



**TECHNICAL WORKSHOP ON PRACTICAL  
IMPLEMENTATION OF INTERNATIONAL NUCLEAR  
SAFEGUARDS IN LAO PDR**

Asia Pacific | Jan 2024

Strengthening legal frameworks and available legislative assistance: case studies

Facilitated Discussion: Lessons Learned from Lao's experience passing the 2019 Radiation Protection Law

# About VERTIC assistance



VERTIC has been helping states to implement international agreements since 2008. It is an established delivery partner for organisations such as the IAEA, the European Union, US DOS, the OSCE, and the UN. We help states implement agreements such as IAEA safeguards, Chemical Weapons Convention, Biological Weapons Convention, UN Resolution 1540, UN sanctions on North Korea.



In-country assistance



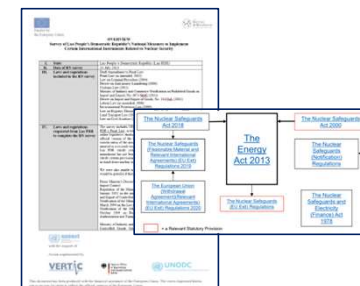
Remote assistance and advice



Multilingual outreach materials



Good practice guides



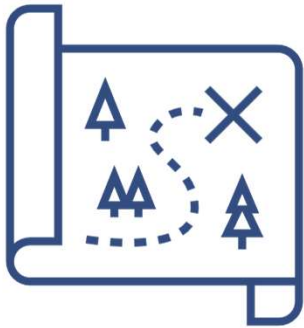
Legislative analysis and assistance

# Why strengthen your legislation?



1. The Comprehensive Safeguards Agreement **requires Lao** to “establish and maintain” a system of accounting for and control of all nuclear material, and “take the necessary steps to ensure that Agency inspectors can effectively discharge their functions.”
2. Establishing nuclear material accountancy and control measures in law ensures that holders of nuclear material **know exactly what they must do** to implement safeguards.
3. A strong legal framework for safeguards can **empower the state authority responsible for safeguards** by:
  - Ensuring the government and legislators support and recognise the authority’s role in meeting international obligations;
  - Equipping the authority with powers to request information, carry out inspections, and enforce safeguards requirements
  - Helping the authority gain the resources, relationships, and cooperation it needs to fulfil safeguards obligations
4. A strong legal framework for safeguards demonstrates to the world and the nuclear energy industry that **Lao is committed to the peaceful and responsible use of nuclear energy.**

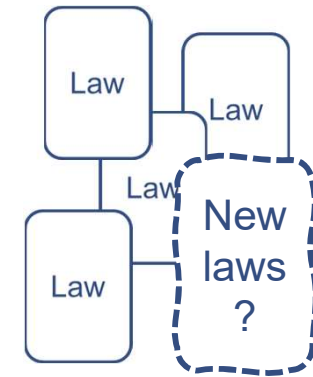
# How to strengthen safeguards legislation



Understand national plans and ambitions for the use of nuclear energy



Understand all the safeguards requirements you need to address (CSA + AP)

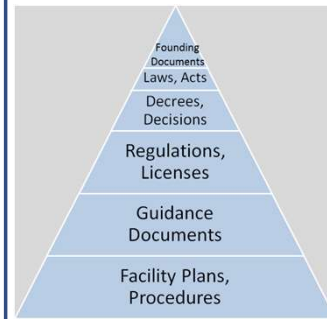


Survey existing laws to identify gaps and consider options

# How to strengthen safeguards legislation



Bring together government stakeholders in nuclear energy and legislation to make a **legislative action plan**



## Structure of legislation changes

What legislative changes do you want to make?

What provisions should be made at what levels (laws vs decisions vs regulations)?

What amendments to other legislation must be made?



## Legislative process

Who is involved in drafting new legislation, and when?

What is the timing and sequence to pass new legislation?

What support and information must be provided to support this process?



## Consultation and collaboration

Which stakeholders need to be involved, and at what stages?

What help is available and how to get it?

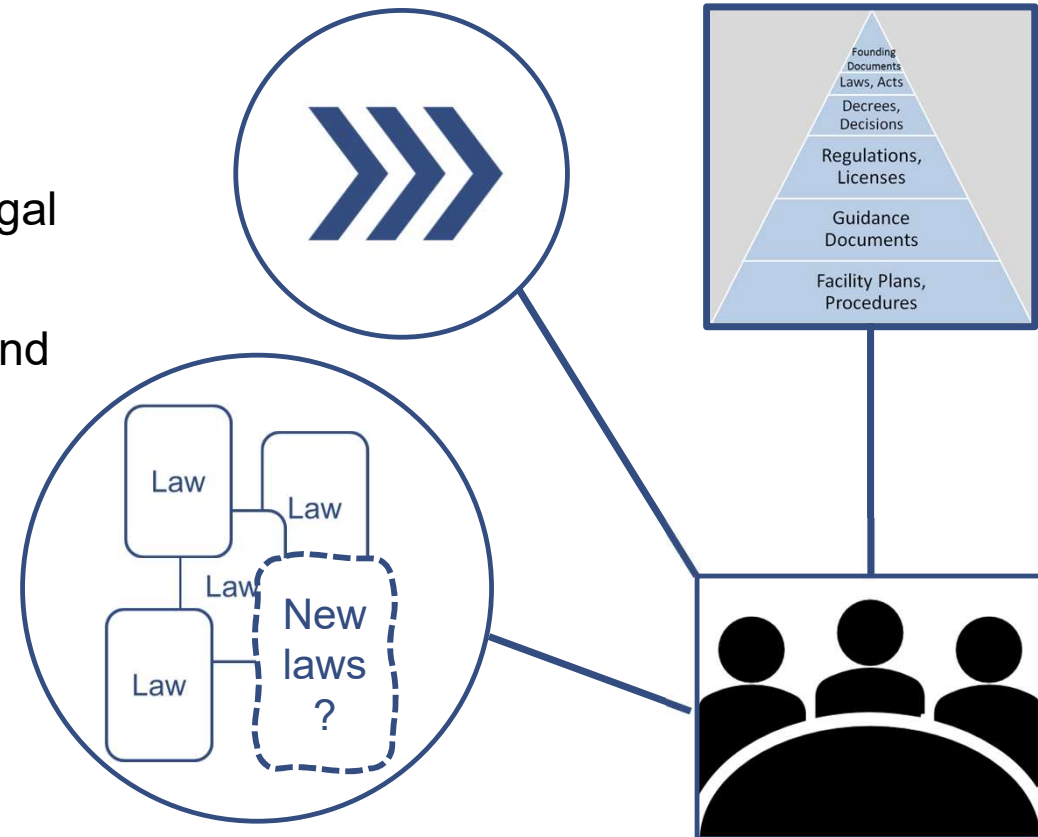
# Case studies



The next few slides explain how other states have strengthened their legal framework to deliver safeguards obligations.

Aims:

1. Demonstrate how other states strengthened their legal framework for safeguards
2. Prompt a discussion about the process of drafting and passing new legislation
3. Share lessons learned from our experiences of strengthening legal frameworks for safeguards



# Case study 1: Vietnam



Establishes the high-level framework for regulating nuclear and radiation activities in Vietnam, including:

- The roles and responsibilities of Ministries and Regulators
- The licensing of radiation and nuclear activities (including import and export control)
- Safety and security obligations on license holders

Law on Atomic  
Energy (2008)  
*No.18/2008/QH12*

## **Key safeguards provisions:**

- Prohibits the development of nuclear weapons and requires that atomic energy activities are for peaceful purposes;
- Empowers the Prime Minister to specify nuclear safeguards requirements;
- Establishes the Vietnam Agency for Radiation and Nuclear Safety (VARANS) and assigns it the role of regulating nuclear safeguards
- Defines some key safeguards terminology:
  - Nuclear material
  - Nuclear source material

# Case study 1: Vietnam



**Using the power provided by the Law on Atomic Energy, the Prime Minister establishes safeguards regulations that:**

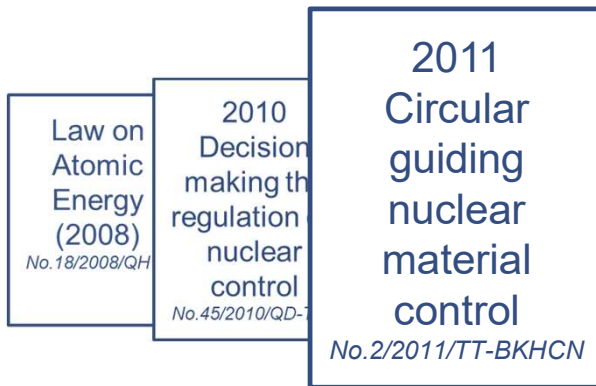
- Define more specific safeguards terminology;
- Prohibit the obstruction of VARANS and IAEA inspections, and the failure to provide safeguards information;
- Require those that hold nuclear material to implement the key tasks of nuclear material accountancy and control, as set out in Vietnam's safeguards agreement with the IAEA;
  - *A graded approach, depending on how much nuclear material is present*
- Facilitates IAEA inspections in Vietnam by:
  - Explaining the nature of those inspections;
  - Explaining that IAEA inspectors must be approved by the Vietnamese State;
  - Providing IAEA inspectors with diplomatic privileges; and
  - Requiring holders of nuclear material to accept IAEA inspections

Law on  
Atomic  
Energy  
(2008)  
*No.18/2008/QH*

2010  
Decision  
making the  
regulation on  
nuclear  
control  
*No.45/2010/QD-TTG*



# Case study 1: Vietnam



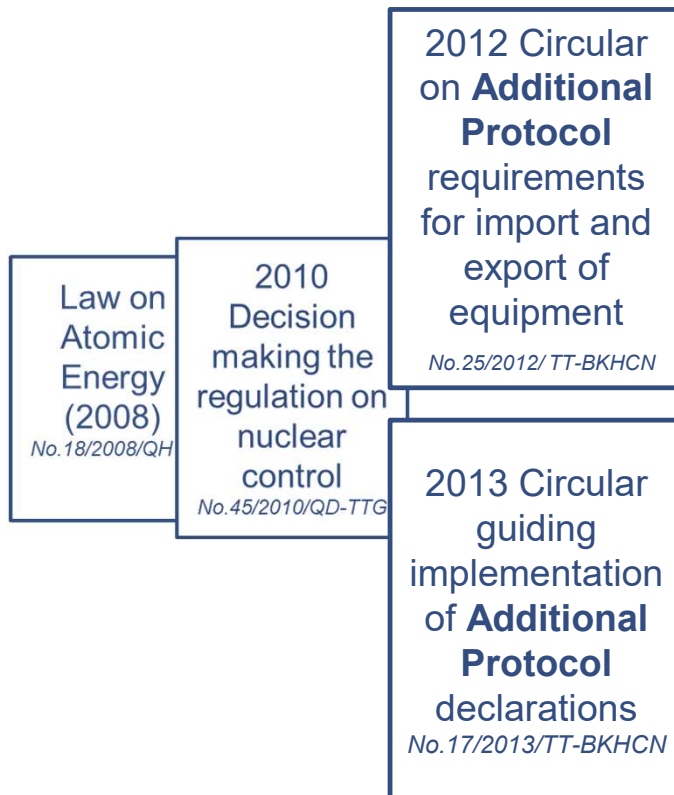
**Using the powers provided by the Law on Atomic Energy, the Ministry circulates detailed safeguards requirements, including:**

- Accounting Records and Operating Records;
- Accountancy Reports to VARANS
- Design Information submissions
- Advance notifications of imports and exports
- Forms that must be used when submitting information to VARANS

# Case study 1: Vietnam

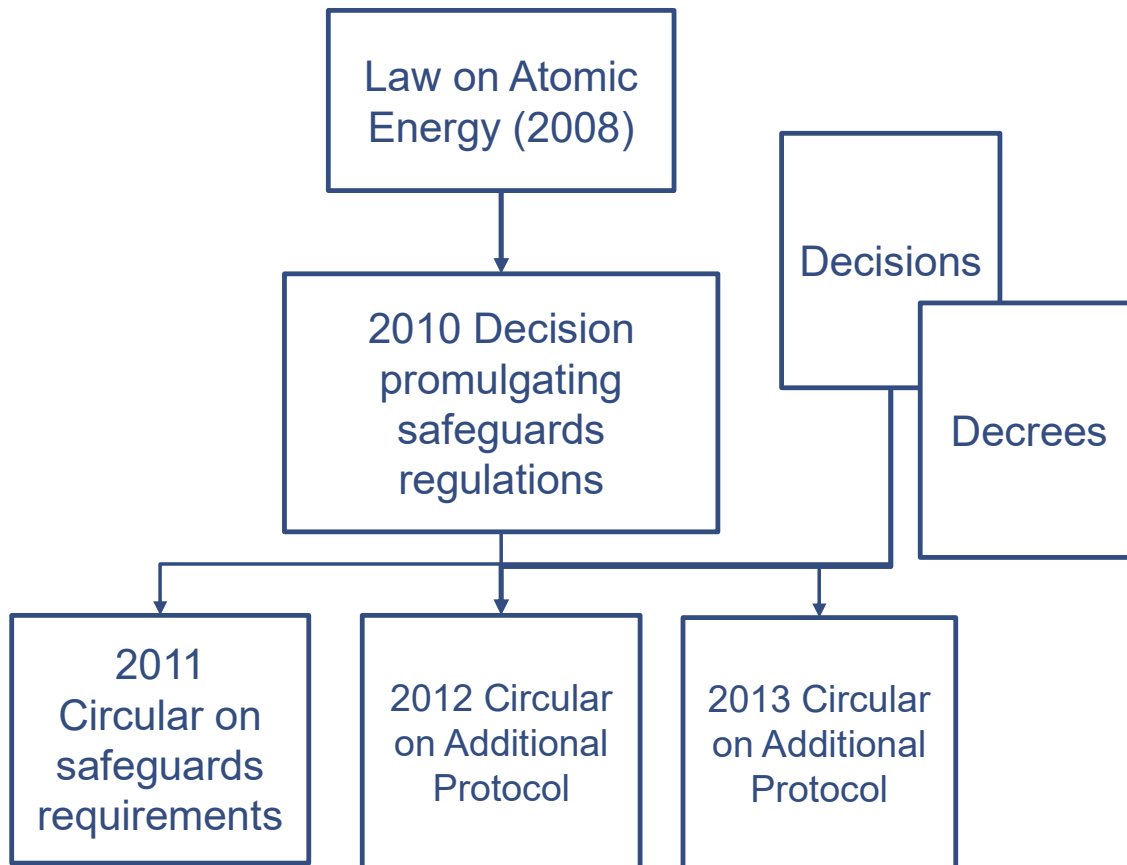


Using the powers provided by the Law on Atomic Energy, the Ministry circulates:



- Declaration requirements for those using, storing, exporting and importing “materials and equipment in the nuclear fuel cycle”, as defined by the Additional Protocol;
- Requirements that those using such material and equipment have proper radiation safety licenses.
- A list of activities (such as fuel cycle research and development) that require declarations under the Additional Protocol;
- Declaration requirements for those carrying out those activities, in line with what is needed by the Additional Protocol;
- Requirements that those carrying out those activities “create favourable conditions” for VARANS and the IAEA to evaluate and confirm declared information.

# Case study 1: Vietnam



1. Successful comprehensive update of safeguards legislation in approximately 5 years.
2. A top-down approach, focussed on one comprehensive law on Atomic Energy, that sets the stage for Government and Ministries to set out more detailed safeguards requirements
3. The main requirements of Vietnam's safeguards agreements are translated directly into regulations, put forward by the Prime Minister using powers from the Atomic Energy Law
4. The Ministry of Science and Technology can then circulate detailed safeguards requirements using powers given by Decrees and Decisions

## Case study 2: New Zealand



New Zealand, like Lao PDR, has no nuclear facilities and very little nuclear material. That material is only used in shielding for radioactive sources or is in the form of uranium ore concentrate passing from Australia to other states.

New Zealand does not intend to expand its use of nuclear material.

Like Lao PDR, it has a modified Small Quantities Protocol (mSQP) in place. It has ratified the Additional Protocol.

New Zealand has a lot of experience implementing safeguards, through a large number of individual regulations. **They replaced all of these with just one law in 2016..**



# Case study 2: New Zealand



2016  
Radiation  
Safety Act

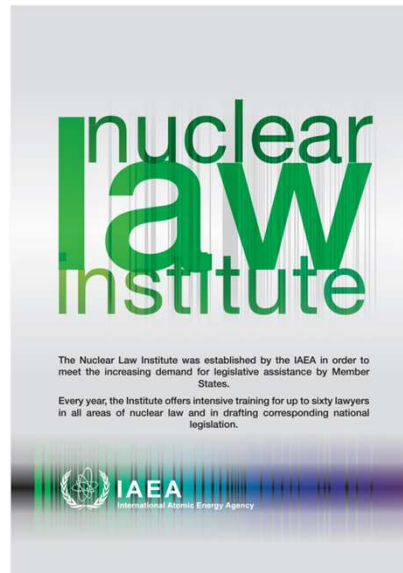
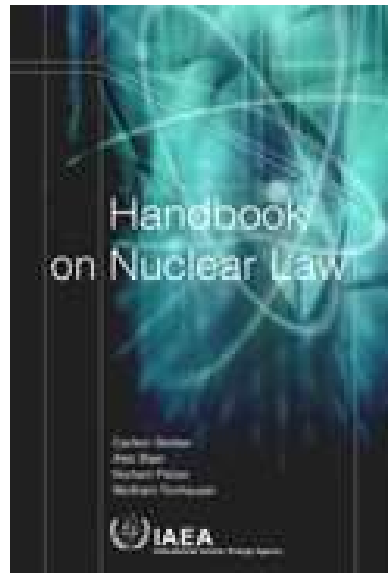
- Establishes a licensing regime for radioactive material to ensure radiation protection and security.
- “Nuclear material” is defined as a subset of radioactive materials, so subject to the same licensing arrangements, including:
  - Government role in maintaining a register of materials
  - Requirement for accounting records and reports
- Authorisation for licenses involving “nuclear material” only given when Regulator is confident that licensee can deliver safeguards requirements.
- Allows regulator inspectors to enter *any place* and ask *any question* if they do so because of compliance with New Zealand’s safeguards obligations
- Allows IAEA inspectors (designated by Regulator) to perform inspections by accompanying regulator inspectors.
- No additional legislation, regulation, or guidance is made regarding nuclear accounting and the Additional Protocol: **they rely on the experience and knowledge of staff in the Regulator and holders of nuclear material.**

# Summary



1. A strong domestic legal framework for safeguards is necessary for the fulfilment of international safeguards obligations.
2. There are many different ways to build safeguards into domestic law. For example, you can:
  - Build on existing laws with new legislation that is specific for safeguards
  - Modify existing laws to include safeguards in existing licensing arrangements
  - Replace existing laws with new legislation covering all aspects of nuclear and atomic energy, including safeguards
3. There is no one single approach to building safeguards into domestic law. Each state has a different situation and different legal framework and will have different safeguards laws.
4. There are many examples demonstrating how states similar to Lao PDR have built safeguards into domestic law, and there is a lot of assistance available to Lao PDR if you want to strengthen legislation.

# Useful resources



**IAEA**

International Atomic Energy Agency

*Atoms for Peace and Development*



**NNSA**  
National Nuclear Security Administration

# Discussion: lessons from past experience?



How did you work with the Government to draft the legislation?



Did the legislative process present any challenges? How did you overcome them?



Who was involved in shaping the content and structure of your legislation? How did you work with them?



Did you have any assistance? What was most helpful?

## Lao PDR Law on Radiation Protection

