

D5.2 Lone Actor Attack Preparation Data Inventory **Public Version**

WP 5 - Events Scripting

Bart Schuurman, Edwin Bakker (University of Leiden) Noémie Bouhana (UCL)







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PReventing, Interdicting and Mitigating Extremists events: Defending against lone actor extremism

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Keywords

Lone actor terrorism; attack planning; attack preparation; motivation; capability; chronological overview; geospatial characteristics; temporal characteristics

Acronyms

Acronyms	Definitions
DoW	Description of Work
LAAPP	Lone Actor Attack Planning & Preparation
PSC	PRIME Steering Committee
RAF	Risk Analysis Framework
RAPA	Radicalisation, Attack Preparation, Attack
SME	Subject Matter Expert
UoL	University of Leiden

1. Introduction

1.1 Context

PReventing, Interdicting and Mitigating Extremist events (PRIME) is a collaborative research project funded under the European Union's Seventh Framework Programme (FP7). PRIME started on 1 May 2014 and is slated to run for 36 months.

PRIME sets out to improve our understanding of lone actor terrorism and to inform the design of social and physical countermeasures for the prevention of lone-actor radicalisation, the disruption of lone-actor terrorist plots, and the mitigation of terrorist attacks carried out by lone extremists. In this endeavour, PRIME adopts a multidisciplinary approach, which combines formal modelling techniques drawn from security engineering with relevant expertise from the ecological, social, behavioural and criminological sciences. The end-product will be a decision-support tool for endusers whose remit is to deal with the lone actor terrorism threat.

PRIME's research activities involve a range of social scientific research methodologies for the purpose of collecting empirical data needed to produce scripts (integrated script and subscripts) of lone-actor extremist events (LAEE) and related analytical products. The ultimate aim of these combined products is to enable the identification of 'pinch points', where interventions (i.e. countermeasures) can be implemented to prevent, disrupt or mitigate lone-actor terrorist activity.

PRIME seeks to go beyond the state of the art in the study of lone actor extremism in a number of ways: firstly, by modelling factors, processes and indicators associated with LAEEs at several levels of analysis, and, secondly, by developing for this purpose a more rigorous theoretical and analytical approach than has heretofore been used in this domain to produce scripts and explanations of LAEEs.

1.2 WP5 "Attack planning and preparation"

Although terrorist acts are frequently assumed to be the end-result of a 'radicalisation' process in which the adoption of extremist ideas compels involvement in extremist behaviour, researchers have questioned the validity of such a linear and deterministic perspectives (McCauley & Moskalenko, 2011, pp. 218-221; Patel, 2011). Research suggests that the 'terrorist attack cycle' may be more chaotic than its frequent representation as a neat linear progression from the development of motivation and intent to planning, preparation and attack execution (Schuurman & Eijkman, 2015; Stratfor Global Intelligence, 2012). By charting qualitatively and quantitatively the chronological sequence of action and events which occur in the weeks, months and

years prior to a lone actor attack, and by combining this information with a robust theoretical framework and an appropriate analytical approach (scripting), the PRIME project aims to yield more sophisticated models and theories of involvement in terrorist violence.

As set out in Deliverables D3.1 and D3.2, the PRIME project is organised around a Risk Analysis Framework (RAF) that divides the pre-attack process into three phases; 'radicalisation', 'attack preparation' and the 'attack' itself. Collecting data relevant to each of these phases has been allocated to different partners within the PRIME consortium, with the ultimate aim of combining their work into one integrated script of a lone actor extremist event. Within this broader effort, the UoL team is responsible for the development of the attack planning and preparation subscript, and associated analytical products.

1.3 Deliverable objectives

The subsequent sections outline the methodological approach taken by the UoL team, provide a summary of activities and research findings to date, and conclude by looking ahead to future steps. In particular, the following topics are addressed:

- The methodological considerations upon which the description of the LAAPP phase is based;
- A description of the case selection process;
- A look at the types of data collected so far and outstanding data needs;
- A summary description of the work conducted up to this point in time and future steps.

In keeping with the DoW, this data inventory will refer where applicable to the four levels of analysis identified in D3.1. As Figure 1 illustrates, while each of these levels of analysis represent dimensions relevant to the pre-attack process, their relative importance is likely to vary depending on the phase of the process being studied. The attack preparation and planning phase is most strongly associated with the individual and situational levels of analysis. It focuses primarily on how and why individuals acquire and maintain their intent and motivation to commit an attack, procure the necessary material means (capability), and form the plan required to match motivation with capability and permit an actual attack to materialise.

Figure 1 Risk Analysis Matrix¹

		Phase of Event					
		Radicalisation	Attack Preparation	Attack			
	Individual	Susceptibility to moral change Susceptibility to social selection Susceptibility to self-selection	Social, physical and cognitive resources Susceptibility to social and self-selection	Social, physical and cognitive resources			
Level of Analysis	Situational	Exposure to radicalising settings Radicalising agents Radicalising teachings Social monitoring context	Opportunity structure Moral context Perception of action alternative Perception of capability (risk) Emergence of motivation	Opportunity structure Moral context Perception of action alternative Perception of capability (risk) Maintenance of motivation			
Lev	Social Ecological	Emergence and maintenance of radicalising settings	Emergence and maintenance of opportunity structure	Emergence and maintenance of opportunity structure			
	Systemic	Emergence and maintenance of radicalisation-supportive social ecologies Emergence of social selection processes	Emergence and maintenance of opportunity-supportive social ecologies Emergence of social selection processes	Emergence and maintenance of opportunity-supportive social ecologies			

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 $^{^{1}}$ The darker the shading of the cell, the higher the likelihood of capturing data relevant to the factors and processes it contains.

2. Conceptual and Methodological Approach

2.1 Rationale

As previously stated, PRIME's scripting approach to the analysis and modelling of data on LAEEs is intended to enable the identification of potential 'intervention points'. These are moments at which there is a heightened chance that the authorities or the general public will be able detect a lone actor's violent intentions and related activities, and may successfully intervene to disrupt the process (with regards to the current report, preparation and planning).

Prior work in this area would suggest that the planning and preparation phase of LAEEs may yield the most opportunities for identifying 'pinch points'. Although terrorists in general place a premium on maintaining operational security, research has shown that they may engage in what could be termed 'leakage behaviour' (Brynielsson et al., 2013; Hamm, 2007; Kelling & Bratton, 2006; Strom et al., 2010). Someone buying large quantities of chemicals, for instance, might inadvertently draw the attention of the authorities. Additionally, it has been suggested that some extremists simply cannot remain quiet about their beliefs or violent plans, dropping hints of their intentions to relatives or associates, or broadcasting them to a wider audience online.

Previous research by the UoL team on terrorists' attack planning and preparation underlined the importance of extensive and high-quality data when trying to reconstruct pre-attack processes (Schuurman & Eijkman, 2015). Media reporting on terrorism is likely to be academics' most important source of information. Journalists are often the first to publish information on terrorism and terrorists, and such publications are abundant and easily accessible. However, in addition to questions surrounding the accuracy and reliability of such sources (Silke, 2009), media reports tend to focus on the (intended or prevented) attack itself and devote relatively little attention for the complex series of events that preceded it. Where possible, such sources should be complemented with information based on primary sources, such as judicial verdicts, police files or interviews with subject matter experts (SMEs), such as public prosecutors, lawyers or law enforcement personnel with direct knowledge of the cases.

This report lays out how the UoL team has set out to take these considerations into account in collecting data on lone actors' attack planning and preparation (LAAPP).

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2.2 Key concepts

Based on the DoW, the RAF described in D3.1, and discussions with the other PRIME team members, the UoL team sought to understand the LAAPP process along four axes; motivation, capability, time and place. The latter two dimensions are especially important to developing a detailed situational understanding of the emergence of the capability and motivation to commit terrorist violence. Indeed, research on lone actors' target selection would suggest that they are likely to 'strike at the intersection of their ideology and their daily routines' (Becker, 2014).

2.2.1 Motivation

Here, motivation is understood as an individual's desire and willingness to plan, prepare and ultimately commit an act of violence. The psychological motivation to harm or kill others and/or cause damage to property is usually the result of a complex process in which a variety of factors may play a role, rather than a sudden or clearly made decision (Bjørgo, 2005; Horgan, 2007). These factors can reside at various levels of analysis, including for instance systemic events such as the military interventions in Iraq and Afghanistan, but also processes at the social-ecological and individual levels such as leader-follower interactions or a person's desire for revenge. Moreover, their relative importance may change over time; the factors that sparked an interest in violence are not necessarily the same ones that sustain the motivation to act (Della Porta, 1995; Horgan, 2009).

The UoL team devoted particular attention to establishing when motivation and its corollary, the intent to commit an attack, first came about, and to map, where possible, the time elapsed between the first signs of an emergent motivation for violent action and the actual beginning of planning and preparatory behaviour. How long do lone actor extremists usually take before initial thoughts of committing an attack turn into an actual plan? Can trigger moments be identified?

2.2.2 Capability

For all but the least sophisticated of attacks, would-be terrorists must complement their motivation to do harm with the capability to actually carry out their plans. An important part of capability is gathering or constructing the physical means necessary to commit an attack such as knives, firearms, explosives or a vehicle in case of a runover style assault. However, capability also has a cognitive aspect; lone actor extremists must have a basic level of technical proficiency and experience if weapons are to be used with some measure of effectiveness. While frequently taken as a given, research has shown that a substantial number of (would-be) terrorists actually lack such fundamental proficiencies (Kenney, 2010). Attempts to gain relevant knowledge

and experience, for instance through attending firearms courses or traveling abroad to participate in paramilitary training, could be important observable indicators of capability acquisition and thus potential intervention points.

Another important but perhaps not directly apparent aspect of capability is overcoming internal moral barriers to the use of violence. For most individuals, harming or killing others is difficult to do unless a form of 'moral disengagement' has occurred that allows them to lower or bypass internal psychological constraints prohibiting such behaviour. There are various processes that can contribute to moral disengagement, such as dehumanizing opponents or attributing ultimate responsibility for violent actions to leaders or ideological mandates for violence (Bandura, 1990). Where possible, the UoL team sought to map such processes as well.

The acquisition of the material and cognitive capability to commit acts of violence also draws attention to the role of external assistance. While lone actors are generally characterised by high degrees of autonomy and independence, they are seldom completely socially isolated (Spaaij & Hamm, 2015). Contacts with other people, whether in 'real life' or the online domain, can be crucial to the emergence and maintenance of both motivation and capability. Lone actors frequently seek some form of legitimisation for violence from people they see as authority figures and might approach others to gain their (unwitting) help with the acquisition of the means or skills necessary to carry out an attack (Gill, Horgan, & Deckert, 2014). When studying how and when the motivation and capability to conduct an attack were acquired and maintained, the social dimension cannot be overlooked.

In our understanding (see Deliverable 3.1 "Risk Analysis Framework"), motivation and capability are conceptually connected, whereby motivation may drive actions geared towards acquiring capability, while, reflexively, the actor's perception of their own capability to realise their intent successfully may impact whether their motivation is sustained over time. The two factors are thus closely interrelated.

2.2.3 Time

Terrorist attacks are seldom the result of a spontaneous decision. Instead, they are better seen as the outcome of a temporal process, even if the space of time between the earliest desire to commit an attack and its actual execution can vary from hours to years (Smith, Cothren, Roberts, & Damphousse, 2008; Smith, Damphousse, & Roberts, 2006). When looking at LAAPP, it is therefore important to not just register if and how motivation and capability emerged and developed, but to map the various aspects of these processes in as much chronological detail as possible.

The UoL team has primarily tried to do so by teasing the various aspects of attack planning and preparation apart. Not just looking, for instance, at whether and when

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explosives where acquired, but trying to find out if and when chemicals were bought, whether the individual in question set up a laboratory of sorts, whether that occurred in his or her residence or at premises acquired specifically for the purpose. In essence, the goal was not just to chart the chronological progression of attack planning and preparation, but to untwist it into its constituent strands and thus reveal as much relevant detail as possible.

2.2.4 Place

Terrorist attacks and the planning and preparatory processes that precede them can be mapped to particular geographical locations. As work by Smith et al. (2008) and Smith et al. (2006) has shown, (would-be) terrorists do not necessarily conduct the entirety of their preparatory work from their place of residence. Planning may occur in one location, preparations in another and the distance between the primary place of residence and the (intended) target can vary greatly, from several minutes' travel by car to necessitating international air transportation. There is also evidence that (group-based) terrorists will relocate their base of operations to be nearer their intended target (Gaibulloev, 2015).

Collecting information on where various aspects of the preparatory process take place is interesting for a variety of reasons. By mapping the average distance between, for instance, a (would-be) lone actor terrorist's residence and his or her intended target, a clearer picture can be gained of their pre-attack movement patterns. Furthermore, locations themselves can have qualities that are relevant to understanding the emergence and maintenance of motivation and capability to commits acts of violence. Travel to a foreign country, for instance, may have enabled a lone actor to come into contact with individuals who provided justifications for the use of violence, or who enabled enrolment in paramilitary training. Closer to home, private get-togethers with like-minded individuals or time spent in prison could fulfil a similar function. To capture this spatial dimension of LAAPP, the UoL team recorded relevant locations wherever possible and assessed what function they fulfilled.

2.3 Datasets

2.3.1 Large-N dataset

Work carried out in WP4 ('Meta-Script Technical Development') established that the formal, Bayesian Network-based scripting approach adopted by the project would require a (relatively) large dataset of LAEEs made up of case-based observations that could be coded with some degree of objectivity and reliability. To develop this dataset, the PRIME project adopted the open-source data collection protocol developed by Gill

and colleagues (Gill et al., 2014). The task of carrying out data collection for the Large-N was allocated to the UCL team. That work involved updating the existing database of lone actors assembled by Gill and colleagues, which, at the time the PRIME project began, contained 119 lone actors who engaged in or planned to engage in terrorism in the United States and Europe, and were convicted for, or died in, the commission of their offence between 1990 and 2011 (Gill et al., 2014).

The original database contained both individuals who committed their offence autonomously, with or without links to an organisation, and isolated dyads, which are pairs of individuals operating independently of a group. That original dataset contained 185 variables. Independent coders collectively spent 5500 hours working on data collection and coding. To qualify for inclusion, each observation had to be recorded by three independent coders, then results reconciled in two stages (coder A with coder B, then coders AB with C). Most of the material was sourced using LexisNexis (e.g. media reports, scholarly articles, published biographies), and therefore qualifies as open source.

At the start of the PRIME project, all new LAEs that emerged in 2012, 2013 and 2014 were added to the database, while, to conform with the definitional requirements of PRIME (see D3.1), dyads were removed from the original database (n=19). Likewise, cases were removed from the original dataset if 1) the individual was part of a cell; 2) they were arrested for non-attack related behaviours (e.g. dissemination of publications); 3) they were involved in attacks with no ideological motivation; 4) their arrest involved an FBI sting operation; and 5) the individual was not convicted. This led to the removal of a further 24 cases from the original Gill et al dataset. Taking updates up to 2014 into account, this produced a dataset of 111 cases which fit the PRIME definition requirements. The countries represented in the large-N dataset are the US, UK, Australia, Norway, The Netherlands, Czechoslovakia, Denmark, Sweden, Poland, France, and Germany.

Additionally, cases from 2000 onwards were re-examined for new information that might have come to light in open sources since the initial dataset was built. Furthermore, non-UK European cases, where the lack of language expertise in the original data collection may have hindered the original coding effort, were recoded. This particular effort is ongoing.

Two additional, significant data collection endeavours are still in progress at the time of writing this deliverable. The first involves coding all lone actors active in 2015 (and some leftover cases from 2014). It is anticipated that this will add around 20 new cases to the dataset (a definite number cannot be stated until each actor has been evaluated to make sure they fit the project's definitional requirements).

The second data collection effort involves coding all existing cases in the dataset with a new set of questions produced to suit PRIME's data needs. This increases the number

of variables from the original dataset by over 30%. In particular, questions related to the radicalisation and attack preparation phases of LAEEs have been expanded. This addition of new variables to the Large-N codebook was closely informed by the data collection and preliminary analyses carried out by the subscript teams (AaU, UoL, HUJI) on the medium-N and small-N datasets, which is why this effort did not get under way practically until the project mid-point and the Reassessment of Data Needs milestone (MS10).

Using a Bayesian Network approach to analyse the Large-N dataset and produce an integrated script requires that the analyst choose which variables to input into the network. The purpose of the subscripting activity and associated analytical work carried out by the AaU, UoL and HUJI teams is to provide an empirical basis to inform those choices (see D3.2).

The list of questions relative to attack preparation added to the original Gill codebook can be found in Appendix A of this report. The development of the additional codebook questions is discussed in further detail in section 2.4 below.

2.3.2 Medium-N dataset

UoL have concentrated their efforts on gathering and analysing the kind of rich data necessary to develop attack preparation subscripts and other analytical necessary to enrich the analysis of the Large-N database (see D3.2 "Data Needs Inventory").

Drawing from Gill et al.'s original open-source dataset of 119 known lone actor terrorists, and following discussion with all PRIME partners during the 2015 Prime Steering Committee (PSC) meeting held in Jerusalem, the UoL and AaU teams drafted a shortlist of the 40 individuals with the most information available on variables relevant to radicalisation and attack planning and preparation. From this list, 20 cases were selected for detailed analysis, a selection designed to maximise the overlap between the Aarhus and UoL teams so that the transitions from radicalisation to attack planning and preparation could be studied as effectively as possible. The UCL team then exploited this same list to generate a medium-N sample of attack cases. This approach to case selection was consistent with that prescribed in D.3.2 "Data Needs Inventory". Subsequently, given the value of preliminary results drawn from the analysis of the 20-case sample, the UoL team expanded the medium-N sample to encompass all forty individuals originally identified from the Gill et al. dataset.

The 40 medium-N cases and are listed in Table 1. The case selection represents a broad cross-section of lone actor extremism in Europe and North America over the past three decades.

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Table 1 Medium-N attack planning and preparation cases

	Name	Sex	Country	Year	Ideology
1	Clayton Lee Waagner	М	USA	2001	Anti-abort.
2	Timothy James McVeigh	М	USA	1995	Anti-gov't
3	Taimour Abdulwahab	М	Sweden	2010	Islamist
4	Mohammed Bouyeri	М	Holland	2004	Islamist
5	Volkert van der Graaf	М	Holland	2002	An. Rights
6	Abdulhakim Muhammad	М	USA	2009	Islamist
7	Brunon Kwiecien	М	Poland	2012	Right-wing
8	Nicky Raymond Reilly	М	UK	2008	Islamist
9	David Copeland	М	UK	1999	Right-wing
10	Martyn Gilleard	М	UK	2008	Right-wing
11	Anders Behring Breivik	М	Norway	2011	Right-wing
12	Richard Baumhammers	М	USA	2000	Right-wing
13	John Salvi, III	М	USA	1994	Anti-abort.
14	Rachelle Shannon	F	USA	1993	Anti-abort.
15	Scott P. Roeder	М	USA	2009	Anti-abort.
16	Isa (Andrew) Ibrahim	М	UK	2008	Islamist
17	Nicholas Roddis	М	UK	2008	Islamist
18	Nidal Malik Hassan	М	USA	2009	Islamist
19	Ivan Duane Braden	М	USA	2004	Right-wing
20	Charles Ray Polk	М	USA	1995	Anti-gov't
21	Kevin Gardner	М	UK	2007	Islamist
22	Benjamin Nathaniel Smith	М	USA	1999	Right-wing
23	Ryan Gibson Anderson	М	USA	2004	Islamist
24	Krenar Lusha	М	UK	2009	Islamist
25	Mohamed Game	М	Italy	2009	Islamist
26	Buford 'O Neal Furrow, Jr.	М	USA	1999	Right-wing
27	Paul Jennings Hill	М	USA	1994	Anti-abort.
28	James Kopp	М	USA	1998	Anti-abort.
29	Tony Lecomber	М	UK	1986	Right-wing
30	Terry Collins	М	UK	2004	Right-wing

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31	Rachid Baz	М	USA	1994	Islamist
32	Kevin Harpham	М	USA	2011	Right-wing
33	Robert Cottage	М	UK	2006	Right-wing
34	Dennis Mahon	М	USA	2004	Right-wing
35	Terence Gavan	М	UK	2009	Right-wing
36	Neil Lewington	М	UK	2009	Right-wing
37	Mohammed Reza Taheri- azar	M	USA	2006	Islamist
38	Mark Bulman	М	UK	2006	Right-wing
39	Mir Aimal Kansi	М	USA	1993	Islamist
40	Walter Leroy Moody, Jr.	М	USA	1989	Anti-gov't

2.3.3 Small-N dataset

In addition to the cases taken from the original Gill et al. dataset, it was decided that the RAPA scripting teams would each conduct in-depth analyses of approximately 5 additional cases. These cases were to stem from each team's country of origin to maximise the teams' ability to gather high-quality, rich primary data, from sources such as police files and interviews with SMEs. These small-N cases would form a qualitative contrast with the medium-N cases, whose analysis is based largely on publicly available data taken from newspaper articles and other media sources.

Given its success with data access, the UoL team eventually brought the number of indepth case studies to 8. These are listed in Table 2.

Table 2 Small-N attack planning and preparation cases (Anonymised)

	Name	Sex	Country	Year	Ideology
1	Withheld	М	Holland	2004	Islamist
2	Withheld	М	Holland	2004	Islamist
3	Withheld	М	Holland	2005	Islamist
4	Withheld	М	Holland	'96-'07	Unclear
5	Withheld	F	Holland	2004	Single-issue
6	Withheld	М	Holland	2014	Single-issue
7	Withheld	М	Holland	2011	Ambiguous
8	Withheld	М	Holland	2009	Single-issue

2.4 Data collection

In order to capture information relevant to understanding lone actor attack planning and preparation, the available data needed to be interrogated in specific ways. Following consultations with the PRIME team during the London (2014) and Jerusalem (2015) PSC meetings, a two-pronged approach to data collection was taken. First, data on the cases was entered into a specially-designed Excel spreadsheet to visualise the chronological progression of LAAPP through its various stages and to capture qualitative information on this process. Second, the information thus formatted was analysed using new codebook questions, which were eventually added to the original Gill et al. codebook to strengthen analysis of LAAPP phase in the Large-N dataset. This allowed quantitative elements to be captured, such as the duration of various preparatory processes and whether or not individuals were part of broader social networks that shared their extremist views during the LAAPP phase.

With regard to the new codebook questions, the UoL team designed questions to specifically focus on attack planning and preparation, informed by an earlier study on terrorists' pre-attack behaviour undertaken by the UoL team (Schuurman & Eijkman, 2015). The LAAPP-relevant codebook questions can be organised in nine categories, each of which looks at several aspects relevant to understanding the emergence and maintenance of the motivation and capability to commit an attack.

These categories are described below.

2.4.1 Relevant personal background factors

While there is considerable consensus in the literature that terrorism cannot be reduced to individual psychopathology or specific character traits, such factors may contribute to an increased likelihood of involvement in violent behaviour (Horgan, 2014; Meloy, Hoffmann, Guldimann, & James, 2012; Victoroff, 2005). The Gill et al. (2014) study has already collected a host of personal data on lone actor terrorists. The new LAAPP questions add more detail, for instance on the nature of potential past involvement in crime and violence or engagement with radical, extremist or terrorist groups and individuals *previous* to involvement in lone actor terrorism.

2.4.2 Social context

Social psychology provides important perspectives on how and why people adopt extremist views or become involved in terrorist behaviour (McCauley & Segal, 2009). Lone actors are of course distinguished by their high degree of autonomy, yet they are seldom completely socially isolated. This category of variables is primarily intended to investigate the potential role of outside assistance in creating and maintaining the

motivation and capability to act in a violent manner. Did the individual in question maintain social connections during the attack planning and preparation phase that are important to understanding the emergence or maintenance of intent and capability? For instance, was he or she in touch with people or groups who justified or even ordered the use of violence? Did anyone provide practical assistance? Were those people aware their help was being used in preparation for an act of violence? Etc.

2.4.3 Attack planning

A successful planning phase leaves (would-be) terrorists with a clear (albeit often implicit, rather than formally recorded) road map of the actions that need to be undertaken in order to achieve success (Schuurman & Eijkman, 2015). Planning is envisioned as focused primarily on the selection of potential targets, the gathering of information on those targets and the formulation of the steps that need to be taken if an effective attack is to materialise. This category of variables is also focused on learning more about the development of the *motivation* to commit an act of terrorism. Questions include: When did the motivation to commit an attack first develop? Can a 'trigger moment' be identified that led the individual in question from considering an act of violence to actually planning for one? Was the planning process well thought-out or largely ad-hoc and spontaneous in nature? Was a target reconnaissance conducted?

2.4.4 Attack preparation

In contrast to attack planning, the attack preparation phase is conceptualised as being primarily focused on the *practical* steps that need to be taken to make a terrorist attack possible (Schuurman & Eijkman, 2015). This, of course, includes the acquisition or construction of weapons and explosives, but also the training to use such means effectively, the potential solicitation of outside support, the acquisition of the necessary funds, etc. Similar to the planning phase described above, the UoL team was also interested in learning when the preparatory phase began, how long it lasted, where activities relevant to it were carried out and whether preparations followed a predetermined plan or were conducted in a more spontaneous and ad-hoc fashion.

2.4.5 Early warning / leakage behaviour

Especially interesting from the perspective of detecting lone-actor extremists' emerging motivation and intent to commit violence, is the finding by Gill et al. (2014) that in almost sixty per cent of the cases studied, people around the suspects had an inkling of their plans. This is echoed by several other authors, who suggest that lone-actor extremists tend to spread their views (online) before committing an attack (Cohen, Johansson, Kaati, & Mork, 2014; Hamm, 2012). It can be very difficult to distinguish between hollow threats and actual intent to commit violence, yet these

findings do provide starting points for thinking about detection and prevention (Appleton, 2014). Some of the capability-related findings also have this potential, as activities such as the stockpiling of weapons, the execution of attack rehearsals ('dry runs') and increased physical training are all essentially observable behaviours. This codebook category was developed specifically to record such instances where lone actor terrorists (inadvertently) 'leaked' indicators of their motivation or capability to commit an attack, which can function as detectable early warning signs.

2.4.6 Concealment & operational security

Maintaining a low profile and safeguarding the secrecy of terrorism-related activities ('operational security') is essential for those who intend to use this form of political violence, whether they are operating in groups or acting alone. Learning more about lone actors' degree of security consciousness is interesting in its own right. However, previous research has also suggested that the relative amateurism of many (would-be) terrorists means their attempts to maintain secrecy may, as a matter of fact, draw more rather than less attention to their activities. Increasingly paranoid behaviour, possession of multiple mobile phones, the use of veiled language and code words, last-minute changes to meeting places: while intended to safeguard secrecy, such behaviour may actually be important indicators that something is afoot (Schuurman & Eijkman, 2015; Schuurman, Harris-Hogan, Zammit, & Lentini, 2014).

2.4.7 Post-preparation phase

Work by Smith et al. (2008) and Smith et al. (2006) indicated that the completion of planning and preparatory phases may be marked by a sudden drop in activity, a period of 'doing nothing' that could presage the execution of the actual attack. The UoL team is interested in assessing whether their cases are similarly marked by a post-preparation phase. If its existence can be confirmed, such a sudden and marked drop in activity on the part of the (would-be) lone actor terrorists would form a very useful intervention point.

2.4.8 Geospatial characteristics

The codebook for the medium-N analysis has numerous variables that focus on recording *where* activities relevant to lone actor attack planning and preparation take place. These include the individual's primary place of residence, the locations where planning and preparatory activities were conducted and the location of the actual and intended target(s). The codebook primarily looks to record quantifiable information relevant to these locations (e.g. their distance to one another). The chronological overview discussed in the next section is used to note qualitative details about these locations, such as the function they served in the emergence or maintenance of the motivation to commit an act of violence.

2.4.9 Related activities

Terrorists do more than work on planning and preparing their (next) attack. While LAAPP can be a time-intensive process, these individuals usually engage in numerous activities that have little or no direct bearing on their violent intentions or plans. Yet the extremist beliefs that frequently accompany involvement in terrorist violence are often so important to terrorists' sense of identity that they become all-encompassing and 'chronically salient' (Ellemers, Spears, & Doosje, 2002). Thus, (would-be or suspected) terrorists' day-to-day activities may still yield clues as to their worldview, social circles and thoughts on the legitimacy of the use of violence. Such information can potentially be used as an early warning indicator of the motivation or capability to carry out an attack. For instance, previous research has identified related activities such as providing funds to foreign terrorist organisations or assisting individuals with traveling to paramilitary training camps (Schuurman & Eijkman, 2015).

2.5 Visualizing lone actor attack planning and preparation

The data collected using the codebook described above will yield a variety of quantitative insights into the planning and preparatory activities of the 40 medium-N cases studied. For instance, they will allow the UoL team to assess the average duration of preparatory activities. Yet it does not provide a visual representation of the various strands that constitute the LAAPP process that can be used for scripting purposes. After consultation with other PRIME colleagues, the UoL team adapted a specially-made Excel spreadsheet that the Aarhus team had originally devised. This template provides a way of organizing data relevant to the nine phases discussed above in a chronological fashion, making the chain of events instantly clear and drawing attention to how the various phases overlap and interact. Because the data put into the various cells is qualitative in nature, this specially-designed Excel sheet also allows its users more freedom to describe relevant events, thus providing a useful complement to the highly-structured approach to data collection taken with the medium-N dataset.

A simplified version of the Excel sheet in which the various preparatory phases are recorded is provided below in Table 3 (a full version is available in appendix of D3.2). The idea is to work backwards from the attack or planned attack ('event') and date information relevant to motivation and capability development. Particular attention is paid to the five years before the event ('T-1' – 'T-5'), as the 'gestation period' for most lone actor terrorist attacks does not appear to exceed this time frame. For instance, the finding that a lone actor bought explosives 2 years before the intended attack will be recorded in the 'attack preparation' under the T-2 column. An allowance has also been made for information that cannot be dated but which is still relevant to record.

Table 3 Visualizing Ione actor attack preparation (simplified)

Lone actor [Name] timeline								
	Undated	Previous	T-5	T-4	T-3	T-2	T-1	Event
Personal background								
Social Context								
Attack planning								
Attack preparation								
Concealment /								
OpSec								
Leakage behaviour								
Post-prep activities								
Geospatial data								
Related activities								

2.6 Data needs assessment

As outlined in D3.2, the PRIME project relies on various types of data to chart lone actors' progression from radicalisation through to attack execution. The medium-N analysis is primarily dependent on open-source information, such as media reports, academic and journalistic literature (including biographies of lone actor extremists) and publicly available courtroom verdicts. For the in-depth case studies, this data is supplemented with as much primary-sources based information as can be acquired. In particular, the UoL team gained access to SMEs such as the public prosecutors involved in the investigations, autobiographical materials produced by the lone actors themselves, information contained in police files and Dutch court cases involving lone actor extremists.

Terrorism studies has long suffered from a lack of primary-sources based research and the scarcity of such material continues to be a problem (Sageman, 2014). For good reasons: finding, accessing and convincing (former) terrorists or extremists to participate in interviews or focus groups, gaining access to government data, let alone carrying out any kind of experimental or clinical study, is very time consuming and failure remains a likely outcome (Orsini, 2013; Toros, 2008). Given the scarcity of high-quality primary-source-based data in research on lone actor terrorism, the information used in the small-N analysis makes a significant contribution to the state of knowledge.

Although primary sources are generally more accurate and reliable than secondary ones, this does not mean the latter are of limited utility in studying lone actors' planning and preparation processes. The UoL team has been able to ascertain that the

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available open-sources based secondary data (media reports, judicial verdicts) is generally sufficiently detailed to allow the reconstruction of the attack planning and preparation phase. The gathering of primary-sources based information therefore becomes a way to increase the reliability and detail of the findings, but does not form a step that is critical or necessary to the completion of the LAAPP subscript, contributing a measure of resilience as well as redundancy in to the data collection activities.

Although data collection and analysis is on-going, one thing that has become clear with regard to outstanding data needs is that much relevant information is hard to date accurately. Journalists are frequently more interested in detailing the attack that occurred, or how one was prevented, and the perpetrator involved, than in providing the kind of detailed step-by-step account of attack planning and preparation that the UoL team is interested in. By combining multiple sources, such as media reports, court verdicts and case studies written by academics, this limitation can frequently be overcome, but it remains a point of concern. One of the goals of the in-depth small-N analysis is to focus particular attention on the geo-temporal aspects of preparatory activities; mapping in as much detail as possible where and when motivation and capability were developed and maintained.

3. Summary of Activities and Preliminary Findings

Prior to the February 2015 PSC meeting in Jerusalem, the UoL team focused predominantly on identifying suitable Dutch cases for the small-N analysis and gathering in-depth data on them. The researchers' goal was to select cases that represented a variety of ideological motives, and included at least one woman. The UoL team looked at ways to gain access to primary data on these cases, such as police files and interviews with stakeholders or even the perpetrators themselves. Once the methodological approach and case study selection for the medium-N analysis was finalised during and after the February 2015 Jerusalem meeting, the UoL researchers also started to develop the codebook described above and began data collection activities. As of the time of writing, data collection has been largely completed and the initial analysis of the results has begun.

3.1 State of data collection

With regard to the eight in-depth or small-N cases, the UoL team has gathered a large amount of information using media articles, the academic literature and government reports. In addition, the team has managed to gain access to a variety of primary sources. This data is taken from police files and interviews with government

stakeholders involved in the investigations. The utilization of these materials followed the submission of an official request for access to the Dutch Attorney General's office. For reasons of security and privacy protection, none of the materials contained in the police files can be made publicly available.

With regard to the 40 medium-N cases, the UoL team is currently finalising data collection. From late 2015 onward, several student assistants have been engaged to speed up data collection efforts. This is partly why the UoL team was able to expand the medium-N sample to 40 cases instead of the 20 originally planned for. Input from the PRIME Expert Advisory Board indicated the additional LAAPP cases were of special interest to practitioners and validated this additional effort.

3.2 Preliminary findings

With data collection and analysis ongoing, no definitive findings can be reported at this stage. That being said, a number of preliminary conclusions can be identified.

First of all, it is encouraging that the research method outlined in the previous pages has proven feasible. The data that the UoL team has gathered allows the LAAPP process to be disentangled into the various phases relevant to understanding the development of motivation and capability to commit an attack as conceptualised in the project's RAF. Furthermore, collecting this information in the specially-made Excel spreadsheet described in Table 2 does indeed offer insights into how these various processes develop over time and how they relate to one another. With data collection virtually completed, the past months have also seen the RAPA teams begin to integrate their findings, assessing how the three subscripts can be connected.

Secondly, it is striking that in many of the cases studied so far, the lone actor extremists were not as alone as their name implies. Some actively tried but (largely) failed to recruit others to join their cause, implying that their status as 'lone' actors was not volitional. In other cases, the individuals studied had various kinds of social connections relevant to the attacks being planned, such as with persons who provided information on bomb-making, assisted with target selection or legitimised and even encouraged the use of violence. Most were (loosely) connected to social networks that shared their radical or extremist views, even if these larger groups did not actively engage in violence themselves.

Although most of the lone actors in question did end up carrying out the (intended) attack by themselves, these findings problematise the popular notion of lone actors as completely isolated individuals who decided the strike out on their own accord. The fact that many of them had these social ties or tried to acquire them also points to possibilities for interdiction: communicating with others about planned acts of violence or trying to recruit people for such activities leaves would-be terrorists prone

to being detected by the authorities or, even, the general public. this finding is, of course, borne out by the fact that many of those studied were detected and apprehended in this fashion.

A third provisional finding is that attack planning and preparation is not always a neatly linear progression through distinct phases. Instead, in at least some of the cases studied so far, the emergence of the motivation and capability to commit an attack, as well as the selection of potential targets, occurred in a rather chaotic fashion. This is interesting as it belies the notion that terrorists follow a rational, neatly-ordered process of deciding if, where and how to attack. Capability acquisition may precede the formulation of concrete plans, just as the decision to commit an attack may be *ad hoc* rather than the result of a carefully thought-through planning process. More analysis of the available results will need to be done in order to assess whether attack planning and preparation is more accurately visualised as several phases of activity occurring roughly parallel to each other, rather than as a linear progression through distinct phases.

Fourth and finally, the research conducted so far has made clear that collecting information on the temporal aspects of planning and preparatory behaviour can be challenging. Even when various sources of data are utilised, it is often not possible to ascertain with any accuracy when certain phases of the LAAPP began or how long they lasted. Gaining as much of this information as possible will be a core challenge during the remainder of the data collection period.

4. Conclusions and Future Steps

The available data appears to be of sufficient quality and detailed to allow the UoL team to chart the lone actor attack planning and preparation phase. Given the detailed nature of the questions being asked, it is inevitable that not all aspects of this process can be charted in equal detail across all 48 cases (medium-N and small-N). Nevertheless, from the data gathered so far, it appears to be possible to develop chronological timelines of LAAPP, which can then be used to draw graphical causal pathways. Thus, from an academic point of view the preliminary results are promising. Looking at the PRIME project's overarching goal of identifying potential intervention points to detect and disrupt lone actors' before they can strike, the work done by the UoL team supports the idea that 'leakage behaviours' can be identified, which can be used for this very purpose. Lone actors may be the principal authors of their violent designs and strike by themselves, but in the run-up to their attacks, they often engage in various social interactions both on and offline that can provide important clues to their motivation and capability to commit acts of terrorism.

Finalising data collection and completing data analysis will be the primary task of the UoL team in the PRIME project's final year. By the time of the next PSC meeting in June 2016 in Aarhus, the UoL team aims to be able to present its preliminary subscript of the LAAPP phase and discuss how this can inform the Bayesian Large-N analysis.

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PRIME Deliverable D5.2

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Appendix A – Additional Codebook Questions on Attack Preparation and Planning

PRIME: Attack Planning and Preparation Codebook¹

! All relevant <u>locations</u> are to be recorded!

Bart Schuurman 3 May 2016

PERSONAL EXPERIENCE / BACKGROUND

1.	Was the individual involved in or convicted of infractions / petty crime? 1 [] No 2 [] Yes 88 [] Unknown
2.	Was the individual involved in or convicted of misdemeanors or felonies? 1 [] No 2 [] Yes 88 [] Unknown
3.	Did the individual have a history of violent crimes / behavior? 1 [] No 2 [] Yes 88 [] Unknown
4.	Had the individual <i>in the past</i> associated with <u>domestic</u> radical, extremist or criminal groups? (i.e. only tick yes if individual was no longer participating in this group at time of event) 1 [] No 2 [] Yes, radical or extremist 3 [] Yes, criminal 88 [] Unknown
	If yes, what was the group's name? 1 [] Describe 88 [] Unknown 99 [] Does not apply
	If yes, how long before the event did these contacts cease? 1 [] X Years/months/weeks/days 88 [] Unknown 99 [] Does not apply
5.	Had the individual <i>in the past</i> associated with <u>foreign</u> radical, extremist or criminal groups? (i.e. only tick yes if individual was no longer participating in this group at time of event) 1 [] No 2 [] Yes, radical or extremist

¹ Based on Paul Gill's codebook.

	3 [] Yes, criminal 88 [] Unknown
	If yes, what was the group's name? 1 [] Describe 88 [] Unknown 99 [] Does not apply
	If yes, how long before the event did these contacts cease? 1 [] X Years/months/weeks/days 88 [] Unknown 99 [] Does not apply
6.	Did the individual participate in armed conflict with non-state actors (e.g. insurgents)? 1 [] No 2 [] Yes 88 [] Unknown
	If yes, how long before the event did this involvement begin? 1 [] X Years/months/weeks/days 88 [] Unknown 99 [] Does not apply
	If yes, how long before the event did this involvement end? 1 [] X Years/months/weeks/days 88 [] Unknown 99 [] Does not apply
SO	OCIAL CONTEXT (AT / JUST PRIOR TO TIME OF ATTACK)
1.	Did the individual have contacts with individuals or groups that shared his/her ideological/religious orientation but which were <i>not</i> radical or extremist and which did <i>not</i> engage in illegal or criminal activities? 1 [] No 2 [] Yes 88 [] Unknown 99 [] Does not apply
	If yes, what were these people / groups called? 1 [] Describe 88 [] Unknown 99 [] Does not apply
	If yes, how long before the event did these contacts start? 1 [] X Years/months/weeks/day 88 [] Unknown 99 [] Does not apply
	If yes, how long before the event did these contacts cease? 1 [] X Years/months/weeks/days

	2 [] They did not cease88 [] Unknown99 [] Does not apply
2.	Did the individual have contacts with radicals, extremists or terrorists? 1 [] No 2 [] Yes 88 [] Unknown 99 [] Does not apply
	If yes, how long before the event did these contacts start? 1 [] X Years/months/weeks/days 88 [] Unknown 99 [] Does not apply
	If yes, how long before the event did these contacts cease? 1 [] X Years/months/weeks/days 2 [] They did not cease 88 [] Unknown 99 [] Does not apply
3.	Did the individual have contacts with radical, extremist or terrorist leaders/authority figures ? 1 [] No 2 [] Yes 88 [] Unknown
	If yes, what were their names? 1 [] Describe 88 [] Unknown 99 [] Does not apply
	If yes, how long before the event did these contacts start? 1 [] X Years/months/weeks/days 88 [] Unknown 99 [] Does not apply
	If yes, how long before the event did these contacts cease? 1 [] X Years/months/weeks/days 2 [] They did not cease 88 [] Unknown 99 [] Does not apply
4.	Did the individual <u>swear fealty to</u> , or in any other way <u>become recognizably involved</u> with, a (foreign) radical, extremist or terrorist group, organization or network? 1 [] No 2 [] Yes 88 [] Unknown

If yes, what was the individual or group's name?

	1 [] Describe 88 [] Unknown 99 [] Does not apply
	If yes, how long before the event did this occur? 1 [] X Years/months/weeks/days 88 [] Unknown 99 [] Does not apply
5.	Did the individual <i>unsuccessfully</i> try to join or create an extremist or terrorist group? 1 [] No 2 [] Yes, join an existing group 3 [] Yes, create a new group 88 [] Unknown 99 [] Does not apply
	If yes, what group? 1 [] Describe 88 [] Unknown 99 [] Does not apply
	If yes, how long before the event did this attempt occur? 1 [] X Years/months/weeks/days 88 [] Unknown 99 [] Does not apply
6.	Did the individual receive (implicit) justification or encouragement for the use of violence? 1 [] No 2 [] Yes 88 [] Unknown
	If yes, from who? 1 [] Describe 88 [] Unknown 99 [] Does not apply
	If yes, how long before the event did this occur? 1 [] X Years/months/weeks/days 88 [] Unknown 99 [] Does not apply
7.	Was the individual ordered by a (foreign) extremist or terrorist leader to carry out an attack? 1 [] No 2 [] Yes 88 [] Unknown
	If yes, by who or what organizations? 1 Describe

	88 [] Unknown 99 [] Does not apply
	If yes, how long before the event was this order given? 1 [] X Years/months/weeks/days 88 [] Unknown 99 [] Does not apply
8.	Did anyone provide assistance with <u>planning</u> -related activities? 1 [] No 2 [] Yes 88 [] Unknown 99 [] Does not apply
	If yes, what form did this assistance take? 1 [] Describe 88 [] Unknown 99 [] Does not apply
	If yes, did the person(s) providing assistance realize the individual was planning to undertake an act of violence? 1 [] No 2 [] Yes 88 [] Unknown 99 [] Does not apply
	If yes, how long before the event did this occur? 1 [] X Years/months/weeks/days 88 [] Unknown 99 [] Does not apply
9.	Did anyone provide assistance with <u>preparation</u> -related activities? 1 [] No 2 [] Yes 88 [] Unknown 99 [] Does not apply
	If yes, what form did this assistance take? 1 [] Describe 88 [] Unknown 99 [] Does not apply
	If yes, did the person(s) providing assistance realize the individual was preparing to undertake an act of violence? 1 [] No 2 [] Yes 88 [] Unknown 99 [] Does not apply

If yes, how long before the event did this occur?

1	[] X Years/months/weeks/days
88	[] Unknown
99	[] Does not apply

ATTACK PLANNING

A .	TACKILANINING
1.	Did the individual develop a clear intention to commit an attack? 1 [] No 2 [] Yes 88 [] Unknown
	If yes, how long before the event? 1 [] X Years/months/weeks/days 88 [] Unknown 99 [] Does not apply
2.	Was the (intended) attack the result of planning or a spontaneous decision? 1 [] Planning 2 [] Spontaneous 88 [] Unknown 99 [] Does not apply
	If planned, how long before the attack did planning <u>begin</u> ? 1 [] X Years/months/weeks/days 88 [] Unknown 99 [] Does not apply
	If planned, how long before the attack did planning end? 1 [] X Years/months/weeks/days 2 [] Did not end; e.g. planning resumed after each attack (Copeland case) 88 [] Unknown 99 [] Does not apply
3.	Can a 'trigger' event or moment be identified that led the individual to initiate actual attack planning? 1 [] No 2 [] Yes 88 [] Unknown 99 [] Does not apply
	If yes, please describe it: 1 [] Description 88 [] Unknown 99 [] Does not apply
	If yes, how much time elapsed between the trigger and the start of planning activities? 1 [] X Years/months/weeks/days 88 [] Unknown 99 [] Does not apply

4.	Was an attack carried out? 1 [] No 2 [] Yes 3 [] Yes, but failed 88 [] Unknown 99 [] Does not apply
	If yes, did the actual and the planned target correspond? 1 [] No 2 [] Yes 88 [] Unknown 99 [] Does not apply
5.	Did the individual go through multiple potential targets that differed from the final selection of one or more? 1 [] No 2 [] Yes 88 [] Unknown 99 [] Does not apply
6.	Did the individual collect information on possible targets using the internet? 1 [] No 2 [] Yes 88 [] Unknown 99 [] Does not apply
	If yes, how long before the event did this <u>first</u> occur? 1 [] X Years/months/weeks/days 88 [] Unknown 99 [] Does not apply
	If yes, how long before the event did this <u>last</u> occur? 1 [] X Years/months/weeks/days 88 [] Unknown 99 [] Does not apply
7.	Did the individual conduct target reconnaissance in person? 1 [] No 2 [] Yes 88 [] Unknown 99 [] Does not apply
	If yes, how many times did this occur? 1 [] X times 88 [] Unknown 99 [] Does not apply
	If yes, how long before the event did this <u>first</u> occur? 1 [] X Years/months/weeks/days 88 [] Unknown

	99 [] Does not apply
	If yes, how long before the event did this <u>last</u> occur? 1 [] X Years/months/weeks/days 88 [] Unknown 99 [] Does not apply
8.	Did the individual formulate a concrete plan/guide to assist with attack preparation and execution? 1 [] No 2 [] Yes 88 [] Unknown
	If yes, how long before the event was this plan finalized? 1 [] X Years/months/weeks/days 88 [] Unknown 99 [] Does not apply
9.	Did certain constraints influence target selection or attack planning processes? 1 [] No 2 [] Yes 88 [] Unknown 99 [] Does not apply
	If yes, please describe how: 1 [] Description 88 [] Unknown 99 [] Does not apply
A	TTACK PREPARATION
1.	Did the individual conduct preparations for an attack? 1 [] No 2 [] Yes 88 [] Unknown
	If yes, how long before the event did preparations <u>begin</u> ? 1 [] X Years/months/weeks/days 88 [] Unknown 99 [] Does not apply
	If yes, how long before the event did preparations end? 1 [] X Years/months/weeks/days 88 [] Unknown 99 [] Does not apply
2.	Can a 'trigger' event or moment be identified that led the individual to initiate actual attack preparation? 1 [] No 2 [] Yes

	88 [] Unknown
	If yes, please describe it: 1 [] Description 88 [] Unknown 99 [] Does not apply
	If yes, how much time elapsed between the trigger and the start of preparatory activities? 1 [] X Years/months/weeks/days 88 [] Unknown 99 [] Does not apply
3.	Did the individual acquire (a) (remote) location(s) specifically to conduct preparations? 1 [] No 2 [] Yes 88 [] Unknown 99 [] Does not apply
	If yes, how long before the event? 1 [] X Years/months/weeks/days 88 [] Unknown 99 [] Does not apply
4.	Did the individual watch execution video's (as desensitization to violence)? 1 [] No 2 [] Yes 88 [] Unknown
	If yes, how long before the attack did this begin/take place? 1 [] X Years/months/weeks/days 88 [] Unknown 99 [] Does not apply
5.	Did the individual compose a last will, martyrs statement etc.? 1 [] No 2 [] Yes 88 [] Unknown
	If yes, how long before the event was it made? 1 [] X Years/months/weeks/days 88 [] Unknown 99 [] Does not apply
6.	Did the individual undertake firearms training? 1 [] No 2 [] Yes 88 [] Unknown
	If yes, how long before the event did firearms training <u>begin</u> ? 1 [] X Years/months/weeks/days

	99 [] Does not apply
	If yes, how long before the event did firearms training end? 1 [] X Years/months/weeks/days 88 [] Unknown 99 [] Does not apply
7.	Did the individual practice shooting by him/herself? 1 [] No 2 [] Yes 88 [] Unknown
	If yes, how long before the event did shooting practice <u>begin</u> ? 1 [] X Years/months/weeks/days 88 [] Unknown 99 [] Does not apply
	If yes, how long before the event did shooting practice end? 1 [] X Years/months/weeks/days 88 [] Unknown 99 [] Does not apply
8.	Did the individual participate in paramilitary training with non-state actors (e.g. overseas terrorist training camp)? 1 [] No 2 [] Yes 88 [] Unknown
	If yes, how long before the event did training begin? 1 [] X Years/months/weeks/days 88 [] Unknown 99 [] Does not apply
	If yes, how long before the event did training end? 1 [] X Years/months/weeks/days 88 [] Unknown 99 [] Does not apply
	If yes, was this training undertaken specifically to prepare for the event? 1 [] Purposeful 2 [] Opportunistic 3 [] Criminal 4 [] Other 88 [] Unknown 99 [] Does not apply
9.	Did the individual acquire funds specifically for the (planned) attack? 1 [] No 2 [] Yes, legally

	3 [] Yes, illegally4 [] Legally and illegally88 [] Unknown
	If yes, please describe how: 1 [] Description 88 [] Unknown 99 [] Does not apply
	If yes, how long before the event did funds acquisition <u>start</u> ? 1 [] X Years/months/weeks/days 88 [] Unknown 99 [] Does not apply
	If yes, how long before the event did funds acquisition end? 1 [] X Years/months/weeks/days 88 [] Unknown 99 [] Does not apply
10.	Did the individual (attempt to) acquire ammunition? 1 [] No 2 [] Yes 88 [] Unknown
	If yes, how long before the event did these attempts <u>begin</u> ? 1 [] X Years/months/weeks/days 88 [] Unknown 99 [] Does not apply
	If yes, how long before the event did these attempts end? 1 [] X Years/months/weeks/days 88 [] Unknown 99 [] Does not apply
11.	Did the individual (attempt to) acquire firearms? 1 [] No 2 [] Yes 88 [] Unknown
	If yes, how long before the event did these attempts <u>begin</u> ? 1 [] X Years/months/weeks/days 88 [] Unknown 99 [] Does not apply
	If yes, how long before the event did these attempts end? 1 [] X Years/months/weeks/days 88 [] Unknown 99 [] Does not apply

	If yes, was weapons acquisition purposeful, opportunistic or related to other purposes (e.g. sport shooting, hunting, personal protection etc.)? 1 [] Purposeful 2 [] Opportunistic 3 [] Criminal 4 [] Other 88 [] Unknown 99 [] Does not apply
12.	Did the individual (attempt to) acquire other types of (hand-held) weapons? 1 [] No 2 [] Yes 88 [] Unknown
	If yes, what type of weapon(s)? 1 [] Description 88 [] Unknown 99 [] Does not apply
	If yes, how long before the event did these attempts <u>begin</u> ? 1 [] X Years/months/weeks/days 88 [] Unknown 99 [] Does not apply
	If yes, how long before the event did these attempts end? 1 [] X Years/months/weeks/days 88 [] Unknown 99 [] Does not apply
	If yes, was weapons acquisition purposeful, opportunistic or related to other purposes (e.g. sport shooting, hunting, personal protection etc.)? 1 [] Purposeful 2 [] Opportunistic 3 [] Criminal 4 [] Other 88 [] Unknown 99 [] Does not apply
13.	Did the individual (attempt to) acquire/purchase a <u>ready-made</u> explosive device? 1 [] No 2 [] Yes 88 [] Unknown
	If yes, how long before the event did these attempts start? 1 [] X Years/months/weeks/days 88 [] Unknown 99 [] Does not apply
	If yes, how long before the event did these attempts <u>end</u> ? 1 [] X Years/months/weeks/days

	88 [] Unknown 99 [] Does not apply
	If yes, was acquisition of the ready-made explosive purposeful or opportunistic? 1 [] Purposeful 2 [] Opportunistic 3 [] Criminal 4 [] Other 88 [] Unknown 99 [] Does not apply
14.	Did the individual (attempt to) acquire the chemicals necessary for an explosive substance? 1 [] No 2 [] Yes 88 [] Unknown
	If yes, how long before the event did these attempts <u>begin</u> ? 1 [] X Years/months/weeks/days 88 [] Unknown 99 [] Does not apply
	If yes, how long before the event did these attempts end? 1 [] X Years/months/weeks/days 88 [] Unknown 99 [] Does not apply
	If yes, was chemicals acquisition purposeful or opportunistic? 1 [] Purposeful 2 [] Opportunistic 3 [] Criminal 4 [] Other 88 [] Unknown 99 [] Does not apply
15.	Did the individual (attempt to) acquire the (laboratory) equipment necessary to construct an explosive device? 1 [] No 2 [] Yes 88 [] Unknown
	If yes, how long before the event did these attempts <u>begin</u> ? 1 [] X Years/months/weeks/days 88 [] Unknown 99 [] Does not apply
	If yes, how long before the event did these attempts end? 1 [] X Years/months/weeks/days 88 [] Unknown 99 [] Does not apply

If yes, was laboratory ac	equisition purposeful or opportunistic?
1 [] Purposeful	
2 [] Opportunistic	
3 [] Criminal	
4 [] Other	
88 [] Unknown	
99 [] Does not apply	
16 Did the individual (atten	npt to) construct an explosive device?
•	ipt to) construct an expressive device.
1 [] No	
2 [] Yes	
88 [] Unknown	
If yes, how long before to	he event did these attempts <u>begin</u> ?
1 [] X Years/months/v	veeks/davs
88 [] Unknown	•
99 [] Does not apply	
99 [] Does not apply	
If was how long before t	he went did these attempts and?
	he event did these attempts <u>end</u> ?
1 [] X Years/months/v	veeks/days
88 [] Unknown	
99 [] Does not apply	
If ves. was construction	of the explosive purposeful or opportunistic?
1 [] Purposeful	The first of the f
<u>=</u>	
2 [] Opportunistic	
3 [] Criminal	
4 [] Other	
88 [] Unknown	
99 [] Does not apply	
17. Did the individual (atten	npt to) obtain or construct an incendiary device?
1 [] No	
2 [] Yes	
88 [] Unknown	
99 [] Does not apply	
If yes, what kind of incer	ıdiary device?
1 [] Describe	
88 [] Unknown	
99 [] Does not apply	
99 [] Does not appry	
If was how long before t	he event did these attempts begin?
	he event did these attempts <u>begin</u> ?
1 [] X Years/months/v	veeks/aays
88 [] Unknown	
99 [] Does not apply	
If yes, how long before the	he event did these attempts <u>end</u> ?
1 [] X Years/months/v	veeks/days

	88 [] Unknown 99 [] Does not apply
	If yes, was acquisition of the incendiary device purposeful or opportunistic? 1 [] Purposeful 2 [] Opportunistic 3 [] Criminal 4 [] Other 88 [] Unknown 99 [] Does not apply
18.	Were attack planning and attack preparation sequential (ordered) or parallel (chaotic) activities? 1 [] Sequential 2 [] Parallel 88 [] Unknown 99 [] Does not apply
CO	ONCEALMENT AND OPERATIONAL SECURITY
1.	Did the individual use a false name / alias? 1 [] No 2 [] Yes 88 [] Unknown
	If yes, please list false names / aliases: 1 [] Description 88 [] Unknown 99 [] Does not apply
	If yes, how long before the event did this begin? 1 [] X Years/months/weeks/days 88 [] Unknown 99 [] Does not apply
2.	Did the individual use an online alias / false e-mail address? 1 [] No 2 [] Yes 88 [] Unknown 99 [] Does not apply
	If yes, please list online aliases: 1 [] Description 88 [] Unknown 99 [] Does not apply
	If yes, how long before the event did this begin? 1 [] X Years/months/weeks/days 88 [] Unknown 99 [] Does not apply

3.	Did the individual suddenly begin to display surreptitious or paranoid behavior? 1 [] No 2 [] Yes 88 [] Unknown
	If yes, what kind of behavior? 1 [] Description 88 [] Unknown 99 [] Does not apply
	If yes, how long before the event did this begin? 1 [] X Years/months/weeks/days 88 [] Unknown 99 [] Does not apply
4.	Did the individual use multiple mobile phones or SIM cards? 1 [] No 2 [] Yes 88 [] Unknown 99 [] Does not apply
	If yes, how long before the event did this begin? 1 [] X Years/months/weeks/days 88 [] Unknown 99 [] Does not apply
5.	Did the individual use veiled language in communications with fellow extremists or co-conspirators? 1 [] No 2 [] Yes 88 [] Unknown 99 [] Does not apply
	If yes, how long before the event did this begin? 1 [] X Years/months/weeks/days 88 [] Unknown 99 [] Does not apply
6.	Did the individual take measures to safeguard the secrecy of his/her intentions/preparations? 1 [] No 2 [] Yes 88 [] Unknown 99 [] Does not apply?
	If yes, what kind of measures? 1 [] Describe 88 [] Unknown 99 [] Does not apply

7.	Did the individual use data protection measures? 1 [] No 2 [] Yes 88 [] Unknown 99 [] Does not apply
	If yes, how long before the event did this begin? 1 [] X Years/months/weeks/days 88 [] Unknown 99 [] Does not apply
8.	Did the individual attempt to identify or dissuade potential informants? 1 [] No 2 [] Yes 88 [] Unknown
	If yes, how long before the event did this begin? 1 [] X Years/months/weeks/days 88 [] Unknown 99 [] Does not apply
9.	Did the individual make last minute changes to meeting locations? 1 [] No 2 [] Yes 88 [] Unknown 99 [] Does not apply
	If yes, how long before the event did this begin? 1 [] X Years/months/weeks/days 88 [] Unknown 99 [] Does not apply
10.	Did the individual hide weapons, explosives or other incriminating evidence? 1 [] No 2 [] Yes 88 [] Unknown
	If yes, how long before the event did this begin? 1 [] X Years/months/weeks/days 88 [] Unknown 99 [] Does not apply
11.	Did the individual attempt to find out if he/she was under surveillance/had attracted the authorities' attention? 1 [] No 2 [] Yes 88 [] Unknown
	If yes, how long before the event did this begin?

1	[] X Years/months/weeks/days
88	[] Unknown
99	[] Does not apply

EARLY WARNING / LEAKAGE BEHAVIOR

1.	Did the individual (inadvertently) communicate to others involvement in suspicious activities? 1 [] No 2 [] Yes 88 [] Unknown
	If yes, how did the individual communicate his/her involvement? 1 [] Describe 88 [] Unknown 99 [] Does not apply
	If yes, how long before the event did this <u>first occur?</u> 1 [] X Years/months/weeks/days 88 [] Unknown 99 [] Does not apply
	If yes, how long before the event did this <u>last</u> occur? 1 [] X Years/months/weeks/days 88 [] Unknown 99 [] Does not apply
2.	Did the individual (inadvertently) communicate his radical or extremist convictions to others? 1 [] No 2 [] Yes 88 [] Unknown
	If yes, how did the individual communicate his/her extremist convictions? 1 [] Describe 88 [] Unknown 99 [] Does not apply
	If yes, how long before the event did this <u>first</u> occur? 1 [] X Years/months/weeks/days 88 [] Unknown 99 [] Does not apply
	If yes, how long before the event did this <u>last</u> occur? 1 [] X Years/months/weeks/days 88 [] Unknown 99 [] Does not apply
3.	Did the individual express a desire to commit an unspecified attack, online or in person? 1 [] No

	2 [] Yes, online 3 [] Yes, in person 88 [] Unknown
	If yes, how long before the event did this <u>first</u> occur? 1 [] X Years/months/weeks/days 88 [] Unknown 99 [] Does not apply
	If yes, how long before the event did this <u>last</u> occur? 1 [] X Years/months/weeks/days 88 [] Unknown 99 [] Does not apply
4.	Did the individual express a desire to die for a cause / achieve martyrdom, online or in person? 1 [] No 2 [] Yes, online 3 [] Yes, in person 88 [] Unknown
	If yes, how long before the event did this <u>first</u> occur? 1 [] X Years/months/weeks/days 88 [] Unknown 99 [] Does not apply
	If yes, how long before the event did this <u>last</u> occur? 1 [] X Years/months/weeks/days 88 [] Unknown 99 [] Does not apply
5.	Did the individual express a desire to commit a specific attack, online or in person? 1 [] No 2 [] Yes, online 3 [] Yes, in person 88 [] Unknown
	If yes, how long before the event did this <u>first</u> occur? 1 [] X Years/months/weeks/days 88 [] Unknown 99 [] Does not apply
	If yes, how long before the event did this <u>last</u> occur? 1 [] X Years/months/weeks/days 88 [] Unknown 99 [] Does not apply
6.	Did the individual issue threats to intended target(s)? 1 [] No 2 [] Yes

	88 [] Unknown 99 [] Does not apply
	If yes, how long before the event did this <u>first</u> occur? 1 [] X Years/months/weeks/days 88 [] Unknown 99 [] Does not apply
	If yes, how long before the event did this <u>last</u> occur? 1 [] X Years/months/weeks/days 88 [] Unknown 99 [] Does not apply
7.	Did the individual plan or intend to escape after completing the attack? 1 [] No 2 [] Yes 88 [] Unknown 99 [] Does not apply
8.	Did the individual plan or intend to die during the attack? 1 [] No 2 [] Yes 88 [] Unknown 99 [] Does not apply
9.	Did the individual come into contact with or was he/she known by the authorities while conducting planning or preparation activities? 1 [] No 2 [] Yes 88 [] Unknown
	If yes, how long before the event did this occur? 1 [] X Years/months/weeks/days 88 [] Unknown 99 [] Does not apply
	If yes, was the individual at that time suspected of involvement in extremism or terrorism? 1 [] No 2 [] Yes 88 [] Unknown 99 [] Does not apply
P	OST-PREPARATION PHASE
1.	Did the individual display a conspicuous drop in attack-related activities between completing planning & preparatory activities and executing the attack? 1 [] No 2 [] Yes 88 [] Unknown 99 [] Does not apply

	If yes, how long did this 'phase of little activity' last, measured in months: 1 [] Describe 88 [] Unknown 99 [] Does not apply		
G	GEOSPATIAL CHARACTERISTICS		
1.	Where was the individual's primary place of registered residence during plan/prep work? 1 [] City/place, country 88 [] Unknown		
2.	Where was the <i>actual</i> target? 1 [] <i>City/place</i> , <i>country</i> 88 [] Unknown 99 [] Does not apply		
3.	Where was the <i>planned</i> target? 1 [] City/place, country 88 [] Unknown 99 [] Does not apply		
1.	Did planning activities take place at a different location than residence? 1 [] No 2 [] Yes, all 3 [] Yes, some 88 [] Unknown		
	If yes, please describe where: 1 [] City/place, country 88 [] Unknown 99 [] Does not apply		
5.	Did preparatory activities take place at a different location than residence? 1 [] No 2 [] Yes, all 3 [] Yes, some 88 [] Unknown		
	If yes, please describe where: 1 [] City/place, country 88 [] Unknown 99 [] Does not apply		
5.	Did planning activities take place at a different location than preparatory ones? 1 [] No 2 [] Yes, all 3 [] Yes, some 88 [] Unknown		

7.	Where did the individual attend paramilitary training? 1 [] City/place, country 88 [] Unknown 99 [] Does not apply
8.	Where did the individual participate in combat as a NSA? 1 [] City/place, country 88 [] Unknown 99 [] Does not apply
9.	Where did the individual (try to) hide weapons / incriminating evidence? 1 [] City/place, country 88 [] Unknown 99 [] Does not apply
10.	Where did the individual's violence justifying/encouraging contacts reside? 1 [] City/place, country 88 [] Unknown 99 [] Does not apply
11.	Were applicable, what was the shortest distance in km's between the following locations? 1 [] Residence and planning location: 2 [] Residence and preparatory location: 3 [] Residence and target: 4 [] Residence and paramilitary training location: 5 [] Residence and site of participation in combat as NSA: 6 [] Residence and hiding place incriminating evidence: 7 [] Residence and location of violence legitimizing authorities
RELATED ACTIVITIES	
1.	Did the individual engage in activities related to an interest in extremism that were however, not related to the planning or preparation of the attack under consideration? 1 [] No 2 [] Yes 88 [] Unknown
	If yes, what categories apply? 1 [] Describe 88 [] Unknown 99 [] Does not apply