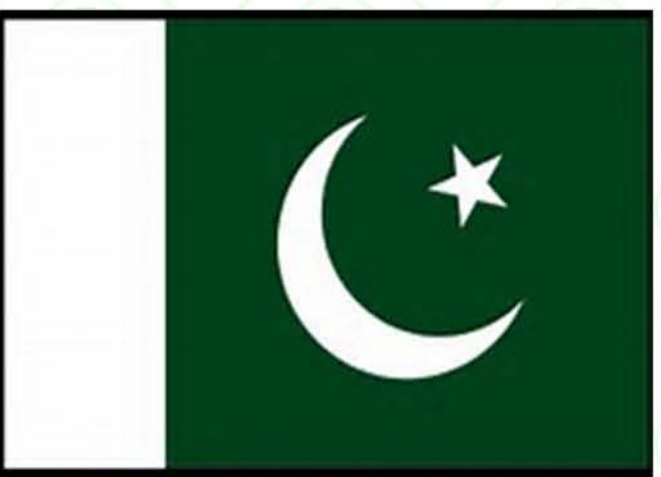


Development of Nuclear Security Regulations in Pakistan to Address International Obligations

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INTRODUCTION

A comprehensive regulatory framework for nuclear safety & security has been established in Pakistan by incorporating requirements of the international Conventions like CPPNM & its 2005 amendment, CNS, CENA & CANARE, relevant UNSC Resolutions and IAEA Guidance Documents to perform regulatory functions.

NUCLEAR SECURITY REGIME OF PAKISTAN

| Legal Framework | Institutions & Organizations | Systems & Measures |
|---|--|--|
| <ul style="list-style-type: none"> NCA Act PNRA Ordinance PAEC Ordinance Export Control Act | <ul style="list-style-type: none"> NCA SPD PNRA PAEC SECDIV Customs Enforcement Agencies | <ul style="list-style-type: none"> Prevention Detection Delay Response NMAC |

PAKISTAN'S LEGAL FRAMEWORK FOR NUCLEAR SECURITY

- NCA Act (2010)**
 - The Act provides the legal Authority to supervise nuclear related activities under the *Strategic Plan Division SPD* – the secretariat of NCA
- PNRA Ordinance (2001)**
 - PNRA is responsible for regulating the safety of nuclear installations, physical protection, the protection risks arising from ionizing radiations, fixing of the extent of civil liability for nuclear damage resulting from nuclear incidents
- PAEC Ordinance (1965)**
 - PAEC became a statutory with requisite powers subject to the provisions of the Ordinance. PAEC is the operator of Nuclear installations in Pakistan and responsible for the promotion of peaceful uses of nuclear energy
- Export Control Act (2004)**
 - It has strengthened export controls on sensitive and dual use goods/technologies particularly related to nuclear and biological weapons and their means of delivery

EVOLUTION OF PAKISTAN'S PP REGULATORY FRAMEWORK

The concept of Physical Protection (PP) was started with the installation of Pakistan's first nuclear power plant (KANUPP-1) in 1972. First regulation on PP was introduced in the PNSRP Regulations-1990. INFCIRC/225/Rev.4 was adopted for the implementation.

NATIONAL REGULATIONS ON PHYSICAL PROTECTION OF NUCLEAR MATERIAL & INSTALATIONS (PAK/925)

I. OBJECTIVE OF PAK/925

Regulations PAK/925 are consistent with the requirements of CPPNM & its 2005 Amendment and other national & International Obligations. The Objective of PAK/925 is to:

- A. Protect against unauthorized removal of nuclear material;
- B. Protect nuclear material and nuclear installations against sabotage.

II. MAIN CONTENTS OF PAK/925

1

Physical Protection against Unauthorized Removal of Nuclear Material (NM) in Use and Storage

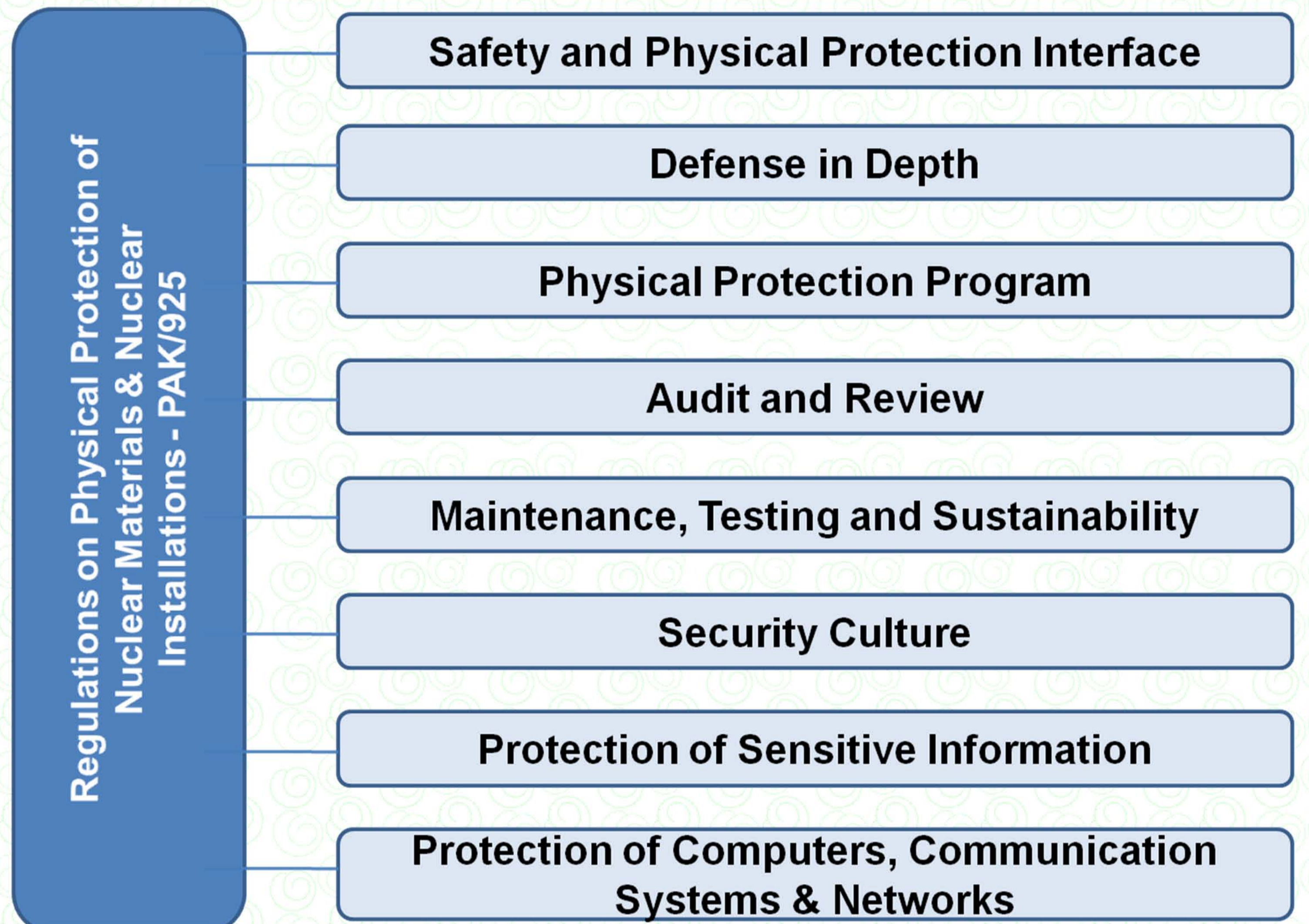
2

Physical Protection Measures against Sabotage of Nuclear Installation & NM in Use & Storage

3

Physical Protection of Nuclear Material during Transport

III. FOCUS AREAS OF PAK/925



IV. PAK/925 COMPARISON WITH IAEA FUNDAMENTAL PRINCIPLES FOR PHYSICAL PROTECTION

PAK/925 is the requirement level document for the operator and covers fundamental principles of physical protection as identified in amended CPPNM that fall in the preview of operator of the facility only. These include:

- Security Culture
- Threat Assessment
- Graded Approach
- Defence in Depth
- Quality Assurance
- Contingency Plans
- Confidentiality of Information

The remaining fundamental principles like Responsibility of the State, Legislative & Regulatory framework, Responsibility during International Transport, Designation of Competent Authority & responsibility of Licensee are already covered in national legislative & regulatory framework.

CONCLUSION

Pakistan's nuclear legislative & regulatory framework adequately covers national & international obligations PNRA implement and ensures compliance of regulatory framework in the country