# Public Resilience using Technology to Counter Terrorism - PRoTECT

**Website:** https://protect-cities.eu/

# EU Cities Vulnerability Assessment

**DISCLAIMER**

The content of this report represents the views of the author only and is his/her sole responsibility. The European Commission does not accept any responsibility for use that may be made of the information it contains.

This project is funded by the European Union's Internal Security Fund Police under grant agreement n° 815356

# CONTENTS

ABBREVIATIONS ..... 4

CONSORTIUM ..... 5

1. INTRODUCTION ..... 6

2. EU VA TOOL ..... 8

2.1 Tool Users ..... 8

2.2 Public Space of Interest ..... 9

2.3 Security Management ..... 11

2.4 EU VAT functionality ..... 13

3. WORKSHOPS AND RESULTS ..... 17

3.1 Participants and Tool Users ..... 17

3.2 Categories of vulnerabilities identified ..... 19

4.RECOMMENDATIONS ..... 22

4.1 Identified needs from VA process ..... 23

4.2 Experience from other disciplines ..... 24

4.3 Tackling terrorism without fuelling feeling of insecurity ..... 26

5. CONCLUSIONS ..... 28

REFERENCES ..... 31

This project is funded by the European Union's Internal Security Fund Police under grant agreement n° 815356

# LIST OF TABLES

**Table 1: Categories of main sites ..... 10**

This project is funded by the European Union's Internal Security Fund Police under grant agreement n° 815356

# LIST OF FIGURES

Figure 1 Municipal Services ..... 9

Figure 2 Example of a PSOI and EU VAT phase designation ..... 14

Figure 3 Phase parts ..... 15

Figure 4 Example of a risk matrix ..... 16

Figure 5: Sample images of related PSOI ..... 18

Figure 6 : Type of experts involved in VA assessments ..... 19

This project is funded by the European Union's Internal Security Fund Police under grant agreement n° 815356

# ABBREVIATIONS

| Abbreviation | Meaning |
|---|---|
| **EU** | European Union |
| **DG HOME** | Directorate- General for Home and Migration Affairs |
| **LEAs** | Law Enforcement Agencies |
| **MB** | Managing Body |
| **PSOI** | Public Space of Interest |
| **VA** | Vulnerability Assessment |
| **VAT** | Vulnerability Assessment Tool |
| **VAW** | Vulnerability Assessment Works |

This project is funded by the European Union's Internal Security Fund Police under grant agreement n° 815356

# CONSORTIUM

The PRoTECT project has received funding from the European Union's Internal Security Fund — Police under Grant Agreement n° 815356.

Starting Date: 1st November 2018
Duration: 24 months

Scan to discover more information!

or visit www.protect-cities.eu

Contact Details

Project Coordinator
Mr. Patrick Padding
patrick.padding@politie.nl

Project Manager
Mr. Peter van de Crommert
peter.vandecrommert@ditss.nl

Dissemination Manager
Dr. George Kioumourtzis
georgios.kioumourtzis@ditss.nl

This project is funded by the European Union's Internal Security Fund Police under grant agreement n° 815356

# 1. INTRODUCTION

For decades, terrorism has been a reality in many European countries and a continuous threat to a great number of European cities. It seriously threatens the safety, the values of democratic states and the rights and liberties of citizens. Acts of terrorism bring about long-term negative effects for cities and high social costs. Not only from a financial, but also from a psychological point of view in the sense of an increased feeling of insecurity among locals and visitors [1].

Over the years, strategies to protect public space against terrorism have strengthened and evolved, mainly focussing on protecting critical infrastructures. However, terrorist attacks are evolving as well. By adapting to new contexts and opportunities, lately public space has turned into an attractive target for terrorist attacks. To illustrate, the latest terrorist attacks in European cities such as London, Paris, Manchester, Stockholm, Berlin, Brussels, Barcelona…have occurred in public areas. These areas are considered as **"soft targets"**. This means that crowded public places including the metro, shopping centres, sports stadiums, bars, restaurants, clubs and commercial sidewalks, are easily accessible to the public and an easy target for terrorists to do great harm. These areas called soft targets, are targets because attacking them can aid terrorist organisations to obtain their goals, for instance threatening the safety of the public, the values of democratic states or the rights and liberties of citizens.

***Soft target: a site that is insufficiently protected against a terrorist attack and when attacked by a terrorist organisation, will help terrorists obtain their goals.***

As stated by the European Commission in the Action Plan to support the protection of public spaces, **"local and regional authorities are also important stakeholders in the protection of public space"**. The EU Commission is thus committed to reinforce the involvement of these stakeholders by promoting dialogue and exchange between national, regional and local authorities and supporting the development of operational projects.

In this context, the PRoTECT project aims to **strengthen local authorities' capabilities in public spaces protection by putting in place an overarching concept where tools, technology, training and field**

This project is funded by the European Union's Internal Security Fund Police under grant agreement n° 815356

**demonstrations will lead to situational awareness and improve direct responses to secure public places before, during and after a terrorist threat. This cross sectoral project is an initiative of the Core group of the European Network of Law Enforcement Technology Services (ENLETS)** [4].

In light of the above, local authorities responsible for the safety and security of their citizens must be aware of the vulnerabilities of their public spaces in order to be able to adopt appropriate measures to prevent and mitigate terrorist attacks and their consequences [2]. This is why, DG HOME has developed the EU Vulnerability Assessment Tool (VAT) [3]. The EU VAT is part of the Commission's efforts to support local and regional authorities in the protection of urban spaces. The commission continues to improve it by developing macros to have a completer and more useful tool.

As such, one of the project activities is to assess the EU Vulnerability Assessment tool's (VA) quality by applying the EU VA Tool in five European cities (Malaga, Eindhoven, Larissa, Brasov and Vilnius), aiding these cities in assessing their vulnerabilities against terrorist attacks, and to give the resulting feedback about the use of the EU VA Tool to DG Home.

This project is funded by the European Union's Internal Security Fund Police under grant agreement n° 815356

# 2. EU VA Tool

In this chapter, the purpose of assessing vulnerabilities as well as underlying conditions to use the EU VAT are thoroughly explained, along with an indication on who should use it and for which situations. Furthermore, it is important to pay significant attention to the process of safety and security as a whole and the different steps in risk management, to understand how a vulnerability assessment fits in and what more to do.

## 2.1 Tool Users

As mentioned in the introduction, through the EU VAT it is possible to identify vulnerabilities of specific sites against different kinds of terrorist attacks. It helps to give an overview of specific geographical areas that might be soft targets and show what areas are safeguarded effectively against terrorism. After using the tool and identifying the vulnerabilities of a public space against terrorism, the results provide the responsible agencies with insights on mitigating actions addressing identified soft targets vulnerabilities. Therefore, it can (and should) be used by municipal staff that are responsible for safety and security in their municipalities to identify their overall vulnerabilities in public space against terrorism.

As management practices regarding security deviates from one city to the other, it is difficult to identify the specific roles of different actors in the protection of public spaces.

In the context of the above Figure 1 provides an overview of the main actors to be involved taking into account some examples of generic municipal structures are provided. This shows the municipal services that should be involved in the process of identifying vulnerabilities against terrorism according to their involvement in the management of public spaces.

This project is funded by the European Union's Internal Security Fund Police under grant agreement n° 815356

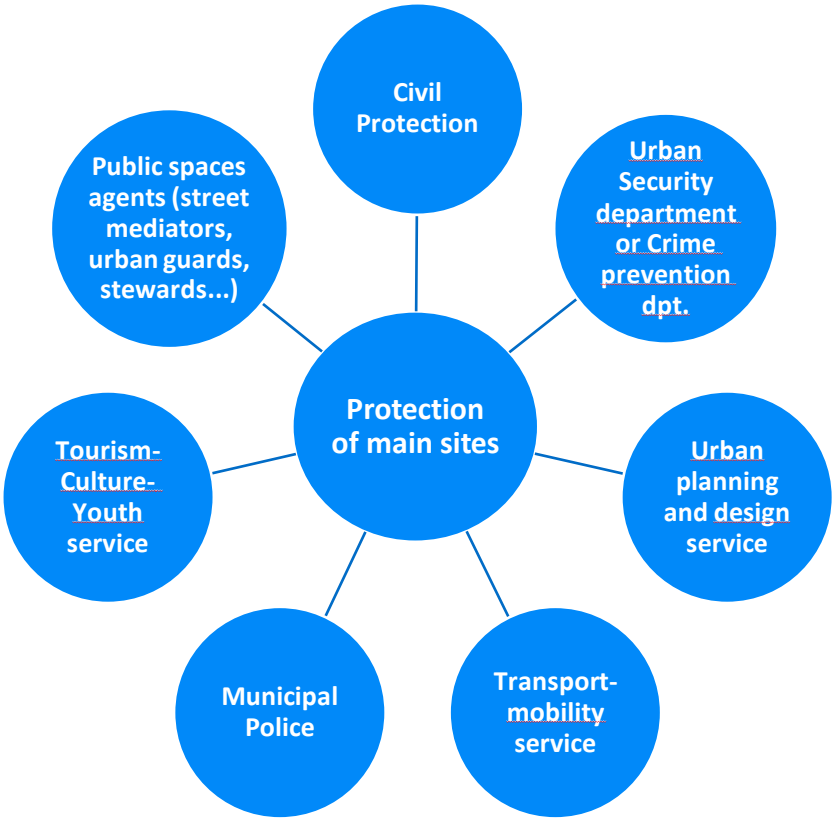


**Figure 1 Municipal Services**

## 2.2 Public Space of Interest

Municipal staff from various departments are to some degree involved in and/or responsible for the safety and security of people in their municipality, especially in public space. Public space is generally open and accessible to members of the public, such as roads, parks and municipal buildings. Public space includes semi-public spaces, such as train stations, and privately-owned spaces such as shopping malls.

Some areas of public space are utilized for specific activities or events (e.g. concerts, train station), resulting in busy areas with very high concentration of people. Consequently, these areas can potentially be considered by a municipality as areas of higher risk against terrorist attacks than other areas. An activity, and the area where the activity takes place, can be managed by separate

This project is funded by the European Union's Internal Security Fund Police under grant agreement n° 815356

organisations/owners or just one organisation/owner. This managing body will also be responsible for the security of the public taking part in the activity. The EU VAT considers the area in public space where the activity takes place as the 'main site'. The following categories of main sites can benefit from the EU VAT:

**Table 1: Categories of main sites**

| Category | Examples |
|---|---|
| Transport hubs | **Train station, bus hub, underground metro stations, etcetera.** |
| Squares | **Squares were many events take place, are next to important buildings, have regular big markets, festivals, etcetera.** |
| Shopping areas | **Malls, main shopping street in city centre, etcetera.** |
| Nightlife areas[1] | **Area with a high density of bars, pubs and/or nightclubs, restaurants, coffee shops, small concert halls** |
| Cultural venues | **Concert hall, museum, monuments, sport events, stadiums, amusement parks, tourist sites, etcetera.** |
| Business venues | **Big hotels with meeting rooms, large offices, conference centres, etcetera.** |
| Places of worship | **Churches, mosques, etcetera.** |
| Institutional venues | **Public buildings, health buildings, education buildings, etcetera.** |

[1] The example of urban nightlife areas was not included in the EU VAT, but it fits well in the criteria of a soft target in a public space.

This project is funded by the European Union's Internal Security Fund Police under grant agreement n° 815356

The activity at the main site can lead to other congested areas around the main site (e.g. an access road to a sports venue). These surrounding sites and their specific characteristics should also be taken into consideration when conceiving a security plan for the main site. In this manual, the main site, together with the surrounding sites associated with the activity, are called the Public Space of Interest (PSOI).

***The EU VAT does not help in identifying which public spaces are public spaces of interest. The VAT does not give clear indicators to help identify PSOI's, nor does it give indicators to help group or cluster different similar events (at the same public space). The information in the VAT suggests that crowd density is considered a highly relevant parameter, and the VAT includes some information to help classify the crowd density on a scale from 2 to 5 (person per square meter). However, there is no other information on the relevance of this information, or on the classification scale that is provided.***

The scale of crowd density is probably coming from crowd-management theories, which also deal with safety problems originating from dense crowds, such as the Duisburg dance event tragedy. However, a crowd with a density that is lowest on this scale, would still be extremely vulnerable to terrorist attacks and successive panic. Because of this lack of clarity on the relevance of crowd density, we have chosen not to focus on this parameter in the manual.

Different Parameters, other than crowd density, could also be relevant. The social identity of people in the crowd might be relevant in order to convey a political message through the attack. Crowd size could be relevant in different ways. A small crowd may be an easy target but send a less powerful message. A large crowd may easily overpower certain types of terrorist attacks, e.g. with sharp objects, making them perhaps less vulnerable than smaller crowds. Other relevant parameters could include the flow of a crowd and the level of intoxication.

## 2.3 Security Management

The PSOI is expected to have a managing body, with a distinct organizational structure, being supported by various stakeholders (municipality staff and LEAs), who will be responsible for security.

This project is funded by the European Union's Internal Security Fund Police under grant agreement n° 815356

***It is important to mention that the vulnerability assessment is organized by a managing body, in the case of the PRoTECT project the five municipalities and their related supporting PRoTECT partner. Important is to note that it is essential to involve relevant stakeholders for the security of the site to be assessed. Also important to mention is that for the purposes of the PRoTECT project the managing body is responsible for identifying what public space to assess.***

The managing body may be a municipality, with for instance an event organiser, police and retailers also as stakeholders. The managing body may be a venue owner with the municipality, police and event organiser also as stakeholders. Other compositions of the stakeholders are conceivable. The stakeholders may be organised in a workgroup, partnership, committee, team of experts etc. for planning and managing the site and possibly also the activities on the main site. In the case of the PRoTECT project, the managing body taking the lead is a municipality e.g. municipal staff that form a team together.

To help protect the people from a terrorist attack (when using the PSOI), the managing body needs to have a clear security plan that could be elaborated by the managing body itself or one of the stakeholders (depending on the PSOI). It is important that the security plan is developed as an integral part of planning and managing the PSOI and its activities. The security plan cannot be formed in isolation and at some point simply delivered to the managing body, but it must be developed under the clear direction of the managing body including the stakeholders, taking various aspects into consideration such as: site characteristics, characteristics of the public on the site, constraints and requirements from the various stakeholders, budget constraints, the security risks, the possibilities for risk mitigation, etc.

This project is funded by the European Union's Internal Security Fund Police under grant agreement n° 815356

## 2.4 EU VAT functionality

The EU VAT assists the user in performing a vulnerability assessment for a specific PSOI. The tool only considers vulnerability aspects during the use of the PSOI and currently does not cover other stages of use, such as construction or installation activities at the site. While writing this report, the tool was still being updated by DG Home. For this reason, the manual describes a method of use which allowing (as far as possible) for the tool to evolve without having to constantly update this manual.

***The EU VAT is primarily used to establish PSOI's vulnerabilities as a result of the risk identification and risk analysis processes. A vulnerability in this context is seen as a weakness in a PSOI's security which could be exploited by a threat, specifically a terrorist organisation to attack a (soft) target, thus forming a risk.***

In the context of the above, the EU VAT is a Microsoft Excel workbook containing 6 spreadsheets (i.e. 6 tabs) and can be viewed in any current Microsoft Office environment or compatible software. Each spreadsheet relates to a specific phase a PSOI site (i.e. main site or one of the surrounding sites) may have. Each spreadsheet denotes a 'phase' a person goes through to get to the main site (i.e. participate in the activity). The following phases (functional areas) exist:

**Phase 1: Access to the Venue**

**Phase 2: Parking and Transport**

**Phase 3: Approach to Venue**

**Phase 4: Arrival at Venue**

**Phase 5: Venue Security – No Access Control**

**Phase 6: Venue Security – With Access Control**

***Note that Phases 1 to 4 correspond to the surrounding sites. Phase 5 or phase 6 are to be used for the main site.***

This project is funded by the European Union's Internal Security Fund Police under grant agreement n° 815356

Figure 2 provides an example of the 6 phases (P1 - P6) for a concert venue in a park. Phase 5 and Phase 6 are alternatives of each other, though in this specific example there will most likely be some form of access control. The PSOI needs to be distinguished in a main site and its surroundings (corresponding to the relevant phases - outlined above).

Regarding the aforementioned example, it can be considered that this PSOI has 1 main site and 15 surrounding sites, requiring a total of 16 site assessments using the EU VAT, whereby each assessment requires the use of a phase.

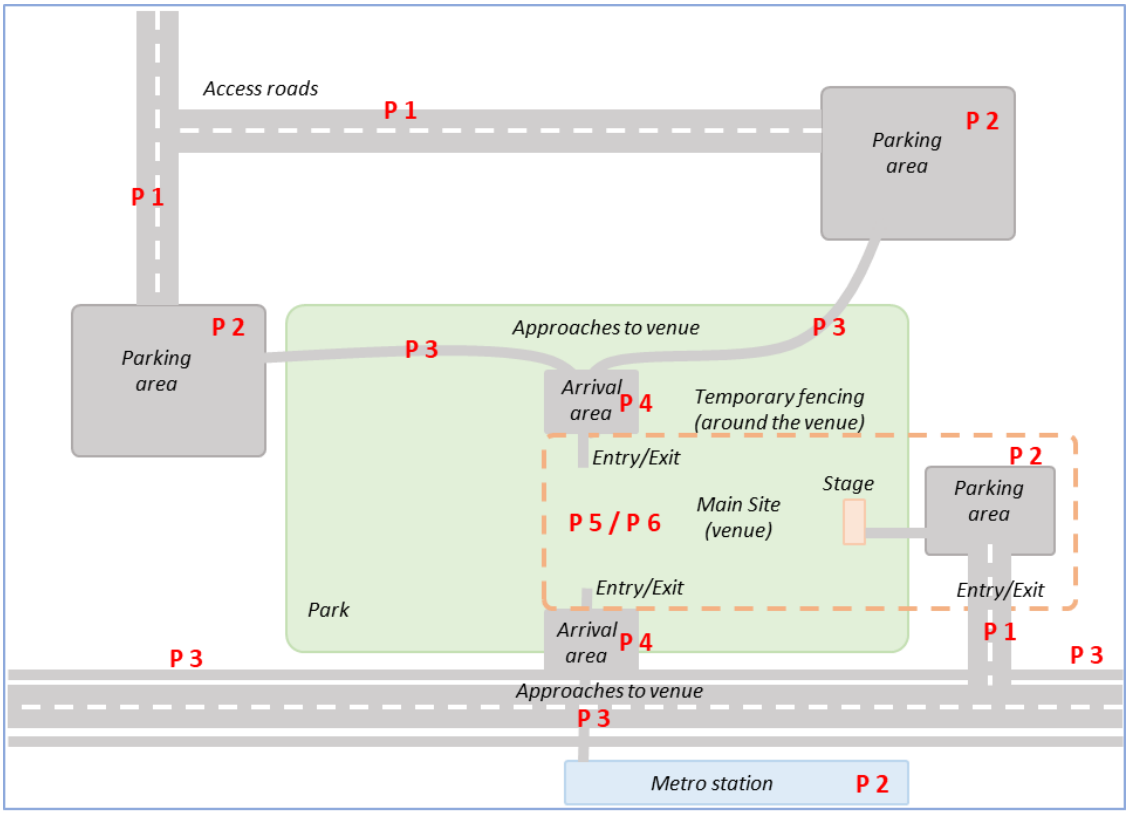


**Figure 2 Example of a PSOI and EU VAT phase designation**

This project is funded by the European Union's Internal Security Fund Police under grant agreement n° 815356

Looking at the corresponding spreadsheet (Figure 3), this has the following four common parts:

**Threat types** **(part 1)**

**Situations** **(part 2)**

**Measure Types** **(part 3)**

**Assessment** **(part 4)**

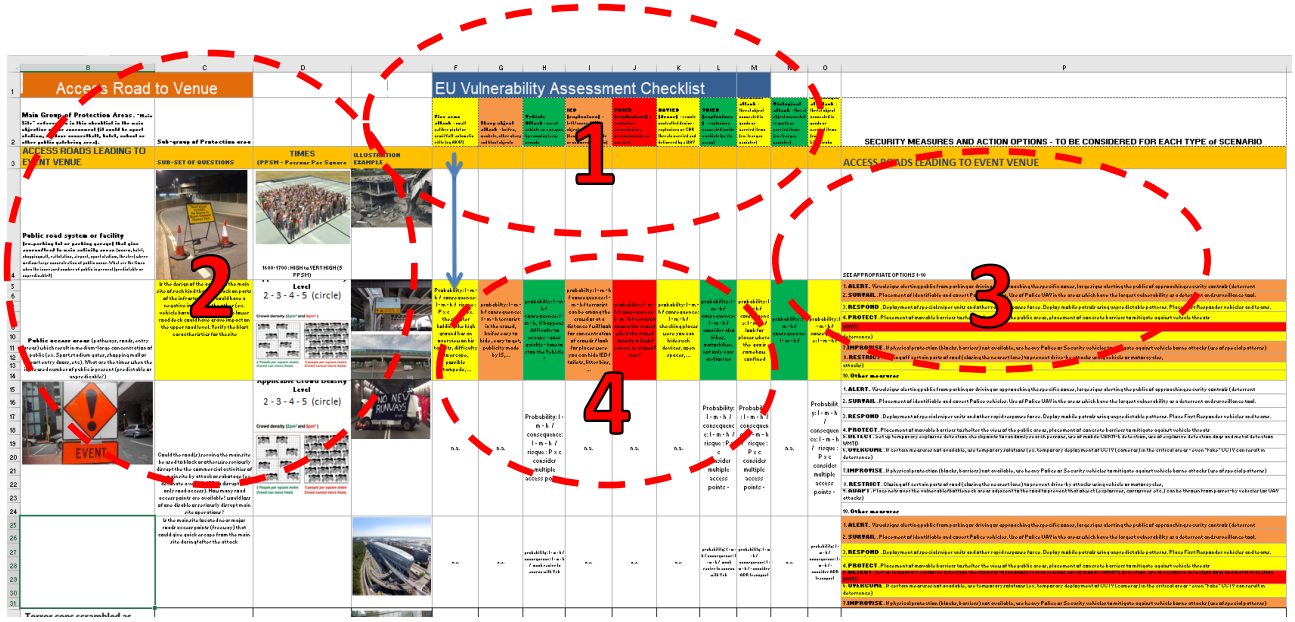


**Figure 3 Phase parts**

The general procedure for using the EU VAT is as follows:

- Decide which phase is relevant for the main site and each surrounding site (so the whole PSOI).
- Conceive viable attack scenarios from combinations of threat types (part 1), situations (part 2) and currently existing natural and emplaced security measures categorised as per the considered the measure types (part 3).
- Estimate the consequence and probability of each attack scenario following the assessment suggestions (part 4).

This project is funded by the European Union's Internal Security Fund Police under grant agreement n° 815356

The tool is designed is such a way that users are stimulated to use their creativity and imagination in discovering possible attack scenarios, as opposed to a design whereby the user is simply asked a lot of detailed questions. The risk of the latter approach is that the right questions might not be asked, and an important vulnerability gets overlooked. Scenarios are thus presented in the tool as a mixture of possible threat types, images, situations, questions and examples – not necessarily complete in every detail and to be taken literally, but to be used as inspiration in discussions within a team of experts.

Once the attack scenarios and levels for the consequences and probabilities have been determined, the risk levels can be established by using a risk matrix Figure 4.

| Probability | | Very likely | Likely | Unlikely | Highly unlikely |
|---|---|---|---|---|---|
| Consequences | Fatality | High | High | High | Medium |
| | Major injuries | High | High | Medium | Medium |
| | Minor injuries | High | Medium | Medium | Low |
| | Negligible injuries | Medium | Medium | Low | Negligible |

**Figure 4 Example of a risk matrix**

This concludes the risk identification and risk analysis processes of the risk assessment step using the EU VAT. Further risk assessment and risk management actions are then carried out without using the EU VAT, for instance mitigating the threats.

This project is funded by the European Union's Internal Security Fund Police under grant agreement n° 815356

# 3. WORKSHOPS AND RESULTS

This chapter provides an overview of the findings and the results of the Vulnerability Assessment Workshops that took place in the cities of Vilnius (Lithuania), Larissa (Greece), Eindhoven (The Netherlands), Malaga (Spain) and Brasov (Romania), between April and July 2019.

Overall, the workshops in the five European municipalities were deemed successful. The purpose of the exercise in revealing and recording the vulnerabilities of the chosen PSOI was achieved and stakeholders gained awareness of the security status of the PSOI. In the context of the above a warm endorsement has been experienced with a high number of active participants from different expertise backgrounds providing much needed input to the assessment of the PSOI and presenting various approaches towards security. By the end of the Vulnerability Assessment Workshops, all the necessary information was gathered for the generation of results in relation to security of the PSOI. The methodology and the effectiveness of the tool were also tested.

Feedback from participants regarding the tool and workshop methodology was positive and further interest has been expresses regarding the improvement of cooperation between the stakeholders involved in the security of “soft targets”. The findings of the tools revealed many applicable security and technological solutions.

Recommendations for the improvement on the tool’s methodology and the process of the assessment were recorded and reported to European Commission.

## 3.1 Participants and Tool Users

The organizing Managing Body of the workshops that were conducted in each of the 5 cities composed of members from the Municipality and members from the Ministry of the Interior/National Police and expert organisations. Participants from different fields of expertise cooperated throughout the assessment. Figure 6 depicts the type of experts and stakeholders involved in the vulnerability assessment workshops in all 5 cities. Not all the categories mentioned below were present in all the cities. In some cases, the Managing Body faced difficulty to mobilize actors of counter-terrorism agencies and intelligence departments. In total, 87 experts and stakeholders were involved in the five workshops.

This project is funded by the European Union’s Internal Security Fund Police under grant agreement n° 815356

**Figure 5: Sample images of related PSOI**

This project is funded by the European Union's Internal Security Fund Police under grant agreement n° 815356


**Figure 6 : Type of experts involved in VA assessments**

## 3.2 Categories of vulnerabilities identified

Analysis has shown that the probability and consequences of an attack vary depending on a) the phase is being considered, b) the existing security measures, c) the concentration of people and d) their location in relation to the main site. The attacks were ranked as Low, Medium or High according to the VAT and Risk Matrix that are provided by the VA Manual. All workshop participants concluded that for

This project is funded by the European Union's Internal Security Fund Police under grant agreement n° 815356

the current security and operational state of the PSOIs, the following attack types present the highest Risk Levels.

- Firearms attack (automatic firearms)- scenarios with individuals attacking crowd of visitors in areas of large crowd density with automatic weapons were analysed.

- Sharp object attacks (mainly knife)- this type of attack, is considered more realistic in case of scenarios involving random criminal acts, or theft rather than scenarios of organized terrorist attacks.

- Vehicle attacks- the scenario of a vehicle driven into the crowd of visitors at the main site seemed to be of higher possibility.

- IED (explosives)- the possibility of attacks with explosives against areas with high crowd density was examined.

- VBIED (explosives concealed inside a vehicle): - the possibility of hidden explosives.

In some Municipalities, the following types of attack where characterized as threats with High-Medium Consequences and Low Probability, thus of lower priority:

- PBIED (suicide bomber)
- Chemical attack
- Biological attack
- Radiological attack

During the workshops, the Managing Bodies established the criteria influencing the consequences and probabilities, as follows:

- Crowd density- the fluctuation throughout the different hours of the day was taken into consideration.
- Proximity to the main site- the consequences and the probability of an attack varies depending on the location of the area examined in relation to the main site and the interconnection of the site.
- Access to weapons- how easy it is for a terrorist to acquire the specific weapons or materials needed for a specific type of an attack.

This project is funded by the European Union's Internal Security Fund Police under grant agreement n° 815356

- Past events/experience- in some cases there was no experiences, in that case MB opted to s compared to other terrorist attack occurred in other countries to estimate the impact and probability of the same attack if it was implemented on the PSOI analysed.
- Attractiveness of site- If a terrorist will choose to attack a site based on such as proximity to the main site, possibility of escape, surveillance of site, crowd density etc.
- Existing security measures- how effectively can the currently implemented security measures mitigate the impact of an attack and if the existing security measures will prevent a terrorist from carrying out an attack.
- Ease of access to site- if adequate security measures are in place to prevent the terrorist for attacking a site.

This project is funded by the European Union's Internal Security Fund Police under grant agreement n° 815356

# 4.RECOMMENDATIONS

In tackling terrorism, local authorities and local stakeholders play a key role in terms of the immediate response to a terrorist act and crisis management, as well as in developing public solidarity and community relations in the long term. During the five workshops, it was acknowledged that local authorities have an important role in counterterrorism planning especially in the definition of security plans and strategies to protect public spaces and specific events from any threat, which could jeopardise the security and safety of its citizens.

Generally speaking, municipalities in Europe have developed strategies for managing large events in which they have defined the roles of each of the services involved during a crisis. However, what was observed during the exercises was the fact that these strategies have not systematically integrated an assessment of the vulnerabilities that those public spaces may present in the case of a terrorist attack, especially in cities which have never suffered from such attacks.

The five partner cities in PRoTECT are cities that have not experienced any terrorism threat but become aware that this type of act can occur in any city regardless of its size, socio-demographic or geographical characteristics. They have also become aware of the major negative impact that an act of this type could have in their territory and consequently on the quality of life of their inhabitants.

Vilnius, Malaga, Brasov, Eindhoven and Larissa decided to take part in PRoTECT to improve the security of their public spaces through the use of the vulnerability assessment methodology developed by DG Home and adapted for the use of local governments in the framework of the project and through the improvement of their knowledge about existing technologies, tools and methodologies to prevent and mitigate the risk of a terrorist attack.

Next, we will briefly present a summary of the recommendations addressed to municipalities for the security of “soft targets” and the rest of the stakeholders.

These recommendations are based on the five VA processes and on the experiences and knowledge sharing during the world café sessions as part of the first PRoTECT European Seminar that took place on 17th of July, in the city of Brasov, Romania. Eighty (80) representatives from local police, national police, local governments, ministries of the interior, civil protection and other sectors participated from 13 European countries.

This project is funded by the European Union’s Internal Security Fund Police under grant agreement n° 815356

## 4.1 Identified needs from VA process

**Improving security strategies of Public spaces of interest**

- Elaboration/enhancement of the security strategy regarding a PSOI. In this regard, a Vulnerability Assessment should be integrated into the design of a PSOI strategy. It should take place annually or before a big event, led by the municipal staff.

- Besides identifying vulnerabilities to different kinds of terrorist attacks, a VA in the long run will allow municipalities to have a map of existing measures protecting such spaces implemented by institutional actors as well as other measures and resources used by other relevant actors.

- Results from the VA provide municipal staff with insights into the identified soft targets to better focus their mitigating actions. Results should be used, in the long term, to take precautionary measures in urban planning. In the short term, they should be used to be prepared when a particular type of threat becomes imminent.

**Fostering coordination in protecting public spaces at a local level**

- Information sharing between the municipal staff and the different practitioners regarding the security plan of the PSOI and the currently implemented security measures (e.g. installation and location of lighting in parking areas) was revealed as a necessity. Establish procedures for an effective cooperation (stakeholders in the same city need more coordination at municipal level).

- Municipal staff, the local law enforcement agencies, first responders in general, should enhance their communication culture and share technical and security information regarding "soft targets" for which they are responsible to protect and respond in case of security threats. Moreover, the local agencies and authorities should inform each other about their available assets and emergency response plans for better security planning and improved situational awareness.

- The municipal staff, personnel from the local and national law enforcement agencies, transportation services, private operators, first responders, national intelligence, counter terrorism agencies and any other relevant actors should participate in the Vulnerability Assessment and in the measures development process to mitigate a risk.

This project is funded by the European Union's Internal Security Fund Police under grant agreement n° 815356

- Public information campaigns could be organised, in order to inform the community with some guidelines regarding how they can be involved in the early warning of terrorist attacks.

**Promoting cooperation between the national and local levels**

- Invest in a closer relationship with the National agencies dealing with counterterrorism, cyber security, national security and crisis management which have the mission to protect states from threats that could disrupt European societies and are best placed to provide information on the high-level threat scenarios that a city could be confronted with. These teams have also the capacity to contribute.

**Improving capacities of local security actors**

- Local security actors, as first responders, require field training in procedures and interoperability.
- Standardisation at least in Communications, Information sharing and interoperable systems.
- Field demonstrations and simulations of scenarios should be organised with the officers which are responsible for the security of the objective and with the first responders.

## 4.2 Experience from other disciplines

For the effective protection of public spaces besides a risk management process, security professionals in charge of counter-terrorism are making use of other crime prevention approaches that involve collaborative working and broad engagement with all parts of the community in the landscape of tackling terrorism and also raising awareness. Some of the approaches mentioned during the VAWs and during the first seminar are mentioned below:

This project is funded by the European Union's Internal Security Fund Police under grant agreement n° 815356

**Community Policing**

Community policing is a strategy of policing that focuses on building ties and working closely with members of the community through interactions with local agencies and members of the public, creating partnerships and strategies for reducing crime and disorder.

The concept of "community policing" is traditionally used by local law enforcement concerned primarily with preventing and solving crimes that have a visible impact on everyday security of the local community and affect citizen quality of life, such as burglary, theft, and robbery. Community policing can be also used by local law enforcement agencies to tackle the current terrorist threat.

This approach is used to minimize the spread of radical ideologies and as a form of gathering intelligence. Interaction between the police and the public can provide an important source of information for the intelligence process and thereby guide the actions of the police, both at the local and national level [5]. By promoting law enforcement proactive partnerships, citizens can become key players and reliable partners to "co-produced" protective security. This approach can help minimizing attacks, but it requires a change in the culture of law enforcement agencies working in counter terrorism, involving the creation of external and multi-level partnerships, citizen involvement and problem solving.

**Urban Planning, Design and Management**

Urban Planning, Design and Management is a multi-disciplinary approach to prevent crime against the person and property, and reduce feelings of insecurity, by incorporating evidence-based urban design, planning and management measures within proposals for urban development. Such measures generally seek to embed protective physical features and encourage prosocial behavior through the design and management of a location.

European cities are exploring innovative solutions for security challenges in public spaces, ensuring the physical structures of crowded places and promoting safety of citizens. Security by design approach, as mentioned in the EU Action Plan to improve the protection of public spaces [2], is being used as a measure to increase security and promote public safety through the design of public spaces, lighting and public awareness campaigns as part of urban regeneration measures.

This project is funded by the European Union's Internal Security Fund Police under grant agreement n° 815356

Terrorist tactics have changed, the targets are less about symbols of the West and more about maximum damage. This has led to crude but deadly attacks in public spaces not previously optimised for security, such as the vehicle attacks in Berlin, Barcelona, Nice and on Westminster Bridge.

This creates a huge challenge not only for security professionals but also for designers, urbanists and planners. Public spaces need to be retrofitted with security measures, while new spaces also need to be reconsidered in a way that they are safe but also pleasant environments rather than be continuously reminded of the peril we may be in. Therefore, we must address this design challenge as early on in the process as possible.

## 4.3 Tackling terrorism without fuelling feeling of insecurity

New modalities of terrorist attacks have led to an evaluation of counter-terrorism protective security in cities. On the one hand, measures to protect public space against terrorism have strengthened and evolved mainly installing protective physical barriers in order to mitigate the impact of an incident. On the other hand, urban regeneration has mainly focused on inclusivity, liveability and accessibility. These conditions of an urban public space hardly reconcile urban design measures against terrorism and leads to concerns about the exclusionary potential of counter-terrorism features in certain locations, thus generating a challenge of blending protective counter-terrorism security measures with urban design principles. Protective security in this sense does not provide feelings of safety and security and can have the opposite effect.

As explained by Paul van Soomeren in [6], during the project seminar- keynote session (PRoTECT Seminar July 2019) and in his article “Design Against Terrorism: soft targets and safe public places” [5], the question of whether the public and / or perpetrators should see the security measures (or not!) is an important consideration. Showing all security measures for the public might result in more or in less feelings of insecurity. This also depends on timing. For instance, roadblocks, set in place in squares and other crowded spaces in prevention of an attack, will probably be perceived as a necessary burden and the same goes for security measures right after a terrorist attack or attempt. If the security measures stay there for month after month it will probably work as a constant reminder that terrorism is a very real possibility and it will thus increase fear and feelings of insecurity. In that way it would help terrorist to reach their goals: spreading fear and terror.

This project is funded by the European Union’s Internal Security Fund Police under grant agreement n° 815356

The UK [7] considers that when incorporating counterterrorism measures into the buildings, appropriate mitigation measures should be sought in terms of risk, cost, aesthetics and usability. Where the measures are appropriate, vulnerabilities of soft targets to terrorist attacks can be mitigated and can also reduce the impact of an attack. These measures must not go against necessary conditions of public spaces such inclusivity, liveability and accessibility and should consider the impact on feelings of insecurity.

This project is funded by the European Union's Internal Security Fund Police under grant agreement n° 815356

# 5. CONCLUSIONS

This report presents the PRoTECT project outcomes after the completion on the Vulnerability Assessment related to the protection of public spaces in five European cities (EINDHOVEN, MALAGA,LARISA, VILNIUS and BRASOV) along with the findings of the 1st PRoTECT Seminar that took place on 17th of July in the city of BRASOV in Romania.

The scope of this report is two-fold. Firstly, it provides a brief on the use of the EU Vulnerability Assessment tool, which is a prototype under development and used to conduct the cities' vulnerability assessment. Secondly, to provide municipalities with further advice and guidance in order to improve the replication of the VA process in other PSOIs so as to identify vulnerabilities and mitigation solutions to reinforce their counterterrorism strategy.

Some recommendations aimed at improving the tool per se while some others aimed at fostering an European framework that involves all relevant stakeholders into the process of assessing soft targets vulnerabilities and improving their protection. PRoTECT provides relevant outcomes that will lead to policy-making changes in the short, medium and long term.

**In the short-term developments**, efforts should be directed at **creating synergies between existing networks** positioned to play a major role in supporting local and regional authorities in the conception, implementation and evaluation of their local security policy as **EFUS** does and in providing technology advice via the organisation of targeted Workshops in close collaboration with the **ENLETS** National Contact Points (NCPs) and within the Technology Interest Groups (TIGs) that operate under ENLETS. Synergies among EU funded projects to propel the co-protection of public spaces is also a major point that emerged from the informal and official exchanges between relevant stakeholders. These initiatives are to be seen as a continuation/intensification of the commission's commitment to support Member States with voluntary on-site assessments mentioned in the EU Action Plan to support the protection of public spaces.

In addition, part of the short-term goal was to provide the 5 municipalities of PRoTECT with an actionable perspective on the protection of their public spaces and other soft targets, by giving them good practices and access to technology concepts, and the knowledge to tailor their needs accordingly.

**In the medium-term**, we expect to raise public awareness on the role of municipalities in the protection of public spaces, in conjunction with multi-level stakeholders. Citizens play a key role in the co-

This project is funded by the European Union's Internal Security Fund Police under grant agreement n° 815356

protection of public spaces and should be involved in the process at an early stage to ensure that solutions that can help to make public spaces more secure do not impinge on their fundamental rights. The open and public nature of urban spaces is to be preserved in close collaboration with all parties (citizen associations, urban planners and designers, operators, security stakeholders etc.).

As pointed out in the EU Action Plan to support the protection of public spaces, some Member States have developed effective awareness-raising materials, such as videos, leaflets and posters. These best practices should be shared with other Member States. PRoTECT partners are committed to pool expertise across the European Union to detect best practices and solutions stemming from the public, as well as, the private sector that cities could adopt to respond to emerging threats.

**Long-term policy changes** triggered by the results of the Vulnerability Assessment Workshops (VAW) could **reinforce the overall architecture of the European Security Model for the protection of public spaces** by familiarising EU local Municipalities with the vulnerability self-assessment methodology, with a broad range of good practices, complementary approaches from crime prevention and urban design as well as technology concepts that will enhance the protection of public spaces.

To summerise, **PRoTECT has provided so far to beneficiaries and the community of users gathered at the first European Seminar with both tangible outcomes as well as strategic directions for the improvement of the safety and security of public spaces.**

The five municipalities are now **more aware and better equipped** to assess vulnerabilities related to the protection of soft targets and will continue to receive the necessary support to adopt the adequate solutions to mitigate such vulnerabilities. The dissemination and the use of the VAT and its Manual is to be pursued throughout the project and extended beyond the project consortium so as to reach a truly European dimension mindful of the local dynamics that contribute to the protection of public spaces.

The **European Commission has now a better picture of the implementation process of the VAT at the local level**, what has worked and what is to be improved in order to promote a comprehensive and standardized framework for the protection of public spaces amongst municipalities, LEAs, private operators and other relevant agencies.

This project is funded by the European Union's Internal Security Fund Police under grant agreement n° 815356

The project consortium has gathered **enough feedback from the VAWs participants** to reinforce the process of VA and the proposed methodology in the manual. The consortium will ensure that the project results will nourish and strengthen the future activities of the project in order to deliver operational and policy impact for municipalities willing to strengthen their capabilities in public protection.

This project is funded by the European Union's Internal Security Fund Police under grant agreement n° 815356

# References

[1] https://issuu.com/efus/docs/cities_against_terrorism visited on 19-02-2019

[2] European Commission: Action Plan to support the protection of public spaces. EU Action Plan on the Protection of Public Spaces, Last visited on 19-02-2019

[3] DG HOME. (2019). Site assessment checklist master enlet1. Version January 2019.

[4] PRoTECT project web site, available online at: https://protect-cities.eu/

[5] Van Soomeren, P., Davis, C. and Wootton, A. (2019). DELIVERABLE 2.5 Review of state of the art: CP-UDP. CUTTING CRIME IMPACT PROJECT. Salford: DSP.

[6] Van Soomeren, P., van Dijk, R. and Stienstra, H. (2019). *Design Against Terrorism: soft targets and safe public places Urban Planning, Design and Management against ram raiders. Amsterdam, The Netherlands.* Available at: https://www.svob.nl/wp-content/uploads/2019/04/Ram-Raiding-EN-20190614.pdf

[7] UK Cabinet Office. (2013). The Civil Contingencies Act. Last visited on 19-02-2019: https://www.gov.uk/guidance/preparation-and-planning-for-emergencies-responsibilities-of-responder-agencies-and-others.

This project is funded by the European Union's Internal Security Fund Police under grant agreement n° 815356