



RWANDA UTILITIES REGULATORY AUTHORITY

P.O BOX 7289 KIGALI, Tel: +250 252 584562, Fax: +250 252 584563

Email: info@rura.rw

Web-site: www.rura.rw

**REGULATION ON IMPORT, EXPORT AND
TRANSIT OF NUCLEAR AND RADIOACTIVE
MATERIAL**

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The Regulatory Board of Rwanda Utilities Regulatory Authority;

Pursuant to Law n°09/2013 of 01/03/2013 establishing Rwanda Utilities Regulatory Authority (RURA) and determining its mission, powers, organisation and functioning;

Pursuant to Law N°59/2017 of 24/1/2018 Governing Radiation Protection in Rwanda;

Considering deliberations from the consultative meeting held on, 2023 with stakeholders on imports and exports and transit of nuclear and radioactive material;

Upon due consideration and deliberation in its meeting of .../.../2023.

HEREBY issues the following:

REGULATION ON IMPORTS AND EXPORTS AND TRANSIT OF NUCLEAR AND RADIOACTIVE MATERIAL

CHAPTER ONE: GENERAL PROVISIONS

Article 1: Purpose of this regulation

The purpose of this regulation is to establish a regulatory framework for the safety and security of imports and exports and transit of nuclear and/or radioactive material.

Article 2: Scope

This regulation applies to the import and export and transit of all nuclear and/or radioactive material that may pose a significant risk to individuals, society and the environment, that is the sources designated by the Regulatory Authority as being subject to regulatory control.

Article 3: Objective

The objective of this regulation is to prescribe requirements to achieve and maintain a high level of safety, security and safeguards for the import, export and transit of nuclear and radioactive material and to optimize protection of people, society and the environment against harmful exposure malicious use of such material.

Article 4: Exclusions

This regulation does not apply to the import, export or transit of radioactive material that are exempt from regulatory control and approved by the Regulatory Authority

Article 5: Definitions

As used in this regulation:

Authorization means a legal document with a validity period of less than five (5) years, issued by the Regulatory Authority, approving the holder to import or export radioactive sources.

Competent Authority means a governmental organization or institution that has been designated by the Government of Rwanda to carry out one or more nuclear security functions. Competent authorities may include regulatory bodies, law enforcement, customs and border control, intelligence and security agencies or health agencies, etc.

Export means the physical transfer, originating from an exporting State, into an importing State or to a recipient in an importing State, of one or more radioactive source(s).

Exporting Facility means a legally recognized business, structure, or location in an exporting State from which nuclear and/or radioactive material are exported to an importing State or to a recipient in an importing State.

Exporting State means the State of origin of an export of nuclear and/or radioactive material to an importing State or a recipient in an importing State.

Import means the physical transfer, into an importing State or to a recipient in an importing State, originating from an exporting State, of nuclear and/or radioactive material.

Importing State means the State of final destination for a physical transfer of nuclear and/or radioactive material from an exporting State or an exporting facility.

Radioactive Material means material designated in national law or by a regulatory Authority as being subject to regulatory control because of its radioactivity.

Radioactive Sources means a type of 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.

Recipient means the natural or legal person in an importing State that receives nuclear and/or radioactive material exported by an exporting State or an exporting facility in the exporting State.

Regulatory Authority means an entity or organization designated by the government of a State as having legal authority for exercising regulatory control with respect to nuclear and/or radioactive material, including issuing authorizations, and thereby regulating one or more aspects of the safety or security of such material.

Regulatory Control means any form of control or regulation applied to facilities or activities by a regulatory Authority for reasons related to radiation protection or to the safety or security of nuclear and/or radioactive material.

Safety: means measures intended to minimize the likelihood of accidents involving nuclear and/or radioactive material and, should such an accident occur, to mitigate its consequences.

Security means measures to prevent unauthorized access or damage to, and loss, theft or unauthorized transfer of, nuclear and/or radioactive material.

CHAPTER II: GENERAL OBLIGATIONS

Article 6: Obligations of the Licensee and/or other Relevant Parties

The licensee and any entity permitted to be involved in the Transit or Trans-shipment of Nuclear and/or radioactive material (including shipping and clearing agents) shall provide the Regulatory Authority with any information related to the Transit or Trans-shipment of Nuclear and /or radioactive material any time it's deemed necessary or if requested. Shipping and clearing agents shall not accept any unlicensed or any unauthorized shipments of Nuclear and/or radioactive material to cross in or out Rwandan borders.

Article 7: Provision of financial justification and other relevant documents

The Licensee shall provide the Regulatory Authority with an official copy of the invoice along with other relevant documents deemed necessary for any nuclear or radioactive material upon the entry or exit of such regulated items in to or out of Rwanda.

Article 8: Provision of correct and complete information

Information required by Law and this regulation, which is provided to the Regulatory Authority by the applicant and other relevant parties in order to obtain a License, shall be correct and complete.

Article 9: Compliance with other laws and regulations

License issued under this regulation do not relieve Licensees from complying with any other applicable laws or regulations, or any related agreements assented or acceded by the Government of Rwanda.

Article 10: Liability

- 1) The licensee shall be liable for any damage, leak, failure or loss of nuclear and/or radioactive material during the importation, exportation or transit;
- 2) The licensee shall be held responsible for any violations and remain liable for any claims made by any third party;
- 3) The licensee shall be responsible for any expenses related to transportation, storage or inspection of nuclear and other radioactive material during the course of importation, exportation or transit of a nuclear and other radioactive material if the transport has been suspended or prohibited as a result of import and/or export without a License or permit.

Article 11: Notification of arrival or exit

The licensee shall immediately communicate to The Regulatory Authority within 24 hours the arrival or exit from the territory of Rwanda for any Nuclear Material, Nuclear Related Items and/ or other radioactive material.

Article 12: reporting

The Licensee shall provide a written report to the Regulatory Authority on any Transfer of Regulated Items. These reports shall be provided within three working days after the end of each transfer.

Without prejudice to other provisions of this regulation, the Regulatory Authority has the right to request specific reports on the transfer of nuclear or/and other radioactive material and the Licensee shall provide such reports to the Regulatory Authority within the period determined in its request.

Upon request by the Regulatory Authority, concerned parties shall justify, clarify or reconcile any inconsistency in reports provided pursuant to this regulation.

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CHAPTER III: LICENSING REGIME AND LICENSE REQUIREMENTS

Article 13: Validity of Authorization

- 1) Import requests for consents or authorization shall be granted when accompanied by a license that is valid for six (6) months from its final approval date for receipt and possession?
- 2) Export requests shall be granted with a license that is valid for six (6) months from its final approval date
- 3) Transit shall be granted with authorization for one (1) month from its final approval date

Article 14: Import license application

Any person who intends to import nuclear and/or other radioactive material shall apply to the Regulatory Authority and provide the following documents:

- 1) a copy of a business registration certificate;
- 2) Written agreement between applicant and the manufacturer to return or exchange? disused or depleted nuclear and/or other radioactive materials/sources or related equipment after use
- 3) Proof of payment (application fee) as provided in Annex I;
- 4) Radiation protection programme;
- 5) Emergency and transport security plans;
- 6) Compliance of radioactive materials and equipment incorporating the sources with recognized international standards;
- 7) Details of the preparations made for premises at which the radioactive materials will be stored prior to installation; and used or installed as measures for appropriate storage of radioactive material when not in use, before installation or its transit from replacement to final disposal;
- 8) Any other information that may be required by the Regulatory Authority.

Each import requires a specific and unique license unless more than one package of material of the same nature, and for the same end purpose, are imported all together.

License applications shall be performed through means provided by the regulatory Authority

Article 15: Export license application

Any person who intends to export nuclear and/or other radioactive material shall apply to the Regulatory Authority and provide the following documents:

- 1) A copy of a valid business registration certificate
- 2) Written agreement between applicant and the manufacturer to return or change disused or depleted nuclear and/or other radioactive material/sources or related equipment after use
- 3) Import license issued by the Competent Authority from the Country of final destination
- 4) Proof of payment (application fee) as provided in Annex I;
- 5) Emergency and transport security plans to the point of exit;
- 6) Any other information that may be required by the Regulatory Authority.

Each export requires a specific and unique license unless more than one package of material of the same nature, and for same end purpose, are exported all together.

License applications shall be performed through means provided by the regulatory Authority

Article 16: Application assessment

Following the submission of a License application and upon scrutiny/ analysis of the application:

1. The license will be granted Within twenty (20) working days following receipt of a complete application if deems fit or
2. The applicant will be requested to provide additional information within fifteen (15) working days; If the application is incomplete,
3. The application will be Rejected and the applicant will be informed in writing of its reasons for rejection;

Article 17: Modification of the License

the modification of the license may be requested by the licensee or initiated by the regulatory Authority when deemed necessary.

Article 18: Transfer of the License

The transfer of licenses including the direct or indirect sale, assignment, conveyance, lease or other transfer of assets or activities subject to a license to a different individual or institution shall be subject to a prior written approval of the Regulatory Authority.

Such approval shall be granted by the Regulatory Authority after consideration of the matter and if the proposed transferee meets all the conditions to be granted the relevant license.

The duration of the license and the license terms and conditions shall remain the same, unless the license transferee requests a license modification as part of the transfer proceedings.

Article 19: Procedure for license transfer

A license transfer proceeding is initiated by an application from the licensee stating the reasons for such transfer and shall be accompanied by the evidence of payment of all fees and levies required by law by the transferor as well as the shareholding structure of the transferee if any.

Article 20: Revocation of License

The Regulatory Authority may revoke a license upon a determination of any of the following:

- 1) The licensee has committed a violation of the provisions of this regulation or any license obligations;
- 2) The licensee has committed a violation which the Regulatory Authority determines, may cause substantial harm to the public society and the environment;
- 3) The license holder failure to comply with authorization terms and conditions;
- 4) The license holder submitted false or deliberately misleading data or information to the Regulatory Authority while applying for the authorization;

Any person whose license has been revoked shall be eligible for re-application within a period of five years from the date of revocation.

Upon revocation, the license shall be returned to the Regulatory Authority within fourteen (14) calendar days.

Article 21: Obligations of the License holder

Under this regulation, a holder of an import or export License shall have the following obligations:

1. Comply with the requirements set out in this regulation and any applicable laws.
2. To notify the Regulatory Authority of the dates of import or export of nuclear/radioactive material before at least 7 working days.

In the event of non-compliance in respect to this regulation and obligations of a given license, the Regulatory Authority may:

- (a) subject the operator to Administrative fines stipulated in this regulation or any other regulatory sanctions;
- (b) revoke the license.
- (c) take any other action deemed fit within its regulatory authority.

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CHAPTER IV: REQUIREMENTS FOR EXPORT AND IMPORT OF NUCLEAR AND /OR RADIOACTIVE MATERIALS

Article 22: Confirmation from the importing State

In applying for an export license, the applicant shall submit to the Regulatory Authority a confirmation from the importing State that the recipient is authorized to receive and possess the export, or a copy of the recipient's authorization issued by the regulatory authority in the importing state.

The recipient's license must include the following information:

- (a) Name of the recipient;
- (b) Recipient's location and legal address or principal place of business;
- (c) Relevant radionuclides and activity (in Bq);
- (d) Intended end-use(s); and
- (e) Expiry date (if any) of the recipient's authorization or license.
- (f) Any other information that the Regulatory Authority may require

Article 23: Notification of export to the importing State

- 1) If granted an export license, the exporting facility shall notify the importing state in advance of each shipment of the following information in writing:
 - (a) Estimated date of export;
 - (b) Name of the exporting facility;
 - (c) Name of the recipient;
 - (d) Radionuclides and activity (in Bq) on a date specified by the exporting State;
 - (e) The number of radioactive sources, their aggregated activity and, if available, their unique identifiers
 - (f) Any other information that the Regulatory Authority may require
- 2) This notification shall take place at least seven (7) calendar days in advance of shipment and avail a copy to the Regulatory Authority in the exporting state.

Article 24: Consistency with relevant international standards for transport of nuclear and/or radioactive material

The exporting facility is held responsible to ensure that the export is conducted in a manner consistent with relevant international standards relating to the transport of nuclear and/or radioactive materials.

Article 25: Conditions to obtain an export license

- 1) The authorization to export nuclear and/ or radioactive material is only granted by the Regulatory Authority if the recipient country to receive the export accepts in accordance with related applicable laws and regulations.
- 2) If there is any potential to pose any threat to Nuclear Non-Proliferation as defined by the Treaty on the Non-Proliferation of Nuclear Weapons, the Regulatory Authority deserves the right to withhold the application and carry out necessary investigations in collaboration with other Competent Authorities.

Article 26: Conditions to obtain an import license

- 1) Prior to importation of nuclear and/or radioactive material, the recipient shall apply to The Regulatory Authority for import authorization and in the process provide:
 - (a) An operating license to use and/or possess Nuclear/Radioactive Material in Rwanda;
 - (b) The exporting facility's Export authorization or its equivalent from the exporting State indicating that the exporting facility is authorized to do so.
- 2) To the extent within its responsibility, make arrangements to ensure that the import of nuclear and/or radioactive material is conducted in a manner consistent with existing relevant international standards.

Article 27: Exceptional Circumstances

If the provisions of articles 16 and 17 of this regulation cannot be followed with respect to a particular import or export, the Regulatory Authority can, after receiving a request from the importing or exporting facility, consider whether the import or export may be authorized in exceptional circumstances.

Exceptional circumstances should be considered as:

- (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 nuclear and/or radioactive material; or
- (c) Cases in which the exporting facility or exporting State maintains control of nuclear and /or radioactive material throughout the period that the material is outside of the exporting State, and the exporting facility or exporting State removes the material at the conclusion of this period.

Article 28: Transit of nuclear and other radioactive material across the territory of Rwanda

The transiting shipper shall ensure that the Transit of nuclear and/or radioactive material is conducted in a manner consistent with relevant national and international standards relating to the transport of nuclear/radioactive materials.

Upon the request of the Regulatory Authority, the transiting shipper shall provide information about their counterpart or a copy of the counterpart's relevant licenses.

For safety and security concerns within the territory of Rwanda, the Regulatory Authority may, in collaboration with security organizations, organize an escort from one border to another border

Article 29: Transit Notification of nuclear and/or radioactive material across the territory of Rwanda

- 1) Prior to entering the territory of Rwanda for transit of nuclear and/or radioactive material, the recipient shall notify The Regulatory Authority and acquire the authorization to transit such material.
- 2) Required fees shall be paid prior to obtaining the transit authorization as indicated in annex I of this regulation and proof of payment shall be submitted along with other required document(s).
- 3) When notifying the Regulatory Authority, the following information should be provided:
 - (g) Estimated date of entry;
 - (h) Expected point of entry in Rwanda;
 - (i) Expected point of exit out Rwanda;
 - (j) Country of origin of the shipment and related regulatory documents including valid export license or its equivalent issued by the Competent Authority of the Country of origin
 - (k) Name of the shipper;
 - (l) Country of final destination of the shipment and related regulatory documents including valid import license or its equivalent issued by the Competent Authority of the Country of final destination
 - (m) Transport license issued by one of the two ending shipping countries (Country of origin or Country of final destination)
 - (n) Name of the recipient;
 - (o) Radionuclides and activity (in Bq: Becquerel) on a date specified by the exporting State;
 - (p) The number of nuclear material or radioactive sources, their aggregated activity and, if available, their unique identifiers
 - (q) Any other information that the Regulatory Authority may require

Article 30: Conditions to be granted an authorization of transit authorization

The authorization of transit of a nuclear and/ or other radioactive material is only granted by the Regulatory Authority if the recipient (shipper) fulfills requirements and holds valid transfer documents from both the sending State and the receiving State;

Article 31: Categorization scheme of sealed sources

Any Licensee or applicant shall ensure that sealed sources are categorized in accordance with the categorization scheme set out in Annex III of this regulation, and in accordance with the requirements of the Regulatory Authority and satisfies requests for information by governmental or international organizations.

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CHAPTER VI: FAULTS AND ADMINISTRATIVE SANCTIONS

Article 32: Administrative sanctions

Without prejudice to other sanctions that may be provided under other Laws and Regulations, any person who contravenes to this regulation commits a fault and is liable to an administrative sanction provided under this chapter.

Article 33: Import, export or transit without A license

Any person who imports, exports or transits a nuclear or/and other radioactive material without a License or prior written authorization by the Regulatory Authority Commits a fault and is liable to an administrative fine as follows:

- 1) If the item is a nuclear material category 1, the fine is Twenty million Rwandan Francs (20,000,000Frws)
- 2) If the item is a nuclear material category 2, the fine is fifteen million Rwandan Francs (15,000,000Frws)
- 3) If the item is nuclear material category 3, the fine is Ten million Rwandan Francs (10,000,000Frws)
- 4) If the item is a category 1 or 2 radioactive material, a fine is ten million Rwandan Francs (10,000,000Frws)
- 5) If the imported item is category 3,4, or 5 radioactive material, a fine is five million Rwandan Francs (5,000,000Frws)

Article 34: Failure to notify the regulatory Authority

Any person who fails to notify the Regulatory Authority on import, export and transit of nuclear and/or radioactive material as provided in this regulation commits a fault and is liable to an administrative fine of two million Rwandan Francs (2,000,000Frw)

Article 35: Failure to comply with enforcement notice

Any person who fails to comply with enforcement notice by the Regulatory Authority commits a fault and is liable to an administrative fine of One million Rwandan Francs (1,000,000Frw)

CHAPTER VIII: TRANSITIONAL AND FINAL PROVISIONS

Article 36: Transitional period

All activities related to import, export or transit of nuclear and/or radioactive material have to comply with this regulation from the date of its signature.

Article 37: Repealing provision

All import, export, or transit prior provisions, contrary to this regulation, are hereby repealed

Article 38: Commencement

This regulation shall come into force on the date of its signature by the Chairperson of the Regulatory Board

Done at Kigali on .../..... /2023

Chairperson of the Regulatory Board

ANNEX I: FEE SCHEDULE FOR IMPORT, EXPORT AND TRANSIT OF NUCLEAR AND/OR RADIOACTIVE MATERIAL

		DURATION	FEES(FRW)
IMPORT & EXPORT OF NUCLEAR MATERIAL			
1.	Nuclear Material Category I	Six (6) months	5,000,000
2.	Nuclear Material Category II		3,000,000
3.	Nuclear Material Category III		2,000,000
IMPORT & EXPORT OF RADIOACTIVE MATERIAL			
1.	Radioactive Sources Category I	Six (6) months	2,000,000
2.	Radioactive Sources Category II		1,500,000
3.	Radioactive Sources Category III		1, 000,000
4.	Radioactive Sources Category IV		500,000
5.	Radioactive Sources Category V		500,000
TRANSIT OF NUCLEAR AND/OR RADIOACTIVE MATERIAL			
1	Nuclear Material Category I	One (1) month	2,000,000
2	Nuclear Material Category II		2,000,000
3	Nuclear Material Category III		2,000,000
4	Radioactive Sources Category I		1,000,000
5	Radioactive Sources Category II		500,000
6	Radioactive Sources Category III		100,000
7	Radioactive Sources Category IV		No fees required
8	Radioactive Sources Category V		

Annex II: Categorization of Nuclear Material

Material	Form	Category I	Category II	Category III ³
1.Plutonium ¹	Unirradiated ²	2 kg or more	Less than 2 kg but more than 500 g	500 g or less but more than 15 g
2.Uranium-235	Unirradiated ² - uranium enriched to 20% ²³⁵ U or more	5 kg or more	Less than 5 kg but more than 1kg	1 kg or less but more than 15g
	- uranium enriched to 10% ²³⁵ U but less than 20 % ²³⁵ U		10 kg or more	Less than 10kg but more than 1 kg
	- uranium enriched above natural, but less than 10 % ²³⁵ U			10 kg or more
3.Uranium-233	Unirradiated ²	2 kg or more	Less than 2 kg but more than 500 g	500 g or less but more than 15 g
Irradiated fuel			Depleted uranium or natural uranium, thorium or low enriched fuel (less than 10% fissile content)	

¹All plutonium except that with isotopic concentration exceeding 80 percent in plutonium-238.

² Material not irradiated in a reactor or material irradiated in a reactor but with a radiation level equal to or less than 1 Gy/h (100 rad/h) at 1 m unshielded.

³ Quantities not falling in Category III and natural uranium, depleted uranium and thorium should be protected at least in accordance with prudent management practice.

In case of different nuclear material in the same conveyance, the total amount of nuclear material in a single conveyance should be used in determining the categorization of the conveyance and, hence, in identifying appropriate physical protection measures for the conveyance.

ANNEX III: CATEGORIES FOR SEALED SOURCES USED IN COMMON PRACTICES

Table III.1 shows categories for sealed sources used in common practices, and Table III.2 shows the activity corresponding to a dangerous source (D value) for selected radionuclides.

TABLE III.1. CATEGORIES FOR SEALED SOURCES USED IN COMMON PRACTICES

Category	Ratio of activity in the source to activity that is considered dangerous ^a (A/D)	Example of sources ^b and practices
1	$A/D \geq 1000$	Radioisotope thermoelectric generators; Irradiators; Teletherapy sources; Fixed, multibeam teletherapy ('gamma knife') sources
2	$1000 > A/D \geq 10$	Industrial gamma radiography sources; High/medium dose rate used for brachytherapy sources.
3	$10 > A/D \geq 1$	Fixed industrial gauges incorporating high activity sources; Well logging gauges.
4	$1 > A/D \geq 0.01$	Low dose rate brachytherapy sources (except eye plaques and permanent implants); Industrial gauges not incorporating high activity sources; Bone densitometers; Static eliminators.
5	$0.01 > A/D$ and $A >$ level for exemption ^c	Low dose rate brachytherapy eye plaques and permanent implant sources; X-ray fluorescence devices; Electron capture devices; Mossbauer spectrometry sources; Positron emission tomography check sources.

^aA is the activity of the radionuclide in a source and D is the activity of that radionuclide that is regarded as dangerous. A dangerous source is defined as one that could, if not under control, give rise to exposure sufficient to cause severe deterministic effects. Values of D for selected radionuclides are given in Table III.2 on the basis of the quantity of radioactive material that could give rise to severe deterministic effects for given exposure scenarios and for given dose criteria. This column of the table can, thus, be used to determine the category of a source, purely based on the value of A/D. This may be appropriate if, for example: the practice is not known or is not listed; if sources have a short half-life and/or are unsealed; or if sources are aggregated.

^b Factors other than A/D have been taken into consideration in assigning these sources to a particular category

^cLevels for exemption are given in Table II.

TABLE III.2. ACTIVITY^a CORRESPONDING TO A DANGEROUS SOURCE (D VALUE^b) FOR SELECTED RADIONUCLIDES

Radionuclide	D value (TBq)	Radionuclide	D value (TBq)
Am-241	6×10^{-2}	Mo-99	3×10^{-1}
Am-241/Be	6×10^{-2}	Ni-63	6×10^1
Au-198	2×10^{-1}	P-32	1×10^1
Cd-109	2×10^1	Pd-103	9×10^1
Cf-252	2×10^{-2}	Pm-147	4×10^1
Cm-244	5×10^{-2}	Po-210	6×10^{-2}
Co-57	7×10^{-1}	Pu-238	6×10^{-2}
Co-60	3×10^{-2}	Pu-239/Be	6×10^{-2}
Cs-137	1×10^{-1}	Ra-226	4×10^{-2}
Fe-55	8×10^2	Ru-106 (Rh-106)	3×10^{-1}
Gd-153	1×10^0	Se-75	2×10^{-1}
Ge-68	7×10^{-2}	Sr-90 (Y-90)	1×10^0
H-3	2×10^3	Tc-99m	7×10^{-1}
I-125	2×10^{-1}	Tl-204	2×10^1
I-131	2×10^{-1}	Tm-170	2×10^1
Ir-192	8×10^{-2}	Yb-169	3×10^{-1}
Kr-85	3×10^1		

^aSince this table does not state which dose criteria were used; these D values cannot be used 'in reverse' to derive possible doses from exposure due to sources of known activity.

^bFull details of the derivation of the D values and D values for additional radionuclides are provided in References [29] of IAEA International Basic Safety Standards (General Safety Standards Part 3).