence and shall be punished upon conviction to imprisonment for a term not exceeding [period] [and/or] a fine not exceeding [amount].¹²³

- (3) Any person who demands unlawfully and intentionally radioactive material or a device by threat, under circumstances which indicate the credibility of the threat, or by use of force commits an offence and shall be punished upon conviction to imprisonment for a term not exceeding [period] [and/or] a fine not exceeding [amount].^{124 125 126 127}

123 ICSANT, Articles 2(1)(b) and 5.

124 ICSANT, Articles 2(2)(b) and 5.

125 States Parties to the ICSTB may also wish to consider including in Section 6.3 the following offences:

“Any person who-

(a) unlawfully and intentionally delivers, places, discharges or detonates an explosive or other lethal device in, into or against a place of public use, a [State] or government facility, a public transportation system or an infrastructure facility-

(i) with the intent to cause death or serious bodily injury; or

(ii) with the intent to cause extensive destruction of such a place, facility or system, where such destruction results in or is likely to result in major economic loss;

(b) attempts to commit an offence as set forth in (a);

(c) participates as an accomplice in an offence as set forth in (a) or (b);

(d) organises or directs others to commit an offence as set forth in (a) or (b);

(e) in any other way intentionally contributes to the commission of one or more offences as set forth in (a) or (b) by a group of persons acting with a common purpose-

(i) with the aim of furthering the criminal activity or purpose of the group; or

(ii) in the knowledge of the intention of the group to commit the offence or offences concerned

commits an offence and shall be punished upon conviction to imprisonment for a term not exceeding [period] [and/or] a fine not exceeding [amount].”
See ICSTB, Article 2.

‘Explosive or other lethal device’ is defined in Article 1, paragraph 3 of ICSTB as, *inter alia*:

“... (b) A weapon or device that is designed, or has the capability, to cause death, serious bodily injury or substantial material damage through the release, dissemination or impact of ... radiation or radioactive material”.

126 Pursuant to their national law and interests, States may also wish to consider including in Section 6.3 the following offences:

“Any person who-

(a) manufactures, acquires, possesses, develops, transports, transfers or uses nuclear weapons or their means of delivery, in particular for terrorist purposes;

(b) attempts to engage in any of the activities in (a);

(c) participates in the activities in (a) as an accomplice;

(d) assists in the activities in (a); or

(e) finances the activities in (a)

commits an offence and shall be punished upon conviction to imprisonment for a term not exceeding [period] [and/or] a fine not exceeding [amount].”
See UNSCR 1540 (2004), Operative Paragraph 2.

Those States which are, for the purposes of the NPT, non-nuclear-weapon States, and which are States Parties to either the Treaty of Rarotonga, Treaty of Bangkok or Treaty of Pelindaba, may also wish to consider:

“Any person who-

(a) develops, manufactures, acquires, stockpiles, possesses or has control over any nuclear explosive device; or

(b) stations or transports any nuclear explosive device by any means

commits an offence and shall be punished upon conviction to imprisonment for a term not exceeding [period] [and/or] a fine not exceeding [amount].”
See Treaty of Rarotonga (Article 3); Treaty of Bangkok (Article 3); Treaty of Pelindaba (Articles 3-5).

127 States which have signed the CTBT (or that ratify/accede to it after entry into force) may wish to also consider:

“Any person who -

(a) carries out a nuclear weapon test explosion or any other nuclear explosion; or

(b) causes, encourages or in any way participates in the carrying out of a nuclear weapon test explosion or any other nuclear explosion

commits an offence and shall be punished upon conviction to imprisonment for a term not exceeding [period] [and/or] a fine not exceeding [amount].”
See CTBT, Articles I, III (1).

6.4 Offences specific to aircraft

- (1) Any person¹²⁸ who unlawfully and intentionally releases or discharges from an aircraft in service any nuclear weapon or other nuclear explosive device or explosive, radioactive, or similar substances in a manner that causes or is likely to cause death, serious bodily injury or serious damage to property or the environment commits an offence and shall be punished upon conviction to imprisonment for a term not exceeding [period] [and/or] a fine not exceeding [amount].¹²⁹
- (2) Any person who unlawfully and intentionally uses against or on board an aircraft in service any nuclear weapon or other nuclear explosive device or explosive, radioactive, or similar substances in a manner that causes or is likely to cause death, serious bodily injury or serious damage to property or the environment commits an offence and shall be punished upon conviction to imprisonment for a term not exceeding [period] [and/or] a fine not exceeding [amount].¹³⁰
- (3) Any person who unlawfully and intentionally transports, causes to be transported, or facilitates the transport of, on board an aircraft-
 - (a) any explosive or radioactive material, knowing that it is intended to be used to cause, or in a threat to cause, death or serious injury or damage for the purpose of intimidating a population, or compelling a government or an international organization to do or to abstain from doing any act;
 - (b) any nuclear weapon or other nuclear explosive device, knowing it to be a nuclear weapon or other nuclear explosive device;
 - (c) any source material,¹³¹ special fissionable material,¹³² or equipment or material especially designed or prepared for the processing, use or production of special fissionable material, knowing that it is intended to be used in a nuclear explosive activity or in any other nuclear activity not under safeguards pursuant to a safeguards agreement with the International Atomic Energy Agency; or
 - (d) any equipment, materials or software or related technology that significantly contributes to the design, manufacture or delivery of a nuclear weapon or other nuclear explosive device without lawful authorization and with the intention that it will be used for such purpose

commits an offence and shall be punished upon conviction to imprisonment for a term not exceeding [period] [and/or] a fine not exceeding [amount].¹³³
- (4) Transport of items and materials under subparagraphs (3)(c) and (d) shall not be an offence if authorized by the [competent authority] and if the transport of such items or materials is consistent with or is for a use or activity that is consistent with [State's] rights, responsibilities and obligations under the Treaty on the Non-Proliferation of Nuclear Weapons (NPT).¹³⁴
- (5) Any person who unlawfully and intentionally assists another person to evade investigation, prosecution or punishment, knowing that-

128 Article 4 of the Beijing Convention encourages States Parties to establish liability for legal entities. Accordingly, the concept of 'person' should be defined or understood under national law to include natural and legal persons.

129 Beijing Convention, Articles 1(1)(g) and 3. The provisions in the Convention prohibit the release or discharge of a 'BCN weapon' as defined in Article 2(h) of the Convention, thus covering nuclear as well as biological and chemical weapons.

130 Beijing Convention, Articles 1(1)(h) and 3. The provisions in the Convention prohibit the use of a 'BCN weapon' as defined in Article 2(h) of the Convention, thus covering nuclear as well as biological and chemical weapons.

131 The Beijing Convention, Article 2(j), makes reference to the meaning of 'source material' in Article XX (3) of the 1956 Statute of the International Atomic Energy Agency.

132 The Beijing Convention, Article 2(j), makes reference to the meaning of 'special fissionable material' in Article XX (1) of the 1956 Statute of the International Atomic Energy Agency.

133 Beijing Convention, Articles 1(1)(i) and 3. The provisions in the Convention prohibit the transport of a 'BCN weapon' as defined in Article 2(h) of the Convention, thus covering nuclear as well as biological and chemical weapons.

134 Beijing Convention, Article 1(1)(i).

- (a) the person has committed an act that constitutes an offence set forth in paragraphs (1), (2) and (3) of this Section and Sections 6.8, paragraph (3); 6.9; 6.10; and 6.11; or
- (b) the person is wanted for criminal prosecution by law enforcement authorities for such an offence or has been sentenced for such an offence

commits an offence and shall be punished upon conviction to imprisonment for a term not exceeding [period] [and/or] a fine not exceeding [amount].¹³⁵

- (6) Any person who intentionally agrees with one or more other persons to commit an offence set forth in paragraphs (1), (2) and (3) of this Section and Section 6.8, paragraph (3) commits an offence and shall be punished upon conviction to imprisonment for a term not exceeding [period] [and/or] a fine not exceeding [amount].¹³⁶

6.5 Offences specific to ships

- (1) Any person¹³⁷ who unlawfully and intentionally uses against or on a ship or discharges from a ship any explosive, radioactive material or nuclear weapon or other nuclear explosive device in a manner that causes or is likely to cause death or serious injury or damage, when the purpose of the act, by its nature or context, is to intimidate a population, or to compel a government or an international organization to do or to abstain from doing any act, commits an offence and shall be punished upon conviction to imprisonment for a term not exceeding [period] [and/or] a fine not exceeding [amount].¹³⁸
- (2) Any person who unlawfully and intentionally transports on board a ship-
 - (a) any explosive or radioactive material, knowing that it is intended to be used to cause, or in a threat to cause, with or without a condition, death or serious injury or damage for the purpose of intimidating a population, or compelling a government or an international organization to do or to abstain from doing any act;
 - (b) any weapon or other nuclear explosive device, knowing it to be a nuclear weapon or other nuclear explosive device;
 - (c) any source material,¹³⁹ special fissionable material,¹⁴⁰ or equipment or material especially designed or prepared for the processing, use or production of special fissionable material, knowing that it is intended to be used in a nuclear explosive activity or in any other nuclear activity not under safeguards pursuant to a comprehensive safeguards agreement with the International Atomic Energy Agency; or
 - (d) any equipment, materials or software or related technology that significantly contributes to the design, manufacture or delivery of a nuclear weapon or other nuclear explosive device, with the intention that it will be used for such purpose,

commits an offence and shall be punished upon conviction to imprisonment for a term not exceeding [period] [and/or] a fine not exceeding [amount].¹⁴¹

¹³⁵ Beijing Convention, Articles 1(4)(d) and 3.

¹³⁶ Beijing Convention, Articles 1(5)(a) and 3.

¹³⁷ Article 5bis of SUA 2005 requires States Parties to establish liability for legal entities. Accordingly, the concept of 'person' should be defined or understood under national law to include natural and legal persons.

¹³⁸ SUA 2005, Articles 3bis(1)(a)(i) and 5. The provisions in the Convention prohibit the use or discharge of a 'BCN weapon' as defined in Article 1(1)(d) of the Convention, thus covering nuclear as well as biological and chemical weapons.

¹³⁹ SUA 2005, Article 1(2)(b), makes reference to the meaning of 'source material' in Article XX (3) of the 1956 Statute of the International Atomic Energy Agency.

¹⁴⁰ SUA 2005, Article 1(2)(b), makes reference to the meaning of 'special fissionable material' in Article XX (1) of the 1956 Statute of the International Atomic Energy Agency.

¹⁴¹ SUA 2005, Articles 3bis(1)(b) and 5. The provisions in the Convention prohibit the transport of a 'BCN weapon' as defined in Article 1(1)(d) of the Convention, thus covering nuclear as well as biological and chemical weapons.

- (3) Transport of an item or material covered by paragraph (2)(c) or, insofar as it relates to a nuclear weapon or other nuclear explosive device, paragraph (2)(d), shall not be an offence if-
- (a) such transport is authorized by the [competent authority]; and
 - (b) such item or material is transported to or from the territory of, or is otherwise transported under the control of, a State Party to the Treaty on the Non-Proliferation of Nuclear Weapons (NPT) where-
 - (i) the resulting transfer or receipt, including internal to [State], of the item or material is not contrary to [State's] obligations under the Treaty on the Non-Proliferation of Nuclear Weapons (NPT); and
 - (ii) if the item or material is intended for the delivery system of a nuclear weapon or other nuclear explosive device of a State Party to the Treaty on the Non-Proliferation of Nuclear Weapons (NPT), the holding of such weapon or device is not contrary to that State Party's obligations under that Treaty.¹⁴²
- (4) Any person who unlawfully and intentionally transports another person on board a ship knowing that the person has committed an act that constitutes-
- (a) an offence set forth in paragraphs (1), (2) and (5) of this Section and Sections 6.8, paragraph (4); 6.9; 6.10; 6.11; and 6.12; or
 - (b) an offence set forth in the 1980 Convention on the Physical Protection of Nuclear Material,¹⁴³ and intending to assist that person to evade criminal prosecution, commits an offence and shall be punished upon conviction to imprisonment for a term not exceeding [period] [and/or] a fine not exceeding [amount].¹⁴⁴
- (5) Any person who unlawfully and intentionally injures or kills any person in connection with the commission of any of the offences set forth in paragraphs (1), (2) and (4) of this Section and Section 6.8, paragraph (4) commits an offence and shall be punished upon conviction to imprisonment for a term not exceeding [period] [and/or] a fine not exceeding [amount].¹⁴⁵

6.6 Offences specific to fixed platforms

- (1) Any person who unlawfully and intentionally uses against or on a fixed platform or discharges from a fixed platform any explosive, radioactive material or nuclear weapon or other nuclear explosive device in a manner that causes or is likely to cause death or serious injury or damage, when the purpose of the act, by its nature or context, is to intimidate a population, or to compel a government or an international organization to do or to abstain from doing any act, commits an offence and shall be punished upon conviction to imprisonment for a term not exceeding [period] [and/or] a fine not exceeding [amount].¹⁴⁶
- (2) Any person who unlawfully and intentionally injures or kills any person in connection with the commission of any of the offences set forth in paragraph (1) of this Section or Section 6.8, paragraph (4) commits an offence and shall be punished upon conviction to imprisonment for a term not exceeding [period] [and/or] a fine not exceeding [amount].¹⁴⁷

142 SUA 2005, Article 3*bis*(2).

143 Article 3*ter* of SUA 2005 makes reference to the Annex to the Convention, which lists nine treaties. The Annex does not include ICSANT or the 2005 Amendment to the CPPNM.

144 SUA 2005, Articles 3*ter* and 5.

145 SUA 2005, Articles 3*quater*(a) and 5.

146 SUA PROT 2005, Articles 1, para. 1 and 2*bis*(a). The provisions in the Protocol prohibit the use of a 'BCN weapon' as defined in Article 1(1)(d) of SUA 2005, thus covering nuclear as well as biological and chemical weapons.

147 SUA PROT 2005, Articles 1, para. 1 and 2*ter*(a).

6.7 Offences related to computer security

- (1) Any person who, in relation to nuclear facilities or facilities involved in the management of radioactive sources, unlawfully and intentionally-
 - (a) commits information-gathering attacks aimed at planning and executing further malicious acts;
 - (b) commits attacks disabling or compromising the attributes of one or several computers crucial to facility security or safety; or
 - (c) compromises one or several computers combined with other concurrent modes of attack, such as physical intrusion to target locations
 commits an offence and shall be punished upon conviction to imprisonment for a term not exceeding [period] [and/or] a fine not exceeding [amount].¹⁴⁸
- (2) Any person who, in relation to nuclear facilities or facilities involved in the management of radioactive sources, unlawfully and intentionally commits a theft of sensitive or confidential information, commits an offence and shall be punished upon conviction to imprisonment for a term not exceeding [period] [and/or] a fine not exceeding [amount].

6.8 Threats¹⁴⁹

- (1) Any person who intentionally threatens-
 - (a) to use nuclear material to cause death or serious injury to any person or substantial damage to property or to the environment or to commit the offence described in Section 6.2, paragraph (1); or
 - (b) to commit an offence described in Sections 6.1, paragraph (2) and 6.2, paragraph (1) in order to compel a natural or legal person, international organization or [State] to do or to refrain from doing any act
 commits an offence and shall be punished upon conviction to imprisonment for a term not exceeding [period] [and/or] a fine not exceeding [amount].¹⁵⁰
- (2) Any person who threatens, under circumstances which indicate the credibility of the threat, to commit an offence as set forth in Sections 6.2, paragraph (3) and 6.3, paragraph (2) commits an offence and shall be punished upon conviction to imprisonment for a term not exceeding [period] [and/or] a fine not exceeding [amount].¹⁵¹
- (3) Any person who-
 - (a) makes a threat to commit any of the offences in Section 6.4, paragraphs (1) and (2); or
 - (b) unlawfully and intentionally causes any person to receive such a threat, under circumstances which indicate that the threat is credible
 commits an offence and shall be punished upon conviction to imprisonment for a term not exceeding [period] [and/or] a fine not exceeding [amount].¹⁵²
- (4) Any person who unlawfully and intentionally threatens to commit the offence in Sections 6.5, paragraph (1) or 6.6, paragraph (1), with or without condition, when the purpose of the act, by its nature or context, is to intimidate a population, or to compel a government or an international organization

¹⁴⁸ *Computer Security at Nuclear Facilities* (IAEA Nuclear Series No. 17) (2011), p. 2.

¹⁴⁹ States may wish to consider existing provisions on threats to commit a criminal offence in their national criminal legislation.

¹⁵⁰ CPPNM/A, Article 7(1)(g) and (2).

¹⁵¹ ICSANT, Articles 2(2)(a) and 5.

¹⁵² Beijing Convention, Articles 1(3) and 3.

to do or to abstain from doing any act, commits an offence and shall be punished upon conviction to imprisonment for a term not exceeding [period] [and/or] a fine not exceeding [amount].¹⁵³

- (5) Any person who intentionally threatens to commit an offence described in Section 6.7 commits an offence and shall be punished upon conviction to imprisonment for a term not exceeding [period] [and/or] a fine not exceeding [amount].

6.9 Attempts¹⁵⁴

Any person who attempts to commit any offence described in Sections 6.1, paragraphs (1), (2), (3) and (4); 6.2, paragraphs (1) and (3); 6.3, paragraphs (1) and (2); 6.4, paragraphs (1), (2) and (3); 6.5, paragraphs (1) and (5); 6.6 and 6.7 commits an offence and shall be punished upon conviction to imprisonment for a term not exceeding [period] [and/or] a fine not exceeding [amount].¹⁵⁵

6.10 Participation¹⁵⁶

Any person who intentionally commits an act which constitutes participation or who participates as an accomplice in any offence described in Sections 6.1; 6.2, paragraphs (1), (3) and (4); 6.3; 6.4, paragraphs (1), (2) and (3); 6.5, paragraphs (1), (2), (4) and (5); 6.6; 6.7; 6.8 and 6.9 commits an offence and shall be punished upon conviction to imprisonment for a term not exceeding [period] [and/or] a fine not exceeding [amount].¹⁵⁷

6.11 Organising or directing others¹⁵⁸

Any person who intentionally organises or directs others to commit an offence described in Sections 6.1; 6.2, paragraphs (1), (3) and (4); 6.3; 6.4, paragraphs (1), (2) and (3); 6.5, paragraphs (1), (2), (4) and (5); 6.6; 6.7; 6.8; and 6.9 commits an offence and shall be punished upon conviction to imprisonment for a term not exceeding [period] [and/or] a fine not exceeding [amount].¹⁵⁹

6.12 Contributing to the commission of an act¹⁶⁰

Any person who intentionally commits an act which contributes to the commission of any offence described in Sections 6.1; 6.2, paragraphs (1), (3) and (4); 6.3; 6.4, paragraphs (1), (2) and (3); 6.5, paragraphs (1), (2), (4) and (5); 6.6; 6.7; 6.8; and 6.9 by a group of persons acting with a common purpose-

- (a) with the aim of furthering the criminal activity or criminal purpose of the group; or
 (b) in the knowledge of the intention of the group to commit the offence or offences concerned commits an offence and shall be punished upon conviction to imprisonment for a term not exceeding [period] [and/or] a fine not exceeding [amount].¹⁶¹

153 SUA 2005, Articles 3bis(1)(a)(iv) and 5; SUA PROT 2005, Articles 1, para. 1 and 2bis(c).

154 States may wish to consider existing provisions on attempts to commit a criminal offence in their national criminal legislation.

155 CPPNM/A, Article 7(1)(h) and (2); ICSANT, Articles 2(3) and 5; Beijing Convention, Articles 1(4)(a) and 3; SUA 2005, Articles 3quater(b) and 5; SUA PROT 2005, Articles 1, para. 1 and 2ter(b).

156 States may wish to consider existing provisions on participation in a criminal offence in their national criminal legislation.

157 CPPNM/A, Article 7(1)(i) and (2); ICSANT, Articles 2(4)(a) and 5; Beijing Convention, Articles 1(4)(c) and 3; SUA 2005, Articles 3quater(c) and 5; SUA PROT 2005, Articles 1, para. 1 and 2ter(c).

158 States may wish to consider existing provisions on organising or directing others to commit a criminal offence in their national criminal legislation.

159 CPPNM/A, Article 7(1)(j) and (2); ICSANT, Articles 2(4)(b) and 5; Beijing Convention, Articles 1(4)(b) and 3; SUA 2005, Articles 3quater(d) and 5; SUA PROT 2005, Articles 1, para. 1 and 2ter(d).

160 States may wish to consider existing provisions on contributing to the commission of a criminal offence in their national criminal legislation.

161 CPPNM/A, Article 7(1)(k) and (2); ICSANT, Articles 2(4)(c) and 5; Beijing Convention, Articles 1(5)(b) and 3; SUA 2005, Articles 3quater(e) and 5; SUA PROT 2005, Articles 1, para. 1 and 2ter(e).

7.1 Jurisdiction over offences committed in the territory of the State or on board a ship or aircraft registered in the State

[State] shall have jurisdiction over offences committed under this [Act, Statute, Ordinance, etc.] when the offence is committed in the territory of [State] or on board a ship or aircraft registered in [State].¹⁶³

7.2 Jurisdiction over offences committed by nationals

[State] shall have jurisdiction over offences established under this [Act, Statute, Ordinance, etc.] when the alleged offender is a national of [State] regardless of where the conduct occurred.¹⁶⁴

7.3 Jurisdiction over offences committed against nationals

[State] shall have jurisdiction over offences committed under this [Act, Statute, Ordinance, etc.] when the offence is committed against a national of [State].¹⁶⁵

7.4 Jurisdiction over offences committed against a [State] or government facility of [State] abroad

[State] shall have jurisdiction over offences committed under this [Act, Statute, Ordinance, etc.] when the offence is committed against a [State] or government facility of [State] abroad, including an embassy or other diplomatic or consular premises of [State].¹⁶⁶

7.5 Jurisdiction over offences committed by stateless persons

[State] shall have jurisdiction over offences committed under this [Act, Statute, Ordinance, etc.] when the alleged offender is a stateless person who has his or her habitual residence in the territory of [State].¹⁶⁷

7.6 Jurisdiction over offences committed in an attempt to compel [State] to act or not act

[State] shall have jurisdiction over offences committed under this [Act, Statute, Ordinance, etc.] when the offence is committed in an attempt to compel [State] to do or abstain from doing any act.¹⁶⁸

162 Section 7 of this Model Law includes eleven bases for a State to exercise jurisdiction over the offences in Section 6. These provisions are derived from the international legal instruments discussed in Part II (1) of this *Kit*. Mandatory or optional exercise of jurisdiction under an international legal instrument is indicated in a footnote. In addition, a State may choose not to exercise jurisdiction on one or more of these bases if it is not a State Party to the relevant international legal instrument(s).

163 This exercise of jurisdiction is mandatory under CPPNM/A, Article 8(1)(a); ICSANT, Article 9(1)(a)-(b); Beijing Convention, Article 8(1)(a)-(b); SUA 2005, Article 6(1)(a)-(b).

164 This exercise of jurisdiction is mandatory under CPPNM/A, Article 8(1)(b); ICSANT, Article 9(1)(c); Beijing Convention, Article 8(1)(e); SUA 2005, Article 6(1)(c); SUA PROT 2005, Article 3(1)(b).

165 This exercise of jurisdiction is optional under ICSANT, Article 9(2)(a); Beijing Convention, Article 8(2)(a); SUA 2005, Article 6(2)(b); SUA PROT 2005, Article 3(2)(b).

166 This exercise of jurisdiction is optional under ICSANT, Article 9(2)(b).

167 This exercise of jurisdiction is optional under ICSANT, Article 9(2)(c); Beijing Convention, Article 8(2)(b); SUA 2005, Article 6(2)(a); SUA PROT 2005, Article 3(2)(a).

168 This exercise of jurisdiction is optional under ICSANT, Article 9(2)(d); SUA 2005, Article 6(2)(c); SUA PROT 2005, Article 3(2)(c).

7.7 Jurisdiction over offences committed on board aircraft operated by the Government of [State]

[State] shall have jurisdiction over offences committed under this [Act, Statute, Ordinance, etc.] when the offence is committed on board an aircraft which is operated by the Government of [State].¹⁶⁹

7.8 Jurisdiction when the alleged offender is not extradited

[State] shall have jurisdiction over offences committed under this [Act, Statute, Ordinance, etc.] when the alleged offender is present in the territory of [State] and is not extradited to another State.¹⁷⁰

7.9 Jurisdiction when the State is involved in international nuclear transport

[State] shall have jurisdiction over offences committed under this [Act, Statute, Ordinance, etc.] when [State] is involved in international nuclear transport as the exporting or importing State.¹⁷¹

7.10 Jurisdiction specific to offences involving aircraft

- (1) [State] shall have jurisdiction over offences committed under this [Act, Statute, Ordinance, etc.] when the aircraft on board which the offence is committed lands in the territory of [State] with the alleged offender still on board.¹⁷²
- (2) [State] shall have jurisdiction over offences committed under this [Act, Statute, Ordinance, etc.] when the offence is committed against or on board an aircraft leased without crew to a lessee whose principal place of business or, if the lessee has no such place of business, whose permanent residence is in [State].¹⁷³

7.11 Jurisdiction specific to offences involving fixed platforms

[State] shall have jurisdiction over offences committed under this [Act, Statute, Ordinance, etc.] when the offence is committed against or on board a fixed platform while it is located on the continental shelf of [State].¹⁷⁴

8. Criminal proceedings and international co-operation

8.1 Investigations and enquiries, prosecution and extradition

- (1) If the [appropriate authority¹⁷⁵] receives information that an offence under this [Act, Statute, Ordinance, etc.] has been committed or is being committed in the territory of [State] or that a person who has committed or who is alleged to have committed such an offence may be present in [State], the

169 This exercise of jurisdiction is optional under ICSANT, Article 9(2)(e).

170 This exercise of jurisdiction is mandatory under CPPNM/A, Article 8(2); ICSANT, Article 9(4); Beijing Convention, Article 8(3); SUA 2005, Article 4; SUA PROT 2005, Article 3(4).

171 This exercise of jurisdiction is optional under CPPNM/A, Article 8(4).

172 This exercise of jurisdiction is mandatory under the Beijing Convention, Article 8(1)(c).

173 This exercise of jurisdiction is mandatory under the Beijing Convention, Article 8(1)(d).

174 This exercise of jurisdiction is mandatory under SUA PROT 2005, Article 3(1)(a).

175 E.g., the police.

[appropriate authority] shall investigate the facts contained in the information, in accordance with national law and the [code of criminal procedure of [State]].¹⁷⁶ The [appropriate authority] is authorised under this [Act, Statute, Ordinance, etc.] to apply nuclear forensics to an investigation under this Section.

- (2) The [competent authority] shall inform relevant States of the findings of any investigations or preliminary enquiries conducted under paragraph (1) and indicate whether [State] intends to exercise jurisdiction over an offence committed under this [Act, Statute, Ordinance, etc.].¹⁷⁷
- (3) The [appropriate authority¹⁷⁸] shall take appropriate measures, including detention, to ensure the presence of any person who is alleged to have violated this [Act, Statute, Ordinance, etc.] for the purpose of prosecution or extradition.¹⁷⁹
- (4) The [appropriate authorities¹⁸⁰] shall ensure that any person regarding whom the measures in paragraph (3) are being taken, and who is not a national of [State], is entitled-
 - (a) to communicate without delay with the nearest appropriate representative of the State of which that person is a national or which is otherwise entitled to protect that person's rights or, if that person is a stateless person, the State in the territory of which that person habitually resides;¹⁸¹
 - (b) to be visited by a representative of that State;¹⁸² and
 - (c) to be informed of that person's rights under subparagraphs (a) and (b).¹⁸³
- (5) The [competent authority] shall immediately inform relevant States, directly [or through the Secretary-General of the United Nations¹⁸⁴], of the fact that a person is in custody, under paragraph (3), and of the circumstances which warrant that person's detention.¹⁸⁵
- (6) In the event the person who is alleged to have violated this [Act, Statute, Ordinance, etc.] is not extradited, his case shall be referred to the [appropriate authority¹⁸⁶] for the purpose of prosecution in accordance with the [code of criminal procedure] of [State]].¹⁸⁷
- (7) The [competent authority] shall communicate the final outcome of any legal proceedings related to an offence committed under this [Act, Statute, Ordinance, etc.] to the [Secretary-General of the United Nations¹⁸⁸] [Council of the International Civil Aviation Organization¹⁸⁹] [Secretary-General of the International Maritime Organization (IMO)¹⁹⁰].

176 ICSANT, Article 10(1). The appropriate authority, e.g., the police and/or prosecutor, may receive this information from and co-operate with the competent authority responsible for enforcement of this law. Also see the Beijing Convention, Article 9(2); SUA 2005, Article 7(2); and SUA PROT 2005, Article 1, para. 1 ["preliminary enquiry into the facts"].

177 ICSANT, Article 10(6); Beijing Convention, Article 9(4); SUA 2005, Article 7(5); SUA PROT 2005, Article 1, para. 1.

178 E.g., the police.

179 CPPNM/A, Article 9; ICSANT, Article 10(2); Beijing Convention, Article 9(1); SUA 2005, Article 7(1); SUA PROT 2005, Article 1, para. 1.

180 E.g., the police, the prosecutor.

181 ICSANT, Article 10(3)(a); Beijing Convention, Article 9(3); SUA 2005, Article 7(3)(a); SUA PROT 2005, Article 1, para. 1.

182 ICSANT, Article 10(3)(b); SUA 2005, Article 7(3)(b); SUA PROT 2005, Article 1, para. 1.

183 ICSANT, Article 10(3)(c).

184 ICSANT, Article 10(6).

185 ICSANT, Article 10(6); Beijing Convention, Article 9(4); SUA 2005, Article 7(5); SUA PROT 2005, Article 1, para. 1.

186 E.g., the prosecutor.

187 CPPNM/A, Article 10; ICSANT, Article 11(1); Beijing Convention, Article 10; SUA 2005, Article 10(1); SUA PROT 2005, Article 1, para. 1.

188 ICSANT, Article 19.

189 Beijing Convention, Article 19(c).

190 SUA 2005, Article 15(1)(c) and (2); SUA PROT 2005, Article 1, para. 1

- (8) The offences in this [Act, Statute, Ordinance, etc.] shall be deemed to be included as extraditable offences in any existing extradition treaty with another State.¹⁹¹ In the event [State] receives a request for extradition from a State with which it does not have an existing extradition treaty [. . .].¹⁹²

8.2 Fair treatment

The relevant authorities of [State] shall treat any person who is alleged to have violated this [Act, Statute, Ordinance, etc.] fairly at all stages of proceedings being carried out in connection with any of the offences set forth in this [Act, Statute, Ordinance, etc.], in accordance with national law and the [code of criminal procedure of [State]] and applicable provisions of international law.¹⁹³

8.3 Mutual legal assistance¹⁹⁴ and other forms of international co-operation

- (1) The [appropriate authorities¹⁹⁵] shall provide mutual legal assistance to other States in connection with investigations or criminal or extradition proceedings brought in respect of any offences set forth in this [Act, Statute, Ordinance, etc.], including the supply of evidence at the disposal of [State] necessary for the proceedings.¹⁹⁶ Such mutual assistance shall be consistent with [State's] international treaty obligations and with the national laws of [State].
- (2) The [appropriate authorities, including the competent authority,] are authorised under this [Act, Statute, Ordinance, etc.] to co-operate with other States to prevent and counter preparations for the commission of the offences set forth in this [Act, Statute, Ordinance, etc.], including taking measures to prohibit in the territory of [State] and other States illegal activities of persons, groups and organizations that encourage, instigate, organize, knowingly finance or knowingly provide technical assistance or information or engage in the perpetration of those offences.¹⁹⁷
- (3) The [appropriate authorities, including the competent authority,] shall under this [Act, Statute, Ordinance, etc.]-
- (a) exchange accurate and verified information with other States, and co-ordinate administrative and other measures taken as appropriate to detect, prevent, suppress and investigate the offences set forth in in this [Act, Statute, Ordinance, etc.] and also in order to institute criminal proceedings against persons alleged to have committed those crimes; and
- (b) inform without delay other relevant State(s) of the commission of the offences set forth in this [Act, Statute, Ordinance, etc.] as well as preparations to commit such offences about which it has learned, and also to inform, where appropriate, international organizations.¹⁹⁸

191 CPPNM/A, Article 11(1); ICSANT, Article 13(1); Beijing Convention, Article 12(1); SUA 2005, Article 11(1); SUA PROT 2005, Article 1, para. 1.

192 Here, the State could consider the international instruments to which it is a party as the legal basis for extradition in respect of the offences, subject to national law (CPPNM/A, Article 11(2); ICSANT, Article 13(2); Beijing Convention, Article 12(2); SUA 2005, Article 11(2); SUA PROT 2005, Article 1, para. 1). Alternatively, the State could recognize the offences as extraditable offences between itself and the other State (CPPNM/A, Article 11(3); ICSANT, Article 13(3); Beijing Convention, Article 12(3); SUA 2005, Article 11(3); SUA PROT 2005, Article 1, para. 1).

193 CPPNM/A, Article 12; ICSANT, Article 12; Beijing Convention, Article 11; SUA 2005, Article 10(2); SUA PROT 2005, Article 1, para. 1.

194 States may also wish to consider: (i) entering into a treaty agreement on Mutual Assistance in Criminal Matters or (ii) incorporating elements of the Model Treaty on Mutual Assistance in Criminal Matters into their nuclear security legislation. The Model Treaty was adopted by General Assembly resolution 45/117 (1990) and subsequently amended by General Assembly resolution 53/112 (1998).

195 E.g., the police, the prosecutor.

196 CPPNM/A, Article 13; ICSANT, Article 14(1); Beijing Convention, Article 17(1); SUA 2005, Article 12(1); SUA PROT 2005, Article 1, para. 1. See also ICSANT, Article 17; SUA 2005, Article 12*bis*; and SUA PROT 2005, Article 1, para. 1.

197 ICSANT, Article 7(1)(a); Beijing Convention, Article 16(1); SUA 2005, Articles 8*bis*(1) and 13(1)(a) [see also Section 8.6, paragraph (4)]; SUA PROT 2005, Article 1, para. 1.

198 ICSANT, Article 7(1)(b); Beijing Convention, Articles 18 and 19(a); SUA 2005, Articles 13(1)(b), 14 and 15(1)(a); SUA PROT 2005, Article 1, para. 1.

- (4) The [competent authority] is authorised under this [Act, Statute, Ordinance, etc.] to co-operate with and assist any State that so requests in the recovery and protection of nuclear material, in the case of theft, robbery or any other unlawful taking of nuclear material or credible threat thereof.¹⁹⁹
- (5) The [competent authority] is authorised under this [Act, Statute, Ordinance, etc.] to co-operate with and assist any State in the case of a credible threat of sabotage of nuclear material or a nuclear facility or in the case of sabotage thereof.²⁰⁰
- (6) The [competent authority] is authorised under this [Act, Statute, Ordinance, etc.] to inform and exchange information with the International Atomic Energy Agency and other relevant international organisations further to paragraphs (4) and (5).²⁰¹

8.4 Political and other justifications; political offences

- (1) For the purposes of enforcement of this [Act, Statute, Ordinance, etc.], no offence committed under this [Act, Statute, Ordinance, etc.], in particular where it is intended or calculated to provoke a state of terror in the general public or in a group of persons or particular persons, shall under any circumstances be justifiable by considerations of a political, philosophical, ideological, racial, ethnic, religious or other similar nature.²⁰²
- (2) A request for extradition under Section 8.1, paragraph (8) or for mutual legal assistance under Section 8.3, paragraph (1), based on any of the offences in this [Act, Statute, Ordinance, etc.], shall not be refused on the sole ground that it concerns a political offence or an offence connected with a political offence or an offence inspired by political motives.²⁰³

8.5 Application of this [Act, Statute, Ordinance, etc.] to the armed forces and military forces of [State]

- (1) This [Act, Statute, Ordinance, etc.] shall not apply to-
- (a) the activities of the armed forces of [State] during an armed conflict, as those terms are understood under international humanitarian law, which are governed by that law and related national law; or
 - (b) the activities undertaken by the military forces of [State] in the exercise of their official duties, inasmuch as they are governed by other rules of international or national law.²⁰⁴
- (2) No provision in this [Act, Statute, Ordinance, etc.], including paragraph (1) above, shall be-
- (a) construed as a lawful authorisation to use or threaten to use force against nuclear material or nuclear facilities used for peaceful purposes;²⁰⁵ or
 - (b) interpreted as condoning or making lawful otherwise unlawful acts, or precluding prosecution under this or other laws.²⁰⁶

199 CPPNM/A, Article 5(2).

200 CPPNM/A, Article 5(3).

201 CPPNM/A, Article 5(2)-(3).

202 ICSANT, Article 6.

203 CPPNM/A, Article 11A; ICSANT, Article 15; Beijing Convention, Article 13; SUA 2005, Article 11*bis*; SUA PROT 2005, Article 1, para. 1.

204 CPPNM/A, Article 2(4)(b); ICSANT, Article 4(2); Beijing Convention, Article 6(2); SUA 2005, Article 2*bis*(2); SUA PROT 2005, Article 1, para. 1.

205 CPPNM/A, Article 2(4)(c).

206 CPPNM/A, Article 2(4)d); ICSANT, Article 4(3); Beijing Convention, Article 6(3).

8.6 Enforcement measures specific to offences involving ships

- (1) The master of a ship, registered in [State], is authorised under this [Act, Statute, Ordinance, etc.] to deliver to the authorities of any State, which is party to the 1988 Convention for the Suppression of Unlawful Acts against the Safety of Maritime Navigation (as amended by the 2005 Protocol), any person whom the master has reasonable grounds to believe has committed an offence set forth in Sections 6.5; 6.8, paragraph (4); 6.9; 6.10; 6.11; or 6.12.²⁰⁷
- (2) The [appropriate authority, in co-operation with the competent authority] shall ensure that the master of a ship registered in [State] is obliged, whenever practicable, and if possible before entering the territorial sea of the receiving State carrying on board any person whom the master intends to deliver in accordance with paragraph (1), to give notification to the authorities of the receiving State of his intention to deliver such person and the reasons therefor.²⁰⁸
- (3) The master of a ship registered in [State] shall furnish the authorities of the receiving State with the evidence in the master's possession which pertains to the alleged offence in paragraph (1).²⁰⁹
- (4) The [competent authority, in co-operation with the appropriate authorities²¹⁰] shall establish standard operating procedures for joint operations with other States, to prevent and suppress unlawful acts under the 1988 Convention for the Suppression of Unlawful Acts against the Safety of Maritime Navigation (as amended by the 2005 Protocol), through the regulations issued under this [Act, Statute, Ordinance, etc.].²¹¹

²⁰⁷ SUA 2005, Article 8(1).

²⁰⁸ SUA 2005, Article 8(2). Also see Article 8(3) and (5).

²⁰⁹ SUA 2005, Article 8(4).

²¹⁰ E.g., the coast guard or other authority responsible for maritime navigation. See also SUA 2005, Article 8*bis*(14).

²¹¹ SUA 2005, Article 8*bis*(12).

It is recognized that sovereign States have their own procedures for legislative development, consistent with their own legal system, structures and practices based on their social, political, economic and cultural values. However, the technical aspects of nuclear security pose unique issues and, as discussed elsewhere, a national law on nuclear security will need to comply with a range of international instruments and guidance documents. A harmonized and consistent approach with international practice will be important for securing assistance and co-operation in addressing nuclear security issues and for combating nuclear security threats, including terrorism. Therefore, a well-ordered process for developing national legislation in this field can enhance and expedite this complex task.

The following sections briefly outline key issues or procedures that have been found useful in developing national nuclear security legislation.²¹²

1. Assessment of a national nuclear programme

A fundamental aspect of drafting nuclear security legislation is an accurate assessment of current and reasonably foreseen nuclear activities to be conducted in the State. If only limited activities (such as use of radioactive sources in medicine, industry and agriculture) are contemplated, the scope of a law on nuclear security can be much narrower than for an ambitious programme for nuclear power. Well before initial drafting of legislation, a survey of the State's current and expected future nuclear programme should be conducted with participation by all relevant governmental bodies and selected stakeholders (particularly expected users and licensees). Some of the elements that should be considered in the assessment include:

- ★ government policy on nuclear energy;
- ★ current programmes for using nuclear and other radioactive material and related technology;
- ★ future plans and schedules for nuclear development (including decommissioning and waste management);
- ★ financial aspects of nuclear development (including public funding and/or incentives);
- ★ role of private entities;
- ★ role of foreign suppliers and technical assistance;
- ★ technical and industrial infrastructure requirements; and
- ★ educational needs for specialists (including in security aspects).

2. Assessment of a national legal and regulatory framework

In parallel with the assessment of the State's current and foreseen nuclear programme, an assessment of the existing legal and regulatory framework should be conducted.²¹³ Failure to ensure consistency between

212 Part IV of this *Kit* is a condensed version of the article "Developing National Legislation for Nuclear Security: Priority Issues and Basic Approaches", Carlton Stoiber, *1540 Compass*, Volume 1, Issue 2, CITS, University of Georgia, Athens, 2012 (reproduced here with the kind permission of the author).

213 VERTIC's National Implementation Measures (NIM) Programme is engaged in a multi-year nuclear security legislation project, which includes reviewing and analysing States' existing legal and regulatory frameworks for the implementation of certain international instruments related to nuclear security. Such legislation surveys can be prepared at the request of interested governments. See further www.vertic.org > Programmes >>NIM.

a law on nuclear security and other relevant legislation can result in problems in implementation. Many different laws and regulatory arrangements in a State will be relevant to implementing a nuclear programme. The following examples are the most relevant:

- ★ general administrative law;
- ★ national criminal law or criminal code;
- ★ civil and criminal enforcement laws and procedures including criminal procedure;
- ★ environmental law;
- ★ export, import, strategic trade and customs laws;
- ★ immigration and border control laws;
- ★ law on emergency preparedness and response;
- ★ economic laws, including taxation and financial matters;
- ★ worker safety and health protection;
- ★ land use planning laws;
- ★ scientific research and development laws (intellectual property);
- ★ intelligence collection and use;
- ★ laws on handling of confidential or classified information;
- ★ laws on liability for damage, including through terrorism or criminal activity;
- ★ laws on transport, particularly transport security; and
- ★ anti-corruption and public integrity laws.

In conducting the assessment, the following issues should be considered:

- ★ Does current law provide that ensuring adequate levels of security is an overriding requirement for conducting nuclear-related activities?
- ★ Does the legal structure contain major gaps, overlaps or inconsistencies in the treatment of activities relating to nuclear security?
- ★ Do key terms used in the legislation have clear and consistent definitions?
- ★ Are institutional responsibilities for implementing nuclear security laws and regulations clear and consistent, avoiding delays, confusion, bureaucratic conflicts and potential for abuse of authority?
- ★ Does the law and regulatory framework comply fully with provisions of the conventions ratified or acceded to by the State, and reflect best practice set forth in relevant guidance documents?

3. Assessment of international instruments

A third assessment needed early in the process of developing a nuclear security law is a determination of which international legal instruments (both binding and non-binding) are relevant for drafting specific provisions of the law. Most States have adhered to at least some of the international instruments in the nuclear security field. Failure to reflect relevant international legal instruments in national legislation can adversely impact a State's ability to utilise nuclear energy through co-operation and assistance (including mutual legal assistance) by other States, international organisations and the global nuclear industry. It is important that the State's assessment not only considers those instruments to which it has already become a party, but instruments that could be important in enabling it to implement its future program for nuclear development.

4. Structure and level of detail of legislation

A threshold issue in drafting nuclear security legislation is whether it should be included in a unified or comprehensive law covering all aspects of nuclear technology in a State, or whether nuclear security should be dealt with separately in a specific law or in broader legislation covering all aspects of national security. As discussed in Volume I of the IAEA Handbook on Nuclear Law, a unified or comprehensive nuclear law can include common elements (such as licensing) that apply to a range of subjects, thereby avoiding repetition or confusing cross-referencing of provisions in different laws.

State practice varies widely on the issue of how detailed legislation needs to be to ensure effective implementation. In some States very detailed (often referred to as “prescriptive”) legislation is drafted. In other States, only the main elements are included, with details left to implementing regulations (sometimes called “subsidiary legislation”) that are adopted by responsible governmental bodies, such as the nuclear regulatory authority. Both approaches have their strengths and weaknesses. What is important is that national legislation clearly assigns essential responsibilities for nuclear security and reflects the rights and obligations of international instruments to which the State is a party.

5. Participants in the process of developing legislation

Nuclear security legislation can involve complex technical issues unfamiliar to persons typically responsible for legislative drafting. For this reason, initial preparation of such legislation is often assigned to a body with technical expertise, such as a nuclear regulatory authority or an energy ministry or department. However, nuclear security law involves other dimensions that technical experts may not adequately comprehend, including criminal law matters or organisational responsibilities of various security agencies. For this reason, in developing nuclear security legislation, it is important that the range of expertise needed for effective legislation in the field be engaged at both the early stages and throughout the entire legislative process. The following listing identifies entities most likely to be affected by nuclear security legislation:

- ★ regulated users or licensees;
- ★ the governmental body responsible for nuclear regulation;
- ★ the governmental body responsible for energy policy and development;
- ★ law enforcement agencies (including police);
- ★ border control, customs and immigration agencies;
- ★ the organisation(s) responsible for international trade and strategic trade controls;
- ★ emergency preparedness and response agencies;
- ★ national intelligence agencies;
- ★ other national governmental organisations with related responsibilities (e.g., environment, administration of justice, administrative law, worker protection, transportation);
- ★ scientific bodies (academic institutions, academies of sciences, etc.);
- ★ local and regional governments;
- ★ relevant interest groups (environmental, energy policy, etc.) and industry or other associations;
- ★ community groups and the public;
- ★ international organizations; and
- ★ other States (particularly those in the vicinity of nuclear facilities).

6. Initial drafting

As mentioned above, all relevant stakeholders should be involved in early preparation of a draft nuclear security law. Both technical and legal specialists need to participate in initial drafting. At this stage, drafting should focus on basic policy issues, rather than on the details of implementation that are better left to regulations or subsidiary instruments (decrees, memoranda of understanding, etc.). The drafters should identify any inconsistencies or ambiguities needing further drafting (particularly regarding relationships with other national laws identified in the assessment described earlier). After an initial draft has been prepared a broader range of stakeholders should have an opportunity to provide comments.

7. Legislative consideration; adoption and promulgation; oversight

After an initial draft has been prepared and subject to any revisions based on stakeholder comment, the draft law will be submitted to the national legislative body under normal State practice. It is important to ensure that expertise in nuclear technology and security are available to legislators and legislative assistants in further development of the law. After approval by the legislative body, the State's procedure for formal adoption will be followed, typically involving action by the national executive authority. Also, normal State practice will be followed in publishing the law so that all relevant stakeholders have adequate notice of new legal requirements and regulatory arrangements, including any time interval for entry into force of the new law's requirements.

A final matter that should be considered regarding any new law is how to ensure that its provisions are being effectively applied and whether any adjustments or revisions are necessary to address any problems in case practical difficulties arise in implementation. The law should identify responsible governmental bodies for conducting such "oversight". Procedures for review by the legislative body may also be appropriate; for example, through hearings on an annual or other periodic basis.

8. Dispute resolution

With many interests involved in most nuclear activities, disputes over interpretation and application of legislation can arise between relevant stakeholders. A clear process for addressing disputes should be included in nuclear security legislation and made public. The process should include internal procedures to be used by responsible organisations (primarily the regulatory body) and among different government agencies. Some States include such measures in their general administrative laws, rather than in specific nuclear legislation. With regard to the handling of appeals of adverse decisions, the law should clarify how they are to be handled and how continuing activities are to be managed (or suspended) pending a final decision.

07 April, 2015

Project Alpha and Association of University Legal Practitioners issue export control guidance for academia

Written by admin (/business/guidance-for-academia/itemlist/user/422-admin)

Project Alpha (<http://www.acsss.info>) and the Association of University Legal Practitioners (<http://www.southampton.ac.uk/corporateservices/legalservices/aulp/>) are pleased to release today a guidance document for universities and the higher education sector on export controls and the UK Government's student vetting scheme (ATAS).

This document has been prepared with support from the UK's Export Control Organisation (<https://www.gov.uk/government/organisations/export-control-organisation>) and the Foreign and Commonwealth Office (<https://www.gov.uk/government/organisations/foreign-commonwealth-office>). The purpose of the document is to provide a comprehensive yet accessible guide for university practitioners on the export control legislation applicable in the UK and the Academic Technology Approval Scheme (Student Vetting Scheme) which are separate but complementary regimes. This document also contains tools prepared by Project Alpha and AULP members, including policy statements, flowcharts and questionnaires, that can be used by university staff to determine if those controls affect them and how to manage compliance. No specific change in legislation or policy prompted the preparation of this guide.

Who is this document for?

This Guide is specifically targeted at university vice chancellors, legal and compliance departments, research support teams and technology transfer offices. It includes suggested templates for working with individual academics and researchers involved in academic disciplines affected by non-proliferation-related controls, particularly engineering and science fields since it is these areas that are most likely, but not exclusively, to be affected by Export Controls.

Ideally, awareness and guidance on Export Controls should form an integral part of an academic institution's research policies and guidance on good practice in research.

Context Controls over strategic goods or technology (collectively referred to as "Export Controls") have been enacted in the UK for decades, with weapons of mass destruction (WMD) provisions in relation to transfers of technology or technical assistance being in place from at least 2004. Equally all EU countries are required to maintain a system of end-use export and transfer controls. By international law, all countries which are members of the UN have been required since 2004 to maintain a system of Export Controls in order to prevent the proliferation of weapons of mass destruction. This requirement affects not just commercial entities, but applies to all entities (commercial or non-commercial) including universities and researchers that might 'export'.

The collective implications of these commitments and obligations is that in some cases individual academics in a university may need an export licence from the Export Control Organisation to carry out an activity - failure to obtain one being a criminal offence.

NOTE: This document is for guidance only. It is NOT a statement of law. Before carrying out any activity subject to strategic controls (exports, transfers of technology, provision of technical assistance, etc.) you should refer to the legal provisions in force at the time.

The Tool Kit:

A Decision Tree adapted for local circumstances would help academics make an initial assessment about whether the rules apply and what needs to be done. An institution's decision tree might be along the following lines:

If you answer "yes" to any of the following questions, take advice:-

Question 1) Was the technology imported from the US? Universities should be aware that in some instances controls from other territories may apply in addition to UK-administered controls. This is particularly common for US technologies, where re-export clauses often apply which prevent not only the goods, software or technology being re-exported to particular countries, but also can prevent it being transferred to or shared with foreign nationals within the UK.

If the technology is subject to ITAR or EAR this may affect exporting and also sharing with researchers within the institution who are from overseas or have dual nationality. These rules need to be satisfied, as well as UK export control requirements. But do not forget to consider UK Export Controls also.

Question 2) The Technology: The primary question that must be answered is whether it appears on the Export Control list. The ECO offers a range of services to help with the process of classification to determine whether the technology is listed. There are three key points to establish here:

Firstly: Is the item or technology specifically designed for military or nuclear end uses?

Secondly: Does the export include encryption software or hardware?

Finally: Do you need to check the UK controlled list of military or dual use items?

Question 3) End use controls: Who are you working with?

The end use controls look at who the end user is and what the end use is. The following list of questions may help you establish an end use or end user issue that you need to look into further.

Even if the item, technology or software is not listed in the UK Consolidated Lists, a licence could also be required if the exporter knows, has been informed or suspects there is a WMD end use.

Question 4) Sanctions

Additional restrictions can apply when dealing with countries that are subject to sanction. These can include restrictions on the actions of individuals and entities, including their ability to travel or to use financial systems, and they can include additional restrictions on exports or trade activities, which often have the effect of broadening the UK Consolidated Lists to include items which would not normally be included in the UK Consolidated List.

Two flow charts are offered:

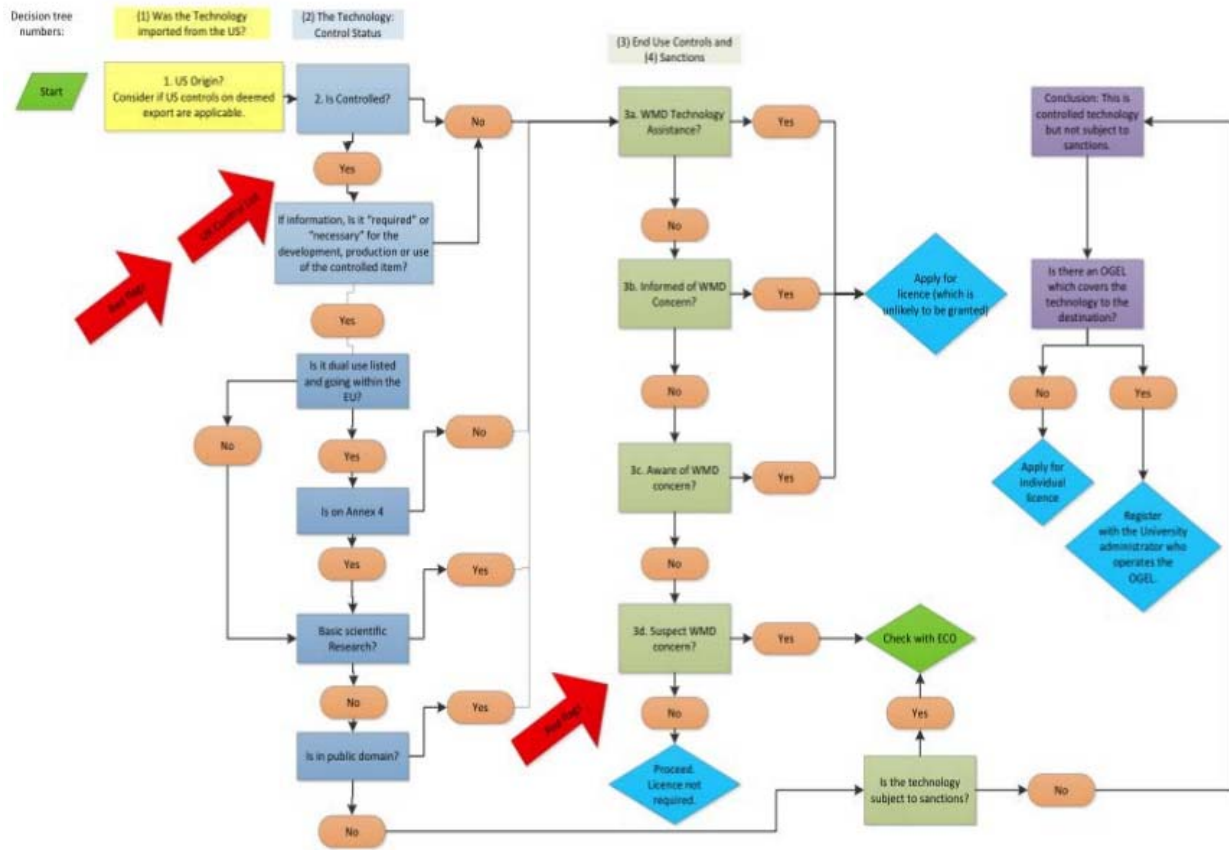
1. Basic awareness – to help researchers understand if they need to know more about Export Control. (Note: This flowchart does not ask researchers whether their goods are controlled. It is intended for use as an awareness raising tool only.)





2. When do the UK Consolidated Lists need to be considered?

This second flow chart on the following page links and cross references to the proposed Decision Tree. "Controlled" as used in this flow chart means the technology is on either

- The Consolidated Military and Dual Use Lists or
- Any Sanctions List



The document can be downloaded at the link below.



**Higher Education Guide And Toolkit
On Export Controls
And
The ATAS Student Vetting Scheme**

Drafted in partnership by the Association of University Legal Practitioners and

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