

NÜTED (NUCLEAR TECHNICAL SUPPORT ORGANIZATION)

5. MDEP Conference, Antalya - Türkiye 24-25 April 2023

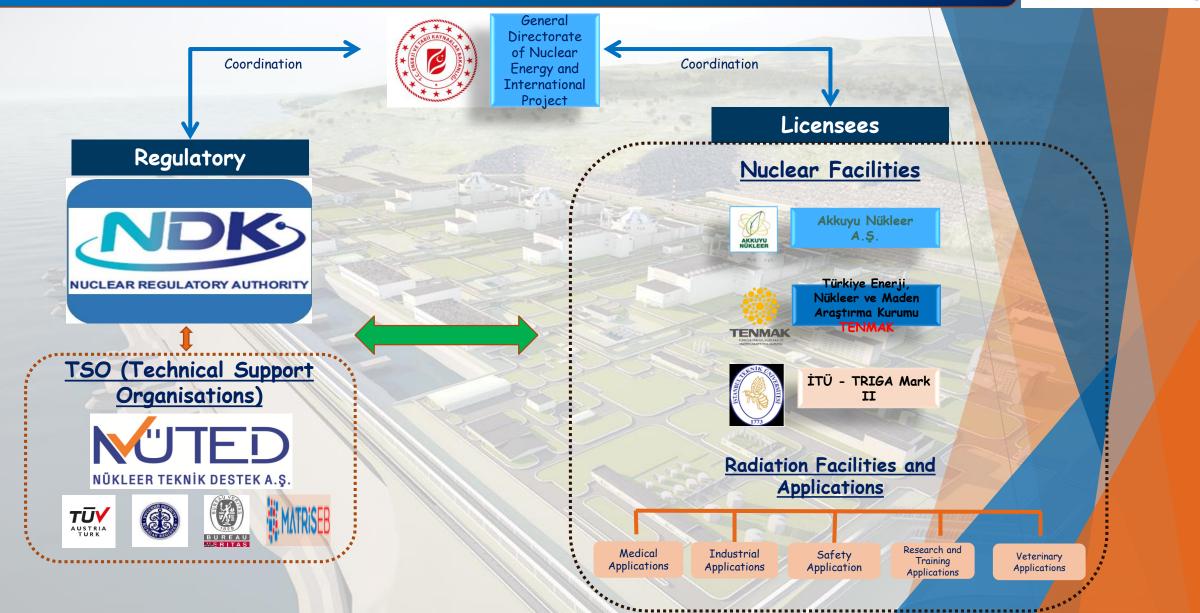
Yusuf CEYLAN



- Turkish Regulatory Ecosystem
- Technical Support Organisation (NUTED)
- * NUTED's Establishment and Development Steps and Organisation
- ❖ NUTED Services to NDK
- Future Plans and Projects of NUTED
- Chalanges and Lesson Learnt

NUCLEAR ECOSYSTEM IN TÜRKİYE

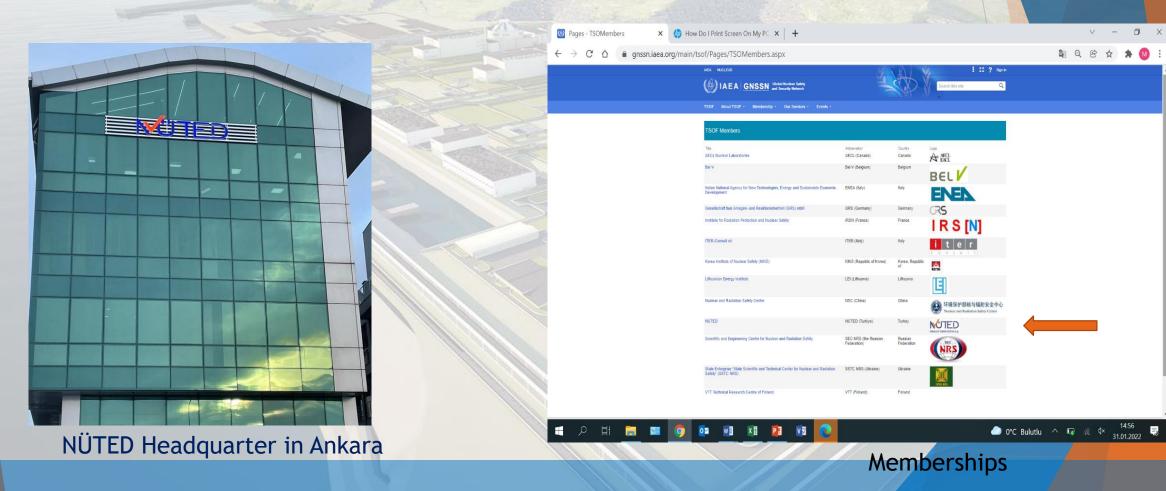




What is the Role of NUTED?

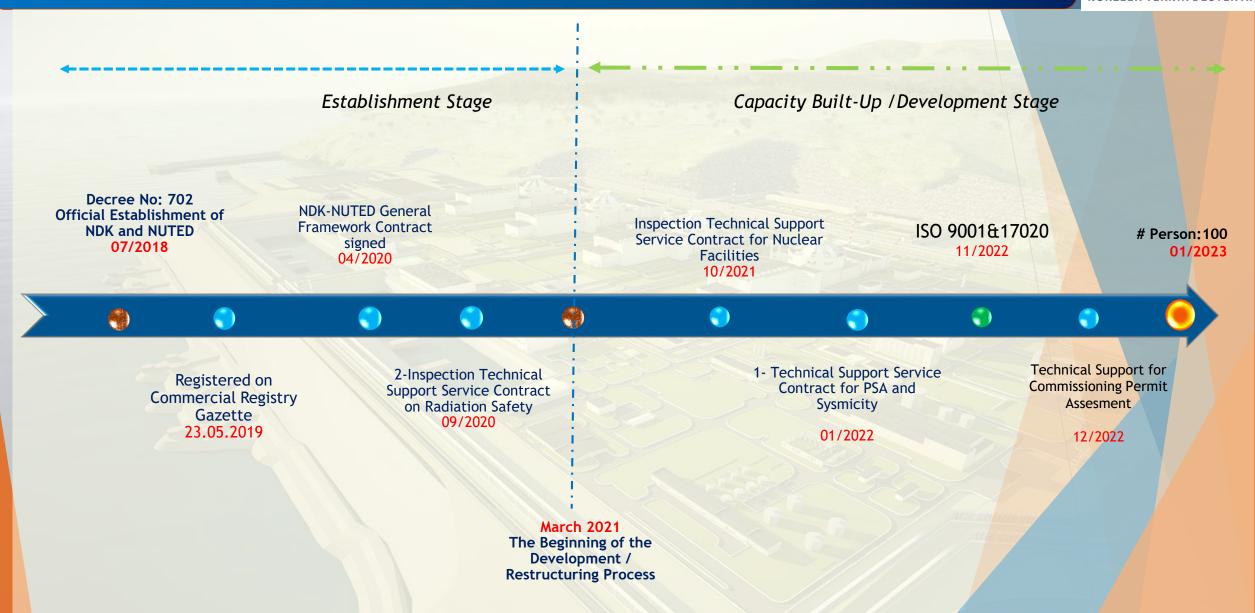


- NÜTED provides technical and scientific support to the Turkish Nuclear Regulatory Authority «NDK» and its regulatory functions as well as the associated activities and processes to maintain the needed level of expertise, state of the art tools and equipment.
- NÜTED's main support functions are authorization, review and assessment, analyses, inspections, trainings, drafting regulations and guides.



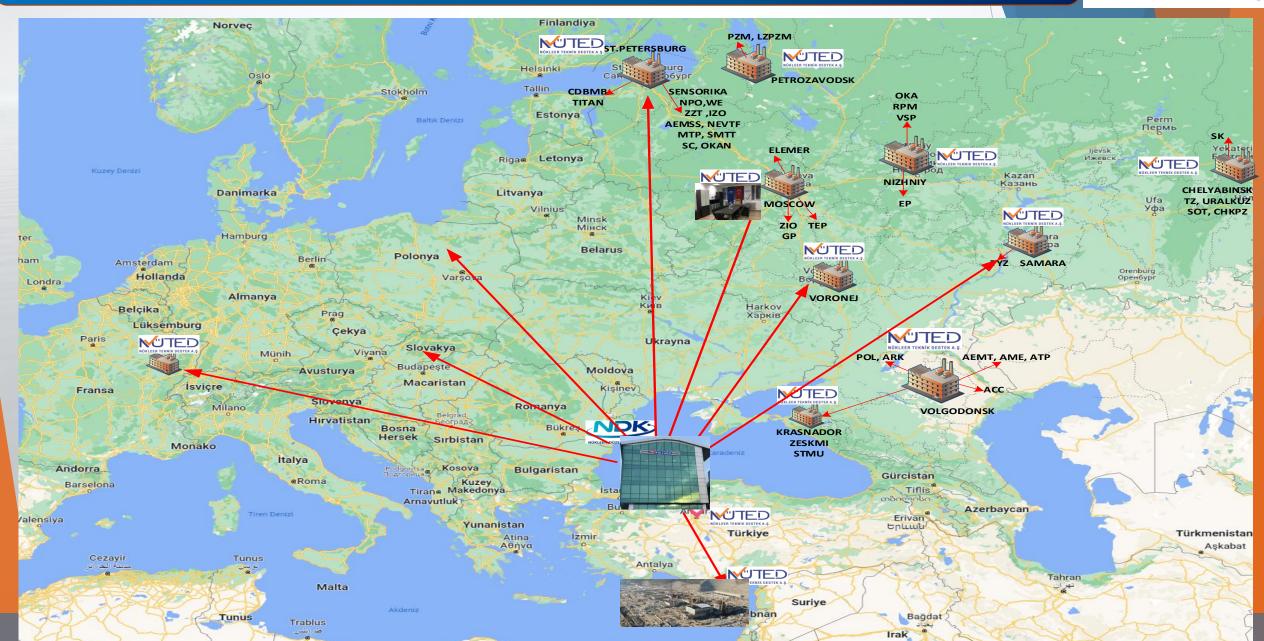
NUTED's STEPS of ESTABLISHMENT and DEVELOPMENT





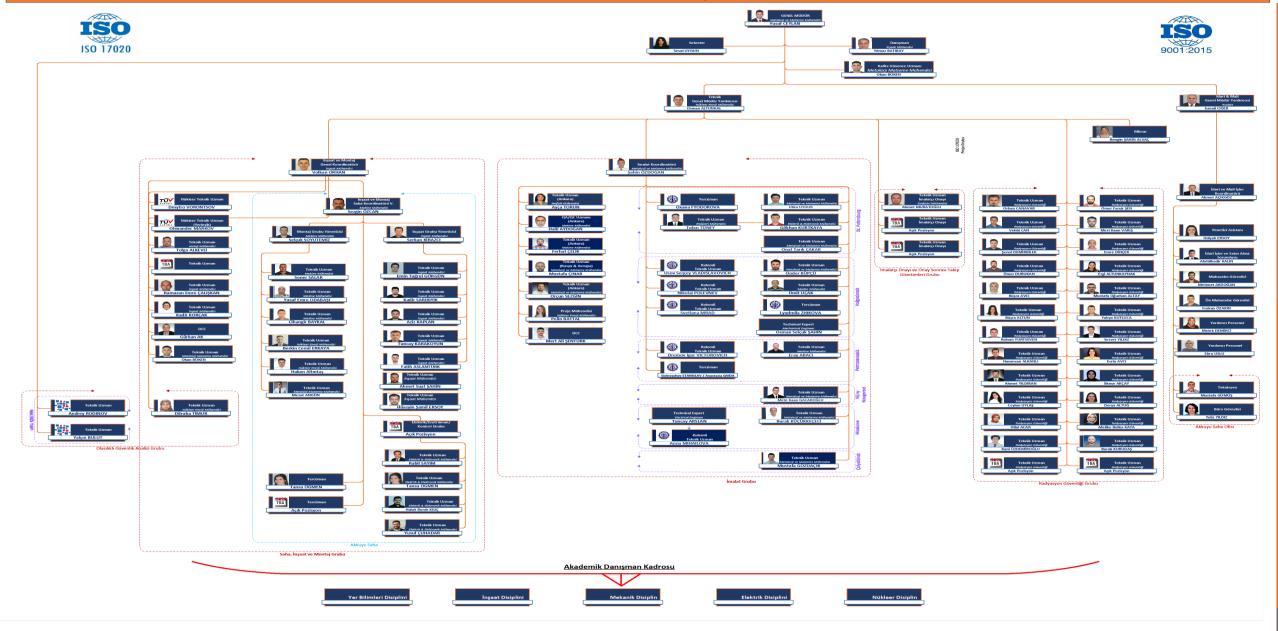
NÜTED Organisation







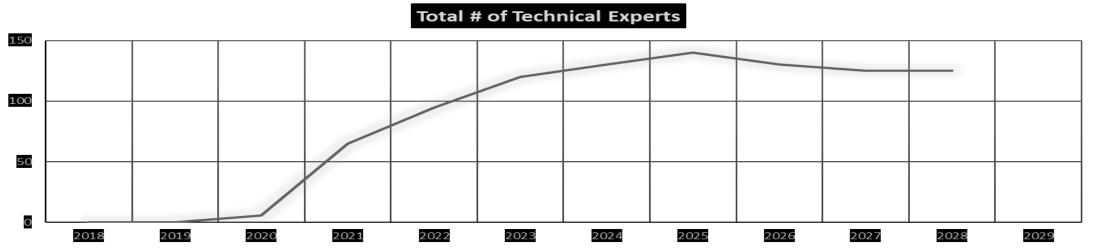
NÜTED ORGANİZASYON ŞEMASI



NUTED's EXPERTISE BASED ORGANIZATION PLAN (Future Planning)

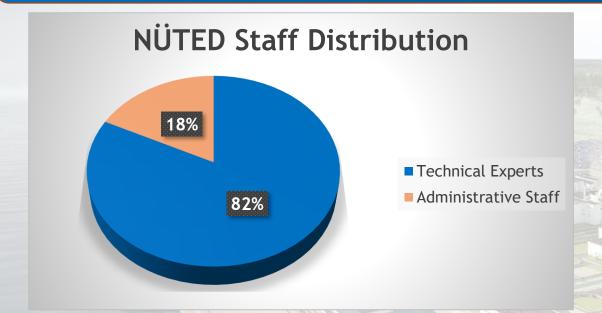




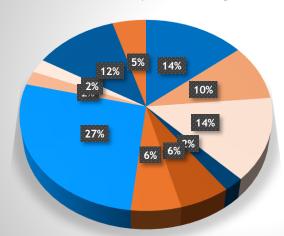


NUTED's EXPERTISE BASED ORGANIZATION (Current Status)



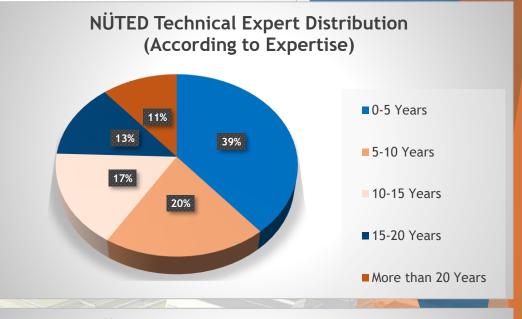




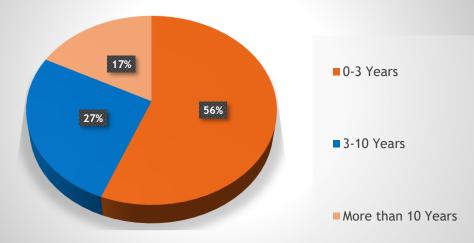




■ Translator



NÜTED Technical Expert Distribution (According to Nuclear Expertise)



NUTED SERVICES TO NDK (Manufacturing Inspections)





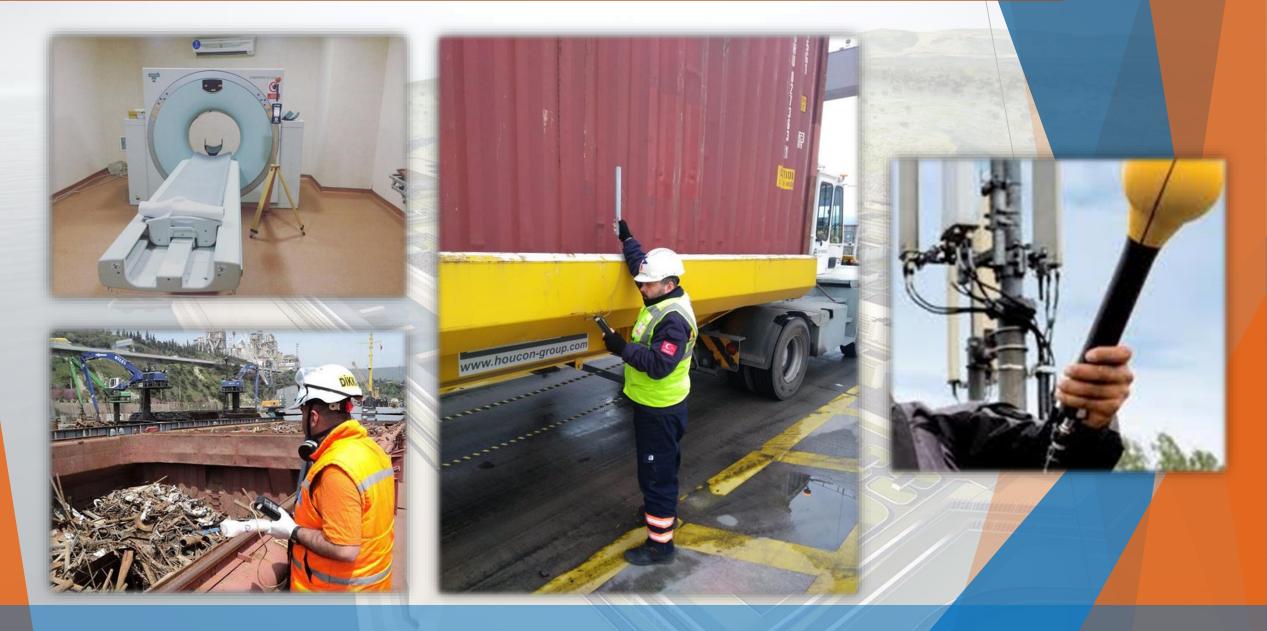
NUTED SERVICES TO NDK (On-Site Inspections)





NUTED SERVICES TO NDK (Radiation Safety)





NUTED SERVICES TO NDK



Surveillance/Inspection Services for;

- Site Surveillance
- NPP Equipment Manufacturing Inspection,
- NPP On-site Inspection (Site, Construction and Installation,)
- Radiation Facilities and Sources

Licensing, Analyses, Safety Review and Assessment Services for;

- Probabilistic Safety Analysis for level-1 & Level-2,
- Probabilistic Safety Analysis for Seismic,
- Training and Consultancy for Preparation of Commissioning Phase
- Review and Assessment of the Commissioning Application for NPP

Approval, Training and Certification Services;

- Nuclear Equipment Vendor Approval
- Personal Qualification
- Nuclear Inspector Qualification Training
- Basic Nuclear Safety and Nuclear Culture Training

FUTURE PLANS and PROJECTS



Technical Support for Inspection and Licensing

- Supporting Regulatory Authority's inspection activities for Commissioning and Operational phases
- Supporting Regulatory Authority's <u>licensing process from Commissioning phase and Operational phases</u>

Emergency Case Coordination Center Support Service

- Emergency Case Coordination Center will be required after commissioning of NPP
- Technical and man power support for the Emergency Case Coordination Center

New Nuclear Project

- To give Support to Regulatory Authority or Licensee' for Review Assessment and Oversight for whole Life-Cycle of NPP from Site to Decommissioning phase; Egypt, Uzbekistan & Hungary NPP Projects
- To Establish infrastructure for New-Comer Countries

CERTIFICATE



✓ ISO 17020 certificate granted with the end of 2022! ✓ ISO 9001:2015 certificate granted in February 2023







TURKISH STANDARDS INSTITUTION hereby certifies that the organization NÜTED NÜKLEER TEKNİK DESTEK A.S.

MUSTAFA KEMAL MAH. 2127, CAD. NO:42/7 ÇANKAYA -ANKARA / TÜRKİYE

has a QUALITY MANAGEMENT SYSTEM which fulfills the requirements of the TS EN ISO 9001:2015

TURKISH STANDARDS INSTITUTION Scope of the certificate is given in annex

> Belge No / Certificate No KY-8438/23 Belge Tarihi / Date of Certificate 07.02.2023 Geçerlilik Tarihi / Valid Unti 07.02.2026 Revizyon Tarihi / Date of Rev

07.02.2023 ilk Belge Tarihi / Initial Certification Dat

07.02.2023 his certificate is valid provided that comelian

Bu belge belgelendirme şartlarına uygunluk sağlandığı sürece geçerlid

FSE-ISO-EI

TÜRK STANDARDLARI ENSTİTÜSÜ

Türk Standardları Enstitüsü Türk Akreditasyon Kurumu TÜRKAK tarafından akredite edilmistir Turkish Standards Institution, has been accredited by the Turkish Accreditation Agency TÜRKAK.

060702202305260001

Chalanges and Lessons Learnt



- ✓ Lack of human sources in Nuclear...

 (Find the professionals from similar industries such as Oil and Gas, Abroach Project etc..)
- ✓ Lack of Experience with new Nuclear Technology... (Hiring experienced professionals from the countries which are using similar technology)
- ✓ <u>Sustainability of the Company Resources with the different stages of Project...</u>

 (Possibility to give services to similar industries or newcomer countries)
- ✓ Dependency to Project Schedule (uncertainties of the Project)...
 (Planning and acting proactively for the different possibilities of the project.



Thanks for listening....

Questions....?

Yusuf CEYLAN

NUTED - Director General

Mail: yusuf.ceylan@nuted.com.tr