SHIELD

Deliverable 5.8

Exploitation strategy - Final version

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16	FONDAZIONE AMICI DELLA CATTEDRALE DI NOVARA	FACN	Italy
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Executive Summary

This deliverable (D5.8) results from task 5.4 of the SHIELD project. Task 5.4 aims at devising a wide-ranging and feasible strategy for the exploitation of the SHIELD results. The exploitation plan - which was initially released in M8, updated in M16 and finalised in M27 (due to a three months extension, the project ends in M27), in accordance with the development of the project - includes the key exploitable results and means for partners to benefit from them after the duration of the project and its termination. In addition, the plan includes strategies to ensure that clusters and networks formed during SHIELD will remain active and cooperative after the project has ended.

The introductory part of this report presents the contents of the document, a summary of the project's objectives, as well as the expected exploitable results.

In the previous document (D5.5, Exploitation Strategy - 2nd version) only partial results have been shown, as the project was at month 16 of its completion. At month 8 (D5.3, Exploitation Strategy - 1st version), only T2.1 ("state of the art") of WP2 had been entirely completed, and T2.2 (Vulnerability assessment - Christianity), T2.3 (Vulnerability assessment - Judaism) and T2.3 (Vulnerability assessment - Islam) were about to finish. At month 16 (D5.5, Exploitation Strategy - 2nd version) the activities of WP2 and WP3 were successfully completed and interesting outcomes have been shown in the M16 document release. At this stage, the activities of WP4 (training sessions and simulations of terrorist attacks) are successfully completed, therefore the exploitable results of all project outcomes are available and described in this document.

The second part reports the common exploitation strategy, and in particular the positioning of SHIELD within the cluster of related topics. Interactions with dissemination and networking activities are also considered, while a full report of the latter will be provided in D5.7.

Finally, the third chapter presents individual exploitation plans to account for the heterogeneity of the consortium. Subsequent documents are presented in the form of a summary table with precise actions.

In the annexes some extracts of the most interesting outcomes of the project are comprised, such as the modified VAC - vulnerability assessment checklist (adapted to places of worship), a risk matrix developed during the project and most importantly the handbook containing security guidelines for the protection of places of worship created in this final stage of the project.

1. Introduction

1.1. Purpose of the document

This deliverable, denoted as D5.8, is a continuation of task 5.4 within Work Package 5 (WP5). It draws upon the content of its antecedent deliverables (D5.3 and D5.5) and has been refined in alignment with the evolving dynamics of the project. This exploitation plan delineates the pivotal exploitable outcomes during their advanced stages, elaborating the strategic approach each partner intends to adopt for individual and consortium-level benefits.

This document also scrutinizes the strategic framework devised to perpetuate the project's sustainability, ensuring its efficacy beyond the project's temporal confines. Furthermore, it aims to guarantee the sustained activity and collaboration of clusters and networks established during the SHIELD project after its conclusion. Emphasis within this deliverable is placed upon the most compelling project outcomes, exploring their potential utility beyond the duration of the project, encompassing both commercial and academic/research dimensions.

1.2. Project objectives

The objective of the project is to protect places of worship from terrorist attacks. To this purpose, the project gathered EU public and private actors and in particular:

- Christian, Jewish and Muslim organisations and their representatives/leaders;
- Security and safety practitioners;
- LEAs;
- Municipalities and policy makers;
- Experts in risk detection;
- Technological partners.

This resulted in the identification of critical points in places of worship of each of the addressed religion (e.g. holy water fonts, matroneums, musalla) as well as circumstances and rituals (e.g. Sunday mass, Shabbat, Jumuʿa) that are more sensitive to the risk of terrorist attacks. In addition, SHIELD identified religious buildings (e.g. schools, madrasa, yeshiva) that are potentially more vulnerable, as well as types of terrorist attack (e.g. gunmen raids, bomb attack, etc.) that are more likely to be perpetrated. This analysis was part of WP2.

The results of WP2 are summarised in deliverables D2.1, D2.2, D2.3 and D2.4. The results of WP2 are notably interesting with regards to the novelty of some quantitative and qualitative analyses. In particular, the analyses on types of risks, frequency of attacks and their complexity were beneficial. SHIELD had the opportunity to present the results of WP2 on several occasions, while other European-funded consortia and projects made use of the outcomes of SHIELD's WP2 for their own work. Moreover, SHIELD was able to present the results of WP2 as well as overall project outcomes at various conferences, workshops and training activities (i.e. during the SHRINES workshop in Nice and Truin or during the SPIRIT workshop in Rome amongst other events).

The identified risks and sensitive points, backed by an analysis of past attacks (analysis available in D2.1), were tackled through the development of new measures and the adaptation of already existing technologies (e.g. CCTV, sensors) to the analysed attacks. In addition, tailored recommendations and guidelines for LEAs and religious leaders were outlined to foster prevention (e.g. identification of

suspicious behaviour) and to implement common protocols for the mitigation of the impact of attacks (e.g. standard evacuation procedures). Moreover, SHIELD produced and distributed factsheets and leaflets to religious leaders and policy makers, who actively spread them and raised further awareness on potential terrorist threats and related security measures among respective communities. Furthermore, training sessions for practitioners and religious leaders were organised to prove the practical feasibility of the recommendations as well as the effectiveness of new solutions and methodologies, which were tested and validated in joint simulations. Finally, SHIELD held two workshops, the first in Rome and the second in Brussels, to share and disseminate the results of the project among relevant stakeholders, including EU policymakers and the general public.

The specific objectives of the project were the following:

- Designing security awareness campaigns: Leaflets and factsheets will be distributed to at least 15 churches, 15 synagogues, 15 mosques and 15 religious buildings. In addition, SHIELD organised a training session involving at least one leader for each represented religion, 5 security practitioners and one technological partner per session. The SHIELD project consortium, and in particular Z&P and SPIN, with the contribution of additional partners, issued a handbook with the main results of SHIELD and with guidelines to be proposed to the representatives of the religious communities. This handbook was provided at the 2nd workshop and distributed at the end of the project.
- Optimising security concepts, measures and technologies: Detection of at least 5 sensitive points for each place of worship/religious building (churches, synagogues, mosques, schools), as well as 3 occurrences and rituals (e.g. Sunday masses, Shabbat, Jumu'a) that are potentially more at risk of terrorist attack. Investigation of at least 5 procedures with regard to armed (e.g. gun raids) and CBRN (e.g. bioterrorism, contamination) attacks.
- Testing, validation and evaluation of project activities: Two surveys (M4, M27) were conducted with representatives of LEAs, security practitioners and religious communities (at least 25 participants) to investigate the level of risk awareness, perception and preparedness among religious community members. Such surveys allow to analyse the differences before and after the identification and discussion of criticalities affecting places of worship, religious buildings, as well as occurrences and rituals deemed more at risk of terrorist attacks.
- Raising awareness on the risk of terrorist attacks: SHIELD organised 2 (physical) workshops (M12/M22) involving - beyond the consortium partners - representative from major religion (e.g. Hinduism, Buddhism, etc.) not represented in the SHIELD project, representatives on behalf of DG HOME, experts on risk detection in public spaces, representatives of religious schools (one for each considered religion), policymakers, security and safety practitioners and members of the general public – including representatives of civil society organisations. During the 1st workshop organised by SHIELD, the consortium focused on the presence of religious leaders, thus achieving its objectives. The event was held at a mosque, which was the ideal place to stimulate inter-religious dialogue, and took place shortly after the conclusion of the WP2 research on past attacks and the specificities of individual places of worship (M12). By the time of the first workshop, the invited policymakers received an in-depth and informative presentation of all the issues discovered during the research work. During the 2nd SHIELD workshop, more attention was given to the presence of policymakers, taking into consideration the difficulty to involve them and fact that religious communities remained the key target of the SHIELD project.

- Promote a wide dissemination of the project results: Beyond the above-described workshops, SHIELD established an online and offline dissemination strategy. Offline activities included the production of SHIELD-related articles, papers and publications (3 at consortium level by the end of the project). Among the publications there was the aforementioned handbook, which has been translated by the SHIELD partners into Italian, German, French, Spanish, Polish, Bulgarian, Portuguese, Romanian and Arabic, to maximise the chances for dissemination and in order to reach a wider audience. SHIELD also organised, 1 event – offering online or offline participation- with the EC-funded project PROSECUW dealing with the protection of public spaces, in order to increase the synergies among EC-funded activities and research organisations/security practitioners from different EU countries.

1.3. Expected exploitable results

The results of the SHIELD project are diverse and can be exploited differently within the consortium according to the partners (this element will be explained later in the "individual exploitation plan" section) and according to the respective stakeholder and target groups.

Below some of the exploitable results for each WP are listed and cross-referenced with the objectives described in the previous subsection:

- **WP2 (M01-M08):** This WP undertook a risk assessment on terrorist attacks on places of worship and religious buildings, respectively for Christianity, Judaism and Islam. Recent terrorist attacks have been reviewed to gather lessons and common trends. Vulnerable spots in buildings and rituals or holidays that attract big crowds have been identified. The activities established the foundation for the definition of prevention and mitigation strategies, identified in WP3.
  - D2.1: the analysis of attacks was very comprehensive and considered all 'violent attacks' (an in-depth description has been proposed concerning the definition of a 'terrorist attack' in D2.1 and it has been decided to select and analyse all 'violent attacks' despite their definition of 'terrorist' by national public authorities) perpetrated in places of worship of the three major monotheistic religions since 2000. T2.1 included the conduction of an extensive research on the topic of terrorist attacks to houses of worship. The consortium analysed in detail specific terrorist attacks, in total 12 (4 for each religion), in order to deepen the research and with the aim to use this data to build - as an exploitable result – a publicly accessible database on violent attacks on the project website. This benefitted researchers in the field of counter-terrorism, crime prevention and religious extremism. Z&P will use the so created database to provide periodic updates via the project website, even after the duration of the project, as publicly exploitable results. This is feasible as the website will be online for several years after the end of the project, managed by SYNYO.
  - D2.2; D2.3; D2.4: The second part of the WP led to more detailed results for each type of place of worship, proposing a methodology for analysing vulnerabilities and testing it in different kind of places of worship in Europe. The VAC (vulnerability assessment checklist) has been created, modifying an already existing "VAC" created by the European Commission for the protection of public spaces. During T2.2, T2.3 and T2.4 the VAC has been modified and adapted to places of worship as well as tested during the tasks. Moreover, T2.2, T2.3 and T2.4 studied the different types of attacks on houses of worship, including in-depth analyses of some case studies. The results obtained are kept confidential, due to the risk of spreading hidden vulnerabilities included in such sensitive material. Thus, most of the exploitable results concerning the

vulnerabilities methodologies and the assessments have been and will be used by the members of the consortium for further research activities and the development of mitigation strategies and have been integrated in the activities of SHIELD´s sister projects (i.e. SPIRIT).

- **WP3 (M05-M14):** This WP aimed at identifying technologies and procedures that can meet the needs and mitigate the vulnerabilities outlined in WP2, to ensure thorough security of places of worship from terrorism, enhance the protection of buildings, prevention of attacks and reaction to potential events. In particular, the first part of WP3 consisted of a review of existing methodologies, technologies and procedures for the security of places of worship and religious buildings. The second part consisted of the proposition of effective security measures to places of worship, with a particular attention to the 'run - hide - tell' model.
  - D3.1: this deliverable presented a general review of the methodologies involved in securing places of worship and security measures adapted to houses of worship. The exploitable results are confidential.
  - D3.2; D3.3; D3.4: in these - confidential - deliverables, specific security measures have been indicated for each religion and each place of worship. General security measures to houses of worship are proposed, specific to each religion, including security awareness and security measures already in place as well as in-depth analyses of some case studies. Although the deliverables are confidential, the security measures proposed for places of worship are public and addressed to religious leader, policymakers and security practitioners through their inclusion in and dissemination of the already mentioned handbook, which summarises the results of WP2 and more specifically of WP3.
- **WP4 (M18-M27):** This WP aimed at developing training sessions and simulations to test, validate and evaluate the methodological, technological and procedural solutions identified in WP3. The objective is to enhance awareness on and preparedness for different risks of terrorist attacks to places of worship and religious buildings.
  - D4.1: this deliverable reported on the training session involving LEAs, security practitioners, experts in risk detection and religious organisations to teach religious leaders how to promptly report a suspicious behaviour to competent authorities, as well as to raise awareness among respective communities about the risk of terrorist attacks. The activity done in this deliverable is itself one of the outcomes of SHIELD, namely the simulation of a terrorist attack on a place of worship with the participation of different stakeholders who took away a unique learning experience from this simulation. D4.2; D4.3 and D4.4 specifically dealt with simulations of the three religions: Christianity, Judaism and Islam.
  - D4.2; D4.3 and D4.4: In these deliverables, the results of simulated terrorist attacks are presented. The attacks were simulated as follows:
    - definition of one or more potential scenarios;
    - identification of a place of worship (existing or fictitious) in which to carry out the simulation;
    - 3D reconstruction of the attack (graphic representation);
    - simulation with animation/video of the conceptualised scenarios.

  The simulations were presented during 3 separate training sessions to security experts, LEAs and religious representatives as well as during the final conference held on 28 February 2024

in Brussels, which was followed by an informal discussion among the participants. The discussions addressed point of entries and the possibility for police forces (in particular local police forces) to make use of these simulations in security planning for major religious events and for the planning of physical exercises in certain locations. In this sense, the benefit of including simulations of terrorist attacks as a measure to reinforce the training capabilities of police and security officers was emphasised at length.

One of the basic ideas behind the simulations was to ensure high graphic quality and realism, while at the same time paying attention to costs in terms of the required effort and skills. Almost all of the software used was open source or moderately priced subscriptions and required basic to moderate knowledge of architecture and software development.

The main types of software used were the following:

- SketchUp
- TwinMotion
- DaVince Resolve
- Unity
- Blender

For additional information on the simulations themselves, please refer to the referenced deliverables. Lastly, it is worth to mention, that the simulations were appreciated by religious leaders, police representatives and security experts, both during the training sessions and at the final SHIELD conference.

WP5 (M1-M27): This WP aimed at maximising the impact of the project by pursuing the following sub-objectives:
a) To develop a comprehensive and coherent dissemination and communication plan and activities in order to identify the project's main stakeholder and target groups and address them most effectively (T5.1. Dissemination and communication plan);
b) To identify targeted communication channels in order to actively engage with the project stakeholders and raise awareness about SHIELD's activities and results (T5.2. Communication and dissemination activities);
c) To promote the project results, selecting the channels and the activities that contributed to the exploitation of the project outcomes (T5.3 Networking activities & T5.4. Exploitation strategy).

Because most of the deliverables of WP2, WP3, WP4 were confidential and to allow the exploitation of the SHIELD outputs in an appropriate way – e.g. by passing sensitive data and avoiding differentiation by religion – WP5 collected its recommendations, guidelines, tools and protocols - to be adopted by practitioners, stakeholders and target groups – in a handbook, translated in several languages. Therefore, the Shield handbook, entitled "Protecting Places Of Worship From Violence And Terrorist Danger: A Quick Guide For Local Stakeholders And Practitioners" is the main tool to communicate and disseminate the SHIELD results ensuring their exploitation as well as an impact that goes beyond the project duration.

2. Common exploitation strategy

The exploitation strategy of the SHIELD results revolves around the aggregation of a cluster of projects funded by the European Commission, concerning the protection of the public spaces and by ensuring that projects in the cluster jointly take part in research activities. The developed outputs (apart from the deliverables) of WP5 - depicted in the table below - are directed towards this purpose:

Table 1: Outputs

Output N°	Output	Explanation
5.1	Coordination meetings for the exploitation planning	An online coordination meeting in M8 has been organised in order to define the exploitation plan. A second meeting took place in M16 clarifying the aim and the objectives of the exploitation plan with all consortium partners.
5.2	Networking Workshops	One in-person workshop was organised in M12 at the Great Mosque of Rome (Italy) with the participation of consortium partners, representatives of other EC-funded projects on protection of houses of worship and public spaces, and relevant stakeholders (religious leaders and LEAs representatives). Another workshop functioning as the final event of the project was organised in Brussels on February 2024 with a major focus on policymakers, other EC-funded projects, security experts and LEAs representatives. Additionally, representatives from religious communities were present. In addition, the project attended and organised different training workshops and participated in networking events, organised by i.e. the different sister projects (see D5.7).
5.3	Coordination meeting for the sustainability and long-term impact of the project	An in-person coordination meeting was organised and implemented after the final conference in February 2024 in Brussels with the members of the consortium to define strategies on how to ensure that the SHIELD clusters will jointly take part in research activities and follow up proposals were and are being developed.

2.1. SHIELD handbook

Among the objectives that the SHIELD consortium set itself, is the production of a manual addressed to the project's stakeholders, in particular to the leaders of religious communities and those responsible for the security of religious communities. To a lesser extent policymakers and LEAs representatives are addressed for information purposes. For the religious communities, the handbook offers practical material with a twofold objective: on the one hand to raise awareness on the issue of security – as the lack of it was one of the elements the SHIELD project focused on - and on the other

hand to provide practical and operational guidance on security measures to be implemented in places of worship in Europe.

The manual will be delivered to at least 15 churches, 15 synagogues, 15 mosques and 15 religious places, as follow up of the SHIELD project. In order to maximise the chances of the handbook being truly usable by those responsible for the security of places of worship and by those in charge of religious communities, it was produced in English and translated into the national languages of all SHIELD partners, in particular into Italian, French, Bulgarian, Hungarian, German, Arabic, Spanish, Portuguese, Romanian and Polish. The English hard copy version of the handbook has been presented on the occasion of the SHIELD Final Conference. The partners will independently distribute the translated digital versions of the handbook (in pdf format). All digital versions will remain available to download on the SHIELD website for the next five years and beyond.

The handbook has several objectives:

- to raise awareness on the issue of security based on the analysis performed by the consortium of the data and trends of violent and terrorist attacks on places of worships in Europe in the last two decades, for each of the three monotheisms: Christianity, Judaism and Islam;
- to raise the awareness on the prevention practices and approaches to violent radicalization and polarization;
- to provide practical and operational guidance on risk assessment tools for the identification of the most vulnerable parts of and events in places of worship;
- to provide practical and operational guidance on the technical security measures to be implemented in order to enhance the protection of places of worship;
- to provide practical and operational guidance on mitigation approaches in the aftermath of an attack by following emergency protocols along with the provision of support services to the victims.

Schematically, the content of its 50 pages is structured as follows:

- INTRODUCTION: presentation of the main purposes and the target audience
- STATISTICAL DATA ANALYSIS: awareness on data analysis from the past 20 years of attacks in European places of worship
- EARLY PREVENTION: awareness on conflicts and radicalisation pathways and mitigation through early prevention programs
- THE VULNERABILITY ASSESSMENT TOOL: risk assessment tool (VAC) on vulnerabilities of places of worship
- TECHNICAL SECURITY MEASURES: risk mitigation/treatment through existing solutions in order to physically protect places of worship, indoor and outdoor
- IN THE AFTERMATH OF AN ATTACK: crisis management in case of terrorist attack, victims support and community resilience

In the SHIELD project, the entire structure of WP2, WP3 and WP4 was designed with a differentiation between places of worship on a religious basis: Christianity, Judaism and Islam. The division made in the project proposal phase and also in the research phase during the project is very relevant, as immense differences were identified between the religious communities in terms of awareness, preparation and physical protection of places of worship.

The handbook, however, is a single document and is addressed to religious communities in general in order avoid misinterpretations of the message that SHIELD wants to deliver. Some religious communities are clearly better prepared than others for terrorist threats for a number of reasons - such as the limited number of places of worship, the long history of attacks they have suffered, etc. - and therefore the security measures recommended to these communities are much more advanced than the security measures proposed to other communities. This cannot be made overtly explicit in the handbook, due to the risk that communities will perceive these suggestions negatively, i.e. that some communities can/should protect themselves to a high degree while others are not required to do so, which is incorrect. The main objective of SHIELD is to raise awareness and provide guidelines for the protection of all places of worship. Each community will choose the level of protection it perceived as appropriate for its own needs. In fact, in the handbook, security measures will not be presented differentiated by religion, but rather by 'security level'. Thereby, each religious community can identify, on the basis of the risk factors to which it is subjected, which security measures are appropriate.

2.2. Positioning of SHIELD in the projects' cluster

The EU recognizes the freedom of religion as a universal right, including atheistic and non-theistic beliefs, confirmed in the Council Conclusions on freedom of religion or belief (Council of Europe, 2009) and in Article 10 of the Charter of Fundamental Rights of the European Union (2000). In this view, SHIELD promotes interregional, intercultural and interfaith dialogue by involving several organisations (including Christian, Jewish and Muslim leaders) from 10 different EU countries already within its consortium.

The right of maintaining freely accessible places of worship or assembly is expressively declared in EU guidelines, and SHIELD aims to protect such rights by identifying and addressing their vulnerabilities through a multi-perspective approach and joint cooperation between EU public and private actors. States are required to act adequately and effectively guarantee the freedom of religion, preventing religious hatred and fighting discrimination and publicly condemning acts of violence. In light of these requirements, SHIELD aims to integrate the EU Guidelines on the promotion and protection of freedom of religion or belief, adding tailored recommendations for security practitioners and different religious communities on how to prevent, promptly react and mitigate the impact of terrorist attacks on places of worship.

Several projects (e.g. PACTESUR, PROTECTOR, PROSECUW, PARTES, ProSPeReS, SOAR, and SHRINES etc.) on the protection of public spaces - within the context of the 2017 Action Plan, or subsequent - have been funded by the EC. However, these projects, with some notable exceptions like SPIRIT, focus on the protection of public spaces in general and places of worship are considered as part of this category. Instead, on the basis of the October 2017 Action Plan to support the protection of public spaces, SHIELD aims to concretely tackle this specific issue by engaging Jewish, Muslim and Christian organisations, security practitioners, LEAs, experts in risk detection in places of worship and religious schools, technological partners and religious organisations working in the education field, with the aim to have a 360 degree perspective of the current vulnerabilities, and promote a dialogue among public and private actors on how to tackle them. This issue is particularly sensitive to religious communities, which often feel threatened due to frequent violent acts against religious buildings. PROSECUW, a project in the same cluster, is also focused on the protection of places of worship, however with a major focus on developing the capacity of religious communities to counteract radicalisation and hate-speech. SOAR and ProSPeReS are currently focusing on the protection of places of worship in a way closer to the SHIELD approach.

In ensuring the protection of places of worship from terrorist attacks, SHIELD contributed to the implementation of Article 67(3) of the Treaty on the Functioning of the European Union, that is, promoting Europe as an area of freedom, security and justice. In fact, SHIELD responds to some of the strategic objectives of the Internal Security Strategy of the EU, such as preventing terrorism, raising the level of security for citizens and communities and increasing Europe's resilience towards violent crime.

Furthermore, SHIELD focused its efforts in integrating and updating the 2017 Action Plan to support the protection of public spaces. It undertook a desk and field research and a risk assessment which was one of the starting points for the optimisation of technologies and procedures as well as the production of recommendations that were tailored to each specific religion, in view of the protection of places of worship and religious buildings. Guaranteeing the security of places of worship is essential to ensure the respect of Art. 10 of the Charter of Fundamental Rights of the European Union, which determines the freedom of religion throughout the EU.

Nevertheless, the collaboration between projects in the same field seems to be a prerequisite for achieving the same goal, having common standards and sharing valuable information that led to shared success. SHIELD has collaborated with the following EU-funded projects:

Project PROTECTOR:

- PROTECTOR worked on a book focused on the protection of public spaces of worship and SHIELD was invited to contribute a specific chapter based on its research insights.
- Cluster meeting: The SHIELD consortium has been invited to join a project meeting/cluster workshop with other related projects in September 2022 in Trento, which was a useful exchange meeting for the consortium.
- Piloting activities: The PROTECTOR project, which stared earlier, invited the SHIELD consortium to participate in their piloting activities (which were especially interesting for the religious representatives and LEAs partners), which took place from November to December 2022 in Antwerp (Belgium), Trento (Italy) and Sofia (Bulgaria).
- Training materials: as the PROTECTOR project also developed various training materials, a plan was set up for a meeting in order to avoid overlaps and cooperate on some common matters.
- Participation and presentation of SHIELD in webinar organized by NOTIONES, PROTECTOR, and ALLIES with the discussion topic '"The Role of European First-Responder Agencies in shaping EU Research and Innovation in the fields of Security and Intelligence".

Project PACTESUR:

- Tool-Box: PACTESUR worked on a collection of tools focused on the protection of public urban space named "Towards safer public places: Toolbox for local authorities and security practitioners". SHIELD partners modified and re-use this toolbox for the specific needs of the worship places.
- 3D modelling: PACTESUR and in particular the Informatic Centre of the Metropolitan Police of Turin offered the opportunity to collaborate with SHIELD by sharing its technology capacity for 3D modelling (through drones) of the worship places for the training activity.
- Final Conference: PACTESUR held its final conference in Brussels in November 2022: a SHIELD delegation participated explaining the collaboration between SHIELD and PACTESUR on the exploitation and sustainability of project outputs.

- SHIELD first Workshop: SHIELD invited the PACTESUR consortium to its first workshop in December 2022, to present their outputs.

Project PROSECUW:

- SHIELD consortium members participated as speakers/workshop facilitators in the International Final Conference "Protecting and Securing our Religious Heritage through Multisectoral Collaboration" in Cyprus. The event was a joint Final International Conference organised by the PROSECUW and PROTECTOR project, that creates an added value for all ISFP PROTECT projects, as a landmark and example of collaboration and a joint effort towards our common goal. The Conference brought together public authorities, security agents, religious leaders, decision makers, local communities and the civil society actors aiming to enhance protection at places of worship in European countries, by setting up a fertile ground for an open dialogue, exchange of valuable knowledge and practices, creation of local and international synergies and cooperation among them, with the ultimate goal to develop their capacity to counteract radicalisation, in an effort to promote inter-religious respect and diversity.

Project NOTIONES

- SHIELD partners were invited to participate in a webinar on April 20, 2022 and present the SHIELD project. The event was attended by another project ALLIES. The event theme was about 'The role of European LEAs in shaping EU research and innovation in the fields of security and intelligence'. The idea was to provide information on the involvement and participation of Law Enforcement Agencies (LEAs) across Europe in EU research and innovation actions, including what value they bring and what they learn and take away.
- NOTIONES Second Conference - Generative AI and other Related Challenges for LEA's - in Paris - at Châteauform' City Monceau was held on 12nd May 2023.

Project SOAR:

- The lead partner SYNYO was invited to present the SHIELD Project on the occasion of the 'EU-level Network Dialogue on Guidance and Standards for Security by Design' online event on 24th October 2022, as a collaboration activity with the sister project SOAR jointly with PROSECUW, ProSPeReS and PROTECTOR.
- SOAR attended the SHILD Final Conference in Brussels in February 2024 and took part at the 3rd Panel: "Enhancing the Security of Places of Worship: Insights from the Sister Projects"

Project PARTES:

- The SHIELD consortium contacted the sister project PARTES to create synergies and cooperation. Starting on March 2023, PARTES proposes a comprehensive prevention model for the protection of places of worship that is evidence based, inclusive and participatory. In order to effectively combat the security threats posed to places of worship, it is essential to understand the underlying violent extremist phenomenon and its concrete manifestations in relation to these targets; involve faith-based communities in policies and measures; and educate the broader population with regard to toxic extremist rhetoric but also the features and manifestations of various faiths.

Project ProSPeReS:

- The SHIELD project has several interactions with ProSPeReS, which led to the common participation in the 'SOAR sister project event' on 24th October 2022 from 3pm to 5pm. The intention was for each one to present their projects, common goals, find synergies and learn from each other when it comes to the protection of places of worship. Other projects also participated such as PROSECUW, PROTECTOR and SASCE. SHIELD has also written a post on X (Twitter) about this participation, at the following link: https://twitter.com/EuShield/status/1584846550227828736?cxt=HHwWgICqnczjwP4rAAAA
- ProSPeReS gave a presentation during the SHIELD 1st workshop in Rome, on 1st December 2022.
- The SHIELD project was represented at the ProSPeReS Final Conference, which took place in Łódź, Poland, on November 22, 2023. The consortium representant presented the results and achievements of the SHIELD project and sparked a lively discussion and exchange of views among representatives of other projects related to the security of religious sites, such as the projects SOAR, PRECRISIS, PROTECTOR and PARTES.
- ProSPeReS attended the SHILD Final Conference in Brussels in February 2024 and took part at the 3rd Panel: "Enhancing the Security of Places of Worship: Insights from the Sister Projects"

Project SHRINEs

- SHIELD became part of the community created by SHRINEs with aims to develop a series of collaborations and synergies with other related projects, including EU-funded projects under Horizon Europe, Internal Security Funds and other relevant programmes.
- SHRINEs attended the SHILD Final Conference in Brussels in February 2024 and took part at the 3rd Panel: "Enhancing the Security of Places of Worship: Insights from the Sister Projects"

Project SPIRIT

- SHIELD`s sister project SPIRIT carried out a workshop with LEAs and representatives of various religious communities, where the SHIELD project was presented and insights shared.
- A delegation from SHIELD attended the SPIRIT Rome workshop on January 2024 and presented the main outputs, included the handbook.
- SHIELD provided SPIRIT with insights on its own research findings and the created vulnerability assessment methodology, participating in all of SPIRITs vulnerability assessment workshops (Greece, Italy, Spain, Germany, Belgium).
- SPIRIT attended the SHIELD Final Conference in Brussels in February 2024 and took part at the 3rd Panel: "Enhancing the Security of Places of Worship: Insights from the Sister Projects"

2.3. Relation with dissemination and networking activities

All partners contributed to the expansion of the SHIELD network with their own network to reach a critical mass audience and spread the results of the project, helping to increase the impact of the project. A detailed overview of SHIELD´s dissemination activities can be found in Deliverable 5.7.

2.3.1. Conferences

Conferences are an essential means for knowledge dissemination. Consortium partners used workshops to discuss, present and deliberate project related matters and findings.

SHIELD organised two (physical and virtual,) conferences at M12 (December 2022) and M26 with the aim to increase the visibility of the project, enhance the dissemination of its activities and results, and create new synergies (both in terms of clusters and EC-funded projects). To these purposes, the Conferences involved, beyond the consortium partners, at least 1 representative from another major religion (e.g. Hinduism, Buddhism), 2 representatives on behalf of DG HOME, 2 experts of risk detection in public spaces, 3 representatives of religious schools or similar institutions (one for each religion), 3 policymakers, 5 security practitioners and 15 members of the general public, including representatives of civil society organisations (see chapter 2.3.2). The first conference was carried in Rome at the Great Mosque in December 2022 whereas the second was organized as the final SHIELD project closing conference, and consisted of the presentation of the outcomes of the project. On that occasion, the SHIELD consortium also distributed to participants the information material (e.g. leaflets, factsheets, etc.) produced within T5.2.

The project partners also participated in local and pan-European workshops on an ongoing basis during the entire project duration. Project partners were in charge of presenting SHIELD during these workshops at the national or European level. The workshops provided knowledge on the project outcomes; lessons learned and sought to generate new ideas and approaches for research. For this purpose, a shared document was proposed to the consortium in order to plan the participation in related events. The document has been updated periodically by all partners.

2.3.2. SHIELD 1st Conference and SHIELD 2nd Conference

SHIELD 1st Conference

One of the objectives of SHIELD was the organisation of two conferences. The 1st conference was held in the Great Mosque of Rome (Italy) in a hybrid format (online and in presence). The aim of this workshop was to increase the visibility of the project, enhance the dissemination of its activities and results, and create new synergies with clusters and EC-funded projects. In particular, the GA set specific targets when it came to the participants, requiring representatives from other religions as well as those examined in SHIELD (Christianity, Judaism, and Islam), experts in risk detection, policy makers and security practitioners.

The Grant Agreement of the SHIELD project had some specific criteria for the participants o this first workshop. The GA indicates that at least 1 representative from another major religion, 2 representatives on behalf of DG HOME, 2 experts of risk detection in public spaces, 3 representatives of religious schools (one for each religion), 3 policymakers, 5 security practitioners and 15 members of the general public should participate in the workshop. Furthermore, sister projects should also be invited to participate.

To this purpose, 57 people attended the workshop, including:

- more than one representative from each religion involved in the SHIELD project: Islam (3 representatives), Judaism (1 representative), and Christianity (2 representatives);
- several representatives of other religions, including the President of the Hindu Union of Italy and a representative of the Italian Buddhist Union;
- several security experts in particular LEAs representatives (more than 5), including individuals with OSINT and counterterrorism backgrounds;
- representatives from the following sister projects: PACTESUR, PROSECUW, ProSPeReS, SOAR and PARTES.

Therefore, the project fulfilled the participant criteria and the diversity in the audience allowed for a great sharing of knowledge among different stakeholders from all over Europe.

SHIELD 2nd Conference

The second SHIELD conference was also the final event of the project. It took place in Brussels (with the possibility of remote connection as well) at the end of February 2024. One of the main objectives of the second workshop, or SHIELD Final Conference (see: D5.6 - 2nd SHIELD workshop), was to take stock of the SHIELD project, as well as to present some of the most interesting results, such as the handbook, which goes beyond the research results presented in the various deliverables.

On that occasion, the 5th Panel was dedicated to present and discuss the SHIELD Handbook and the future challenges in safeguarding and resilience of places of worship. It was highlighted how the handbook is a concise and smart guide on the main outcomes and recommendations of the SHIELD project to support the protection of places of worship from terrorist danger with the aim to provide information and practical guidance that can support a comprehensive protection system.
The handbook is attached in Annex X in this deliverable. The handbook has also been translated into Italian, German, French, Spanish, Portuguese, Romanian, Hungarian, Polish, Bulgarian and Arabic. This important work was performed by the consortium members and helps to spread the handbook in Europe to the attention of religious leaders, regardless of their knowledge of the English language. Reaching the communities in their own language is crucial in order to transfer recommendations and operational guidelines and procedures in the most appropriate way. The quality of the handbook has been underlined by the representatives of the EC and other participants attending the event.

The second workshop was well attended, as the event was visited by more than 70 participants in Brussels and a few dozen participants who attended the event remotely. The workshop met the required KPIs and in particular, it is worth to mention that the participants belonged to different categories:

- 12 representatives from LEAs, including municipal and local police officers (that have stressed the need for specific training in order to handle terrorism related accidents), national police officers and counter-terrorism officers;
- 14 representatives from different religions, that have stressed the importance to promote interfaith projects and activities, especially in these times of political and religious tensions in different parts of the world;
- 15 representatives of NGOs;
- 15 representatives of universities and research centres, showing that there is a huge interest in research in this field;
- 7 representatives from the industry;
- 7 representatives from public authorities: this point is also important as the consortium was expecting a bit more interest from public authorities in this field, which unfortunately is not highly valued except when attacks occur and the issue becomes a national/local priority. This lack of strong interest on such questions (except on a logic of emergency) and the need for continuous commitment and prevention in the field of terrorism has been raised by panellists and participants (see also D5.6).

2.3.3. Involved Stakeholders

Apart from the cluster of EU-funded projects, SHIELD performed collaboration and interaction with the following categories of stakeholders:

Table 2: Involved Stakeholders

Type of organisation	Specific organisation
LEAs and security and safety practitioners	Civil protection private security bodies and organisations, fire brigades, ambulance services, public bodies, religious organisations within EU countries, religious associations and their volunteers, RAN (Radicalisation Awareness Network) Practitioners, operators involved in crisis response
Industry and technology community	CEOs and Senior Managers of companies specialising in providing advanced technological solutions for LEAs and other practitioners such as LEA-IT Departments, Information Commission Office, IT security providers, Network providers, Virtual-Reality providers, simulation tools providers
Policy makers	National Contact Points (NCPs), OSCE, EUROPOL, INTERPOL, European Commission, DG HOME policy officers, RAN (Radicalisation Awareness Network) Policy Support, EU countries' ministries of interior and defence, Office of counter-terrorism of the United Nations
Scientific community	Researchers, academics, conference chairs, coordinators of ongoing and former relevant projects
General public	Citizens, members of the civil society, religious associations

Including these stakeholders in the dissemination of SHIELD results increased the chances of awareness among practitioners on the issue of terrorist attacks against places of worship in Europe and stimulate reflection and discussion on this issue.

3. Individual Exploitation Plans

The Individual Exploitation Plan of each partner are reported below.

Some of the partners updated their individual exploitation plan between M8, M16 and M27 depending on the results of the projects, while others did not, as indicated.

3.1. Individual Exploitation Plan - SYNYO

Question	Individual exploitation plan
1) Which outcomes of SHIELD will be of particular relevance for your organisation? Please briefly explain the reason.	For SYNYO the following outcomes of the SHIELD project are of particular relevance for our own research and development activities as well as for their integration into related projects, SYNYO is involved in: (1) The adjusted vulnerability assessment checklist (VAC), which has been modified for the SHIELD project to address the particular characteristics of places of worship (POW). The methodology has already been used by SYNYO in related projects (i.e. SPIRIT) and increased our ability to conduct risk assessments, especially with regards to places of worship. (2) The conducted review of existing security measures. This provides SYNYO with a structured overview of various security solutions in the field and their use-cases. This will be used by SYNYO to enhance related research activities in related projects, have an increased understanding of the existing solution landscape, which allows SYNYO to better plan its own R&I activities and address identified gaps, especially by enriching the overview with the insights gained on the needs and requirements of security practitioners as well as municipalities and religious representatives. (3) The established Guidelines for the protection of different places of worship, for the same reasons as outlined above. (4) The created 3D simulations on potential terrorist attacks. The simulations have created new insights and how 3D approaches can be used to enhance security and present research findings. The created 3D environments in particular can be used as basis for future projects and adjusted to new use-cases and scenarios. Besides the mentioned specific outcomes, the SHIELD project has generally provided new insights (i.e. D2.1) into the modus operandi of terrorists, related needs of security practitioners and a wide range of research findings and insights, which will be used by SYNYO to enhance its own research activities and serve as available and structured body of knowledge to draw from. Furthermore, by working on the SHIELD project SYNYO could increase the skills of its employees in the fields of management, research and development.

2) Which field(s) will the outcome concern most? e.g. business, research, applied research	The outcomes mainly address the area of applied research.
4) Who will be the main target group for the specific outcome?	The outlined outcomes will be especially relevant for: (1) law enforcement agencies (2) related security practitioners (3) related projects (4) academic community (5) developers.
5) How are you planning to reach this target group?	The outlined target groups will and have already been reached by SYNYO through its own network of practitioners and will also be used to enhance the content and insights provided for especially first line practitioners through SYNYO´s related platforms and hubs. Further, through SYNYO´s participation in a wide range of related projects the results of SHIELD can and have been successfully integrated into related R&I activities.
6) How do you think the results of the project will help your organisation in the long term?	In the long term the results and overall participation in the SHIELD project have on the one hand increased the skills of the personal at SYNYO, who has been working on the project. On the other hand, besides the outlined exploitable outcomes of SHIELD, the project has also allowed SYNYO to form new connections and links with related and complimentary organisations, with whom follow up proposals for new projects were already established. Overall, the participation in the SHIELD project has connected SYNYO further in the security R&I ecosystem, has increased the skills of its team and led to new cooperation opportunities and expanded our network.
7) What future exploitation or further development of the outcomes could you foresee?	The outcomes will be integrated and further expanded on through related projects and initiatives, in which SYNYO is involved. For instance, the in SHIELD adjusted VAC will be further enhanced, tested and refined in a related project (SPIRIT) of which SYNYO is part of.
8) Do you think that clusters and networks formed during the SHIELD project will be beneficial to your organisation? Please briefly justify the answer.	The created network, on the one hand through SHIELDs external outreach activities and on the other through the increased relation and experiences made by working with the partners of the SHIELD consortium have been very beneficial for SYNYO. New contacts have led to the creation of new and related projects and proposals and have integrated SYNYO further into the security related R&I ecosystem. Especially, they have provided SYNYO with new contacts in the field of places of worship, opening a new research venue for SYNYO.

3.2. Individual Exploitation Plan - Z&P

Question	Foreseen individual exploitation plan
1) which outcomes of SHIELD will be of particular relevance for your organisation?	Z&P is both a research institute and an advisory company, specialised in the field of security, which has already established a methodology in order to ensure physical and cyber security to their customers. Now that the project is completed, the most interesting outcomes are:

	1. the results of one of the more extensive research efforts in the field of terrorist attacks towards places of worship, conducted by Z&P in T2.1 and the methodologies used in order to perform the in-depth analysis of some case studies of terrorist attacks; 2. the methodological tool created during WP2 in order to perform the vulnerability assessment of places of worship (the vulnerability assessment checklist - VAC); 3. the review of existing security measures as well as the methodologies and approaches used in order to propose solutions to enhance the security of places of worship (WP3) as well different peculiarities depending on religion. This will be useful for other research activities as well as for market strategies. 4. the methodology that was used for the simulations of terrorist attacks (WP4), in particular the software used for the 3D reconstruction and the animations for the simulations. This was an interesting output of SHIELD in order to test new technologies related to the protection of infrastructures (in this case places of worship).
2) in which field the outcome will be? e.g. business, research, applied research	Z&P will benefit from the project results and from the aforementioned outcomes especially in the following fields: • applied research: Z&P has extensive experience in the field of EC-funded projects. Having participated in SHIELD allowed Z&P to gain more experience in the field of security (in particular in counter-terrorism) which will be used in further EC-funded project as well as new knowledge to be used for commercial purposes; • consulting: one of Z&P's core businesses are the advisory activities for customers. In this regard, the experience, gained knowledge and skills acquired during the project will be added to the already available advisory services in the field of security.
3) please briefly explain why the outlined outcome (question 1) will be of particular relevance for your organisation	Z&P has already been involved in research projects both in the field of security (BODEGA, TRESSPASS) and more specifically in the field of counter-terrorism and radicalisation (TRIVALENT, CICERO) in the past. In the framework of the SHIELD project, Z&P increased its expertise in the field of security and counter-terrorism issues. The most relevant outcomes for Z&P (mentioned in question 1), in particular the methodology used for the vulnerability assessment and the security measures will be used and implemented to the already existing methodology and toolbox developed by Z&P, both for new EC-funded projects as well as for the advisory activities of the company. Finally, the technologies used in SHIELD in order to simulate terrorist attacks on places of worship will be added to the toolbox of Z&P, used for further research activities and proposed to customers.

4) who will be the main target group for the specific outcome?	Z&P is both a research centre and an advisory company. In this regards, the main target groups will be the scientific communities and other companies/stakeholders interested in pursuing researches in the field of counter-terrorism and security as well as companies willing to develop "security-by-design" and/or "security-as-a-service" commercial solutions.
5) how are you planning to reach this target group?	Z&P expects to reach the target group via two channels 1. through the communication and dissemination activities of the SHIELD project, in particular the workshop organised by the project and standard dissemination activities such as newsletters and communications on social channels; 2. as SHIELD addresses in particular places of worship and the representatives of religious communities, Z&P has undertaken the action of directly contacting the representatives of different religions and/or their security managers in order to inform them about SHIELD. This approach has had some results, as religious communities have been involved in interviews, vulnerability assessment exercises and participated in the workshops. This approach allows for more direct and effective communication.
6) how do you think the results of the project will help your organisation in the long term?	The SHIELD project enables Z&P to let the relevant stakeholders (in particular religious communities and LEAs) know about the action undertaken by the EC in financing projects in the fields of counter-terrorism and the protection of citizens. Z&P will promote the project and its results. In particular, the results will be used by Z&P to increase the services provided by the company as well as for its activities of applied research.
7) what future exploitation or further development of the outcomes could you foresee?	The results of SHIELD will surely be beneficial for further research in the field of terrorism. In particular, in WP2 one of the most extensive research efforts related to attacks on places of worship have been conducted. This shows a great potential for further research in the field. In WP2 and WP3 a methodology has been created in order to evaluate the vulnerability of places of worship (this methodology came from an already existing methodology created by the EC for the protection of public spaces and has been adapted to places of worship) to be used by individuals lacking knowledge about security (i.e. religious representatives).The simulation that was undertaken in WP4 will be used as a regular tool by Z&P during the provision of its security services. Z&P and the consortium would like to propose to the EC that the tools created, i.e. the VAC (vulnerability assessment checklist) and the general outcomes of the project will be included in a list of recommendations for the protection of public spaces and places of worship. Finally, the technologies used in WP4 could be used for training of LEAs in further projects in the same field.
8) Do you think that clusters and networks formed during the SHIELD project will be	The established network, facilitated by Z&P's external outreach initiatives and enhanced by strengthened relations and experiences gained from collaborating with the partners of the

beneficial to your organisation? Please briefly justify the answer.	Z&P consortium, has proven highly advantageous for Z&P. The formation of fresh connections has resulted in the initiation of new and correlated projects and proposals, further embedding Z&P within the security-related Research and Innovation (R&I) ecosystem. Notably, these connections have introduced Z&P to new contacts within the domain of places of worship, expanding Z&P's research opportunities.

3.3. Individual Exploitation Plan - SOF

Question	Foreseen individual exploitation plan
1) Which outcomes of SHIELD will be of particular relevance for your organisation? Please briefly explain the reason.	Considering the mission and objectives of the Social Observatory Foundation (SOF), the outcomes of the SHIELD project are of particular relevance to our organization include: 1. **Vulnerability Assessment (D2.2)**. This deliverable is crucial for SOF as it provides an in-depth analysis of the vulnerabilities associated with Christian places of worship. Given our focus on enhancing the security and safety of religious gatherings, understanding these vulnerabilities allows us to tailor our efforts towards mitigating risks and threats specific to Christian communities. 2. **Guidelines for Christian Places of Worship and Buildings (D3.2)**. This outcome is directly aligned with our goal of promoting safety in religious environments. The guidelines offer practical advice and strategies for enhancing security measures, which is essential for the foundation's mission to support Christian communities in safeguarding their congregations and facilities. 3. **Simulation Report (D4.2)**. The insights gained from simulations of potential security threats and their management are invaluable for our organization. This deliverable helps us understand the effectiveness of different security interventions and prepares us for real-life implementation of these strategies. 4. **Handbook on Protecting Places of Worship**. Although not listed among the initial deliverables, the handbook is a comprehensive resource that compiles best practices, recommendations, and strategies for protecting places of worship from violence and terrorist threats. It serves as an essential tool for SOF in our educational and advisory roles. These outcomes are of particular relevance because they provide a foundation for informed decision-making and strategy development within our organization. They enable us to contribute more effectively to the safety and security of Christian religious gatherings, aligning with our mission to address contemporary challenges faced by the Church and society at large.
2) Which field(s) will the outcome concern most? e.g. business, research, applied research	The outcomes of the SHIELD project mainly touch on applied research and practical implementation within our organization. These areas are critical for us because they directly influence how we can better protect places of worship and ensure the safety of congregations. The SHIELD project's findings, particularly in vulnerability assessments and guidelines for

	enhancing security in Christian places of worship, provide us with a solid foundation for developing targeted strategies and interventions. This knowledge enables us to address specific security challenges faced by religious communities, informing our workshops, training sessions, and advisory services. By focusing on applied research, we ensure that the insights gained from the SHIELD project are translated into practical actions and recommendations that can be readily implemented by the communities we serve. This approach aligns with our mission to not only understand but also actively respond to the evolving security needs of religious gatherings, making a tangible difference in their safety and resilience.
3) Please briefly explain why the outlined outcome (question 1) will be of particular relevance for your organisation.	The outcomes of the SHIELD project, particularly the Vulnerability Assessment (D2.2), Guidelines for Christian Places of Worship and Buildings (D3.2) and the Handbook on Protecting Places of Worship, align closely with the Social Observatory Foundation's (SOF) mission to analyse and respond to social realities and threats affecting the Church and society. These outcomes provide actionable insights and tools essential for enhancing the security and safety of Christian congregations, directly supporting SOF's commitment to fostering safe religious environments. Through educational and advisory activities, the SHIELD project's findings enable SOF to offer targeted training and resources on protecting places of worship. The project bolsters SOF's policy advocacy and community resilience efforts, utilizing evidence-based recommendations to advocate for improved security measures. Additionally, these outcomes serve as a foundation for SOF's future research and initiatives aimed at addressing the evolving security challenges facing places of worship. The relevance of the SHIELD project to SOF is underscored by its potential to significantly contribute to the foundation's objectives of community safety, educational outreach, and the promotion of Catholic social teaching. Ultimately, the SHIELD project outcomes provide SOF with a strategic framework for long-term engagement and impact in the field of religious community security. This ensures not only immediate benefits but also supports the foundation's broader goals of enhancing community resilience and facilitating dialogue.
4) Who will be the main target group for the specific outcome?	The main target group for the specific outcomes of the SHIELD project, as relevant to our organisation, encompasses a broad spectrum of stakeholders associated with Christian places of worship. This group includes religious leaders, who play a pivotal role in implementing and advocating for enhanced security measures within their communities. Security managers and personnel responsible for the physical safety of religious sites also form a crucial part of our target audience, as they directly apply the guidelines and strategies developed through the project. Additionally, the wider community of congregants and volunteers associated with Christian places of worship are also a primary focus. These individuals benefit from increased awareness and training on how to respond to potential threats, contributing to a safer and more resilient worship environment. Furthermore, policymakers and local government officials are targeted to influence and inform policy development that supports the protection of religious spaces.

	Collaborative networks of interfaith and non-governmental organisations engaged in promoting religious freedom, tolerance, and safety are also among our key stakeholders. By engaging with these diverse groups, we aim to foster a holistic approach to security that not only addresses immediate vulnerabilities but also promotes long-term resilience and solidarity among communities facing similar threats. Our engagement strategy encompasses tailored educational programs, workshops, and advocacy campaigns designed to meet the specific needs and capacities of each stakeholder group. Through this targeted approach, we leverage the comprehensive insights and tools provided by the SHIELD project to enhance the security and safety of Christian places of worship, aligning with our mission to respond proactively to contemporary challenges faced by the Church and society.
5) How are you planning to reach this target group?	To effectively reach our target group, we have refined our strategy to ensure optimal utilization of the SHIELD project outcomes. We will incorporate the findings and recommendations from the SHIELD project into our existing and future training programs and seminars. This integration ensures that religious leaders, security personnel, and community members receive up-to-date, evidence-based information tailored to enhancing the safety of Christian places of worship. Our seminars will focus on practical applications of the project outcomes, including risk assessment techniques and security measures, to empower our target audience with the knowledge to implement these strategies effectively. The Handbook on Protecting Places of Worship, derived from the SHIELD project, will be adopted as a key educational tool in our outreach efforts. It will serve as a comprehensive guide for our stakeholders, providing them with detailed insights into safeguarding their congregations and facilities against potential threats. By distributing this handbook widely and incorporating it into our educational sessions, we ensure a consistent and impactful dissemination of crucial safety protocols and best practices. Through these focused efforts, we aim to ensure that the valuable insights and tools generated by the SHIELD project are disseminated effectively among those responsible for the security of Christian communities. This strategy not only maximizes the reach of the project's outcomes but also strengthens the overall capacity of our target audience to respond proactively to security challenges.
6) How do you think the results of the project will help your organisation in the long term?	The results of the SHIELD project will assist our organisation in several significant and long-term ways. Firstly, the comprehensive vulnerability assessment and guidelines for Christian places of worship directly supports our mission to enhance the safety and security of religious gatherings. By integrating these findings into our operational framework, we can offer more informed and effective advice to the communities we serve, helping to mitigate risks and prevent potential security incidents. Moreover, the simulation report and the protective strategies outlined in the SHIELD project's deliverables will enable us to develop tailored training and educational programs. These programs will not only increase awareness among religious leaders and community members but also equip them with the practical skills needed to enhance their preparedness and resilience

	against threats. This aligns with our goal of fostering a proactive and informed approach to security within Christian communities. In the long term, the knowledge and tools derived from the SHIELD project will facilitate a culture shift towards a more security-conscious community. This shift is crucial for ensuring that places of worship are safe spaces for all congregants, free from the fear of violence or terrorist attacks. Furthermore, the project outcomes will strengthen our advocacy efforts, providing a solid evidence base to lobby for policy changes and increased support for security measures at local, national, and EU levels. Additionally, the SHIELD project has fostered collaboration and networking opportunities with other organisations and stakeholders engaged in similar efforts. These relationships will be beneficial for future projects and initiatives, enabling us to leverage a broader range of expertise and resources to achieve our objectives. Finally, the SHIELD project's emphasis on interfaith protection and community resilience resonates with our foundational values of promoting reconciliation, understanding, and dialogue. By applying the project's outcomes, we can contribute more effectively to building cohesive and resilient societies that value and protect their diverse cultural and religious heritage.
7) What future exploitation or further development of the outcomes could you foresee?	Looking ahead, we at the Social Observatory Foundation plan to keep improving the tools and guidelines we've got from the SHIELD project. We will make sure they stay up-to-date with the latest research and technology, and we will listen to what users say to make these tools even better. We are also thinking about making online courses and learning materials so more people can easily learn how to keep their places of worship safe, no matter where they are. Another big step for us will be to work with universities and research places to study how these security measures affect people's feelings and the community vibe. It is important to us that these security steps make people feel safe without making the place feel less welcoming. By doing all this, we are not just keeping the good work going; we are making it even bigger and better. Our aim is to make sure Christian places of worship are as safe as they can be, and in doing so, help build communities that are strong, peaceful, and ready for anything.
8) Do you think that clusters and networks formed during the SHIELD project will be beneficial to your organisation? Please briefly justify the answer.	The network formed during the SHIELD project will certainly benefit our organisation, the Social Observatory Foundation. This network of collaboration provides us with valuable connections to experts, religious communities, and other stakeholders committed to enhancing the safety of places of worship. Sharing knowledge, resources, and best practices enables us to more effectively address the complex challenges of securing religious spaces. Moreover, this network offers opportunities for joint initiatives, broadening our impact and fostering a united front against threats to religious freedom and safety.

3.4. Individual Exploitation Plan - FUNDEA

Question	Foreseen individual exploitation plan
1) Which outcomes of SHIELD will be of particular relevance for your organisation? Please briefly explain the reason.	All the outcomes produced in the project are of interest for the Euro-Arab Foundation (FUNDEA), though the most interesting for our institution due to its mission and vision are: - Vulnerability assessment – Islam (D2.4). - Guidelines for Muslim places of worship and buildings (D3.4). - Simulation report - Islam (D4.4). These outputs will be disseminated at local, regional and national level.
2) Which field(s) will the outcome concern most? e.g. business, research, applied research	The outcomes will specially concern applied research: firstly, the main target groups will be Muslim local, regional and national communities in Spain. Secondly, local authorities and LEAs. Additionally, the results and solutions produced in the framework of the SHIELD project will also be of interest for our Department of Research and Projects, as protection of PoWs is one of the areas in which we implement our research.
3) Please briefly explain why the outlined outcome (question 1) will be of particular relevance for your organisation.	
4) Who will be the main target group for the specific outcome?	As mentioned earlier, the main target group will be Muslim communities present at a local, regional and national level in Spain.
5) How are you planning to reach this target group?	The Euro-Arab Foundation maintains a fluid and continuous relationship with the Muslim communities and associations in Granada, Andalusia and Spain. Likewise, it also has a dynamic contact with the local communities and associations from the MENA region present in the city, most of whose members are Muslim.
6) How do you think the results of the project will help your organisation in the long term?	The results of the project will enhance the Euro-Arab Foundation links with Muslim and Arab communities based in Spain. SHIELD outputs will contribute to consolidate our role as an interface between Arab and Muslim communities present in Europe and the European Union.
7) What future exploitation or further development of the outcomes could you foresee?	The above-mentioned outputs will be disseminated to key actors at (namely LEAs, local authorities and Muslim communities). In addition, they will also be a valuable base upon which we can build future research projects.
8) Do you think that clusters and networks formed during the SHIELD project will be beneficial to your organisation? Please briefly justify the answer.	The clusters and networks created throughout the project's life will benefit the Euro-Arab Foundation at different levels: They will improve our capacity to exchange information and participate in future research projects with relevant stakeholders and projects.

	They will allow us to disseminate the outputs created by our organization in other projects and programmes we develop.

3.5. Individual Exploitation Plan - IIT

Question	Exploitation plan of the Intercultural Institute of Timisoara
1) Which outcomes of SHIELD will be of particular relevance for your organisation? Please briefly explain the reason.	1. SHIELD Handbook 2. SHIELD awareness-raising activities
2) Which field(s) will the outcome concern most? e.g. business, research, applied research	1. Inter-religious cooperation at regional level 2. Inter-institutional cooperation at local and regional levels 3. Cooperation between LEAs and religious communities/institutions
3) Please briefly explain why the outlined outcome (question 1) will be of particular relevance for your organisation.	
4) Who will be the main target group for the specific outcome?	Representatives of Christian (Orthodox, Catholic, Greek-Catholic, Reformed, Protestant and Neo-Protestant), Jewish and Muslim communities LEAs and other relevant institutions
5) How are you planning to reach this target group?	Religious communities have been contacted directly, and separate meetings were held with the individual ones. Representatives of all communities were invited to an event organised jointly with Timis County Prefect Office. LEAs were contacted through Timis County Prefect Office.
6) How do you think the results of the project will help your organisation in the long term?	The joint event on 12th March aimed at setting the basis for a systematic analysis of needs and opportunities for further cooperation. The intention is to set-up a regional mixed working group (as proposed at the SHIELD final conference), coordinated by the Prefect Office and involving religious communities and LEAs. The group will define a format and procedures for further cooperation, both in prevention and in cases of emergencies.
7) What future exploitation or further development of the outcomes could you foresee?	The cooperation described above, that we intend to continue to support on the long-term, is expected to increase trust and cooperation between religious communities as well as between them and LEAs. Moreover, the SHIELD project will likely be the first opportunity to include the regional Muslim community in inter-religious dialogue and cooperation.

8) Do you think that clusters and networks formed during the SHIELD project will be beneficial to your organisation? Please briefly justify the answer.	Yes, we intend to maintain and develop further cooperation established in the SHIELD project, especially with th partners that represent religious communities and organisations.

3.6. Individual Exploitation Plan - TECOMS

Question	Foreseen individual exploitation plan
1) Which outcomes of SHIELD will be of particular relevance for your organisation? Please briefly explain the reason.	Security measures suggested and technologies applied to those security measures
2) Which field(s) will the outcome concern most? e.g. business, research, applied research	Business
3) Please briefly explain why the outlined outcome (question 1) will be of particular relevance for your organisation.	
4) Who will be the main target group for the specific outcome?	LEAs, security solutions companies
5) How are you planning to reach this target group?	Through networking and standard marketing operations
6) How do you think the results of the project will help your organisation in the long term?	Growing business, portfolio, customer base
7) What future exploitation or further development of the outcomes could you foresee?	Developing new security solutions
8) Do you think that clusters and networks formed during the SHIELD project will be beneficial to your organisation? Please briefly justify the answer.	The events that occurred in the global geopolitical panorama during the course of the project confirmed how the object of the research is of fundamental importance. Being involved as a company in this project has brought and will bring benefits in terms of image, prestige and visibility.

3.7. Individual Exploitation Plan - SPIN

Question	Foreseen individual exploitation plan
1) Which outcomes of SHIELD will be of particular relevance for your organisation? Please briefly explain the reason.	All the outcomes of the project. In particular the English and Italian versions of the Shield Handbook because they allow to spread the project outcomes in the broader framework of the EU policy on preventing and countering violent extremism at the ground level.

2) Which field(s) will the outcome concern most? e.g. business, research, applied research	Both business and applied research for networking in the frame of good practices and policy advise in urban security and preventing and countering violent extremism. In particular, SHIELD will increase the experience of SPIN SYSTEM in the field of EC-funded projects in the field of security and terrorism prevention.
3) please briefly explain why the outlined outcome (question 1) will be of particular relevance for your organisation	The Shield Handbook - with its guidelines, risk assessment tools and policy recommendations - is relevant for future exploitation inside our European networks.
4) Who will be the main target group for the specific outcome?	In particular, the target group will be the partners in our network involved in safety and security work both at practitioner and policy levels, including the religious communities, civil society organisations and NGOs.
5) How are you planning to reach this target group?	Networking through communication and dissemination activities, during and after the duration of the project. In particular Spin System will ask the Italian network of Local Authorities (ANCI) to disseminate the SHIELD Handbook through their communication channels.
6) How do you think the results of the project will help your organisation in the long term?	The project results consolidate our research and innovation policies and projects in strategic and interlink policy areas.
7) What future exploitation or further development of the outcomes could you foresee?	Other future exploitation may come from the collaboration with stakeholders and target groups in the frame of new local or international projects.
8) Do you think that clusters and networks formed during the SHIELD project will be beneficial to your organisation? Please briefly justify the answer.	Yes, the clusters and networks formed during the SHIELD project will be beneficial to our organization. They offer valuable resources, expertise, and opportunities for collaboration, helping us stay updated, access specialized skills, and foster innovation.

3.8. Individual Exploitation Plan - BayHofD

Question	Foreseen individual exploitation plan
1) Which outcomes of SHIELD will be of particular relevance for your organisation? Please briefly explain the reason.	For BayHofD the most relevant outcome is the training content. As a LEA and university for police officers the training aspect is the most important. Moreover, the guidelines are of relevance.
2) Which field(s) will the outcome concern most? e.g. business, research, applied research	For BayHofD, the outcome will be in research and applied research.

***3)* Please briefly explain why the outlined outcome (question 1) will be of particular relevance for your organisation**	Drawing experience from practical implementation and teaching, as we act as a university that trains police officers for the Law enforcement.
4) Who will be the main target group for the specific outcome?	Security practitioners and law enforcement.
5) How are you planning to reach this target group?	About the way of communication, practice and our network as a LEA.
6) How do you think the results of the project will help your organisation in the long term?	In the long term, the benefits for BayHofD come from what comes out of the practical implementation from the project. The most important aspects regarding this topic are the training and simulations, respectively what results and best practices come out of it.
7) What future exploitation or further development of the outcomes could you foresee?	In the future, it would be conceivable as a goal to make training and simulations available for law enforcement, but also for all communities involved. With the premise of being prepared in case of an emergency but also to raise awareness in general.
8) Do you think that clusters and networks formed during the SHIELD project will be beneficial to your organisation? Please briefly justify the answer.	As a research institution, it is particularly important for us to build up a network. The SHIELD project has definitely enriched us with its broad spectrum of partners and has enabled us to build a good network for the future.

3.9. Individual Exploitation Plan - MBAR

Question	Foreseen individual exploitation plan
1) which outcome of SHIELD will be of particular relevance for your organisation?	WP2, WP3 and WP4 are particularly relevant.
2) in which field the outcome will be? e.g. business, research, applied research	In the field of applied research for security, prevention and protection.
3) please briefly explain why the outlined outcome (question 1) will be of particular relevance for your organisation	The outlined outcomes from question 1 will be relevant for us for security issues, for prevention and protection at municipality civil protection level.
4) who will be the main target group for the specific outcome?	The target groups will be the entities involved in the municipal emergency plan, police authorities, health authorities, firefighters, municipal services, at the level of civil protection.
5) how are you planning to reach this target group?	Through the dissemination of the outputs of this project within the teams already created, through regular meetings and using the internal channels already created.

6) how do you think the results of the project will help your organisation in the long term?	We hope that the results of this project can help us, through new technological solutions, new procedures and new protocols, to improve the work already started regarding water supply safety. We also have expectations that the risk assessment carried out in this project can give us new perspectives on risk assessment, for example in the water supply, as there are always things that can be replicated, both in terms of prevention and preparation, protection and response to any event that may happen, but also very important, in terms of gaining awareness of security issues. Another important aspect for us is communication. In this field, the adopted communication plan will help us to improve our communication, not only internally, within the entity, but with the other entities involved and mainly with the affected population in case of any emergency.
7) what future exploitation or further development of the outcomes could you foresee?	One development that we are particularly interested in has to do with risk assessment tools applied to the assessment of CBRN risks in the water supply system. On the other hand, we intend to take care of dissemination of the outputs of the project, in particular of the handbook, by local religious communities, both at municipal and district level, through the responsible services of the municipality of Barreiro.

3.10. Individual Exploitation Plan – EIA

Question	Foreseen individual exploitation plan
1) Which outcomes of SHIELD will be of particular relevance for your organisation? Please briefly explain the reason.	• Vulnerability Assessment of the Places of Worship - raise awareness of the risk factors. • New technologies - enhance the protection of places of worship. • Synergy between LEAs, Local communities and Religious groups - a better securely protected society • Training & simulations - dissemination of knowledge to communities • Handbook - a guideline and reference for security enhancement
2) Which field(s) will the outcome concern most? e.g. business, research, applied research	Applied research
4) Who will be the main target group for the specific outcome?	Religious communities (and Congregations)
5) How are you planning to reach this target group?	We, (EIA) already have set up a network with religious communities. They have since been one of our target groups in our past activities.
6) How do you think the results of the project will help	The results will help as a reference on a reliable and credible source of information.

your organisation in the long term?	
7) What future exploitation or further development of the outcomes could you foresee?	With applied research, other new technologies will be invented, and new solutions will be implemented based on the outcomes.
8) Do you think that clusters and networks formed during the SHIELD project will be beneficial to your organisation? Please briefly justify the answer.	Yes indeed, they constitute a strong and solid foundation for better results.

3.11. Individual Exploitation Plan - ISGAP

Question	Foreseen individual exploitation plan
1) Which outcomes of SHIELD will be of particular relevance for your organisation? Please briefly explain the reason.	The most important outcome is still to promote collaboration and cooperation between LEAs and religious authorities. Even more so nowadays, it is important to promote religious pluralism in a context of security. The religious community and security practitioners must be familiar with (and agree on) good security practices and adopt behaviours that are useful for their own safety and the safety of the place of worship.
2) Which field(s) will the outcome concern most? e.g. business, research, applied research	In protection and safety of the people in the exercise of their worship, i.e. applied research.
3) please briefly explain why the outlined outcome (question 1) will be of particular relevance for your organisation	Our organization works in steady connection with religious authorities and law enforcements in order to prevent religious extremism and to secure the practice of worship. In fulfilling its tasks, the organization needs capacity enhancement in awareness and preparedness for different risks. Therefore, the solutions and the dedicated approach identified in the project will be useful in preventing extremism and connected crimes, informing the law enforcement and the religious authorities.
4) Who will be the main target group for the specific outcome?	Religious authorities, Law enforcements, people frequenting the places of worship.
5) How are you planning to reach this target group?	The target group always remains law enforcement and religious authorities, with whom individual meetings, events or participation in third-party events are regularly organised.
6) How do you think the results of the project will help your organisation in the long term?	Training and awareness-raising in the field can only be improved through concrete, long-term work. The results of the project will be provided to the competent authorities, who will use them in an attempt to increase

	awareness and knowledge of the prevention of religious extremism and its associated dangers.
7) What future exploitation or further development of the outcomes could you foresee?	The guidelines produced can be provided to the relevant authorities. In particular, 3D simulation models could be useful in the future, as they could be used in a versatile way and applied to multiple scenarios. Both the guidelines and the simulation aim to increase and improve the training and education of both LEAs and religious communities.
8) Do you think that clusters and networks formed during the SHIELD project will be beneficial to your organisation? Please briefly justify the answer.	Yes, we believe that the clusters and networks formed during the project will be useful to our organisation, as it aims precisely to promote religious pluralism in a security context, in connection with law enforcement and religious authorities.

3.12. Individual Exploitation Plan - EOS

Question	Foreseen individual exploitation plan
1) Which outcomes of SHIELD will be of particular relevance for your organisation? Please briefly explain the reason.	Guidelines for places of worship and buildings. As an association of security related organizations, EOS regards guidelines for the protection of places of worship to be a useful resource to bring to our members and future ISF projects. The outlined outcome is of particular relevance for EOS as it is often a target of violent demonstrations in Brussels. Although EOS is not a religious entity, the outlined outcomes may allow it to enhance the security of its own facility. Furthermore, the guidelines will contribute to further research on public spaces' security.
2) Which field(s) will the outcome concern most? e.g. business, research, applied research	Public security, protection of public spaces and critical infrastructures.
3) please briefly explain why the outlined outcome (question 1) will be of particular relevance for your organisation	
4) Who will be the main target group for the specific outcome?	Organizations and private companies operating in the field of security.
5) How are you planning to reach this target group?	Through the EOS network, that brings together more than 40 partners (businesses, research institutes, universities etc.) from different EU Member States.
6) How do you think the results of the project will help your organisation in the long term?	The results of the project may help EOS in improving its processes and security measures when dealing with violent demonstrations. The guidelines for the protection of places of worship, in particular

	those that can be applied to the protection of public spaces, will be of great use to EOS when contributing to similar EC projects.
7) What future exploitation or further development of the outcomes could you foresee?	Sustainability may be ensured by assessing the needs of those responsible for the protection of places of worship and buildings. Furthermore, making the simulation and training modules that were developed in the project accessible to external stakeholders will facilitate the uptake of the outlined outcome.
8) Do you think that clusters and networks formed during the SHIELD project will be beneficial to your organisation? Please briefly justify the answer.	Yes, we believe that the clusters formed during the SHIELD projects will be useful as they form a network of successful partners in creating winning consortiums for ISF proposals.

3.13. Individual Exploitation Plan - PTOT

Question	Foreseen individual exploitation plan
1) Which outcomes of SHIELD will be of particular relevance for your organisation? Please briefly explain the reason.	• Learning about and gaining knowledge of new technologies used to protect religious sites; • Guidance provided in the resulting manual on securing religious sites from terrorist attacks; • Practical training on protecting religious sites from terrorist threats; • The role of interreligious dialogue in the process of preventing political and religious radicalization All these aspects enrich our organization significantly with new knowledge and experience.
2) Which field(s) will the outcome concern most? e.g. business, research, applied research	Research, applied research.
3) please briefly explain why the outlined outcome (question 1) will be of particular relevance for your organisation	Our organisation is focused on assessing technology in various areas of social activity, including those related to ensuring security and maintaining order and good communication, and evaluating technology used in emergency situations to identify any possible threats. Thanks to this project, we can learn about the latest methodological solutions, modern technologies used in anti-terrorist protection and procedures to help identify threats, which may allow us to better plan and guide solutions against terrorist threats in the future.
4) Who will be the main target group for the specific outcome?	Religious communities, institutions and organizations involved in the protection of religious sites, entities organizing religious events.

5) How are you planning to reach this target group?	Each member of PTOT will be asked to send the link of the Shield handbook to representatives and managers of religious communities and organizations involved in the protection of religious sites. In addition, information on the SHIELD project and the manual will be presented in the form of a video, which will be published on PTOT's channel on YouTube with general access.
6) How do you think the results of the project will help your organisation in the long term?	The result of participation in the SHIELD project is • increased credibility of PTOT as an organization that has a history of participation in the realization of the project from EU funds; • enriching the scientific and organizational achievements;
7) What future exploitation or further development of the outcomes could you foresee?	Thanks to the participation in the SHIELD project members of the PTOT will be more aware of how to use and implement the latest technologies.
8) Do you think that clusters and networks formed during the SHIELD project will be beneficial to your organisation? Please briefly justify the answer.	Participation in the SHIELD project results in gaining international contacts, which may enable participation in other projects of this type in the future.

3.14. Individual Exploitation Plan - ITLP

Question	Foreseen individual exploitation plan
1) Which outcomes of SHIELD will be of particular relevance for your organisation? Please briefly explain the reason.	Identify new technologies and best practices that can mitigate the vulnerabilities of places of worship with regards to the protection of buildings and prevention of attacks. Increase awareness on and preparedness for different risks of attacks to religious buildings.
2) Which field(s) will the outcome concern most? e.g. business, research, applied research	In the field of security, protection of public critical infrastructure and the private sector.
3) please briefly explain why the outlined outcome (question 1) will be of particular relevance for your organisation	Italpol complements, supplements and supports the police authorities, carries out checks and activities to ensure the maximum protection of different places (banks, airports, ports, building, private homes) and events (sporting, cultural, etc.). It intertwines the high professionalism of its staff with technologies regarding security through its own certified operating rooms. Its staff carries out continuous training, therefore the results of the project will be useful to raise awareness of higher security standards, especially for the aspects of training and technology, as well as the need for all stakeholders involved to pay greater attention to places and to religious events.

4) Who will be the main target group for the specific outcome?	Security directors and building administrators, local, regional and national public administrators.
5) How are you planning to reach this target group?	In trade associations, in direct meetings, events and formal / informal communications, specific report.
6) How do you think the results of the project will help your organisation in the long term?	Through a greater awareness of the main stakeholders of the complex dynamics of the protection of places of worship, greater channels for the exchange of best practices and the study of the best integrations between physical and logical security.
7) What future exploitation or further development of the outcomes could you foresee?	Identify specific skills and technologies that can guarantee overall safety that starts from the analysis of the risk, of the actors and of the criticalities, already in the initial phase of the risk and through greater cooperation with the major national and international actors.
8) Do you think that clusters and networks formed during the SHIELD project will be beneficial to your organisation? Please briefly justify the answer.	Yes, they could be useful to our organization, especially to facilitate the exchange of knowledge and experience between security members, both at a national and international level.

3.15. Individual Exploitation Plan - CIRS

Question	Foreseen individual exploitation plan
1) Which outcomes of SHIELD will be of particular relevance for your organisation? Please briefly explain the reason.	• Vulnerability Assessment • Virtual reality simulations of some terrorist attacks (WP4) • SHIELD Handbook (WP5)
2) Which field(s) will the outcome concern most? e.g. business, research, applied research	In EU applied research and in the context of social research we carry out at CIRS.
3) please briefly explain why the outlined outcome (question 1) will be of particular relevance for your organisation	Nowadays religious communities have scarce funding to face new terrorist threats. Terrorism is equipped with advanced tools (chemical attacks, gas, etc.) while, on the other hand, small but also large communities have fallen behind in terms of training and technological equipment. CIRS stands as an actor who can carry out an action of cultural mediation between the unexpressed needs of religious communities, police forces and institutions to better direct security policies and necessary funds.
4) Who will be the main target group for the specific outcome?	Jewish religious communities and security experts responsible for national security.
5) How are you planning to reach this target group?	By disseminating the results of the project directly to the Jewish institutions with which we have a close relationship thanks to the fact that our President Rav. Scialom Bahbout is one of the most authoritative Italian rabbis and the person responsible for the

	security of all the Jewish communities in Italy, Mr. Giacomo Zarfati, is our expert in the project.
6) How do you think the results of the project will help your organisation in the long term?	Participating in this project has helped our association to consolidate our relationships with the Jewish communities of Italy and with security managers, attesting to our role as cultural mediators between the religious world and the world of security experts.
7) What future exploitation or further development of the outcomes could you foresee?	With the SHIELD partners we have presented a new request for funding to the Commission for the continuation of the project's objectives.
8) Do you think that clusters and networks formed during the SHIELD project will be beneficial to your organisation? Please briefly justify the answer.	Yes, conducting such a sensible project with different religious partners could have been very difficult. The fact that the religious components have a "moderate" approach has allowed us to work well together.

3.16. Individual Exploitation Plan - FACN

Question	Foreseen individual exploitation plan
1) which outcome of SHIELD will be of particular relevance for your organisation?	Recommendations for religious leaders.
2) in which field the outcome will be? e.g. business, research, applied research	Risk awareness and risk assessment knowledge.
3) please briefly explain why the outlined outcome (question 1) will be of particular relevance for your organisation	Recommendations for religious leaders may increase the awareness of the Christian-catholic word about the relevance to pay attention to safeguard and security in their places of worship.
4) who will be the main target group for the specific outcome?	The targets will be the main dioceses of the Italian Episcopate and Apostolic nunciature in the most exposed countries (to terrorism attacks).
5) how are you planning to reach this target group?	Throughout a communication campaign via emails and direct phone-calls.
6) how do you think the results of the project will help your organisation in the long term?	Awareness processes need time and the project outputs will help this process in the long term.
7) what future exploitation or further development of the outcomes could you foresee?	Other future exploitation may come from the collaboration with communities, local authorities and law enforcement in the frame of new local or international projects.

3.17. Individual Exploitation Plan - GDNP

Question	Foreseen individual exploitation plan
1) Which outcomes of SHIELD will be of particular relevance	Referring to **WP 2,** which aimed to identify technologies and procedures that can meet the needs and mitigate the vulnerabilities outlined in WP2, to ensure a thorough security of

for your organisation? Please briefly explain the reason.	places of worship from terrorism with regards to protection of buildings, prevention of attacks and reaction to such events. Referring to **WP 4,** which aimed at developing training sessions and simulations to test, validate and evaluate the methodological, technological and procedural solutions identified in WP3 as to enhance awareness on and preparedness for different risks of terrorist attacks to places of worship and religious buildings. Referring to **WP 5**, which aimed at maximizing the impact of the project by pursuing the following sub-objectives: • To develop a comprehensive and coherent dissemination and **communication** plan and activities; • To identify targeted communication channels and stakeholders and raise awareness about SHIELD's activities and results; • To promote the project results, selecting the channels and the activities that will contribute to the exploitation of the project outcomes at EU level. Using the handbook to increase the security of places of worship.
2) Which field(s) will the outcome concern most? e.g. business, research, applied research	In the field of security, protection and public order maintenance, i.e. applied research.
3) please briefly explain why the outlined outcome (question 1) will be of particular relevance for your organisation	Our police organisation is authorized to deal with many tasks related to protection and maintenance of the public order during mass events (sport, cultural, political etc.) in case of riots and mass commotions; maintenance and restoring the public order during different types of crises; providing security and protection of strategic premises and places of primary importance; intervention in case of terrorist activities, etc. In fulfilling its tasks, the organization needs capacity enhancement in awareness and preparedness for different risks of riots, terrorist attacks in buildings and in the open space. New methodological, technological and procedural solutions identified in the project will be useful in prevention of crimes of all types, especially countering terrorist threats in closed and limited spaces and when planning and carrying out different police operations.
4) Who will be the main target group for the specific outcome?	Operative police officers, security police officers, gendarmerie police officers, incl. Special Counter Terrorism Unit police officers.
5) How are you planning to reach this target group?	The target group is within different police structures, all under the head of the Ministry of Interior of Bulgaria (MoI). The communication channels to reach are usually the legal central internal information system of MoI, the internal electronic network of MoI and the internal internet network of MoI (INTRANET).

6) How do you think the results of the project will help your organisation in the long term?	Based on vulnerability assessments made, there will be provided long-term recommendations and guidelines on how to optimise daily police work in order to enhance safety and security of Christian places of worship, religious buildings. In terms of protection, police officers will apply updated technological solutions and action protocols to better identify terrorist attacks and prevent terrorists from entering places of worship and religious buildings. As a result of the updated information material acquired and enhanced capacity gained in the field, police officers will be able to raise awareness among religious leaders on potential attack or prepare them how to identify and report suspicious behaviours to competent authorities. As a result of training sessions and simulations carried out, police officers will have an enhanced degree of knowledge of critical risks in places of worship and religious buildings and higher level of risk awareness in terms of perception, prevention, protection, preparedness and reaction to a terrorist attack.
7) What future exploitation or further development of the outcomes could you foresee?	Sustainability is expected to be achieved, by applying elaborated solutions and procedures that can identify the needs, assess vulnerabilities and mitigate the risks of terrorist attacks and other dangers in places of worship and buildings. As a result of applied researches and assessments made in the project, the methodology and technology learned will be used to further ensure security of places of worship from terrorism as regards protection of buildings, prevention of attacks and reaction to the event. Trained police staff will further disseminate gained best European practices by participation in future trainings on „Train the Trainers" principle and disseminate out project results.
8) Do you think that clusters and networks formed during the SHIELD project will be beneficial to your organisation? Please briefly justify the answer.	A good foundation for better results and future development and improvement.

3.18. Individual Exploitation Plan - BUJS

Question	Foreseen individual exploitation plan
1) Which outcomes of SHIELD will be of particular relevance for your organisation? Please briefly explain the reason.	After the 27-month long project, we found the following: the Jewish communities are better prepared in terms of physical protection, guarding and security awareness than other religious communities in Europe, because, due to their historical situation, compared to their size, they faced a disproportionally high number

	of attacks in the second half of the 20th century as well as in the 21st century. However, unfortunately, there is always a room and need for improvement: we must adapt to the new trends of threats. We mentioned in our previous report, and yet again we emphasize that there is a need for a 'legal body' in the European Security Council that is responsible for the security of religious places and communities, with pragmatic and effective financial and legal tools. Individual programs and projects exist in this field, but we need more than short-term projects, we need an institution or a body that can continuously assist communities.
2) Which field(s) will the outcome concern most? e.g. business, research, applied research	We also must highlight now that the lack of cooperation among representatives of religious communities – even of the same faith – makes the communities much more exploitable. Platforms, roundtables for multi-actor dialogue are needed more than ever at the regional, national, and international level as well, to share best practices, information about suspicious acts, and help each other in a top-down, politically driven way.
3) please briefly explain why the outlined outcome (question 1) will be of particular relevance for your organisation	Please see question 1 Leaders of religious communities and chief security officers must be involved on the local and national level. On the national and international level, the main messages of the SHIELD project should be delivered to political representatives of security and religious affairs.
4) Who will be the main target group for the specific outcome?	Leaders of religious communities and chief security officers must be involved on the local and national level. On the national and international level, the main messages of the SHIELD project should be delivered to political representatives of security and religious affairs.
5) How are you planning to reach this target group?	We propose that the policy makers and funding authorities move forward and address political stakeholders in the EU first. Then we (religious communities) can also follow-up and underline the importance of the cooperation to the national governmental bodies.
6) How do you think the results of the project will help your organisation in the long term?	The project results can raise awareness and promote understanding among governmental stakeholders about the fact that the need to protect religious places and houses of worship is not a individual challenge for the communities, but the European Parliament and national governments are also responsible. With funds, legal background, and LEA support there is a way to improve protection.
7) What future exploitation or further development of the outcomes could you foresee?	The impact of the international coordination of the fight against hate crimes and attacks against religious places will be the increase in breadth of societal reach. We could reach the wider public, not only the religious communities. We already see a trend in shifting some tasks and resources of law enforcement

	authorities to public security. This natural process could be more standardized and controlled by the governments based on EU directives.
8) Do you think that clusters and networks formed during the SHIELD project will be beneficial to your organisation? Please briefly justify the answer.	We have built important connections which will be beneficial on the practical level, and also for future cooperation. We are participating in further EU application consortiums with the SHIELD partners. We have reached some leaders in our community and the leadership of the university was very involved; however, some other countries, particularly Italy, presented a higher level of interest from their community, with more representatives attending SHIELD events. We need to add that our community went through elections and leadership change mid-project. The new leadership is very interested in further projects. Still, we will aim at improvement in this respect in the planned continuation projects.

4. Conclusion

The exploitation plan and strategy outlined provides the basis to help the consortium understand and identify exploitable results and the related dissemination and networking activities. The plan was revised at the mid-term review (M16) and at the end of the project to evaluate and adapt the strategy in place. This final plan is submitted in M27 of the project and outlines the strategy as all tasks are completed and the outcomes are final.

The report provided a comprehensive overview of the individual exploitable outcomes, of which the key results are:

- a standardized vulnerability assessment ready to be done quickly (this is what is currently in progresses in WP2) so that any religious leader or security manager can proceed to secure buildings based on various criteria;
- a set of simulations and training courses for the protection of worship places (planned for WP4)
- policy guidelines for the protection of public areas, to be brought to the attention of the EC (planned as outcome of WP5).
- A practical handbook, providing an easy to access overview on all of the key findings, recommendations and outcomes of the SHIELD project.

…as well as the related overall (project-level) and individual (partner-level) exploitation pathways.

5. List of tables

6. List of abbreviations

CBRN: Chemical, Biological, Radiological, Nuclear

CCTV: Closed Circuit Television

D: deliverable

EC: European Commission

EU: European Union

EUROPOL: European Union Agency for Law Enforcement Cooperation

INTERPOL: International Criminal Police Organisation

LEAs: Law Enforcement Agencies

M: month

NCPs: National Contact Points

OSCE: Organization for Security and Co-operation in Europe

RAN: Radicalisation Awareness Network

T: task

WP: Work Package

7. Annex: SHIELD Handbook (English version)

SHIELD

solutionS to enHance Interfaith protEction of pLaces of worship from terrorist Danger

This project was funded by the European Union's Internal Security Fund — Police under grant agreement No. 101034229.

PROTECTING PLACES OF WORSHIP FROM VIOLENCE AND TERRORIST DANGER: A QUICK GUIDE FOR LOCAL STAKEHOLDERS AND PRACTITIONERS

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01 INTRODUCTION

This handbook is a concise and smart guide on the main outcomes and recommendations of the SHIELD project **to support the protection of places of worship from terrorist danger**. Behind the SHIELD project there is a consortium of 18 partners from 10 EU countries, working from January 2022 to March 2024, and funded by the European Union's Internal Security Fund in the framework of its Counter-Terrorism policies and action plan. Such a plan has the aim to support the protection of public spaces, to develop better capacities to detect and mitigate threats, to improve the resilience of communities as well as raising citizens' awareness, and engaging more at regional and local level, as well as at international level.

SHIELD's analysis was focused on a subset of public spaces: the places of worship that intrinsically possess a special value that has to be carefully preserved. In fact, both believers and non-believers of all communities recognize them as having with a strong symbolic value around which the common sense of identity feeds the social cohesion at the local, national and European level.

The project consortium, involving a wide range of stakeholders and experts on the topic, has developed a set of strategies, tools and recommendations that we now share with the readers of this handbook, which is intended **for the leaders of religious communities, their security managers, local policy makers and LEAs representatives**. **The aim** is to provide **information and practical** guidance that can support a comprehensive protection system.

In particular:

1 On the one hand, **to raise awareness**:

- on the issue of security based on our analysis of the data and trends of violent or terrorist attacks on places of worship in Europe in the last two decades, for each of the three main religions: **Christian, Jewish and Muslim**;
- on the prevention practices and approaches to violent radicalisation and polarization.

2 On the other hand, **to provide practical and operational guidance**:

- on risk **assessment tools** for the identification of the most vulnerable parts and events in places of worship;
- on the technical **security measures** to be implemented to enhance the interfaith protection of places of worship;
- on mitigation approaches in the aftermath of an attack by following emergency protocols along with the provision of support services to the victims.

To make the most of the contents of this handbook, our preliminary recommendation to the readers is to bear in mind the importance of establishing and maintaining cooperation between public authorities, religious leaders and security experts, which includes creating clear communication channels and providing information and awareness on security threats.

In order to facilitate the reading of this handbook, we have tried to reduce specialist terminology to a minimum. However, a terminological clarification is necessary to conclude this introduction. It should be noted that there is no official and universally accepted definition of terrorism and that labelling a violent event as a terrorist attack entails ideological and political implications. Therefore, the SHIELD consortium has decided to adopt the broader term of 'violent or terrorist attack' to encompass all the violent offences motivated by political, religious or cultural reasons - usually referred to as terrorism, violent extremism, fundamentalisms, hate crimes - against places of worship.

Finally, the editors and reviewers of this handbook thank all project consortium partners who worked on SHIELD's analyses and deliverables. A network of religious organizations, security experts, police, city councils and technology companies who have individuals' freedom and security at heart and want communities to practise their faith and live their lives without fear.

December 2023

To ensure the widest dissemination of this handbook, the project partners agreed to provide a digital version translated into their respective national languages. They are available here: ***https://shieldproject.eu/handbook***

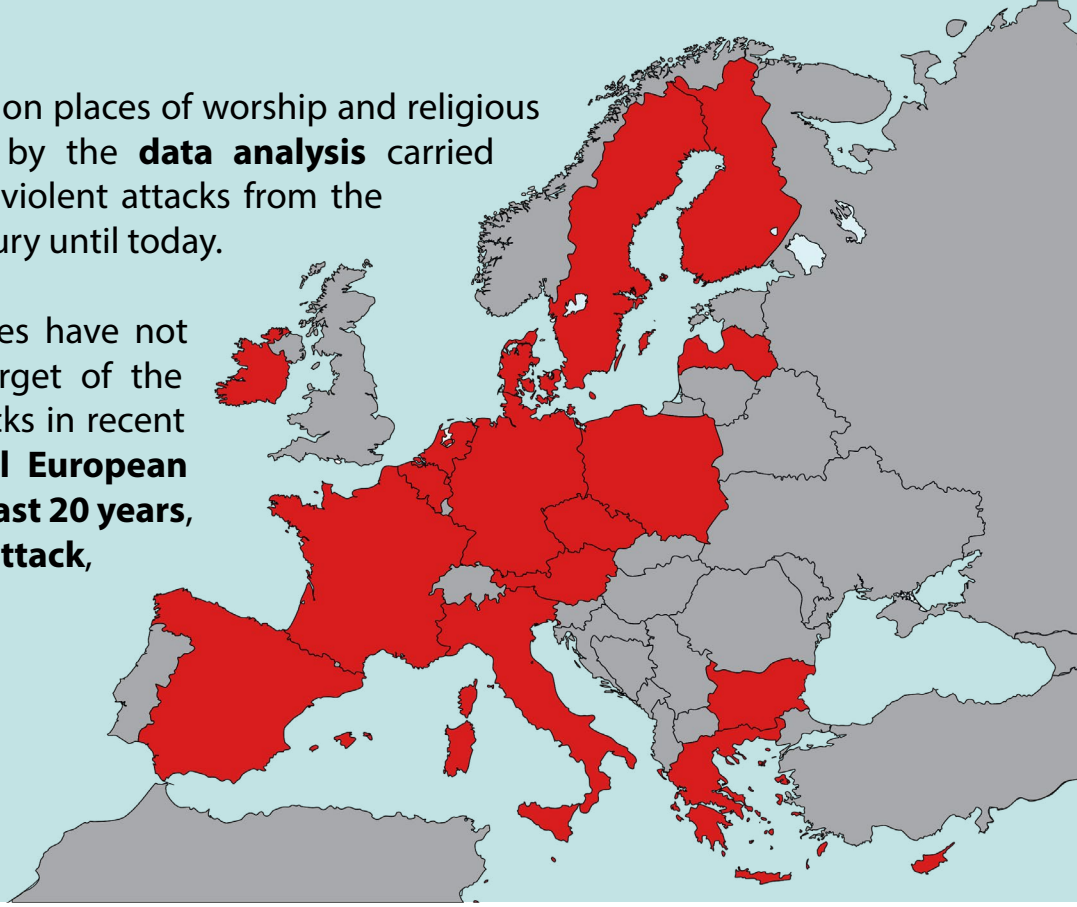
The Shield project first workshop on the 1st December 2022 at the 'Grande Moschea' of Rome

02

STATISTICS DATA ANALYSIS

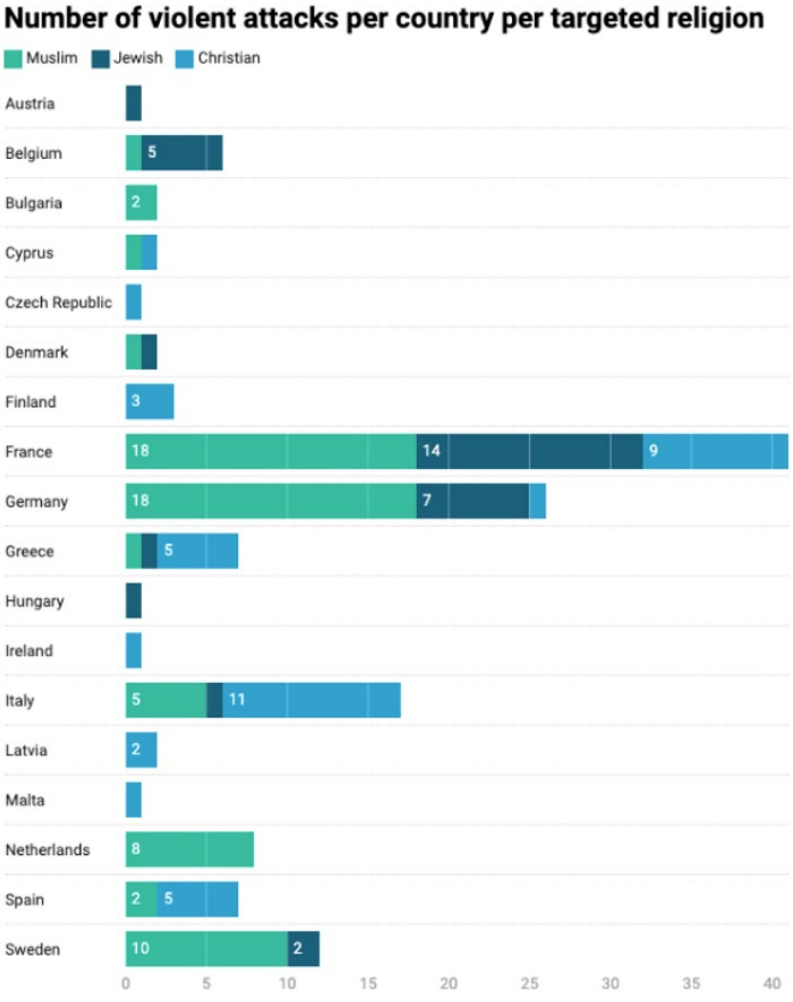
The relevance of the focus on places of worship and religious buildings was confirmed by the **data analysis** carried out by SHIELD project on violent attacks from the beginning of the 21st century until today.

In fact, even if these places have not always been the main target of the most serious terrorist attacks in recent years, however, almost **all European countries have, over the last 20 years, suffered a direct violent attack**, as shown in the picture.



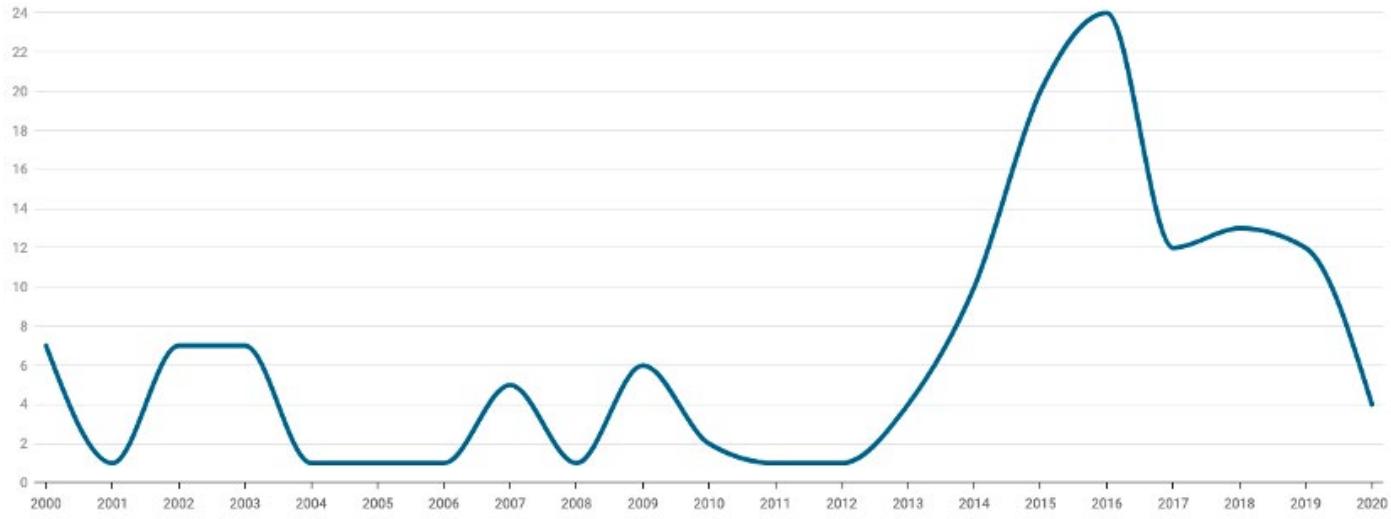
EU Countries that have experienced at least one violent attack on religious buildings

Based on the same data collected analysis, the SHIELD project also reported the distribution of violent attacks by targeted country and religion, focusing on the three main monotheist faiths, as highlighted in the graph below.



Number of violent attacks per country per targeted religion

The following table illustrates the quantitative distribution of the attacks on the timeline, showing clearly the fluctuation wave along the last 20 years and the peak between 2013 and 2017. A peak that reinforces the motivation behind the SHIELD project to focus on the protection of religious places of worship.



Number of violent attacks on places of worship between 2000 and 2020

Furthermore, almost half of the recorded violent attacks were against the Muslim community (48%), while the rest of the attacks are equally divided between the Christian (29%) and Jewish (24%) communities.

Percentage of violent attack toward the 3 monotheisms in the EU

This statistical data, that include the attacks on both buildings and people, allows to draw some **rather relevant considerations**:

1. **Muslim community**: it often targeted by attacks in countries with larger Muslim communities, such as France, Germany, and Sweden. However, Italy and Holland have also experienced significant attacks despite having a low percentage of Muslims. Political-religious conflicts have contributed to a rise in white supremacist violence and right-wing extremism, resulting in numerous acts of terrorism against Muslim places of worship.

2. **Christian community**: it faces various types of attacks that are difficult to analyse, as they have different motivations and actors behind them. Some of the attacks are motivated by vandalism (as for other communities), extreme left-wing or anarchist groups (especially in Greece and Italy), and mainly Islamic jihadism, which aims to destroy and undermine symbols of European identity, and sometimes to harm people directly.
3. **Jewish communit**y: it suffers from surprisingly violent attacks, which often result in casualties. Although they represent only 25% of the total attacks, and only 0.2% of the entire population of the European Union, they are disproportionately targeted by a range of actors, especially the extreme right and jihadist Islam.

This data analysis, besides offering a picture of the European situation over the two decades, served as a basis for the SHIELD Project to examine the modus operandi present in all these attacks. Through this examination and the additional twenty interviews conducted with representatives of the various religious communities, we were able to:

a. assess the level of awareness and preparedness of the different religious communities in Europe and thus;
b. develop the proposed vulnerability assessment tool and the appropriate security measures, adapted to the possible scenarios based on the type of religious building and its location, presented in chapters 4 and 5 of this handbook.

03

EARLY PREVENTION

The analysis of the recent attacks presented in the previous chapter, revealed that the religious places were not adequately protected due to an underestimation of the risks. In fact, despite the risk was identified at a national level, **small and/or local places of worship were either unaware of the risks or unable to implement mitigation measures**. Therefore, before presenting the vulnerability assessment and the security measures, it is important to recommend some **approaches and practices to raise awareness** at an early stage of prevention.

A lack of perception of the risks at the local level may denote a lack of awareness on how political violence works: **a geo-political event, far from our communities, can cause repercussions and affect them**. We have a striking example of this dynamic in the Middle East war which broke out on 7th October 2023 and which immediately led to a resurgence of terrorist attacks in Europe in the following weeks; a global rise in incidents of anti-Semitism and Islamophobia; and a related growing alarm from various intelligence or counter-terrorism agencies for the security of religious communities and places. So, since the bombing attacks in Madrid in 2004 and in London in 2005, many European countries and the European Union have developed **programs and policies to prevent radicalisation leading to terrorism**. The aim of such policies is **to increase the resilience and the efforts of local communities to interrupt**, as soon as possible, **the violent radicalisation process** before an individual or a group engages in criminal activities.

Although the SHIELD project has not been focused on early prevention work, on it has highlighted, during all the public events that has organized or attended,

the importance for local authorities, civil society and religious organisations to carry out practices that support the safeguard of the social cohesion and the resilience of citizens and communities. Early prevention work is primarily aimed at **avoiding the risks of polarisation and radicalisation** of opinions and viewpoints on sensitive issues, irrespective of whether these are of a political or religious nature.

Interreligious and intercultural dialogue activities are the central axis of a prevention work that should always be open and continuous in a context of conflicts increasingly interconnected at the international level, as agreed by all the main religions representatives who attended the SHIELD Workshop in Rome in 2022.
The recommendation for religious communities' leaders, policymakers and LEAs representatives is therefore **to establish local networks** - open to the

relevant stakeholders such as education system, social care services, prison and probation, civil society organisations, etc. - with awareness of the risks that stem from global conflicts and with operational capacity for continuous prevention intervention **on the ground and over time**.

On the issue of polarisation and radicalisation prevention, a large **repository of practices**, that can inspire the readers of this handbook, has been developed by the Radicalisation Awareness Network (RAN), set up by the EU Commission in 2011, and available here:

RAN Collection of inspiring practices.
The RAN Collection offers practitioners, policymakers and researchers the opportunity to draw inspiration from existing practices and to find examples adaptable to their local/specific context.
https://home-affairs.ec.europa.eu/system/files/2021-05/ran_collection-approaches_and_practices_en.pdf

04 THE VULNERABILITY ASSESSMENT TOOL

In its effort to support local and regional authorities in the protection of urban spaces, the European Union's Directorate General for Migration and Home Affairs (DG HOME) has developed the EU Vulnerability Assessment Tool (VAT) or Checklist (VAC). A tool which main objective is to provide **practical support to be able to adopt appropriate measures to prevent and mitigate terrorist attacks and their consequences**.

This VAC, originally addressed to local and regional authorities, has been modified and simplified by the SHIELD project team, to meet the specific needs of places of worship. In any case, using **this tool requires good skills in the security of public space and risk management**, so we recommend the readers of this handbook to create **a small multi-agency team** involving the proper skilled experts.
The local security policy should always contain a reference to the mitigation of the risks that are critical or serious to the targeted asset, in our case the places of worship. **The VAC is an objective and rational way for stakeholders to set their action plans and the technical security measures, as described in the following chapter**.

The SHIELD VAC follows the idea that general risk is the multiplication of three factors:

1. Sensitivity of the site (based on size, usage, architecture)
2. Threat to the site (by *modus operandis* and by security zone)
3. Protection measures (by layers of security) to decrease/mitigate the risk

The threat is highly dependent on the local parameters of damage and likelihood that are shown in a matrix table to be set by experts by each site.

In order to obtain the results of the risk assessment for each space or building, the list of factors analysed within the VAC needs to be inserted in the matrix table which is part of the **online directory** along with **all the relevant files**.

The VAC files - which includes: **a)** the methodology explanation, **b)** the VAC and **c)** the Excel (matrix) to obtain the assessment – are available here:
https://shieldproject.eu/handbook

05

TECHNICAL SECURITY MEASURES

Security: A Matter for All Religious Communities

In the European Union, the approach to the protection of religious communities varies somewhat from country to country. In some Member States, the protection of religious communities is seen as a responsibility of the government and is supported by both law enforcement and financial means. In many Member States, however, religious communities do not have State support and must therefore mitigate the risks they face using their own resources. The costs of building and operating security systems are very high, so it would be worthwhile for the European Commission to discuss this issue thoroughly.

The SHIELD project findings highlight that the fundamental goal of these security measures lies in safeguarding human life as the foremost priority. It is imperative for religious communities to prioritize ensuring the safety and freedom for individuals to live their lives and practice their faith without fear. Thus, the security measures primarily focus on preventing attacks that endanger human lives rather than solely protecting property. While safeguarding property remains essential, it is secondary **to preserving human life**. The deployment of security systems involves **a layered approach**, wherein individual solutions function independently. Ideally, multiple security measures operating simultaneously aim to counter a potential attack effectively.

Religious communities, local authorities and LEAs in Europe should consider some **security principles** which are the following:

1

The purpose of defence is to protect human life.

The protection of property is important, but not as important as the protection of the safety of community members, guests, and visitors. It is not acceptable that the life or way of life of the community should be endangered.

2

Preventing attacks is more effective than defeating them.

Preparation is needed to ensure that the community is able to respond to specific threats and attacks, but the focus should be on preventative methods first and foremost. Prevention encompasses many things, from passive means of protection, to creating protection plans and processes, to being well trained to respond.

3

The security system must be systematic and layered.

Attacks should be kept as far away as possible from the sensitive area. Progressively stronger barriers and controls should be placed between the people being protected and the attackers, which should be able to operate independently of each other.

4

Resources should be shared proportionally between the three pillars of defence.

Technologies, human resources and procedures will only work effectively if they are developed in equal measure. The results of continuous risk analysis should be taken into account in the development of the pillars of defence. In the event of new risks, the necessary responses must be found, taking into consideration that this must be based on the cooperation of technology, human resources and security processes.

5

In their operations, defence forces must be proactive rather than passive in their operational processes.

Active patrols, checks and vigilance tests are necessary. These ensure both the necessary deterrent effect, prevention and high quality. Maintaining dynamic defences is not an easy task, especially in the case of prolonged periods of no or no detected hostile operations.

6

Training and drills for both security personnel and the community must be continuously ensured.

It is not enough to acquire only theoretical knowledge; security drills must be conducted regularly. Simulations should be carried out, including the involvement of crisis management.

7

Systematic but random verifications and audits of the functioning of security systems should be carried out.

All technologies and standards are only as strong as the compliance with them. Wherever possible, the operation of security systems should be measured and evaluated (tactical exercises, self-audits, staff surveys) to demonstrate improvements in quality.

8

Ensure that adequate staff are in place to carry out security duties.

The person responsible for security should be directly accountable to the community leader but should also have considerable responsibility in his/her own area, with the appropriate authority. Reliable and highly skilled professionals should be selected who are committed and professionally competent.

9

Good relations must be established and maintained with the designated professionals within the Authorities.

In line with the principle of prevention, information about suspicious events should be shared and warnings should be taken into account. It should be made clear to the authority's designated contacts that their views and involvement are important for the security of the community, and that incidents detected and shared by the community will help to prevent crime.

External fences

"A physical barrier is a mean of establishing a controlled access area around a building or asset. Physical barriers can be used to define the physical limits of a building and can help to restrict, channel or impede access and constitute a continuous obstacle around the site. Physical barriers can create a psychological deterrent for anyone planning an unauthorized entry. A number of elements may be used to create a physical barrier, some natural and some manmade. Natural barrier elements include rivers, lakes, waterways, steep terrain and other terrain features that are difficult to traverse. Manmade elements include fencing, walls, bollards, planters, concrete barriers".

Fences and walls are the most common form of protection of all places from unwelcome intrusion. In addition to their primary security function, fences and walls demarcate the space of a place of worship and in particular its outer perimeter. Fences can be of many types with different technical characteristics, from those that are purely delimiting and aesthetic, to those capable of stopping even heavy vehicles thrown at them at great speed.

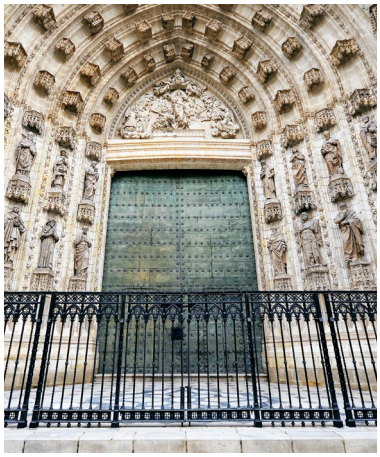
Fences are very effective, as they form both a physical and psychological barrier that delimits a well-defined area. Fences, however, have some fairly precise limits: if they are too low and/or made of non-resistant material, they cannot be effective because they are subject to degradation, break, and cannot withstand a vehicle or an explosion. Moreover, they can easily be bypassed, defeating their function.

Another element to consider is the surveillance of the fences: without a minimum of surveillance equipment (CCTVs), one risks relying on the perception that the fences will not be climbed over. Fences are then absolutely unable to stop armed individuals. Nevertheless, they are often indispensable tools when securing a place of worship, as they form an initial barrier, a boundary, between an external perimeter and the place of worship.

Finally, it should be remembered that fences should be designed with the right balance between the need for security and cohesion with the surroundings, while also respecting local regulations on the installation of security barriers.

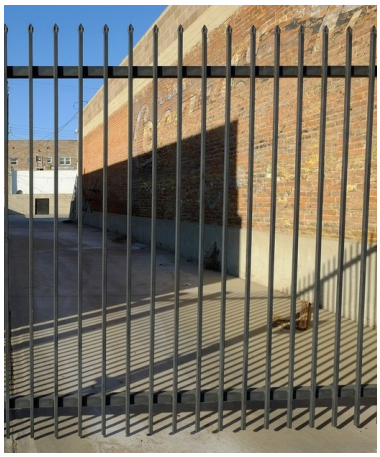
As it can be imagined, the most critical feature of the fences is, apart from the likelihood of the peripheral boundary being breached without adequate control, the entry point, which if unguarded, is a key critical point.

There are many types of fences, here is a non-exhaustive list of fences, depending on different characteristics:



Metal railings:

this type of fence is one of the most suitable for the security of places of worship. Aesthetically, they can be adapted to any context, because if built new, they can echo the style of the place of worship or the surrounding buildings. Material-wise, they are usually made of wrought iron, which makes them very safe and durable, although they do require maintenance. Their cost is higher, but they usually do not allow them to be climbed over, they resist vehicles breaking through, and if accompanied by metal sheets they also offer good privacy.



Vertical bar fencing/steel fencing:

this type of fence is a good compromise between cost and effectiveness. Steel fencing can also be created in such a way that it cannot be scaled and is of various heights, even up to 4 metres. Depending on the thickness and type of metal used, they can also be able to stop vehicles from breaking through, especially if there is reinforced concrete at the base of the perimeter. This type of fence is also aesthetically more adaptable to various contexts.

Welded mesh fencing and/or chain link:

this type of barrier is by far the cheapest, the easiest to install and with very little maintenance costs. It is available in various heights, but the most common is around 1.80 metres. Although it is the easiest and cheapest fence, it is also the one that offers the least protection, as it can easily be climbed over and damaged, is not at all resistant to vehicles breaking through, and aesthetically may not enhance the place of worship. Only if the fence is fixed on a reinforced concrete base around the perimeter, then it could stop vehicles, but, in any case, all existing vulnerabilities remain.

Ha-ha barriers or 'saut de loup' barriers:

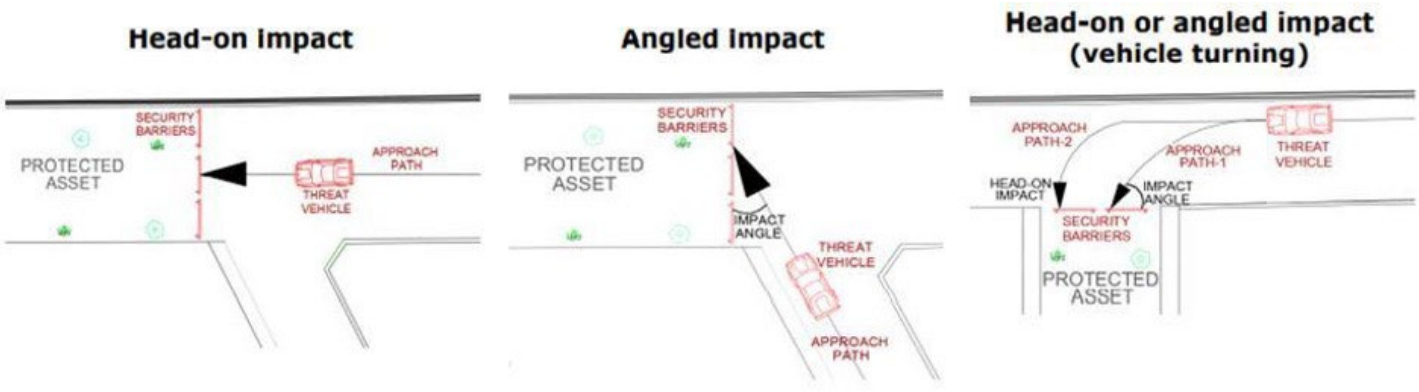
ha-ha barrier is a recessed landscape design element that creates a vertical barrier (particularly on one side) while preserving an uninterrupted view of the landscape beyond from the other side. It prevents vehicles and unauthorized people to enter a determined area while keeping the view from the inside to the exterior.

Anti-ramming systems

In recent years there has been an increasing trend in vehicle ramming attacks against soft targets as people. This growing tendency of vehicle attacks, characterised by the ramming vehicles that are either deliberately driven at high speed against the public to maximise human casualties or are used for transporting an improvised explosive device (IED) close to a facility, concerns also places of worship.

The increased use of vehicle attacks is attributed to their relatively easy planning, accessibility and minimal expertise required in carrying out the attack. In order to block or minimise the damages of these attacks an effective strategy for the protection of physical perimeter is required. This strategy is based on the implementation of anti-ramming systems, which are obstacles acting as a barrier. These anti-ramming systems stop an ill-intentioned vehicle if it attempts to breach the security perimeter by forcing it to reduce speed or stop completely, disabling it before causing destruction and injuring people. These systems should be placed across roadways and passages and can be active or passive, permanent or temporary and can be made from various materials, such as steel, concrete and rock. Large plants and trees could be also used as anti-ramming systems, and they are less impactful (but nevertheless with the same degree of effectiveness) and more environmentally friendly with regards to the surroundings.

In order to understand which the most efficient anti-ramming systems are for a specific religious site, a risk and vulnerability assessment should be carried out, in particular by imagining multiple scenarios of attack, the potential size and speed of the vehicle, the possible attack routes. These elements will help in determining the type of barriers needed.



Example of scenario and trajectories calculation

The goal of the barrier is to absorb the kinetic energy of the speeding vehicle at the point of impact, halting its penetration or causing it a significant damage so that it will need to stop very shortly afterwards. Additionally, these barriers may act as a deterrence factor, functioning as a psychological obstacle against potential attackers.

Below we have added some examples of anti-ramming systems or other architectural elements that could be used as anti-ramming systems:

Bollards:

these elements are one of the most commonly used form of barrier. They are predominantly used in city centres and pedestrian areas. Normally made of steel, reinforced concrete or a combination of these two materials. Their narrow form and small size make them less intrusive in comparison to other solutions. Bollards are a cost effective and pragmatic solution that could be largely employed for the protection of places of worship. Bollards could be fixed or retractable, and equipped with lights if they need to be visible.

Temporary barriers:

they are re-deployable, and because they aren't built with a foundation on the ground, they rely on the aggregation of multiple barriers in order to prevent ramming attacks. They are usually used during large public events, or as temporary installation in order not to intervene on the ground, even if sometimes this temporary solution became the perennial solution. Unfortunately, these elements are not the most efficient in order to protect houses of worship and they do not fit very well with an urban landscape. They are helpful in the case of a large public event attracting crowds but not as a long-term solution.

Landscaping and architectural elements:

hardened street furniture and streetscape element which smoothly integrate and blend into the urban setting are also used a valuable form of barrier in order to block vehicle attacks. They consist sometimes of dual or multiple use elements (such as lampposts, bus stops, signposts, sculptures, benches) and their main added value is their minimal visual impact. When they are combined with other form of barriers like bollards, they become very effective. Below there is a partial list of potential elements that could be used as anti-ramming systems:

Benches in reinforced concrete:

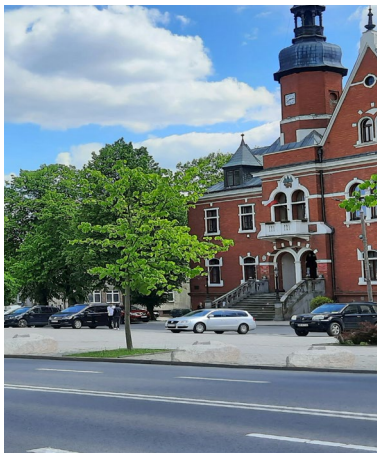
this element could be an excellent form of protection, if positioned in tactical and precise positions. They could be positioned in order to create a fictive perimeter around the PoW or in pedestrian areas in order to avoid vehicle approaching. Also, they could be well integrated with the environment by covering the bench with wood and decorative elements as plants. It is important to keep in mind that the structure should be somehow built in the ground in order to avoid fragmentation in the case of an explosion. Another element that could be considered is a wall in concrete, which is very effective but unfortunately doesn't always aesthetically fit with the surrounding environment.

Large pots and flowerbeds:

they could be made of metal or better if of reinforced concrete and should have the same characteristics of the aforementioned benches, in particular the material chosen should be a potential threat to life causing injuries in the case of an explosion. The same approach is valid for earthen hills with plants, concrete benches interspersed with plants and/or grass.

Trees:

large trees are a very valid source of protection against the tentative of a vehicle penetrating a perimeter, especially if trees and placed in a dense row. Obviously, the trees should be quite big and large and maybe they are not suitable for a city centre old town, but they could be a valid option for PoW surrounded by big empty spaces. Trees have not only a great landscaping value, but also a protection effect. For example, in case of an explosion, trees could, on one hand, restraint the blast, but on the other, be a source of potentially serious injuries. Rows of tress could be considered also an integrative element of a fence, so they will be only briefly mentioned in the section dedicated to fences.



Boulders and rocks:

when their size is especially big and if densely placed they can act as barrier in order to prevent a vehicle forcing the perimeter. Depending on the type of mineral they could be resistant at different degree to an explosion.

Planting hedges:

Planting hedges can be a good alternative to building a perimeter wall for security purposes, especially for places of worship or other public places. It can help obstruct the view of potential attackers and make the area more natural, while also being cost-effective. However, it's important to choose the right type of vegetation for the specific climate and location where they will be planted. The wrong type of plants may not provide enough cover or may require excessive maintenance, which can negate the benefits of using hedges for security. Additionally, some types of masts can provide protection against shock waves caused by explosions. Therefore, it's important to consider the specific security needs of the area when choosing what type of vegetation and other natural defences to

use. Overall, planting hedges and other forms of natural defence can be an effective way to enhance security while also maintaining the natural beauty of the area. However, it's important to carefully consider the specific needs of the location and choose the right type of vegetation and other natural defences to ensure they provide the necessary protection.

Security personnel

Among the many existing solutions for the protection of places of worship (PoW), that of security personnel plays a very important part. There are mainly three types of patrolling possible:

1. Foot patrol;
2. Motorised patrol;
3. Hybrid patrolling (the patrolling is performed by unmanned vehicles which could be remotely followed by humans).

Obviously, the fundamental element to take into account when choosing one of the two solutions is the geographical extent of the territory to be patrolled and the costs of resources to be involved in.

French soldiers patrolling

It should be reminded that patrols and identifiable security personnel are by themselves a form of deterrence. Nevertheless, the objectives of security personnel are to ensure the security of determined zones, in particular:

- the surroundings of the PoW, including parking areas, pavements, and access roads;
- the immediate exterior of a PoW;
- the interior of a PoW;
- other elements (buildings, equipment, materials) that could be a threat for the safety of people or for the security of buildings.

Among the duties of security personnel, it should be mentioned the constant verification of already identified weak spots; the checking of entrances; the verification of the status of security barriers (fences, locked doors, gates etc.) and suspect behaviour of people and the identification of potential threats as object left unattended.

If patrolling is not guaranteed from LEAs and instead is organised by religious communities themselves, some basic principles should be followed. By applying these measures, some security gaps could be avoided:

- **Patrolling should be unpredictable**: different timing for patrolling should be arranged in relation to the needs of the PoW and to the specific situation (e.g. if the PoW is open throughout the week, if it is always crowded, what are the events that attract lot of people). The frequency and timing of patrolling should be determined following an appropriate risk and vulnerability assessment.
- **Patrolling routes should not be always the same**: it should be taken into consideration the creation of different roadmaps for patrolling. If the surrounding area has small roads (e.g. city centre of an old town) consider at least different starting and ending points.
- Patrolling consists not only in physical presence as deterrence, but also in daily specific activities as the verification of the following elements:
    - » the conditions of infrastructures and security elements (barriers, fences, and effective restriction of locked areas, etc);
    - » punctual verification before and after specific events where crowds are expected;
    - » suspect behaviour of people in the surrounding areas;
    - » suspect circulation or parking of vehicles;
    - » vandalism acts, especially if hate speech is spread;
    - » the integrity of the security infrastructures after violent natural events.

Video surveillance

Systems for video surveillance are very helpful for allowing quicker intervention from emergency responders and for detecting unusual behaviours, such as potential spying activities. To accomplish such an objective, it is essential that they are continuously monitored by an operator. Systems that only record data and do not transmit images in real time are significantly less effective because they only allow for the probation of facts during the trial. But, in areas with very little risk, these solutions may also be considered. The national legislation, which might vary greatly depending on the country, must always be checked and consulted when it is matter to protect privacy. Solutions for public- private collaboration and integrated security can be explored in various nations. These options call for the installation of a video camera, which the private body pays for but which sends images to the police operating room. The cameras can then be pointed at an open public space.

Because cameras can be fitted with sensors that can detect potential intrusions, intrusion alarm systems were not taken into consideration in this analysis from a cost-saving perspective. Of course, the end user is free to install intrusion detection systems as well for increased security.

Security cameras are fundamental and now almost ubiquitous elements in many houses of worship. They can be divided into many types, but first of all two essential distinctions must be made:

- **Cameras that record but do not send images in real time to a control room**: these cameras are certainly useful as a psychological deterrent but have no preventive element. Since they are not connected to a control room, there is no operator able to monitor the situation in real time and/or intervene in the event of an alert. This type of camera is only useful in cases of low risk and where security risks are only related to property such as attempted intrusions for theft and vandalism.
- **Cameras with connection to a local control room or monitoring room**: this type is the most suitable for effective prevention and to thwart the most serious threats directed against people. In this regard, an important element to stress is the role of the monitoring operator(s), whose duty is to monitor any potential threats. CCTV systems should be tailored to the needs of PoW after having conducted a risk and vulnerability assessment. There are two main elements to consider while talking about CCTVs:

  1. Type of cameras;
  2. Location of cameras.

1. TYPES OF CAMERAS

There are two main types of cameras:

1. Digital cameras (or IP cameras)
2. Analogue cameras

Internet Protocol (IP) cameras are all those digital cameras capable of sending and receiving data via an IP network. They are widely used as video surveillance cameras and come in different designs and capacities. Analog video cameras, on the other hand, capture images, record them and send them as analogue signals via a coaxial cable to a digital video recorder (DVR). The latter then converts the analogue signals into digital signals, compressing the file and storing it on a hard disk.

Before highlighting the main differences, pros and cons of analogue and IP surveillance cameras, several factors are often overlooked when making comparisons between the two types. These include two main elements:

1. resolution: IP cameras capture better quality images with a higher resolution and have a much wider field of view than analogue cameras;
2. storage: an IP camera can consume up to 6 times the disk space of an analogue camera in the same amount of time. This also depends on the resolution and HD specifications of the cameras.

Analog Cameras | **IP Cameras**

PRO AND CONS OF IP CAMERAS

Pro	*Cons*
IP cameras have several sensors in one device and can cover a wide angle of view. In addition, they have a higher resolution and thus higher quality images.	Compared to analogue cameras, IP cameras are more expensive to install. However, they are easier to customise and scale than their analogue counterparts.
As technology improves and more of these products come onto the market, IP cameras are becoming more and more affordable. Today we have several entry-level IP cameras that are worth buying.	They are high-resolution and therefore take up a lot of storage space.
IP cameras are easy to install: no encoders/decoders are required and only one cable is needed for power and data connection to a network switch.	These cameras have a user interface that may require some learning by non-tech-savvy people.
They offer increased security as the video is encrypted before transmission.	

PRO AND CONS OF ANALOGUE CAMERAS

Pro	*Cons*
They are significantly cheaper than IP cameras, especially when more cameras need to be installed.	Analogue security cameras are not ideal for areas with a lot of movement, due to their low frame rate and image quality.
Analogue cameras are easy to use and do not require a learning curve.	They occupy less space, so more analogue cameras are needed for a given project than IP cameras.
High-definition (HD) analogue cameras are now available on the market and have significantly improved image and video quality.	They do not have data encryption technology; therefore, images and videos are susceptible to digital hackers.
It is easy to find an installer at a relatively low price.	

There are then different types of cameras, depending on their characteristics and destination:

- Indoor cameras: these cameras are specifically made for indoor areas and are normally in HD but with cheaper material than outdoor cameras.
- Outdoor cameras: the weather resistance is the primary distinction between indoor and outdoor IP cameras. The latter are made to tolerate significant variations in temperature and humidity, whereas the former is appropriate for situations with nearly constant temperature and humidity. In addition, outdoor IP cameras need to be capable of withstanding snow, rain, and dust by insulating the shell that houses the electrical circuits.
- Pan Tilt and Zoom cameras (PTZ): this camera is capable of panning horizontally (from left to right), tilting vertically (up and down), and zooming (for magnification). PTZ cameras are often positioned at guard posts where active employees may manage them using a remote camera controller. Their primary function is to monitor expansive open regions that need views in the range of 180 or 360 degrees. Depending on the camera or software being used, they may also be set up to automatically monitor motion-activated activities or adhere to a defined schedule.
- Infrared Night Vision cameras: this camera allows to maximize video surveillance effectiveness in low light conditions.
- Bullet CCTV: most bullet cameras will offer LEDs that allow the camera to see well in the dark or in low light situations; it can be used on the interior or exterior and can withstand harsh weather conditions or extreme temperatures. Bullet cameras are known for their longer range rather than their wide-angle field of view capabilities and they can be mounted on any wall, making them a great option for external monitoring.
- Dome cameras: dome security cameras are a versatile and visually subtle option for surveillance. The housing is dome shaped as the name suggests and is usually placed on ceilings or under eaves as they need a horizontal surface to be mounted on. They are extremely durable with vandal-resistant housing and can withstand all the elements both internally and externally. Most dome camera options will include smart-infrared night vision surveillance, high resolution images, and wide dynamic angle imaging to cover a wide range of areas.
- 360º CCTV: it can capture omnidirectional videos or photos.
- Cameras able to distinguish between people and animals in order to recognise potential threats and send alerts to the security operators
- Cameras with positioning systems
- Cameras for license plates recognition
- Camera able to count people

Almost all these cameras (IP cameras) could be integrated with other sensors (movement, fire, etc) in order to automatically send an alert to security personnel.

Pan Tilt and Zoom camera (PTZ)

Bullet camera

Dome camera

360° camera

Camera able to perform human recognition

2. LOCATION OF CAMERAS

In addition to having presented the different types of security cameras and their characteristics, it is also necessary to look at their possible location and other guidelines to maximize the cameras' potential.

One of the first things that comes to mind is that the placement of cameras should be carefully thought out: fewer cameras than actually needed will leave vulnerabilities that can be exploited by malicious intruders, excess cameras will cost too much, will not be as effective as they seem, and at the same time may even intimidate PoW users. Visibly placed cameras in specific locations increase the sense of security and help in psychological deterrence, whereas too many cameras can almost induce a sense of insecurity.

In general, the elements to watch out for are the followings:

- Identify precise areas to be monitored (not everything has to be monitored);
- Pay attention to the brightness of the area to be monitored (low brightness will reduce the general definition but a light source that is too close could create annoying reflections);
- Avoid blind spots such as walls, columns, protruding objects that limit the view of the camera;
- Pay attention to vegetation: trees can be serious obstacles to the view;
- Try to make the public notice the existence of surveillance cameras, on the one hand to instil security and on the other hand as a psychological deterrent. At the same time, cameras must aesthetically integrate with the rest of the building;
- Cameras should be positioned in such a way that they cannot be degraded or vandalised without other cameras noticing. Usually the principle of 'cameras watching each other' applies.

In conclusion, it can be noticed that surveillance cameras are a very effective tool, if some rules are followed and these cameras are used in an efficient and correct way.

Lighting systems

This section describes supplementary lighting powered by an alternative source to the primary one (which could be provided by the local administration if the building is on a public road). Security lighting provides a level of illumination to clearly identify persons or objects and creates a psychological deterrent to criminal activity in the area being protected. There are four general types of outside security lighting:

- continuous lighting;
- emergency lighting;
- moveable lighting;
- standby lighting.

The motion sensor light is turned on by the motion sensor. That usually means that the light will automatically turn on as soon as this sensor (also called an occupancy sensor) notices a person moving. There may also be a mechanism to turn the light on manually, but not always.
These sensors could be connected with CCTVs and could also automatically provide an alert to the control room.

Motion sensor lighting

INDOOR

Active and passive fire protection systems

Active protection systems are one option that may be taken into consideration, as well as passive protection systems. It can be defined "active" any equipment that takes action in the event of a fire. An intervention, which may occur with or without a man present, is necessary for active protection. This type of fire protection includes fire extinguishers, **fire extinguishing systems with hydrants or sprinklers, smoke and heat extruders, pressurization systems, and fire detection and alarm systems.**
Any actions that lessen the effects of a fire without requiring human intervention or the activation of a device are collectively referred to as passive protection systems. The spread of the fire is prevented by these measures. Hence, they are products to protect structural components, to delimit fire- resistant compartments, or simply materials with low combustibility properties as fire barriers.

It is feasible to appropriately protect houses of worship from the risk of arson that can be initiated in a variety of ways by combining active and passive protection systems. For instance, someone could break into a place of worship at night and light up the wood furnishings or could throw a Molotov cocktail bottle at the door of a PoW during the function or as the people leave. A Molotov cocktail bottle could also be thrown inside the structure after breaking a window with a stone. Because it combines protection systems that are automatically activated with others that must be manually activated by an operator, the combination of the fire protection systems illustrated below is a good option for guaranteeing the protection of the building both during the day and at night. Nonetheless, it must be remembered that fire rules might differ significantly amongst the various European Union member states. As a result, the general ideas presented here must be elaborated upon at the time of installation under the guidance of a skilled technician who is familiar with how to implement local laws. It should also be borne in mind that under local national laws churches may not be subject to fire regulations or be subject to them but with significant limits respect others. This obviously requires a high degree of flexibility in applying what is proposed below.

Sprinkler systems

Sprinkler system

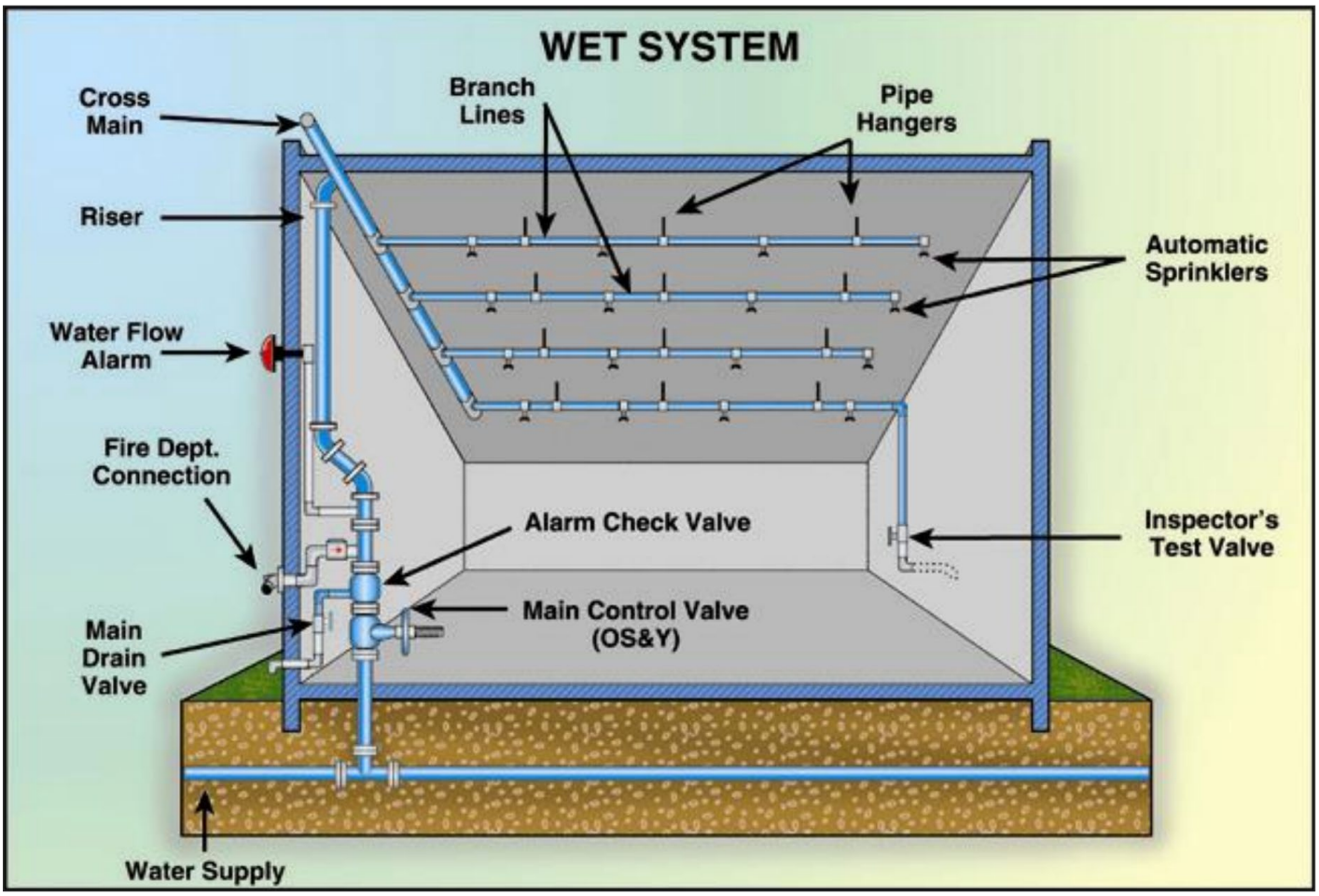
The sprinkler is an automatic rain extinguishing system. It aims to detect the presence of a fire and to control it so that the extinguishing of the same can be completed by other means, or to extinguish it in the initial stage. (ESFR - Early Suppression Fast Response).

Such a system includes one or more water supplies and one or more sprinkler systems. The system includes various sprinkler valves (the regulator is installed on the roof) and a network of pipes where water flows can be visible or hidden.

The plants are further divided into two types: wet and dry. Wet and dry plants are further separated into two categories. One of the most prevalent is the wet plant. The pipes of this kind are filled with water that is dispensed under pressure in the event of a fire and continue to do so until a control valve is closed. The supply is dependent on a thermosensitive component that breaks when the ambient temperature reaches a range between 57C° and 77C°, resulting in water falling. The sprinkler activates the water supply in the event of a fire, and the alarm bell sounds to signal impending danger.

Water in pipes may freeze in extremely cold temperatures. A dry sprinkler system can be installed in these circumstances. With these systems, the pipes are pressured with air, and a valve stops water entry until the sprinkler is turned on in the event of a fire. In dry sprinkler systems, the pipes upstream of the control station are always pressurized with water, whereas the pipes downstream of the station are always pressurized with air. As one or more dispensers are opened, the air pressure drops, immediately allowing water to enter the distribution pipes.

Thus, dry plants have the same advantages as wet plants but are slower in spraying water when activated. In case of fire, the sprinkler system starts the water supply, while the alarm bell comes into action by setting off the alarm warning.



Sprinkler piping system

Smoke detectors

Smoke detectors come in two varieties: "ionizing chamber" and "optical beam" models. The variation in the electric field that is produced for the creation of ions in the air when there is a fire, allows ionizing chamber smoke detectors to detect the presence of smoke. These detectors work well in situations where fires spread quickly, such as when Molotov bottles are thrown. Also, we need to take into account the fact that churches are empty at night. Therefore, if they are lacking intrusion alarm systems or cameras, it would be very easy for an arsonist to break in and start a fire that, if not detected right away, could result in the complete destruction of the place of worship, seriously harming the local community's artistic and cultural heritage.

The optical beam smoke detectors work thanks to a particular phenomenon of optical diffusion of light, the so-called "Tyndall effect". The smoke that develops during a fire, invades the detector chamber and varies the way the light spreads inside, generating an alarm. They are not recommended for installation at the structures of interest because they are too subject to false alarms due to the low brightness of some areas.

Smoke detector

Fire extinguishers

Fire extinguishers are a crucial component in every building's safety system. Since that firemen need some time to arrive, they are the most secure technique of fire prevention and emergency response. Extinguishers come in a variety of types that vary depending on the sort of fire they must put out. It might be worth using both CO2 extinguishers placed at different parts of the structure and a large- capacity powder extinguisher, however this assessment must be done on a case-by-case basis with the assistance of a fire protection specialist consultant. It is advisable to differentiate in order to deal with many forms of fire that could arise during an assault or arson while still safeguarding the religious cultural heritage. It is obvious that using CO2 to put out a fire started by a Molotov cocktail bottle that spreads combustible liquid is different from trying to put out an arson fire that's been set on a main wooden door. Due to the vast scorched area in the second case and the possibility that CO2 may not be effective, dust is more efficient. Generally speaking, CO2 extinguishers can be used to put out small or liquid fires (like those started by Molotov cocktails), while powder can be used to put out larger fires, like those started by huge wooden structures. The many existing regulations require that the personnel in charge of using extinguishers attend a specialized training.

FIRE CLASS	TYPES OF FIRE EXTINGUISHERS		
	CO20	POWDER	FOAM
A - SOLID	✗ (large solids)	✓	✓
B - LIQUID	✓	✓	✓
C - GAS	✓	✓	✗
D - METAL	✗	✓	✗
E - ELECTRONIC DEVICES	✓	✓	✗
F - GENERAL OIL AND FATS	✗	✗	✗

CO2 extinguishers contain liquid compressed carbon dioxide. Air is drawn into the extinguisher when it is activated, and when the liquid is ejected, it turns into carbon dioxide snow. It is also known as "dry ice." The carbon snow changes once more and returns to gaseous form when it comes into contact with fire, subtracting oxygen and therefore suffocating it. When using these extinguishers, extra caution must be exercised in there are people around as they can lead to cold burns and breathing issues. At the same time, this factor should be kept in mind in the event of having to defend yourself against a potential terrorist, when fleeing is not an option.

On the other side, dust extinguishers are more ductile and effective at putting out practically all sorts of fire. They are highly effective at putting out fires caused by solid, liquid, gaseous, and metallic materials. They can also put out electrical appliance fires, however doing so results in permanent harm to the equipment. This kind of extinguisher also puts out fires by cooling and suffocating. When used inside a building, it can make people intoxicated and scatter a significant amount of extinguishing material in the area around 4 or 5 meters from the fire. As previously stated, when necessary, a transportable trolley fire extinguisher may be used. The CO2 extinguishers should be generally preferred because they produce less damages to the nearby materials than the powder.

Fire doors

In order to suffocate the fire and stop it from spreading, fire doors are built to withstand the heat of the flames and shut off the oxygen supply. Steel, plaster, glass, vermiculite layers, wood, and other combinations of these materials may be used to create these passive defences. The following are the purposes of fire doors:

- to stop the spread of fire and smoke within a building or between adjacent structures;
- to give building occupants a way out;
- to allow firefighters to intervene with some degree of safety;
- to facilitate the operation of active fire-fighting systems;
- to safeguard works of art and cultural landmarks that are situated in those areas.

Such doors must guarantee the following:

- Resistance: the door is flame-resistant and prevents the spread of fire outside the environment where it occurred;
- Hermeticity: the door prevents the

passage of the gases produced by the fire from spreading to other environments;

- Insulation: the door isolates the premises from the one where the fire developed, keeping the temperatures within set limits (about 150 C).

The doors can withstand fire for up to 180 minutes. Creating temporary safe spaces is a crucial additional application of fire doors. Moreover, some recent attacks on places of worship across various faiths have underscored that terrorists sometimes possess only knives, lacking access to firearms or explosives. In such scenarios, a sturdy fire door can effectively block access for an armed individual, offering safety until assistance arrives. This significance is heightened considering that panic rooms may not always be available within places of worship. Furthermore, doors can include extra functionalities like smart electronic locks activated solely by authorized individuals.

Intelligent electronic locks

An intelligent electronic lock is a home automation device that can be installed on all kinds of doors. Both internal and outdoor doors can have smart locks. These doors allow for access control and can be opened or not, depending on whether the individual attempting to gain entry possesses the required electronic authorization. These security systems can be managed remotely via a control panel or a mobile phone app. In the event of an attack, individuals in charge of the system can allow the police entrance by remotely opening the doors without putting themselves in danger. This also prevents the breaking through of historic doors or the use of explosives to break down walls by special forces attempting to access the place of worship.

Intelligent electronic lock is a user recognition device that can work in different modes. The most common mode involves connecting via Bluetooth or Wi-Fi to an app downloaded on the mobile phone. This app allows both remote control and automatic recognition of the phone in order to ensure access without having to perform any operation on the phone.

There are also locks with numerical access systems, voice recognition or fingerprint recognition. The most practical solution, in this case, seems to be that of cellular access.

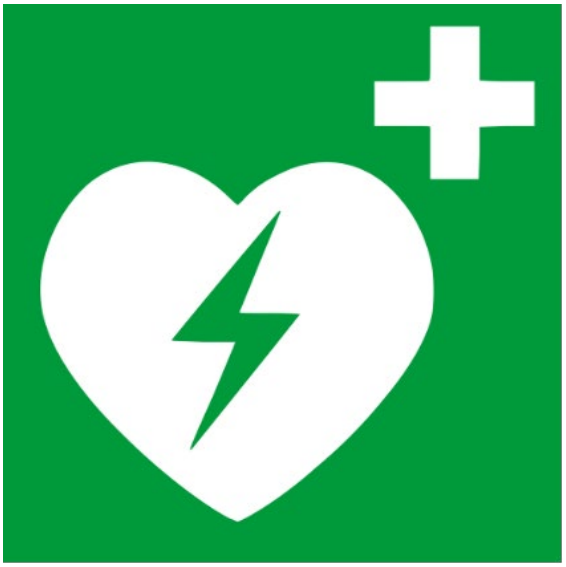
Intelligent electronic lock

AED devices

AEDs (Automated External Defibrillator) are a type of medical equipment used throughout Europe that are typically made available to users in areas where there is a mass exodus of people. It can be easily identified by its distinctive, high visible symbol and it can save life. AEDs are divided in two main categories:

- Automatic external defibrillator;
- External semi-automatic defibrillator.

There is only one "ON/OFF" button on the external automatic defibrillator. The AED will automatically assess the patient after applying the "PADS," or electrodes, and decide whether to deliver the discharge or shock or not. Via audio communications from the AED, the user and rescuer are kept constantly informed of the procedures carried out by the medical equipment and given guidance on any necessary steps. It is advisable to train some subjects on the use of such a device, as well as basic techniques of first aid (BLS-D). The person who decides to intervene during a terrorist attack should be aware that doing so can be extremely risky because some terrorists can be nearby. Therefore, it is strongly advised that individuals who choose to do so have at least a basic understanding of the risks of this kind of intervention.



AED device symbol

Panic buttons

A panic alarm is a simple-to-use electronic device that can be used to alert for assistance in an emergency if there is a risk to people or property. It is made to cut down on the amount of time before help can be provided. Often, but not always, a hidden panic alarm button is used to operate it. These buttons can be linked to a monitoring station, a local alarm system, or a bell or siren that can be heard. The alarm can be used to call for local security, police, or emergency services for aid in an emergency. Some devices can turn on, record or assess the event. These buttons are electrical devices with internal long-life batteries that are often waterproof, shockproof, and extremely durable. When pressed, many panic alarm buttons lock on and need a key to be reset. Others might experience a brief delay, during which the request for assistance might be cancelled.

The monitoring service operates a call centre that is open round-the-clock to take calls from the system console. Some monitoring systems use qualified operators who can more accurately assess the seriousness of support requests and choose whether to send an emergency service or handle the issue remotely.

An electronic device worn on a bracelet or necklace as part of a medical alert system is called

a medical alert panic button or medical alarm. When activated, it wirelessly connects to a console in the house, dialling the alarm monitoring team to notify them of an emergency. The emergency services will be called in depending on the urgency of the issue, according to the alarm monitoring staff. The advantage of using an alert button in a medical emergency over a cell phone is that the person who is in difficulty might not be able to dial the emergency number or might not be able to speak.

In the event of a terrorist attack, this kind of emergency alert can be highly helpful because it enables victims, such as hostages held inside a place of worship, to transmit a silent alarm to the security forces. So, terrorists may face special forces when they least expect it. These should, of course, be utilized by those in charge of security and/or by volunteers who have special expertise in security.

Self-protection in the case of a terrorist attack

TOPIC	TIP
Keep a safe distance	It is crucial to prevent a suspicious individual from getting too close. This must be avoided especially by those who have a service gun, because the aggressor could attack them to take possession of the weapon. If a suspect approaches, it is important to prevent him from exceeding the minimum distance of one meter. If he does, it is necessary to back away. Those with service weapons should avoid putting themselves in positions where they could be taken by surprise.
Even if you are injured, run away	Even if you have been injured once, it is essential to run away immediately to avoid being hit further. Though it is unlikely that a single stab can kill a person, trying to escape remains vital in order to avoid any further injuries. Rather than trying to block the aggressor it is essential to get away from his radius of action, because if he is not at close range, his weapon serves no purpose and, having to chase the victim, will take away momentum to his attack.

In the event you are caught, wriggle	Feeling of fear, shock or surprise may take over those who are caught by a terrorist. In these cases, it is essential not to become overwhelmed psychologically and wriggle as much as possible to get away.
Shout or scream with all the breath you have in your throat	If you are attacked, start screaming to alert the surrounding people so that they can escape and call for help. This can also intimidate the attacker because it draws attention to him/her.
Use objects to protect and keep the aggressor at a distance	A bag can be used to parry stabs and a chair to keep the aggressor at a distance. Putting yourself behind a large object, such as a car or a table, can delay the aggressor's action and make it more difficult to reach the you.
If barehanded, protect youself from a knife attack using the outside of your forearms, kicking and keeping your fists closed	If you have to defend yourself with your bare hands from a knife attack, it is better to use the outside of your forearms and keep your fists closed, rather than your hands open. The forearms are more robust and less sensitive. If you fall, kick your feet as this can prevent the aggressor from jumping on you (the feet are protected by shoes).

A safe room, which could be locked from the inside, is a high valid alternative.

CONCLUSION

In summary, this is an overview of the main technical security measures that could be taken into consideration when protecting a PoW:

Mitigation measure	Location	Threat	Purpose
Sprinkler system	Internal	Fire	When the presence of a fire is detected, through a temperature detector once a heat threshold has been exceeded (usually between 68 and 74°C), the system is activated to extinguish the fire through a rain extinguishing and Sprinkler
Fire extinguishers	Internal	Fire	To allow manual intervention, possibly before the Sprinkler system is activated
Interna fireproof partitions	Internal	Fire	Prevent interior partitions, countertops from fireproof

Furniture materials	Internal	Fire	Prevent carpets, curtains, fabrics, cushions from being fireproof
Fire Alarm / Smoke detector	Internal	Fire	Promptly report the fire when there is anyone in the House of Worship
Fire doors	Internal	Fire / Assault	They prevent the spread of fire and provide robust protection behind which to shelter in case of assault
Windows	Internal	Attack	All accesses to the outside, if present or glazed, must be shatterproof and opaque so as to obstruct the view from the outside as well as for windows
Emergency exits	Internal / External	Any emergency	Prepare escape and alternative routes according to local regulations with anti-panic safety doors or in the presence of separating compartments with REI doors with a minimum seal of 60 minutes.
CCTV	External	Attack	CCTV closed circuit camera system connected via WiFI with separate power supply from the mains and the base not located on the ground floor. The basic requirements give the possibility of monitoring 24/24 even remotely, alarm sensors, infrared equipment for the night and the possibility of recording in the cloud.

Backup Generator	External	Any emergency	Keep the systems running even if the main power supply is cut off.
Anti-ramming barriers / gates	External	Vehicle attack	Mobile shatterproof barriers to prevent possible vehicle attacks. In the majority of cases, where this is not possible, it would be enough to close the access gate to the site with gates.
Lighting	External	Any emergency	Supplementary lighting powered by an alternative source to the primary one is a deterrent to many vandalism attacks
Training	Human resources	Any emergency	Supplementary lighting powered by an alternative source to the primary one is a deterrent to many vandalism attacks
Safety emergency procedures	Human resources	Any emergency	They are essential to make the community of the faithful and religious leaders aware of what to do in case of emergency and above to prepare them to carry out the previously developed procedures.
Security App	Human resources	Any emergency	A system to connect the believers with an App to communicate emergencies in connection with the Police

The religious communities cannot be easily categorized since they are neither governmental or private sector organisations. They have usually huge and outdated infrastructure and lack professional knowledge in the field of safety and security. This is clearly understandable as their interest lies in religion and not in safety and security.

What it has been stressed here is that **unfortunately religious communities have been, are and will be a target of violent and terrorist attacks and religious leaders, as well as the other local stakeholders, need to be aware of these threats to ensure that such communities can preserve their freedom and enjoy their religious and community life safely.**

06

IN THE AFTERMATH OF AN ATTACK

Protocols on crisis management

Despite all the prevention and safety measures presented in this handbook, **violent or terrorist acts may still occur**. For this reason, we thought it valuable to add a last chapter on the important role played by religious communities' leaders, local policymakers and LEAs representatives in the aftermath of an attack. These attacks, as any other traumatic events and irrespective of their source or scale, have the potential to **cause distress and they have the greatest impact on the affected local community**.

In the most severe cases, all the national authorities have **protocols or plans for crisis intervention** to activate immediately, with the aim to manage and coordinate the first responders, integrating national, regional and local governance structures.

Regardless of the severity of the attack suffered, **the consequences can be mitigated by effective political, religious and civil leadership with an intervention capacity aimed to strengthen community cohesion and social support to victims and survivors**. In fact, there is evidence in scientific literature indicating that the way in which people's psychosocial responses to disasters are managed may be a defining factor in the ability of communities to recover. So, activities - in the short, medium and long term - that normalise reactions, protect social and community resources and signpost access to additional services are fundamental to effective psychosocial responses.

See this non-binding guidance by NATO Joint Medical Committee, on Psychosocial Care for People Affected by Disasters and Major Incidents: a Model for Designing, Delivering and Managing Psychosocial Services for People Involved in Major Incidents, Conflict, Disasters and Terrorism.

https://www.coe.int/t/dg4/majorhazards/ressources/virtuallibrary/materials/Others/NATO_Guidance_Psychosocial_Care_for_People_Affected_by_Disasters_and_Major_Incidents.pdf

Supporting the victims and community resilience

Once emergency care has been provided to victims, survivors and family members of a person whose death was directly caused by a violent or terrorist offence, their **specific needs** must be assessed:

- Recognition and respect of their role as victims.
- Support: medical care, specialised psychological-trauma care, information, practical assistance, legal assistance, communication (media) support, peer support, etc.
- Protection: physical protection, protection from secondary victimisation.
- Access to justice: safe participation in the criminal justice process.
- Compensation and restoration: financial compensation and help with the financial impact of a violent or terrorist attack. Restoration includes overall recovery and restorative justice processes.

Individual victims' needs will depend on personal characteristics; age; (mental) health; social network; socio-economic situation; cross border situation; and daily stressors. These needs will evolve over time, therefore, responding to the needs of victims of terrorism requires an **individualised victim-centred approach**.

On 18 January 2021, the Commission published the EU Handbook on Victims of Terrorism produced by the EU Centre of Expertise for Victims of Terrorism. The EU Handbook aims to assist national authorities and victim support organisations in the practical implementation of the EU legislation, based on lessons learned from responses to previous terrorist attacks. It is available here:

https://commission.europa.eu/strategy-and-policy/policies/justice-and-fundamental-rights/criminal-justice/protecting-victims-rights/eu-centre-expertise-victims-terrorism_en

Furthermore, The National handbooks complement the EU Handbook on Victims of Terrorism (published in January 2021) and elaborate on the rights of victims of terrorism in each Member State. In particular, they include advanced or system-specific examples, with information and practical tools, in the domestic context of the Member States. They are available here:

https://commission.europa.eu/publications/eucvt-national-handbook-victims-terrorism_en

If violent or terrorist attacks always undermine social and cultural cohesion, this is even more true and profound when the target is a place of worship. We therefore recommend a **broader action of social accompaniment and social rehabilitation** aimed not only at the victims, but also at the local community as a whole.

These kinds of attacks, in fact, may often promote polarisation which divide communities and which can lead some to become radicalized. So, **an effective political, religious and civil leadership should take care of their communities' resilience**, as highlighted in the early prevention's practices and programs within chapter 3.

Furthermore, maintaining a strong and continuous interreligious dialogue, with periodic meetings between local religious communities, is ever more important to mitigate polarisation and radicalisation not only when a terrorist attack occurs locally impacting one of the communities, but also when the attack occurs far away causing a vast international echo, as in the case of the past and present wars in the Middle East.

07

SHIELD PARNERS

SYNYO GmbH

Web site: ***synyo.com***

Zanasi & Partners

Web site: ***zanasi-alessandro.eu***

Fundacja Obserwatorium Spoleczne

Web site: ***obserwatoriumspoleczne.pl***

FUNDEA

Web site: ***fundea.org***

Institutul Intercultural Timisoara

Web site: ***intercultural.ro***

TECOMS

Web site: ***tecoms.it***

Spin System

Web site: ***spinsystem.eu***

HochschuleFürDenÖffentlichen Dienst in Bayern

Web site: ***fhvr.bayern.de***

Município do Barreiro

Web site: ***cm-barreiro.pt***

Europe Islamic Association

Web site: ***euroislam.eu***

Institute for the Study of Global Antisemitism and Policy - Europe

European Organisation for Security

Web site: ***eos-eu.com***

Polskie Towarzystwo Oceny Technologii

Web site: ***ptot.pl***

Itapol Vigilanza

Web site: ***italpolvigilanza.it***

Centro Internazionale di Ricerca Sistemica

Web site: ***ricercasistemica.org***

Fondazione Amici della Cattedrale di Novara

Web site: ***novaria.org***

Glavna Direktsia Natsionalna Politsia

Web site: ***gdnp.mvr.bg***

Orszagos Rabbikepzo Zsido Egyetem

Web site: ***or-zse.hu***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