Client Alert

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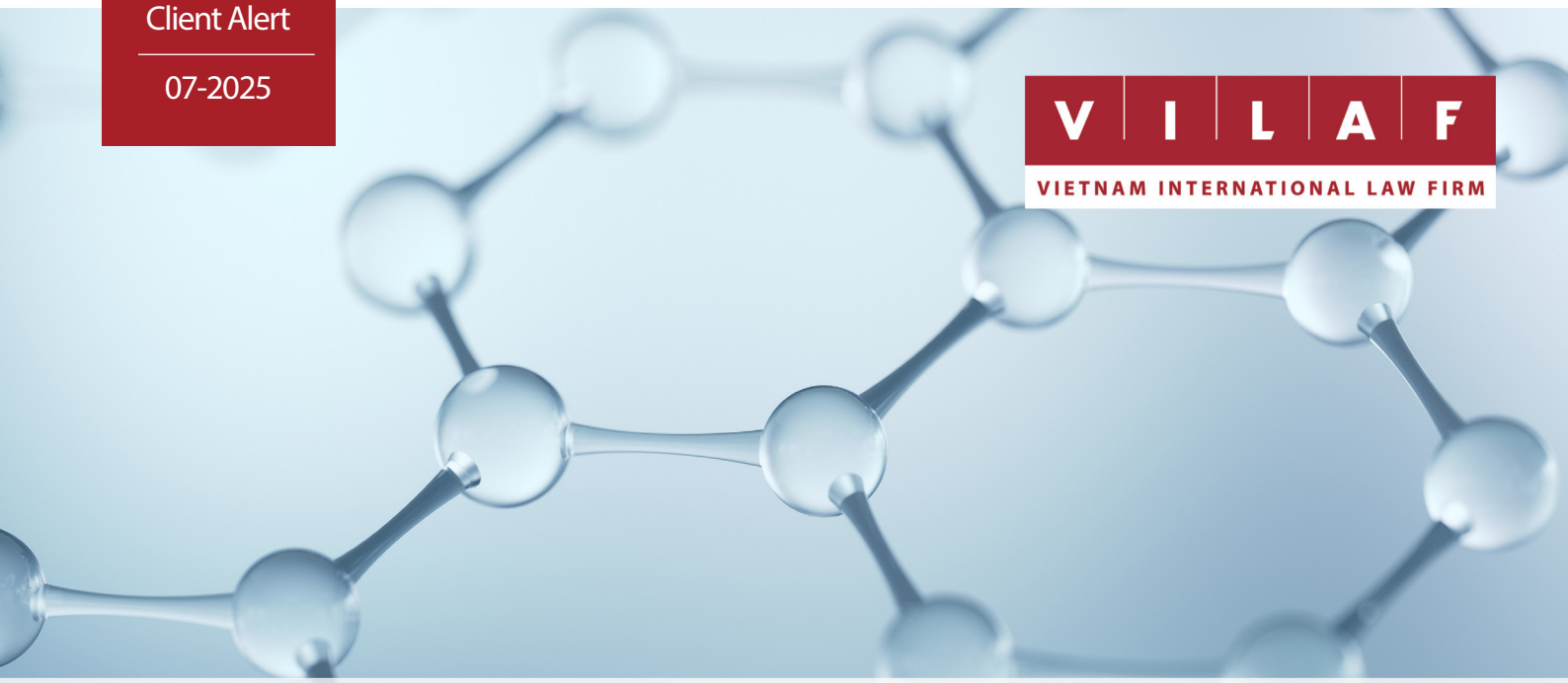

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VIETNAM OVERHAULS ATOMIC ENERGY LEGAL FRAMEWORK: Emphasis on four pillars - Safety, Security, Safeguards, and Liability

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On 27 June 2025, the National Assembly of Vietnam adopted Law No. 94/2025/QH15 on Atomic Energy, effective January 1, 2026, repealing the 2008 law. This legislative overhaul establishes a unified legal framework for the peaceful use of atomic energy, aligned with Vietnam's strategic energy goals and international obligations, particularly under IAEA monitored treaties and conventions.

The Law is structured in 8 Chapters and 73 Articles and governs all aspects of radiation and nuclear activities, from safety and security regulations to licensing, reactor development, import/export controls, and radioactive waste management.

Key Definitions

- Radiation work: Use, production, processing, transport, and disposal of radioactive materials.
- Nuclear energy: Energy released during nuclear transformation, including fission energy, fusion energy, and energy from radioactive decay. But, nuclear power plant remains limited to fission.
- Nuclear fuel cycle: The activities related to the generation of nuclear energy, including: mining and processing of uranium or thorium ores; uranium enrichment; manufacturing of nuclear fuel; use of fuel in nuclear reactors; recycling of spent nuclear fuel to the treatment, storage and burial of radioactive waste and spent nuclear fuel generated from the generation of nuclear energy and related research and development activities.
- Nuclear facility: Includes nuclear power plants, research reactors, enrichment and reprocessing plants, and spent fuel storage sites.
- Radioactive waste: Material no longer in use, containing radionuclides above clearance levels.
- Liquidation level: The value of the radioactive activity concentration or total radioactive activity of the radionuclides in the radioactive substance from which the value and below will be considered to not cause radiation hazard to humans, the environment and will no longer be managed as radioactive substance

State Management Framework

- Governing Entities:
  - ◊ Government: Exercises overall regulatory authority.
  - ◊ Ministries and Provincial Authorities: Implement regulatory functions within their jurisdiction.
  - ◊ Central State Management Agency for Atomic Energy: Designs national atomic energy policy, planning, and international cooperation.
  - ◊ National Radiation and Nuclear Safety Agency (NRNSA): Executes technical oversight, issues licenses, inspects, and enforces compliance.
  - ◊ Funding: State allocates public investment for infrastructure, R&D, and environmental monitoring related to atomic energy.
  - ◊ Socialization: Encourages private sector and foreign participation in infrastructure, training, and waste management.

Principles, Safety, and Security

- Core Principles:
  - ◊ Licensees are responsible for radiation safety (RS), nuclear safety (NS), and nuclear security (NSec).
  - ◊ Public access to RS/NS/NSec information is guaranteed.
  - ◊ Safety optimization must comply with ALARA (As Low As Reasonably Achievable) standards.
- Safety/Security Prohibitions
  - ◊ Prohibits nuclear weapons, unauthorized radiation work, concealment of incidents, tampering with data/equipment, and import of radioactive waste.
- Security
  - ◊ Mandatory graded security measures based on material category.
  - ◊ Immediate notification of theft/loss to NRNSA and police.
  - ◊ Security plans are required for facilities and during transport.

Digital Platform

- The law mandates a unified digital platform for:
  - ◊ Licensing, declarations, reporting, environmental monitoring, and incident response.
- Platform must integrate with other government systems.
- All data entry and transmission is compulsory for licensees and regulators.

Licensing and Declaration System

Licensing Requirements

- Radiation Work: Use/transport of radioactive materials, operation of nuclear fuel and waste facilities, and nuclear measurement instruments require licensing.
- Support Services: Installation, calibration, radiation shielding, personal dosimetry, and training are also regulated.

- Safety Documentation:

  ◊ SAR required for most radiation activities.
  ◊ SAR+ required for construction, modification, or decommissioning of facilities.
  ◊ Annual status report must be submitted to NRNSA.

Declaration and Notification

- Declaration required within 10 working days for radioactive materials above exempt levels.
- Notification required for changes to declared information.

Nuclear Facility Regulation

General Provisions

- Facilities include:

  ◊ Nuclear power plants;
  ◊ Research reactors;

Stage	Key Requirements
Site Approval	Requires inclusion in national and local planning; final decision by Prime Minister.
Design Approval	NRNSA appraises SAR+, technical drawings, risk mitigation plans.
Construction License	Issued upon compliance with SAR+, environmental clearance, security systems, and decommissioning plan.
Trial Operation License	Two phases: non-fueled and fueled. Each phase requires specific licensing.
Operating License	Issued post-trial operation, verifying full compliance.
Decommissioning License	Required for dismantling; must be pre-planned from design stage.

- Transfer or shutdown of operations requires government approval and safe termination plans.

Research Reactors

- Site approval by the central agency.
- Licensing follows same procedure as for power plants.

Radioactive Waste and Spent Fuel

- *Licensing:* Required for waste treatment and storage.
- *Financial Responsibility:* Waste generators must cover all lifecycle costs.
- *Disposal/Transfer:* Transfer to licensed entities required. Export subject to international safeguards and host state approval.
- *Liquidation/Exemption:* Allowed only for material below clearance thresholds.

Import, Export, and Transit Controls

- *Import/Export Licensing:* Required for:
  - ◊ Radioactive sources;
  - ◊ Nuclear fuel and materials;
  - ◊ Irradiated goods.
- *Transit Approval:*
  - ◊ Movement of nuclear-powered vessels or nuclear goods via Vietnam requires Prime Minister's written approval.
- Import of radioactive waste is prohibited.
- Re-export required if materials are contaminated upon import.

Environmental Radiation Monitoring

- Continuous and periodic radiation monitoring is required for:
  - ◊ All facilities with radiation risk;
  - ◊ Data submission to digital platform is mandatory;
  - ◊ Unexpected radiation events must be immediately reported.

Medical Radiation and Occupational Safety

- *Medical Use:* Facilities must ensure patient dose control, diagnostics calibration, and therapy validation.
- *Worker Protection:*
  - ◊ Mandatory certification and training;
  - ◊ Dose monitoring, health checks, and recordkeeping.
- *Monitoring Equipment:* Employers must install appropriate detection and shielding systems.

Training, Research, and International Cooperation

- *National Training Program:* Government to support HR development and capacity building.
- *Scientific Research:* Includes lab establishment, equipment investment, and research grants.
- *International Agreements:* Vietnam honors international conventions and bilateral nuclear agreements.

Enforcement, Liability, and Transition

- Violations may result in:
  - ◊ Suspension or revocation of licenses;
  - ◊ Administrative penalties;
  - ◊ Criminal prosecution for serious breaches.

- *Transitional Provisions:*

  ◊ Existing licenses under the 2008 law remain valid until expiry or conversion.
  ◊ Implementation guidance to be issued by relevant ministries.
  ◊ Amends Article 5.10.a of the Law on Electricity 2024 – *"Nuclear power development is identified as a strategic component in national power development to ensure the goal of electricity supply security;"*

FOR MORE INFORMATION PLEASE CONTACT:

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