



Autoridad Regulatoria Nuclear  
PRESIDENCIA DE LA NACIÓN

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# IAEA Physical Protection Conference

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## COMPARING THE STRUCTURE OF CONCEPTS IN SAFETY AND SECURITY (view from a reactor regulator)

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# Content

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## Structural-comparative analysis of safety and security

### Nuclear Safety theoretical structure

- Safety Approach
- Legal / government Framework
- Institutional links
- Implementation-projection on Plants

### Nuclear Security theoretical structure

### Elements of Nuclear Safety projected to security

### Role of Regulatory Body in Security

- Nuclear Regulatory Security
- Nuclear National Security

### Focus for IAEA's activities



# Elements of Nuclear **Safety Approach**

**In Nuclear  
REACTORS**

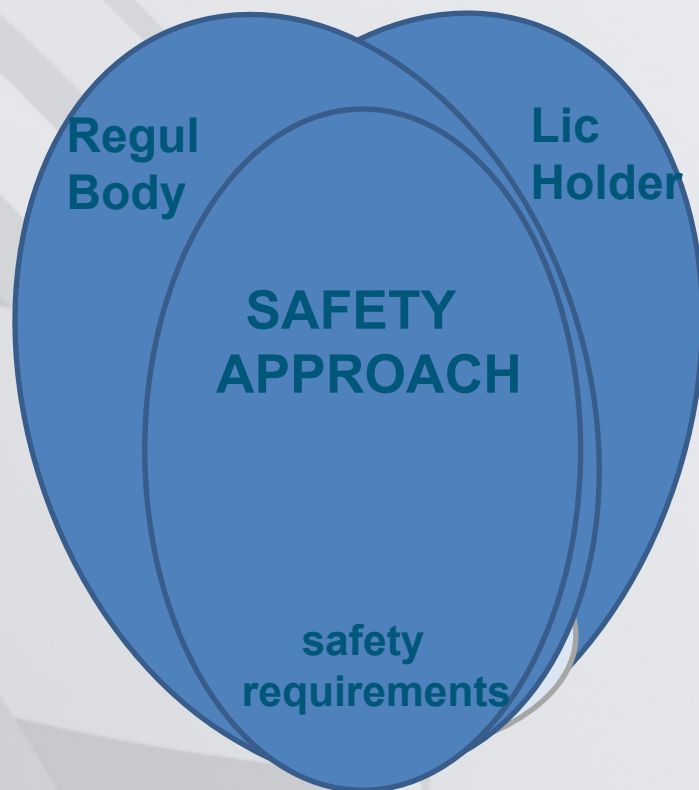
**SAFETY  
APPROACH**

Safety Assessment  
of a design

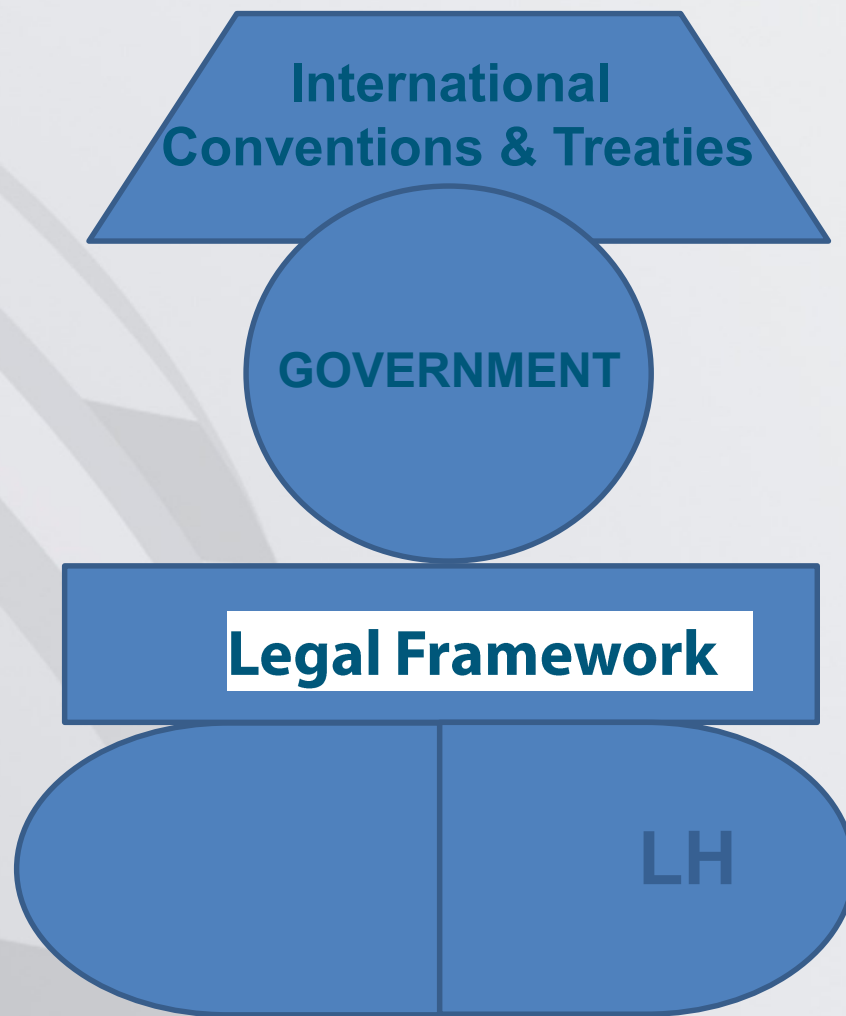
Of a PROJECT  
IMPLEMENTATION



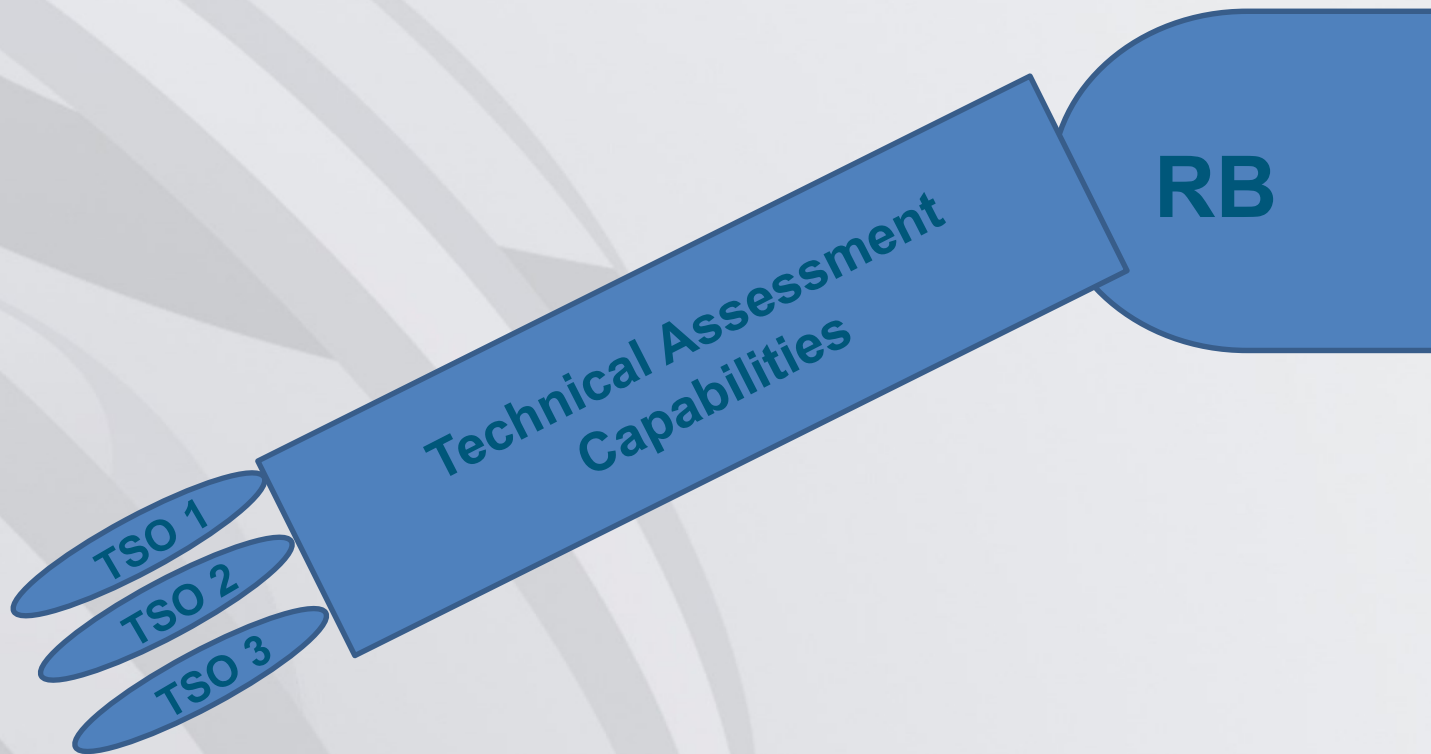
# Nuclear **Safety** main actors



# *Nuclear Safety Superstructure*

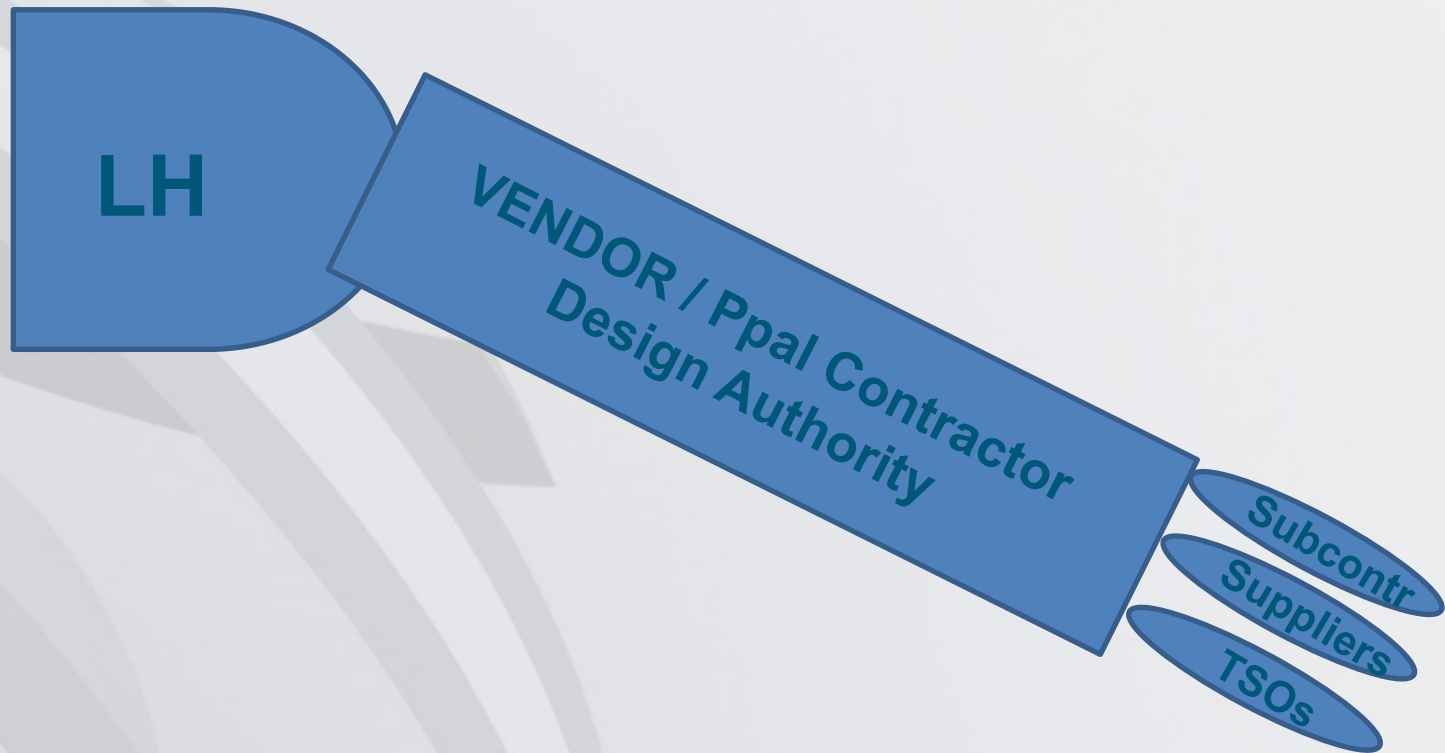


## *Links to the Nuclear Safety Regulatory Body*



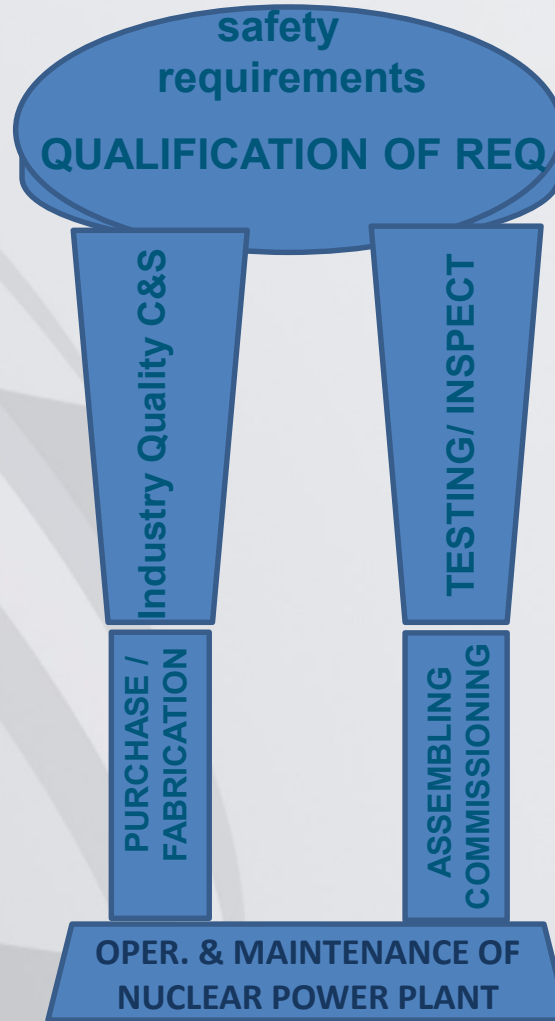


## *Links to the Nuclear Safety License Holder*

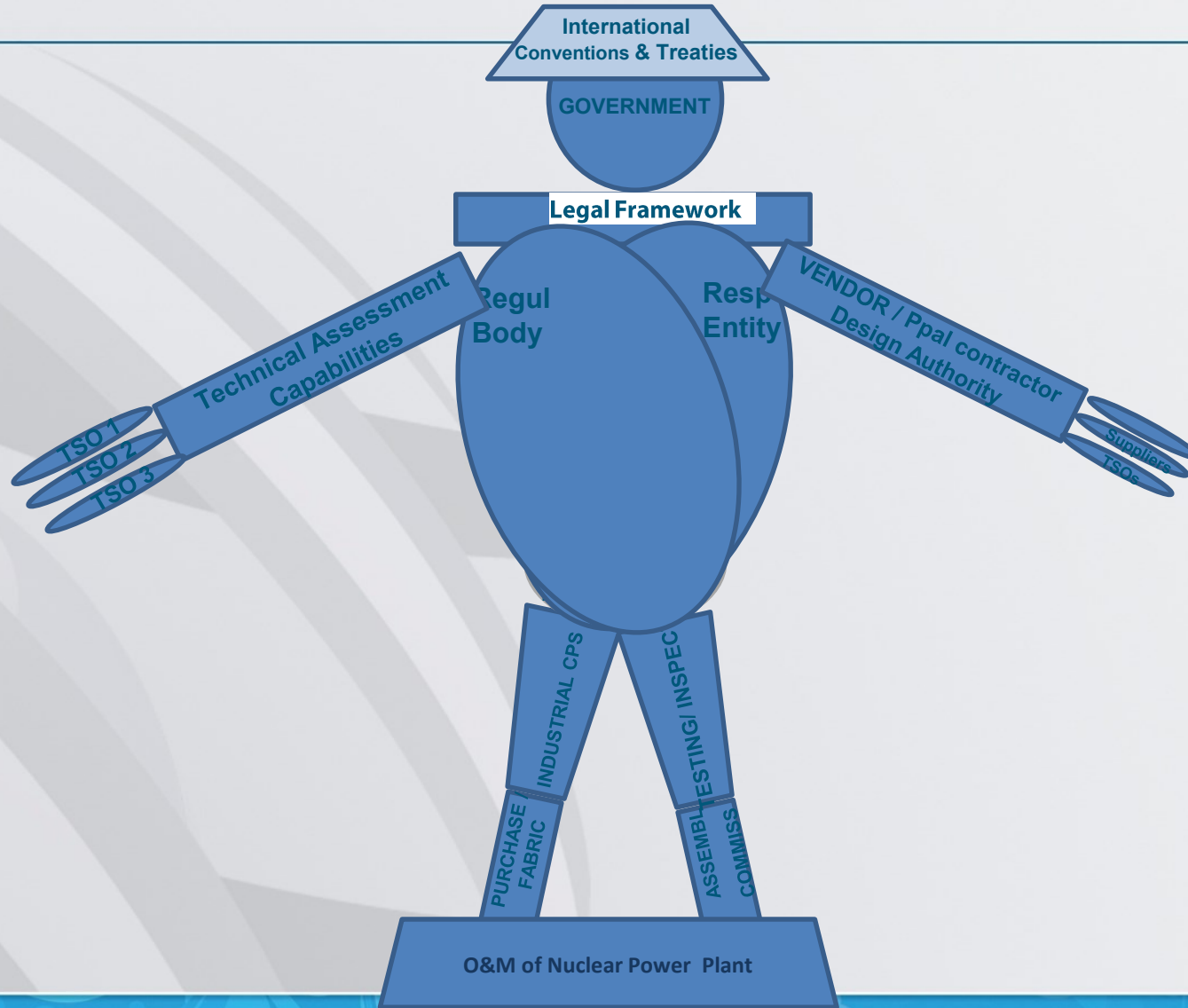




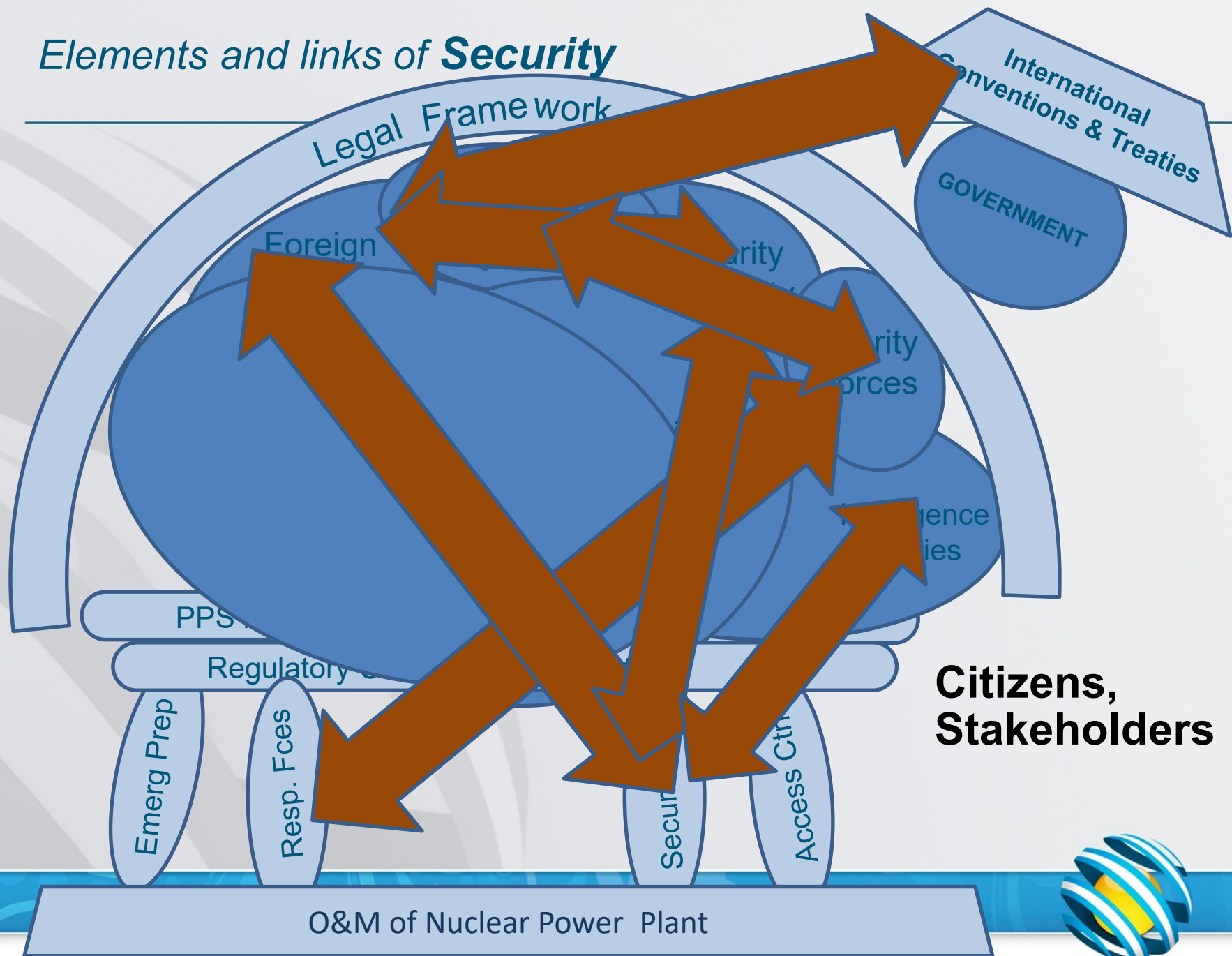
# Links to the Nuclear Safety infrastructure



# Scheme of Nuclear *Safety*

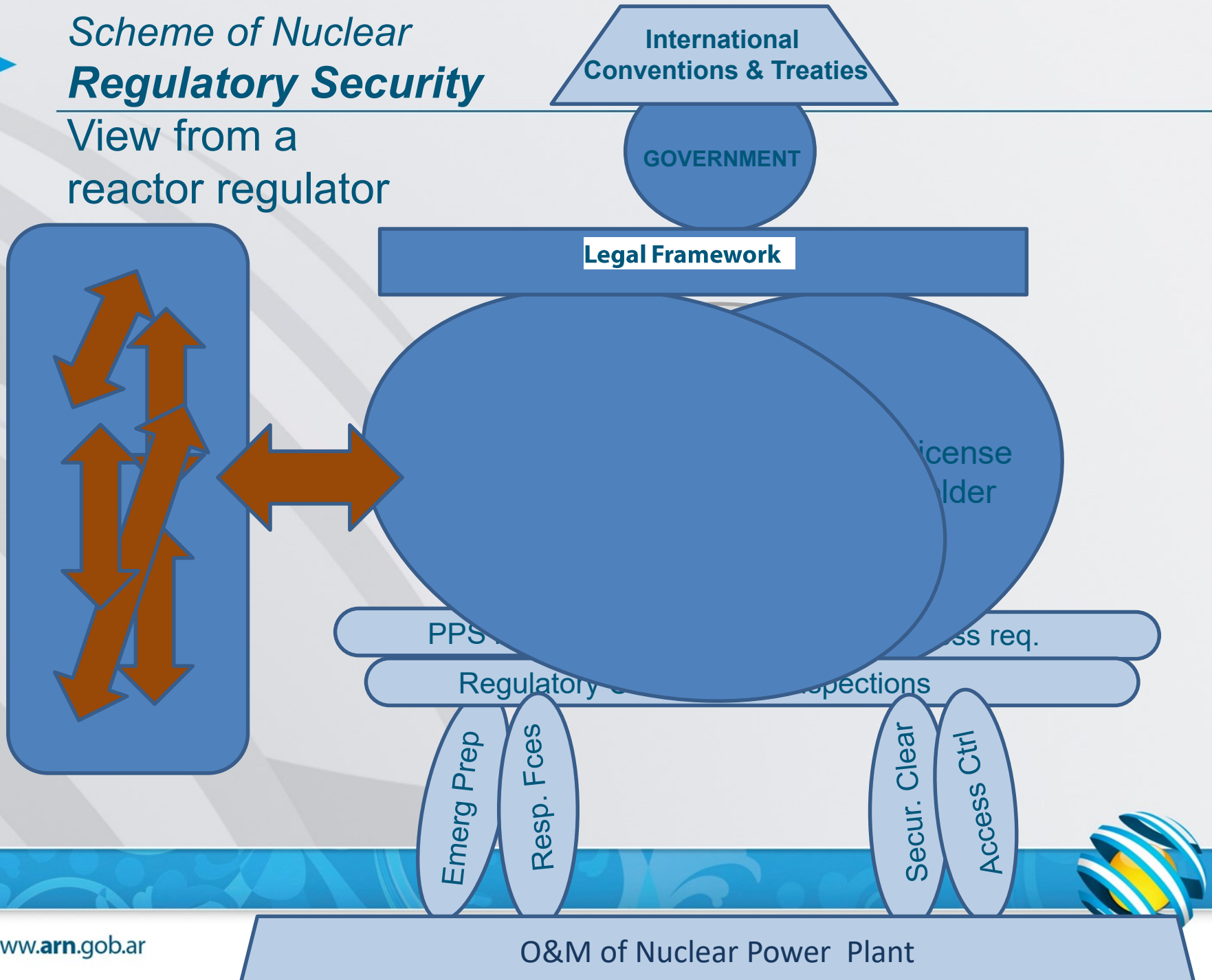


# Elements and links of **Security**



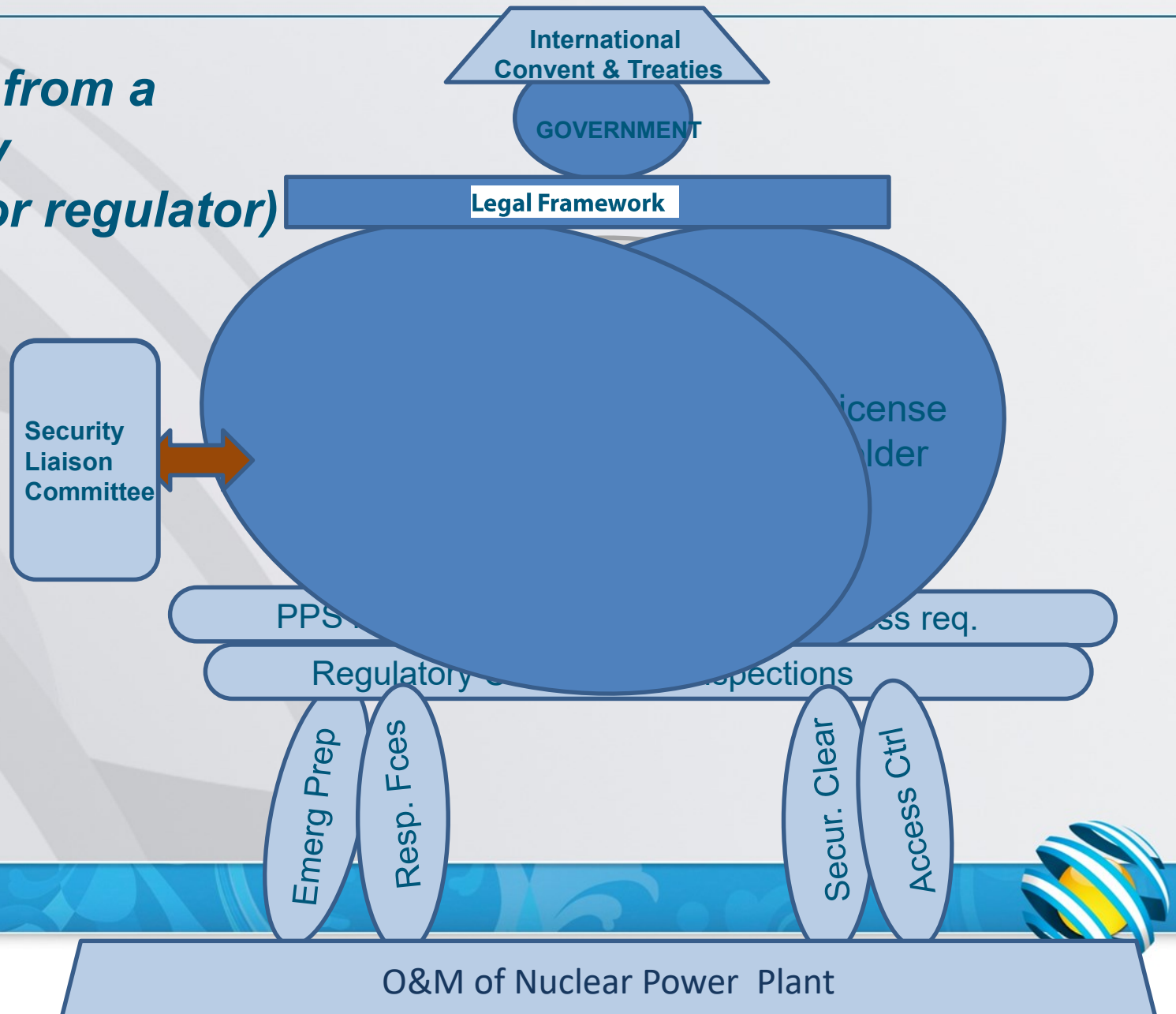
# Scheme of Nuclear **Regulatory Security**

View from a  
reactor regulator



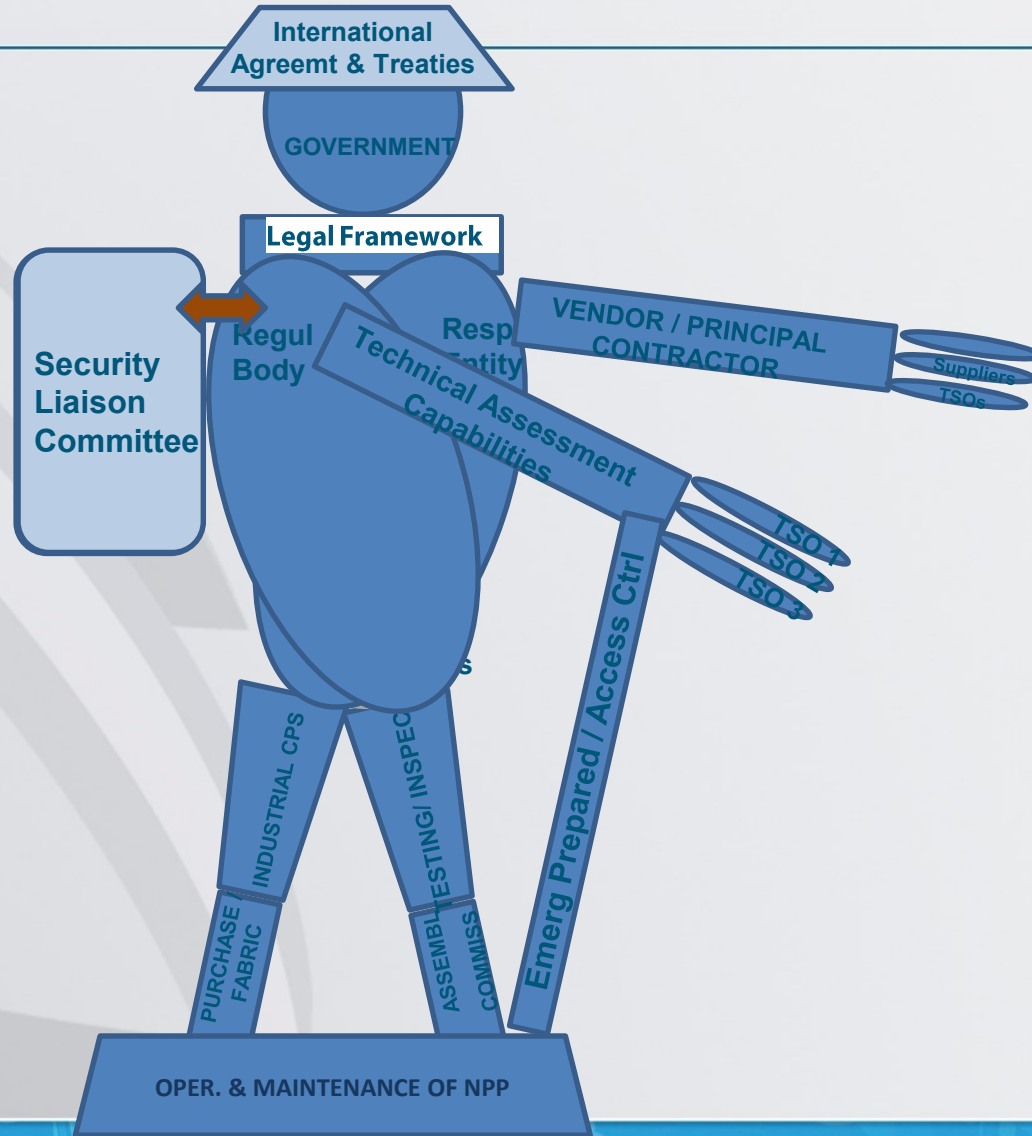
# Scheme of Nuclear **Regulatory Security**

*(View from a  
Safety  
reactor regulator)*



# Scheme of Nuclear Regulatory Security and Safety

*(View of a  
Safety  
Regulator)*





## *Conclusions on Regulatory Security vs National Security*

Maybe there are two different concepts presented as “nuclear security”:

- Security issues with nuclear or radioactive **materials under regulatory control** (Nuclear **Regulatory Security**).

Security is one of the Regulatory Areas, together with Nuclear and Radiological Safety and Safeguards, all of them have regulatory standards and controls.

IAEA is UN agency competent on issuing safety standards and on safeguards.

- **National Security** issues that involve nuclear or radioactive materials (Nuclear **National Security**).

“nuclear” is one among many threats, treated by different authorities, government areas, prevention and intervention forces, coordinated under different frames of rules and standards that are not regulatory.

IAEA may not be UN agency competent on National Security issues.





# Regulating Security within Nuclear and Radiological Safety

## Activities of Nuclear NNS out of the scope of NRS, e.g.:

- Nuclear Security Systems and measures for major public events (preventive)
- Nuclear forensics as a means to identify the origin of materials used in malevolent events (for prosecution as a function beyond mitigation)

These are out of the scope of responsibility of a RB, but the RB could be irreplaceable to provide technical assistance in these activities.

The structure of concepts and actors of Nuclear **Regulatory Security** Nuclear **Regulatory Security** turns out more understandable.

Regulatory Security could be embedded in the regulation of radiological and nuclear safety. Security scenarios are treated as one group of “external events” among many other PIEs for safety.

Handling NRS is necessary to achieve Safety, but not enough.

The definition, identification and classification of security scenarios or threats may be elaborated by the competent and specialized government institutions incorporated to the regulatory process through orderly, formal interphases.



## *Conclusions on the role of IAEA*

For IAEA's activities

Frequently

personnel from Nuclear Regulatory Bodies, License Holders (Utility – Operators), TSOs, nuclear vendors and suppliers, government officers from S&T...

Diplomats or high level officers.

Not as frequent,

personnel from Security Forces, Intelligence Agencies or providers of security services and supplies

Proposal:

IAEA is UN agency competent on issuing safety standards and on safeguards.

IAEA may not be UN agency competent on National Security issues.

**Focus on Nuclear Regulatory Security**



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