

Role of Nuclear Knowledge Infrastructure in Building and Developing a Nuclear Industry

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Current level of development of nuclear technology pushes future owners and users to address several important challenges at the very beginning of preparation for introduction of nuclear power programme including development of national expertise and technical competence for safe and secure use of nuclear technology and creation of national scientific and research infrastructure. However, many times national stakeholders involved into the development of nuclear power programmes act in separate information environments. This creates confusion and may result in delays of execution of a nuclear power programmes. A common environment in this case is important to ensure information exchange and collaborative work on nuclear power programme development. A common environment facilitates transfer, preservation and spread of nuclear knowledge to all stakeholders involved in a national nuclear power programme. Due to the long life cycle of nuclear power plants, strengthening and maintaining the effective management of knowledge and information over the entire life cycle for licensed nuclear facilities is imperative. This covers areas including design, construction, commissioning, operation and decommissioning, especially in newcomer countries and new builds. Nuclear knowledge infrastructure assumes this role and helps countries deciding to develop nuclear programmes ensure the safe and secure use of its nuclear power for national development.

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