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Countering Lone-Actor Terrorism Series No. 6

Lone-Actor Terrorism

Policy Paper 2: Attack Methodology and Logistics

Simon Palombi and Benoît Gomis



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Fight against Crime Programme of
the European Union

About this Paper

This paper is the sixth publication in the Countering Lone-Actor Terrorism (CLAT) project, which aims to improve understanding of, and responses to, the phenomenon of (potentially) violent lone actors through analysis of comprehensive data on cases from across Europe. The eighteen-month project is co-funded by the Prevention of and Fight against Crime Programme of the European Union, and has been undertaken by a RUSI-led consortium. Partnering institutions include Chatham House, the Institute for Strategic Dialogue (ISD) and Leiden University, one of the founding organisations of the International Centre for Counter-Terrorism (ICCT) at The Hague.

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LONE-ACTOR TERRORISM IS rising in Europe. Given that current global events, such as civil wars in Syria, Libya and Yemen, and the spread and effectiveness of Islamic State of Iraq and Syria (ISIS) propaganda, all represent potential sources of inspiration for lone-actor terrorist plots, policy-makers in Europe must be adequately equipped to respond. Crucially, the response should be commensurate with the threat posed; however, the threat has hitherto tended to be framed using hypotheses rather than empirical analysis relevant to Europe.

The perceived freedom that lone-actor terrorists have in designing and implementing their plots without interacting with individuals or groups that might alert police and security services to their activities is a commonly cited concern. However, as the Countering Lone-Actor Terrorism (CLAT) Analysis Paper shows,¹ other fundamental factors should be considered in terms of attack methodology and logistics. In particular, the diversity in casualty rates, preferences for certain types of weapons that are relatively available in Europe, the ethnographic nature of lone-actor terrorist targeting and the range of actors' competencies have all highlighted in the Analysis Paper.

The need to identify these other trends led to the formation of the Countering Lone-Actor Terrorism (CLAT) consortium. Following an extensive data-collection phase with the Royal United Services Institute, the Institute for Strategic Dialogue, and Leiden University, Chatham House was allocated nine variables from the completed dataset to analyse in order to help develop a more nuanced understanding of the lone-actor terrorism threat in Europe. These variables are:

- Injuries
- Fatalities
- Target type
- Target details
- Weapon type
- Weapon details
- Legal gun possession
- Reported military experience
- Indication of a safe space

This paper expands upon those findings and suggests policy recommendations based on that analysis.

Measuring the Effectiveness of Lone-Actor Terrorist Attacks

According to the dataset, lone-actor terrorist attacks killed 195 people and injured 282 more in 30 European countries (European Union member states, Norway, and Switzerland) between 1 January 2000 and 31 December 2014. Of the 72 attacks, 24 (33.3 per cent) were lethal. On average, for one plot, 1.99 people were killed and 4.58 were injured. These results are in part skewed by the attack carried out by Anders Breivik, who killed 77 people in Oslo and on the

1. Ellis, C. et al., 2016. 'Lone-Actor Terrorism: Analysis Paper', Royal United Services Institute, pp. 11–17.

island of Utøya on 22 July 2011. If Breivik is excluded, the averages drop to 1.22 killed and 2.13 people injured per plot.

From a statistical perspective, it can be argued that *successful* lone-actor terrorists demonstrate a notable capacity to inflict harm, even though they lack the support structure and technical know-how provided by terrorist organizations. However, merely using the number of deaths and injuries from all attacks obscures the precise threat emanating from lone-actor terrorist plots, especially when ‘effective outliers’ such as Anders Breivik are taken into account.²

Indeed, only one in three lone-actor terrorist attacks and one in four lone-actor terrorist plots were fatal, according to the data. While it may be easier to group lone-actor terrorists together as a single lethal concern, doing so does not illuminate the problem accurately in terms of the actual threat posed by lone-actor terrorist plots. By grouping all lone-actor terrorist attacks under the banner of deaths and injuries, the effective outliers are absorbed into a generalized cohort, which obscures the overall ineffectiveness of the lone-actor terrorist plots in the dataset.

Breivik’s plot was a highly successful black-swan event; it was not anticipated, and the odds against it succeeding were very high. Breivik engaged in a number of activities that risked exposing his intentions: notably, he travelled to Prague and made an unsuccessful attempt to obtain firearms and grenades from Balkan organized-crime groups there; he stockpiled ammonia nitrate for his explosive device; and he released his manifesto prior to the attack.³ One should not, however, conclude from this that all lone-actor terrorists therefore pose the same threat. Ultimately, Breivik had idiosyncrasies such as organization, discipline and patience that he used to his advantage. This cannot be said for all lone-actor terrorists in the CLAT dataset.

Other effective outlier attacks in the dataset resulted in much smaller numbers of fatalities and injuries, from simpler plots. For example, one of the deadlier attacks was carried out in France. The perpetrator killed a soldier in Toulouse, two soldiers in Montauban, and four other people – including three children – outside a Jewish school in Toulouse, as well as injuring six others, over the course of 11 days in 2012. Another perpetrator killed 10 people and injured one before committing suicide. While these cases form, behind Breivik, the second tier of casualties collected in the dataset, they represent a statistical minority.

A significant number of cases demonstrate low competency. In one example, a perpetrator killed only himself after one of six pipe bombs he was carrying detonated on a busy Stockholm street. Similarly, another perpetrator lost the use of a hand, a forearm and an eye following a failed bombing attempt against the Santa Barbara Carabinieri barracks in Milan. In this case, only 1 kilogram of the 5-kilogram ammonium nitrate bomb detonated, due to improper preparation. Such pertinent failures are repeated across the dataset.

2. Also see Stewart, S., 2011. ‘Cutting Through the Lone-Wolf Hype’, *Stratfor Security Weekly*, <<https://www.stratfor.com/weekly/20110921-cutting-through-lone-wolf-hype>>.

3. For more see Stewart, S., 2011. ‘Norway: Lessons from a Successful Lone-Wolf Attacker’, *Stratfor Security Weekly*, <<https://www.stratfor.com/weekly/20110727-norway-lessons-successful-lone-wolf-attacker>>.

It is certainly useful for policy-makers to highlight that lone-actor terrorists can be *competent* and deadly, but it is also important to acknowledge that they are often *grossly incompetent*. From a harm minimization standpoint, lone-actor terrorist plots vary greatly in the numbers of deaths and injuries caused, offering no real trends on which to base a firm policy recommendation, beyond a plea to keep future lone-actor terrorist attacks in perspective.

Recommendation: Policy-makers should weigh casualty numbers against the number of ineffective plots, so as to be able to view the potential and actual harm caused by lone-actor terrorists in the correct context. The data suggest that the current threat does not require further strengthening of the laws already in place or of the powers of security services, as the likelihood of an effective lone-actor terrorist attack remains low. This being said, the destructive power of lone-actor terrorist attacks ranges significantly. This should result in different degrees of policy focus across European countries, based on the impact of lone-actor terrorism to date, and the current level of the threat. Policy-makers must also take greater care to educate the public on the nature of the lone-actor terrorism threat in this context, in order to mitigate uncertainty and fear, and encourage societal resilience.

Trends and Factors in Target Choice

The CLAT dataset shows civilians as the preferred targets of lone-actor terrorists. Accounting for 35 per cent of the plots, the most frequent civilian targets were ethnic groups, particularly Asian, black, white, Roma, Jewish and Israeli communities, as well as immigrants and asylum-seekers. Some 14 attacks were launched against religious targets, with 11 of those (or 79 per cent) being Muslim (e.g. mosques, community centres). Government targets accounted for only 17 per cent of attacks, while nine per cent had multiple targets. In 11 plots no specific category of target was selected or the target was unknown.

For policy-makers, this finding re-emphasizes a long-established challenge: countering radicalization is difficult in a world where information and opinions are amplified through mainstream, social and other media. Irresponsible reporting or characterizations of societal affairs through improper rhetoric may provide inspiration for lone-actor terrorism, in addition to the traditional ideological drivers. For example, the recent cartoon in the *Daily Mail* comparing refugees seeking asylum in Europe to rats,⁴ or US presidential candidate Donald Trump's call to ban Muslims seeking to settle in the United States in response to the November 2015 terrorist attack in Paris, can both be considered testaments to avoidable divisive statements.

However, it is not possible to conclude definitively whether the lone-actor terrorists in the CLAT dataset chose their targets because the latter were specifically suited to their motivations, or due to insufficient capacity to attack more sophisticated government targets, or simply on

4. Mackey, R., 2015. 'Anger Over Daily Mail Cartoon Equating Refugees to Rats', *New York Times*, 17 November (Online), <<http://www.nytimes.com/live/paris-attacks-live-updates/anger-over-daily-mail-cartoon-equating-refugees-to-rats/>>.

the grounds of relative vulnerability.⁵ It can be deduced through analysis and consideration of other literature, but not conclusively from the data themselves. Indeed, both ISIS and Al-Qaeda have encouraged readers of their propaganda to conduct lone-actor terrorist plots for the simple reasons that they cause casualties and cannot be easily detected, so it is probable that a combination of these factors weigh into lone-actor terrorism targeting.

Physical security measures should not be an automatic response. Soft civilian targets are ubiquitous, and the hardening of many of them is simply impossible or would open the doors to further unnecessary securitization, with unintended consequences for society at large. Additionally, the ethnographic nature of the targeting adds another layer of complexity that for obvious reasons would make building physical protective barriers for certain ethnic groups unthinkable.

Recommendation: Policy-makers are advised to focus on the modus operandi of lone-actor terrorists and thereby attempt to prevent and mitigate plots, and to focus on building national capacity to respond effectively to crises (including from public health, communication and investigatory standpoints), rather than simply adding further physical protection. They are also advised to consider the presence of ethnographic factors in targeting, and to consider the future potential for lone-actor terrorism. Measured and tolerant discourse, in particular with regard to Muslims and other ethnic and religious minorities, is crucial in the aftermath of terrorist attacks, in order to mitigate the risk of copycat and revenge attacks.

Weapons: The Key Question of Access to Firearms

The CLAT dataset shows an overwhelming correlation between lone-actor terrorists who use firearms and resultant casualties. Overall, almost 90 per cent of fatalities in the dataset were caused by lone-actor terrorists carrying firearms, yet this subset only represented one-third of all attacks. This statistically significant figure dwarfs the impact of other weapons: for example, explosives only account for four per cent of fatalities. Importantly, explosives were still a favoured weapon (used in 31.6 per cent of all plots), but, as shown above, firearms demand the immediate attention of policy-makers seeking to protect against lone-actor terrorist attacks, given their lethality.⁶

Firearms circulation is an ongoing issue for the European Union (EU). The fact that one perpetrator was able to acquire an arsenal of at least three Colt .45 pistols, a 9mm Sten submachine gun, a Kalashnikov assault rifle, a pump-action shotgun, an Uzi machine pistol and a Colt Python .357 proves that a competent and/or motivated lone-actor terrorist can, and will, acquire military-grade firearms. Indeed, in an analysis for *IHS Jane's Intelligence Review*, Benoît Gomis notes that:

5. Previous studies had similar findings, including: Asal, V., Deloughery, K. and King, R. D., 2013. 'Understanding Lone Actor Terrorism: A Comparative Analysis with Violent Hate Crimes and Group-Based Terrorism', Final Report to the Resilient Systems Division, Science and Technology Directorate, US Department of Homeland Security, National Consortium for the Study of Terrorism and Responses to Terrorism, p. 10.

6. For more see Ellis et al., 'Lone-Actor Terrorism: Analysis Paper'.

most of the weapons illicitly traded in Europe originate from the Western Balkans and the former Soviet Union... previous conflicts in those regions have created substantial weapons stockpiles, a large number of which have been made available to external customers from the European continent and elsewhere.⁷

A communication from the European Commission to the European Council and European Parliament in October 2013 warned that ‘almost half a million firearms lost or stolen in the EU remain unaccounted for, the overwhelming majority of which ... are civilian firearms’.⁸

As a point of distinction, explosives generally require a significant level of technical knowledge and therefore, often, external support, to be successfully assembled and thus become effective, whereas a firearm can be used highly effectively without much training. For example, in the dataset, only 17 per cent of lone-actor terrorists used explosives as the sole weapon in successful attacks, and none of these resulted in fatalities. The lone-actor terrorists who attacked with a combination of firearms and explosives constituted 21 per cent of the total cohort, but only one such attack’s explosive device resulted in fatalities (eight, in the Breivik case). Fundamentally, the deadliness of Breivik’s attack was largely a result of his legally owned semi-automatic firearms.

A reduction in the number of firearms circulating in Europe will have a significant impact on the lethality of lone-actor terrorist attacks. Indeed, even when excluding the CLAT data, it is well documented that lone-actor terrorists gravitate towards firearms. A 2015 study by the Georgetown National Security Critical Issue Task Force, which focused on US lone-actor terrorists between 2001 and 2010, suggests that 80 per cent used firearms,⁹ while Ramón Spaaij suggests that the lone-actor terrorists he surveyed demonstrated a preference for firearms over bombings.¹⁰

Contextually, the lone-actor terrorism threat is low but the overall effectiveness of attacks remains high when mixed with access to firearms. In France, 54.5 per cent (six out of 11) attacks were carried out with firearms. Four of these attacks caused 19 fatalities and injured 32 people, accounting, respectively, for 95 per cent of all lone-actor terrorist attack fatalities and 53 per cent of all injured in such attacks. In Germany, all five lone-actor terrorist attacks were carried out with firearms. This being said, 54 per cent of the firearms in the CLAT dataset were illegally owned, and only 38 per cent¹¹ legal, which suggests that imposing more rigorous checks and

7. Gomis, B., 2015. ‘Stopping the Flow: Terrorism highlights arms trafficking in Europe’, *Jane’s Intelligence Review*, pp. 38–43, p. 41.

8. European Commission. ‘Firearms and the internal security of the EU: protecting citizens and disrupting illegal trafficking’. Communication from the Commission to the Council and the European Parliament, 21 October 2013, <http://ec.europa.eu/dgs/home-affairs/what-we-do/policies/organized-crime-and-human-trafficking/trafficking-in-firearms/docs/1_en_act_part1_v12.pdf>.

9. Connor, J. and Flynn, C. R., 2015. ‘Report: Lone Wolf Terrorism’, Security Studies Program, National Security Critical Issue Task Force, Georgetown University, p. 10.

10. Spaaij, R., 2012. ‘Understanding Lone Wolf Terrorism: Global Patterns, Motivations and Prevention’. London: Springer.

11. In the remaining eight per cent of the dataset cases, it was unclear whether the firearms had been purchased and used legally.

restrictions on weapons available for sale would not necessarily stop a lone-actor terrorist from acquiring and using firearms.

The current academic focus on understanding lone-actor terrorism must be met with concurrent efforts to deny access to means of implementation, especially firearms. This is the tried and tested approach of operational counter-terrorism, and it is an imperative that the emphasis placed on explosives prevention is applied to firearms availability. In November 2015 the EU vowed to toughen control of firearms, including through amendments to the EU Firearms Directive, which called for:¹²

- Stricter rules to ban certain semi-automatic firearms, so that they will not, under any circumstance—even if permanently deactivated—be allowed to be held by private persons;
- Tighter rules on the online acquisition of firearms, key parts or ammunition;
- EU common rules on the marking of firearms to improve the traceability of weapons;
- Better exchange of information between member states – for example, concerning any refusal by another national authority to authorize ownership of a firearm – and the obligatory interconnection of national registers of weapons;
- Common criteria concerning alarm weapons (e.g. distress flares and starter pistols) in order to prevent their transformation into fully functioning firearms; and
- Stricter conditions on the circulation of deactivated firearms, and for collectors, to limit the risk of sale to criminals.

In addition to these useful recommendations, further measures could help improve the current situation with regard to firearms trafficking. EUROPOL's role as a focal point for joint investigations could be strengthened to encourage effective transnational police and judicial cooperation, and increase the quality of data collection when weapons are seized. Peer-to-peer training and exchanges of best practices across Europe would help build trust between EU member states, and spread useful lessons for relevant law enforcement authorities. Ultimately, European policy-makers would do well to tackle the known *sources* of the illicit firearms trade, including in the Balkans and Transnistria, while monitoring flows from Ukraine as well as activity in central *hubs* such as Brussels.

Recommendation: The EU and its member states should strengthen their commitment to restricting access to certain firearms and to eradicating illicit arms networks. It is important that European policy-makers take advantage of the fact that there are fewer political obstacles to European members enacting stricter gun control laws than in certain other jurisdictions, such as the United States. That being said, local EU law enforcement agencies require skills standardization, to ensure that any legal and institutional barriers that are set up against

12. European Commission, 2015. Press Release: 'European Commission strengthens control of firearms across the EU', <http://europa.eu/rapid/press-release_IP-15-6110_en.htm>; also see Directive 2008/51/EC of the European Parliament and of the Council of 21 May 2008, amending Council Directive 91/477/EEC on control of the acquisition and possession of weapons, <<http://eur-lex.europa.eu/legal-content/en/ALL/?uri=CELEX:32008L0051>>.

illicit arms flows can be met with operational competence. EUROPOL can play a positive role in that regard.

Military Training – Not a Decisive Factor?

Overall, there was little representation of military experience in the dataset, with only 22 lone-actor terrorists having had some form of training. Of these, 13 had undergone legitimate national military service, four had received illegal training, three had undertaken legal private training, and two were confirmed as trained but with no further detail given.

The CLAT literature review highlighted findings from previous research that the level of military experience among lone-actor terrorists is higher than might be expected within the general population.¹³ It was hypothesized that individuals with military training or combat experience may be more 'effective' in conducting their attack, causing greater numbers of fatalities, a theory supported by studies of terrorism more broadly.¹⁴ Within the CLAT database, 19 per cent of perpetrators had some form of militarily training or experience, and accounted for 29 per cent of all fatalities. These findings therefore support the hypothesis that such experience may increase the lethality of lone-actor terrorists.

However, without further research on the role of military training, it may also be said that such training merely represents an additional factor to be considered in addition to other capabilities and environmental factors, rather than a stand-alone indicator of the threat posed by a lone-actor terrorist. While the data suggest that military training may enable a more deadly lone-actor terrorist attack, this may also simply be the result of other factors, such as the perpetrator's competency, as discussed above; Breivik killed 77 with no prior military training. While policy-makers and analysts are naturally inclined to assume that training will raise the efficacy of lone-actor terrorist attacks, the CLAT dataset is not significant enough to warrant such a conclusion.

Recommendation: Our dataset suggests that policy-makers should, for now, resist representing military training as a determinative factor in the lone-actor terrorist threat. From the CLAT data it can neither be concluded nor ruled out completely that military training provides any particular advantage to lone-actor terrorists. This, of course, does not necessarily apply to affiliated terrorists, who often receive training and support from their organizations. With regard to lone-actor terrorism, policy-makers should tackle the important issue of returning foreign fighters. Policy-makers should consider regulating access to courses that specialize in weapons training and other skills that could assist a lone-actor terrorist in preparing an attack. However, other areas of focus, particularly firearms, deserve more attention.

13. Pantucci, R., Ellis, C. and Chaplais, L., 2015. 'Lone-Actor Terrorism: Literature Review', Royal United Services Institute, p. 8.

14. *Ibid.*

Safe Spaces¹⁵

Of the 34 lone-actor terrorists to have had safe spaces, 13 were confirmed to have lived in a cohabitation environment, while nine were confirmed to have lived alone. The living arrangements of the remainder were not verified. For the individuals confirmed to have been in a cohabitation situation, the data revealed this to be either in the family home or with housemates. In these cases, either the lone-actor terrorist was afforded sufficient privacy due to the indifference or ignorance of the cohabitants, or had forced privacy by way of having a locked bedroom or room that the cohabitants did not challenge.

Some 16 of the 34 plots using a safe space involved explosives only, and in a further 12 there was a multiple weapon configuration that included explosives. No safe space was used in any plot involving firearms alone. This suggests that, more often than not, these safe spaces were used to build explosives. This may have implications for programmes focusing on raising awareness of the use of safe spaces for terrorist plots.

Interestingly, the analysis showed that only 15 of the lone-actor terrorists were described as socially isolated, whilst 19 were not. This almost even split made it difficult to link a person's socialization with the opportunity, desire or decision to use a safe space. On this basis, it was suggested that the creation or use of a safe space should be seen as either a tactical or opportunistic consideration during planning. Further supporting this conclusion is the fact that only five lone-actor terrorists (in four plots) were found to have created a safe space in a manner that suggests a premeditated attempt to conceal their activities thoroughly. These cases were:

1. A perpetrator's house was raided and a stash of weapons and explosives was found inside. He had refused his family access to the house. He is not believed to have carried out any attacks.
2. A dyad from the United Kingdom rented a flat as part of preparations for the attack.
3. A perpetrator in Poland used a garage as a secret place to store materials for the attack.
4. **Anders Breivik (Norway)**. Responsible for the deaths, in 2011, of eight people in an explosion in Oslo and 69 people in a firearm attack on the island of Utøya. Breivik plotted from a remote farm and did not allow friends or family to visit.

There is no doubt that a process should be implemented that raises awareness of behaviours that suggest a lone-actor terrorist has created a 'safe space', and that incorporates measures to encourage reporting. This is particularly useful from a detection standpoint, where cooperation between family members and/or cohabitants and the police/security services is crucial. Indeed,

15. The concept of 'safe space' was one that the research team focused on in the wake of a presentation given to the consortium by Dr Paul Gill of University College, London (UCL) at the CLAT project kick-off meeting in London, 5 September 2014. The idea was something he had been developing as part of separate work looking at the phenomenon of lone-actor terrorists.

it is necessary to point out that, of those four plots discussed above, three resulted in successful attacks, of varying magnitude – with Breivik, again, the effective outlier.

Recommendations: Policy-makers should continue to develop existing methods that encourage reporting of suspicious behaviour with minimal collateral impact for the family and/or community affected. The need to balance the actual threat posed by lone-actor terrorists who use safe spaces with the protection of civil liberties is an extremely relevant concern. Any policy that allows entering a community or a home, with important ramifications for privacy, can be assisted by the findings in the CLAT report. However, policy-makers should also note that while safe spaces were not overwhelmingly represented as a factor that enabled the effectiveness of attacks in the CLAT dataset, this is far from conclusive. It is a complex area that requires further study.

About the Authors

Benoît Gomis is an international security analyst focusing on terrorism and organized crime. He is an associate fellow with Chatham House, an independent consultant, and the author of *Counterterrorism: Reassessing the Policy Response* (CRC Press 2015), which he wrote as a visiting scholar at the Canadian Network for Research on Terrorism, Security and Society (TSAS). He is a frequent contributor to *World Politics Review*, *IHS Jane's Intelligence Review*, *Oxford Analytica* and the international media. He previously worked at Simon Fraser University, Royal Roads University, Chatham House, the NATO Parliamentary Assembly and the French Ministry of Defence. He was educated at Sciences Po in Aix-en-Provence, Loyola University Chicago, and the London School of Economics and Political Science.

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