



Contribution ID: 28

Type: **Wedge Participant**

NUCMAT: INTEGRATED NATIONAL-LEVEL NUCLEAR MATERIALS INVENTORY MANAGEMENT SOFTWARE

The main purpose of the development of the NUCMAT software is facilitation of the implementation of an integrated national-level nuclear materials inventory management system in countries with different nuclear programs. NUCMAT is comprehensive nuclear material accounting for and control of software that has three main pillars: 1) Safeguards: Accounting for and reporting of nuclear materials in full compliance with the IAEA requirements and regulations 2) Nuclear Security: Interface between nuclear material accounting and protection of nuclear material 3) Cyber Security: Sensitive data protection in multiuser environment against external attacks and insider threat. NUCMAT could be used both at state and facility/LOF levels using either single server or distributed network configurations through protected communication channels. Besides all IAEA required reports NUCMAT allows user to generate additional free format reports to facilitate regulatory body/IAEA inspections, as well as nuclear security efforts. Reports generated by NUCMAT are fully compatible to pass QA/QC control via IAEA QCVS program.

To support nuclear material protection efforts NUCMAT provides user with recoverable history of each nuclear material with exact specification of the location as well as comprehensive, traceable log information. In NUCMAT strong multi-layer means were deployed to guarantee secure storage and transfer of sensitive information.

Which "Key Question" does your Abstract address?

SGI2.1

Topics

SGI2

Which alternative "Key Question" does your Abstract address? (if any)

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Session Classification: [SGI] Tools, Approaches and IT Systems for State Safeguards Reporting

Track Classification: Shaping the future of safeguards implementation (SGI)