



# The Key Technical Components for National Strategies for SFM

## The key “essential” facilities

**Interim storage facilities adapted to the radiological substances they receive**

- **Cooling just after unloading**
- **Keeping until the next management step is available (reprocessing/disposal)**

**Infrastructures, systems and equipment for shipping (loading/unloading) and transport of radioactive substances adapted to the radiological substances to be transported**

- **Including fleet of transport casks for the various transport casks**

**Long-term management options for radioactive waste adapted to their characteristics/nature**

- **Underground characterization and R&D program, including underground research facilities for the development of deep geological disposal for HLW or SF**
- **Disposal geological facility**
  - **All countries started their nuclear program without these facilities, however they will have to be developed**

**The other facilities of the fuel cycle may or may not be build on national soil depending on the national energy policy. Their services are commercially available.**



# The Optional Technical Components for National Strategies for SFM

## Optional and depending on National strategy

- Nuclear fuel fabrication facilities can be developed Nationally or nuclear fuel can be bought on the global market and commercially supplied from abroad.
- Nuclear fuel treatment facilities can be developed Nationally or reprocessing services can be bought from foreign processing operators (Under bilateral National agreement)
  - SNF is shipped abroad for treatment. The treatment operator ships back the waste produced by the treatment operations (HLW and IL-LLW)



# The Key Organizational Components for National Strategies for SFM

**Comprehensive regulatory framework defining the role of the various actors in terms of Safety, Security and Safeguards, including management of emergency situation**

- **State**
- **Public agencies, authorities and stakeholders (National and local)**
- **Operators**

**Scientific and technological program**

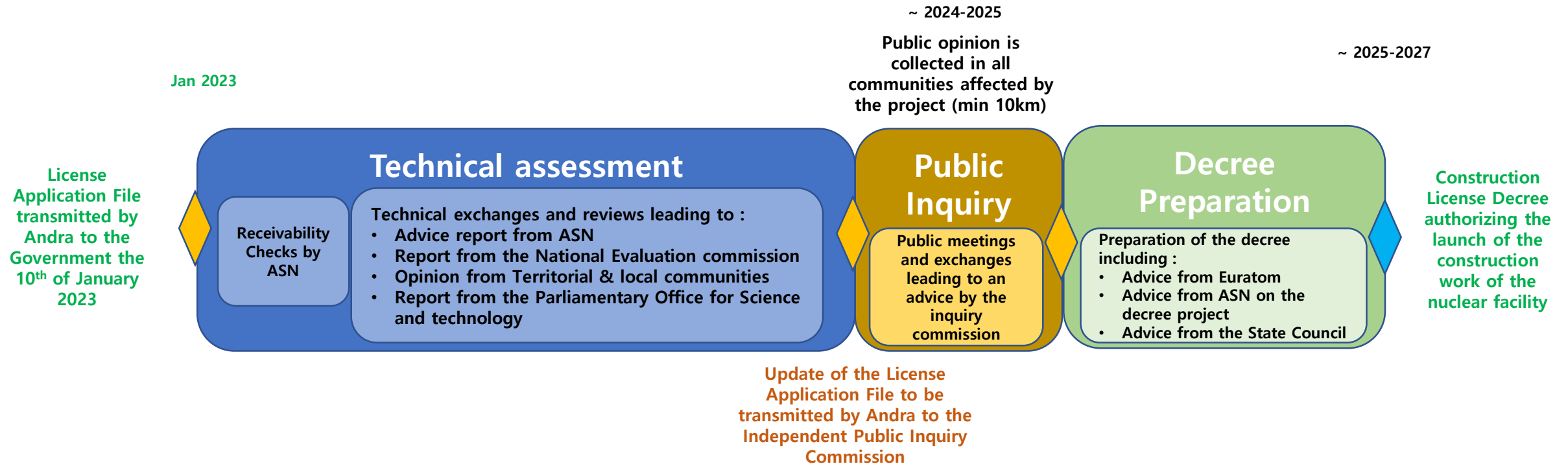
- **Human resources for staffing the various actors**
- **Human and technical resources to provide the right level of analyses and expertise in support of decisions**
  - **Expert commissions and advisory committees...**
  - **Laboratories and equipment for surveillance and environmental monitoring, quality controls...**
  - **Management of emergency situation...**

**Adapted international agreements for safeguards and fuel supplies (potential transport...)**

**Dedicated financial scheme or mechanism to secure the funds for long-term SF management**

**National Inventory and adapted data management systems**

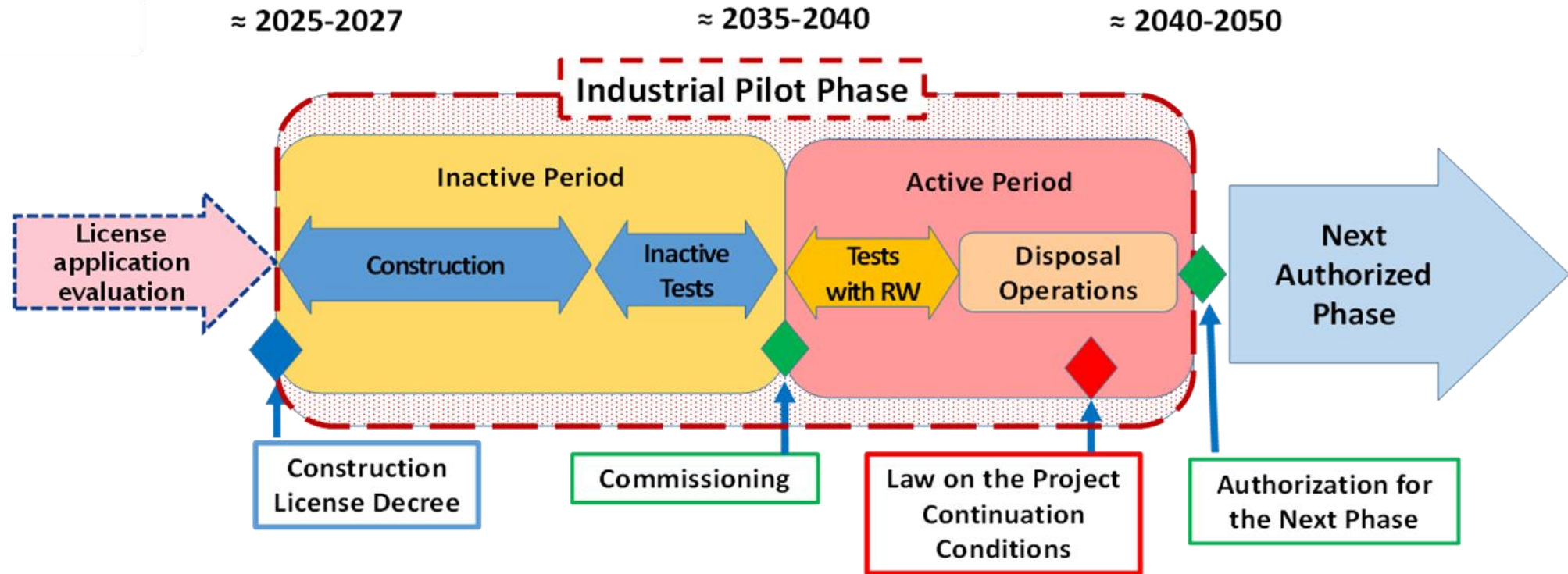
# The License Application Assessment Process



**This specific authorization process has been designed by the laws of 2006 and 2016.**

**During the license application assessment, optimization studies will continue to prepare construction. So will exchanges with the public to prepare and inform on the complementary characterization works carried out (archeology, environmental survey, utility supplies, transports...) and on the future construction work.**

# The Authorization of Operations : A Progressive Decision Process



The industrial pilot phase ends after a law is voted by the Parliament defining the conditions for the continuation of disposal.

The idea of the pilot phase emerged from the Public debate in 2013. It was made into Law in 2016.

The role of the parliament is essential. Its decision will be requested at all major key stages (future laws).