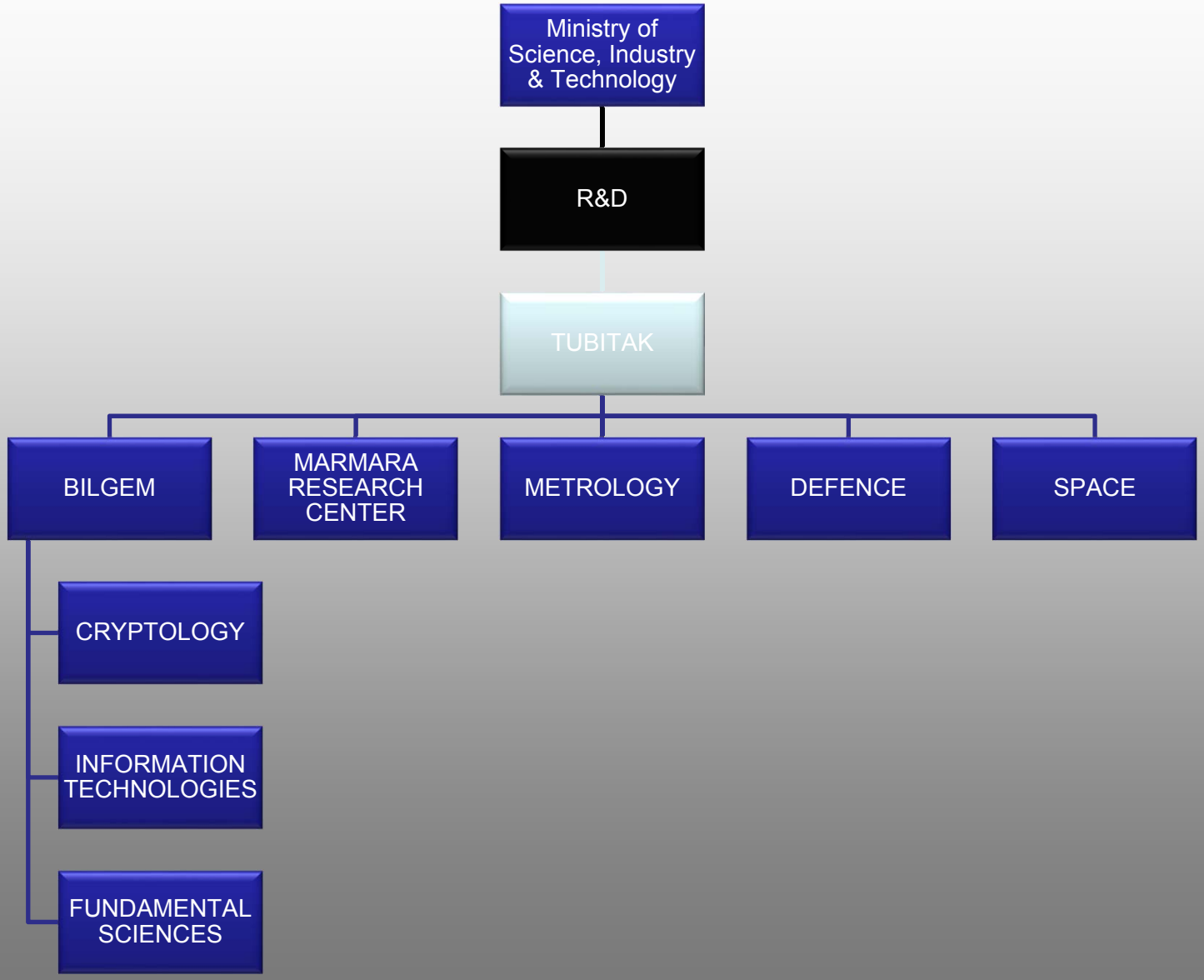
TÜBİTAK

BİLGEM

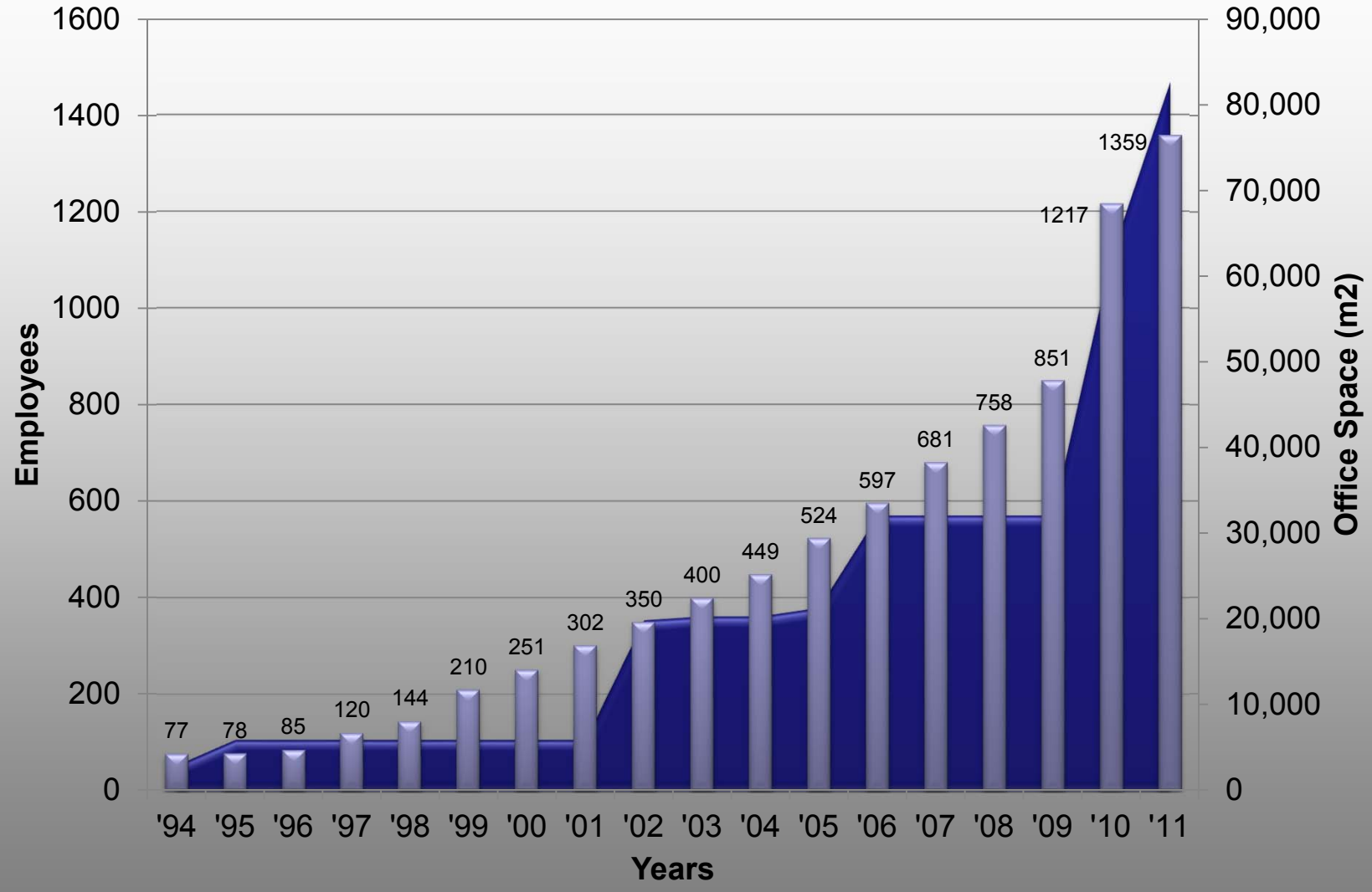
CENTER OF RESEARCH FOR ADVANCED TECHNOLOGIES OF INFORMATICS AND INFORMATION SECURITY
TURKEY

Mehmet Sabır KİRAZ

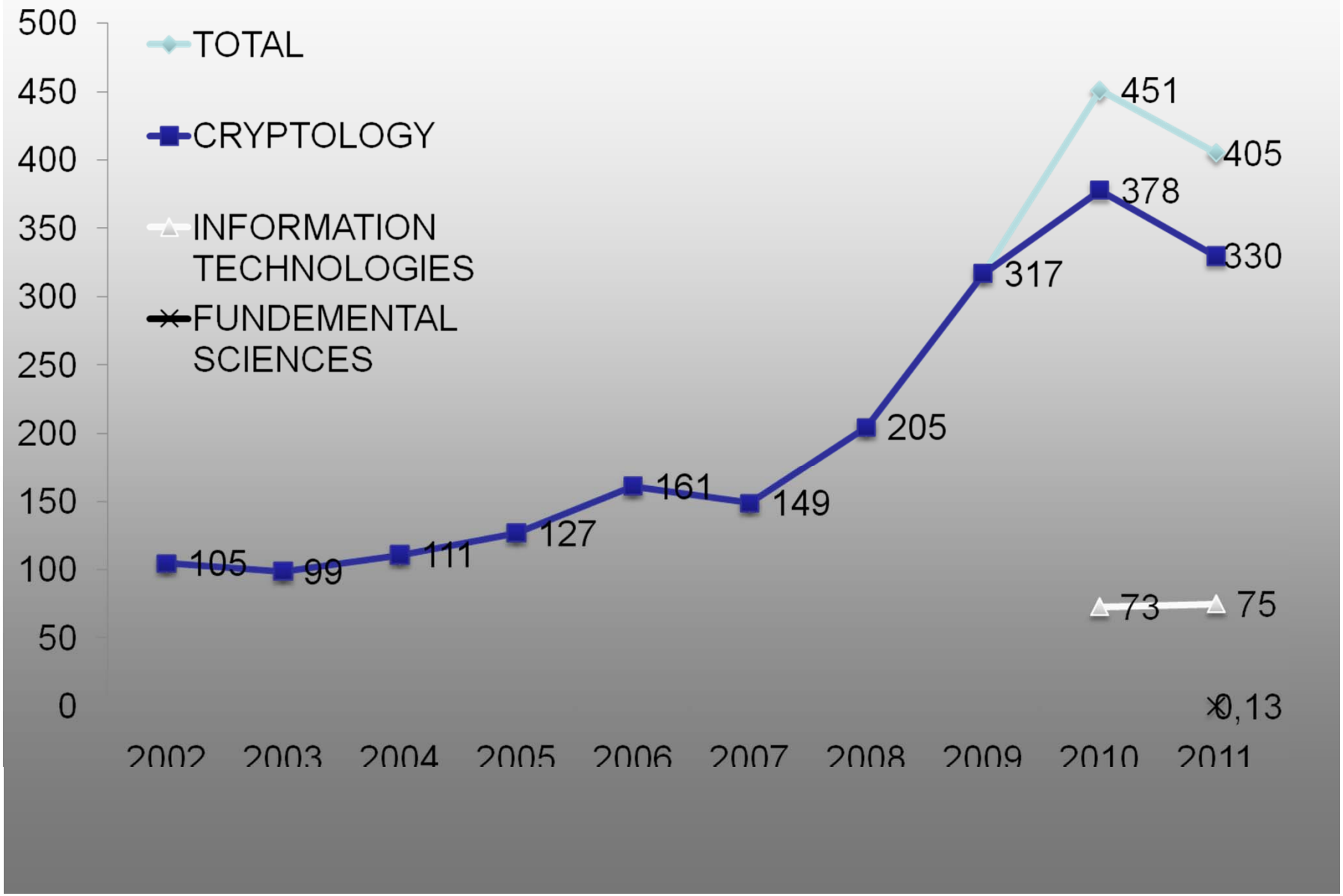
BILGEM within TUBITAK



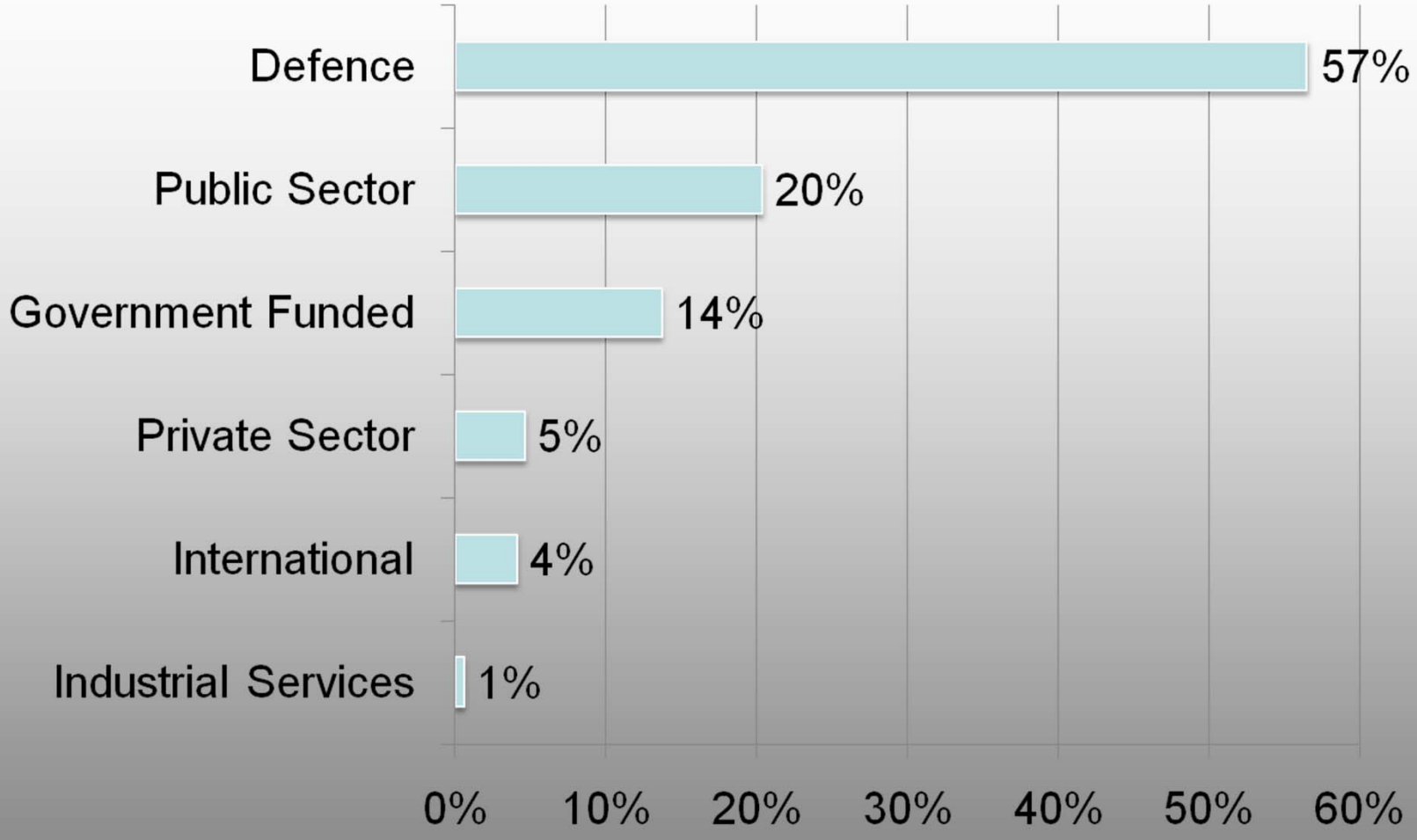
Personnel and Office Space



Project Budgets (Million USD)



Distribution of the Project Budgets

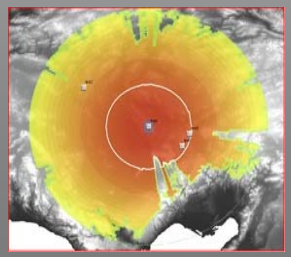


(405 Million USD)

Fields of Operation

- Information Security
- Information Technologies
- Microelectronics
- Optoelectronics
- Electronic Warfare
- Sensor and InformationTechnologies
- Platform Mission Control and Simulation Technologies
- Digital Signature Certification Authority

TOP SECRET



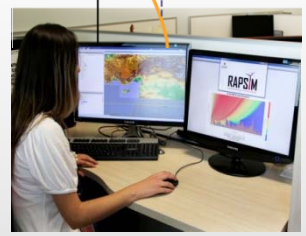
Turkish Electronic Identity Card

- 2 chip, contacted and contactless
- Polycarbonate, 10 years duration
- National Operating Systems
- Resistant to copy physically
  - Anti-scan/anti-copy patterns
  - Background printing
  - Guilloches / fine line patterns
  - Hologram
  - …
- Resistant to copy electronically
  - CC EAL 5+ Chip,
  - CC EAL 4+ Operating System
- Personal biometrics kept in chip only
- e-ID, e-Singature, e-Passaport (ICAO 9303)
- Electronic Authentication system
- Smart Card Operating System (AKİS, UKİS) and Microchip (UKTÜM),
- Secure Card Access Devices
- National Public Key Infrastructure,
- Card Management and Issuing System.

Technological Infrastructures

Center of Cryptanalysis

Cryptographic algorithm and protocol development and testing



Radar Performance and Trace Analysis Center

Analysis of the impact of the wind turbine projects to the radar systems

Speech and Language Technologies Laboratory

- Multilingual solutions in the fields of speech and language technologies
- Machine translation and speech/speaker recognition technologies
- Biometric technologies

Advanced Genome Research and Bioinformatics Laboratory

Genetics, molecular biology, health, farming, livestock, energy and defence

Common Criteria Testing Center

TEMPEST Test Center

Antenna Test and Analysis Center

Software Test and Quality Verification Center

Semiconductor Technologies Research Laboratory

Public Certification Authority

Quantum Cryptology Research Laboratory

Certificates

- NATO SECRET Facility Security Certificate
- National SECRET Facility Security Certificate
- ISO 9001:2000
- CMMI Level 3 (Capability Maturity Model Integration)
- NATO AQAP 2110 (NATO Quality Assurance Requirement for Design, Development and Production)
- NATO AQAP 2130 (NATO Quality Assurance Requirement for Inspection and Test)
- NATO AQAP 160 (NATO Integrated Quality Requirements for Software Throughout the Life Cycle)
- ISO 17025 — TURKAK (Turkish Accreditation Authority) Accreditation - Common Criteria Test Center
- ISO 17025 — TURKAK (Turkish Accreditation Authority) Accreditation – EMI/EMC & TEMPEST Test Center
- ISO/IEC 27001:2005 — Information Security Management System Certificate for Public Certification Authority