

Chapter 1

Introduction: Purpose and Organization of the Handbook

by Alex P. Schmid

The idea for this *Handbook of Terrorism Prevention and Preparedness* goes back twenty years. I first had the desire to put together such a Handbook two decades ago when, between 1999 and 2005, I was Officer-in-Charge of the Terrorism Prevention Branch (TPB) of the UN Office on Drugs and Crime (UNODC) in Vienna, Austria. In the wake of the events of 9/11, those were very busy days. However, not only was there not enough time to write or assemble such a volume, I did not have a mandate from the UN Crime Commission, nor were there any resources made available from UN member states to do so. Since then much has changed - but neither TPB nor any of the other UN Counter-Terrorism agencies and branches has produced a work like the present one.

Once I retired from the United Nations, I no longer had to wait for an official mandate and I finally had enough time to produce this *Handbook* with the help of friends and colleagues who were prepared to contribute a chapter. I received technical support for producing this volume from the International Centre for Counter-Terrorism - The Hague (ICCT) of which I am, since 2012, a Research Fellow.

The choice for an online publication was the result of the following consideration. A volume with more than 1,000 pages, marketed by a commercial publisher, would have been prohibitively expensive for the average reader and would have placed it well beyond the budget of some of the people who might profit most from it. The decision to make this Handbook freely available online was supported by the volume's contributors who all felt that this was the right thing to do to achieve maximum distribution with no loss of time. I am deeply thankful to them as well as to the staff of ICCT which provided the necessary support.

The need for a *Handbook of Terrorism Prevention and Preparedness* needs little explanation in the light of the fact that the dominant approach of counterterrorism, based largely on heavy-handed military action, has been such a failure - especially in the Middle East. The traditional military instrument of deterrence has not worked against enemies who have, in most cases, no fixed territorial basis while claiming to love death more than life. The decapitation of terrorist organizations by killing their leaders in drone strikes has created martyrs rather than broken their organization's will to fight. The collateral damage of military strikes has often turned family members, friends and other witnesses near and far into avengers. For many societies, the "cure" of militarized counterterrorism has been worse than the "disease" of terrorism.

The following facts substantiate this claim. Since 9/11, much of counterterrorism has been counter-productive. Al-Qaeda numbered only about 400 fighters in Afghanistan when 19 of them killed nearly 3,000 civilians from more than sixty countries on September 11, 2001, in the US. Today there are, next to Al-Qaeda, about one hundred other Islamist extremist groups active in nearly 70 countries worldwide, killing more than 120,000 people in the last few years alone.¹ Al-Qaeda and its affiliates now have an estimated 40,000 fighters. Altogether there are some 230,000 active jihadists in our midst² – not counting other religious as well as right-wing and other secular terrorists.

¹ Munasinghe, Sandun, Rachael Garne'r, Jean Heery, Gavin James, and Daniel Rey, *Global Extremism Monitor: Islamist Violence after ISIS*. London: The Tony Blair Institute for Global Change. 15 January 2020, p. 6. Available at: <https://institute.global/policy/global-extremism-monitor-islamist-violence-after-isis>.

² Schmitt, Alex P., 'Two decades after 9/11, militants have only multiplied,' *The New York Times*, 20 November 2018. Available at: <https://www.nytimes.com/2018/11/20/us/politics/terrorism-islamic-militants.html> (citing Jones, S.G. and Nicholas Harrington, 'The evolution of the Salafi-Jihadist threat,' Centre for Strategic and International Studies, 20 November 2018. Available at: <https://www.csis.org/analysis/evolution-salafi-jihadist-threat>).

The US alone conducted military counterterrorism missions in 80 countries at a cost which has conservatively been estimated at US \$2 trillion. The price paid by civilians in the ‘Global War on Terror’ (GWOT) has been staggering - in the post- 9/11 wars an estimated 43,074 civilians died in Afghanistan, 23,924 in Pakistan, between 184,382 and 207,156 in Iraq, 49,591 in Syria, 12,000 in Yemen – altogether between 312,971 and 335,745 civilians or one hundred times more civilians than had perished in the 9/11 attacks. Add to this the members of national military and police forces in Afghanistan, Pakistan, Iraq, Syria and Yemen who lost between 173,073 and 335,745 men and women in uniform.³ Worldwide, between 770,000 and 801,000 human beings have died in the post-9/11 wars. This total estimate includes civilian deaths – some 312,000 or more – as well as dead terrorists (more than 250,000).⁴ In addition, an estimated 37 million people have been internally or externally displaced as a result of the wars the US military fought post-9/11.⁵

Given the fact that the counterterrorism efforts of the last two decades have taken such a heavy toll and that victory is not in sight, it is high time to rethink the way terrorism should be countered. By focussing on *prevention*, this Handbook seeks to stimulate such rethinking.

The editor has invited forty diverse scholars and (former) counterterrorism practitioners to share their insights with the readers of this volume. Some of the contributors are ‘old hands’ with decades of experience. Others are promising newcomers to the field. Most of the chapters have been written by single authors, while a few chapters have two or even three (co-) authors. 15 of the 43 contributors to this *Handbook* are women. While the majority of the authors are from Europe or North America, there are also more than a handful from Asia, the Middle East and Africa. The biographies of the contributors can be found at the end of each chapter.

The *Handbook* is structured into five parts, comprising 32 chapters, next to this introductory chapter and a concluding chapter by the editor and a foreword, a postscript and a comprehensive bibliography as follows:

- Part I: Lessons for Terrorism Prevention from the Literature in Related Fields (4 chapters);
- Part II: Prevention of Radicalization (6 chapters);
- Part III: Prevention of Preparatory Acts (7 chapters);
- Part IV: Prevention of, and Preparedness for, Terrorist Attacks (10 chapters);

³ Crawford Neta C., and Catherine Lutz, ‘Human Cost of Post-9/11 Wars: Direct War Deaths in Major War Zones, Afghanistan and Pakistan (October 2001 – October 2019); Iraq (March 2003 – October 2019); Syria (September 2014–October 2019); Yemen (October 2002–October 2019); and Other,’ Costs of War Project, Brown University, Providence, RI, 13 November 2019. Available at:

<https://watson.brown.edu/costsofwar/files/cow/imce/papers/2019/Direct%20War%20Deaths%20COW%20Estimate%20November%2013%202019%20F>.

⁴ Brown University, ‘The cost of global war on terror: \$ 6.4 trillion and 801,000 lives,’ Brown University News, 13 November 2019. The first of the two reports is authored by Neta C. Crawford and titled ‘United States Budgetary Costs and Obligations of Post-9/11 Wars through FY2020: \$ 6.4 Trillion.’ Available at: <https://watson.brown.edu/costsofwar/files/cow/imce/papers/2019/US%20Budgetary%20Costs%20of%20Wars%20November%202019.pdf>; the second report, is authored by Neta C. Crawford and Catherine Lutz.

⁵ Vine, David, Cala Coffman, Katalina Khoury, Madison Lovasz, Helen Bush, Rachel Leduc, and Jennifer Walkup. *Creating Refugees: Displacement Caused by the United States’ Post-9/11 Wars*. Watson Institute, Brown University, 2020. Available at:

https://watson.brown.edu/costsofwar/files/cow/imce/papers/2020/Displacement_Vine%20et%20al_Costs%20of%20War%202020%2009%2008.pdf.

- Part V: Preparedness and Consequence Management (5 chapters).

The idea of combining prevention with preparedness requires little explanation. Preparedness contributes to prevention and, should prevention fail, preparedness reduces harm and facilitates better crisis- and consequence-management. The relationship between the two is fleshed out in more detail by the editor of this volume in chapter 2.

What follows here is a brief preview of the content of each chapter.

Chapter 2: “Terrorism Prevention: Conceptual Issues (Definitions, Typologies and Theories)” has been written by Alex P. Schmid, the editor of the *Handbook*. Here the key concepts are explored, including the differences between terrorism prevention, prevention of radicalization and prevention of extremism – concepts with admittedly fuzzy borders. Prevention itself is by no means an un-problematical concept: while everyone agrees that prevention is generally a good thing when it comes to take precautionary measures against harmful phenomena and ominous developments, it is often less than clear where and when to apply which instruments and measures to achieve a non-event - the one prevented. The author introduces a distinction between upstream-, midstream- and downstream-terrorism prevention and outlines which type of measures ought to be considered in each of these phases as terrorism emerges and evolves. The conceptual and theoretical tools developed in the second chapter have been offered to the other contributors of this *Handbook* for consideration before they embarked on writing their chapters.

Preview of the Five Parts and their Chapters

PART I: Lessons for Terrorism Prevention from the Literature in Related Fields

Since terrorism prevention is clearly lagging behind the study of prevention in some other, but related, research fields, Part I explores what can be learned from crime prevention, conflict prevention as well as from the counterinsurgency and genocide prevention literature.

Chapter 3 opens with a contribution by Kelly A. Berkell (Senior Research Fellow at the Center on Terrorism at John Jay College of Criminal Justice, New York), titled “A Criminological Approach to Preventing Terrorism: Situational Crime Prevention and the Crime Prevention Literature.” The author explores what “lessons learned” from crime prevention can teach us for the prevention of terrorism by introducing models and foundational concepts in crime prevention, with a focus on situational crime prevention and its theoretical underpinnings. In the field of terrorism studies, the political character of terrorism has often overshadowed its criminal nature but a crime remains a crime whether it is political or not. As the saying goes, opportunities not only make thieves, but can also make terrorists. Smart changes in environmental parameters, the author argues, can not only reduce ordinary crime hotspots but are also helpful against extraordinary terrorist acts.

Chapter 4 by Andreas Schädel (Research Fellow at the Berghof Foundation) and Hans J. Giessmann (Director Emeritus of the Berghof Foundation) is titled “De-Exceptionalizing the Terrorist Phenomenon: Lessons and Concepts from Conflict Prevention and Transformation.” It argues that terrorism is not as extraordinary as many of those think who argue that one should never shake hands with terrorist murderers. At the end of the day, most terrorist campaigns have been brought to a close not by superior law enforcement tactics or by military victories,

but by secret negotiations. Terrorism is often part of a wider conflict and the instruments of conflict resolution should, the authors argue, be applied. Conflict prevention can also be a form of terrorism prevention, and while not all conflicts can be prevented there are opportunities for conflict transformation that should be explored.

Chapter 5 by Rob de Wijk (Founder of The Hague Centre for Strategic Studies (HCSS)) is titled “Contributions from the Military Counter-insurgency Literature for the Prevention of Terrorism.” The author notes that counter-insurgency (COIN) operations and counterterrorist operations, while sometimes overlapping, differ in important ways. COIN operations require a “hearts and minds” approach to win the trust of the people while counterterrorism operations, directed against small groups of clandestine actors, require search, arrest and neutralization tactics that should not inconvenience the general public too much. The author discusses the lessons that can be learned from various counterinsurgency operations for counterterrorist campaigns and explores the role of deterrence by denial and deterrence by punishment and their respective places in COIN and counterterrorism operations.

Chapter 6 by Clark McCauley (Research Professor of Psychology at Bryn Mawr College) is titled “‘Killing Them to Save Us:’ Lessons from Politicide for Preventing and Countering Terrorism.” While both terrorism and genocide involve the one-sided killing of unarmed civilians (though on a different scale), the two extremes of violence are rarely discussed together. This is exactly what the author – the founder of the journal *Dynamics of Asymmetric Conflict: Pathways toward Terrorism and Genocide* - does. He stresses the importance of studying both sides in a conflict dyad when it comes to exploring the early phases of a conflict when prevention is still a possibility. The author also calls for an acknowledgment of the threats and grievances as perceived by both sides.

PART II: Prevention of Radicalization

Since nobody is born a terrorist, socialisation of an individual or group to accepting this form of one-sided killing of unarmed people, and mobilisation of an individual or group to actually engaging in murdering civilians (usually complete strangers), are required for most acts and campaigns of terrorism. Radicalization can take place in prisons, refugee camps, secular and religious schools, and diasporas as well as online. Part II explores these pathways to terrorism in six chapters.

Chapter 7, titled “At the Crossroads: Rethinking the Role of Education in Preventing and Countering Violent Extremism,” by Thomas K. Samuel (Consultant with UNODC and UNDP) first describes how and why schools and universities have become targets of terrorist recruitment. Then the author explores how and why even privileged students can be radicalised and recruited by terrorist organizations. Based on his research in South-East Asia, he advocates that values and qualities such as critical thinking, empathy, and religious and cultural literacy be integrated into subjects taught in schools as well as made part of extra-curricular activities in order to make young people more resilient against extremist ideologies.

Chapter 8, titled “Prevention of Radicalization to Terrorism in Prisons: A Practical Guide,” by Gary Hill (Director, Staff Training and Development of the International Corrections and Prisons Association) draws on his decades-long experience working with correctional institutions, to familiarize the readers with the early signs of radicalization among prison inmates. Prisons have traditionally been depicted as schools for criminals and are now being

widely seen as hotbeds for recruitment efforts by extremists. The author reviews prison programs dealing with radicals and presents his concept of “dynamic security” as a way to manage and control the situation.

Chapter 9, titled “Prevention of Radicalization to Terrorism in Refugee Camps and Asylum Centers,” is authored by Barbara H. Sude (former Senior Political Scientist at RAND). She draws on her earlier work in this field and identifies what contributed to the rise of violent militant groups and terrorists among refugees confined to camps during major historical migration crises. Then the author turns to the current situation in Africa and Asia where many young people (many of whom have seen nothing of the world outside their refugee camp) can be tempted to join a terrorist group. The experience of Palestinian refugees is one that is not unique in the contemporary world. There are now more than 70 million people who are internally displaced or have become external refugees. In many cases, their situation in camps is comparable to the one of prisoners and radicalization is a clear and present danger if government policies are not responsive to the plight of those driven from their homes.

Chapter 10, titled “Preventing Terrorism from Students of Extremist Madrasahs: An Overview of Pakistan’s Efforts,” by Asad Ullah Khan and Ifrah Waqar (Research Fellows, Institute of Strategic Studies (IISS), Islamabad, Pakistan) explores the situation in religious schools (*madrasas*) in Pakistan. These serve mainly poor young males who are offered free boarding and lodging while receiving an often fundamentalist religious education. The authors explore the social setting of *madrasas* and their role in education, politics and terrorism as well as government efforts to reform them, both in terms of broadening the curriculum, and in preventing them from becoming instruments of political entrepreneurs. The authors note that these efforts have so far largely failed due to lack of political will to implement reforms.

Chapter 11 deals with the “Prevention of Radicalization in Western Muslim Diasporas” and has been written by Nina Käsehage (Senior Lecturer at the University of Rostock, Germany). She looks at the situation of Muslims in five countries - Germany, Great Britain, France, Belgium and Denmark - which have all produced homegrown Muslim terrorists who have become foreign fighters in Syria. The author follows the national and international discussions about the causes of radicalization, e.g. the French debate between those who see a ‘radicalization of Islam’ and others who see an ‘Islamization of radicalism.’ It discusses promising ways of preventing and countering radicalization, such as the Danish Aarhus model - elements of which have also been introduced in other European countries. The chapter concludes with a set of recommendations, partly based on the author’s own fieldwork in Salafist milieus in several European countries.

Chapter 12 is titled “Prevention of Radicalization on Social Media and the Internet” and is authored by Sara Zeiger and Joseph Gyte (Hedayah International Center of Excellence for Countering Violent Extremism, Abu Dhabi, UAE). They review in detail the methods terrorists employ to spread their propaganda and how they recruit online. The authors also present the theoretical foundations of methods to prevent radicalization on social media and the internet. Subsequently, their chapter explores current and newly emerging prevention and preparedness strategies which address the online space, introducing specific examples, predominantly from Europe, Southeast Asia and East Africa, and showing what selected governments are doing to tackle the problem of online radicalization.

PART III: Prevention of Preparatory Acts

Like other purposeful human activities, acts and campaigns of terrorism require preparation. Interference with such preparations (e.g. with arms acquisition or financing) can prevent or foil terrorist attacks. This is the focus of Part III.

Chapter 13, titled “Prevention of Recruitment to Terrorism” has been written by Ahmet S. Yayla (former Chief of Counter-terrorism in Sanliurfa, Turkey and currently Research Fellow at George Washington University, US). The author argues that preventing terrorist recruitment is one of the most effective methods of countering terrorism. Although the recruitment strategies of different organizations may vary, they follow a similar pattern, with recruiters first trying to identify qualified candidates, then build rapport, followed by indoctrination, and finally luring the vulnerable candidates into the clandestine organization. He documents this with examples from his own decades-long experience in Eastern Turkey where he set up a successful program for interrupting and preventing terrorist recruitment after having identified relevant societal factors and triggers that recruiters use to spot and subsequently control the young men and women they recruited.

Chapter 14 is on the “Prevention of Terrorist Financing” by Jessica Davis (former analyst with the Canadian Security Intelligence Service, currently president of Insight Threat Intelligence). The author explores how terrorists raise, use, move, store, manage, and obscure their funds. In doing so, she distinguishes how terrorist cells and individual actors finance their plots and attacks and how terrorist organizations finance their activities. She describes national and international instruments and mechanisms to prevent terrorist financing, and how (and to what extent) bodies like the Financial Action Task Force are able to detect and prevent such activities.

Chapter 15 by Sajjan M. Gohel (International Security Director for the Asia-Pacific Foundation) is entitled, “Prevention of Cross-Border Movements of Terrorists: Operational, Political, Institutional and Strategic Challenges for National and Regional Border Controls.” The author explores how borders are both points of vulnerability for states and opportunities to catch terrorists trying to cross them and how international cooperation is crucial to succeed in intercepting terrorists. The author looks at a number of crucial borders such as those between India, Pakistan and Afghanistan; and those between Turkey and Greece. He analyzes and evaluates obstacles to border security of a political, institutional, and operational/technical nature, specifically focusing on assessing the employed externalisation strategy of the European Union.

Chapter 16 is “Prevention of the Procurement of Arms and Explosives by Terrorists” by Mahmut Cengiz (Professor at the Schar School of Policy and Government, George Mason University, USA) who analyzes how to prevent terrorist organizations from getting a hold of firearms and explosive materials. He discusses several jihadist and other groups and shows how they procured arms and bomb-making materials. The chapter discusses policy implications and actions that need to be taken in order to prevent terrorist organizations from obtaining weapons. In addition, the chapter explores the challenges that need to be overcome in order to develop a policy model that can be applied to whole regions where terrorist groups operate.

Chapter 17 is titled “Prevention of CBRN Materials and Substances getting into Terrorist Hands” and is authored by Ioannis Galatas (Ret. Brigadier-General and clinical allergy and immunology specialist, Greece). The author explores how terrorists seek to obtain chemical,

biological, radiological and nuclear (CBRN) substances. He urges that the CBRN threat should be studied more seriously and that investigators should follow the ways terrorists are plotting their attacks. EU countermeasures and international regulation and control bodies along with preventive measures are addressed. The author identifies existing gaps, thereby facilitating possible solutions and the development of countermeasures that can lead to a better control of CBRN agents and a more efficient management of the risks.

Chapter 18 is titled “Prevention of (Ab-)Use of Mass Media by Terrorists (and vice versa)” and is authored by Alex P. Schmid (Research Fellow, ICCT, The Hague). It explores both the uses of mass media by terrorists and the use of terrorism-generated news by mass media. Ever since the effectiveness of ‘propaganda by the deed’ was discovered in the second half of the 19th century, terrorists have exploited the mass media’s propensity to cover bad news extensively, first with the help of the printing press, followed by radio and television. There is a fine line between the public’s right to know and the media creating exaggerated anxiety in the public by sensationalising terrorist-related news. Existing media guidelines for covering terrorist news are discussed and evaluated with an eye on harm prevention resulting from saturation coverage of terrorist incidents.

Chapter 19, titled “Prevention of (Ab-)Use of the Internet for Terrorist Plotting and Related Purposes” is written by Branislav Todorovic (Institute for National and International Security, Serbia) and Darko Trifunovic (Senior Research Fellow Faculty of Security Studies, University of Belgrade). The authors focus on the use of the internet as a tool for assisting terrorist activities and seeks to provide guidance for addressing abuse with the help of legal, and information and communications technology (ICT) methods. They detail the many possibilities for misuse of publicly available information on the internet for planning, organizing, and executing acts of terrorism and suggest workable measures to counter terrorist plots. They also explore tools for overcoming the anonymity of the internet and describe some of the current legal restrictions and technological shortcomings. The various forms of use/abuse of the internet by terrorists are classified and structured by type and purpose, and possibilities for prevention are discussed for each cluster.

Part IV: Prevention of, and Preparedness for, Terrorist Attacks

In Part IV, the focus is on the interface between prevention and preparedness. Ten chapters explore what can, and what has been done, ranging from early warnings to the prevention of cyber-terrorism.

Chapter 20, “The Role of Intelligence in the Prevention of Terrorism (Early Warning – Early Response)” is authored by Ken Duncan (former Chairman of the Interagency Intelligence Committee on Terrorism in the US government). This chapter outlines how intelligence has adapted to terrorism’s ever-changing threat and the critical role warning has played and will continue to play in countering and mitigating that threat. To understand the capabilities and limitations of warnings, it also examines the factors behind its collection, analysis, production, dissemination, and reception - highlighting the critical relationships between intelligence and law enforcement agencies and between those agencies and their consumers. In addition, it also traces its evolution as part of the US government’s organizational and operational response to terrorism from the late 1960s until the present, examining both its strengths and weaknesses.

Chapter 21, “Prevention of Low-tech, Lone Actor Terrorist Attacks: The Case of the United States, 1970– 2019,” is authored by Joshua Sinai (Professor of Practice in Counterterrorism Studies, Capitol Technology University, in Laurel, Maryland). The author examines the nature of the threat posed by ideologically extremist homegrown lone actors in the United States, based on his analysis of incidents from the period 1970-2019 (listed in an appendix). The research objective is to formulate best practice-based measures to counter lone actor attacks during the formative pre-incident phase. The author examines how these plots were discovered and how incidents were resolved, and what measures were or not applied, particularly in preventing those that had failed. This chapter also discusses what security technologies are being deployed to detect and counter such perpetrators.

Chapter 22, “Prevention of Gun-, Knife-, Bomb- and Arson-based Killings by Single Terrorists” by Annelies Pauwels (Research Fellow at the Flemish Peace Institute in Brussels, Belgium) also focuses on lone actor terrorism and its prevention, studying lone actor attacks in Western Europe over a period of twenty years. Her main attention is on how to deny potential terrorists the access to weapons and explosives in order to reduce the mortality of attacks. She offers four case studies on each attack type and presents at the end recommendations aimed at further restraining access to weapons and limiting online and hands-on training in the use or manufacturing of arms. The author argues that while a hundred percent safety from lone-actor attacks is probably unattainable, it is possible to diminish their ability to successfully carry out an attack.

Chapter 23, “Prevention of Bomb Attacks by Terrorists in Urban Settings (with a Focus on Improvised Explosive Devices)” is written by Rachel Monaghan (Professor of Peace and Conflict at the Centre for Trust, Peace and Social Relations at Coventry University) and David McIlhatton (Professor of Protective Security and Resilience, Coventry University). The authors note that while much of the literature on the subject has been in direct response to the impact of specific terrorist attacks that have occurred in recent times in many cities, less attention has been devoted to the understanding how policy- and practice-based approaches in disciplines that are not considered mainstream in the counterterrorism discourse can be used to enhance the protection of crowded places. This chapter analyzes, on the one hand, the question, “what measures have been undertaken?” and on the other hand, but to a lesser extent, “who should be responsible for counterterrorism-related protective security measures?”

Chapter 24, “Prevention of Kidnappings and Hostage-Takings by Terrorists,” is authored by Sabrina Magris (President of the École Universitaire Internationale, Italy). Kidnapping and hostage taking have become major sources of income for terrorists and Al-Qaeda even produced a mini-manual on the subject (included in the appendix to this chapter). Hostage taking also provides terrorists, thanks to the publicity it generates, with a platform to make their grievances and objectives known to the world. The author presents and discusses some of the phases of kidnappings and hostage-taking and the prevention and intervention options available for both potential victims and bystanders at the scene of crime.

Chapter 25 by Susanne Martin (Political Science Department, University of Nevada, Reno) addresses the difficult subject of “Preventing Suicide Attacks by Terrorists” with a special focus on Israel which experienced two Palestinian intifadas marked by “martyrdom” operations. She finds that while counterterrorism efforts in Israel and those involving the hijacking of passenger planes have been fairly successful, until now no remedies for the sources of the violence that inspire groups to use suicide attacks or individuals to sacrifice their lives

and those of their victims have been found. However, tactical solutions can and do reduce the frequency and severity of suicide attacks.

Chapter 26, “The Terrorist Threat to Transportation Targets and its Prevention” has been written by Brian M. Jenkins (Director of the National Transportation Security Center at the Mineta Transportation Institute in California). The author addresses both aerial hijackings and terrestrial attacks on commuter trains and busses, drawing from a unique database of national and international incidents. He notes that the relatively successful model developed to counter aerial hijackings cannot be replicated on the ground due to the high volume of local commuters. Instead of establishing security checkpoints, terrestrial transportation operators ought to seek to mitigate casualties through environmental design and rapid intervention, while also enlisting passengers themselves in detecting suspicious behavior.

Chapter 27, titled “Layers of Preventive Measures for Soft Target Protection against Terrorist Attacks” by Alex P. Schmid (Research Fellow, ICCT) analyses the shifting focus of terrorist targeting and discusses the many audiences terrorists seek to influence by attacking specific victim groups. He presents mainly mid- and down-stream counter-measures and develops a security concept including 13 Layered Preventive Measures (LPM) for reducing the risk of attacks on soft targets. In the concluding section, the author juxtaposes his own LPMs with the Good Practices (GP) recommended in 2017 by the Global Counter Terrorism Forum which consists of an equal number of measures. As an Appendix, the chapter lists ‘12 Rules for Preventing and Countering Terrorism’, a guideline which the author originally developed when he was Officer-in-Charge of the Terrorism Prevention Branch of UNODC.

Chapter 28, “Prevention of Terrorist Attacks on Critical Infrastructure” is authored by Anneli Botha (Senior Researcher at the Department of Political Studies and Governance, University of the Free State in South Africa). She notes that such attacks have been on the increase but finds that while the threat of cyber-attacks against critical infrastructure is a reality, the use of firearms and explosives still remains the preferred modus operandi. However, the author also notes a growth of drone attacks. She argues that developing preventative measures must start with understanding the “enemy” - the motivations and capabilities of terrorist organizations. To get ahead of the curve, it is necessary to make continuous risk-, threat- and vulnerability-assessments and implement measures for anticipating infrastructure attacks.

Chapter 29, “Cyber Attacks by Terrorists and Other Malevolent Actors: Prevention and Preparedness. With Three Case Studies on Estonia, Singapore and the United States” has been written by Shashi Jayakumar (Executive Coordinator, Future Issues and Technology at the S. Rajaratnam School of International Studies (RSIS), Nanyang Technological University, Singapore). The author examines attacks against computer infrastructure and Critical Information Infrastructure (CII) by all actors with relevant capabilities - not just non-state groups such as Al-Qaeda or ISIS. He notes that while conventional terrorist groups might have the intention to launch major cyberattacks, they do not yet have the resources and skills to carry out the type of attacks that might lead to major loss of life. His wide-ranging chapter also focuses on technical aspects of cyber protection, system resilience, risk mitigation, as well as nurturing human talents within a viable cyber ecosystem.

Part V: Preparedness and Consequence Management

Here the focus of five chapters is on what to do to minimize harm should prevention fail, and how this can be done, exploring victim- and human rights issues among others.

Chapter 30 on the “Prevention of Lasting Traumatization in Direct and Indirect Victims of Terrorism” is authored by Shannon Nash (Network Manager of the North American and Arctic Defence and Security Network). In her chapter, the author reviews findings of important studies on how to reduce risk factors contributing to lasting traumatization of terrorism victims. The chapter identifies a variety of responses and mental health strategies to mitigate damage, including support for first responders, and the promotion of resilience in children. She also focuses on disaster planning, stressing that preparations occurring both before and after an attack can contribute toward more effective responses, based on a public health model.

Chapter 31 focuses on the “Prevention of Public Panic in the Wake of Terrorist Incidents” and is jointly co-authored by Juan Merizalde, John D. Colautti, and James J.F. Forest (all associated with the Center for Terrorism & Security Studies, University of Massachusetts, Lowell). The authors note that studies on community resilience indicate that being well prepared, effectively communicating accurate and relevant information and empowering citizens to take recommended actions, all help to significantly reduce fear and anxiety in times of crises. While one of the objectives of terrorists is to create public panic, studies show that such an outcome is unlikely; studies of public behavior following terrorist incidents conclude that most people are logically-reacting, rational beings who tend not to panic or be frozen in fear. Following a review of research findings, the chapter concludes with a brief discussion of policy implications.

Chapter 32 is titled “Prevention of Major Economic Disruptions Following Acts of Terrorism – The Case of the Bali Bombings of 2002 and 2005” and is authored by Richard J. Chasdi (Department of Political Science, George Washington University). The writer focuses on the economic consequences of terrorism, with particular attention to the tourism industry and related services sectors. By selecting a twice hit location (Bali, Indonesia) with a three years interval between the terrorist attacks, lessons learned and not learned emerge. The author applies a three-level analysis to the consequences, looking at international, national and local responses, which can also serve as a framework for similar studies in the future.

Chapter 33, “Prevention of Revenge Acts and Vigilantism in Response to Acts and Campaigns of Terrorism” by Marie Robin (Researcher at the Centre Thucydide at Université Paris 2 Panthéon-Assas) explores an important, but under-researched, aspect of terrorism -the desire for individual revenge. This desire becomes especially strong when government responses are considered weak or inadequate by sectors of society. Since terrorism is often a strategy of provocation, giving in to this understandable, but ultimately counter-productive impulse needs to be countered. The author examines the dangers posed by vigilantism and concludes with offering recommendations on how to deal with private revenge acts and vigilante efforts to restore “order” outside the rule of law.

Chapter 34 looks at the “Prevention of Human Rights Violations and Violations of International Humanitarian Law while Fighting Terrorism” and is authored by Tom Parker (former UK Intelligence Officer and subsequently UN Consultant). The author examines the role of human rights violations by state actors in fuelling non-state terrorism. Based on rich historical and contemporary materials, he shows how, again and again, governments fall into

what he terms “the terrorist trap,” giving in to provocations rather than devising a strategy not dictated by the terrorists. He argues that adhering to higher moral standards than terrorists is crucial in winning the battle for the hearts and mind of the people. Adhering to international human rights law does not hinder but helps prevent states from falling into the terrorists’ trap.

In addition to these chapters in the five parts of this *Handbook*, there is a concluding chapter 35 “Terrorism Prevention – An Agenda for Action” by Alex P. Schmid, the editor of this *Handbook*.

An extensive General Bibliography on the prevention of radicalization, extremism and terrorism as well as preparedness has been compiled by Ishaansh Singh (Terrorism Research Initiative). It can be found at the end of the volume. However, each chapter also has its own bibliography while also offering a list of clickable, web-based resources.

Each chapter of the *Handbook* is self-contained and can be read on its own as there are few cross-references. Information about the contributors to this volume can be found at the end of each chapter.

Despite its size, the *Handbook* has its limitations. Except for a few chapters (Chapters 4, 6 and 34), this volume does not address the issue how to prevent - and prepare for - state or regime terrorism. While the editor has dealt with state terrorism and repression in some of his previous work,⁶ he decided not to focus on this problem in the present *Handbook* due to spatial constraints.

⁶ Schmid, Alex P., ‘Research on Gross Human Rights Violations: A Programme.’ Leiden, C.O.M.T., 1988, vii, 163 pp. 2nd enlarged edition 1989, v, 243 pp.); Schmid, Alex P. ‘Repression, State Terrorism, and Genocide: Conceptual Clarifications.’ in Bushnell, Timothy. et al., *State Organized Terror. The Case of Internal Repression*. Boulder, Westview Press, 1991, Chapter 2, pp. 23-37; Schmid, Alex P., ‘Human Rights and Genocide’; in Charny, Israel W. (ed.), *Encyclopedia of Genocide*. Vol. I Santa Barbara, ABC-CLIO, 1999, pp. 343-345; Schmid, Alex P. ‘Magnitudes and Focus of Terrorist Victimization’ in Ewald, Uwe and Ksenija Turkovic (eds.), *Large-Scale Victimization as a Potential Source of Terrorist Activities*. Amsterdam, IOS, 2006, pp. 3-19.