

Secure Societies 2024: Horizon Europe Cluster 3 Brokerage Event in Istanbul Pitch Presentation Template

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REPUBLIC OF TÜRKİYE
MINISTRY OF INDUSTRY
AND TECHNOLOGY



Business Support on Your Doorstep



**«Increased Security at the Land Borders of Eastern Europe –
Turkiye to Europe»**

**HORIZON-CL3-2024-BM-01-03: Advanced user-friendly,
compatible, secure identity and travel document
management**

Contact Details

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Proposal activity: Border Management (including customs security and maritime security)

Description of the Organization

- Short information about NTNU

*NTNU is an international oriented university with headquarters in [Trondheim](#) and campuses in [Gjøvik](#) and [Ålesund](#). NTNU has a main profile in science and technology, a variety of programmes of professional study, and great academic breadth that also includes the humanities, social sciences, economics, medicine, health sciences, educational science, architecture, entrepreneurship, art disciplines and artistic activities. The university's root goes back to 1760 with the foundation of Det Trondhiemske Selskab (Trondheim Academy). A merger in 2016 made NTNU Norway's largest single university. **The Department of Information Security and Communication Technology (IIK)** conducts international competitive research in several areas of cyber security, information security, communication networks and networked services. The department operates study programs in information security and communication technology at PhD, master and bachelor levels. **MR PET** - multidisciplinary research group on privacy and data protection together with experts with their own expertise focuses on interdisciplinary research to address complex privacy and data protection issues in collaborative environments/application areas such as Smart infrastructure, Law enforcement, Healthcare, Education, and Energy in the cyberspace.*

- Horizon2020/Horizon Europe Projects

METICOS (H2020) - Budget 4 997481 EUR

The METICOS project has identified the need for “no gate crossing point solutions” in order ‘to allow for the seamless crossing of borders and security checks without the risk of invading people’s privacy, and gain the societal and political acceptance of these technologies, taking into account the human factor, the social and societal aspects, providing a secure environment for travel and for host countries. The NTNU team has developed an agent based simulation and modelling tool.

SMILE (H2020)

SMILE proposes a novel mobility concept, using privacy by design principles, that will enable low cost secure exchange and processing of biometric data, addressing in parallel the aforementioned challenges by designing, implementing and evaluating in relevant environments (TRL6) prototype management architecture, for the accurate verification, automated control, monitoring and optimization of people’ flows at Land Border Infrastructures

- Expertise related to the topic

MRPET Research group is located at the department of information security and communication technology with one of its main focus areas on border security related projects, proposals, research articles, student supervision at various levels, and national and international collaboration

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Proposal idea/content



- *Role in the project: Coordinator*
- *Description of the proposed project idea (briefly with clear statements)*

The security of European Borders is not only a matter of protecting borders of European Union and Schengen Area, it is also a matter of protecting the borders of countries surrounding Eastern and Southern Europe which do not belong to either of EU and Schengen Area, such as Turkiye. Particularly Turkiye has a strategically important role as being a bridge between European and Eastern Mediterranean-Western Asian Lands. When conflicts occur in Eastern Mediterranean and Western Asian Lands, there is migration to Turkiye and further on to Europe, which is a challenge. This is a challenge due to that border staff have to cope with high volumes of people in terms of registering them and verifying their identity during migrations. However, another main challenge is the safety and security of Turkish and European citizens in case people with malicious intentions move into Turkey, who either settle in Turkiye or further move onto Europe to settle there using legal or illegal means of move. For that reason, there maybe a need for strengthening the security of Turkish land borders by developing and deploying biometrics based high technology border crossing control systems to support the border crossing staff with registering and verifying high volumes of people. Such a system should be customized according to the needs of the Turkish land borders and would create an example for land borders of other East Mediterranean-Western Asian Lands experiencing similar challenges with Turkiye, This in turn may help the Turkish police to identify people with malicious intentions and acts in a faster way. The picture becomes even more complex when migrants move back and forth from Turkiye to their countries during holidays which increases the volume even more for border staff.

- Objectives:
 - To increase the security of external borders of countries surrounding Europe, particularly Turkish land borders.
 - To understand the requirements and needs for processing high volumes of people at Turkish land borders connected to Eastern Mediterranean and Western Asian land
 - To employ biometrics based automated border crossing systems for identity registration and verification
 - To increase the efficiency, speed, reliability and precision of border crossing registration and verification processes by supporting border crossing staff with latest technology.
- Expected results
 - A list of requirements and needs for designing an automated biometrics based decision support system for Turkish Land Borders
 - A biometrics based automated border control system that can help register and verify identity of persons entering and leaving external borders of Turkey at higher speeds, reducing errors and supporting border staff decision making.
 - Experimental results for deployment of the developed system at the pilot sites

Project participants

Existing Consortium - profile of known partners (if any)

No	Partner Name	Type	Country	Role in the Project
01				
02				
03				
04				
05				
06				
07				

Project participants

Consortium – required partners

No	Expertise	Type	Country	Role in the project
01	Border Police		Türkiye	Requirements and needs at Turkish land borders
02	Border Police		EU country	Requirements and needs at European land borders connected to Turkey
03	Research University	RTD	Türkiye	Research on biometrics based registration and verification system based on requirements and needs
04	NTNU	RTD	Norway	Research on biometrics based registration and verification - safety and security
05	ABC developer company	SME	EU country	Development and deployment
06	ABC developer company	SME	Türkiye	Development and deployment