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IMPROVISED EXPLOSIVE DEVICES IN THE SAHEL: HUMANITARIAN RESPONSES AND CURRENT CAPACITIES

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Improvised Explosive Devices in the Sahel: Humanitarian Responses and Current Capacities
Geneva International Centre for Humanitarian Demining (GICHD), April 2026 © GICHD

Cover photo: Impact of an improvised explosive device in Mali, Andrew Grantham.

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LIST OF ABBREVIATIONS AND ACRONYMS

ACLED	Armed Conflict Location and Event Data
Amended Protocol II	Protocol on Prohibitions or Restrictions on the Use of Mines, Booby-Traps, and Other Devices as amended on 3 May 1996 to the Convention on Prohibitions or Restrictions on the Use of Certain Conventional Weapons Which May Be Deemed to Be Excessively Injurious or to Have Indiscriminate Effects
APMBC	Convention on the Prohibition of the Use, Stockpiling, Production and Transfer of Anti-Personnel Mines and on Their Destruction
CCW	Convention on Prohibitions or Restrictions on the Use of Certain Conventional Weapons Which May Be Deemed to Be Excessively Injurious or to Have Indiscriminate Effects
ECOWAS	Economic Community of West African States
ERW	explosive remnants of war
EXTRACCT	Explosive Weapons Trauma Care Collective
GICHD	Geneva International Centre for Humanitarian Demining
IDP	internally displaced person
IED	improvised explosive device
IHL	international humanitarian law
IMAS	International Mine Action Standards
INTERPOL	International Criminal Police Organization
MINUSMA	United Nations Multidimensional Integrated Stabilization Mission in Mali
NATO	North Atlantic Treaty Organization
NTS	non-technical survey
TNMA	Technical Note for Mine Action
UNICEF	United Nations Children's Fund
UNIDIR	United Nations Institute for Disarmament Research
UNMAS	United Nations Mine Action Service
UNODC	United Nations Office on Drugs and Crime
UXO	unexploded ordnance

EXECUTIVE SUMMARY

Over the past five years, the Sahel region has seen a steady rise and geographical spread in the use of improvised explosive devices (IEDs), a term used to describe an explosive device placed or fabricated in an improvised manner.[1] In the Sahel, these devices are mainly used to target security forces. However, they also put civilians in danger.

Impact of IEDs on people and communities in the Sahel

Between January 2020 and December 2024, at least 2,370 IEDs were recorded across Burkina Faso, Chad, Mali, Niger and northern Nigeria, resulting in more than 5,000 direct victims. Civilians make up about 40 per cent of casualties. Due to gaps in reporting, the true number of incidents and victims is likely higher.

Since 2022 there has been an increase of the number of IED incidents, and a decrease of IEDs found and disposed of. This could be linked to the rapid spread of contamination, increased pressure on national systems, political instability and reduced international support.

As in other explosive ordnance affected regions, the impacts go beyond those directly injured or killed. The effects are also felt by victims' families, displaced people and entire communities.

The consequences are both immediate and long-term. IEDs disrupt freedom of movement, meaning communities may avoid certain roads or areas for extended periods. In practical terms, this can mean farmers unable to cultivate land, traders unable to reach markets, and people cut off from essential services or humanitarian assistance. This causes economic hardship and ongoing psychological stress from living in unsafe environments.

Limited data on how IEDs affect women, men, girls and boys differently makes it harder to fully understand these impacts and to design targeted responses, particularly in risk education and victim assistance.

How IEDs are used in the Sahel

This study identifies two main transnational patterns of IED use:

- In Mali, Burkina Faso and much of Niger, IED use is spreading into new areas
- In northern Nigeria, Chad and south-eastern Niger, IED use is concentrated in already affected areas

Across the region, IEDs are most often placed along roads and routes used by security forces. However, civilians use the same roads, which means they are also exposed to the risk. Most devices target vehicles or infrastructure. The repeated use of the same routes, both by military and civilians, means that areas can remain dangerous over long periods.

Challenges for policy and responses

Countries in the region have shown commitment to addressing the IED threat and are engaging with international frameworks, such as the Anti-Personnel Mine Ban Convention. These frameworks support coordination, reporting and international cooperation.

However, IEDs vary widely in how they are made and used. This makes it difficult to classify them clearly within international frameworks and develop consistent responses.

In the Sahel, two main approaches co-exist to address the threat posed by IEDs:

- Counter-IED, security-based responses, which aim to prevent the use of IEDs by armed groups and protect security forces
- Mine action, which focuses on protecting civilians, namely through risk education and victim assistance.

Although mine action and counter-IED efforts have different objectives, they are linked in practice. For example, roads may be cleared for military purposes, also enabling humanitarian access and civilian use.

This may create opportunities for coordination and in some Sahel countries, both approaches fall within the same institutional approach. Risk education, information management, victim assistance, and advocacy are areas where there is clear complementarity.

However, it may also create challenges. Particularly, it can affect how communities understand and trust different actors and make it harder to uphold the humanitarian principles of neutrality, impartiality and independence.[2]

Strengthening the response

All countries in the study have systems in place to respond to IEDs, but most face significant resource and capacity constraints. While progress has been made in developing strategies, laws and standards, many are still in early stages.

Reducing the humanitarian impact of IEDs in the Sahel requires coordinated action across government institutions and partners. Key priorities include:

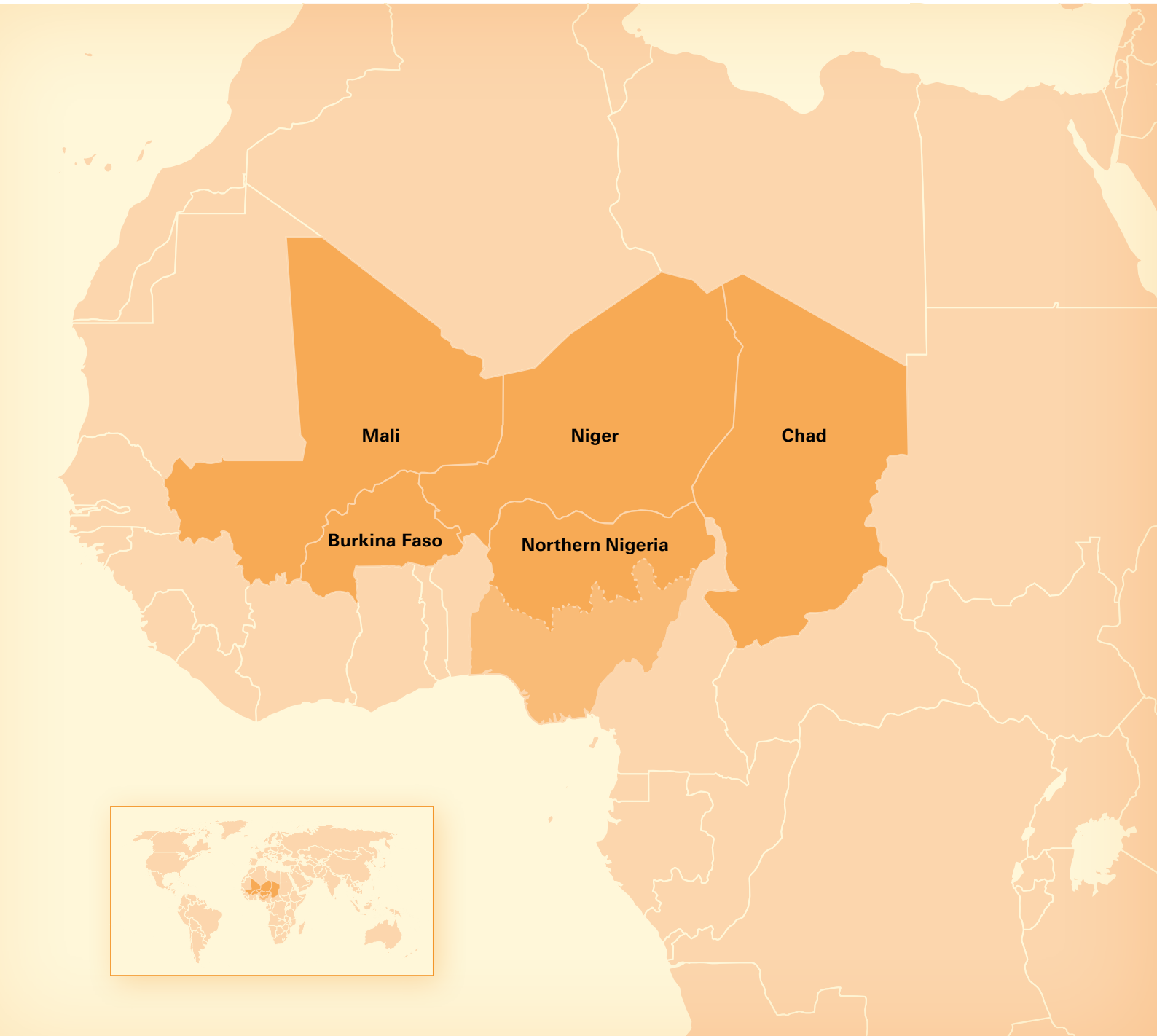
- strengthening national leadership and ownership, in mine action as well as counter-IED responses
- improving data collection and information sharing
- expanding risk education to help communities stay safe
- increasing support for victims and affected communities

Without sustained political commitment, adequate resources and coordinated international support, the impact of IEDs is likely to continue or worsen.

Who can benefit from this study?

This study is designed to support national authorities, policymakers and practitioners working on mine action, protection and security in the Sahel. It is also relevant for donors, international organizations and partners seeking to better understand the scale and impact of the IED threat.

The findings can be used to inform policy decisions, programme design and funding priorities, and to strengthen coordination between humanitarian and security actors.



METHODOLOGY

The present study examines the use of, and responses to, improvised explosive devices in the Sahel. The scope of the analysis is limited to Burkina Faso, Chad, Mali, Niger, and northern Nigeria.

The quantitative analysis of the IED threat across the Sahel is based on data collected by ACLED (Armed Conflict Location and Event Data), a global monitor that collects, analyses, and maps data on conflict and protest. The data were recorded between 1 January 2020 and 31 December 2024, with data subject to a recoding process that is further detailed in annex I on methodology. The analysis considered 2,049 IED incidents, involving 2,370 IEDs, their geographical and temporal distribution, and their tactical characterization, which is "the manner in which an IED incident is planned and conducted (tactical design) and the intent (purpose of device)".[3] The impact of IED use on direct victims was also assessed using this data set. The methodology selected allowed comparison of the situation across countries despite the challenges faced by national authorities in collecting data. It is acknowledged, however, that the data set gives only an indication of the threat rather than representing a complete record. In reality, the scale of IED use and the number of direct victims is likely to be far greater than shown.

The study was complemented with qualitative research concerning the impact of IEDs on the enjoyment of human rights, on the economy, and on the disruption of humanitarian access. This was supported by a literature review and by field research in Ouagadougou (Burkina Faso), Bamako (Mali), and Maiduguri (Nigeria), where interviews with the national authorities and humanitarian actors were conducted. Various bilateral meetings with relevant organizations and experts were also conducted, both on and offline. In addition, reports published by UNIDIR, UNMAS, the Landmine and Cluster Munition Monitor, and the Mine Action Review, as well as Article 5 extension requests and Article 7 reporting under the APMBC were invaluable in providing the information and frameworks necessary for this study.

This combination of data-driven analysis, literature review, and qualitative research enables the present study to show quantitative trends in the IED threat and to share qualitative insights into the impact of IEDs and the current response capacity across the Sahel. It provides a knowledge base for enhancing understanding of the unique challenges posed in a region facing the increasing use of IEDs, rising numbers of victims, and decreasing funding for response efforts.

INTRODUCTION

Between 2020 and 2024, the Sahel region witnessed the proliferation of IED use amid a context of broader conflict. The number of devices recorded more than tripled during that period. Across the region, over 5,000 direct victims were affected by a total of 2,370 IEDs.[4] By 2022, the number of direct victims recorded each year had surpassed 1,000 and was continuing to rise.

Although security forces are primarily the target of IEDs, two out of every five direct victims recorded are civilians. At least 1,000 civilians were killed as a direct result of IEDs across the region over the five years under review. Given the limitations of the reported data, however, the number of civilian casualties is likely to be much higher in reality. A further 1,025 civilian survivors were recorded, although data on the nature and extent of injuries also remain limited.

In addition to direct victims, the repercussions of the use of IEDs are far-reaching. IEDs exacerbate the risks posed to communities by insecurity, displacement, and climate disasters. They further disrupt economic activities and supply chains, severely undermining food security and access to medical support and other essential services. Humanitarian organizations, which already face significant financial constraints, must rely on expensive air bridges for access in situations where road use is considered extremely high risk. Internally displaced persons (IDPs) need to travel along some of the routes most affected by IEDs to reach IDP camps and must contend with the risk of IED contamination on return to their place of origin.

This severe and disproportionate humanitarian impact has been brought to the attention of the international mine action community, but there had been a lack of understanding of the threat, context, and national governance structures, thereby limiting the capacity of the community to act in a more concerted and structured manner.

The purpose of the present research is to provide a better understanding of the humanitarian impact of IEDs in the region, the existing international, regional, and national response structures that enable the humanitarian responses and mine action, and their progress and impact.

During the conduct of the study it became clear that it was not possible to analyse the mine action governance and response frameworks without analysing the respective counter-IED or IED threat mitigation strategies and response mechanisms as they were intertwined. As the study shows, this reflects the historical existence, or lack, of landmine contamination in a country, the nature of the IED threat, and the ongoing, active conflicts in the region.

Mine action, humanitarian responses to improvised explosive devices, and counter-improvised explosive device approaches

From a mine action perspective, the Sahel region could be described as a combination of States that have already faced conventional landmine contamination (Chad, Niger, Nigeria) and those that are contending with landmine contamination, albeit from improvised devices, for the first time in their history (Burkina Faso, Mali). In recognition of the increasing threat from IEDs, national authorities across the Sahel have started to develop responses aligned with international obligations and good practice typically associated with mine action, namely under the APMBC. According to the International Mine Action Standards (IMAS), mine action focuses on "activities which aim to reduce the social, economic and environmental impact of explosive ordnance".[5] This is done through explosive ordnance risk education, clearance, victim assistance, stockpile destruction, and advocacy.

From a counter-IED perspective, the region could be described as one that faces an active and increasing threat from IEDs that target security forces and State entities as a result of the activity of non-State armed groups and ongoing local conflicts. Counter-IED efforts focus on reducing the IED threat through a three-pronged approach: attack the networks, defeat the device, and prepare the force.[6] Counter-IED approaches are being implemented at the same time as mine action in the region. In some instances, there is a clear separation of roles and responsibilities, such as in Nigeria. In others, there is a less apparent distinction, such as Burkina Faso, where the national authority responsible for mine action is also responsible for the country's counter-IED strategy.

In response to the surge in IED use, all the Sahel States in the present study have received international support for both mine action initiatives and counter-IED efforts, despite the difference in the ultimate objectives of the two approaches. Amid protracted conflict, activities have largely remained distinct, even if at times the boundary between the humanitarian response to IEDs and security forces' responses in non-permissive environments has been blurred.

The GICHD has previously considered IED clearance and mine action in *An Initial Study into Mine Action and IEDs*[7] and the *Improvised Explosive Device Clearance Good Practice Guide*.[8] Further guidelines on IED disposal are set out in *IMAS 09.31: Improvised Explosive Device Disposal*.[9] All this work largely reflects the humanitarian imperative prompting early mine action IED disposal efforts in Iraq after the defeat of the Islamic State of Iraq and the Levant. Despite the specific nature of that context, those publications remain the principal references on the subject, outlining the operating envelope, namely the parameters, within which mine action organizations determine their suitability to carry out IED disposal. These identify the potential for mine action organizations to engage in IED disposal where military campaigns are deemed to be non-active and the technical complexity of the IEDs is assessed to be low. This has often been the case with patterned minefields or mine belts built of improvised landmines, and with urban environments. Nevertheless, the study acknowledges that these boundaries are context-specific and not always easy to define.[10]

Both mine action and counter-IED efforts involve government strategies, structures, resources, and activities. Even if they pursue distinct but complementary objectives, using distinct frameworks, methods, and activities, they share the aim of reducing the risk posed to communities by IEDs.[11] There are, therefore, areas of crossover where mine action and counter-IED efforts are mutually supportive and can promote a whole of government approach to explosive ordnance risk reduction.

This study outlines the mine action and counter-IED strategies, structures, capacities, and activities that exist in the Sahel region and their strengths and shortcomings. For this particular regional context, it provides recommendations for mine action engagement alongside parallel counter-IED systems.

The study comprises two main sections. It starts by defining the problem, outlining the IED threat and key trends. This is followed by an overview of current response capacities at the international, regional, and national levels, from both a mine action and a counter-IED perspective. The second main section also considers the progress and impact of those responses. Where the actual measurement of impact was considered premature, the study discusses anticipated outcomes and expected challenges. A final section suggests key conclusions and recommendations.

Annexes to the report provide an overview of the methodology used, technical information concerning international humanitarian law (IHL) governing IED use, and further reflections on the distinctions between mine action and counter-IED efforts.

COUNTER-IED CAPABILITIES (UPSTREAM)

- National policy, legislation, and regulations
- Security and control of explosives
- Counter-IED capability development
- Border controls
- Control of IED precursors
- IED risk education
- Intelligence-led operations
- Regional and international cooperation and information-sharing

COUNTER-IED CAPABILITIES (DOWNSTREAM)

- IED response: render safe
- IED response: scene exploitation
- Recovered evidence analysis
- Technical exploitation of recovered IEDs
- Identification of perpetrators
- Information management
- Judicial process
- Development of IED countermeasures

National counter-IED and mine action strategies should remain distinct but should be compatible and reflect a whole of government approach.

Destruction of stockpiles, alongside weapon and ammunition management, can support the security and control of explosives by mitigating the risk of military grade explosives being used as main charges. Weapon and ammunition management may also include safe storage practices for explosive chemicals.

Risk education is a legal obligation to protect civilians under international humanitarian law and international human rights law, even amid ongoing conflict (IMAS 12.10/01: Risk education for improvised explosive devices).

States Parties to the APMBC are obligated to report (through Article 7) and share (through Article 5 extension requests) information regarding the identification and extent of mine contamination, including IEDs that fit the definition under paragraph 1 of Article 2 of the Convention.

In permissive environments, mine action operators will conduct processes that resemble scene exploitation and technical exploitation of IEDs to enhance the safety of clearance activities. Such processes can also inform IED threat analysis and threat assessments (IMAS 07.14). However, mine action processes remain distinct from counter-IED exploitation, which primarily seeks to collect evidence for prosecution.

The sharing of information from information management systems is required for mine action in order to monitor contamination, inform IED threat analyses and assessments, and identify requirements for risk education, and victim assistance. Counter-IED information management, however, will likely include operational and forensic information, alongside intelligence. The sharing of information should be limited to what is strictly necessary for mine action activities.

PILLARS OF MINE ACTION

- Laws and regulations, national strategies and national mine action standards
- Stockpile destruction
- Risk education
- Advocacy
- Clearance
- Victim assistance
- Information Management

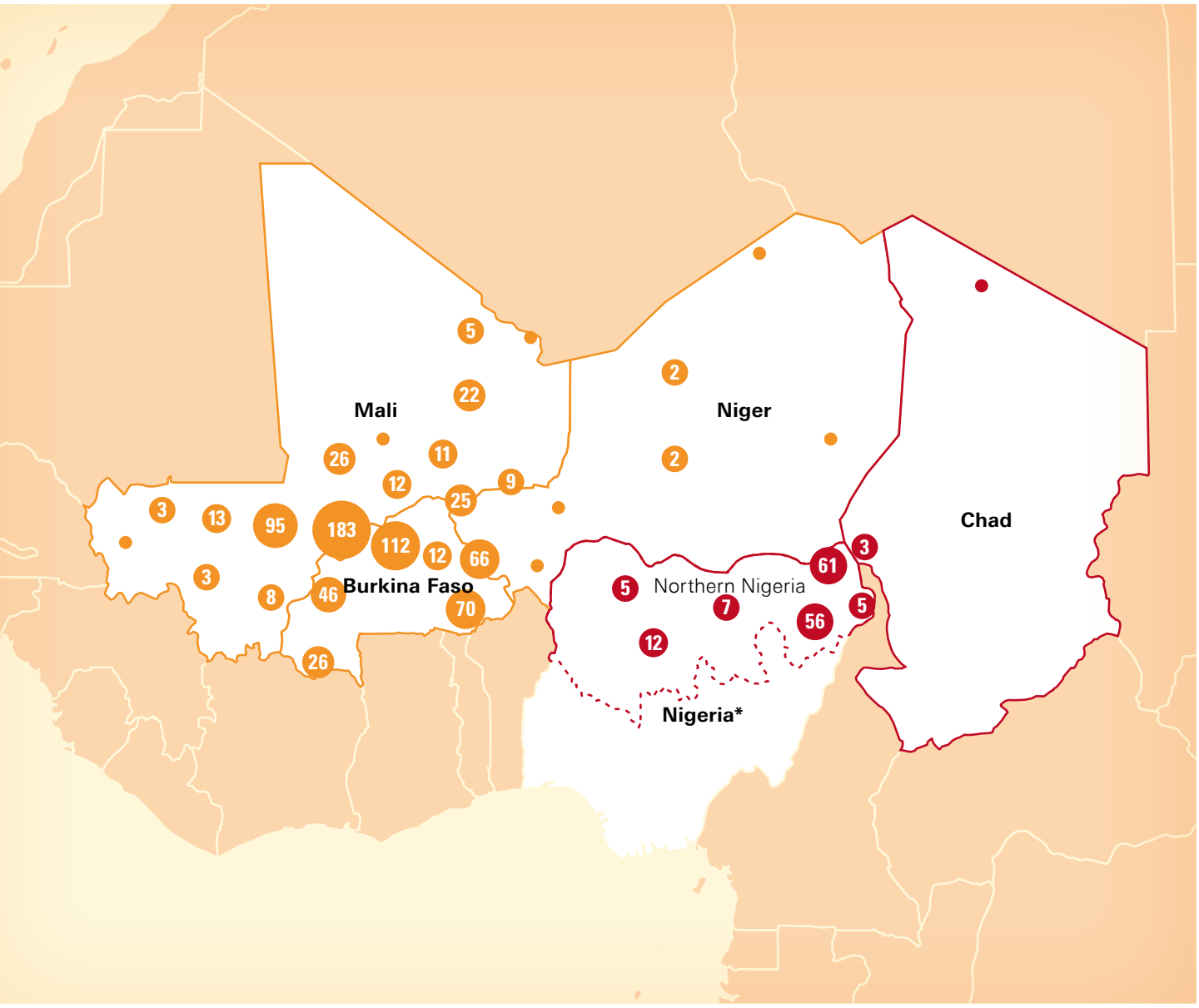
CHARACTERIZING THE THREAT

The present section seeks to provide a contextual understanding of the IED threat across the region. It draws primarily on analysis of quantitative data on the frequency and geographical distribution of IED incidents and the direct victims recorded. These data were supplemented with interviews and literature reviews as necessary. The section begins by considering the temporal and geographical trends in IED incidents and the tactical design of the devices in use. This is followed by discussion of the impact of IEDs in the region, including victims and the implications for human rights, economic opportunity, and humanitarian access. The section provides a foundation for understanding current response efforts, identifying gaps, and measuring progress.

Throughout the present section, the IED threat is broadly considered to fall into two transnational zones of conflict: Burkina Faso, Mali, and Niger; and Chad, the south-eastern border of Niger, and northern Nigeria. It is recognized that this two-zone categorization significantly oversimplifies the complexity of the situation in the region, but it is a useful and approachable way of framing the two distinct IED threats that affect the countries under review.

Figure 1: IEDs recorded 2020-2024

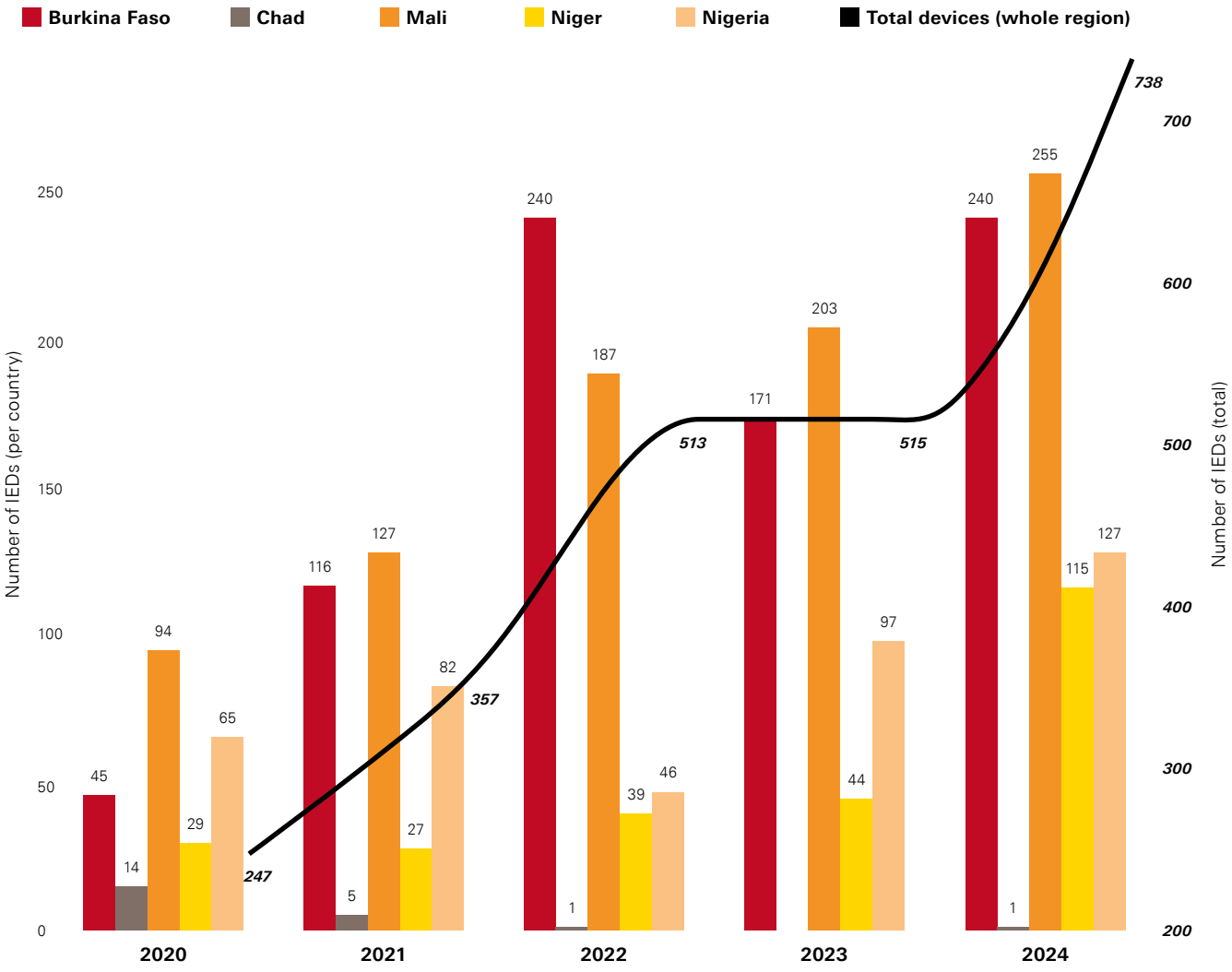
*For Nigeria, only data from Northern Nigerian states were considered in the analysis.



DEFINING THE THREAT

Temporal and geographical trends

Figure 2: The total number of IEDs recorded across the region under review (line) and the number of IEDs recorded by country (bars).



The number of IEDs recorded across the Sahel tripled over the five years under review, with the most acute increases in Burkina Faso and Mali. In Niger, despite the comparatively fewer IEDs recorded, there was a rise in the use of such devices after 2020. In Nigeria, the number of IEDs increased by over 60 percent between 2020 and 2024, affecting the broader Lake Chad area, including the Nigeria–Chad border. In Chad, the number of recorded devices remained comparatively low, with activity declining from a peak in 2020. These less frequent IED incidents in Chad were mostly confined to the Chad–Nigeria border region.

Figure 3: Distribution of IEDs recorded from 01 January to 31 December 2020.

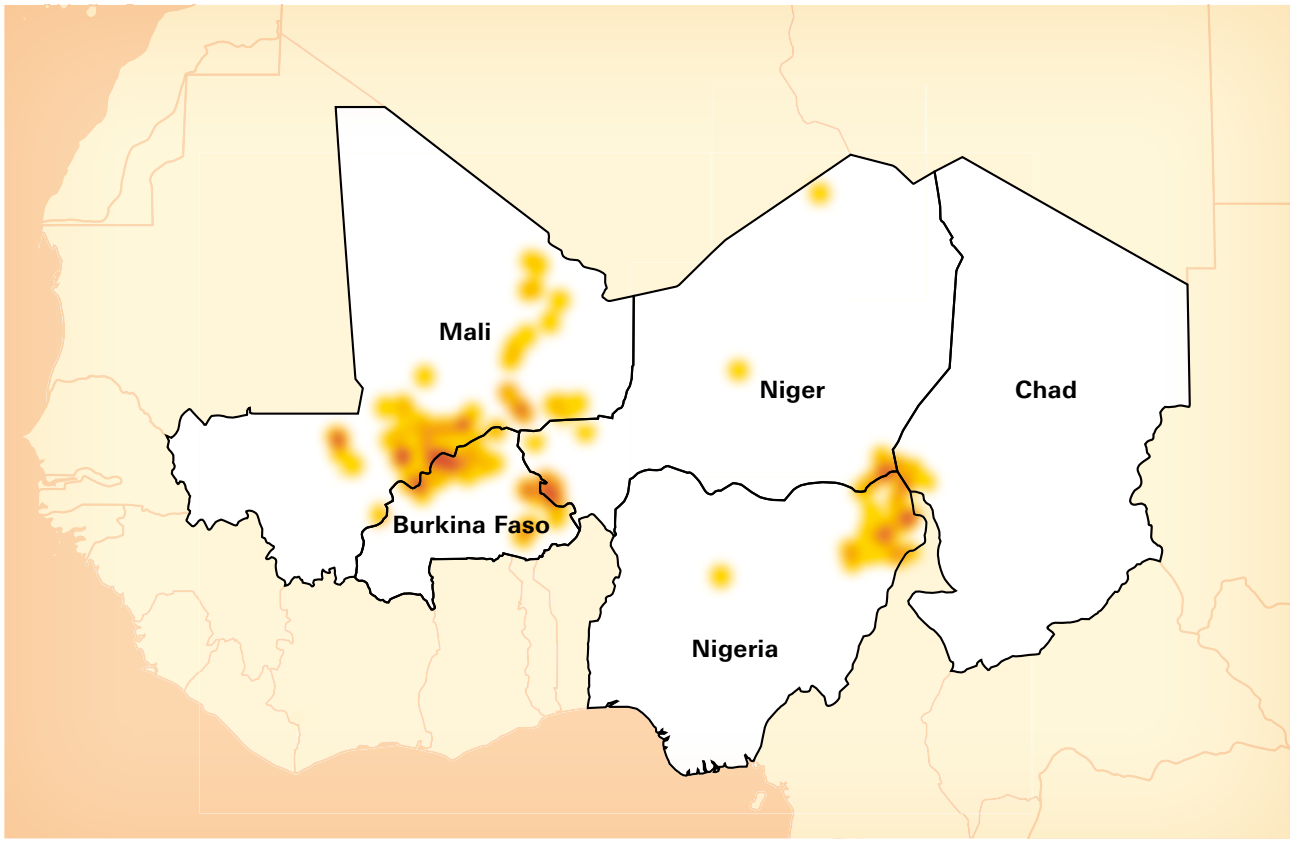
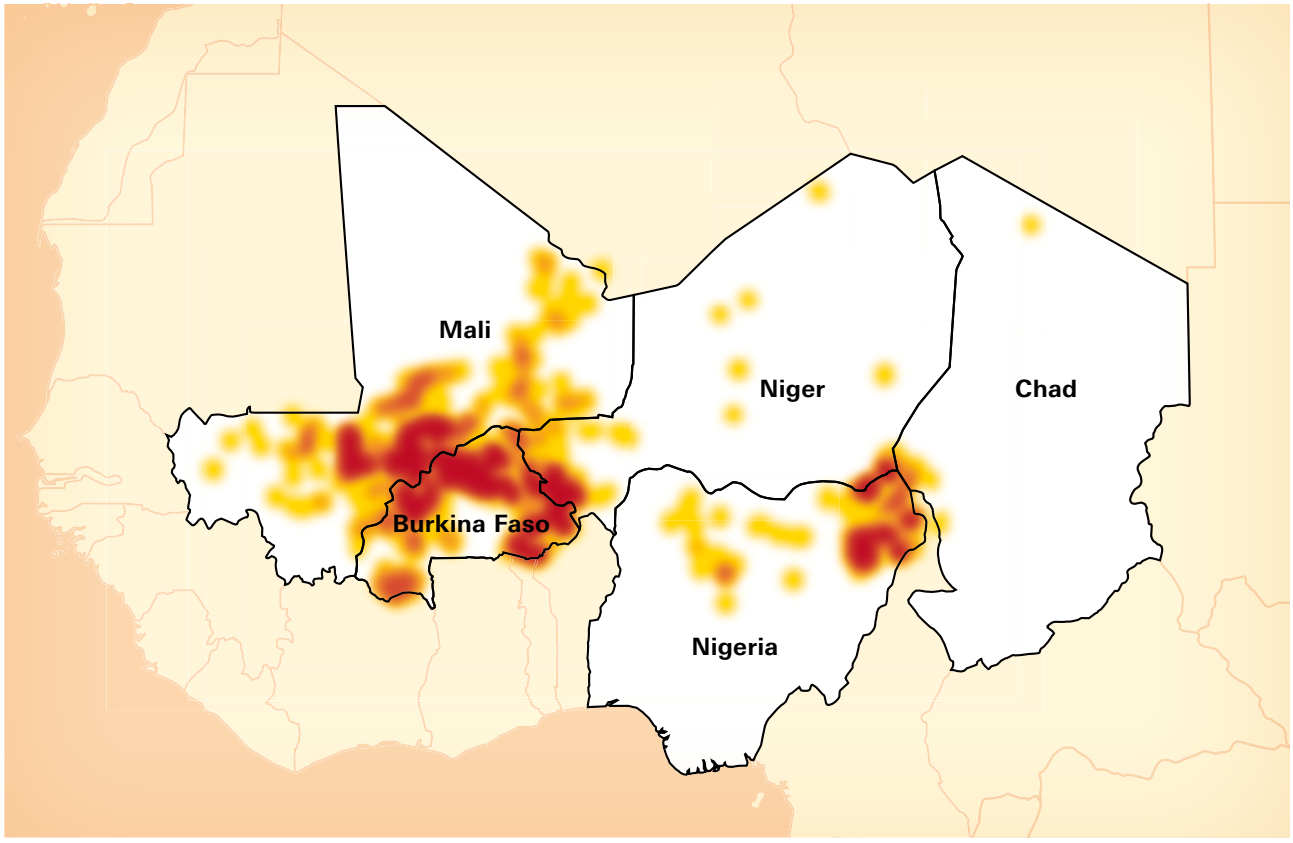


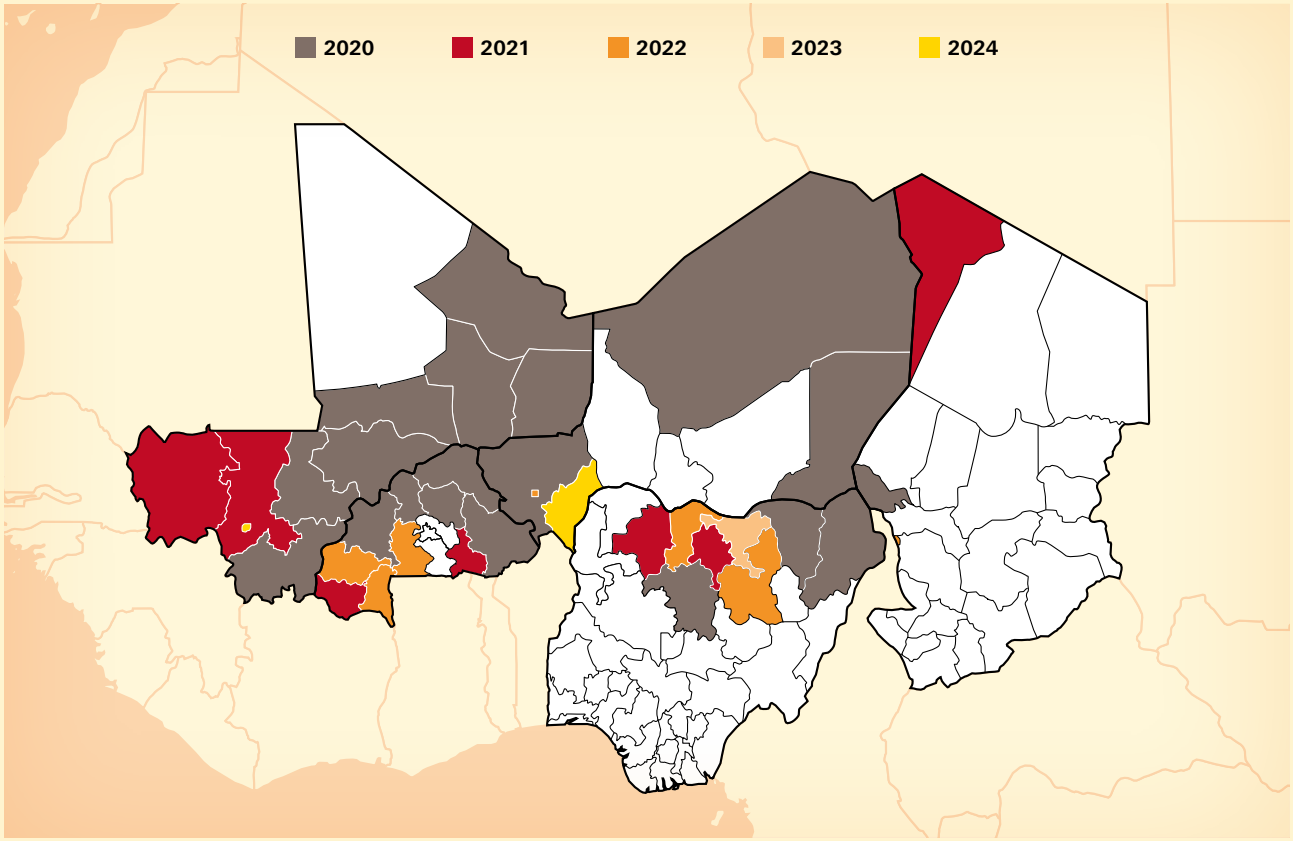
Figure 4: Distribution of IEDs recorded from 01 January 2020 to 31 December 2024. The use of IEDs expanded significantly in geographical terms after 2020.



Across the region, IEDs are primarily, though not exclusively, used to disrupt and deter the movement of security forces. As a result, the geographical spread of IED use typically represents the footprint of the security forces at any given time. As security operations expand, so does the IED threat. Across Burkina Faso and Mali, trends in the geographical location of IEDs demonstrate an expansion of the threat, rather than a shift in its geographic focus. The emergence of IED use in previously unaffected areas was noticeable, with no substantive decrease in IED activity in regions that had historically been a focus. This demonstrates the continued capacity of actors to increase IED manufacture and use as required to achieve their intended goals, with limited constraints. Without an enhanced response capacity, it is likely that the use of IEDs across Burkina Faso and Mali will continue to spread into historically unaffected areas.

Meanwhile, in Nigeria, there was no significant and long-term expansion of IED usage in the north-east. Rather, the number of devices recorded within the same geographical area increased over time. This, perhaps, reflects the more confined nature of the conflict in north-eastern Nigeria.

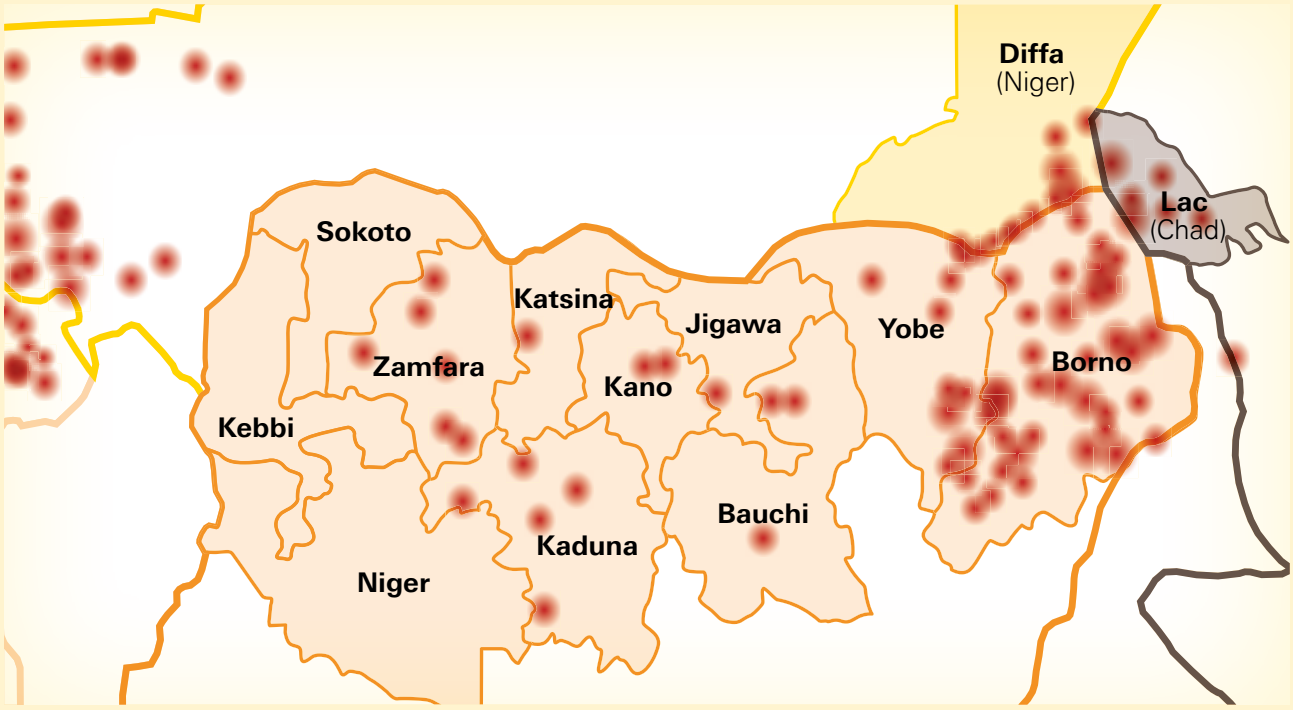
Figure 5: Affected administrative districts by year of first IED recorded.



In Mali, in 2020, the majority of devices were concentrated in the central Mopti region, with a lower level of activity in the northern regions of Gao, Kidal, and Timbuktu. A low level of IED activity affected bordering regions in north-western Burkina Faso. A separate zone of IED activity emerged in the Est region of Burkina Faso, with over 150 km between the two closest events recorded on opposing sides of the country. Niger was affected by a spillover from both neighbouring countries.

As of 2020 the proliferation of IED use in geographical terms was considerable, pushing progressively south and south-west in Mali year on year. Six devices were recorded in the Segou region of Mali in 2020, increasing to 52 in 2024. Burkina Faso too recorded a drastic expansion of IED use, which escalated into the central areas of the country, particularly the Centre-Nord region. The threat in Niger remained comparatively static.

Figure 6: IEDs in Northern Nigeria and bordering regions of Niger and Chad (2020-2024)



In Nigeria, the spread of IEDs can be loosely considered as falling within two zones of conflict. In the north-east, IED use was closely linked with insurgency in affected states. There, IED use was largely concentrated in Borno State, with some spillover into the neighbouring Adamawa and Yobe States (collectively referred to as the BAY States). Infrequent IED incidents related to insurgency in the north-east was also recorded, periodically, in Bauchi, Jigawa, Kaduna, and Kano States. IED usage in the north-east did not demonstrate a significant and long-term expansion. Rather, the number of devices recorded within the same geographical space increased over time. In north-western Nigeria, sporadic IED use was primarily related to criminality and community conflict, with little in the way of a demonstrable trend.

Tactical characterization of devices and extent of contamination

During the period under review, the majority of the IEDs recorded were single, static, emplaced devices intended to be anti-vehicle, anti-armour, anti-infrastructure, and, less typically, anti-personnel. The anti-infrastructure devices targeted primarily bridges, communications masts, buildings, and water access points. Such devices were most commonly employed for immediate to short-term use in areas where the presence of the intended target was highly likely to occur within a set time frame, such as during routine convoy movements.

The anti-personnel devices recorded included multiple incidents of booby-trapped corpses in Burkina Faso and Mali. This was supported by findings by the Small Arms Survey.[12] In Nigeria, interviews indicated that various high-value items, including cash, were used to attract people to the location of an IED prior to initiation. Anecdotal reporting also suggested that IEDs were employed by criminal entities in some cases for

Anti-armour: "An IED that utilizes a directional explosive effect primarily intended to penetrate armoured vehicles."
Anti-infrastructure: "An IED primarily intended to damage or destroy physical infrastructure such as pipelines, communications towers, bridges, buildings, utility lines and/or facilities such as electrical transformers or water pump houses."
Anti-personnel: "An IED primarily intended to kill or wound people."
Anti-vehicle: "An IED primarily intended to damage or destroy vehicles – is not intended to penetrate a vehicle's armour."
Obstacle creation: "An IED primarily intended to create an obstacle to impede movement or channel movement into a desired location, possibly as part of a complex attack or ambush."

Source: UNMAS IED Lexicon

obstacle creation, intending to discourage vehicles from bypassing illicit tax checkpoints.

In Burkina Faso, Mali, and Niger, the majority (92 per cent) of incidents involved a single IED. There was no evidence collected of large-scale improvised minefields or mine-belts,[13] although it is possible that improvised minefields could be identified in the future as the nature of the conflict evolves. While siege tactics were common across Burkina Faso and Mali, including the use of IEDs to deny access, it is thus not known whether the IEDs were emplaced in an improvised mine-belt formation or used in relative isolation to deny road access. Recorded events rarely described the use of more than one device within the same period in a limited geographic area (fewer than 8 per cent of events reported included more than one device). Events involving multiple devices (between 2 and 16) typically involved security forces encountering IEDs along a single stretch of road within a condensed timeframe. Available data did not allow an assessment of whether the devices were geographically related. The recording of the intentional emplacement of secondary devices, such as those that intentionally target first responders or disposal operators, was infrequent.

Most IEDs (over 59 per cent of all devices) across Burkina Faso, Mali, and Niger were recorded along roads. The devices were predominantly buried, and their assessed intent was to target security force vehicles, although the impact was often indiscriminate. The same routes were subject to the threat of IEDs year after year, demonstrating the recurring nature of the threat.

In Burkina Faso and Mali, 34 per cent of IEDs occurred in populated areas, posing a considerable threat to communities. A third of devices were recorded in populated rural areas, such as villages and communes, with far fewer (fewer than 4 per cent) occurring in urban centres. Devices were emplaced along roads within populated areas, at checkpoints, affixed to infrastructure (communications masts and bridges), or were improvised explosive booby-traps attached to motorcycles, the entrances of buildings, or water access points. In populated areas, security forces were the primary target, although IEDs were also frequently used to damage infrastructure. At least nine devices, however, were reported as being concealed within buildings, including homes, a town hall, and shops. In seven incidents, water access (pumps and water wells) was threatened.

In northern Nigeria, the majority of the IEDs recorded were used in populated areas, most commonly in rural locations (41 per cent). A surge in IEDs in rural population centres was recorded in 2024, with numbers almost tripling. This resulted in a tenfold increase in the number of civilian victims reported in rural areas. IEDs also frequently occurred along routes in Chad and Nigeria. Devices were recorded along all the major routes leading from Maiduguri, with security forces being the primary target. Both main supply routes and secondary roads were affected. Interviews indicated that IEDs were emplaced along routes linking garrison towns prior to attacks to inhibit the response of quick reaction forces.

Interviews indicated that the IEDs employed in some areas in Borno State in Nigeria could be considered improvised minefields, albeit with inconsistent mine-laying patterns. They were said to be both a defensive measure and to serve as an early warning system for the approach of opposition actors. These reports were supported by data indicating the presence of a high number of devices recorded in a matter of days near known actual or former strongholds of parties to the conflict. Devices were found around historic strongholds, such as Alagarno and Sambisa Forest. The presence of such, relatively small-scale, improvised minefields should be considered possible anywhere parties to a conflict have had an extended presence.

The tactical design of the IED use, whereby the IEDs were rarely laid in patterns and often used in isolation, did not align particularly well with the typical approach for marking confirmed hazardous areas and suspected hazardous areas. At the time of writing, no such widespread contamination assessment focusing on IEDs has taken place in the region. The understanding of IED contamination in these contexts continues to be derived primarily from limited data on the number of explosions or the IEDs disposed of (incidents that are now in the past), rather than on an assessment of present contamination. Reporting may be more accurately aligned with processes for EOD spot tasks ("disposal of single or multiple EO discovered outside a suspected or confirmed hazardous area")[14] in most cases.

Method of employment

Person-borne improvised explosive devices

Person-borne IEDs is the term used hereinafter to refer to both person-borne IEDs (an IED worn, carried, or housed by a person, either willingly or unwillingly) and proxy IEDs (a person (unwitting or coerced) who acts as a means of delivery of an IED).[15] Distinguishing between the two is a challenging task post-blast and impossible on the basis of data alone. As such, the term person-borne IED is used without any indication of the person's intent or knowledge.

There was a clear distinction across conflicts in the Sahel regarding the use of person-borne IEDs during the period under review. No person-borne IEDs were recorded in

Burkina Faso, Mali, or Niger. In northern Nigeria, however, suicide attacks – and the use of person-borne IEDs in particular – had historically been a commonly used tactic. Between the first recorded person-borne IED, in April 2011, and June 2017, 434 suicide devices (inclusive of person-borne IEDs and suicide vehicle-borne IEDs) were reported across Nigeria and the Lake Chad region (Cameroon, Chad, and Niger).[16] By 2017, an average of 16 person-borne IEDs were recorded per month.[17] From 2018 onwards, however, the number of suicide IEDs recorded decreased significantly amid broader changes in the conflict dynamics.[18] By 2021, just two devices were recorded. A slight resurgence in suicide IEDs across Borno State in Nigeria was recorded in 2024, however: nine in total.

Over 70 percent of the person-borne IEDs recorded in Chad and Nigeria between 2020 and 2024 targeted civilians, in keeping with historic trends.[19] Civilian targets included mosques, schools, IDP camps, a house during prayers, and funerals. The conflict across north-eastern Nigeria and the Lake Chad Basin has become known for its atypically high use of female suicide and/or proxy IEDs.[20]

Vehicle-borne improvised explosive devices

A vehicle-borne IED is an IED delivered by or concealed in a ground-based vehicle.[21] Although prominent in other theatres of conflict, such as in Iraq or Syria, vehicle-borne IEDs were not recorded at a particularly high frequency across the region between 2020 and 2024.[22] Thirteen were recorded in total: six in Mali, five in Nigeria, and one in Burkina Faso. The primary target of the vehicle-borne IEDs were military positions or convoys. In Nigeria, one incident involved the use of a vehicle-borne IED alongside a person-borne IED as part of a complex attack.

The comparatively limited use of vehicle-borne IEDs in Nigeria, where the employment of person-borne IEDs has been so extensive, is noteworthy. This likely results from the comparative difficultly of infiltrating a target location with a vehicle-borne IED, as opposed to a person-borne one, and the more limited quantity of materials required for the manufacture of person-borne IEDs.

Drone-delivered improvised explosive devices

The use of drones by parties to conflicts in the region is not new. Historically, unmanned aerial systems have been employed for reconnaissance and propaganda purposes by non-State armed groups across the continent.[23] Reporting, however, highlighted the emergence of drone-delivered improvised explosives in late 2023 and early 2024 across Burkina Faso and Mali. This was followed by a significant increase in their use in the first quarter of 2025.[24] During interviews, there was speculation that the use of drones in Burkina Faso and Mali might be explained as a concerted effort to target security forces and minimize civilian casualties. In north-eastern Nigeria and the Lake Chad Basin, where civilian casualties appeared to be less of a concern to conflict parties, it more likely reflected a perceived enhancement in operation capabilities.

Technical categorization

IEDs generally consist of five main components: a **power source** (for example, a battery), an **initiator** (for example, an electric detonator), a **container** (for example, a plastic oil container), a **main charge** (for example, home-made explosive), and a **switch** (for example, a pressure plate).

Switch: "A device for making, breaking, or changing the connection in an IED […] The firing switch that initiates the IED determines the device type by category (command / time / victim operated)."[25]

Based on the function of the switch, IEDs can be classified into three categories, which can affect implications under the APMBC:

Command	Time	Victim-operated
A command switch is activated by the attacker to control the moment of initiation.	A time switch functions after a set period of time.	A victim-operated switch is activated by an unsuspecting individual. These switches rely on the intended target to carry out some form of action that will cause it to function.
A device using a command or time switch would not typically meet the definition of an anti-personnel mine under the APMBC. Command-initiated devices are not designed to be activated by "the presence, proximity or contact of a person".		IEDs using a victim-operated switch may, in some cases, meet the definition of an anti-personnel mine under the APMBC. This depends on the type and design of the switch and IED (eg. an IED using a pressure plate switch may not be considered an anti-personnel mine if the force required to activate the switch is equivalent to that of an anti-vehicle mine).

The present study encountered substantial difficulty building a complete picture of the components used in IED construction across the region. In all the countries under review, post-blast investigation was reported to be limited, if it was conducted at all. As a result, there was no evidence to perform an assessment of IED construction.

Interviews were of great support in identifying overarching themes related to the tactical aspects of the IEDs in use. Nevertheless, the misidentification and/or misclassification of IED components and precursor chemicals remains a concern in IED-affected countries that do not have adequate post-blast investigation capacity. As a result, the decision was made to avoid recirculating unsubstantiated information.

IMPACT

The impact of IEDs is felt widely, affecting the population, the economy, and humanitarian access. Although the easiest way to quantify impact is typically through IED-related casualties, the measurement of impact on the basis of numbers of victims alone can be deceptive. Outlier incidents that do not fit established patterns, but which result in unusually high numbers of victims per device, can skew annual figures without indicating any real change in the threat. The following analysis considers direct and indirect victims, challenges to human rights, and the impact on the economy, as well as the implications of IED use for humanitarian access.

Victims

Victim: "persons, either collectively or individually:

- who have experienced physical, emotional and/or psychological injury, economic loss;
- whose recognition, enjoyment or exercise of their human rights on an equal basis with others has been hindered; or
- whose full and effective participation in society has been restricted by an accident with a confirmed or suspected presence of explosive ordnance."

Direct victim: "person killed, injured and/or impaired as a result of an accident with EO."

Indirect victim: "family members of direct victims, as well as individuals and communities affected by EO."

Source: IMAS 13.10: Victim assistance in mine action

Physical injury

Across the Sahel during the period under review, over 5,000 direct victims were recorded, of which 40 per cent were civilians. Available data on direct victims only included those who had experienced physical injury (fatalities and injuries). By 2022, the annual number of direct victims recorded had surpassed 1,000, and it continued to rise. Of the direct victims recorded over the five years, 2,623 people were killed and 2,568 were survivors.

Figure 8: Direct victims of IEDs recorded across the Sahel from 2020 to 2024.

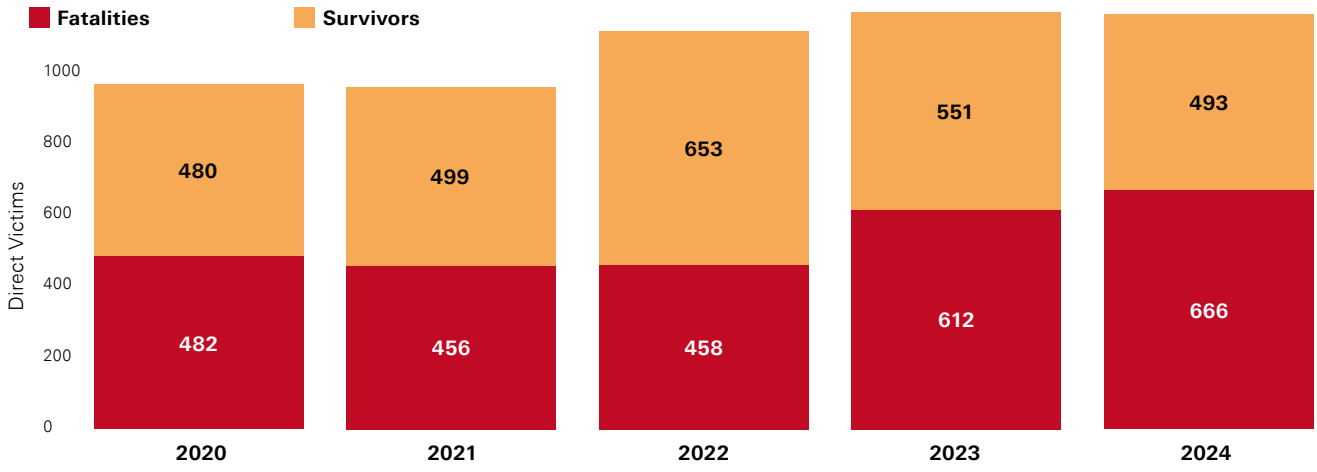


Figure 9: Direct victims of IEDs recorded across the Sahel, by year and by country.

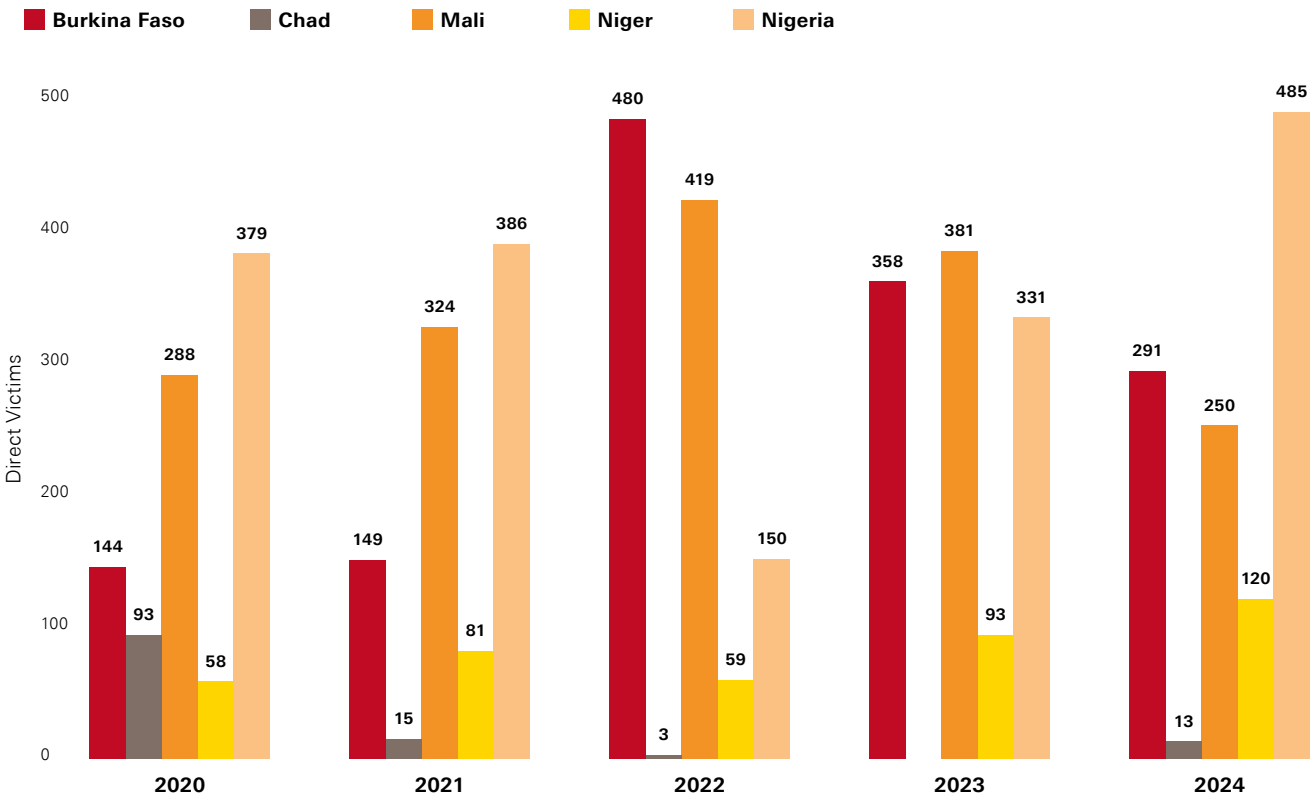
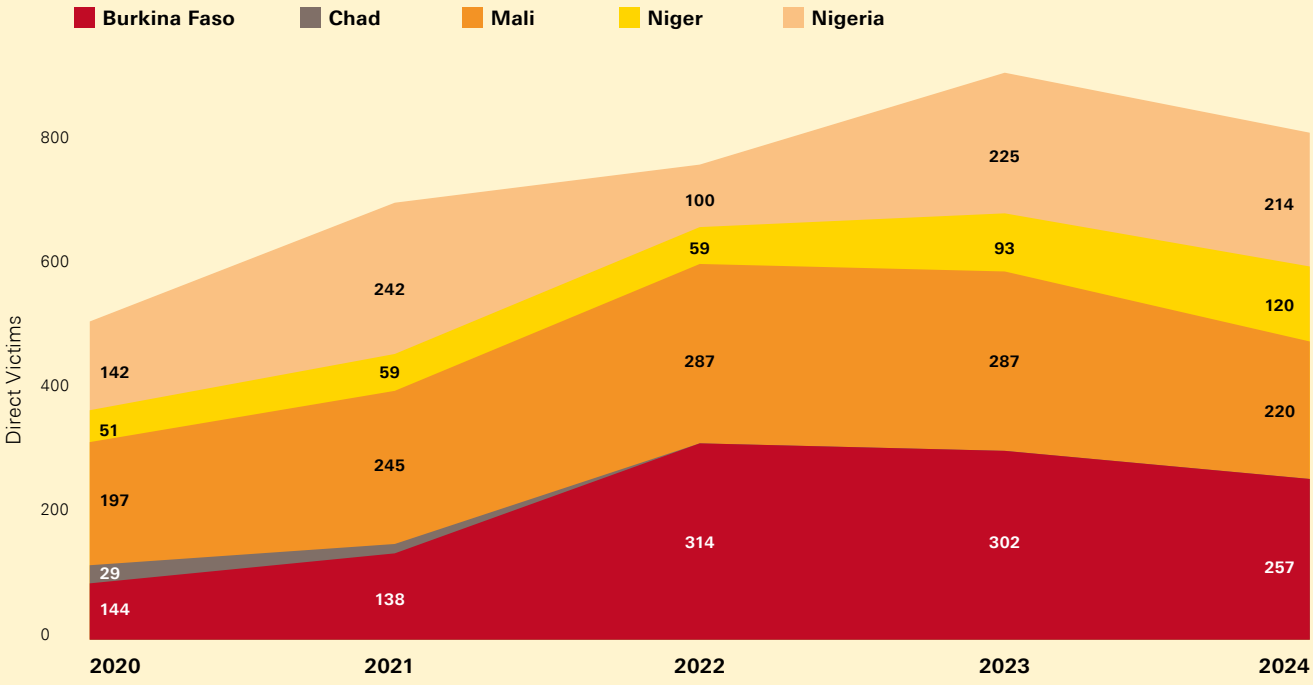


Figure 10: Direct victims of IEDs recorded across the Sahel, by year and by country, excluding outlier events.



Both Burkina Faso and Mali saw a notable decrease in the number of direct victims recorded between 2022 to 2024. This was due to a number of particularly high-impact outlier incidents in the two countries in 2022. These resulted in as many as 72 direct victims from a single device that impacted public transport vehicles. The exclusion of outlier events highlights that, after a significant increase from 2020 and 2021 to 2022, annual numbers of direct victims in Burkina Faso, Mali, and Niger remained relatively steady from 2022 onwards.

Annual numbers of direct victims in northern Nigeria and the Chad–Nigeria border are remarkably high. It is to be noted that the comparatively high use of suicide IEDs (typically considered mass casualty devices in other conflicts) did not contribute significantly to the higher figures in the northern Nigeria and the Chad-Nigeria border. Even when all suicide devices and associated direct victims are removed from the assessment, the average number of victims per device remains much higher in Chad and Nigeria than those recorded in Burkina Faso, Mali, and Niger.

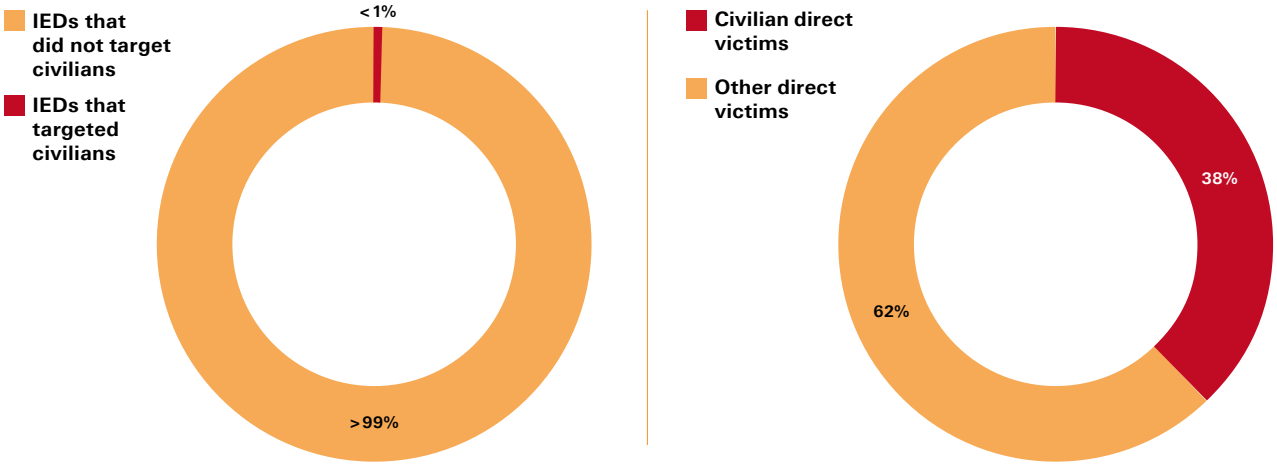
Table 1: Average number of direct victims per device, with the average number of direct victims per device, excluding vehicle- and person-borne IEDs, shown in brackets.

Country	Year				
	2020	2021	2022	2023	2024
Burkina Faso	3.2 (3)	1.3	2	2.1	1.2
Chad	6.6 (6.5)	5	3	0	13
Mali	3.1	2.6	2.2 (2.3)	1.9	1
Nigeria	5.8 (6.3)	4.7 (4.5)	3.3 (3)	3.4 (3.4)	3.8 (3)
Niger	2.1	3	1.5	2.1	1
TOTAL	**3.9**	**2.7 (2.6)**	**2.2**	**2.3**	**1.6 (1.4)**

Such a difference can be partially explained by the higher ratio of devices successfully disposed of in Burkina Faso, Mali, and Niger (25 per cent). In Chad and Nigeria, just 10 per cent of IEDs were reported to be disposed of. In addition, the numbers reflect the greater use of devices in populated areas in Nigeria.

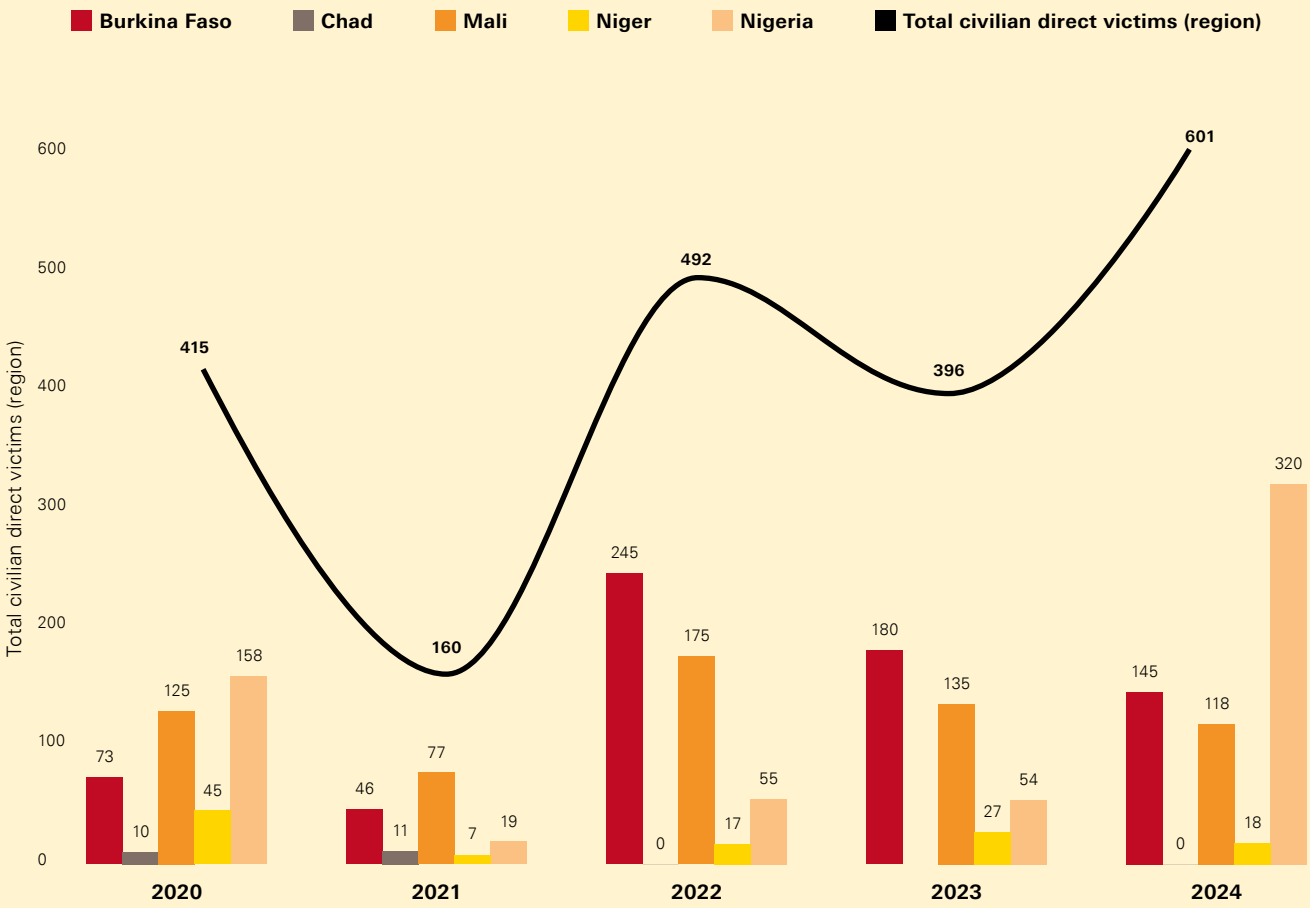
Civilian direct victims

Figure 11: From 2020 to 2024, IEDs assessed to have targeted civilians, as a percentage of total devices recorded, and civilian direct victims as a percentage of the total direct victims.



Across the Sahel, almost 40 per cent of direct victims were civilians, despite being the intended target of less than 1 per cent of devices. Some years saw civilian casualties increase by five to six times (e.g. Burkina Faso 2021–2022 or Nigeria 2023–2024). This underscores the high price paid by civilians across the Sahel and the importance of interventions that prioritize their protection.

Figure 12: Civilian direct victims, by year and by country (line: total for the region)



Civilian casualties were highest in Burkina Faso, where civilian victims increased by five times in a single year, from 2021 (46) to 2022 (245). Mali similarly recorded a peak in civilian casualties in 2022 (175).

In Nigeria, civilian casualties multiplied sixfold between 2023 (54) and 2024 (320). This was the result of a series of particularly high-impact incidents, resulting in as many as 65 civilian direct victims recorded as a result of a single device. Nigeria also recorded a notably high average of civilian victims per device (1.45). This was almost double the average in Burkina Faso (0.85) and Mali (0.73). As with the overall casualty trends, this results in part from the level of reporting and in part from the use of devices in populated areas.

Across the Sahel, 44 per cent of direct civilian victims were impacted while moving on roads. Public transport vehicles, motorcycles, tricycles, carts, and people on foot were all affected. Moreover, devices that impacted public transport vehicles typically resulted in numerous casualties owing to the high number of people in the vehicle. Interviews indicated that civilians were also at risk while carrying out routine tasks, such as collecting firewood and scrap metal, owing to their need to use IED-affected roads.

Civilian casualties also occurred in populated rural and urban areas. The presence of IEDs in communities is likely to cause a high number of civilian casualties, including women and children. During the period under review, the number of civilian direct victims resulting from devices in urban settings was almost double that caused by IEDs emplaced along roads. Despite just 7 per cent of IEDs recorded across the Sahel occurring in urban settings, these accounted for almost 14 per cent of the civilian casualties.

As highlighted previously, civilians are disproportionately affected by IEDs, despite the fact that they are rarely the intended target. This could be explained by the proximity between civilians and security forces. Civilians often travel in convoys escorted by security forces or armed groups, and civilian contractors can be used for logistics movements alongside security forces.

Survivors

Across the Sahel region, at least 982 civilian survivors of IEDs were recorded. Detailed reporting on survivors of IEDs across the region is non-existent, providing limited insight into the nature of injuries sustained. Generally, victims of IEDs are affected by comparatively severe injuries when compared with those caused by conventional anti-personnel mines.[26] The absence of records significantly impedes the implementation of victim assistance activities.

Sex and age disaggregation of data on direct victims

Data limitations hamper the disaggregation by sex and age of data on IED casualties. Across the Sahel, a total of 203 direct victims were identified as women and 201 as children (8 per cent of all the direct victims recorded). In reality, these numbers are likely to be much higher.

Most of the available data related to incidents in Burkina Faso, Mali, and Niger. In those countries, 188 female direct victims and 150 child direct victims were recorded. The devices that led to female and child direct victims caused a disproportionately high number of victims per device (2.76) compared with the total regional average (2). This largely reflects patterns of behaviour in which women and children travel in vehicles carrying multiple people, resulting in incidents with a greater number of casualties.

In Chad and Nigeria, data were far less likely to make reference to the sex or age of the direct victims. Twenty-six devices were recorded as causing direct victims that were women or children. Nine of those devices were person-borne IEDs where the perpetrator was reported to be a woman.

Emotional and/or psychological injury

Available data did not allow for an accurate understanding of the extent of victims affected by emotional and / or psychological injury. Literature on the effects of explosive incidents on the mental health of civilians point to risks of post-traumatic stress disorder, depression, anxiety, and functional impairment.[27] Psychological injury from such events often extends beyond the direct victim to secondary victims (family members) and tertiary victims (those who observe the victims or are exposed to them through TV or radio coverage).[28] Measuring the number of individuals that have experienced emotional or psychological injury from the prevalence of IEDs is extremely challenging. It is exacerbated by the lack of data on victims in the region. Nevertheless, basic assessments point to large numbers of indirect IED victims. In Borno State in Nigeria, 1,488 people killed or injured were recorded. With an average household size of 4.8 people, an estimated 7,000 people are likely to have been affected indirectly.[29] This is without considering extended family and community support systems.[30]

Economic loss

Interviews pointed to the huge economic issues faced by those affected by IEDs. The presence of IEDs, amid broader insecurity, disrupts the subsistence economy.[31] This includes both pastoral and agricultural practices. Historically, 80 per cent of people in Burkina Faso have relied on subsistence agriculture for their income and sustenance.[32] Pastoral communities face the risk of encountering explosive ordnance along traditional transhumance routes. This compounds the challenges posed by ecological and demographic changes.[33]

In Burkina Faso, Mali, and Nigeria displaced persons are often confined to garrison towns, unable to return to their fields. Access to agricultural areas is affected not only by displacement, but also by the presence of IEDs along roads to farming areas. At least 15 IEDs were recorded as causing the death or injury of victims as they were travelling to or working on agricultural or pastoral land. Such incidents were recorded in Burkina Faso, Mali, and Nigeria. Interviews in Nigeria indicated that civilians were directly targeted by IEDs when attempting to reach areas forbidden by parties to the conflict, including those required for agricultural activities. Across the region, market access was limited and supply chains hampered in affected areas because of limitations on road movements. By contributing to widespread displacement, IEDs compounded the economic challenges of both IDPs and host communities.

Gold extraction, which accounts for approximately 16 per cent of the GDP of Burkina Faso, is also affected by IED use.[34] Logistics convoys and water tankers supporting gold extraction companies were affected by IEDs in Burkina Faso and Niger. It is unclear whether the gold mining activities or the security force escorts were the intended targets. Artisanal gold mining sites also recorded a small number of IEDs, some targeting security forces dismantling the sites.

Improvised explosive devices and human rights

IEDs, like other types of explosive ordnance, have a significant impact on the ability of people to exercise their human rights as set out in the United Nations Universal Declaration of Human Rights.[35] The presence of IEDs is a direct violation of the right to life, liberty, and security of person (Article 3) as they pose the threat of death or severe injury. Freedom of movement is eroded (Article 13) and further challenged by the vast numbers of IDPs and refugees seeking safety across the region.

Key figures (Global Trends 2024, UNHCR, the United Nations Refugee Agency)

- 3.8 million people forcibly displaced across the Sahel.
- **Burkina Faso** – 2.1 million people internally displaced.
- **Mali** – 361,000 people internally displaced.
- **Niger** – 412,000 people internally displaced.

The use of IEDs in conflict has also contributed to driving displacement. Across Burkina Faso, Mali, and Niger, at least 3,775,618 individuals were recorded as forcibly displaced as at March 2025.[36] Insecurity was identified as a leading driver of displacement,[37] with women and girls accounting, in 2024, for 49 per cent of displaced people in the Sahel Plus region (Burkina Faso, Mali, Mauritania, Niger, northern regions of Benin, Côte d'Ivoire, Ghana and Togo).[38] The use of IEDs contributes significantly to the insecurity, as was cited in the 2025 Article 5 extension request by Burkina Faso under the APMBC.[39] In addition to contributing to the drivers of the initial displacement, contamination also presents a significant challenge for people's safe return home.

Insecurity is compounded by the absence of the right to work and to choose employment (Article 23). Access to food, housing, and medical and social care (Article 25) is impeded for affected populations. Food insecurity across north-eastern Nigeria became so acute by mid-2025 that a national food security emergency was announced by the government.[40] Insecurity also denies people access to education (Article 26). In Burkina Faso, by June 2024, some 5,300 schools had closed as a result of conflict, while, by September 2023, 500,000 children in Mali had had their education disrupted.[41]

Humanitarian access

Interviews highlighted that the threat posed by IEDs, amid the broader conflict dynamics, significantly impeded humanitarian access across the region. The use of siege tactics was commonly described in Burkina Faso, with IEDs and informal checkpoints prohibiting the resupply of affected communities. Despite this significant challenge, government and international efforts to access and support affected communities continued. Large-scale logistic movements, such as the transfer of food supplies, predominantly took place by road with security force escorts, which increased the likelihood that they would be targeted by association. While road access was feasible in some areas, humanitarian organizations relied on air movements to carry out activities in others. Reliance on air operations, including by the United Nations Humanitarian Air Service and the European Union Humanitarian Air Flight, is extremely costly, however, and places a significant stress on already stretched funding.

EXISTING STRUCTURES, STRATEGIES, FRAMEWORKS, AND ACTIVITIES

Across the continent, many regional and national initiatives to respond to the proliferation of IEDs have begun. They are largely still under development or in their infancy, yet are indicative of the commitment of a multitude of actors to addressing the spread and impact of IEDs. National frameworks are still mostly focused on security, although there are notable efforts to find synergies and implement activities according to mine action principles, in recognition of the good practices and obligations under the APMBC. At every level of governance, strategies are primarily still at the draft stage. Security forces, which have historically received significant international training and equipment, are adjusting to a reduction in support and funding. As such, assessment of the efficacy of many of these activities may be premature. The sections below consider the existing initiatives that seek to mitigate the use and impact of IEDs across the Sahel, their current influence, and, where appropriate, their potential for future impact.

INTERNATIONAL EFFORTS

International frameworks

The use of IEDs is addressed in various international instruments and humanitarian legal frameworks. This section provides an overview of the APMBC and the Protocol on Prohibitions or Restrictions on the Use of Mines, Booby-Traps, and Other Devices as amended on 3 May 1996 (Amended Protocol II) to the Convention on Prohibitions or Restrictions on the Use of Certain Conventional Weapons Which May Be Deemed to Be Excessively Injurious or to Have Indiscriminate Effects (Convention on Certain Conventional Weapons (CCW)). A more comprehensive examination of applicable IHL, including its applicability to non-State armed groups, is considered in depth in annex II to the present study.

Anti-Personnel Mine Ban Convention

Nairobi Summit on a Mine-Free World, the First Review Conference of the APMBC (2004). The decision to hold the First Review Conference in Nairobi was considered highly symbolic given that Africa was the continent most affected by landmines at the time of the event.

Image: APMBC Implementation Support Unit

Table 2: History of explosive ordnance contamination and ratification of the APMBC in the countries covered by the study.

Country	Year of ratification of the APMBC	Contamination at the time of ratification	Most recent Article 5 extension request	Current contamination type	Comment
Burkina Faso	1998	No contamination reported	2025	Improvised anti-personnel mines	The Article 5 extension request of 2025 was the first to be submitted by Burkina Faso.[42]
Chad	1999	Contamination (extent undetermined)	2024	Conventional anti-personnel mines	Chad has stated that IEDs within its territory do not fall within the definition of anti-personnel mines (under Article 2 of the Convention), primarily because they are command initiated.[43]
Mali	1998	No contamination reported	Expected 2026	Improvised anti-personnel mines	Mali acknowledged the presence of IEDs that fall under the APMBC in its 2024 Article 7 reporting. It intends to submit an extension request in 2026.[44]
Niger	1999	Contamination (extent undetermined)	2024	Conventional and improvised anti-personnel mines	The country's extension request cites both the laying of conventional landmines since 2007 and the proliferation of IEDs since 2015.[45]
Nigeria	2002	2002: no known or suspected mined areas.[46] 2007: areas of contamination identified.	2025	Improvised anti-personnel mines	In 2011, Nigeria declared completion of implementation of Article 5, following the clearance of contamination resulting from civil war (1967–1970).[47] Subsequently, two extension requests were submitted (in 2021 and 2025) because of new improvised anti-personnel mine contamination resulting from the conflict in the northeast.[48]

All the countries considered in this study have ratified or acceded to the APMBC and are therefore committed to fulfilling their obligations under the instrument. All became parties between 1999 and 2002, although not all had faced contamination at that point.

The APMBC continues to serve as a key international framework, focused on addressing the impact of the use of anti-personnel mines. The Convention does not distinguish between manufactured and improvised anti-personnel mines, thus the same prohibitions and obligations that govern the use, stockpiling, production, and transfer of factory-produced anti-personnel mines also extend to those of an improvised nature if they meet the definition set out in paragraph 1 of Article 2 of the Convention, as shown in the adjacent box.

> "...a mine designed to be exploded by the presence, proximity or contact of a person and that will incapacitate, injure or kill one or more persons. Mines designed to be detonated by the presence, proximity or contact of a vehicle as opposed to a person, that are equipped with anti-handling devices, are not considered anti-personnel mines as a result of being so equipped."
>
> Source: APMBC (Article 2, paragraph 1)

Access constraints and the recurring nature of the threat make it challenging to provide the level of detail on the location and extent of contamination required for an extension request. This includes determining whether and what percentage of IEDs in use fall under the definition in paragraph 1 of Article 2 where comprehensive analysis of

IED construction is absent and estimating the areas where there is suspected anti-personnel mine contamination amid ongoing conflict and shifting territorial control.

This is compounded by the nature of the devices being used. Although devices may be emplaced in a way that indicates that they are likely intended as anti-vehicle devices, without adequate understanding of the IEDs' construction, it is hard to dismiss the possibility that the same device could be triggered by the presence, proximity, or contact of a person. As such, determining what does and does not fall under the APMBC is the responsibility of national authority submitting the request. Notably, in 2025, the *Clearing the Mines* report explicitly stated that an improvised anti-vehicle mine sensitive enough to be detonated by a person should be recorded as an improvised anti-personnel mine.[49]

In addition to the obligations borne by States under the APMBC, there is also significant value in leveraging the support offered through the Convention. Under Article 6, on international cooperation and assistance, each State Party "has the right to seek and receive assistance, where feasible, from other States Parties". This includes a right to participate in the "exchange of equipment, material and scientific and technological information" alongside support for victim assistance, clearance and the establishment of mine action programmes.[50] This is further supported by the Siem Reap-Angkor Action Plan 2025–2029, which calls for States Parties in a position to do so to provide assistance to States requiring support (actions 7, 43, and 44).[51]

Through the APMBC, Burkina Faso, Chad, and Nigeria have been given a platform to share with the international community the challenges that they are facing. This has been possible through the publication of Article 5 extension requests, Article 7 reporting, and attendance at international events such as the Fifth Review Conference and intersessional meetings. This not only allows the affected States to share good practices and approaches across similar contexts but also provides an opportunity to identify potential avenues of financial and technical support and collaboration, under commonly agreed and transparent frameworks, in which the States are held accountable.

Protocol on Prohibitions or Restrictions on the Use of Mines, Booby-Traps and Other Devices as amended on 3 May 1996 annexed to the Convention on Certain Conventional Weapons

Amended Protocol II of the CCW[52] is the only international treaty that explicitly mentions IEDs. The Protocol defines its scope of application as covering the use of land of mines, booby-traps, and other devices, including those laid to interdict beaches, waterway crossings, or river crossings, while explicitly excluding anti-ship mines at sea or in inland waterways (Article 1, para. 1). It further defines "other devices" as manually emplaced munitions and devices, including IEDs, that are activated manually, by remote control, or automatically after a lapse of time (Article 2, para. 5). Through this definition, IEDs are brought within the regulatory ambit of Amended Protocol II, thereby situating their use within the broader legal framework governing restrictions on means and methods of warfare in both international armed conflicts and non-international armed conflicts (Article 1, paras. 2 and 3). Importantly, many of the core obligations under the Protocol are formulated to apply to all parties to an armed conflict, including non-State armed groups (Article 1, para. 6).

Article 3 establishes general restrictions on the use of mines, booby-traps, and other devices. This includes the prohibition (paras. 3, 7, and 8) of:

- their use where they are designed or are of a nature to cause superfluous injury or unnecessary suffering;
- their direction against civilians or civilian objects;
- their indiscriminate use.

The Protocol further establishes an obligation to take all feasible precautions to protect civilians from the effects of mines, booby-traps and other devices (Article 3, para.10). It also specifies that each High Contracting Party or party to a conflict bears responsibility for all such devices that it has employed and is obliged to ensure clearance, removal, destruction, or maintenance of those devices (Article 10).

Article 7 is specific to the use of booby-traps and other devices, establishing limits on the circumstances and manner in which such devices may be employed. For instance, it prohibits their use when they are attached to or otherwise associated with protected persons, objects, or locations, including medical facilities, food or drink, children's toys, and objects of cultural or religious significance.

Amended Protocol II also outlines obligations relating to the recording and management of information on weapons falling within its scope (Article 9). Parties to a conflict are required to record all information concerning minefields, mined areas, mines, booby-traps, and other devices, including IEDs, and to retain such information. After the cessation of active hostilities, this information shall be used to protect civilians from the effects of these devices in areas under their control. Subject to security considerations, the information concerning devices laid in areas no longer under their control should be made available.

The Protocol also outlines obligations requiring the clearance, removal, or destruction of mines, booby-traps, and other devices without delay after the cessation of active hostilities (Article 10). Where such areas are no longer under a party's control, that party is required to provide to the party controlling the area the technical and material assistance necessary to facilitate clearance (Article 10, para. 3). Pending the fulfilment of these clearance obligations, the Protocol also addresses the risks arising from the effects of minefields, mined areas, mines, booby-traps, and other devices for specified missions and personnel, and provides for protective measures in that context (Article 12).

Table 3: Information on whether the countries covered by the study are party to the CCW and whether they have submitted the requisite reports.

Country	Whether it is a High Contracting Party to Amended Protocol II of CCW	National annual reports submitted
Burkina Faso	Yes, as of 2003	None
Chad	Not party to the CCW	
Mali	Yes, as of 2001	Report in 2018
Niger	Yes, as of 2007	Report in 2022
Nigeria	A signatory to CCW since 1982, but not a High Contracting Party	

Other international frameworks

Counter-IED efforts primarily fall under two similar but distinct international response frameworks. National governments typically draw on the NATO counter-IED doctrine, where the objective is to defeat the adversary's IED system.[53] The NATO doctrine comprises three pillars built on security intelligence:

1. Attack the networks
2. Defeat the device
3. Prepare the force

The United Nations, in recognition of the challenges posed by IEDs to ongoing peacekeeping missions, adopted an aligned but distinct framework known as IED threat mitigation. Here, the objective is primarily to enable peacekeeping missions to carry out mandated tasks in IED-affected environments.[54] The UN framework also comprises three pillars, but these are built on peacekeeping intelligence.[55] The pillars are:

1. Training and capacity development / preparation of peacekeepers
2. Defeating the device
3. Degrading the network

In addition to supporting peacekeeping missions, UN IED threat mitigation also extends to the provision of "support [to] the host nation to be capable of providing a safe and secure environment".[56] This focuses on the strengthening of national political engagement and systems to respond to the IED threat, but may also include efforts to enhance practical capabilities either with the support of UN Member States, or through bilateral or regional arrangements.[57] The support required by host nations is determined using the UNIDIR counter-IED capability maturity model and self-assessment tool.[58]

The United Nations General Assembly adopted resolution 70/46 "Countering the threat posed by improvised explosive devices" in December 2015. The resolution highlights the roles of the Counter-Terrorism Implementation Task Force (which has since been succeeded by the United Nations Office of Counter Terrorism), the United Nations Office on Drugs and Crime (UNODC), UNIDIR, the Department of Peacekeeping Operations, and UNMAS in providing the relevant support in responding to IEDs.[59]

The resolution:

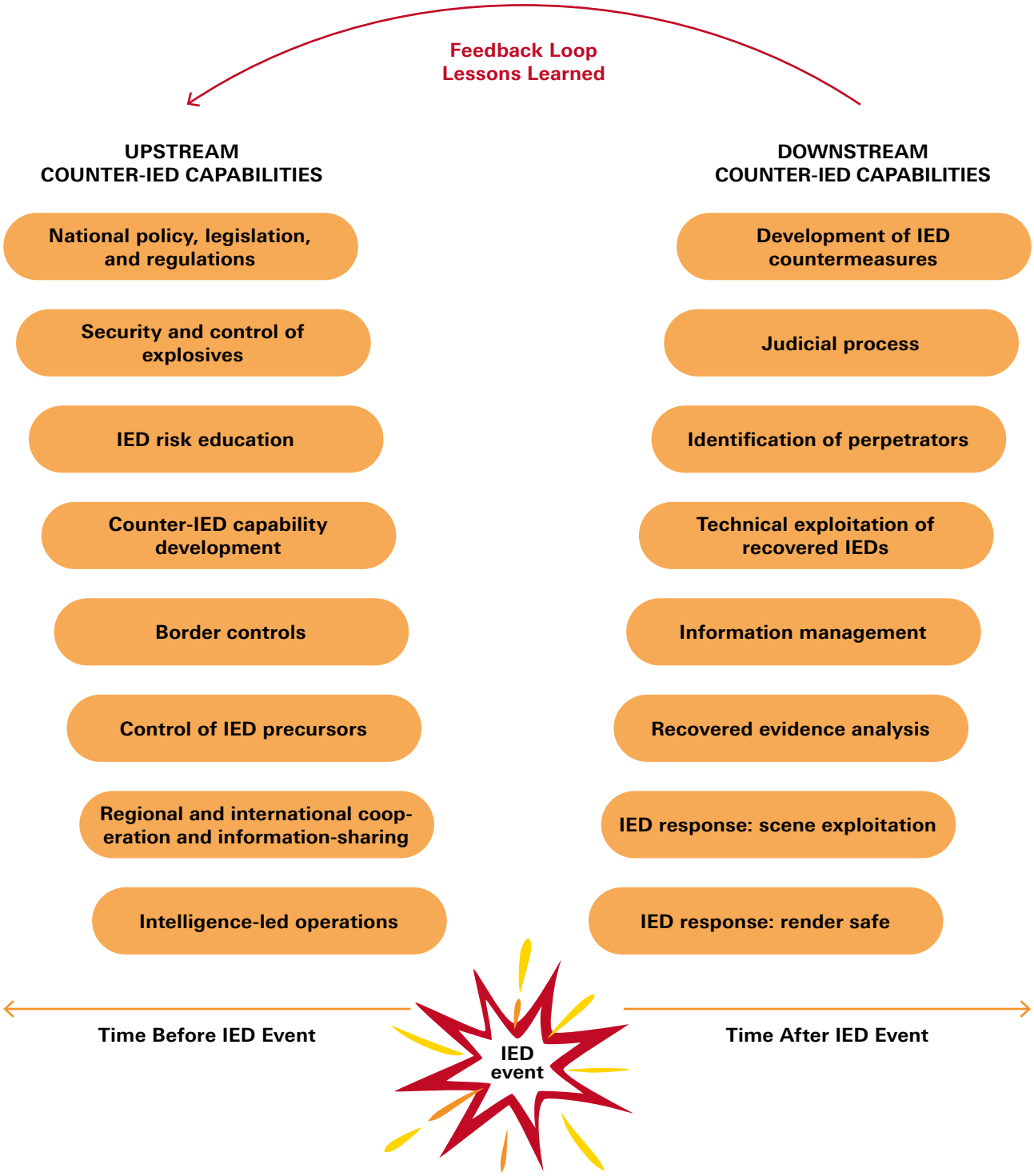
- Notes the important role that Member States can play in working with business entities to develop effective strategies to counter the threat posed by IEDs, including to prevent the adverse impact of the diversion of materials;

- Urges States to implement measures to promote vigilance by those involved in the production, sale, supply, purchase, transfer, and storage of precursor components and materials relevant to IED manufacture;
- Encourages States to develop and adopt their own national policy to counter IEDs, which may include supporting international and regional efforts to mitigate IEDs.

In 2020, mandated by General Assembly, UNIDIR released the counter-IED capability maturity model and self-assessment tool.[60] It provides a framework for assessing gaps in national capacities to respond to the IED threat and has become a key framework for the international community and States in coordinating counter-IED capacity-building. It considers counter-IED maturity using an upstream (before the IED event) and downstream (after the IED event) model. On the basis of voluntary self-assessment input, the model determines a State's counter-IED capability maturity, according to five levels.

Figure 13: Counter-IED upstream and downstream capabilities, according to the counter-IED self-assessment tool

Source: UNIDIR



There are several other global mechanisms providing support to States in countering the proliferation of IEDs. These include Programme Global Shield, an initiative established under the World Customs Organization, the International Criminal Police Organization (INTERPOL), and UNODC, then run in partnership with INTERPOL and the US Defense Threat Reduction Agency. Programme Global Shield seeks to reduce the illicit flow of explosive precursor chemicals and IED components, monitor legal flows of these elements, and enhance information-sharing. Project Watchmaker, by INTERPOL, similarly facilitates information-sharing between INTERPOL member States regarding the identity of individuals involved in the manufacture of IEDs and chemical/biological weapons.[61]

AFRICA-WIDE INITIATIVES

The 7th African Counter-IED Conference was hosted at the Humanitarian Peace Support School in Nairobi, Kenya, in October 2025. It brought together experts from across Africa to share best practices and current trends related to IEDs.

Image: Humanitarian Peace Support School

Mine action

Efforts to eliminate the threat posed by anti-personnel mines in Africa predate the formal adoption of the APMBC. In May 1997, amid the ongoing Ottawa Process, South Africa hosted the first continental conference on the issue of anti-personnel mines in Kempton Park. The title of the conference was "Towards a Landmine-free Africa: The Organization of African Unity and the Legacy of Anti-Personnel Mines". The conference encouraged member States of the Organization of African Unity (the predecessor of the African Union) to participate actively in the Ottawa Process. It also highlighted the importance of building the institutions needed for responding to mine contamination, rather than focusing exclusively on clearance, for intercontinental cooperation, and for States to use armed forces properly in demining efforts.[62]

In 2001, Mali hosted a Seminar on the Universalization and Implementation of the Ottawa Convention (APMBC) in Africa.[63] Furthermore, the Common African Position on Anti-Personnel Landmines was adopted

in September 2004, during the Second Continental Conference of African Experts on Landmines.[64] The common position calls for:

- All member States to ratify or accede to the APMBC, if they have not already done so (as at 2025, only three African States were not party to the Convention – Egypt, Libya, and Morocco), as well as the CCW;
- Member States not party to the APMBC to desist from sales, exports, and transfers of anti-personnel mines, sanction their illicit trade, and secure remaining stockpiles;
- Member States party to the APMBC to implement necessary legal and administrative measures, adhere to Article 7 transparency measures, destroy remaining stockpiles, and abide by voluntary reporting requirements;
- Non-State actors to respect the APMBC;
- The mainstreaming of mine action within national and local development plans, the implementation of risk education, marking, and clearance, and the capacity-building of regional and national bodies responsible for strategic planning related to those activities;
- Renewed commitment to victim assistance, the promotion of victims' participation in policy development and execution, and improved collection and management of information on landmine victims;
- The development of a plan of action to implement the Common Position.

At the time of the Second Continental Conference of African Experts on Landmines, Africa was the continent most affected by anti-personnel mines.[65] IED use, however, had yet to become widespread and was more typically associated with large-scale attacks such as those on the US embassies in Nairobi, Kenya, and Dar es Salaam, United Republic of Tanzania, in 1998 and on the Paradise Hotel in Mombasa, Kenya, in 2002.[66] As such, there was little reference to improvised anti-personnel mines or IEDs within the Common Position of 2004.

In 2014, the African Union published a project document, entitled "The African Union Mine Action and Explosive Remnants of War Strategic Framework".[67] The framework was intended to map and guide mine action activities under a programme on mine action and explosive remnants of war (ERW) for the period 2014–2017. At the time of writing, however, no additional or updated framework had been released, although a draft African Union mine action strategy is reported to have been produced, but never finalized. Within the 2014–2017 strategic framework, there is explicit reference to IEDs, alongside mines, ERW, conventional weapons, and cluster munitions. The content of the draft African Union mine action strategy has not been made public.

Counter-improvised explosive device efforts

Over the past decade, as the use of IEDs has grown, so has the role of continental and regional bodies in countering the threat. The first United Nations General Assembly resolution on IEDs (70/46) was adopted in 2015 and highlighted the role of regional approaches. Notably, the resolution makes no particular link between the proposed strengthening of counter-IED efforts and mine action activities.

During the 837th meeting of the African Union Peace and Security Council in April 2019, the African Union called for continued "consultations with member States to develop the necessary framework" for preventing and countering the use of IEDs.[68] Subsequently, the first draft of an African Union-wide counter-IED strategy was developed, starting in 2019, and a final draft was completed in April 2023. In 2025, a briefing note stated that the draft strategy would be presented to member States and other African Union entities for their input prior to its adoption.[69]

A continent-wide conference on counter-IED efforts has been hosted annually by Kenya for the past seven years. The conference is co-organized by the International Peace Support Training Centre, the British Peace Support Team (Africa), and the UNMAS Mobile Training Team. The event brings together representatives of African Union member States and subject matter experts to share good practices and discuss current trends.[70]

The African Union remains uniquely placed to support initiatives addressing the challenges posed by IEDs and other explosive hazards, given its continent-wide mandate to promote peace, security, and stability, protect human rights, and promote sustainable development.[71] Nevertheless, the role of the African Union in supporting the States in the Sahel in responding to the threat posed by IEDs is significantly challenged by the ongoing suspension of Burkina Faso, Mali, and Niger from the body owing to perceived violations of the African Union Charter on Democracy, Elections and Governance, with suspensions commencing in 2021–2023.[72] As a result, the engagement of the African Union Peace and Security Council with the region has somewhat declined, with just three sessions dedicated to West Africa recorded in 2024.[73]

Despite recent suspensions, the countries of the Sahel that are considered in the present study are, or have historically been, parties to the aforementioned continental initiatives addressing the challenges posed by IEDs. This reinforces the enabling conditions for enhanced collaboration and international support set by the international frameworks.

REGIONAL EFFORTS

Current regional efforts targeting the threat posed by IEDs are based primarily on counter-IED initiatives. Specific mine action initiatives at the regional level are less prevalent, although demining training is provided by the Centre de Perfectionnement aux Actions Post-Conflictuelles de Déminage et de Dépollution (Centre for Training in Post-Conflict Demining and Decontamination) in Benin. Counter-IED efforts are being carried out under the label of West Africa, both by countries that are members of the Economic Community of West African States (ECOWAS) and by those that are not. Initiatives such as the West Africa Capacity-Building Working Group of the Global Counterterrorism Forum, which is chaired by Algeria and Germany and supported by UNODC, focus on regional collaboration. The Small Arms Survey too has produced a number of reports concerning IEDs and small arms and light weapons in the region, in addition to organizing workshops and supporting the drafting of related strategies in affected countries, such as Burkina Faso.

Since the launch of UNIDIR—ECOWAS engagement and cooperation in 2021, the UNIDIR counter-IED capability maturity model and self-assessment tool has been used by Burkina Faso, Mali, and Niger (2022) and Nigeria (2025), and by the United Nations Development Programme to conduct a virtual assessment of the Sahel region (2021). This led to the decision by ECOWAS to draft a regional counter-IED strategy. At the time of writing, the draft strategy was being reviewed by three ECOWAS divisions (Small Arms and Light Weapons, Peace Support, and Regional Security). Finalization of the strategy has been further complicated by the withdrawal of Burkina Faso, Mali, and Niger from the regional body. Following their withdrawal, the three countries formed the Alliance of Sahelian States. At the time of writing, no regional counter-IED initiatives under the Alliance had been identified.

Despite the challenges posed by the withdrawal of Burkina Faso, Mali, and Niger from ECOWAS, there are still regional initiatives that offer a potential framework under which all Sahel States can cooperate to address the challenges posed by IEDs. Even if such frameworks focus primarily on counter-IED efforts, they can still enable humanitarian approaches, such as the raising of awareness among vulnerable communities. In October 2025, the Global Counter Terrorism Forum released the Lomé Recommendations on Preventing and Countering the Acquisition and Use of Improvised Explosive Devices by Terrorist Groups in West Africa.[74] The recommendations focus on four key areas:

- Breaking the supply chains
- Increasing the effectiveness of the judicialization process to turn intelligence into admissible evidence
- Enhancing regional and national counter-IED expertise
- Raising vulnerable communities' awareness of the threat

In principle, counter-IED strategies should serve as "the glue that holds together most successful national approaches".[75] Efforts to develop both a continental (African Union) and regional (ECOWAS) counter-IED strategy are ongoing. The coordination of efforts at these levels is key: as the IED threat is transnational in nature, a shared approach is crucial. Nowhere is the cross-border nature of the IED threat more apparent than in the Sahel. It is hoped that the African Union and ECOWAS strategies will enhance cooperation and coordination among States with regards to the IED response, although the exact content of the strategies will be clear only once the final drafts are approved. The efficacy of the strategies in mitigating the effects of the IED threat across the region depends on the inclusion of all affected States in their development, review, and finalization, and in their implementation.

Similar efforts by the African Union in relation to strategies in the past have faced significant challenges in terms of their efficacy and implementation. Perhaps the most comparable situation is that of African Union counter-terrorism efforts, which have encountered numerous hurdles in achieving notable impact in the majority of member States.[76] This has resulted from limited initial endorsement by affected member States and a lack of implementation of recommendations by the majority of member States.[77] This can, in part, be attributed to the difference in the extent to which States have been affected by the problem, competing priorities, and limited resources. It also reflects, however, the reality that counter-terrorism is inherently linked to sensitive issues of national security, and this presents understandable hurdles to transnational responses. Counter-IED efforts will likely face similar challenges, although there are plenty of lessons that can be learned from the implementation of other frameworks.

NATIONAL APPROACHES

While international and regional frameworks can provide a higher degree of cohesion and bolster impact at the national level, both mine action and counter-IED initiatives are ultimately national responsibilities, and only through comprehensive national efforts can tangible progress be achieved. Such efforts begin with a cross-cutting or whole-of-government approach.

The regulation of mine action and counter-IED efforts requires the enactment of appropriate legislation to facilitate cooperation and coordination between relevant ministries and committees.[78, 79] Mine action and counter-IED efforts are inevitably intertwined in this cross-cutting approach, across government offices and in legislation. Nonetheless, a certain separation of activities is necessary, particularly at the execution level, when the benefits of intervening versus the risks of doing so must be carefully weighed up.

Structures

Across the region, national mine action structures exist, even if they continue to be affected by financial and human resource constraints. It is typical for the coordination of mine action activities to be delegated to an existing national authority, rather than attributed to a specific mine action body. In Burkina Faso, Mali, and Niger, the national body concerned is the entity responsible for the control of proliferation of small arms. In Chad, responsibilities fall under a national mine action authority with an extensive structure, while in Nigeria coordination is intended to be carried out by a recently established national mine action centre, with support from UNMAS as its capacity development continues.

The majority of these entities reported challenges related to resources and staffing, with the exception of Chad, which had reported conventional landmine contamination in the past. The country's National High Commission for Demining stated in 2024 that it was considering reducing overstaffing levels.[80]

Table 4: The national entities responsible for mine action and counter-IED efforts in the countries covered by the study.

Country	National entity responsible for mine action	National entity responsible for counter-IED efforts
Burkina Faso	Le Secrétariat Permanent de la Commission National de Contrôle des Armes (Permanent Secretariat of the National Commission on Arms Control)	
Chad	National High Commission for Demining	National security (entity unconfirmed)
Mali	Le Secrétariat Permanent pour la Lutte Contre la Prolifération des Armes Légères et de Petit Calibre (Permanent Secretariat to Counter the Proliferation of Small Arms and Light Weapons)	
Niger	La Commission Nationale pour la Collecte et le Contrôle des Armes Illicites (National Commission for the Collection and Control of Illicit Arms)	
Nigeria	National Mine Action Centre	National Counter Terrorism Centre

A similar set-up can be found in national counter-IED structures. In Burkina Faso, the Permanent Secretariat of the National Commission on Arms Control is responsible both for mine action and counter-IED activities at the strategic level. A similar overlap of responsibilities was observed in Mali. In Burkina Faso, the National Demining Centre serves as the operational arm of the national authority. Nigeria is once again the exception. There, mine action and counter-IED are more distinct, with the latter falling within the scope of security and defence. At the country level, counter-IED is interlinked with counterterrorism, under the National Counter Terrorism Centre.[81] In the north-eastern region, counter-IED is coordinated through a dedicated counter-IED cell located in Borno State.[82] The cell focuses on the traditional counter-IED pillars (attack the networks; defeat the device; prepare the force) and serves to bridge tactical level work and policy efforts at the National Counter Terrorism Centre.[83] This counter-IED cell is supported by Adam Smith International, the Lake Chad Regional Stabilization Facility, and international partners.[84]

Coordination with other national agencies was often reported. In Burkina Faso, the Permanent Secretariat of the National Commission on Arms Control works in coordination with the Secrétariat Permanent du Conseil National de Secours d'Urgence et de Réhabilitation (Permanent Secretariat of the National Council for Emergency Relief and Rehabilitation). In Nigeria, the National Mine Action Centre reported working closely

with the National Emergency Management Agency, the Ministry of Humanitarian Affairs and Poverty Reduction, the National Commission for Refugees, Migrants and Internally Displaced Persons, and the North East Development Commission.

Coordination mechanisms specific to mine action were also recorded, including the Groupe de travail de lutte antimines humanitaire (Humanitarian Mine Action Working Group) in Mali, overseen by the Permanent Secretariat to Counter the Proliferation of Small Arms and Light Weapons, and the Mine Action Sub-Working Group in Nigeria.

The national structures and coordination mechanisms in the Sahel region showcase that, despite resource limitations, national mandates are in place for both mine action and counter-IED efforts. These national entities represent their respective States Parties in regional and international forums, such as the meetings of the APMBC.

Strategies, legislation, and standards

In February 2024, the National Commission on Small Arms and Lights Weapons of Ghana hosted a three-day conference to raise awareness of the humanitarian impact of improvised anti-personnel mines in the region. The Conference was held thanks to support provided by the European Union and received technical support from the APMBC's Implementation Support Unit.

Image: National Commission on Small Arms and Lights Weapons of Ghana

At the time of writing, Burkina Faso was the only State to have a designated counter-IED strategy in place at the national level, for the period 2023–2027. A separate mine action strategy had not, however, been developed. The counter-IED strategy was mentioned in the 2025 request by Burkina Faso for an extension under Article 5 of the APMBC,[85] framing the country efforts to fulfil its obligations under the Convention. The counter-IED strategy, the development of which was supported by UNMAS,[86] sits within the broader national security policy. It seeks to:

- Improve legislative, institutional, and organizational responses;
- Strengthen counter-IED capacity;
- Increase regional and international cooperation;
- Coordinate demining efforts.

The strategy includes an associated action plan, which sets out practical steps and commitments for implementation.

National strategies serve not only to provide a framework of agreed objectives but also to clarify responsibilities and ownership. Ideally, responsibilities for counter-IED efforts fall under a single government entity, responsible for coordinating all other stakeholders.[87] In reality, however, this is extremely challenging to achieve. The research for the present study found that some counter-IED elements fell under the responsibility of entities addressing small arms and light weapons or of national mine action authorities tasked with the oversight of mine action activities. Other elements fell to bodies responsible for counterterrorism. IED disposal, meanwhile, remained the prerogative of security forces during their operations as opposed to a team tasked according to requests from an overarching body.

Ultimately, the development of strategy documents and associated action plans for implementation are key to guiding effective counter-IED efforts and, to an extent, the intertwined mine action activities. Nevertheless, they remain guiding documents to support mitigation of the threat and impact of IEDs. No counter-IED strategy, however well considered, will serve as a one-size-fits-all solution for ending the use of IEDs in a country or region. Similarly, the real power of any continental, regional, or national counter-IED strategy lies in its meaningful implementation. It is crucial therefore that a strategy not only realistically reflect the capacities of those implementing it but also garners the political will and the resources needed to put it into practice.

A different approach to addressing the issue has been taken in Nigeria, where draft mine action legislation has been developed with the support of International Committee of the Red Cross (ICRC) and is reported to be under review. No specific counter-IED strategy exists;

Image: Improvised explosive device disposal training, Mali, Andrew Grantham.

IEDs are rather woven into other national frameworks. Counter-terrorism efforts in the country are guided under the framework of the National Counter Terrorism Strategy.[88] The strategy comprises five pillars, four of which align with counter-IED principles (secure, identify, prepare, and implement). The 2019 National Security Strategy also broadly covers elements of counter-IED, including calling for capacity-building for legal frameworks specific to chemical, biological, radiological, nuclear, and explosive weapons, enhanced inter-agency information-sharing, and adequate measures targeting the storage, transport, and import/export of chemical, biological, radiological, nuclear, and explosive material.[89]

Across the region, various legal frameworks are in place to control the manufacture and the use of IEDs. This includes legislation pertaining to counter-terrorism, such as in Burkina Faso, and to weapons and ammunition (including landmines), such as in Burkina Faso and Mali.[90]

National mine action standards across the region are in varying states of readiness. The Nigeria Mine Action Centre is currently using the IMAS, with the intention of developing national mine action standards when capacity is available to do so.[91] In Mali, which also uses the IMAS, several national mine action standards were drafted prior to December 2023, although at the time of writing they had yet to be finalized.

Table 5: Existence and status of national mine action standards in the countries covered by the study where the IMAS are not used.

Burkina Faso		Chad		Niger	
National mine action standard[92]	**Status**	**National mine action standard[93]**	**Status**	**National mine action standard[94]**	**Status**
Glossary	Complete	Non-technical survey	Complete	Non-technical survey	Complete
Risk education	Complete	Technical survey	Complete	Clearance	Complete
Accreditation of risk education organizations	Complete	Marking	Complete	Risk education	Complete
Information management and report-writing	Complete	Manual clearance	Complete	Community liaison	Complete
Non-technical survey	Complete	Mechanical clearance	Complete	Tasking	Draft
Community liaison	Complete	Quality assurance/ quality control	Complete	Accreditation of mine action organizations	Draft
Victim assistance	Complete	Handover of land	Complete		
Task allocation procedures	Complete	Information management	Complete		
Neutralization and destruction of explosive devices	Complete				
National stockpile destruction planning	Complete				
Animal detection systems	Complete				
Neutralization of IEDs	Complete				
Environmental considerations	Planned for development in 2026				

Image: Andrew Grantham.

Capacities and activities

Mine action activities are progressively being undertaken earlier and closer to ongoing conflict, as the cases of Syria, Ukraine, and Yemen show. The main goal of reducing the social, economic, and environmental impact of explosive ordnance remains unchanged, however. The focus is typically on reducing the immediate risk to communities from explosive ordnance, including IEDs, and preparing the ground for efficient and effective post-conflict recovery.

In the context of the Sahel, such efforts may include:

- Delivering risk education;
- Conducting limited non-technical survey (NTS);
- Providing victim assistance;
- Supporting humanitarian actors by providing information and coordinating safe access;
- Advocacy and preparations for land release, including the development of mine action strategies, the documentation of patterns of IED use, establishment of standards, and capacity-building.

The study found that, across much of the Sahel region, mine action activities were largely restricted to IED risk education and limited victim assistance. In Chad, there was a more comprehensive land release process owing to the historical contamination of the country by conventional landmines. As mentioned earlier, current reporting by Chad indicates that IEDs fall outside of the scope of mine action and the APMBC.[95]

Risk education

Risk education is designed to ensure that women, girls, boys, and men in affected communities are aware of the risks posed by explosive ordnance and are encouraged to behave in a way that reduces the risk to people, property, and the environment.[96]

Risk education is conducted by national and international organizations, with varying levels of coordination. In Burkina Faso, the Permanent Secretariat of the National Commission on Arms Control coordinates IED risk education and harmonizes related messaging and is the accreditation body for organizations wishing to carry out risk education and victim assistance. In Nigeria, the Mine Action Sub-Working Group (chaired by the National Mine Action Centre with the support of UNMAS) serves as the coordinating body for activities, and in Mali this is the task of the Humanitarian Mine Action Working Group.

In Burkina Faso, the Explosive Weapons Trauma Care Collective (EXTRACCT) and the Mines Advisory Group piloted the integration of IED risk education with first-responder training for laypersons in order to enhance the first line of response for IED victims.

Image: EXTRACCT

The same challenges in implementing risk education were found across countries in the study, primarily severe access impediments resulting from insecurity, restrictions outside garrison towns, widespread displacement, and the nomadic, seasonal movements of populations.

In Mali, difficulties were compounded by limited Internet and phone services in remote areas, impeding the use of digital means of reaching target audiences.[97] Methods to overcome these challenges included the use of radio to reach remote communities that were unable to attend face-to-face sessions. In Mali, collaboration with the Ministry of Education, with the support of the United Nations Children's Fund (UNICEF), took advantage of the network of the existing education system and enabled teachers to disseminate key messages to students, who would then share the information with their communities. In addition, national organizations, such as the Association Malienne pour la Survie au Sahel (Malian Association for Survival in the Sahel) reported both conducting focus group discussions and sharing information door to door.

Burkina Faso piloted an initiative by the Explosive Weapons Trauma Care Collective (EXTRACCT) and the Mines Advisory Group that integrated community first-responder training and IED risk education.[98] The initiative, which used a train-the-trainer model, provided community members in affected areas with contextualized, first-responder training focusing on trauma caused by explosive ordnance and IEDs.[99] The pilot initiative led to the creation of a toolkit to guide implementation in other contexts.[100]

A first-responder training session delivered under the pilot initiative by EXTRACCT and the Mines Advisory Group in Burkina Faso.

Image: EXTRACCT

Monitoring related to risk education typically looks at the effectiveness and efficiency of the risk education delivery; the perception of risk education projects by the communities at risk; knowledge increase and retention; resulting behavioural change; geographical coverage; the equity of targeting and prioritization; the reasons for risk-taking, new behaviours, and adaptation to the hazard; and explosive ordnance incidents and casualties.[101] In the Sahel, however, the measurement of many of these qualitative aspects, such as behavioural change and knowledge retention, was not feasible. In many cases, up-to-date figures on the number of people reached were also unavailable. The calculation of beneficiaries was further challenged by the use of radio and listening devices to reach remote communities.

In addition to significant access challenges, impediments caused by insufficient funding, material resources, human resources, and training were also reported as undermining risk education. Despite these challenges, however, risk education continued in many places. In 2025, Burkina Faso reported that approximately 550,000 individuals had received risk education, with the support of Mines Advisory Group, Handicap International, the Danish Refugee Council, DanChurchAid and DCAF, the Geneva Centre for Security Sector Governance, as well as various national organizations.[102] Mali recorded that 73,432 beneficiaries had been reached in 2022, which was the most recent available figure.[103] In Chad, the last detailed breakdown of information on risk education activities was reported in 2022. Risk education was reported in the Lac and Hadjer-Lamis areas of the country in 2024, but no specific numbers were provided.[104] Nigeria reported a total of 1,393,526 beneficiaries of face-to-face risk education messaging across Borno, Adamawa and Yobe states.[105]

Victim assistance

Lionel Pechera, GICHD Programme Manager, delivers IMAS 13.10 awareness training to EORE operators in Maiduguri, Nigeria.

Image: GICHD

The study found that victim assistance was conducted on a limited scale across the region. Initiatives were deterred in the first place by the widespread absence of economic opportunity, which affected entire communities, as well as insufficient funding, infrastructure, and capacity. In Burkina Faso, a system was reported to exist at the national level, more broadly applied to all victims of terrorist activities, yet it faced challenges caused by a lack of synergy and coordination. In Mali, victim assistance processes were also lacking owing to the absence of a dedicated victim database or referral system. Medical and psychological support was reported by some national organizations, such as the Association Malienne pour la Survie au Sahel. Informal processes were also reported, whereby community focal points raised awareness of services. Victim assistance specifically targeting children was reportedly coordinated through the Global Protection Cluster.

Victim assistance faced many of the same challenges as risk education, related to access and significant underfunding. Across the region, there was often an absence of official referral mechanisms or victim databases. The sheer number of direct victims of IEDs across the region, combined with the much higher number of victims of conflict, posed a significant challenge to effective implementation of victim assistance.

Land release processes

Land release is the process of applying all reasonable effort to identify, define, and remove all presence or suspicion of explosive ordnance.[106] It is an evidence-based decision-making process that helps determine which land should be targeted for action and which should not.[107]

The process can equally be used in relation to land where IEDs are present or suspected to be present. Many programmes broadly apply the same process to IEDs and to other explosive ordnance, as has been seen in Iraq and Sri Lanka. IMAS, however, limits the application of land release to IEDs when their clearance is undertaken for humanitarian purposes and in areas where active hostilities have ceased.[108]

One of the challenges faced in the Sahel region, as in other areas experiencing ongoing conflict, is that the cessation of hostilities in a specific location may be only temporary. As mentioned above, one of the characteristics of the IED threat in the region is its recurrence in the same geographical settings. Additionally, most of the responses to the threat of IEDs in the Sahel during the period under review were framed by the needs of security forces not humanitarian responses. Land release in the strictest sense is therefore unfeasible: even if conducted for humanitarian reasons, any efforts to identify, define, and remove all presence and suspicion of explosive ordnance in such a context may be only provisional and lead to near-constant reduplication.

Nevertheless, land release is based on a set of principles that can still be applied to the context of the threat of IEDs and ongoing conflict: evidence-based decision-making; credible information and reliable sources; well-documented process; graduated response based on local circumstances; local participation of men, women, boys, and girls; and safety and security of staff and communities.[109]

In the context of the Sahel, with its ongoing conflict and accessibility challenges, land release principles, when referring to inaccessible areas or areas with limited information available, clearly state that such areas should not be recorded as suspected hazardous areas by default. Suspected hazardous areas should be recorded in a database only when there is sufficient evidence to justify doing so. Other processes for managing areas that are inaccessible, or that present limited information, may be developed by the national mine action authority.[110] Such principles can provide a basis for an adaptation of the land release process in such contexts.

In addition, elements of the land release process can be taken and modified to support the IED responses across the Sahel, namely, NTS and clearance. These can be used in areas under the control of the government, when the situation is conducive. It should be remembered, however, that such activities may need to be repeated owing to the recurring nature of the IED threat and the changing nature of the conflict. This may also be the case when there are broader humanitarian efforts, such as those related to shelter reconstruction, food security, and livelihood restoration. Early coordination helps ensure that land is made safe for planned returns and the restart of economic activity when conducive.

In active conflict zones or highly insecure areas, land may be searched and explosive ordnance hazards disposed of for specific purposes, such as the immediate facilitation of aid. The parameters for such activities should be agreed by the relevant national authorities in consultation with those operationally responsible for search and disposal.

Non-technical survey

> NTS is the "collection and analysis of data, without intrusive interventions, about the presence, type, distribution and surrounding environment of EO contamination, in order to define better where EO contamination is present, and where it is not, and to support land release prioritization and decision-making processes through the provision of evidence."
>
> Source: IMAS 07.11: Land release

As a result of the active nature of conflict and ongoing insecurity, NTS with regard to IED contamination has largely been deemed unfeasible in most countries in the Sahel. Both Chad and Niger have conducted NTS concerning conventional anti-personnel mines.[111] Burkina Faso has indicated its intent to conduct NTS, with the National Demining Centre responsible for areas faced by insecurity and non-governmental organizations tasked in areas where the situation is more permissive.[112] In Mali, community focal points from the Association Malienne pour la Survie au Sahel, who were primarily tasked with risk education and victim assistance, were reported to

be trained in NTS, but there was no indication of any NTS being conducted. In Nigeria, limited NTS had been conducted in the past within garrison towns to support the establishment of IDP camps.[113] NTS was subsequently included in the responsibilities of the security forces.[114]

During conduct of the study, the absence of reliable data was repeatedly found to be a challenge faced by the national authorities responsible for mine action activities. In such cases, where there is an absence of available verified information, a comprehensive desktop assessment should be used to make an initial assessment of the presence, type, and distribution of the explosive ordnance using all available historical incident data, community reports, and satellite imagery. Some organizations operating in other contexts have developed a traffic light methodology, marking areas red, amber, or green on the basis of the risk assessed using satellite imagery only, to help prioritize the deployment of survey and clearance assets.

IMAS 07.14 Annex C – Threat Analysis and Threat Assessment in Environments Affected by IEDs[115] and the GICHD *Improvised Explosive Device Clearance Good Practice Guide*[116] suggest methodologies for data collection and analysis as part of a national IED threat assessment. In the Sahel region, such an approach can draw on existing counter-IED systems to inform broader mine action activities. This can pave the way for a cohesive understanding of the IED threat and its geographical spread, which would allow the prioritization of survey activities once hostilities have ceased.

Future NTS processes need to be adapted in accordance with the nature of the ongoing conflict, including how the national authorities define direct and indirect evidence of the presence of explosive ordnance. The IMAS (*08.10 – Non-technical survey*)[117] includes examples of both.

Table 6: Examples of indirect and direct evidence of the presence of explosive ordnance according to the IMAS.

IMAS examples of indirect evidence	Contextual considerations
Potentially productive land not in use	Productive land is unlikely to be in use in many areas owing to the displacement of the population. Such land is thus not necessarily indicative of the presence of explosive ordnance. In Borno State, Nigeria, for example, populations are unable to access agricultural land due to insecurity.
Verbal reports from the local population, former combatants, and all other relevant actors	The community may have been absent for an extended period and may have limited knowledge of what has occurred since they were displaced. Engagement with local communities risks harming them amid ongoing conflict. Authorities should consider whether perceptions that a community is supporting NTS may have a negative impact on their safety.
IMAS examples of direct evidence	**Contextual considerations**
Detonations of explosive ordnance during fires or by animals and accidents or incidents where the location of the event can be accurately determined	In a context where IEDs are commonly used in isolation, the presence of craters and fragmentation, or detonations by animals may not be considered direct evidence of the continued presence of IEDs. In most cases, this evidence would instead only signify that an event, involving the presence and initiation of a single device, has taken place.

Clearance

> The term "clearance" in the context of mine action refers to tasks or actions to ensure the removal and/or the destruction of all explosive ordnance from a specified area to a specified depth or other agreed parameters as stipulated by the national mine action authority/tasking authority.
>
> Source: IMAS 04.10: Glossary of mine action terms, definitions and abbreviations

> An explosive ordnance disposal spot task is an explosive ordnance disposal task conducted outside a reported suspected hazardous area or confirmed hazardous area. Such operations may involve a single item of explosive ordnance or several items at a specified location.
>
> Source: TNMA 05.10/01: Measurement and reporting of beneficiaries

The actions that have been taken across the Sahel to dispose of IEDs (including improvised landmines) do not meet the definition of clearance in the IMAS definition. Activities do not, for the most part, involve the removal of all explosive ordnance hazards from a specified area to specified depth. The actions reported during the conduct of the study were more closely aligned with explosive ordnance disposal spot tasks.

It was found that IED disposal in Burkina Faso, Mali, and Nigeria was conducted solely by national security forces. This reflects both the limitations on access owing to insecurity and, in countries such as Nigeria, restrictions on the use of explosives.[118] The 2025 APMBC extension request of Nigeria outlines a plan to second members of police and National Security and Civil Defence Corps to the National Mine Action Centre as mine action teams, although reporting lines, roles, and responsibilities are not detailed.[119]

At present, the search for and disposal of IEDs is a task undertaken primarily by military forces responsible for achieving military operational objectives. In Burkina Faso and Nigeria, during the period under review, this included search and disposal to enable the movement of humanitarian convoys, where movement by road was deemed feasible. In Burkina Faso, immediate efforts conducted by military engineers were reported.[120] In Mali, community focal points, known as multitask teams, conducted preliminary marking and liaised with the paramilitary police explosive ordnance disposal team (gendarmerie) for the disposal of explosive ordnance identified by communities. In Niger, a national humanitarian demining capacity (comprising 60 deminers) exists to focus on historical conventional landmine contamination, but in 2024 it was noted that the deminers had not been active since 2020.[121]

UNMAS training for Nigerian police explosive ordnance disposal teams and the National Security and Civil Defence Corps.

Image: UNMAS Nigeria

In Nigeria, it was reported that, even within the military, the disposal of IEDs fell under a variety of entities. Military activities in the north-east included the ongoing counterinsurgency operation, Operation Hadin Kai, and operations by the Multinational Joint Task Force, which comprises units from Benin, Cameroon, Chad, and Nigeria.[122] As such, search and disposal operations related to IEDs conducted by the military in the north-east fell under the remit of Operation Hadin Kai. Explosive ordnance disposal teams from the Nigeria Police Force were also reportedly responsible for IED disposal, while the National Security and Civil Defence Corps too had a mandate to cover IED disposal activities.[123]

Regional security forces have benefitted from significant training in IED threat mitigation, particularly in the French-speaking countries. This includes both bilateral support and regional initiatives, such as the provision of security force assistance to the G5 Sahel.[124] Prior to the end of 2023, Mali recorded a comparatively high level of military assistance, resulting from the presence of international military operations that provided training and equipment.[125] This included the United Nations Multidimensional Integrated Stabilization Mission in Mali (MINUSMA), which provided training in the disposal of improvised explosive devices and explosive ordnance, and support for the establishment of a coordination centre for explosive ordnance disposal operations until December 2023.[126] In addition, assistance was provided to the security forces by the European Union, France, and other bilateral partners. In Burkina Faso, UNMAS provided IED awareness training, search and detection training, support for development of a counter-IED training module, and training for IED awareness trainers. Burkina Faso also received significant assistance for its security force and bilateral support from Germany and the United States of America.[127]

In Nigeria, security forces conducting counter-IED activities had received bilateral support from various countries, including Germany, for the construction of the country's counter-IED and explosive ordnance disposal centre, the United Kingdom of Great Britain and Northern Ireland, and the United States of America.[128] In 2025, officers from the police and National Security and Civil Defence Corps underwent conventional munitions disposal and IED disposal training provided by UNMAS.[129]

Measurement of the efficacy of IED removal is challenging. IED disposal refers to the location, identification, rendering safe, and final disposal of IEDs.[130] For the purposes of the present study, although data did not always indicate that final disposal had taken place, all IEDs that were reported as "disrupted", "dismantled", "neutralized", or "defused" were considered to have been found and disposed of, regardless of the method used. Issues related to data collection and recording were encountered throughout the conduct of the study: as could be predicted, the location and clearance of devices was not always reported in open sources.

The study found that, across much of the region, the percentage of total IEDs that were disposed of before initiation, between 2020 and 2022, saw a steady progression. In Nigeria, the number of devices disposed of in 2022 was 8 per cent higher than in 2021. As of 2022, however, this percentage remained steady, with around 10 per cent of all devices recorded being disposed of. In Burkina Faso, the IEDs disposed of increased rapidly from 2020 to 2021, exceeding 40 per cent. This increase correlates with a surge in IEDs recorded from August to December 2021. During that period, disposal rates were relatively high (between 45 and 50 per cent) in the worst-affected regions, including the Est, Nord, and Sahel regions of the country. In 2020, all of the 32 IEDs that were recorded across the three regions initiated, whereas, in 2022, 48 IEDs recorded in those regions were disposed of by security forces or associated non-state groups. The reason for the rapid increase in response is unclear, but it may reflect the longer-term impact of concerted national and international efforts to address the growing threat. Not only had there been counter-IED capacities operating under MINUSMA (to which countries in the region contributed troops) but also an investment in 2020 of over USD 2 million in counter-IED training programmes by the United States of America and various training initiatives by UNMAS.[131]

From 2023 onwards, however, there is a notable regression in progress. This was most acute in Burkina Faso and Mali. By 2023, the percentage of IEDs found and disposed of in Burkina Faso was down to 19 per cent (from 44 per cent in 2021). In Mali, the proportion in 2024 had fallen to 9 per cent (from 34 per cent in 2022). This significant drop in capability correlates with several challenges that were encountered during that period: an increase in the tempo and change in the geographical spread of IED activity, which strained existing response capacities; national political instability; and the withdrawal of international counter-IED support.

Table 7: Potential reasons for changes in the IED search and disposal capacities in the Sahel region.

Potential reason for changes in IED search and disposal capacities	Comment
Increases in the tempo of IED activity, creating pressure on existing search and disposal capacities	In Burkina Faso, in 2022, the number of IEDs recorded rapidly increased from June onwards. This followed an unusually low level of activity in the first quarter of the year. Amid this surge, the percentage of devices found and disposed of dropped by more than 10 per cent. The following year recorded a further decrease in the disposal of IEDs, before a slight increase in 2024. As of 2024, however, the percentage of IEDs disposed of remained well below the peak of 2021. In Mali, the number of IEDs recorded rose by 36 per cent between 2022 and 2024. This coincides with a rapid decline in the number of devices found and cleared during the same period.
Geographical spread of IED activity, stretching existing search and disposal capacity	In Burkina Faso, in 2022, regions like Centre-Nord and Nord recorded between four and six times as many IEDs as in 2021, while there was no notable decline in the number of IEDs reported in areas of historically high levels of activity. Security forces in the newly affected areas thus required time to respond and adapt to this new threat level, and the available IED search and disposal resources had to be reorganized or shared across an expanding area of operations.
Political uncertainty, leading to the temporary disruption of activities	In 2021, Mali experienced its second change in government in less than a year. In 2022, Burkina Faso also experienced two changes of government. Domestically, such occurrences are likely to disrupt IED-related efforts as government/security force positions are reshuffled. At the international level, the political uncertainty led to a pause in the activities of many international entities, including those providing security support.[132] The United States of America, for example, is typically unable to provide military aid where it is deemed that "a country's military has overthrown, or played a decisive role in overthrowing, the government".[133]
Withdrawal of international counter-IED support	The case of Mali demonstrates the importance of the provision of sustained support for the training of security forces in responding to IEDs. Until 2023, Mali, of all the States under review, hosted by far the most international military operations, with the armed forces receiving significant training and equipment.[134] In addition, peacekeepers operating under MINUSMA provided additional IED search and disposal capacity. Between 2019 and 2021, more than 50 courses on explosive ordnance disposal were given by national instructors (trained by MINUSMA/UNMAS). Over 1,400 Malian security force members were trained in explosive ordnance and IED disposal during the time of MINUSMA in the country.[135] Following changes in government in 2020, US support to the Malian security forces was paused.[136] In late 2022, French forces withdrew from Mali. By 2024, following the closure of MINUSMA in December 2023, the percentage of devices found and disposed of had dropped to below 10 per cent.

Additional IED search and disposal capacity was present in Mali under MINUSMA.

Image: Harandane Dicko/MINUSMA , CC BY-NC-SA 2.0 (https://creativecommons.org/licenses/by-nc-sa/2.0/). Image modified (canvas extended) to fit layout.

The existence of counter-IED strategies, capacities, and activities in the Sahel countries is a good indicator of strong national ownership and a commitment to enhance local and national capacities. With the notable exception of Chad, however, for historical reasons few of the existing structures and capacities have been established in alignment with mine action pillars and governance standards. This is understandable given the characterization of the IED threat and the limited applicability of the land release process to the present context. Nevertheless, given the present trend of high numbers of IED victims/survivors in the region and the limited capacities and activities related to risk education and victim assistance, the countries covered would benefit from the adoption of good practice in those areas from the mine action field.

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

The present study identified growing proliferation of the use of IEDs across the Sahel. This included an expansion of the geographical spread of IED use; increasing numbers of direct and indirect victims; and a persistent, disproportional impact on civilians. While security forces remained the primary intended target, civilians continued to be significantly affected owing to their proximity to security operations, their use of shared transport corridors, and the emplacement of IEDs near critical infrastructure. The humanitarian consequences extended well beyond the immediate casualties. The threat posed by IEDs exacerbated displacement, undermined economic activity, restricted humanitarian access, and compounded vulnerabilities linked to climate-related shocks and insecurity.

The study found that, across the Sahel, IED responses are characterized by the complex interaction of mine action, broader humanitarian considerations, and counter-IED approaches. Mandates, institutional structures, and coordination mechanisms are largely in place, but the overlap of mine action and counter-IED authorities and mandates can blur the lines between the two approaches.

Recommendations

The study shows that national, regional and international response frameworks play a vital role in the IED response. In order to take full advantage of these, national authorities should consider:

- **Further leveraging international legal and normative frameworks:** States Parties should continue to leverage the APMBC as a means of making progress in addressing IEDs and of receiving related support, and donors and international partners should provide sustained technical assistance to help States navigate the challenges of applying such frameworks in non-permissive, IED-affected environments (such as voluntary trust funds, multi-year partnerships, and other efforts to advise and support States in fulfilling their obligations as per the Siem Reap-Angkor Action Plan 2025–2029);
- **Further engaging with regional and continental bodies on the shared threat posed by IEDs:** National authorities across the Sahel should seek to engage with those of other countries, share experiences, and exchange good practices through the African Union, at the continental level, and ECOWAS, at the regional level (bodies seeking to develop strategies to enhance IED response) and to draw on the various internationally supported initiatives to provide support to West African States in enhancing the IED response (in line with Action 45 of the Siem Reap–Angkor Action Plan 2025–2029, which calls on States to explore opportunities for international, regional, and bilateral cooperation including among affected States Parties or triangular cooperation for the voluntary sharing of national experiences and good practices).

In order to operationalize clear governance frameworks that distinguish between mine action and counter-IED approaches, yet strategically align them, national authorities should consider:

- **Strengthening nationally led, whole-of-government approaches that consider both mine action and counter-IED responses:** While objectives are distinct, mine action and counter-IED efforts are often operationally intertwined and fall under the same institutional structures, and there are clear areas of complementarity, particularly risk education, information management, victim assistance, and advocacy. Coordinated engagement in these areas can enhance civilian protection without compromising the respective mandates, improving alignment and reducing duplication of effort while ensuring that critical civilian protection considerations are addressed alongside security-centric responses;
- **Expanding humanitarian IED response capacity in parallel with counter-IED efforts:** Donors and national authorities should ensure that humanitarian IED response approaches, particularly explosive ordnance risk education, victim assistance, and information management, are not subsumed by security-driven counter-IED priorities. Efforts to mitigate the impact of IEDs on civilians require dedicated funding, policies, and implementation capacities that preserve the humanitarian character of those activities in active conflict settings.

Conclusions	Recommendations
It is clear that the region's response capacity is increasingly strained by the pace, scale, and dispersed nature of IED use, along with fluctuations in support. Some of the progress achieved in earlier periods, particularly in the identification and disposal of IEDs by security forces, has been lost in several contexts, owing to intensified IED activity, political instability, and the withdrawal or reduction of international support.	Future support should seek to build sustainable and enduring national capacity that recognizes the temporary nature of the presence of international actors. Across both mine action and counter-IED approaches, national authorities, international actors, and donors should consider balancing engagement and support for short-term operational activities, such as clearance or disposal, with longer-term investment in national capacity. The sudden reduction in the number of IEDs disposed of by security forces following the decline in international security assistance highlights this imperative. Sustainable impact depends on the resilience of national systems and capacities, not simply on short-term outputs.
The study documents the alarming number of direct and indirect victims among civilians.	While broader efforts seek to disrupt the long-term viability of IED use, there should be an immediate focus on: ▾ **Continuing to promote civilian protection through systematic risk education and community engagement:** Humanitarian IED response efforts should continue to prioritize immediate solutions that reduce the risk posed to civilians, enable humanitarian access, and recognize the recurring nature of the IED threat in the Sahel (i.e. a short-term focus that promotes safe behaviour until the IED threat is reduced); and national authorities, supported by local and international humanitarian actors and donors, should continue to promote context-specific IED risk education, recognizing it as an essential life-saving intervention that supports the mitigation of civilian IED casualties, even amid ongoing conflict; ▾ **Integrating risk reduction within wider humanitarian response and protection efforts:** According to the Siem Reap-Angkor Action Plan 2025–2029, risk reduction should be integrated into "wider plans for humanitarian response and protection, development, health, mental health, climate, the environment, education, and / or disaster risk reduction"; ▾ **Enhancing the understanding of the impact of IEDs on civilians:** National authorities should strengthen systems for recording IED incidents and victims, including the collection of data disaggregated by sex and age, using a do-no-harm approach based on assessment of the impact on beneficiaries of data collection, use, storage, and sharing. Some elements of IED-related data collected by security forces or national security elements will be sensitive in nature, so every effort should be made to extract and share the minimum amount of data required for mine action activities to be effective.

The study concludes that addressing the impact of IEDs in the Sahel requires an approach that takes into account both mine action and counter-IED considerations, while respecting the necessary separation of the activities. Strengthening national ownership, enhancing information-sharing within appropriate limits, and investing in risk education and victim assistance are critical to mitigating the impact of IED use on civilians. The conclusions and recommendations set out in this report aim to support more effective and sustainable responses to the IED threat, grounded in existing obligations, operational realities, and the humanitarian imperative to reduce harm to civilian populations.

ANNEX I: METHODOLOGY

Both quantitative and qualitative research was conducted for this study. Qualitative research included research trips to Ouagadougou (Burkina Faso), Bamako (Mali), and Maiduguri (Nigeria), and various in-person and virtual meetings organized in Geneva, Switzerland. Meetings were held with national authorities, operators, the United Nations and associated agencies, and national and international non-governmental organizations, alongside experts in the subject matter.

Quantitative data was exported from ACLED to assess the threat using a standardized data set.[137] This was selected owing to the divergence in the availability of IED data and collection and management processes across the countries under review. It is recognized that the figures retrieved from ACLED may diverge from the figures held by national authorities, and thus the analysis in the present study is intended to be only broadly indicative of the nature of the IED threat. It is likely that the figures cited, particularly those pertaining to casualties, significantly underrepresent the reality and scale of the threat.

The export of the data was conducted using the following export parameters:

Table A.1: Parameters used for the export of data in the present study.

Parameter	Selected input
Date range	1 January 2020 to 31 December 2024
Event type	"explosions/remote violence" and "all"
Sub-event type	"remote explosive/landmine/IED," "suicide bomb" and "disrupted weapons use"
Actor type	All
Actor	All
Region	All
Country	"Burkina Faso", "Chad", "Mali", "Niger", "Nigeria"
Location	All
Keyword	None

Incidents pertaining to ERW (also coded as "remote explosive/landmine/IED" by ACLED) were manually removed (key terms for exclusion: "UXO" (unexploded ordnance), "grenade", "mortar").

Incidents recorded under the sub-event type "disrupted weapons use" were reviewed. Incidents not pertaining to IEDs or associated components were manually removed (key terms for exclusion: "disarmed", "weapon(s)", "ammunition", "magazine", "military equipment", "military material", "rocket", "shell", "anti-vehicle mine", "landmine"). Other key terms were included ("defusal", "IED", "IED landmine", "dynamite", "explosives", "IED manufacturing materials", "bomb", "mines", "homemade", "detonators", "precursors", "detonation cord").

All data was then subject to a secondary round of coding internally, allowing for the extraction of additional information required for the study. This secondary coding was based on the narrative provided by ACLED in the column "notes". Each incident was assigned additional parameters, including:

a. Assessed target
b. Impact
c. Location
d. Type of device
e. Number of devices
f. Type of incident
g. Number of fatalities
h. Number of injuries
i. Breakdown of injuries and fatalities by actor (national security force, civilian, government, national other armed group, international other armed group, international security force, non-State armed group)
j. Disaggregation of data on the victims by sex and age

During the recoding, a process of inductive reasoning was used to suggest why civilians were affected during IED incidents. This was supported by the collection of anecdotal information from various stakeholders as to why civilian casualties occurred, and if civilians were typically considered a legitimate target of IEDs by their users.

CODE KEY AND EXPLANATIONS

The present section provides further information on the parameters listed above.

Assessed target

Assessment of the intended target of attack used narrative data to determine who or what the actor emplacing the IED planned to attack. This should be considered distinct from the broader strategic aims of the IED use, such as denial of access, the undermining of morale, and disruption of operations. Although the actual impact of a device can support assessment of the intended target, it can be different.

Table A.2: Assessment of the intended target of an IED.

Possible intended target	Considerations
National security forces (army, police, gendarmerie, prison services) These were coded according to the specific national security force mentioned, but grouped together throughout much of the report for ease of understanding.	▾ Presence of national security forces in the immediate vicinity of an IED event explicitly stated ▾ Direct impact (material, casualties, or IED disposal operation) affecting national security forces recorded National security forces are considered highly likely to be the target of IEDs as an active party to the conflict. This is supported by claims by non-State armed groups, following IED incidents, clearly stating the intended target of the attack.
International security forces (MINUSMA, G5 Sahel, Takuba Task Force, French Armed Forces) These were coded according to the specific security force mentioned, but grouped together throughout much of the report for ease of understanding.	▾ Presence of international security forces in the immediate vicinity of an IED event explicitly stated ▾ Direct impact (material, casualties, or IED disposal operation) affecting international security forces recorded International security forces are considered highly likely to be the target of IEDs as an active party to the conflict. This is supported by claims by non-State armed groups, following IED incidents, clearly stating the intended target of the attack.
Other armed groups: national (Civilian Joint Task Force, Dana Atem, Dan Na Ambassagou, Donso, Volontaires pour la défense de la patrie) The term "national other armed groups" is used when referring to groups where the relationship with the State is unclear. These entities may, at times, support State security forces, although the relationship is often highly adaptable.	▾ Presence of national other armed groups in the immediate vicinity of an IED event explicitly stated ▾ Direct impact (material or casualties) affecting other armed groups recorded National other armed groups are considered highly likely to be the target of IEDs as an active party to the conflict. This is supported by claims by non-State armed groups, following IED incidents, clearly stating the intended target of the attack.

Possible intended target	Considerations
Other armed groups: international (Africa Corps, Wagner) The term "international other armed group" refers to armed actors operating in the conflict that do not represent the security force of a recognized nation State, nor are they part of an international task force. They nevertheless operate at the request of or in support of the national government.	▾ Presence of international other armed groups in the immediate vicinity of an IED event explicitly stated ▾ Direct impact (material or casualties) affecting international other armed groups recorded Owing to their support for the State, international other armed groups are considered highly likely to be the target of IEDs as an active party to the conflict. This is supported by claims by non-State armed groups, following IED incidents, clearly stating the intended target of the attack.
Non-state armed group (Islamic State in the Greater Sahara, Jama'a Nusrat ul-Islam wa al-Muslimin)	▾ Presence of non-State armed groups in the immediate vicinity of an IED event explicitly stated ▾ Direct impact (material or casualties) affecting international non-State armed groups recorded Non-State armed groups with different aims target each other using IEDs. This is supported by claims by non-State armed groups, following IED incidents, clearly stating the intended target of the attack.
Infrastructure	▾ Destruction of infrastructure (bridges, water access points, telecommunications masts, electricity supply) explicitly stated ▾ Absence of obvious alternative intended target (e.g. the security forces were not stated to be present at the time of the incident) This is supported by trend analysis, which indicates that various types of infrastructure (e.g. bridges) are considered valid targets (frequency of incidents) and by evidence of broader conflict dynamics that involve the siege of locations.
Government	▾ Presence of government-associated officials explicitly stated (other terms used include "officials", "administrative authorities", "village councillor", "delegation", "vice-president", "sub-prefect", "member of parliament", "electoral workers") ▾ Presence of government-specific infrastructure explicitly stated (other terms used include "mayor's office", "prefecture", "customs post") Official government figures, employees, and infrastructure are considered highly likely to be the target of IEDs as an active party to the conflict. This is supported by claims by non-State armed groups, following IED incidents, clearly stating the intended target of the attack.
Civilian	▾ Device emplaced/initiates in a location where there is no immediately obvious intended target other than civilians (other terms used include "house", "houses") This is supported by analysis of the broader conflict dynamics, which indicates that specific actors may infrequently emplace IEDs in response to a perception that residents support other non-State armed groups This, however, represents less than 0.15 per cent of incidents reviewed. There have also been explicit mentions, in the immediate vicinity of the incident, of a civilian who could feasibly be deemed an extension of the government (such as those undertaking education-related tasks).
Unknown	▾ Narrative indicates no feasible explanation for emplacement of the device ▾ Device is emplaced/initiates in a location where there is a reasonable likelihood of typical targets (i.e. security forces), but no target is explicitly stated ▾ No casualty or infrastructure impact is reported ▾ Impact on civilians or livestock was recorded, but no clear claim was made by a non-State armed group

Impact

For the purposes of coding the data, the parameter "impact" was confined to the immediate impact of the specific device and did not look at the broader implications of IED usage in the area. The coding of impact was based primarily on the indication of casualties and/or damage to assets. In incidents where IEDs were successfully identified and cleared by an actor, the device was considered as affecting that actor owing to the disruption resulting from the requirement that disposal take place.

Location

The table below shows potential locations of IEDs.

Table A.3: Location of IEDs

Location	Description
Urban	▾ Device emplaced in an urban populated area ▾ Key terms used: "town", "airport", "outskirts of the town"
Rural	▾ Device emplaced in a rural populated area ▾ Key terms used: "village", "commune", "near the town", "forest", "community", "farm"
Route	▾ Device emplaced along a route, ▾ No explicit reference to a populated area ▾ Reference to the periphery of a rural populated area ▾ Key terms used: "between _ and _", "outskirts", "entrance", "north/south/east/west of _", "_km from _"
Market	▾ Device emplaced at a market
Security force position	▾ Device emplaced at a security force position, checkpoint or forward operating base.
Unknown	▾ No reference to a location or a specific location listed with no reference to it being urban or rural.

Type of device

The parameter "type of device" was used to categorize the delivery mechanism of the IED where possible. Vehicle-borne and person-borne IEDs were marked as such.

Number of devices

The number of devices used in each incident was extracted. Where there was no indication that more than one device was used, number of devices was coded as 1. Where the number of devices was specified, this was coded accordingly. Where there was an indication of more than one device, but no specific details, the number of devices was coded as 3, in keeping with ACLED casualty methodology.

Type of incident

The types of incident encountered are set out in the table below.

Table A.4: Types of IED incident.

Incident	Description
Cache found	Cache of probable IED components, precursors, or dual use items identified. Device not fully constructed.
IED (disposed of)	IED(s) identified and disposed of without unintended initiation of the device.
IED (initiated)	IED(s) functions, and no details indicate that this was a divergence from what had been technically intended.
IED (initiated during disposal)	IED(s) functions, and no details indicate that this was a divergence from what had been technically intended. Details indicate, however, that the device functioned during the course of an intervention (e.g. with operator casualties).
IED (initiated during emplacement)	IED(s) functions during emplacement.
IED (initiated during manufacture)	IED(s) functions during manufacture of the device.

Casualties

ACLED records whether there were fatalities resulting from an incident, but does not record the number of injured, nor does it disaggregate the casualties by type of actor.[138] To compensate for this and to provide casualty figures that were as accurate as possible, cases of fatalities and injuries were extracted manually from the narrative and categorized according to the actor affected. In keeping with the ACLED methodology, which indicates that casualties occurred or injuries were sustained without giving information about the number of individuals affected, the number of injured individuals was coded as 3. As mentioned earlier, figures on IED-related casualties typically represent an underestimate of the actual number of casualties, and as such should always be considered indicative rather than exhaustive.

Disaggregation of victims by sex and age

Casualties were coded on the basis of the sex and/or age of the victims where the narrative contained such information. The key terms used were "women", "woman", "wife", "mother", "girl(s)", "boy(s)", "youth(s)", "young", "child(ren)", "infant(s)", "son(s)", and "daughter(s)".

Where it was indicated that casualties had occurred among women and children, but there was no further information with which to disaggregate the sex and age of the victims, the number of fatalities and those injured was coded as 3. Where casualties were stated to be women and children, but no specific breakdown was available, casualties were equally divided between the two.

UNDERSTANDING THE IMPACT OF IMPROVISED EXPLOSIVE DEVICES ON CIVILIANS

Themes relating to the impact of IEDs on civilians were identified through a process of inductive reasoning, based on the review and assessment of individual IED incidents. Throughout the process, notes were taken on any information contained in the narrative that might explain why civilians were affected by each device. The explanations were then grouped and several recurring themes identified. Data were then reviewed according to those broad themes, as appropriate.

Table A.5: Situations in which civilians may be among IED victims.

Theme	Explanation
Proximity to conflict actor	The specific and immediate target of the IED is likely to be the security force/other armed group/government. Civilians may be a secondary target to discourage their liaison with the security force/other armed group/ government. Despite not being the primary target of the IED, civilians are affected by their proximity to the device.
Security force/other armed group escort	Civilian traffic, commercial activities, and food convoys are escorted by security forces/other armed groups for protection.
Shared transport with security forces/other armed groups/the government	The mode of transport includes the presence of at least one member of the security forces/another armed group/the government.
Proximity to security forces/other armed groups (no context provided)	The IED results in both security force/other armed group and civilian casualties, indicating their immediate proximity, but no explanation is provided for the proximity.
Proximity to government infrastructure	Civilians are present at government buildings at the time of an incident.
Civilian contractor supports security force/government	Commercial civilian contractor vehicles are operating in support of the security forces/government or travelling within a security force convoy. When doing so, they are largely indistinguishable from the security forces.
Government affiliates	Recorded casualties include former or current government affiliates or former local administration representatives (e.g. a former village councillor)
Involvement in government-affiliated development infrastructure activities	The specific and immediate target of the IED is the activity itself (in order, for example, to undermine it). Civilians are affected owing to their involvement in the activity. The intent may be to restrict access to an area (e.g. to stop repairs to a bridge), to undermine visible governance activities, or to dissuade civilians from supporting the government.
The identity of the IED victims is unclear	Non-State armed groups may claim that casualties were from the security forces/other armed groups, but no details are provided to support this claim.
Denial of access or inconvenience (target unclear)	IEDs are emplaced before a conflict actor withdraws from a location. The target may be the security forces, other armed groups, non-State armed groups, or civilians.
Affiliation with a banned activity	The victims are associated with activities banned by a non-State armed group (e.g. musicians).

GEOGRAPHICAL DEFINITIONS

The following administrative regions were included within the study:

- Burkina Faso: all
- Chad: all
- Mali: all
- Niger: all
- Nigeria: Bauchi, Borno, Jigawa, Kaduna, Kano, Katsina, Kebbi, Sokoto, Niger, Yobe, and Zamfara States

ANNEX II: CONSTRAINTS ON THE APPLICATION OF INTERNATIONAL HUMANITARIAN LAW TO NON-STATE ARMED GROUPS

INTRODUCTION

The present annex seeks to provide an overview of the international legal framework regulating the use of IEDs, including the conduct of hostilities regime under IHL and its applicability to non-State armed groups. It comprises four sections. The first outlines the classification of armed conflicts under IHL and the corresponding applicability of treaty provisions. The second examines the international instruments that directly or indirectly regulate IEDs. The third discusses the treatment of IEDs under the general principles and rules of IHL governing the conduct of hostilities, and the potential legal repercussions of violations of those norms. The fourth section analyses the legal bases for non-State armed groups to be bound by IHL, such as customary international law, legislative jurisdiction, and unilateral undertakings.

INTERNATIONAL HUMANITARIAN LAW AND THE TYPOLOGY OF ARMED CONFLICTS

IHL applies to situations of armed conflict. This is the existence of hostilities in practice without there needing to be a formal declaration or recognition of war by the parties involved. Once an armed conflict exists, any act carried out in relation to that conflict is subject to the rules of IHL.

IHL distinguishes between two categories of armed conflicts:

- International armed conflicts
- Non-international armed conflicts

Certain IHL treaty provisions apply exclusively to one category, while others, complemented by customary international law, govern both. There is no international body vested with the authority to determine definitively whether a given situation amounts to an international armed conflict or non-international armed conflict. This is decided on the basis of criteria assessed in each individual case.

International armed conflict arises in situations of declared war or in any instance of recourse to armed force between two or more States, even in the absence of a formal declaration of war, and in instances of partial or total occupation of the territory of a State, even if the occupation meets no armed resistance. The existence of an international armed conflict is established by the factual occurrence of the use of force between States, irrespective of its intensity or duration, or whether the opposing side engages in hostilities in response.

Non-international armed conflict, by contrast, is waged between a State's armed forces and one or more organized non-State armed group, or between such groups themselves. Where a State exercises overall control of a non-State armed group engaged in hostilities against another State, the non-international armed conflict may be characterized as international in nature.

The threshold for the application of the IHL to non-international armed conflict has been progressively defined through international jurisprudence. It is now generally accepted that two criteria must both be satisfied for a situation of violence to qualify as a non-international armed conflict and thus trigger the application of IHL. First, the non-State armed group involved must display a sufficient degree of organization; and, second, the hostilities between the parties must reach a level of intensity exceeding that of isolated or sporadic acts of violence. The determination of whether these criteria have been met is an inherently factual exercise requiring a case-specific assessment of the totality of the circumstances. The motives of the parties or the legitimacy of their cause are irrelevant to the legal qualification.

Non-international armed conflicts are to be distinguished from situations of internal disturbance or tension,

including riots, demonstrations, or other forms of internal violence, which, despite possibly involving considerable levels of force and disruption, do not attain the requisite degree of organization and intensity to constitute an armed conflict under IHL. The legal classification of a situation as a non-international armed conflict means that it is regulated within the IHL framework, including its weapons-specific conventions. This is of particular importance in the context of IED use, because it otherwise falls under other applicable branches of law, notably domestic legal frameworks governing law enforcement and, where relevant, international human rights law. This means that the factual qualification of the situation is a necessary preliminary step in determining the source of the applicable obligations and the corresponding implications for their scope and content, and the legal consequences of their breach.

While differences between the rules of IHL applicable to international armed conflicts and to non-international armed conflicts remain, the development of customary IHL has led to a substantial convergence of the rules governing the conduct of hostilities in both types of armed conflict.

INTERNATIONAL LEGAL INSTRUMENTS RELEVANT TO REGULATION OF THE USE OF IMPROVISED EXPLOSIVE DEVICES

There is no single international convention dedicated exclusively to regulation of use of IEDs. In addition to the APMBC and Amended Protocol II of the CCW, as outlined in the section of this study on international frameworks, several instruments within the broader frameworks of disarmament, arms control and IHL govern the use, production, and transfer, and other aspects of their life-cycle. A non-exhaustive overview of selected obligations under these instruments is provided below.

Protocol on Explosive Remnants of War (Protocol V to the Convention on Certain Conventional Weapons)

The Protocol on Explosive Remnant of War to the CCW[139] does not explicitly mention IEDs. Nevertheless, its broad definition of ERW and abandoned explosive ordnance may, in certain cases, include IEDs. This depends on their design and function. The definition expressly excludes mines, booby-traps, and other devices as defined in Amended Protocol II to the CCW. As a result, IEDs that meet those definitions fall outside the ambit of Protocol V. Accordingly, the applicability of Protocol V to IEDs requires case-by-case analysis of devices on the basis of their characteristics, functions, and nature.

Where it is applicable, Protocol V can provide a framework for addressing the long-term post-conflict humanitarian risks posed by some types of IEDs, through a set of obligations that are applicable to High Contracting Parties and, with respect to some of those obligations, to parties to an armed conflict more broadly.

Protocol V establishes obligations requiring each High Contracting Party and party to an armed conflict, following the cessation of active hostilities and as soon as feasible, to mark and clear, remove, or destroy ERW in affected territories under its control and sets out measures to reduce the risks posed by ERW (Article 3). It further requires such parties, to the maximum extent possible and as far as practicable, to record and retain information on the use or abandonment of explosive ordnance and to make such information available, subject to their legitimate security interests, in order to facilitate the marking and clearance, removal, or destruction of ERW and to support risk education (Article 4).

Protocol V also addresses assistance with respect to existing ERW, as well as international cooperation and assistance more broadly. This includes support for marking and clearance, removal, or destruction activities, victim assistance, and the provision of technical, financial, and technological support (Articles 7 and 8). High Contracting Parties are encouraged to take generic preventive measures aimed at minimizing the occurrence of ERW, including, but not limited to, those set out in part 3 of the Technical Annex.

Convention on Cluster Munitions

The Convention on Cluster Munitions[140] does not refer specifically to IEDs either, but its provisions may apply to certain types of IEDs if they meet the definition of cluster munitions set out in Article 2 of the Convention. In such cases, these devices fall within the scope of the Convention's stringent regulatory framework. Under this framework, States Parties undertake never to:

- Use cluster munitions
- Develop, produce, otherwise acquire, stockpile, retain, or transfer them
- Assist, encourage, or induce anyone to engage in activities prohibited under the Convention (Article 1)

The Convention on Cluster Munitions establishes obligations concerning the storage and destruction of stockpiled cluster munitions, and requirements for the clearance and destruction of cluster munition remnants in areas under a State Party's control (Articles 3 and 4). This includes the measures necessary for the implementation of those obligations, such as survey, marking, and risk reduction education, along with procedures for extending applicable clearance and destruction deadlines (Article 4).The instrument also establishes obligations relating to victim assistance, in accordance with IHL and international human rights law (Article 5).

Terminology

When an IED falls under the definitions established by relevant international instruments, it should be identified using the terminology of the applicable framework. This allows for greater clarity regarding the corresponding obligations relating to its use, clearance, and/or destruction, and other aspects of its life cycle. At the same time, precise legal categorization of an IED does not preclude the use of broader regulatory or operational measures for addressing such devices. These are often governed by national legislation and general IHL.

REGULATION OF THE USE OF IMPROVISED EXPLOSIVE DEVICES UNDER INTERNATIONAL HUMANITARIAN LAW

As shown above, certain international instruments provide for limited regulation of IEDs, but their use remains subject to the broader framework of IHL, particularly the rules regulating the conduct of hostilities. Derived from both treaty law and customary international law, these rules impose legal constraints on the means and methods of warfare during an armed conflict, including the employment of IEDs.

Table A.6: IHL principles and their relevance to the use of IEDs

Principle under IHL	Explanation
Principle of distinction	Requires parties to an armed conflict to distinguish at all times between combatants and civilians, as well as between military objectives and civilian objects.[141] Parties to an armed conflict may violate this principle when they direct attacks against civilians or civilian objects, including through the use of IEDs. For instance, detonating a command-operated IED against a school bus or a civilian evacuation convoy may constitute a breach of the principle of distinction.
Prohibition of indiscriminate attacks	Forbids attacks that are not directed at a specific military objective or that affect both military targets and civilians without distinction.[142] The use of IEDs may be indiscriminate when their design, emplacement, or method of initiation does not permit distinction between combatants and civilians or between military objectives and civilian objects. For example, the use of victim-operated IEDs along civilian routes or large-charge command-detonated IEDs in densely populated areas may constitute conduct contrary to this rule.

Principle under IHL	Explanation
Prohibition of weapons that are indiscriminate by nature.	Proscribes the use of any weapon that cannot be directed at a specific military target or the effects of which cannot be limited as required by IHL.[143] Certain types of IEDs, particularly victim-operated devices, may meet this definition given the inherent inability to differentiate between combatants and civilians once activated.
Principle of proportionality	Prohibits the launch of attacks that may be expected to cause incidental loss of civilian life, injury to civilians, or damage to civilian objects that would be excessive in relation to the concrete and direct military advantage anticipated.[144] The employment of IEDs in populated areas presents a heightened risk of civilian harm owing to the proximity of military objectives and civilian infrastructure, and the intermingling of civilians and combatants. In such contexts, the foreseeable civilian harm resulting from the use of IEDs may outweigh the military advantage anticipated. For example, detonating a large-charge IED to target a military vehicle moving through a crowded urban street may violate the proportionality rule, as the expected civilian casualties and damage to civilian objects would be excessive compared with the limited and localized military gain.
Prohibition of means and methods of warfare that cause superfluous injury or unnecessary suffering	Limits the choice of weapons and tactics by prohibiting those that inflict harm exceeding that which is required to achieve a legitimate military objective.[145] The improvised nature and lack of precision of many IEDs may increase the likelihood of injuries that are disproportionate to the military effect sought.
Obligation to take all feasible precautions to protect civilians and civilian objects	Encompasses precautions in attack (aimed at minimizing incidental civilian harm) and precautions against the effects of the attacks (intended to protect civilians under their control from foreseeable dangers).[146] The technical unpredictability of certain IEDs may prevent parties from verifying whether civilians are present at the moment of activation, thereby calling into question their ability to comply with these precautionary obligations. For example, victim-detonated IEDs emplaced along roads that are used by both military convoys and civilian vehicles offer limited opportunity to ensure that civilians are not harmed.

Breaches of the prohibitions and obligations in the table above may amount to serious violations of IHL, thus constituting war crimes. This is reflected in treaty law, including the Rome Statute of the International Criminal Court, and in customary IHL applicable in both international armed conflicts and non-international armed conflicts, albeit with variations in formulation and scope.[147] This includes the rules prohibiting attacks directed against civilians and civilian objects, indiscriminate attacks, and attacks carried out in violation of the principle of proportionality.

Other rules discussed above, including the prohibition of weapons that are indiscriminate by nature or that cause superfluous injury or unnecessary suffering or the obligation to take feasible precautions in attack or against the effects of attacks, while binding under IHL, do not constitute war crimes when breached.[148] Each situation must be assessed in light of the applicable legal basis and the circumstances of the weapon use.[149] Violations of these rules may serve as evidence in determining whether an attack amounts to a war crime, even when such breaches in themselves do not constitute war crimes. Furthermore, while IHL does not generally oblige States to prosecute violations that do not amount to war crimes, they are required to take appropriate measures to prevent and suppress all other violations of IHL.

There are multiple mechanisms for the enforcement of IHL, the main one being national legal systems. As a matter of principle, IHL violations should, and in some cases must, be investigated, prosecuted, and adjudicated through national institutions and mechanisms in accordance with applicable national law. International mechanisms are meant to serve a complementary function, intervening principally where national accountability frameworks are unavailable, ineffective, or otherwise unable to ensure compliance with IHL.[150]

If, against this legal framework, the use of IEDs amounts to a war crime, it triggers States' obligations under IHL to investigate such conduct and, where appropriate, to prosecute, through their national legal systems, those suspected of being responsible. Such conduct may also give rise to individual international criminal responsibility and, in certain cases, prosecution by third States exercising universal jurisdiction under their domestic legal frameworks.

LEGAL BASIS FOR THE APPLICABILITY OF INTERNATIONAL HUMANITARIAN LAW TO NON-STATE ARMED GROUPS

As outlined above, both treaty-based and customary rules of IHL regulate the use of IEDs, but, while IHL imposes obligations on parties to an armed conflict, non-State armed groups cannot become formal signatories to international treaties such as the Geneva Conventions or their Additional Protocols. Their participation in treaty negotiations is rare, and their practices and views on legal provisions are generally not considered in the formation of customary international law.[151] Nevertheless, it is widely accepted that non-State armed groups are legally bound by core IHL obligations.[152] This calls for an examination of the normative basis on which such obligations apply to entities that exist outside the conventional framework of international lawmaking.

Since the adoption of the Geneva Conventions in 1949, various legal theories have been put forward to explain how IHL obligations extend to non-State armed groups. Although these theories vary in their conceptual foundations and have been classified differently across the literature, it is generally possible to distinguish five principal approaches: customary international law; general principles; State succession; third-party consent; and legislative (or prescriptive) jurisdiction.[153] The present section focuses on the principles of customary international law and legislative jurisdiction for they are regarded as the most coherent in explaining the direct and immediate applicability of the full body of IHL to non-State armed groups.

Customary international law

Customary international law constitutes one of the main sources of international law, alongside treaties and general principles of law.[154] For a concept to become a rule under customary international law, there must be both a general and consistent practice by States, and *opinio juris (*a conviction on the part of States that such practice is carried out of a sense of legal obligation rather than mere convenience, comity or habit).[155] Once these two elements converge, a rule emerges that is legally binding on States and may in certain instances extend to other subjects of international law. [156] The binding force of customary international law derives not from the explicit consent of States but from the general acceptance of a practice as law by a sufficiently broad and representative number of States, subject to the principle that a State that persistently objects to the rule during its formation may remain exempt from its application.[157]

Customary international law plays a significant role in sustaining and extending the normative reach of IHL beyond treaty frameworks. It ensures that the fundamental rules governing the conduct of hostilities and the protection of persons during armed conflicts remain applicable even in the absence of treaty obligations or the case of their limited regulation of a particular situation, thereby reinforcing the universality and internal coherence of the humanitarian legal order.[158]

The binding force of customary international law extends beyond States to other subjects of international law.[159] The decisive criteria is not statehood but the possession of international legal personality.[160] When a non-State armed group demonstrates a sufficient degree of organization[161] and engagement in protracted armed violence rising above the level of internal disturbances or banditry,[162] the situation amounts to a non-international armed conflict. Such recognition confers upon the group, to a limited extent, an international legal personality, allowing it to hold and exercise corresponding rights and obligations under IHL.[163] The consequence of this recognition is that such groups are bound by customary IHL, irrespective of their consent and conduct of the territorial State.[164]

Principle of legislative jurisdiction

The principle of legislative or prescriptive jurisdiction is widely regarded as one of the main theories explaining the binding force of IHL on non-State armed groups.[165] It reflects the capacity of States to extend their international legal obligations to all persons and entities subject to their authority, whether on the basis of territory or nationality.[166] When a State becomes a party to IHL treaties, it therefore undertakes obligations not only for itself but also with binding effect on those within its jurisdiction. As has been observed by Sandesh Sivakuraman, "the rights and duties of states are simply the rights and duties of the people who make up those states".[167]

A State's ratification of an international treaty can operate as the functional equivalent of legislating for all individuals within its jurisdiction.[168] Importantly, the capacity to legislate should not be understood as confined to domestic lawmaking, but should also encompass the ability of States to assume rights

and obligations at the international level on behalf of persons and entities subject to their jurisdiction.[169] Thus, even when a non-State armed group contests the government's authority, it remains bound by the international obligations that the State has accepted.

Traditionally, international law has been understood as unable to impose direct obligations on non-State entities. This position has gradually evolved and such actors are now recognized as capable of bearing both rights and obligations under international law.[170] The theory of legislative jurisdiction is grounded in the understanding that IHL constitutes an exception to the general principle whereby an international treaty creates direct rights and obligations for individuals only when the State follows a monist approach (internal and international legal systems form a unity) or the treaty is self-executing (it becomes enforceable as domestic law immediately upon ratification). A central condition for extending treaty obligations to individuals and groups within a State's jurisdiction is the drafters' intent that the instrument should bind non-State third parties.[171] The existence of such intent on the part of the drafters is widely, if not universally, acknowledged with respect to common Article 3 of the Geneva Conventions and Additional Protocol II thereto, an interpretation that is supported by the records of the Geneva negotiations and reflected in the Commentaries to the Geneva Conventions and their Additional Protocols.[172]

The doctrine of legislative jurisdiction has been put forward primarily to explain the binding nature of conventional IHL, but it has also been employed, by analogy, to conceptualize the binding force of customary IHL. It is not based on the drafters' intent, which is absent in the formation of custom, but rather on the universal character of customary norms established through consistent State practice and *opinio juris*.[173]

Express commitment to abide by international humanitarian law

As scholarly debate on the precise legal basis for non-State armed groups being bound by IHL continues, many such groups have expressly committed to respecting its rules, either in general terms or with respect to specific provisions.[174] These commitments are typically expressed through unilateral declarations, special agreements, or internal codes of conduct, each of which is discussed below.

Express commitments by non-State armed groups serve to bridge the legitimacy gap resulting from their exclusion from formal lawmaking processes and reinforce adherence to humanitarian norms. By voluntarily acknowledging the applicability of IHL, such groups demonstrate a form of normative ownership, namely an acceptance of the rules as their own rather than externally imposed obligations. This sense of ownership can, in turn, strengthen the perceived legitimacy of IHL and encourage more consistent compliance. This makes express commitments more than mere political declarations; they foster the internalization and effective implementation of IHL within non-State entities.[175]

Unilateral declarations

Unilateral declarations are one of the principal mechanisms through which non-State armed groups may express their commitment to comply with IHL. Paragraph 3 of Article 96 of Additional Protocol I to the Geneva Conventions expressly recognizes this possibility for the authorities representing a people engaged in a war of national liberation within the meaning of paragraph 4 of Article 1.[176] Outside this framework, other non-State armed groups have also issued unilateral undertakings to abide by IHL, addressed variously to the ICRC, United Nations bodies, Switzerland as depositary of the Geneva Conventions, or non-governmental organizations such as Geneva Call.[177]

There is no uniform model governing the unilateral declarations made by non-State armed groups. Such declarations may express a general commitment to comply with IHL[178] or may address specific rules and obligations.[179] In some instances, the commitments go beyond existing IHL requirements, imposing stricter limitations on the group's conduct.[180] The scope and level of detail vary considerably: some declarations consist of only a few sentences, while others outline comprehensive frameworks of conduct.[181] Unilateral declarations may be prepared independently by the group or developed with advice of humanitarian actors.[182] Ideally, they should not only reaffirm adherence to IHL but also provide for the incorporation of its rules into the group's internal disciplinary code and establish mechanisms for ensuring compliance.[183] These instruments fulfil an important normative and practical function: they clarify the group's responsibilities, provide a basis for internal discipline, and establish a framework for assessing compliance within the group's command structure.[184]

Whether unilateral declarations of non-State armed groups constitute international legal obligations is described as "tenuous".[185] With the exception of declarations made by an authority representing a people engaged in a war of national liberation under paragraph 3

of Article 96 of Additional Protocol I to the Geneva Conventions, the legal status of other declarations is less clear. International practice, including the jurisprudence of international courts and United Nations suggests that the legal consequences of such declarations must be determined on a case-by-case basis.[186] Their binding effect may depend on factors such as the content of the declaration, the circumstances in which it was made, and the authority of those who issued it.[187] According to the ICRC, however, non-State armed groups are bound by IHL obligations regardless of the existence or scope of any unilateral declaration that they may issue.[188]

Special agreements

Special agreements constitute another mechanism through which non-State armed groups may articulate their adherence to IHL.[189] These instruments are typically concluded with the State against which a group is fighting, although agreements between non-State armed groups are also possible.[190] Agreements may further involve or be facilitated by third parties such as UN bodies, the ICRC, or non-governmental organizations.[191]

Special agreements may take various forms and serve different purposes. Some replicate or restate the IHL obligations already applicable to the parties (declaratory agreements), while others introduce additional or more detailed commitments that go beyond existing obligations (constitutive agreements).[192] Such agreements may be concluded pursuant to common Article 3 of the Geneva Conventions, which encourages parties to a non-international armed conflict to "bring into force, by means of special agreements, all or part of the other provisions of the present Convention". Other agreements are concluded outside this framework, either as ad hoc arrangements not intended to fall under common Article 3 or as components of broader peace negotiations.[193] A number of these instruments have also incorporated provisions drawn from international human rights law, thereby extending the scope beyond common Article 3.

In addition to clarifying the scope of mutual obligations, special agreements may play a stabilizing function in situations where the legal characterization of a conflict is uncertain or contested. They allow parties to reaffirm humanitarian standards applicable to their conduct without necessarily reaching consensus on the classification of the conflict itself.[194]

Codes of conduct

Although unilateral declarations and special agreements provide the normative framework for non-State actors to adhere to IHL, to ensure that the commitments are implemented within their ranks, an operational mechanism is required. Codes of conduct fulfil this function by translating general legal obligations into concrete behavioural rules for members of non-State armed groups, thereby promoting internal discipline, accountability, and consistency in practice.[195] Such instruments may be developed by the group itself or adopted from external models, such as codes prepared by the ICRC or other humanitarian organizations.[196]

Codes of conduct may also come first and in themselves constitute a form of express commitment to IHL.[197] As with other forms of express commitment, their content and structure vary considerably. Some codes are purely humanitarian in nature, while others combine humanitarian provisions with disciplinary rules.[198] In certain cases, however, the connection to IHL remains unclear: some codes rely primarily on moral, cultural, or religious principles rather than on international legal standards. Such formulations may contribute to internal cohesion, but they risk undermining the clarity, precision, and legal consistency needed for effective compliance.[199] When consistent with IHL, codes of conduct enhance both the credibility and practical implementation of humanitarian obligations within non-State armed groups, institutionalizing humanitarian norms and guiding conduct in the field.

CONCLUSION

Although no single international instrument comprehensively regulates IEDs as a distinct category of weapons, their use is governed by the general rules of IHL, particularly the conduct of hostilities regime under both treaty law and customary international law. These obligations extend to all parties to armed conflict, including non-State armed groups. While the precise legal basis for non-State armed groups to be bound by IHL remains debated, the regulation of the use of IEDs during armed conflicts is essential not only for ensuring compliance with the principles of distinction, proportionality, and precaution but also for reinforcing the universality and coherence of humanitarian norms in contemporary warfare.

ANNEX III: MINE ACTION AND COUNTER-IMPROVISED EXPLOSIVE DEVICE APPROACHES

In 2017, the GICHD published *An Initial Study into Mine Action and Improvised Explosive Devices*. The study focused on the IEDs encountered by mine action organizations during humanitarian operations. It explicitly did not address IEDs used amid ongoing conflict or associated with terrorism, which were, and continue to be, addressed primarily through measures based on the NATO-three pillar counter-IED approach. The United Nations, in recognition of the challenges posed by IEDs to ongoing peacekeeping missions, adopted an aligned but distinct framework of IED threat mitigation. Its objective is primarily to enable peacekeeping missions to carry out mandated tasks in IED-affected environments.[200] The tables below consider the definitions and characteristics of NATO counter-IED, IED threat mitigation and mine action approaches, highlighting areas of contrast and – in some cases – elements that may benefit from enhanced collaboration.

PILLARS

Counter-IED and IED threat mitigation

NATO counter-IED	"The collective efforts to defeat the IED system by attacking the networks, defeating the device, and preparing a force [...] The C-IED approach aims to defeat an adversary's IED system. This approach can be described as a building. Its roof is supported by three mutually supporting and complementary pillars standing on a strong foundation. Understanding and intelligence is the foundation for any operation and it will facilitate attacking the networks, enable defeating the device and support proper preparation of the force."[201]
Attack the networks	Weaken IED system by targeting the different component parts of the IED network using information (influencing people) and physical actions.[203]
Defeat the device	Detect, neutralize and mitigate IEDs and the effect of IED events.[205]
Prepare the force	Prepare friendly forces to operate in an environment with an active IED threat, including equipping, training and educating.[207]

IED threat mitigation	The UN frames IED threat mitigation in mission settings as "the range of efforts to prevent, respond to and neutralize the IED system, by providing training and capacity development, defeating the device, and understanding the system."[202]
Degrading the network	Enable rule of law efforts through the collection of devices, components and material and the subsequent production of reports for authorized stakeholders.[204]
Defeating the device	Mitigate the effects and likelihood of an IED initiating, including search, conventional munition disposal, and improvised explosive device disposal.[206]
Training and capacity development	Train police and military in identifying, protecting against and reacting to the IED threat; develop the national capacity for explosive ordnance disposal (EOD) and IED disposal (IEDD) and deliver risk education and training of civilians in public safety.[208]

Mine action

Mine action	"Activities which aim to reduce the social, economic and environmental impact of explosive ordnance [...] The objective of mine action is to reduce the risk from explosive ordnance to a level where people can live safely; in which economic, social and health development can occur free from the constraints imposed by explosive ordnance contamination, and in which the victims' different needs can be addressed."[209]
Clearance	*Clearance in mine action is tasks or actions that ensure the removal and / or the destruction of all explosive ordnance from a specified area to a specified dept or other agreed parameters (determined by the national mine action authority or task authority).*[210] *Clearance forms part of the process of land release, that is the application of all reasonable effort to identify, define, and remove all presence or suspicion of explosive ordnance through non-technical survey, technical survey and / or clearance.*[211] Clearance can be conducted during active conflict if it is carried out to enable safe returns, facilitate economic activities, and enable civilians to carry out everyday routines in areas that are no longer directly affected by the active conflict. Such activities would be subject to coordination by relevant national authorities. In the context of IEDs the GICHD *An Initial Study into Mine Action and Improvised Explosive Devices* outlines safety considerations and other good practice.[212] Military mine clearance and/or Improvised Explosive Ordnance Disposal (IEDD) operations are primarily linked to achieving military objectives, such as the clearing of paths of landmines and IEDs to enable advancement and protection of military forces amid conflict. The clearance of mines and/or IEDs for this purpose is in nature contrary to the humanitarian principles underpinning mine action.
Risk education	*Explosive Ordnance Risk Education refers to activities, including public information dissemination, education and training, that seek to reduce the risk of injury from explosive ordnance by raising awareness of women, girls, boys and men in accordance with their different vulnerabilities, roles and needs, and promoting behavioural change.*[213] Risk education is both a pillar of mine action and an established component of a counter-IED approach. IED risk education inspired by a counter-IED approach can often be conflated with broader civil–military cooperation activities, seeking to build relationships between security forces and civilian populations. IED-specific risk education, particularly in active conflict settings, could be perceived as deviating from the humanitarian principles of neutrality and independence. Caution should be exercised to minimize the risk to operators and local communities posed by any perceived partiality amid an ongoing conflict.
Stockpile destruction	*Stockpile destruction is the process for the final conversion of explosive ordnance into an inert state whereby it can no longer function as designed.*[214] Stockpile destruction can reduce the opportunities for access to military grade explosives for use in the construction of IEDs.
Victim assistance	*Victim assistance are broader and specific efforts to address the needs and rights of victims, including delivery of victim assistance services, data collection, coordination, law, policies as well as facilitation of access to victim assistance services.*[215] Victim assistance remains applicable in an environment with an active IED threat, yet, as with IED risk education, there are additional considerations that should be factored in to ensure the safety of affected communities. Similarly, the integration of victim assistance into counter-IED activities should seek to ensure that, while the assistance may help build relations between States and local communities, it is not considered to be an intelligence-gathering activity.
Advocacy	*Advocacy is positive publicity or encouragement of public support for the removal or reduction of the risk and impacts associated with explosive ordnance.*[216] All States Parties to the APMBC have an obligation to report any contamination by devices that fulfil the definition provided under paragraph 1 of Article 2 of the Convention. This includes IEDs, where the devices are deemed to be victim operated.

COUNTER-IED CAPABILITIES AND MINE ACTION

The UNIDIR counter-IED capability maturity model and self-assessment tool is used by the United Nations to determine the support needed by host States.[217] The model has been widely used in the region under review.

Table A.8: Upstream and downstream IED counter-proliferation measures in the UNIDIR counter-IED capability maturity self-assessment tool.

Upstream and downstream IED counter-proliferation measures in the UNIDIR counter-IED capability maturity self-assessment tool

Upstream IED counter-proliferation measures	
National policy, legislation and regulations (a whole-of-government approach)	National mine action and ammunition management structures are able to collaborate within a whole-of-government approach, but mine action and counter-IED initiatives should remove any conflict in areas of shared interest (e.g. IED risk education, victim assistance, information management). Mine action initiatives should be cautious, however, when engaging with broad national strategies based on the traditional pillars of counter-IED and intelligence-led approaches.
Security and control of explosives	This enables the State to deny access to conventional explosives for IED main charges. It includes ensuring the security and control of State-owned ammunition and explosive stockpiles, and State-authorized civilian explosives, and the clearance of UXO and legacy minefields.[218] Mine action entities conducting weapons and ammunition management activities may support these initiatives, including through legislative support for the acquisition, control, transport, storage, and/or use of explosives and ammunition by the armed forces, and the control and storage of explosive substances.
IED risk education	Risk education, even amid ongoing conflict, is a legal obligation to protect civilians.[219] Mine action should continue to play a leading role in IED risk education, on the basis of decades of experience in providing and promoting such activities. Nevertheless, operators should exert additional caution when conducting activities amid ongoing conflict, including in relation to their messaging and to risk management.[220] The marking and reporting of explosive ordnance in active conflict environments may risk reprisals aimed at both operators and local populations.[221] While military personnel may serve as risk education operators, this may pose additional risks and considerations for local communities.
Counter-IED capability development	Counter-IED capacity development includes a broad spectrum of capacity-building activities. While mine action operators may contribute to increasing IED awareness among civilians, many other areas of counter-IED capacity development do not align with humanitarian activities, including: ▼ Training and equipping of military or police IED disposal teams for destroy in situ/render safe procedures and forensic exploitation ▼ Development of capabilities to deal with the forensic exploitation and analysis of IED incidents and recovered IED material – this is primarily intelligence-led, and conflicts with neutrality ▼ Effective control of borders and monitoring of the import of IED-related precursors ▼ Horizon-scanning and the development of timely responses to predicted future IED threats[222]
Border controls	Border controls seek to disrupt IED components and precursor chemical supply chains.[223] This includes raising awareness of the threat posed by these items, which could feasibly be conducted by mine action operators, in line with advocacy efforts regarding anti-personnel mines and certain conventional weapons. The implementation of border controls, however, also includes intelligence-led investigations and the identification and seizure of illicit shipments, much of which falls far outside of the scope of humanitarian activities.[224]

Control of IED precursors	The control of precursor chemicals primarily involves restricting access to specific dual-use chemicals. Support to States in strengthening legislation to mitigate the risk of dual-use chemicals being used to manufacture homemade explosives could be provided by mine action operators, as this aligns with broader weapon and ammunition management activities aimed at the safe storage of explosive chemicals. Any organization undertaking efforts to restrict access to dual-use chemicals should be aware of the potential risks and benefits of doing so. The dual-purpose nature of these chemicals means that the restriction of their use may have unintended negative consequences. For example, this may be the case when such chemicals are also used in agricultural fertilizers. Any efforts to implement controls in this regard should be evidence-based (including consideration of current homemade explosives) and involve full examination of any indirect consequences.
Regional and international cooperation and information-sharing	In the context of counter-IED efforts, information-sharing relates primarily to intelligence-sharing. Mine action operators may, however, encourage security forces and national governments to share information relating to IED incidents and victims in support of mine action activities.
Intelligence-led operations	Intelligence-led operations are the foundation of counter-IED activities and enable the identification and prosecution of individuals involved in the manufacture and use of IEDs.[225] These activities do not align with mine action activities.

Downstream IED counter-proliferation measures

IED response procedures	IED response procedures refer to the ability to neutralize IEDs and to deal safely with a find of IED components, with an additional requirement for there to be IED search capacity.[226] In permissive environments, this may fall to mine action operators. IED clearance by mine action operators may be guided by the operational envelope outlined in *An Initial Study into Mine Action and Improvised Explosive Devices* by the GICHD.[227] From a counter-IED perspective, and particularly in relation to active conflict environments, an IED render safe response is primarily carried out by the State, specifically State security forces.
Scene exploitation and recovered evidence analysis	In counter-IED activities, scene exploitation involves preservation of the scene of an IED incident and facilitation of the collection of forensic evidence to support future investigations into offences and possible prosecutions.[228] Mine action operators in permissive environments may collect data related to IED design and use in order to enhance the safety and efficacy of future clearance activities,[229] but counter-IED exploitation and mine action exploitation serve two very distinct purposes.
Information management	Mine action operators should exercise caution in relation to the data requirements for effective counter-IED and the uses of data. Counter-IED data collection may include: ▼ IED incident information, including operationally sensitive data ▼ Victim data, including that which is specific to the security forces ▼ Reports and photographs from those involved in the rendering safe of IEDs ▼ Forensic analysis reports on physical exhibits collected from IED incidents ▼ Forensic evidence and police interview reports collected from those arrested and subsequently prosecuted for IED-related offences ▼ All-source intelligence reports (human intelligence, signals intelligence, and open-source intelligence) pertaining to IED incidents or people suspected of involvement in IED-related offences ▼ Reports pertaining to the analysis of tactics[230] Such reporting can and should be used by security forces for operational planning and activities to attack the network, and therefore does not align with mine action. That said, data-sharing on the occurrence of IEDs and the impact on victims is necessary for mine action activities. Security forces should be encouraged to share the minimum data required for such purposes in a format that does not compromise security.

Technical exploitation of recovered IEDs	Technical exploitation of IEDs refers to determination of the IED components in use and of manufacturing signatures. This supports States in disrupting IED supply chains and identifying IED manufacturers through the linking of incidents.[231] Mine action operators in permissive environments may follow related processes to improve their understanding of IED design to enhance the safety and efficacy of future clearance activities, but this is distinct from the use of technical exploitation for prosecution purposes.[232]
Identification of perpetrators/ judicial process	Forensic analysis and technical exploitation of IEDs supports the State in identifying and prosecuting those involved in the manufacture and use of IEDs.[233] This is beyond the scope of mine action activities.
Development of IED countermeasures	Understanding of the technical and tactical design of IEDs informs decisions regarding countermeasures required for intervention, including electronic countermeasures.[234] When operating in permissive environments, mine action operators also require an understanding of the countermeasures required to facilitate safe clearance operations.

IEDs continue to pose a challenge to economic livelihoods, including both pastoral and agricultural practices.

Image: Andrew Grantham

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167 Sandesh Sivakumaran, "Binding Armed Opposition Groups", *International and Comparative Law Quarterly* 55, no. 2 (2006): 369 and 381–382. See also Claude Pilloud et al., Yves Sandoz, Christophe Swinarski, and Bruno Zimmermann (eds.), *Commentary on the Additional Protocols of 8 June 1977 to the Geneva Conventions of 12 August 1949*, ICRC (The Hague, Kingdom of the Netherlands: Martinus Nijhoff Publishers, 1987).

168 Katharine Fortin, *The Accountability of Armed Groups under Human Rights Law* (Oxford, England: Oxford University Press, 2017), 189.

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171 Jan Klabbers, *The Concept of Treaty in International Law* (The Hague, Kingdom of the Netherlands; Boston, United States of America; London: Kluwer Law International, 1996), 68; Ulf Linderfalk, *On the Interpretation of Treaties: The Modern International Law as Expressed in the 1969 Vienna Convention on the Law of Treaties* (Dordrecht, Kingdon of the Netherlands: Springer, 2007), 205.

172 Daragh Murray, *Human Rights Obligations of Non-State Armed Groups* (London: Bloomsbury Publishing, 2016), 125 and 131; Sandesh Sivakumaran, "Binding Armed Opposition Groups", *International and Comparative Law Quarterly* 55, no. 2 (2006): 373–375.

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174 Numerous armed groups have made unilateral public declarations in which they pledge to respect a law in full or in part, and others have taken similar steps in the context of agreements with their adversaries.

175 Sandesh Sivakumaran, "Implementing humanitarian norms through non-State armed groups" in *Inducing Compliance with International Humanitarian Law*, ed. Heike Krieger (Cambridge, England: Cambridge University Press, 2015), 130.

176 *Protocol Additional to the Geneva Conventions of 12 August 1949, and relating to the Protection of Victims of International Armed Conflicts (Protocol I) 8 June 1977*, Arts. 1 and 96.

177 In 2000, Geneva Call introduced the Deed of Commitment, which is a mechanism enabling armed groups and de facto authorities to pledge adherence to key humanitarian norms derived from international humanitarian and human rights law. This process allows such actors, which are ordinarily excluded from treaty participation, to assume responsibility for compliance and accountability. At the time of writing, Geneva Call had developed five Deeds of Commitment addressing: (i) adherence to a total ban on anti-personnel mines and cooperation in mine action (2000); (ii) protection of children from the effects of armed conflict (2010); (iii) prohibition of sexual violence in situations of armed conflict and towards the elimination of gender discrimination (2012); (iv) protection of health care in armed conflict (2018); and (v) prevention of starvation and addressing conflict-related food insecurity (2021). A variety of express commitments by non-State armed groups can be found in the Geneva Call Directory of Armed Non-State Actor Humanitarian Commitments, "Their Words".
The ICRC has also received unilateral declarations from a number of non-State armed groups: the Palestine Liberation Organization (*International Review of the Red Cross* 30, no. 274 (1990): 64–65), the National Union for the Total Independence of Angola (UNITA) (*International Review of the Red Cross,* no. 219 (1980): 320), and the African National Congress of South Africa (*International Review of the Red Cross*, no. 220 (1981): 20).
Anne-Marie La Rosa and Carolin Wuerzner, "Armed groups, sanctions and the implementation of international humanitarian law" *International Review of the Red Cross* 90, no. 870 (2008): 332.

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179 Sandesh Sivakumaran, "Implementing International Humanitarian Norms Through Non-State Armed Groups" in *Inducing Compliance with International Humanitarian Law*, ed. Heike Krieger (Cambridge, England: Cambridge University Press, 2015), 126–128; Ejército de Liberación Nacionas (National Liberation Army (Colombia)), "El Ejército De Liberación Nacional Y El Derecho Humanitario", 15 July 1995, available in Spanish, accessed 9 February 2026; National Coalition of Syrian Revolution and Opposition Forces, "Declaration of Commitment on Compliance with IHL and the Facilitation of Humanitarian Assistance".

180 For example, the Frente Farabundo Marti para la Liberación Nacional in El Salvador expressed its commitment to abide by Protocol II to the Convention on Certain Conventional Weapons in 1988, before the Protocol was amended in 1996 to cover non-international armed conflict in addition to international armed conflict; Sandesh Sivakumaran, "Lessons for the law of armed conflict from commitments of armed groups: identification of legitimate targets and prisoners of war", *International Review of the Red Cross* 93, no. 882 (2011): 472.

181 Sandesh Sivakumaran, "Implementing humanitarian norms through non-State armed groups" in *Inducing Compliance with International Humanitarian Law*, ed. Heike Krieger (Cambridge, England: Cambridge University Press, 2015), 127.

182 Ibid., 126.

183 Anne-Marie La Rosa and Carolin Wuerzner, "Armed groups, sanctions and the implementation of international humanitarian law", *International Review of the Red Cross* 90, no. 870 (2008): 332.

184 Jann K. Kleffner, "The unilateralization of international humanitarian law", *International Review of the Red Cross* 104, no. 920–921 (2022): 2,153–2,169; Michelle Mack and Jelena Pejić, *Increasing Respect for International Humanitarian Law in Non-International Armed Conflicts*, ICRC, 2008, 7 and 19.

185 Ibid.; ICRC, *Commentary on the First Geneva Convention* (Cambridge, England: Cambridge University Press, 2017), 288, section 857; Sandesh Sivakumaran, *The Law of Non-International Armed Conflict* (Oxford, England: Oxford University Press, 2012), 109–10 and 118–24.

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187 Sandesh Sivakumaran, "Binding Armed Opposition Groups", *International and Comparative Law Quarterly* 55, no. 2 (2006): 373–374.

188 Michelle Mack and Jelena Pejić, *Increasing Respect for International Humanitarian Law in Non-international Armed Conflicts*, ICRC, 2008, 19 and 20.

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190 Sudan People's Liberation Movement/Army, "SPLM/OLS (Operation Lifeline Sudan), Agreement on Ground Rules"; Representatives of the President of the Republic of BosniaHerzegovina, the President of the Serbian Democratic Party, the President of the Party of Democratic Action, and the President of the Croatian Democratic Community, "Agreement at the invitation of the International Committee of the Red Cross", 22 May 1992; Government of the Republic of the Philippines and the Moro Islamic Liberation Front, "Agreement on the Civilian Protection Component of the International Monitoring Team", 27 October 2009. Marco Sassoli observes that, although such agreements between non-State armed groups are legally permissible, their practical enforceability and recognition remain limited, as no State or international authority ensures that they are implemented: Marco Sassòli, *International Humanitarian Law: Rules, Controversies, and Solutions to Problems Arising in Warfare*, second edition (London: Edward Elgar Publishing, 2024), 206–207.

191 Christine Bell, *Peace Agreements and Human Rights* (Oxford, England: Oxford University Press, 2000); Michelle Mack and Jelena Pejić, *Increasing Respect for International Humanitarian Law in Non-international Armed Conflicts*, ICRC, 2008, 17.

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