

# **Evidence-based Collaborative Urban Risk Management (CURiM) Platform:**

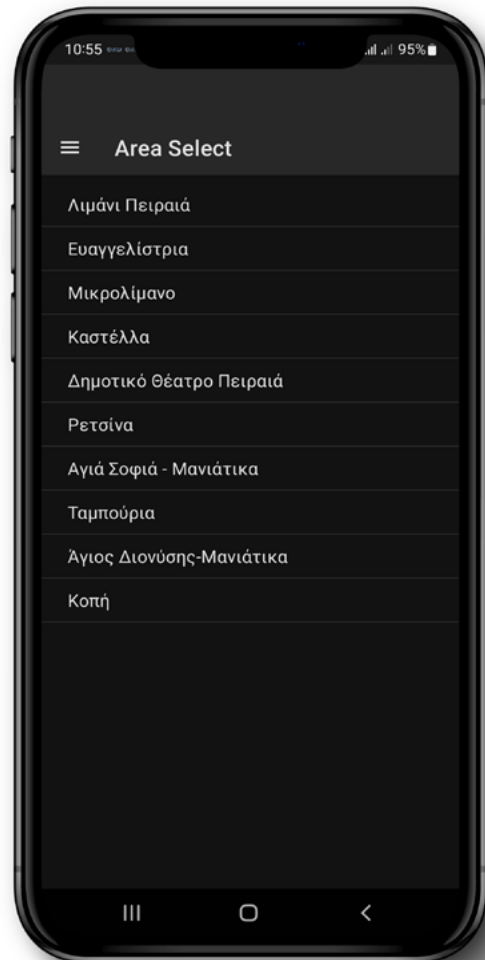
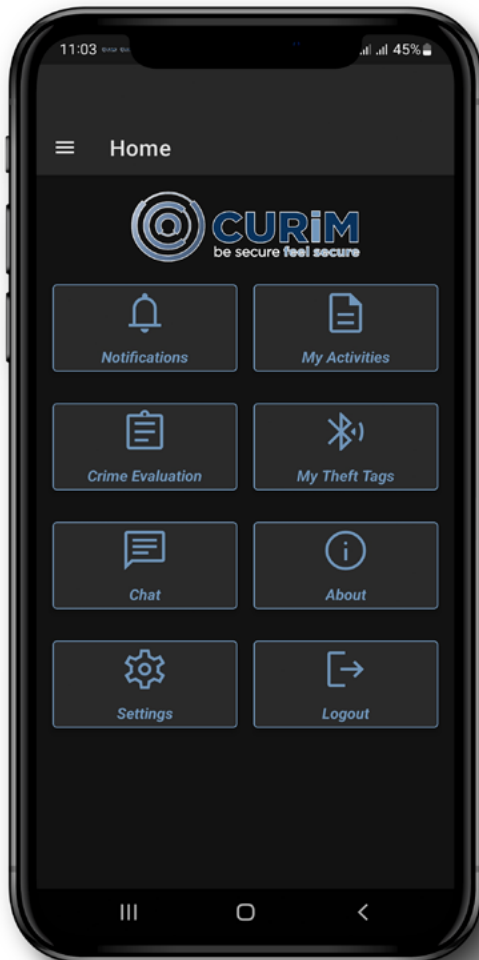
Gathering Data and  
Assessing Urban Threats

## ● Key Words:

#digital tool

#social cohesion

#prevention at the local level



The **BeSecure-FeelSecure (BSFS)** project aims to reinforce urban security and feelings of safety among citizens. This is done through the development of a dedicated local level governance structure and the provision of strategies and tools that foster cooperation among the main urban security stakeholders, in both the physical and cyber space.

The project is built on three interlinked and mutually reinforcing pillars: governance (with the **Local Council for Crime Prevention - LCCP**), social and spatial interventions, and technological innovation (ICT tools).

## ● What is the Collaborative Urban Risk Management (CURiM) tool?

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CURiM is the main tool that was developed under the ‘technological innovation’ strand of the project. It is meant for citizens, with the aim of enhancing social cohesion in the community and enabling people to exchange information either with one another or with their town or city council on issues of urban security such as, for example, incivilities. CURiM also serves as a database for local level decision-makers, thus contributing to evidence-based policymaking.

CURiM is designed to collect information from multiple sources: police reports, open online sources, smart sensors, the city’s digital infrastructure, and directly from citizens through a custom-made mobile application. The information is fed into a risk management engine that provides the basis for analysis and for the generation of advanced crime risk reports. It provides the local authority with valuable urban security insights. A key aspect is that principles of privacy, data protection and fundamental rights are respected throughout.

## ● Making the CURiM Platform Work - Key Actors

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Various roles are involved in operating the urban risk assessment system:



### ADMINISTRATOR

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This role provides the CURiM system with support in workflow evaluation and improvement; to insert, delete, and modify data in the database and to manage user roles (e.g. create new roles, modify and delete existing users).



### POWER USER

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The Power User is a Municipality officer who is responsible for initiating, configuring and carrying out Risk Assessment Analyses and producing reports.



### OPERATOR

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An operator could be a member of/work for the Local Council for Crime Prevention, a municipal officer, or an authorised scientist (sociologist, crime expert) who only has viewer’s authorisation rights. An Operator User is able to see the results of previously executed Risk Assessments and perform Risk Mappings.

## IT ADMINISTRATOR



The IT Administrator is the municipal information security officer who has access to IT Risk Assessments and also to the broader administrative environment beyond CURiM. The IT Admin can modify the digital infrastructure and manage digital assets and their vulnerabilities, as well as perform threat assessments.

## IT OPERATOR



The IT Operator is a member of the city's information security unit and has access to CURiM's features. They are able to run risk assessments on specific infrastructures and to view the results.

## The Community:

## CITIZENS



Citizens interact with the Urban Risk Assessment through the CURiM mobile application, which they can download for free. They can use it to report incivilities, to chat, to share their feelings about security in general and how they evaluate an offence or crime they have witnessed.

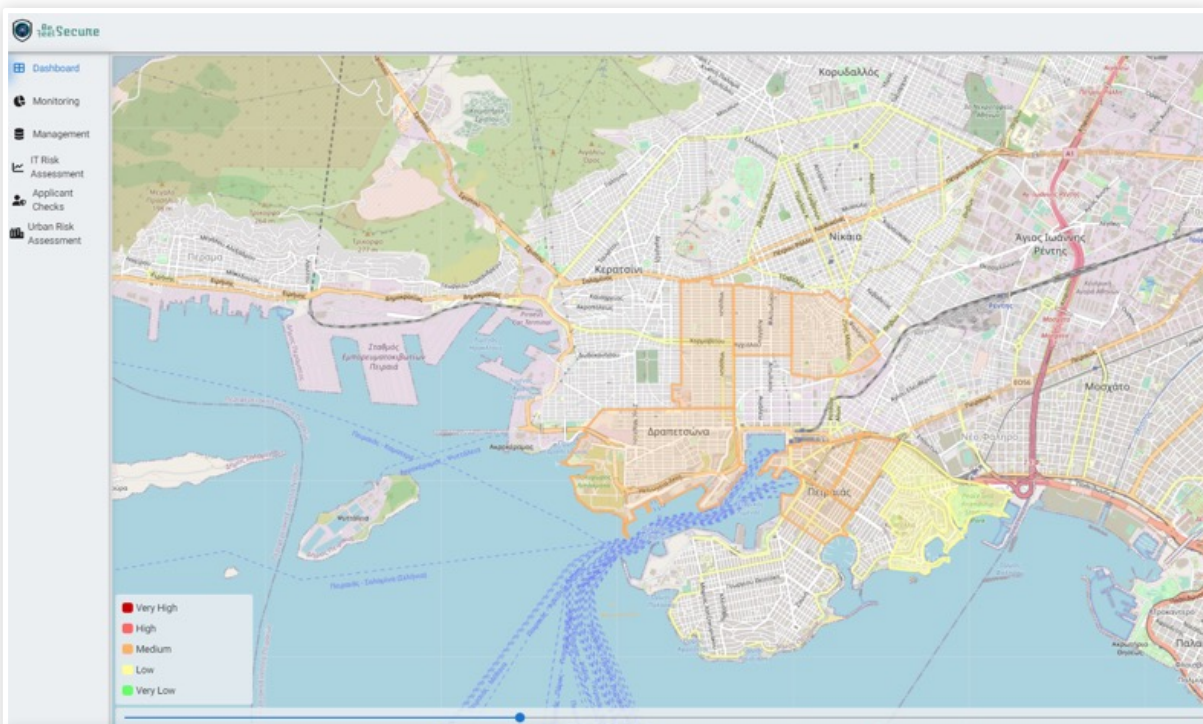
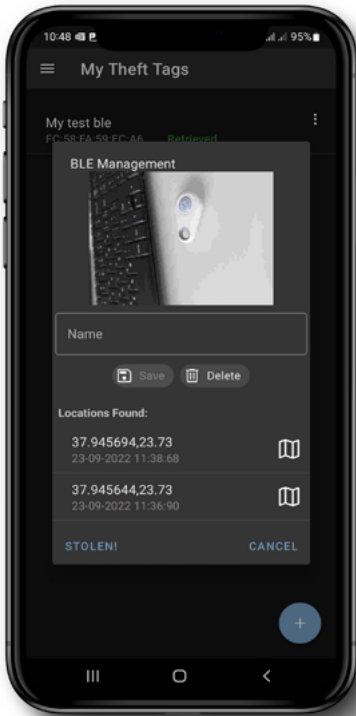


Figure: Time-layered crime heatmap

## ● Data Protection - Consent and anonymity

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The CURiM platform is compliant with the EU's General Data Protection Regulation (GDPR), national privacy laws, and best international practices.



- When a user registers with the app, the only personal information required is a valid email address, which is used as a unique user identifier and if need be to recover forgotten login credentials.
- Crime Evaluation is performed in a structured manner with predefined questions. Furthermore, when a user evaluates an offence or a crime, the user's precise location is hidden.
- The theft detection module (*My Theft tags*) tracks the user's location for Bluetooth Low Energy (BLE) tracking purposes. However, in compliance with the GDPR's Data Minimisation Principle, the user's location is not continuously tracked, but only in spatiotemporal intervals which are configurable by the user via the app's settings. Once a stolen BLE is tracked by a third app user, the latter can inform the owner of the BLE by sharing their location, where the BLE was tracked. This location is included in the BLE's profile within the owner's account. The owner can delete them by unpairing the BLE from their device.
- The app's chat service is not linked with the user's email address, but with a user-defined username, which can be edited ad hoc.
- Finally, all the information associated with the CURiM app and the execution of crime risk assessments is used exclusively in an aggregated manner by the CURiM Platform. In light of this, the LCCP members and other MoP operators do not have access to any personal or sensitive user information.

## ● Citizens can use CURiM app for:

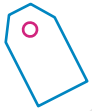
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### CRIME EVALUATION

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- citizens can respond to short questionnaires about the frequency of specific crimes, their impact on urban life as well as the efficiency of the prevention measures in place
- the responses are sent to the CURiM platform, comprising the citizens' remarks and feedback (voice of the citizens), alongside other information sources. This enhances trust in the local authority and ownership of the potential actions that are taken



### THEFT TAGS

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- crowdsourced tracking of stolen objects using Bluetooth Low Energy technology
- a citizen who finds a stolen object previously reported on CURiM can help the victim retrieve it. This enhances collaboration between citizens and, ultimately, social cohesion



### CHAT

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- citizens can exchange text and multimedia content, forming local networks at the neighbourhood level = this enhances social cohesion

## ● Citizens can use CURiM app for:

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- ✓ It fosters social cohesion and citizen participation through an openly accessible and freely downloadable mobile app.
- ✓ It provides policymakers with up-to-date information regarding the local security situation and enables the creation of tailored, evidence-based policies.
- ✓ It enhances trust in local authorities.

## ● Recommendations

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- When deploying such an app, citizens should be informed about its objectives, how it can be of use to them and to local policymakers, and about all the privacy and ethical safeguards that are included, such as GDPR compliance.
- To foster community ownership of any action taken on the basis of data provided through CURiM, it might be helpful to regularly exchange with citizens, for example through yearly Open Information Days. The local authority could give information on actions taken, or currently being implemented, based on the information provided by citizens through the app.

## ● Other European and international practices

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- Safetipin - Essentially deployed in India and in some African countries, Safetipin is a system of mobile apps enabling women to ‘score’ the level of safety of streets and other public spaces, and thus plan safe routes when they go about in their city.

More broadly, Safetipin is a social organisation working with a wide range of urban stakeholders, including governments, to make public spaces safer and more inclusive for women. It collects data through three mobile phone applications (My Safetipin, Safetipin Nite and Safetipin Site) and presents this to relevant stakeholders with recommendations. Safetipin also generates a safety score based on the data collected and provided by the My Safetipin app, for users to make safe and informed decisions about their mobility. In the My Safetipin app, users (citizens) can carry out local security audits by assessing “physical infrastructure as well as the social usage of streets and public spaces”<sup>1</sup>. Users can give a safety score to a given public space, or a street or other urban area, according to different parameters:

- Lighting – Enough light available to see all around you
- Openness – Ability to see and move in all directions
- Visibility – Vendors, shops, building entrances, windows and balconies from which you can be seen
- People – Number of people around you
- Security – Presence of police or security guards
- Walk Path – Either a pavement or road with space to walk
- Public Transport – Availability of public transport such as metros, buses, cars, rickshaws
- Gender Usage – Presence of women and children near you
- Feeling – How safe you feel<sup>2</sup>

- Tellingstones is an app that was developed as part of the EU co-funded ToNite project, which sought to increase security and feelings of safety in two neighbourhoods of Turin (Italy). A large part of the project consisted in creating more services in these neighbourhoods, thus generating more footfall and activities during the day and at night, and in the end better quality of life.

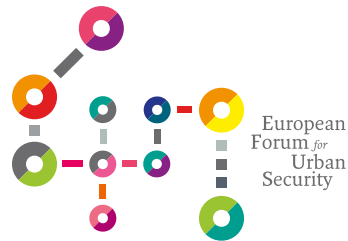
The *Tellingstones* app sends a notification to the user whenever they are near a place and provides content related to the history or cultural relevance of that place, or to the personal stories of local residents. In the framework of the ToNite project, *Tellingstones* helps create a sense of community, of shared history, and of belonging among local residents.

<sup>1</sup> My Safetipin App: <https://safetipin.com/services/>

<sup>2</sup> Ibid.



## Project Partners



**EUROPEAN UNION**  
European Regional Development Fund

This project is co-financed by the European Regional Development Fund through the Urban Innovative Actions Initiative under grant agreement number **UIA04-274**

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