1. Project title

BeSecure – FeelSecure: A Holistic Urban Security Governance Framework for Monitoring, Assessing and Forecasting the Efficiency, Sustainability and Resilience of Piraeus

2. Main theme

Urban Security

3. Project purpose and outcome (in two sentences)

The BeSercure-FeelSecure (BSFS) project aims to reinforce urban security and promote positive perception of urban safety by providing strategies & tools to link the main urban security stakeholders & facilitate their collaboration in physical-and-cyber space.

4. Project submitter (Member State), project leader(s) and project partner(s)

- Municipality of Piraeus, Greece
- Ministry of Citizen Protection (Police), Greece
- SingularLogic SA, Greece
- Urban Criminology Lab – Panteion University of Social & Political Sciences, Greece
- University of Piraeus Research Center, Greece
- European Forum for Urban Security (EFUS), France
- Space Hellas SA, Greece

5. Links to the project's website or online reports/publications (preferably in English)

https://www.bsfs-piraeus.eu/

6. Short summary of the project (**max. 100 words**)

Big and commercial districts are vulnerable for both inbound and outbound smuggling, street and organized crime. The BeSercure-FeelSecure (BSFS) project aims to reinforce urban security and promote positive perception of urban safety by providing strategies & tools to link the main urban security stakeholders & facilitate their collaboration in physical-and-cyber space. BSFS will introduce the Local Council for Crime Prevention (LCCP), where the urban security city stakeholders will be represented (municipality, police, local chambers etc.) under the common goal to decide on activities and interventions that increase city resilience against crime. Under the supervision of the LCCP, BSFS will apply a number of spatial interventions, such as image management, target hardening following the CPTED "Crime Prevention through Environmental Design" model, accompanied by social activation strategies to enhance community cohesion and connectivity at neighbourhood level. BSFS will also offer a digital platform enabling the assessment of combined physical cyber threats and the visualization of risks and other relevant activities through geospatial mapping to facilitate decision-making.

7. Project description

Piraeus is the largest & busiest port in Greece, among the biggest European ports and the main hub connecting Europe, Asia and Africa. Piraeus is the maritime and former industrial centre of the Athens metropolitan area, and one of the most densely populated cities in Europe (15.065 citizens/km^2). The urban threat landscape is comprised mainly by small scale crime (i.e. pickpockets, thieves), night crime activities, drug & cigarettes smuggling and immigrants' trafficking. These events are hardly reported to the authorities due to the lack of transparency, cross-sectoral cooperation and exploitation of cyber-physical flaws. Piraeus is divided in 5 municipal departments (MDs). The intervention areas will be MD2 (Centre (27.500 residents)) and MD5 (Tampouria (40.000 residents)), meeting the following urban crime factors:

- Low social cohesion entailing weak citizen engagement: According to the Greek National Statistics Authority, MD2 is the wealthiest in terms of income and employment status, while MD5 rank last in this list. MD2 is the Piraeus commercial centre where all the major businesses are located and can become potential targets of urban threats. In MD5 social cohesion is particularly low due to its high percentage of immigrants.
- High population density: MD5 is the most populated and degraded in terms of financial (lowest income per capita) and social (mixing with immigrants) aspects. Although MD2 is not that populated, the daily street traffic (40.350 moves) & cruise passengers move around the port area (18.6M in 2014) comprise high density factors.
- Sense of degradation: 88% of the population believe that the port environmentally degrades the city and 40% that the port socially degrades

Piraeus due to pollution, the movement of polluting/dangerous goods and high passengers' traffic.

- Fear of crime: according to a recent local poll, the citizens believe that urban insecurity is in the top 3 city problems. This feeling is strengthened by the high concentration of immigrants, the majority of which have entered the country from the port, and many of them illegally.
- Environmental degradation & urban design: Piraeus is the EU city with the lowest amount of green per capita (1.56 m^2), open spaces cover only 2.12% of the city while 11.000 acres are covered by abandoned and former industrial buildings. After the recent installation of tram rails, the road network of Piraeus has changed, having only one main entry and one exit, deteriorating the daily traffic and limiting the evacuation ways in case major incidents occur.
- Weak collaboration among the critical information systems of the urban authority, the police and other key stakeholders is associated to the almost non-existent interoperability, entailing information losses and hampering timely reaction of the first responders. Considering the emergence of cyber-physical crime (i.e. cyberattack at Port of Rotterdam), the need for holistic collaborative security solutions is imperative.

The solution of BeSecure-FeelSecure (BSFS) will span over the cyber-physical continuum by providing a holistic framework against urban security threats aiming at crime prevention and improvement of the actual and perceived security. This can be achieved via efficient collaboration of key urban entities, infrastructures and the citizens, entailing seamless information sharing and increased social cohesion. In this line, BSFS will be implemented in two dimensions (physical and cyber). In the Physical dimension, a Local Council for Crime Prevention (LCCP) (WP4) will be formed in Piraeus to promote collaborative decision making between the main urban stakeholders in addressing and dealing with social exclusion and marginalization, and by mobilizing and engaging the citizen's solidarity in the field of prevention of everyday crime. LCCP will be comprised by representatives of the urban authority, police, criminology (scientific) experts and cybersecurity (technical) experts. These decision makers will be supported by the Cyber dimension of the project, with the implementation of an Evidence-based Collaborative Urban Risk Management (CURiM) ICT platform (WP5). CURiM enables synergies among local stakeholders towards identifying, modelling, evaluation, forecasting and prevention of cyber/physical security threats. As depicted in the attached Architecture figure, CURiM will support the design and execution of LCCP actions through:

1. The collection and analysis of data from social media, devices & sensors

2. Mobile incident reporting by the citizens

3. Sentiment analysis from social media and citizen mobile reports

4. Urban threats and attack simulation

5. Collaborative risk assessment

In order to harvest immediate results, LCCP has defined an initial set of social mobilisation & spatial actions (WP6) to be performed in the intervention areas following the approach of modern CPTED "Crime Prevention through Environmental Design".

1. Facilitate the creation of neighbourhood crime prevention clusters, promoting the participative behaviour and engagement of citizens

2. Setup a one-stop-shop service for victimisation support with the aid of the Metropolis of Piraeus and UNESCO Hellas

3. Perform urban security awareness & training sessions to students and shop owners

4. Spatial interventions at MD5:

a. Smart playground – "install friendly" looking smart fencing for access control

b. Target hardening - Lock and protection of deserted buildings

c. Image management - graffiti removal from abandoned buildings at Ag. Dionysios area

The BSFS framework, i.e. the LCCP, the associated actions and CURiM will be tested and evaluated in the city of Piraeus. Ultimately, the project will deliver a design framework and ICT platform along with best practices for the replication of CURIM solution beyond Piraeus.

8. Project objectives

O1: Raise concern in cross-sectoral preparedness by introducing an urban security collaboration framework for the main stakeholders of the city in two dimensions, physical and cyber.

O2: To develop and integrate an evidence-driven risk management system (CURiM) that captures and correlates data derived from social media, police info and engaged citizens' mobile reports aiming to assess the urban cyber-physical threats and risks along with their propagated effects and to deliver a risk assessment report of specific intervention areas that along with mitigation measures for urban crime (Digital environment).

O3: To plan and apply initial soft actions for urban security awareness at the areas of intervention will be identified (at proposal level) by the criminology experts. During the project, the output of CURiM will facilitate decision making of the urban authority in regards to planning and execution of future soft actions, as well as urban development interventions (in collaboration with the

scientific experts) required for increasing urban security in Piraeus (Physical environment).

O4: To develop and integrate an operational warning decision support system with the interplay of first responders (police, municipality) allowing forecasting, identification, reaction and warning aiming to inform the authorities in charge about (potential) threats and events. The warning emergency service will be carried out with Big Data & Analytics technologies.

O5: CURiM will be a coherent part of establishing a Central operations centre in the CoP according to its digital strategy (compliant with the international/E.U./national/regional standards, directives and norms) which balances activation with regulation.

O6: To test and evaluate the proposed framework in Piraeus and produce best practices and blueprints for the replication of the solution to different cities.

9. Project outcome

R1) Increased sense of perceived security across the citizens of Piraeus.

R2) Improved urban security status especially in the most critical area of intervention, MD5.

R3) Collaboration among the municipality, the local police and the citizens in terms of urban threats' response will be strengthened, promoting also the trust levels of the citizens towards the local authorities.

R4) The citizens of Piraeus will be motivated to engage with BSFS using the CURiM App, since they will be part of the urban security improvement of their city.

R5) The adoption, deployment and proper use of CURiM by the Urban Authority and the citizens will entail the reduction of unreported crime, facilitating thus the work of the Piraeus Police.

R6) The CPTED interventions foreseen to be performed in specific abandoned or degraded areas of MD5 will transform them into safer and citizen-friendly locations.

R7) Victims of criminal activities and other forms of violence will be supported by the Victimization Support Unit in terms of practical/ beauraucratic guidance, medical aid and social reinduction.

R8) The successful implementation along with the replication activities led by Efus are expected to develop the BSFS Urban Security Framework, which will be ready to be adopted by every European city.

10. Start and end project, timescales and key milestone dates

Start Date: 01/09/2019

End Date: 31/08/2022

Total Months: 36

11. Funding (total budget and type of funding (e.g. ISEC, EUCPN Fund,...))

Total budget: 4,966,425.00

ERDF co-financing / ERDF rate: 80%

12. Evaluation

The measurement will be held under the scientific supervision of the Urban Criminology Laboratory of Panteion University. Panteion will design the survey that will be distributed anonymously to the citizens of the 5th department of Piraeus. The survey will be held with the use of online questionnaire. Panteion will provide the online tool, supervise its continuous functionality and conduct the statistical analyses of the results. The tool will be linked to the city of Piraeus web page which will be responsible for the call. The number of sample sizes will be related to the population of the MDs involved. The data that will be derived, will act as the baseline, the initial value in which the comparisons will be made. After the conduction of social and spatial actions described, the follow-up survey will be conducted in the final phase of the project. Evaluation on progress related to projects interventions will be conducted through the comparison of each index in the initial and final phase. The information associated to the usage of CURiM will be collected by the system logs and will be provided to the scientific experts for the evaluation.

13. Contact details project

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