

LEGAL FRAMEWORK OF NUCLEAR SAFETY IN INDONESIA



Presented at:

The FNCA 2018 Study Panel on
“Enhancing Domestic Measures
in the Field of Nuclear Law

Tokyo, 23 March 2018

1. Gumilang Fuadi
2. Hendig Winarno



National Nuclear Energy Agency
of Indonesia (BATAN)

OUTLINE OF PRESENTATIONS



Introduction

International Legal Instruments of Nuclear Safety

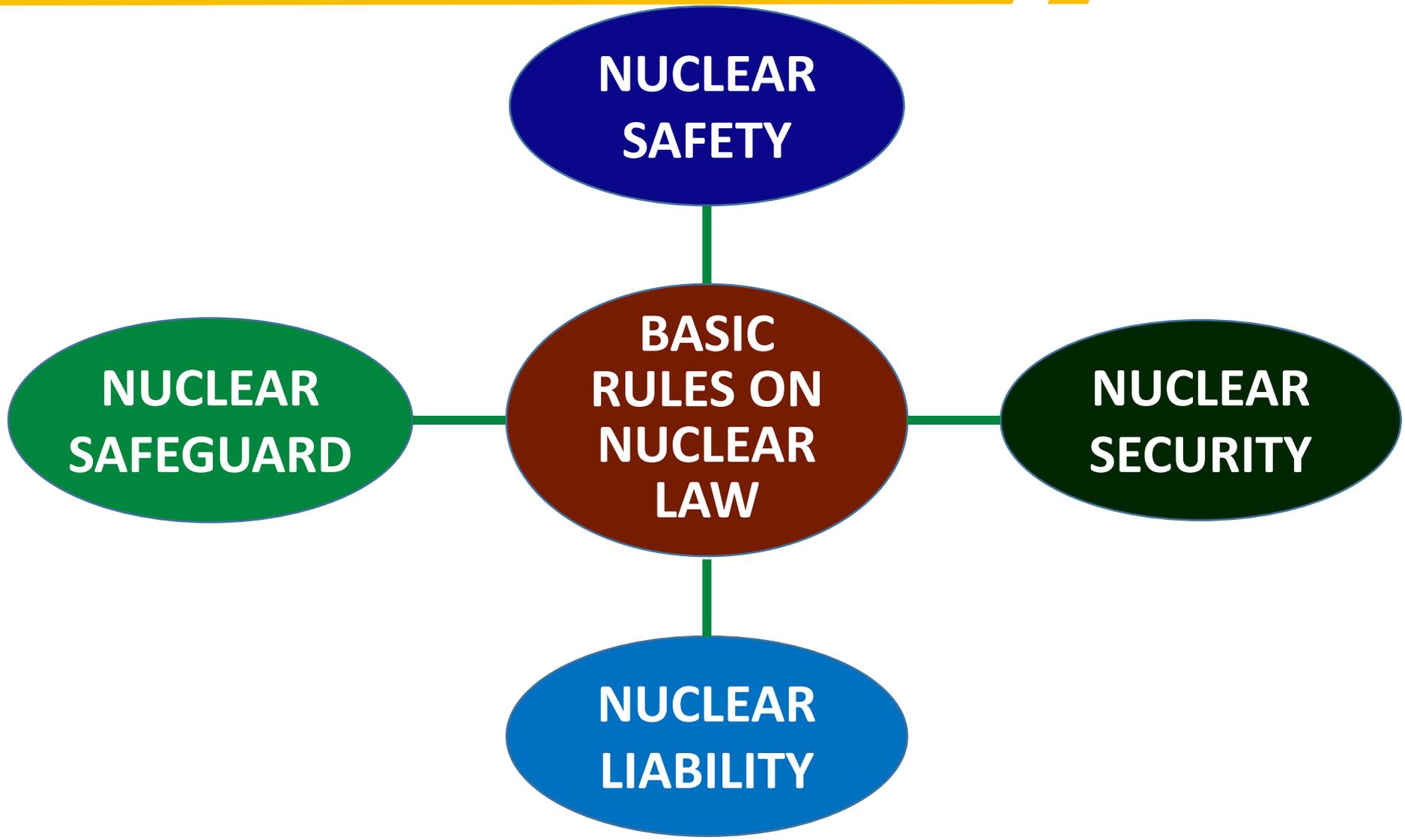
National Compliance

National Legal Framework of Nuclear Safety

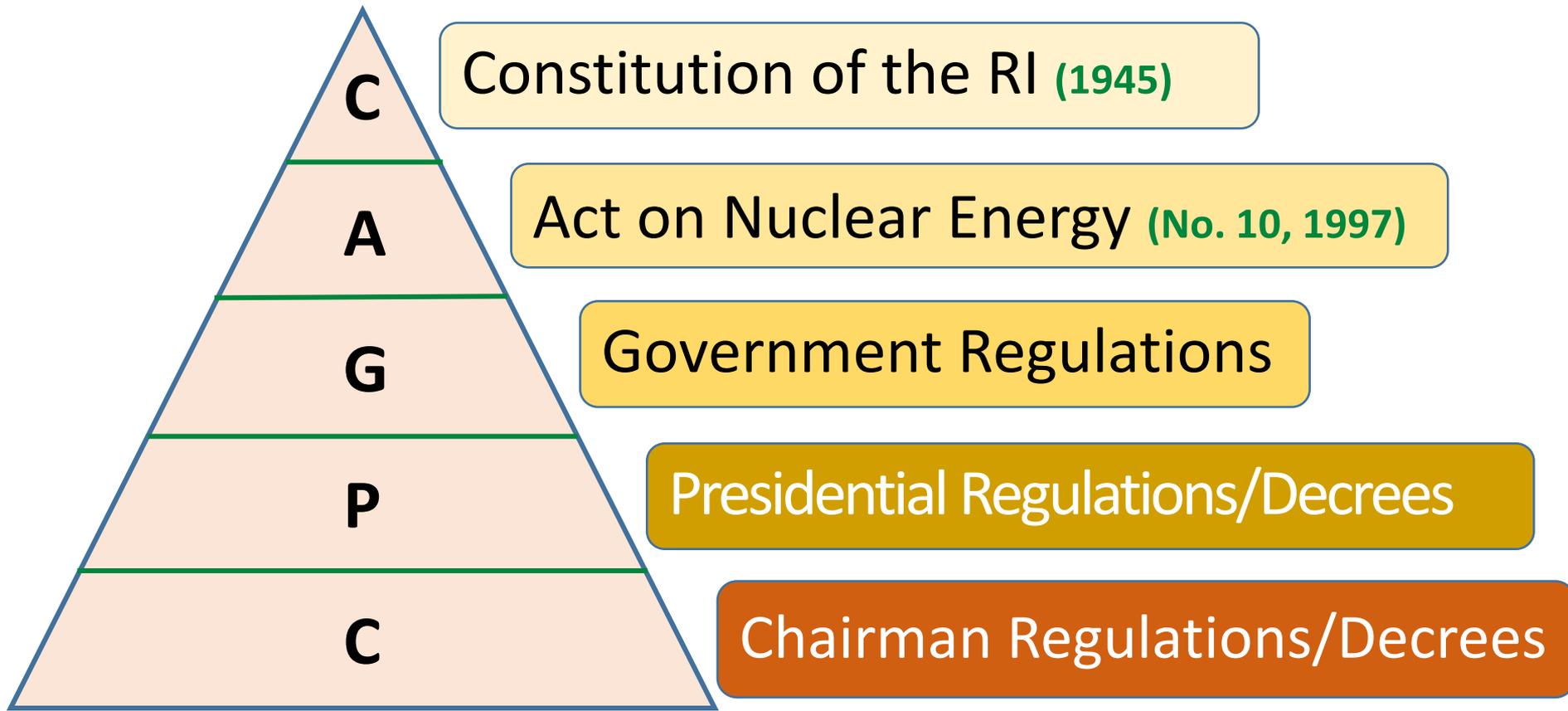
Implementation of Nuclear Safety in BATAN

Conclusions

INTRODUCTION



Legal Framework based on the Hierarchy:



Convention Related Nuclear Safety [status: Party]

1. Convention on Early Notification of Nuclear Accident (26 Sept 1986).
2. Convention on Assistance in the Case of a Nuclear Accident or Radiological Emergency (26 Sept 1986);
3. Convention on Nuclear Safety (20 Sept 1994);
4. Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management (5 Sept 1997).

Other Legal Instruments

1. International Atomic Energy Agency Regulations for the Safe Transport of Radioactive Material;
2. Code of Conduct of the Safety and Security of Radioactive Sources;
3. Code of Conduct of The Safety of Research Reactors;
4. *Etc.*

As a form of national compliance with international legal instruments related to nuclear safety, Indonesia has ratified The International Legal Instruments of Nuclear Safety, such as:

- **Presidential Decree No. 81, 1993**, ratifying the Convention on Early Notification of a Nuclear Accident (Early Notification Convention);
- **Presidential Decree No. 82, 1993**, ratifying the Convention on Assistance in the Case of a Nuclear Accident or Radiological Emergency (Emergency Assistance Convention);
- **Presidential Decree No. 106, 2001**, ratifying the Convention on Nuclear Safety;
- **Presidential Regulation No. 84, 2010**, ratifying Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management.

Nuclear Activities in Indonesia

(Based on the Act
No. 10, 1997 on
Nuclear Energy)

BATAN

has the tasks to execute the use of nuclear energy: research and development, general surveys, explorations and exploitations of nuclear ore, raw material production for manufacturing and fabrication of nuclear fuel, production of radioisotopes for research and development, radioactive waste management.

BAPETEN

has the tasks to control any activity using nuclear energy by implementing: Regulations, Licencing, and Inspections

GENERAL PRINCIPLES of NUCLEAR SAFETY in the ACT No. 10, 1997 on NUCLEAR ENERGY

Safety
Security
Health
Environmental
protection

- 1) For **the safety, security, peace, health of workers and the public, and environmental protection**, the use of nuclear energy shall be implemented correctly and carefully and is aimed to peaceful purposes and for the utmost benefit for the people's welfare and prosperity [**Considering: Letter C**];
- 2) The control is aimed at one of them to assure **the safety and the health of worker and public, and the environmental protection** [**Article 15: Letter B**];
- 3) Any activity related to the utilization of nuclear energy shall maintain **the safety, the security, the peace, the health of the workers and the public, and the environmental protection** [**Article 16**].

GENERAL PRINCIPLES of NUCLEAR SAFETY in the ACT No. 10, 1997 on NUCLEAR ENERGY

Radioactive Waste Management

- 4) Provisions related to **the radioactive waste management** shall be conducted to prevent radiation hazards to workers, the public, and the environment **[Article 22]**;
- 5) Provisions related to **the treatment and classification of radioactive waste** in order to ensure the safety of the worker, public and the environment **[Article 24]**;
- 6) Provisions related to **the transportation and storage of radioactive wastes** shall consider the safety of workers, public, and environment **[Article 27]**.

❖ Implementing Regulations of **ARTICLE 16** ACT No. 10, 1997:

1. **Government Regulation No. 33, 2007** on Ionizing Radiation Safety and Security of Radioactive Sources;
2. **Government Regulation No. 54, 2012** on Safety and Security Nuclear Instalation;
3. **Government Regulation No. 2, 2014** on Licencing Nuclear Instalation and the Use of Nuclear Material;
4. **Government Regulation No. 58, 2015** on Radiation Safety and Security in the Transportation of Radioactive Materials;
5. **BAPETEN Charmain Regulation No. 4, 2013** on Radiation and Safety Protection in the Use of Nuclear Energy.

❖ IMPLEMENTING REGULATIONS RELATED **ARTICLE 22, 24, and 27** ACT NUMBER 10, 1997:

1. Gov. Reg. No. 61, 2013 on Radioactive Waste Management;
2. Gov. Reg. No. 58, 2015 on Radiation Safety and Security in the Transportation of Radioactive Materials;
3. BAPETEN Chairman Decree No.03/Ka-BAPETEN/V-99 on Safety of Radioactive Waste Management;

❖ OTHER RELATED IMPLEMENTING REGULATIONS

1. BAPETEN Chairman Reg. No. 1, 2010 on Emergency Preparedness and Response;
2. BATAN Chairman Reg. No. 200/KA/X/2012 on Guidelines for Implementation of Safety Culture;
3. BATAN Chairman Reg. No. 14, 2016 on Nuclear Emergency Preparedness and Response Program.

IMPLEMENTATION OF NUCLEAR SAFETY IN BATAN



1) **BATAN Safety Policy:**

“**Safety is a top priority** on all activities so as to achieve zero accidents in order to protect every employee, facility, community and environment from potential hazards. Every BATAN employee must strive for the achievement of safety objectives according to their respective responsibilities and roles.”

2) **Zero accidents** are the achievement target of the work unit, especially those operating nuclear facilities and installations.

3) **Continuous improvement of safety culture** through training activities, socialization and self-assessment to all stakeholders in BATAN.

4) **Hearings with residents** around nuclear facilities and installations to provide information and ensure that nuclear facilities and installations are safely operated by BATAN.

CONCLUSIONS



- ❑ Indonesia has ratified the International Convention concerning nuclear safety as a form of national compliance with international legal instruments related to nuclear safety;
- ❑ Indonesia has adopted the international principle of nuclear safety within the national nuclear legal framework;
- ❑ In principle, Indonesia has developed provisions and guidelines related to nuclear safety in various implementing regulations;
- ❑ To update the dimensions of national nuclear law including nuclear safety therein, Indonesia is in the process of amending the Act No. 10 of 1997 on Nuclear Energy with the status of drafting and under discussion inter-institutions.



BATAN
SADAN TENAGA NUKLIR NASIONAL

**THANK YOU
FOR YOUR ATTENTION**
Terima kasih, Matur nuwun
ありがとうございます
Danke