

# The self-assessment of selected specific infrastructure issues for the first research reactor project in Mongolia

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## Introduction

The based on approval by Parliament of Mongolia on the exploitation of radioactive minerals and nuclear energy, June 25, 2009:

- **Considering** the utilization of nuclear power in the future
- **Planning** to build their first research reactor

A research reactor project must be supported by a **specialized national nuclear infrastructure** regarding to IAEA guidelines.

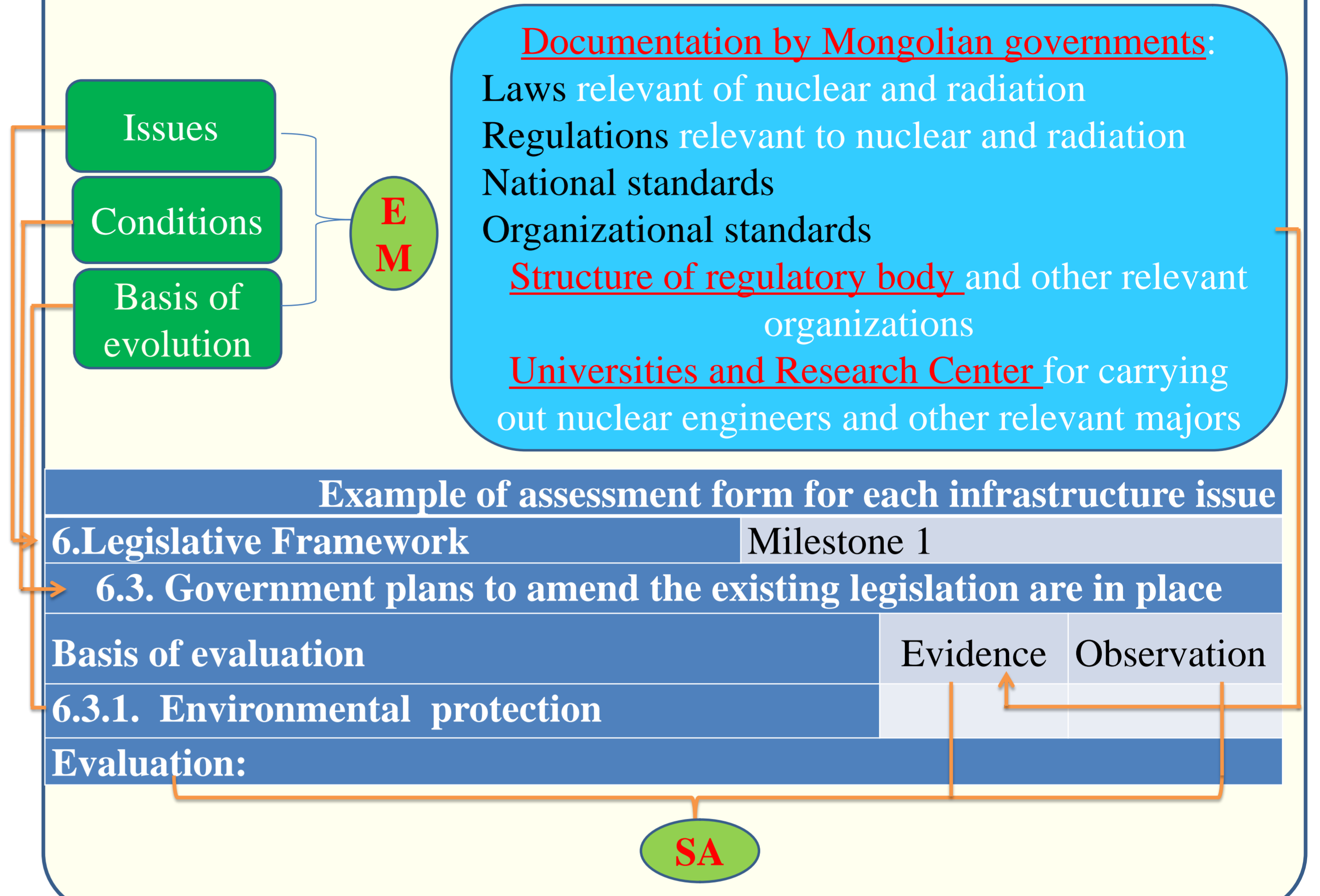
- IAEA NE Series NP-T-5.1 “**Specific considerations and Milestones for a RR project**” (timely preparation )

**19 infrastructure issues** to be considered during the different three stages of development of a specific infrastructure for a research reactor project :

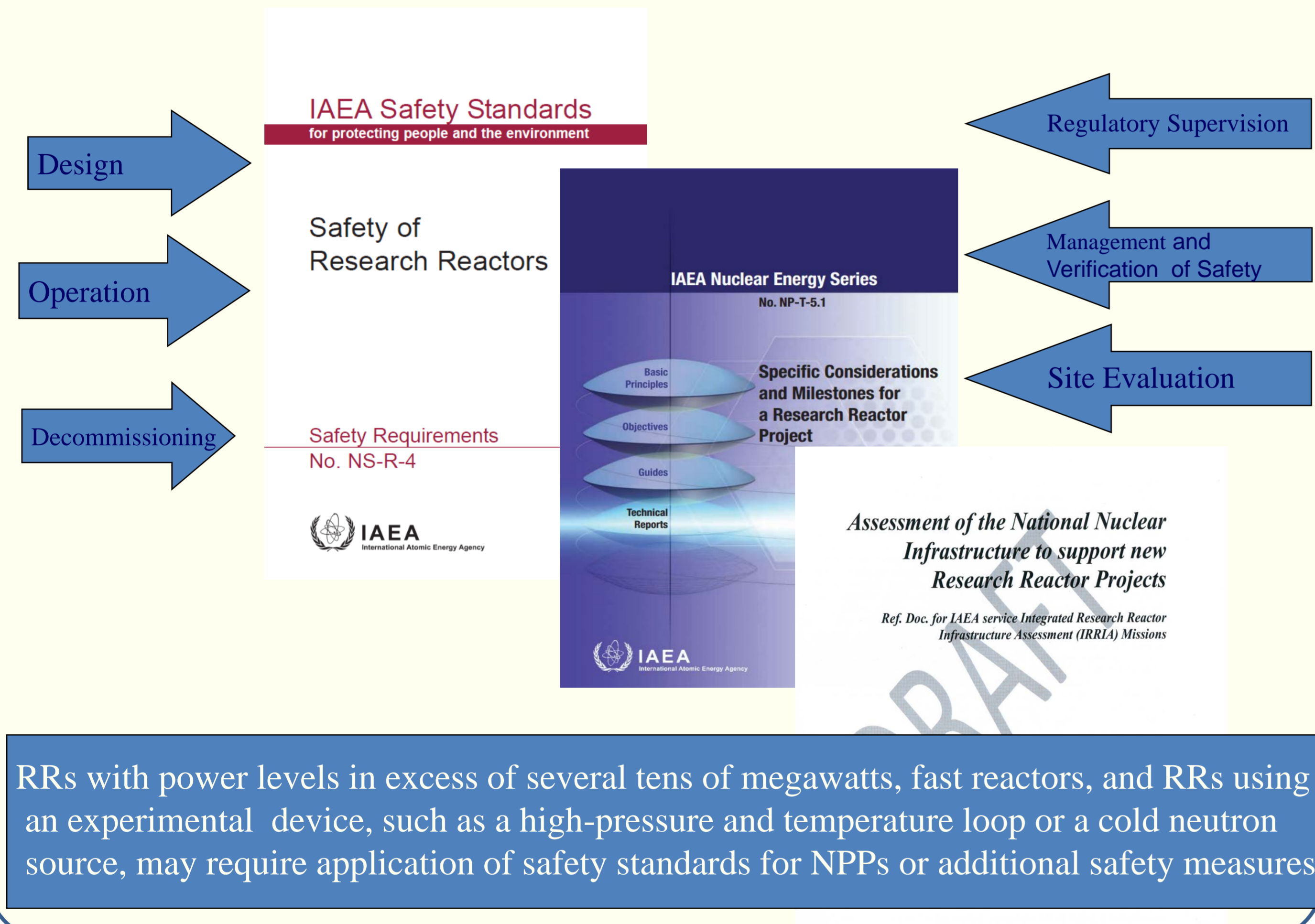
- such as **legislative framework, Regulatory framework,**

Evaluation will provide to **identify gaps** between current status and requirement, and **future development needs**.

## Self-assessment process



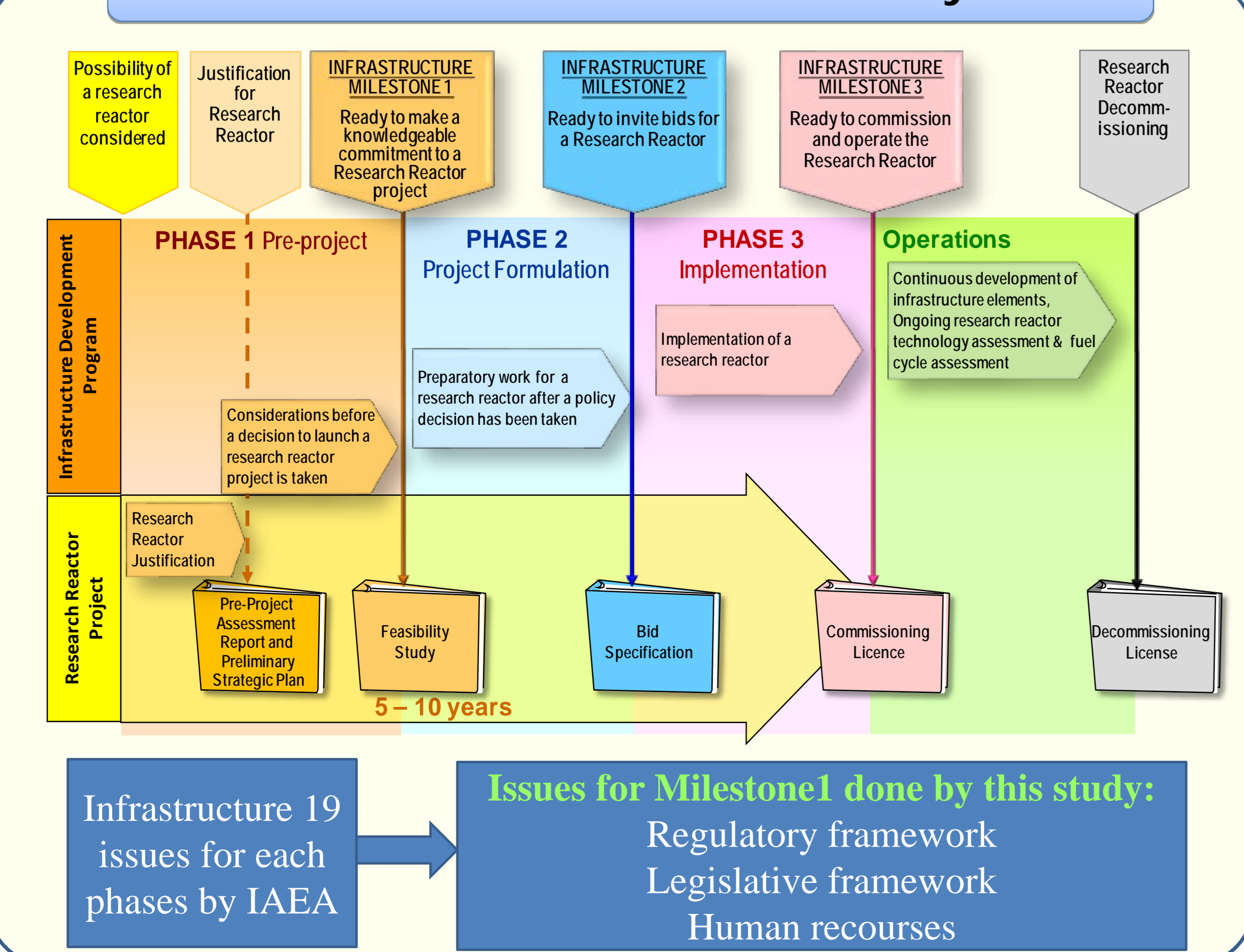
## Documentation for new RR by IAEA



## Summary of self-assessment result

1. Legislative framework	
Condition	Statue
International legal instruments identified by RRPIC and adherence discussed and planned with government	<b>Minor action needed</b> - To have to join convention on NS
Government plans to amend the existing legislation are in place	<b>Minor action needed</b> Need to be spesific plan
Consultation with national stakeholders about the legislative framework taken place	<b>Significant action needed</b> There isn't any attempt
2. Regulatory framework	
Condition	Statue
RRPIC understands the need for and the scope of the regulatory framework and the specific plan needs to be developed	<b>Minor action needed</b>
3. Human resource	
Condition	Statue
A plan exists to develop and maintain the required human resources at the national level	<b>No action need</b>
Knowledge and skills needed at the national level to support a RR project identified by AMPT and included in the national plan, accepted by RRPIC	<b>Significant action needed</b> There isn't any attempt

## Milestone for a research reactor by IAEA



## Conclusions

The self-assessment is an essential and useful tool to **identify weakness** and **additional works needed to develop** its national infrastructure for implementing new nuclear research reactor project.

Some weakness issues of Mongolian legislative framework have been identified in current situation.

- Existing legislation is addressing mainly **radioactive minerals and radioactive isotopes** as have to amended for **nuclear facility including research reactor**.

Mongolian regulatory framework was restructured in 2015.

- **Nuclear and Radiation Regulatory Department** of the GASI is a Regulatory Body, its general functions are **assessment of applications, authorization for radiation sources, inspection and enforcement**.

Human resources have been preparing by national universities and institutes, and joining to foreign universities in national level.

- **Practical experience, integrated knowledge and specific training for staffs is necessary for implementing research reactor project.**
- **The before starting a research reactor project, integrated plan for human resources should be developed.**