**Codebook for Radiological Trade Controls Measure Level Database**

**13 November 2018 v1.2**

Variable 001

Variable Name: State Name

Variable Description: UN Member State Names

Value Type: Alpha

Variable Values and Labels: e.g., Afghanistan …. Zimbabwe

Source: <https://unstats.un.org/unsd/methodology/m49/>

Special Coding Rules:

Variable 002

Variable Name: State Code

Variable Description: UN Member State M49 ISO codes

Value Type: Numeric

Variable Values and Labels: 4-894

Source: <https://unstats.un.org/unsd/methodology/m49/>

Special Coding Rules:

Variable 003

Variable Name: State Measure Identifier

Variable Description: UN Member State M49 ISO code plus unique number for each measure

Value Type: Numeric

Variable Values and Labels: M49 ISO code plus 0.001-0.999

Source(s): <https://unstats.un.org/unsd/methodology/m49/>

Special Coding Rules:

Variable 004

Variable Name: State Measure Title

Variable Description: Official Title of Measure

Value Type: Alpha

Variable Values and Labels: Include

Source(s): Measure

Special Coding Rules: Official full title or official short title, but if not available put “unofficial” in parentheses.

Variable 005

Variable Name: Language of Origin

Values: Alpha

Variable Values and Labels:

Variable Description: Original Language of Measure

Source(s): Measure

Special Coding Rules: If not clear, leave it as missing data.

Variable 006

Variable Name: Language Used

Variable Description: Language of Measure Used in Data Collection

Values: Alpha

Variable Values and Labels:

Source(s): Measure

Special Coding Rules: Include a URL link in parentheses or list “URL unavailable” or “URL under construction”

Variable 007

Variable Name: Rad Trade Control Bodies

Variable Description: The name(s) of the government bodies in the measure that exercise regulatory jurisdiction controls on trade in radioactive sources over

Values: Alpha

Variable Values and Labels:

Source(s): Measure

Special Coding Rules: The regulatory bodies need not be a specialized nuclear regulatory authority. If the measure lists a regulatory body within a Ministry or higher bureaucratic body, link to the agency, not the higher body. Include a URL to each body in parentheses or list “URL unavailable” or “URL under construction.” Don’t name a specific entity? Enter “Uncertain”

Variable 008

Variable Name: Number of Regulatory Bodies

Variable Description: The number of government bodies in the measure that exercise regulatory jurisdiction over offenses and violations identified in the measure or linked to another measure?

Values: Numeric

Variable Values and Labels: 0, 1, 2, …

Source(s): Measure

Special Coding Rules:

Variable 009

Variable Name: Regulatory Body Type(s)

Variable Description: The type(s) of the government bodies in the measure that exercise regulatory jurisdiction over offenses and violations

Value Type: Numeric

Variable Values and Labels: Recode as 1 = Nuclear Regulatory Authority; 2 = Other Authority; 3 = Both 1 and 2

Source(s): Measure

Special Coding Rules:

Variable 010

Variable Name: Export Authorization Category 1

Variable Description: Measure creates licensing requirements for exporting IAEA Category 1 sources

Value Type: Numeric

Variable Values and Labels: 1 = Has requirements; 0 = No requirements

Source(s): Measure

Special Coding Rules: 1 = If the measure creates any trade authorization requirements on stakeholders, even if relatively general; 0 = No trade authorization requirements on stakeholders

Variable 011

Variable Name: Other Export Authorization(s)

Variable Description: Measure requires an authorization/licensing system to export rad sources other than just Category 1 sources

Value Type: Numeric

Variable Values and Labels: 1 = Has requirements; 0 = No requirements

Source(s): Measure

Special Coding Rules:

Variable 012

Variable Name: Notify Importing State

Variable Description: Measure creates obligations to notify the State importing radioactive sources

Value Type: Numeric

Variable Values and Labels: 1 = Requires notification; 0 = No requirements

Source(s): Measure

Special Coding Rules:

Variable 013

Variable Name: Exceptions to Authorization

Variable Description: Measure establishes exceptions beyond exigent circumstances for export authorizations

Value Type: Numeric

Variable Values and Labels: 1 = Has exceptions; 0 = No exceptions

Source(s): Measure

Special Coding Rules: Exceptions must exist other than those for extraordinary circumstances.

Variable 014

Variable Name: Import Authorization

Variable Description: Measure requires authorization for the import of radioactive sources

Value Type: Numeric

Variable Values and Labels: 1 = Requires authorization; 0 = No requirement

Source(s): Measure

Special Coding Rules:

Variable 015

Variable Name: Transit Controls

Variable Description: Measure has controls transit of radioactive sources

Value Type: Numeric

Variable Values and Labels: 1 = Establishes controls; 0 = No controls

Source(s): Measure

Special Coding Rules: Goods in a vessel stay in that vessel and never enter the economy of a country (or enter the country’s customs jurisdiction).

Variable 016

Variable Name: Transshipment Controls

Variable Description: Measure has controls on transshipment of radioactive sources

Value Type: Numeric

Variable Values and Labels: 1 = Establishes controls; 0 = No controls

Source(s): Measure

Special Coding Rules: Goods in a vessel that are placed in a new vessel and may or may not enter a country’s economy.

Variable 017

Variable Name: Re-Export Controls

Variable Description: Measure has controls on re-export of radioactive sources

Value Type: Numeric

Variable Values and Labels: 1 = Establishes controls; 0 = No controls

Source(s): Measure

Special Coding Rules:

Variable 018

Variable Name: List of Types of Controlled Sources

Variable Description: Measure establishes, contains or refers to a list of types of controlled radioactive sources

Value Type: Numeric

Variable Values and Labels: 1 = Establishes, contains or refers to a list; 0 = No list

Source(s): Measure

Special Coding Rules:

Variable 019

Variable Name: Prohibitions

Variable Description: Measure identifies prohibited activities

Value Type: Numeric

Variable Values and Labels: 1 = identifies prohibited activities; 0 = does not identify prohibited activities

Source(s): Measure

Special Coding Rules: These include prohibitions of actions without a license

Variable 020

Variable Name: Text Location of Prohibitions

Variable Description: Specific paragraph or article identifying prohibited activities

Value Type: Alpha

Variable Values and Labels:

Source(s): Measure

Special Coding Rules:

Variable 021

Variable Name: Offences or Violations

Variable Description: Measure defines offences or violations (i.e. **criminal or intentional unauthorized acts**)

Value Type: Numeric

Variable Values and Labels:

Source(s): Measure

Special Coding Rules:

Variable 022

Variable Name: Text Location of Offences or Violations

Variable Description: Specific paragraph or article of definitions of offences or violations (i.e. **criminal or intentional unauthorized acts**)

Value Type: Alpha

Variable Values and Labels:

Source(s): Measure

Special Coding Rules: Only list the articles where the offenses are defined.

Variable 023

Variable Name: Death Penalty

Variable Description: Inclusion of death as a penalty.

Value Type: Numeric

Variable Values and Labels: 1 = Has the death penalty; 0 = does not have the death penalty

Source(s): Measure

Special Coding Rules:

Variable 024

Variable Name: Max Prison

Variable Description: The maximum prison sentence for any defined offense or violation in months.

Value Type: Numeric

Variable Values and Labels: 0-360 or greater, with no prison penalty option counted as 0

Source(s): Measure

Special Coding Rules: Life imprisonment = 600 months

Variable 025

Variable Name: Max Min Prison

Variable Description: The maximum for any minimum prison sentence for any defined offense or violation in months

Value Type: Numeric

Variable Values and Labels: 0-600, with no minimum prison penalty counted as 0

Source(s): Measure

Special Coding Rules:

Variable 026

Variable Name: Max Monetary Local

Variable Description: The maximum monetary penalty for any defined offense or violation, in national currency

Value Type: Numeric

Variable Values and Labels: 0-999,999,999, with no monetary penalty option counted as 0

Source(s): Measure

Special Coding Rules:

Variable 027

Variable Name: Max Min Monetary Local

Variable Description: The maximum minimum monetary penalty for any defined offense or violation, in national currency

Value Type: Numeric

Variable Values and Labels: 0-999,999,999, with no monetary penalty option counted as 0

Source(s): Measure

Special Coding Rules:

Variable 028

Variable Name: Max Fine USD

Variable Description: The maximum fine for any defined offense or violation, in USD

Value Type: Numeric

Variable Values and Labels: 0-999,999,999, with no fine penalty counted as 0

Source(s): Measure

Special Coding Rules:

Variable 029

Variable Name: Max Min Fine USD

Variable Description: The minimum fine prison for any defined offense or violation, in USD

Value Type: Numeric

Variable Values and Labels: 0-999,999,999, with no monetary penalty counted as 0

Source(s): Measure

Special Coding Rules:

Variable 031

Variable Name: Graduated Penalties

Variable Description: Measure has graduated penalties for more serious offenses

Value Type: Numeric

Variable Values and Labels: 1 = Has graduated penalties; 0 = does not have graduated penalties

Source(s): Measure

Special Coding Rules: Increased penalties for repeat offenders counts as graduated

Variable 031

Variable Name: Combined Penalties

Variable Description: Measure allows for combinations of penalties for offenses (e.g., fines and imprisonment)

Value Type: Numeric

Variable Values and Labels: 1 = Allows for combined penalties for offenses; 0 = does not allow for combined penalties

Source(s): Measure

Special Coding Rules:

Variable 032

Variable Name: Other Penalties

Variable Description: Penalties other than imprisonment, fines, licensing, warning, or corrective action identified in other variables

Value Type:

Variable Values and Labels: 1 = Has other penalties; 0 = does not have other penalties

Source(s): Measure

Special Coding Rules: Include a note in the comment variable on the type of penalties. E.g., license revocation, seizures, but we might want to keep track

Variable 033

Variable Name: Text Location for Other Penalty or Penalties

Variable Description: Specific paragraph or article of the other penalties (e. g., seize**)**

Value Type: Alpha

Variable Values and Labels:

Source(s): Measure

Special Coding Rules: Only list the articles where the other penalties are defined.

Variable 034

Variable Name: Enforcement Bodies

Variable Description: The name(s) of the government bodies in the measure that exercise jurisdiction over offenses and violations

Values: Alpha

Variable Values and Labels:

Source(s): Measure

Special Coding Rules: Include a URL to each body in parentheses or list “URL unavailable” or “URL under construction”

Difficulty: Unclear in many instances, often looks as if it’s assumed to be the police

Variable 035

Variable Name: Number of Enforcement Bodies

Variable Description: The number of government bodies in the measure that exercise jurisdiction over offenses and violations

Values: Numeric

Variable Values and Labels: 0, 1, 2, …

Source(s): Measure

Special Coding Rules: See above

Variable 036

Variable Name: Enforcement Body Type(s)

Variable Description: The type(s) of government bodies in the measure that exercise enforcement over offenses and violations

Value Type: Numeric

Variable Values and Labels: Recode as 1 = nuclear authority; 2 = other authority; 3 = combination

Source(s): Measure

Special Coding Rules:

Variable 037

Variable Name: Training for Stakeholders

Variable Description: Does the measure establish or maintain a training program for stakeholders, e.g., users, industry, other government ministries (from Code of Conduct)

Value Type: Numeric

Variable Values and Labels: 1 = Has a training program; 0 = Does not have a training program

Source(s): Measure

Special Coding Rules:

Variable 038

Variable Name: Awareness Raising for Stakeholders

Variable Description: Does the measure establish or maintain awareness raising for stakeholders, e.g., users, industry (from Code of Conduct)

Value Type: Numeric

Variable Values and Labels: 1 = Has an awareness raising program; 0 = Does not have an outreach program

Source(s): Measure

Special Coding Rules: includes general education on import and export of radioactive sources

Variable 039

Variable Name: Awareness raising for the Public

Variable Description: Does the measure establish or maintain awareness raising for the general public (from Code of Conduct)

Value Type: Numeric

Variable 045

Variable Name: Comment

Variable Description: Space for comments by the coder

Value Type: Alpha

Variable Values and Labels:

Source(s): Coder

Special Coding Rules:

Additional Coding Rules

* Don’t include IAEA agreements
* Don’t include repealed Acts or Regulations
* Limit to laws and regulations
* Keep one ROW just for the country and code with no measure numbers, e.g., country, number, then all missing data until the comment section. This allows for some general comments on the country to be kept in this database.

Search Strategy Decisions

* Only include acts that **include radioactive, radiological, or nuclear in the text**. Exclude general customs, health or environmental acts without specific references to those terms.
* Separately, coders should keep track of how much time it takes to code each measure found
* Start with the measures listed in the 1540 Matrix for each country, using OP3 (c) and (d)
* Include Customs laws
* Review the VERTIC database on nuclear measures for that country (it’s better for trade controls than it is for source security measures)
* Search for additional measures on the websites of the national regulatory bodies
* Review PacLii, NATLEX, FAO, Lexadin, wipolex, or similar databases
* Special search terms: penalty, violation, offence (or offense), regist(ry), cadastre, fine, (im)prison, death, life, warn(ing), license, authoriz(ation), nuclear, radio(active/logical), atomic, sanction, infringe(ment), infraction, seize, import, export, transit, trans(s)hipment, re-export
* Treat measures not in English or an easily translatable language as missing data (for now), but record original language, although if possible translate the above terms
* Treat measures not found besides the title as missing data (for now)
* Review statements by States at the IAEA General Conferences since 2014 for new measures and other IAEA presentations