

Request for Proposal

Small Modular Reactor Simulator to Support Civil Nuclear Energy Education and Training in Central Asia

Submission deadline: August 9, 2024. Applications will be considered on a rolling basis.

Summary:

The International Science and Technology Center (ISTC) **is seeking proposals from qualified organizations, SMR vendors, and other relevant entities to provide a Small Modular Reactor Simulator (SMR) for academic training and workforce development** in Kazakhstan and other partner countries in the region. The SMR simulator will be a part of a regional SMR training hub in Kazakhstan. The SMR training hub will provide eligible countries in Central Asia, that are approaching deployment decisions for specific nuclear reactor projects, with a suite of advanced project preparation tools and training to prioritize the highest standards of nuclear security, safety, and nonproliferation as key criteria in future reactor deployment decisions. The Project is funded under the Foundational Infrastructure for Responsible Use of Small Modular Reactor Technology (FIRST) Program (see the FIRST program background [here](#)).

Location: The SMR simulator is planned to be deployed at the facilities of the Institute of Nuclear Physics (INP), location is Almaty (1 Ibragimov Street, zip code 050032), the Republic of Kazakhstan and supported by the Ministry of Energy on Kazakhstan.

Scope: The SMR simulator will assist Kazakhstan and other eligible countries in the region in conducting training and developing local workforce in operating small modular reactors to ensure flexible operation, demonstration of real-time response to normal and off-normal conditions, and electricity generation consistent with the highest standards of nuclear security, safety, and nonproliferation. The selected contractor will work closely with ISTC and the FIRST Program to provide, install, test, and train host institution users for the SMR simulator within a mutually agreed schedule and budget. The selected contractor will provide all necessary equipment for the simulator, software support, and training of the local team.

Please note that the SMR simulator will be used solely for educational and workforce development purposes and should not include U.S. export-controlled data.

Proposal Requirements:

- Statement of Interest and Technical Capabilities
- Cost proposal
- List of recent experience in the RFP Subject Matter

For any additional questions, please reach out to tender@istc.int.

Schedule Example

Key Milestone	Est. Completion Date	Description
Contract execution	TBD	Vendor, ISTC, and INP sign contract; project start-up and initiation activities commence
Project kick-off and administration	+1 month after contract execution	
Coordinate with INP for room set-up and confirmation of shipping address	+2 months after contract execution	
Equipment installed at INP facility	+6 months after contract execution	Equipment arrives and is installed at the INP facility by Vendor representative with assistance from INP
Completion of training, turnover to INP	+9 months after contract execution	Vendor provides training and turns over Simulator to INP; two-year software-services subscription period commences
First year after turnover	+21 months after contract execution	Vendor continues to service the Simulator
Second year after turnover	+33 months after contract execution	Expiration of software-services subscription period and support services