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**THE ROLE OF THE REGULATOR**

YANEV Yanko  
*Nuclear Knowledge Management Institute  
Gersthofer Strasse 162  
A-1180 Vienna  
AUSTRIA*



**IAEA**



Developing a Nuclear Power Program

# **THE ROLE OF THE REGULATOR**

Yanko Yanev  
NKMI - Vienna

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# Need

- Crucial to the long term success of a national nuclear power program is the existence of an independent and competent nuclear regulatory body.
- The confidence of the public and the international community depends on an effective regulatory body.
- The essential need for a competent and effective regulatory body should be understood and given high priority by the NEPIO in close consultation with the existing regulatory body for the control of radiation sources.



# Competence

- The development of competent human and physical resources for the expanded, or new, regulatory body is as important as it is for the owner/operator organization.
- The technical training, knowledge and capabilities of the regulator should be adequate for competent interaction with the owner/operator, supplier organizations and consultants.

# Independence

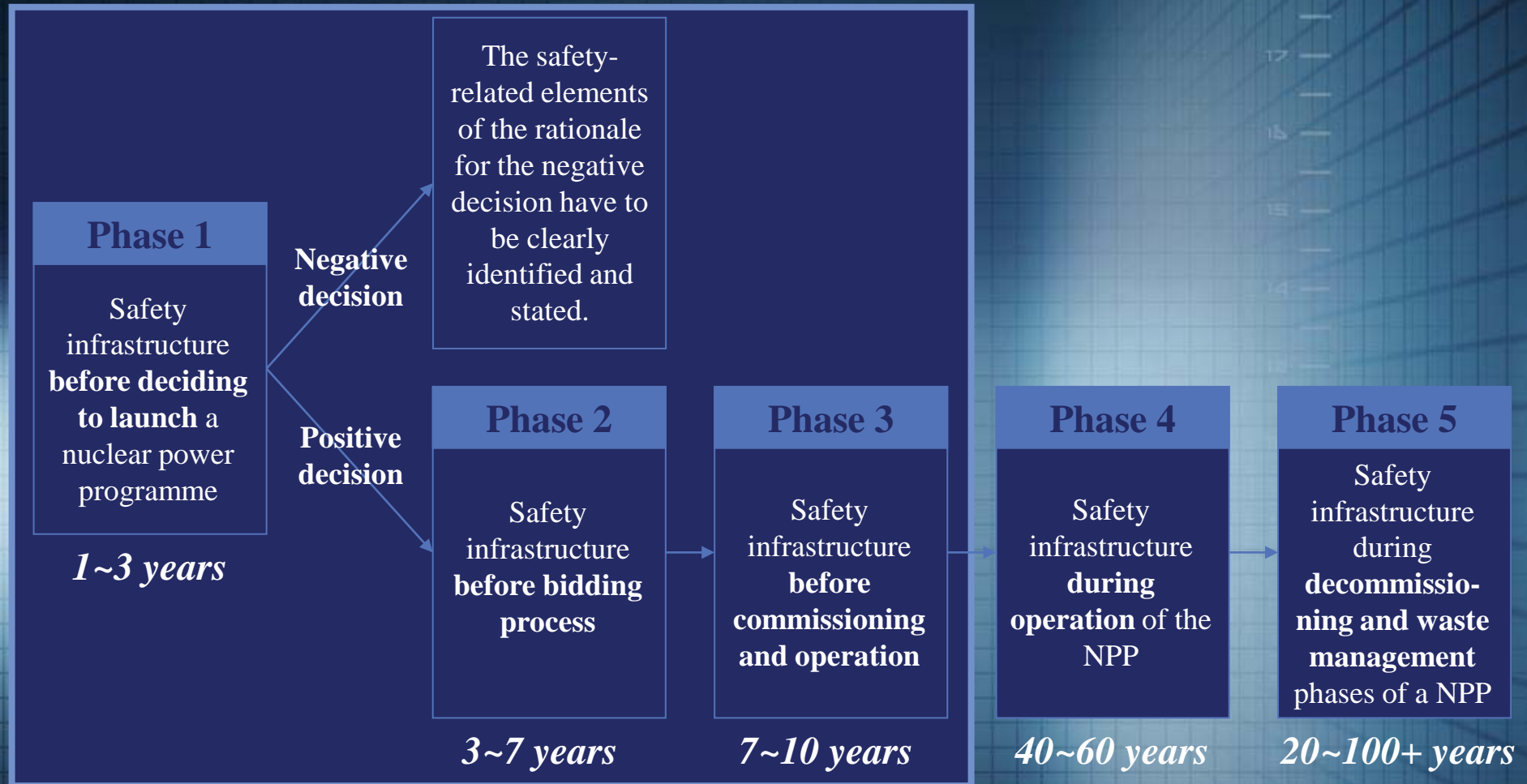
- Experience has shown that safety and credibility are best served by a complete separation of the regulatory body from the promotional and implementing organizations and the political process.
- While not all governments have begun their nuclear programs with this provision, virtually all are adopting this approach.

# Infrastructure

- Member States embarking on a nuclear power program should consider the efficiencies of building on the national infrastructure already in place for radiation, waste and transport safety.
- Expanding the existing regulatory body to take on the role as regulator for a nuclear power plant would seem to offer significant advantages in terms of utilizing resources (facilities and human).



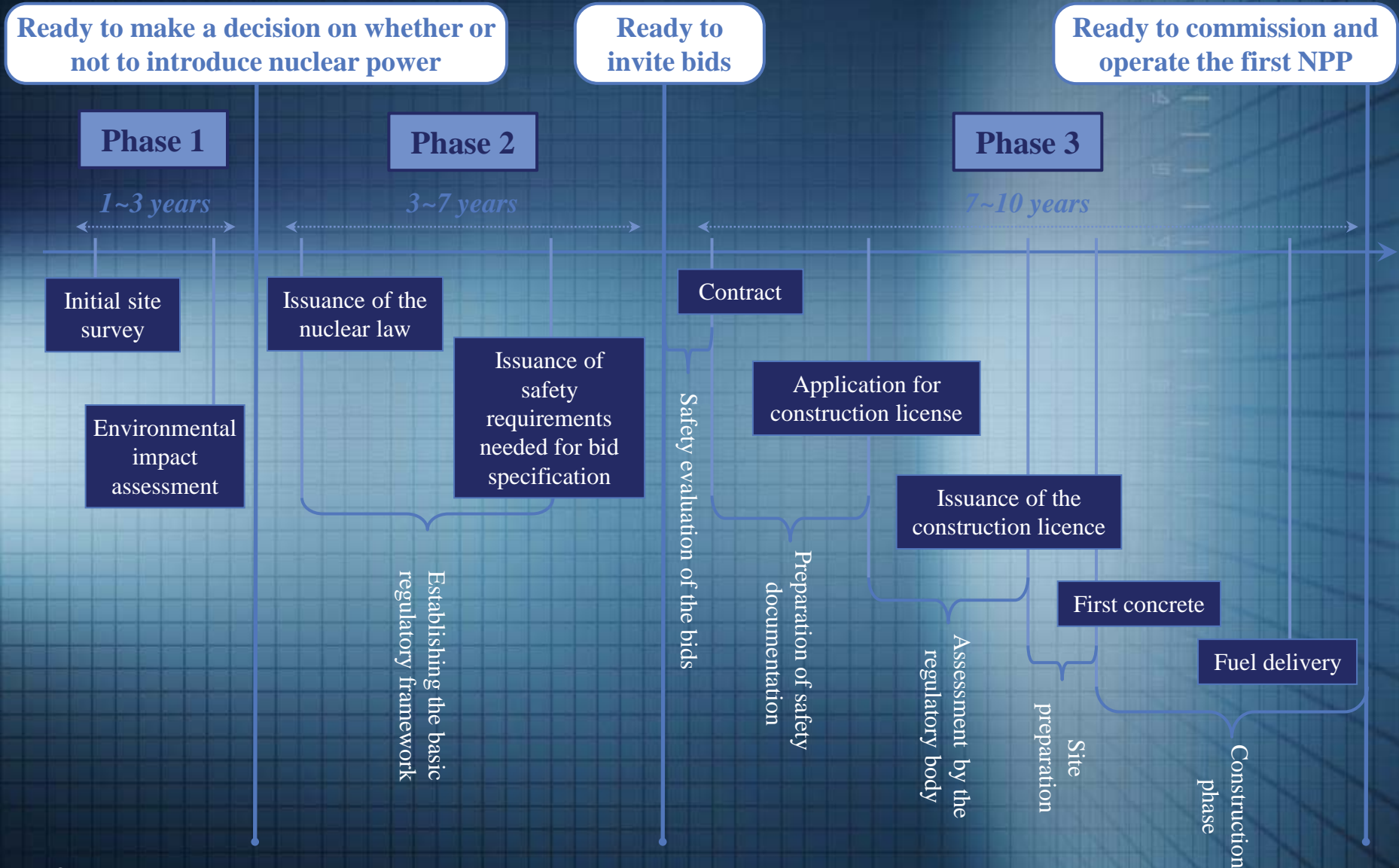
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▶ Safety Infrastructure Guide (DS424) constitutes a “Road-map” to apply the entire set of IAEA safety principles and requirements progressively during Phases 1, 2 and 3 of the implementation of a nuclear power programme.



# Program Milestones



# Milestones

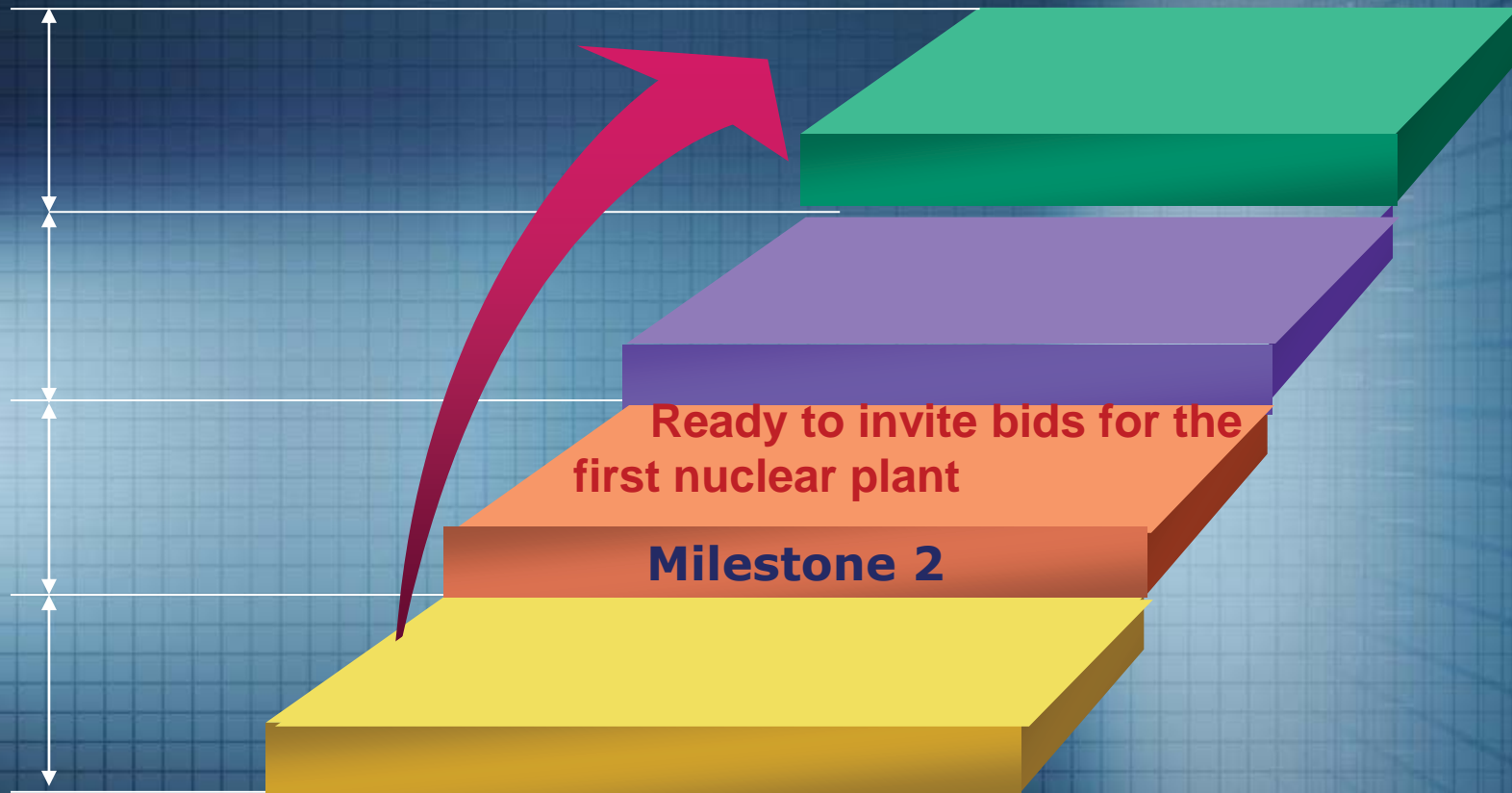


# Milestone 1 focus

- Designation of an effectively independent regulatory body, with clear authority and adequate human and financial resources;
- Assignment of core regulatory functions for the development of regulations, for licensing, review and assessment, inspection, enforcement and public information;
- Authority to obtain technical support as needed;
- Clear definition of the relationship of the regulatory body to other organizations;
- Establishment of the rights and responsibilities of licensees;
- Authority to implement international obligations, including IAEA safeguards;
- Authority to engage in international cooperation;
- Provisions to protect proprietary, confidential and security information;
- Provisions for stakeholder and public information and interactions;
- Compatibility with the existing regulatory framework for radiation, waste and transport safety.



# Milestones



# Milestone 2

## focus

- Overall organization, staffing and training of licensee
- Safeguards;
- Security;
- Nuclear and radioactive materials transportation, handling and storage;
- Radiation protection;
- Formal licensing process;
- Regulations, codes and standards for siting, design, construction, and operation necessary for licensing a nuclear power plant, including the management system;
- Emergency preparedness requirements (site, off-site, national);
- Establishment of international relationships,
- Waste management, including disposal considerations.

## **Milestone 2 focus contd.**

**Appropriate regulations, codes and standards have been developed or amended and issued for:**

- The import/export, transshipment, transportation, storage and handling of nuclear and radioactive material;
- Radiation protection;
- Site environmental assessment and licensing;
- Nuclear plant siting, design, construction and commissioning;
- Security and safeguards;
- Waste management;
- Emergency planning.



## Milestone 2 focus contd.

### Competent staff is in place to:

- —Perform licensing of sites;
- —Review, assess and license nuclear plant designs;
- —Develop programs for the inspection and oversight of nuclear construction;
- —Develop requirements for operator training and certification;
- —Prepare for operational inspection and oversight

# Milestones



## **Milestone 3**

### **focus**

- All regulations, codes and standards for nuclear plant construction are in place and staffing is sufficient for the efficient and effective review and licensing of a nuclear facility.
- Regulatory requirements for plant operator training and certification have been developed.
- The regulatory body has confirmed that the licensee has demonstrated compliance with the relevant regulatory requirements.



# Involvement

Ready to make a decision on whether or not to introduce nuclear power

Ready to invite bids

Ready to commission and operate the first NPP

Phase 1

Phase 2

Phase 3

1~3 years

3~7 years

7~10 years

Involvement of the Government

Involvement of the Regulatory Body in nuclear power activities

*establishment*

Involvement of the Operating Organization

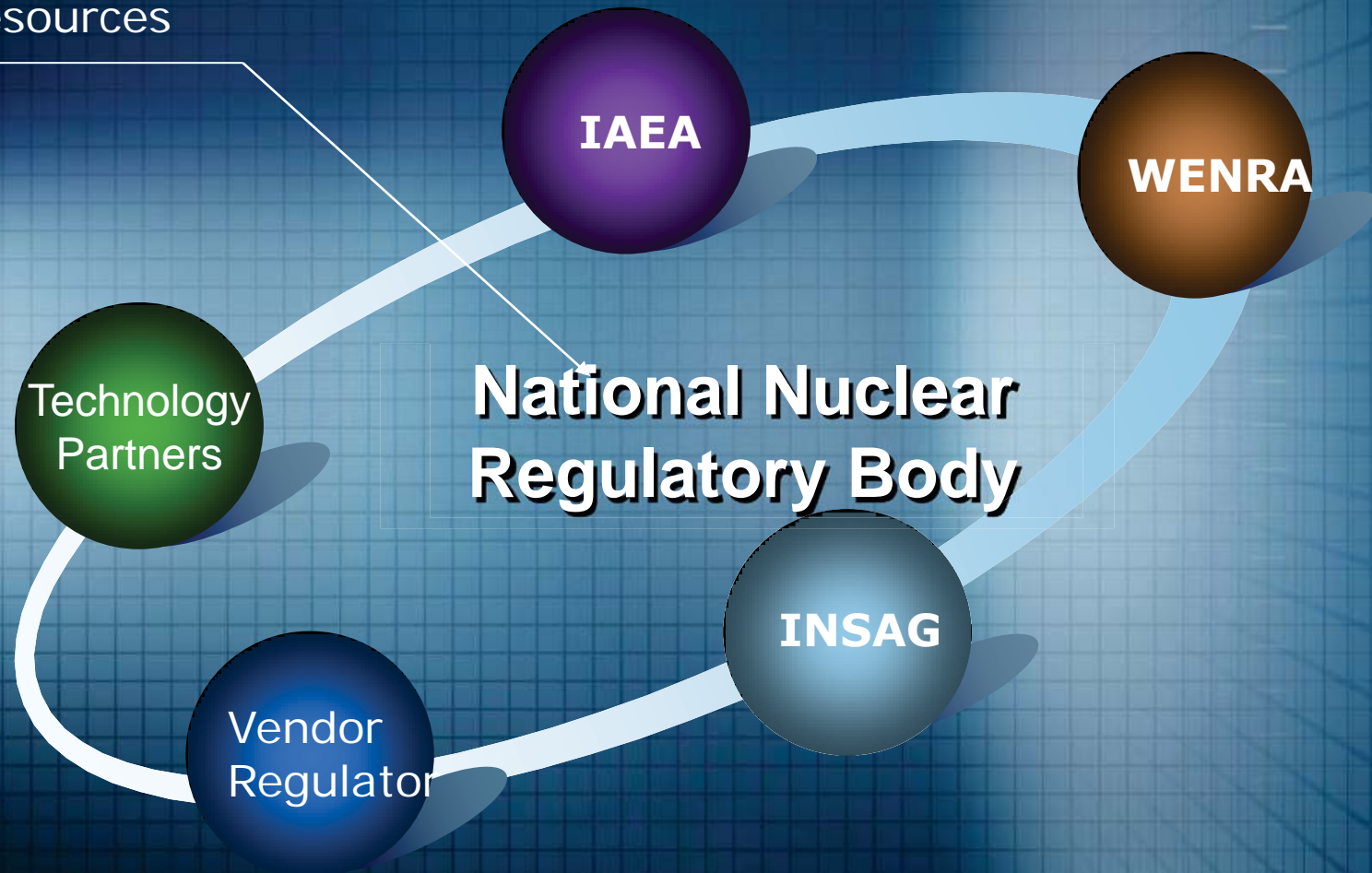
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# Partners



# International

International Partners  
and Resources







# Thank You !

[y.yanev@nuclear-km.org](mailto:y.yanev@nuclear-km.org)

## Questions and Comments?