The TReSPAsS-ETN project

TRaining in **S**ecure and **P**riv**A**cy-preserving biometric**S**

Early Training Networks
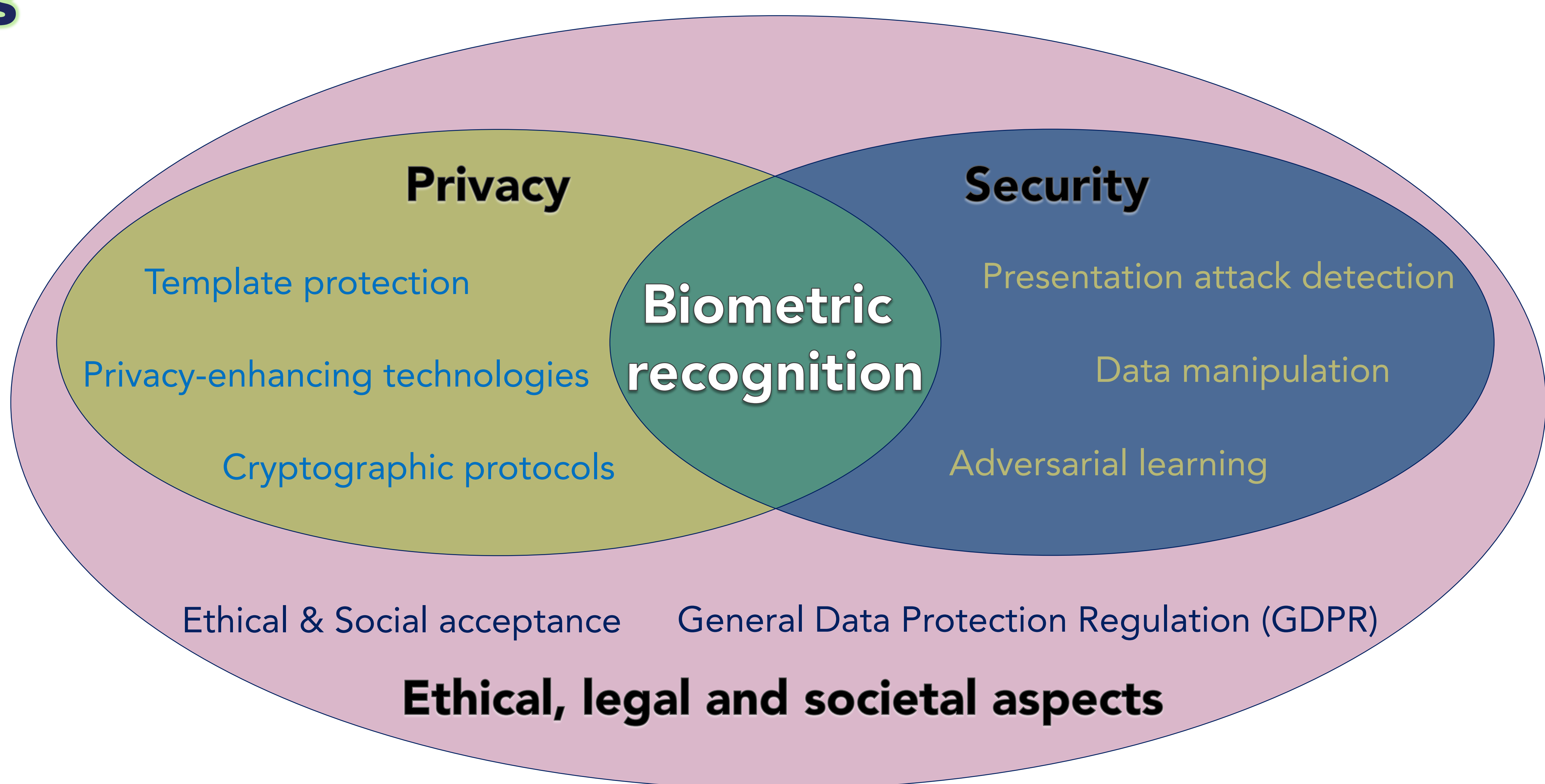
mission

TReSPAsS-ETN provides a training in three broad research areas: (i) privacy-preserving biometrics technologies, (ii) security protection in biometrics systems and (iii) ethical, legal and societal aspects for biometric recognition systems. By protecting privacy and by improving security, the social acceptance of biometrics technologies can be improved and conformant technological advancements can be made.

modules

Privacy

Template protection

Privacy-enhancing technologies

Cryptographic protocols

Biometric recognition

Security

Presentation attack detection

Data manipulation

Adversarial learning

Ethical & Social acceptance   General Data Protection Regulation (GDPR)

Ethical, legal and societal aspects

innovations

◎ Privacy-preserving biometric technologies
- ❍ assess state-of-the-art multi-biometric privacy enhancing-technologies;
- ❍ develop novel approaches for biometric template protection;
- ❍ investigate the application of advanced cryptographic techniques such as homomorphic encryption;
- ❍ perform an application-specific evaluation thereof.

◉ Security protection in biometric systems
- ❍ assess vulnerabilities to presentation and morphing attacks upon biometric systems;
- ❍ propose innovative novel solutions to detect attacks and increase the security of biometric systems;
- ❍ integrate attack detection methods with state-of-the-art biometric systems;
- ❍ assess and benchmark attack detection systems and security solutions within realistic and practical application scenarios.

◉ Ethical, legal and societal acceptance issues surrounding biometric systems
- ❍ assess ethical, legal, and social acceptance of biometric algorithms;
- ❍ propose requirements for data protection and security in biometric systems;
- ❍ develop a regulatory framework and use it to assess proposed security and privacy protection techniques.

- ❍ Project start: January 2020
- ❍ Duration: 48 months
- ❍ Coordinator: EURECOM
- ❍ Beneficiaries and Partners:

EURECOM
Sophia Antipolis

da/sec
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DEUDAT
Datenschutz und Informationssicherheit

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European Association for Biometrics
eab
Human Identity in Europe

Digital Barriers

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