

Edition 5, October 2020

Welcome to the latest newsletter of EXERTER, an EU Funded H2020 project. EXERTER commenced in May 2018 and is a five year project which seeks to connect practitioners into a pan-European network of explosives specialists.

Message from the Project Coordinator

I hope this Newsletter finds you all well. As we all know this has been a very unusual year, which of course has affected all of us both personally and professionally. For EXERTER, Covid-19 has meant that a number of activities have been changed. The Annual Conference this year being replaced by a virtual conference on the 5th November, and by information sharing and discussions using our other channels. The Stakeholder workshop to discuss requirements has this year been replaced by smaller national discussions during October/November, to the extent possible in each country. This way we have the possibility to discuss directly with you as practitioners in a smaller environment, and we are hoping for many stimulating discussions. We are also hoping to have smaller, when possible, online discussions with manufacturers, to discuss the needs, issues and ideas and bring them forward in the network.

I hope we can all meet again next year, but until then let's make the most use of our close networks and all of the online opportunities, watch out for the EXERTER Webinars.

EXERTER Hosts its first Webinar

The very first EXERTER webinar was held in April 2020, hosting a presentation from the network project MEDEA – Mediterranean & Black sea Security Practitioners' Network.

MEDEA is an EU funded Coordination and Support Action project the scope of which is to establish and further develop a regional Network of practitioners and other security related actors in the Mediterranean and Black Sea region. MEDEA groups the practitioners in four thematic communities.



TCP1

Managing of migration flows and
asylum seekers



TCP2

Border management and
surveillance



TCP3

Fight against cross-border crime and
terrorism



TCP4

Manage natural hazards and
technological accidents

For more information on MEDEA, please visit their website, <https://www.medea-project.eu>



For more information visit:
www.exterter-h2020.eu

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EXTERTER Hosts citizenAID Webinar

In June 2020 the EXTERTER Project hosted their second Webinar hosting citizenAID. CitizenAID is a UK registered charity with a focused mission to prepare individuals, communities and organisations to help themselves and each other when there are multiple casualties, particularly from deliberate attacks. It is recognised that the citizenAID system is fully transferable to any situation where there are multiple casualties.

Why do we need citizenAID?

Many know what to do when someone collapses with a heart attack. But being able to act effectively after a deliberate attack requires different knowledge and skills. citizenAID provides this information.

In the minutes following an attack, before emergency services arrive, simple actions like opening an airway or stopping bleeding are vital in saving people's lives. citizenAID empowers YOU to do this. citizenAID helps the general public to stay safe and improvise effective treatment before emergency services are available to provide professional medical support. citizenAID enables the public to save lives.

How can citizenAID help you?

citizenAID is a simple system comprising of an award winning free App, online familiarisation videos, a Pocket Guide, and educational material for both adults and children. citizenAID has a network of volunteers across the UK who share the charity's teaching material.

If you wish to find out more or join their community please sign up on the website, www.citizenaid.org/

Tourni-Key
Turn off limb bleeding with Tourni-Key + triangular bandage or clothing
Twist until bleeding stops – **QUICK LOCK**
WRAP cloth around limb & tie it over anti-pinch cord
Complete knot to TIE in Tourni-Key
TWIST until the bleeding stops
HOOK the Tourni-Key to lock
WRAP cloth around limb & tie it over anti-pinch cord
Complete knot to TIE in Tourni-Key
TWIST until bleeding stops
Pass inside under the cloth
HOOK back the Tourni-Key to lock
WRAP cloth around limb & tie it over anti-pinch cord
Complete knot to TIE in Tourni-Key
TWIST until bleeding stops
WRONG position to hook? Flip the Tourni-Key 180°
Key to flip
Rust to twist and tighten the material
Hook to lock off Tourni-Key
Slide

citizenAID®

POCKET GUIDE
PUBLIC IMMEDIATE ACTIONS
IN A DELIBERATE ATTACK

Knife Attacker
Active Shooter
Vehicle Attack
Explosion
Acid Burns
Unattended Item
Suspicious Item
Treatment

YOU can save lives

T. Hodgetts A. Thurgood K. Porter P. Mahoney

YOU can save lives

New Yearly EXERTER scenario: Suicide Bomb Attack

For the coming year, EXERTER will consider a new IED attack scenario, which will focus on suicide bomb attacks, and will be used to guide our discussions in the network and within the project. This means that discussions around requirements, opportunities, ideas, technical possibilities, etc., will connect to the specific challenges connected to that scenario. The scenario is intentionally very open, to allow for discussions on emerging threats and new ideas.

To commence with the research and discussion, EXERTER has developed the following outline for an attack scenario:

- Suicide bomber reaches a crowded square in a major European city,
- Travels to target site using public transport and walking/biking, during a working day at rush hour.
- Without any previous warning, the suicide bomber detonates the explosives resulting in around 10 individuals being killed and several more badly injured.
- Post-blast forensic investigations identifies the explosives and ignition mechanism, as well as the design of the vest.
- The location where the HME was prepared and the vest assembled was later identified.
- Searches uncover information from various sources regarding purchases, financing and inspiration.



Creator: Jacques Brinon | Credit: AP

EXERTER seeks stakeholder input through discussions

The EXERTER Stakeholder workshop is normally a meeting point in November for all those who wish to attend and share knowledge and ideas regarding requirements, needs and gaps. This year, due to the circumstances with regard to COVID-19, it is being replaced by national, small discussions held by the EXERTER partner in each country. EXERTER will then continue to discuss solutions, research, differences etc. related to the input, and present the outcome of this work and discussions in 2021.

The stakeholder discussions will be held in a suitable format according to what the situation in each country allows, and therefore it might be difficult for some to attend due to current restrictions. If you would like to contribute you can contact Ola Norberg - ola.norberg@foi.se (Work Package Lead) to receive the discussion items and contribute with your input to as many or few items as you like.

Evolution of threats and attack strategies

Dr I. Daniilidis, Center for Security Studies – KEMEA

For the purposes of the EXERTER Work Package Number 9, the “Center for Security Studies” (KEMEA – GR) compiled an internal report under the title “Evolution of threats and attack strategies”. The study comprises a comprehensive summary of the key global trends and patterns in terrorism, endeavouring to delineate current and emerging terrorist threats and relevant attack strategies, with emphasis put on explosives.

Review of Terrorist Threats

Definition and Typologies of Terrorism

At EU level, the definition of the term terrorist offences is specified in the Directive 2017/541 of the European Parliament and of the Council of 15 March 2017 on combating terrorism , that all EU Member States have transposed in their respective national legislations.

According to David Rapoport, since the end of the 19th century there have been four “terrorist waves”, which he describes as “Anarchist”, “Anti-colonial”, “New Left”, and “Religious”. These waves could be seen as a cycle of activities in a set time period characterised by expansion and contraction phases, whilst, “when a wave’s energy cannot inspire new organizations, the wave disappears” (Rapoport, 2002).

On the other hand, focusing on the basis of their source of motivation and ideological background, Europol (2019) categorises terrorist organisations, as jihadist, right-wing, left-wing/anarchist, ethno-nationalism/separatism and single-issue.

Key Developments in Modern Terrorism

Being adopted during the period of the terrorist attacks of 11 September 2001 and at the heyday of al-Qaeda terrorist organisation, new terrorism bears a number of partially distinct characteristics:

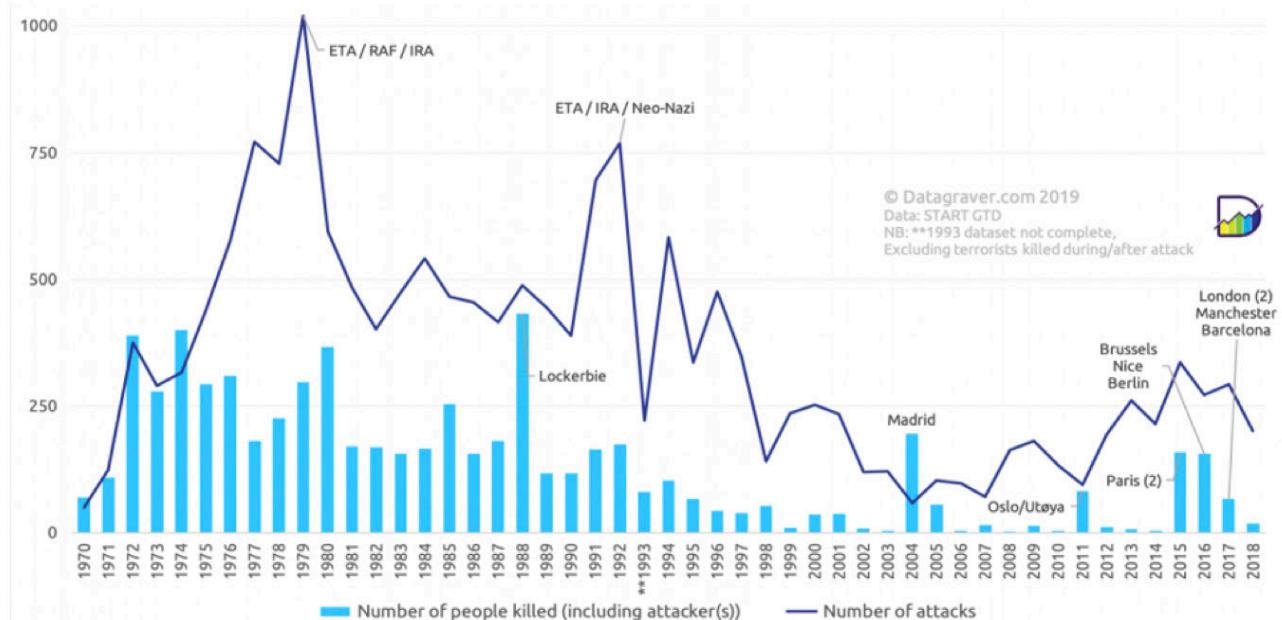
	New Terrorism	Old Terrorism
Aims	Religiously-inspired, absence of ideological rigour	Predefined set of political, social and/or economic objectives
Methods	Mass civilian attacks; excessive violence	“Legitimate” targets; rules of engagement
Targets	Civilians, infrastructure, officials; soft and -less frequently- hard targets	Symbolic targets (e.g. embassies, banks) or persons representing authoritarianism; hard targets
Structure	Global network and agenda	Hierarchical structure

Focusing on the last five decades of terrorist activities, fatalities in terrorist attacks in Europe have declined since the end of the Cold War, when Europeans suffered terrorist attacks

¹ It replaced the Council Framework Decision 2002/475/JHA and amended the Council Decision 2005/671/JHA.

by ethno-nationalist groups (i.e. IRA and ETA) and by left-wing groups (i.e. the Red Brigades and the Greek Revolutionary Organization 17 November). The attacks of September 11, 2001 signalled the shift toward religiously-inspired terrorism and jihadism.

Figure 1: Terrorism in Europe (1970-2018)



Source: START GTD, 2018

Since the Syrian conflict began in 2011, thousands of EU nationals have travelled or attempted to travel in conflict zones in Iraq and Syria to join insurgent terrorist groups, such as ISIS/Daesh. This influx of the so-called “Foreign Terrorist Fighters” (FTFs) to Syria and Iraq seems to had reached, in 2018, a number of more than 40,000 individuals originating from around 110 countries, of which it has been estimated that around 30% have already returned to their place of origin (European Parliament, 2018).

In the case of the EU Member States, the threat raised by the FTFs phenomenon held four distinct dimensions (Van Ginkel & Entenmann, 2016):

- The first concerns those who have already travelled from Europe to the war zones, seeking to become foreign fighters.
- The second includes the security challenges posed to European countries, following the return of FTFs, taking into account that they have received military training in the Middle East.
- The third dimension is the impact of the phenomenon and the subsequently generated extremist action on EU social cohesion.
- Finally, another risk category is composed of these “would-be FTFs” that, after being detected, have been banned from travelling towards conflict areas.

Currently, the issue of the FTFs remains high on the political agenda at both Member State and EU level inasmuch as it touches upon a broad spectrum of policies, related to the prevention of radicalisation, information exchange at EU level, criminal justice responses to returnees, as well as disengagement/deradicalisation inside and outside prisons (European Parliament, 2018).

Review of Terrorist Attack Strategies

A key element in the structural transformation of modern terrorism is the emergence of a variety of operational actors. Amongst them, the salient role of the “lone wolves” can be identified, along with their implemented strategy – the so-called “leaderless resistance”.

In many instances, an overall decision-making model for terrorist action is centred on the theory of “rational choice”, which seems to partially interpret the behavioural patterns of terrorist organisations, especially when lone actors are deployed.

Another important parameter for modern terrorist organisations is their involvement in the digital world, especially through the use of the Internet. Indeed, since the early period of al-Qaeda, its online presence was seen as a significant mechanism for the transition to an era of terrorism, characterised by the active role of digital extremist communities with a high degree of resilience.

An indicative review of the terrorist incidents, following the 9/11 attacks in the USA, reveal the trend of the attack strategies where the use of IEDs is the main operation tool. Such examples are:

- Madrid (2004): 10 IEDs (+3 IEDs that failed) with 193 fatalities (2050 injured)
- London (2005): 4 IEDs with 56 fatalities (784 injured)
- Oslo (2011): 1 IED and shooting with 77 fatalities (269 injured)
- Boston (2013): 2 IEDs with 263 fatalities (3 injured)
- Brussels (2016): 4 IEDs with 35 fatalities (340 injured)
- Manchester (2017): 1 IED with 23 fatalities (120 injured)



Indeed, in the vast majority of terrorist attacks in the EU, such as in Paris in 2015, Brussels in 2016 as well as Manchester and Parsons Green in 2017, home-made explosives have been extensively used.

The chemicals to produce them, known as explosives precursors, can be found in a number of products, like detergents, fertilisers, lubricants and water-treatment chemicals with the EU strengthening rules regulating the purchase of these substances (European Parliament, 2018).

The explosives used in the Paris and Brussels attacks were TATP (Triacetone Triperoxide), a home-made explosive which is for years the explosive of choice for terrorists. TATP can be made from commonly available ingredients, it is difficult to detect, while instructions on how to produce it can be found online.

Emerging Threats and Attack Strategies in Terrorism

In Europe, the unlawful use of explosives is highly related not only to groups or lone actors linked to jihadist terrorism, but also to many organisations and individuals with radical right-wing and left-wing ideologies. Home-made explosives were broadly used in the most known explosive-related attacks linked to terrorism, irrespective of the ideological background.

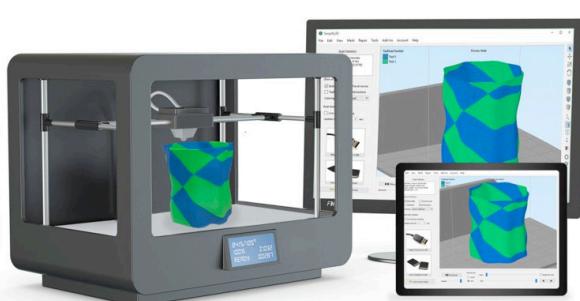
In particular, a number of current and emerging trends, with regard to the use of explosives for terrorist purposes, are as follows (Europol, 2019):

- A shift is noted from the previously predominant use of TATP to a broader range of home-made explosives (HME), such as black powder, chlorate mixtures and fertilisers-based mixtures.
- Since procurement of precursors for the production of TATP has become increasingly difficult, due to control measures, there are attempts to use alternative explosive precursors for its manufacture.
- An increased use of pyrotechnic mixtures (mainly fireworks) is observed, which are obtained legally or, more often, illegally.
- Attempts to use IEDs in combination with chemical or biological toxins were identified in 2018, something that was also promoted in jihadist propaganda and IED-making manuals.
- Knowledge transfer, in terms of HME and IED production, is enhanced through the use of online, and often encrypted, social networks and forums, while there is an increasing trend of receiving bomb-making knowledge from readily available online open sources.



Finally, technological advances seem to raise important concerns among experts, while their application could critically influence terrorist activities and the use of explosives:

- Artificial Intelligence can transform the security landscape by becoming a tool for conducting cyber-attacks, target selection, production and spreading of false information (fake news, deep fakes, etc.), as well as for handling AI drones and self-driving vehicles.
- Quantum computing, namely computing power with the ability to break current encryption standards.
- Darknet and cryptocurrencies that comprise key facilitators for trade in illicit goods, with decentralised Darknet markets enabling vendors and customers to carry out transactions with high degree of anonymity.
- The criminal abuses of 3D printing technology can obtain an even more complex nature with the development of programmable matter (PM) technology and its use in 4D printing.



Networking & Events

EXERTER Events

EXERTER Virtual Conference - 5th November 2020

The 2020 EXERTER Annual Workshop has been cancelled due to current COVID-19 pandemic. It has been agreed to hold a virtual conference. EXERTER will present part of the outcomes from the work around the Explosives in Public transportation scenario. Details for joining the conference will follow.

EXERTER Webinar on Interpol's experiences from the field - 2 December, 14:00-16:00 CET (preliminary)

EXERTER Stakeholder requirements national discussions - Dates to be confirmed

EXERTER Partners will host national discussion events in lieu of the annual conference, and will take place during October/ November 2020. Further information can be found on page 3.

Other Related Events

International Security Expo (ISE) 2020

The event will take place as a virtual conference this year, 30th November -3rd December 2020. Details on how to connect can be found on, <https://www.internationalsecurityexpo.com/>

ISADE 2021 - 24-30 April 2021

The 13th International Symposium on the Analysis and Detection of Explosives is held in conjunction with the Scientific Workshops annual Trace Explosives Detection Workshop. It is held 24-30 April 2021 in Charlotte, North Carolina. www.isade2021.org

4th International Conference CBRNE – Research & Innovation

The conference takes place in Lille, France, 17-20 May, 2021
<https://cbrneconference.fr/>

If your project or organisation wish to promote a future conference, workshop or meeting please contact the EXERTER Project to have it included in future newsletters or the project website.

EXERTER End User and Expert Community

EXERTER End user and Expert Community (EEC) is important to the network, in order to give valuable input to scenarios, requirements, evaluations and upcoming threats.

It consists of practitioners, academia, research institutes, industry and policy makers. If you are interested in becoming a member of the EEC, or are aware of some- one who would benefit in participating in EXERTER, please contact the Project Coordinator. Alternatively if you only wish to receive regular information and updates on the project you can get this through visiting the website and the project news- letter. Please contact the Project Coordinator to be added to the project mailing list.



For more information visit:
www.exerter-h2020.eu



Facts & Figures

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01/06/2019 – 31/05/2023

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€ 3 498 868.75

Contact

If you wish to find out more, are interested in our End user and Expert community or wish to receive the EXERTER Newsletter with updates of the project, please contact us:

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Security of Explosives pan-European Specialists Network

Partners



Keeping People Safe

