



Illicit flows of explosives in Central Africa

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Executive Summary

In Central African countries, explosive substances, explosive precursor chemicals and initiators are controlled products and special authorization is needed to import, use, and transport or store them. However, some of these products are diverted, and used to manufacture improvised explosive devices (IEDs), or in activities such as illegal mining or blast fishing. Criminal actors are involved in the illicit flows of explosives. Some are the illegal final users of explosives, which constitute the last step of the illicit supply chain. These are the non-state armed groups (NSAGs) using explosives as weapons, such as Boko Haram and, its rival offshoot, the Islamic State in West Africa (ISWA) in the Lake Chad Basin (Chad and Cameroon), the separatist NSAGs active in the North West and South West regions in Cameroon, the Retour, Réclamation et Rehabilitation (3R) NSAG in the Central African Republic (CAR) and the Allied Democratic Forces (ADF) active in the Democratic Republic of the Congo (DRC). Other actors include illegal mining sector players, Illegal dealers, thieves and smugglers.

Data shows that all countries in the region have imported civil explosives and initiators, the main importer of these products being by far the DRC. The availability of explosives and initiators in all the countries increases the risks of diversion. As for illicit flows of explosives, available information suggests that Cameroon is the main destination of illicit explosives flows originating in Nigeria. Both conflict zones in Cameroon, that is to say in the North/Far North regions and in the North West/South West regions are zones of explosive trafficking.

Black markets of diverted commercial explosives and components, likely primarily bound for illegal mining, permit some NSAGs to acquire such equipment. For instance, the Allied Democratic Forces (ADF) NSAG was supplied with civil explosives from the black market in Tanzania. An illicit supply chain of civil explosives seems to be active in some regions of the DRC. The United Nations Panel of Experts highlighted risks of diversion of civil explosives legally imported in the CAR as well. In Congo, a NSAG used stolen civil explosives to destroy public infrastructure suggesting the existence of a potential black market, illustrating the possibility for NSAGs to illegally acquire explosives in mining regions.

In Cameroon, Boko Haram and separatist NSAGs from the South West and North West Region, as well as the Allied Democratic Forces NSAG from the DRC use diverted military grade explosives. Boko Haram uses unexploded and diverted ordnances from countries of the Lake Chad Basin region to manufacture improvised explosive devices (IEDs). In the CAR, Retour, Réclamation et Réhabilitation (3R) NSAG is suspected of using anti-vehicle mines, modified as an IED main charge or utilized as such.

Open source information shows a recent Increase in seizures of explosive precursor chemicals in and near conflict zones in Cameroon, especially in the South West Region, where most of the seizures were reported. Almost all seizures of explosive precursors, which are of great diversity, are originating from Nigeria.

According to several sources, both Boko Haram and separatist NSAGs of the South West and North West regions use radio controlled switch, as well as other components smuggled from Nigeria to manufacture IEDs. Seizures of assembled IEDs occurred in the DRC and in the Lake

Chad Basin region. These IEDs are coming from factories where IED components are transported to be assembled.

Explosive substances and associated components are likely to be smuggled along with others goods and commodities, illicit or not, using the usual smuggling routes by sea or by land between Nigeria and Cameroon.

** Two versions of this report exist. This report is the public version of the completed analysis, which included police information; where specific police information was used, this information has subsequently been sanitized for public distribution **

Key Findings

The following are the key findings of this report resulting from an analysis of a range of available data sources on illicit flows of civil explosives and components, precursors of explosives, military explosives, in Central African countries:

- Explosives and associated components are diverted to be smuggled and used in illegal activities such as illegal mining or weapons when manufactured as an Improvised Explosive Device (IED).
- ❖ In the region, five non-state armed groups (NSAGs) use diverted explosives as weapons: Boko Haram and its offshoot the Islamic State in West Africa (ISWA) in the Lake Chad Basin (Chad and Cameroon), the separatist NSAGs active in the North West and South West regions in Cameroon, the Retour, Réclamation et Rehabilitation (3R) NSAG in the Central African Republic (CAR) and the Allied Democratic Forces (ADF) active in the Democratic Republic of the Congo (DRC)
- Available information suggests that Cameroon is the main destination country for illicit flows of explosives from Nigeria. Seizures of civil explosives, precursors and components are higher at borders near both conflict zones, and enter the country along with other goods and commodities following known smuggling routes by land and sea.
- Information suggests the existence in Cameroon and the DRC of a black market for diverted commercial explosives and components, which are sold on local markets. This equipment is likely to be primarily bound for illegal mining, but their diversion make them available for NSAGs.
- NSAGs in the region use diverted military grade explosives, unexploded and diverted ordnances from Niger, Nigeria, Chad and Sudan to manufacture IEDs. NSAGs are supplied with military explosives thanks to the trafficking networks, the complicity of some national military storekeepers, the looting of stockpiles.
- All countries in the region have imported civil explosives and initiators, respectively from 19 and 22 supplying countries. The diversity of supplying countries is likely to induce a diversity of products, which is likely to increase difficulty to identify and trace diverted products in the region when seized.

- DRC is by far the main importer of civil explosives with 13,539 t, representing 82 per cent of the imports of the region. It imports 99 per cent of its civil explosives from Zambia (68 per cent) and South Africa (31 per cent).
- Heavy regulation and possible profits for illegal dealers may lead to the development of parallel illicit markets of commercial explosives.
- ❖ Belgium PRB M3 mines suspected to be used by Retour, Réclamation et Réhabilitation (3R) non-state armed group to manufacture IEDs are also documented in West Africa (Mali) and are likely to come from looted Libyan stockpiles or from trafficking networks, which get their supplies by harvesting active landmines in the Tibesti Region of Northern Chad or Sudan.

List of Acronyms

3R	Retour, Réclamation et Réhabilitation
ADF	Allied Democratic Forces
ANAL	Ammonium Nitrate Aluminum
ANFO	Ammonium Nitrate Fuel Oil
CAPCCO	Central African Police Chiefs Committee
CAR	Central African Republic
CAR PoE	Panel of Experts for the Central African Republic
CEMAC	Economic and Monetary Community of Central Africa
CWD	Conventional Weapons Destruction
EU	European Union
FARDC	Armed Forces of the Democratic Republic of Congo (Forces Armées de la
.,	République Démocratique du Congo)
	nepasiique zemesianque au conge,
FTO	Foreign Terrorist Organization
DRC GoE	Group of Experts for the DRC
HME	Home Made Explosive
НМХ	Octogen
ICIS	INTERPOL's Criminal Information System
IED	Improvised Explosive Device
IS	Islamic State
ISWA	Islamic State in West Africa
NCB	Interpol National Central Bureau
NSAG	Non-state Armed Group
OCG	Organized Crime Group
PBIED	Person-Borne Improvised Explosive Device
PETN	Pentaerythritol Tetranitrate (Pentrite)
RDX	Hexogen

RSO	Interpol Regional Specialized Officers
SAS	Small Arm Survey
TATP	Triacetone Triperoxide
UNMAS	United Nations Mine Action Service
UXO	Unexploded Ordnance
Tetryl	Tinitrophenylmethylnitramine
TNT	Trinitrotoluene
VOIED	Victim Operated IED

Introduction

In recent years, the Central African region has experienced an increase in use of explosives. Non-state armed groups (NSAGs), which can be defined as "groups of actors distinct from the armed and security forces of a State, and without authorization from the State in which they are based or operate to possess and use conventional arms," make use of explosives as weapons and pose a serious threat to regional stability in general, and to law enforcement and civil populations in particular.

The use of explosives in the Lake Chad Basin (Cameroon and Chad) dates back to the 2010s and has been more recently developing in the Democratic Republic of Congo, in the North West and South West regions of Cameroon or increasing in the Western part of the Central African Republic. These groups mainly use explosives to carry out attacks using Improvised Explosive Devices (IEDs). Moreover, in a region known for its considerable diversity and abundance of mineral resources, explosives are likely to be illicitly acquired, inter alia, for illegal mining or other illegal purposes.

The development of the use of explosives by NSAGs in the Central African Region raises questions about the illicit flows of explosive substances and the players involved in the trafficking. An illicit flow can be defined as the trafficking of a licit or illicit commodity, from source to destination. The trafficking can take place along domestic or transnational routes. Illicit flows are "generally generated by organised crime and facilitated by criminal activities."²

Therefore, the EU funded ENACT Project has undertaken this assessment on illicit flows of explosive materials, including civil explosives and associated components such as initiators, as well as military explosives and explosive precursor chemicals in Central Africa, to better inform law enforcement at a strategic level.

This report is divided into four main parts. The first part presents its scope and objectives as well as the methodology employed. The second part aims at explaining what an explosive is, what the different types are and how they are found to be illegally used in Central Africa. The third part is dedicated to the profiles of the various players active in the illegal supply chain of explosives. Finally, the fourth part of the report examines the flows of civil explosives and initiators, military explosives and explosive precursor chemicals in the region.

1. STRUCTURE OF THE REPORT

1.1 Scope and objectives

The objective of this report is to provide an assessment of the trafficking of explosive substances, including commercial, military, precursor chemicals, and associated components such as switches or initiators, over the period from 2018 to 2021 in the Central African region. In this report, the Central African region will refer to the countries of the Central African Police Chiefs Committee (CAPCCO), which includes: Cameroon, the Central African Republic (CAR), Chad, Congo, the Democratic Republic of the Congo (DRC), Equatorial Guinea, Gabon, and the Sao Tome and Principe.

The assessment draws upon an analysis of available data and presents the current nature, scope, dynamics, and activities of organized crime linked to the trafficking of explosives in the region. When possible, it also provides an overview of the active groups throughout the region and the type of illegal enterprises, in relation to explosive trafficking, in which they are engaged. This report intends to provide the concerned countries with actionable strategic intelligence to enable them to devise appropriate countering strategies and to be a tool for eliciting law enforcement cooperation among the countries impacted by this crime and among those which are at risk of being affected in the near future.

1.2 Methodology

This assessment follows an all-source intelligence analysis methodology. It is the result of integrating multiple data sources.

Open sources used in the framework of this report include news articles and reports from various private entities, international organizations and think tanks. Whenever identified, official statistics and data were used and given preference over other sources.

Information from the aforementioned sources was aggregated in order to identify consistencies across all data, patterns and trends, and any identifiable convergences. Following this, the ENACT-INTERPOL team consulted and cooperated with INTERPOL analysts working on specialized crime areas covering trafficking and illegal use of explosives. Information provided by these departments was incorporated into this report where relevant. A regional approach was retained when drafting this report. Therefore, when national examples are quoted, it is done for illustrative purposes, in order to put forward regional dynamics.

ENACT-INTERPOL team would also like to thank subject-matter experts, such as Dr R. Sumo Tayo (Small Arms Survey) and Ms E. Hainard for their valuable inputs and time.

2. EXPLOSIVE SUBSTANCES, EFFECTS ON VICTIMS, AND OFFENSES LINKED TO EXPLOSIVES IN CENTRAL AFRICA

2.1 What is an explosive substance and how does it work?

According to the definition by the United Nations Economic Commission for Europe, "an explosive substance or mixture is a solid or liquid substance or mixture which is in itself capable by chemical reaction of producing gas at such a temperature and pressure and at such a speed as to cause damage to the surroundings." ³ This chemical reaction occurs when, under specific conditions of excitation, "the explosive substance decomposes itself." ⁴ This quick decomposition or oxidation is called an explosion. An explosion can be defined as "a chemical or physical reaction accompanied by a significant release of energy in a very short time." ⁵ Explosions are more often producing the three following effects: a static overpressure wave called the blast wave, a dynamic pressure wave called the wind, and a heat release or heat flux.

There are two categories of explosions, based on their speed of decomposition: deflagration and detonation. ⁷ Deflagration is a rapid combustion of the explosive resulting in a subsonic shockwave, that is to say, moving at less than 340 meters per second. These explosive substances are also referred to as low-order explosives or low explosives. ⁸ Low Explosives can be defined as "a chemical compound or mixture that is designed to deflagrate (rapid burn) and generally require confinement to explode."

Detonation is an extremely rapid reaction which generates a supersonic shock wave whose propagation speed varies from 2,000 to 9,000 meters per second in the air. ¹⁰ These explosive substances are also called high-order explosives or high explosives. ¹¹ The higher the detonation velocity of an explosive substance, the more damage it is likely to cause. According to the United Nations Mine Action Service (UNMAS) lexicon, a high explosive is "a chemical compound or mixture that is capable of supporting or sustaining a detonation wave. High explosives do not require confinement as they combust instantaneously producing heat, gas, a rapid expansion of matter, and a detonation / shock wave." ¹²

There are two categories of explosions, based on their speed of decomposition: deflagration and detonation.

Primary and secondary explosives

Primary explosives can easily detonate; they are sensitive to shocks, sparks or heating. They are an essential element of primer and detonators as they are used to initiate the detonation of secondary explosives.

Secondary explosives are less sensitive and more stable and constitute the main charge of an explosive device. The detonation of the secondary charge occurs at the end of the triggering session or explosive train, which is "a succession of initiating and igniting elements arranged to cause a charge to function." ¹³

2.2 Civil, military and homemade explosives in the Central African Region

For the purpose of the report, we will consider three different types of explosive materials: civil explosives, military grade explosives, and homemade explosives.

2.2.1 Civil explosives

Civil explosives, also called commercial or industrial explosives, are "primarily used in the mining, quarrying and construction industry." For instance, ANFO-based (for ammonium nitrate / fuel oil) substances, or emulsion explosives, water gel explosives, and slurry explosives are the most widely used civil explosives. These can be marketed in the form of cylindrical cartridges or various diameters, but can also be delivered in bulk by tank truck directly to the worksite. The packaging of these explosives bears inscriptions to identify the origin and the date of manufacture, the approval number and the batch number. They have a limited lifespan of approximately one year. Civil explosives are insensitive. To trigger them, initiation boosters, made from high order explosive (TNT/RDX/PETN) are usually used. Moreover, the companies producing industrial explosives are generally also producing a wide range of initiating products, such as detonators and detonating cord. 16





FIGURE 1 CIVIL EXPLOSIVES AND DETONATORS RECOVERED FROM ADF NSAG 17

Some companies selling mining explosives and services have settled in Central Africa. They import or produce explosives and supply mining accessories and explosives to the country in which they are settled as well as to the neighbouring countries. Due to high regional demand, multiple projects to settle explosive manufacturing units in the region are considered. For instance, in 2018, two explosives production plants have been inaugurated in the DRC to ease the access to explosives and limit imports in the country. The project was developed by SICODEX, which is a joint venture company created by Auxin Holdings (Hong Kong) limited and the DRC national monopolistic public company African Explosives (AFRIDEX). The project included two plants. One based in Likasi, with an announced production capacity of more than 100,000 tonnes per year (cartridge and bulk emulsion and packaged and bulk ANFO). The other plant based in Kolwezi was reported to produce 50,000 tonnes of civil explosives per year.

2.2.2 Military explosives

Military explosives are more sophisticated and are used in expensive weapon systems. There is an important range of product intended to meet specific military needs. Contrary to most civil explosives, they have a long lifespan. Some military grade explosives are trinitrotoluene (TNT), hexogen (RDX), pentrite (PETN), octogen (HMX) and tinitrophenylmethylnitramine (Tetryl). They are used for loading many ordnance like grenades, shells, rockets, or mines. ²⁰



FIGURE 2 A MORTAR SHELL PREPARED TO BE USED AS A MAIN CHARGE IN AN IED RECOVERED FROM ADF NSAG 21

These ordnances can be diverted from poorly secured state-held stockpiles, posing a risk of fueling violence and threatening civilians and security forces if acquired by criminal actors. The ordnance can be used as the main charge of an IED, or can be combined with a homemade explosive (HME) to be used as a booster, to detonate less sensitive homemade explosives and improve the destruction effect.

In the Central African region, ordnances can be stolen during looting of stockpiles by NSAGs, they can be trafficked by corrupted members of the Defense and Security Forces. Unexploded ordnances (UXO) are also collected by NSAGs to use as a part of IEDs.

Some initiatives are active to reduce the issue in the Central African Region, for instance, the U.S. investments in Conventional Weapons Destruction (CWD) in Africa supported Chad and the DRC governments by destroying excess and obsolete munitions as well as unexploded ordnance (UXO). It also secured, built and refurbished their national armouries and depots, marked weapons for inventory and tracing purposes, and provided training in stockpile management. This helped the beneficiary countries to prevent munitions from being lost or stolen.²²

2.2.3 Homemade explosives

Homemade Explosives (HME) are defined as "an energetic material produced from precursor chemicals that have been physically mixed or combined in a chemical reaction." HMEs may be categorized in two groups: "explosive compounds, which are synthesized, and explosive compositions, which consist of a mechanical mixture of a fuel and an oxidizer". ²⁴

Explosive precursors are chemical substances that can be used for legitimate purposes, but may also be misused in the manufacture of homemade explosives.²⁵ These products usually have legitimate industrial or agricultural uses. For instance, ammonium nitrate, a relatively cheap oxidizing substance widely used in HMEs, can be "harvested from fertilizers, from stolen technical-grade ammonium nitrate (for use as a commercial explosive) or from cool packs from medical supply chains."²⁶

Ammonium nitrate falls within the definition of dual use items, which are "goods, software and technology that can be used for both civilian and military applications."²⁷ These items, designed for civilian use, "could be used to supress human rights or launch terrorist attacks." ²⁸ These include explosive precursor chemicals or electronic components which can be used in improvised explosive devices. Several international initiatives are implemented to control these dual use items, in line with some international treaty and conventions. For instance, the EU controls the export, transit, brokering and technical assistance of dual-use items.

According to the United Nations Institute for Disarmament Research (UNIDIR), "one of the issues facing all States is the dual-use nature of most of the precursors used in the manufacture of IEDs." In an effort to counter the illicit diversion and trafficking of precursor chemicals used by terrorists and other criminal organizations to manufacture explosive devices, INTERPOL made available a list of 24 explosive precursor chemicals with their description; these precursors are regulated and subject to controls in the European Union and their founding should raise concerns. Similarly, the World Customs Organization, with its international Programme Global Shield (PGS) aims at monitoring the licit movement of chemical precursors and countering the illicit diversion of explosive precursors and other materials.

2.3 Effects of explosion on victims

Within the region, law enforcement and military officers, as well as an increasing number of civilians are victims of explosions causing death and a wide range of harm. According to the United States Center for Disease Control and Prevention, explosions provoke various types of physical injuries: primary blast lesions are caused by "the impact of the over pressurization wave with body surfaces" and are more likely to affect gas filled structures such as lungs, gastrointestinal tract and middle ear. Secondary blast lesions are caused by the projection of fragments and flying debris. Tertiary blast injuries result from individuals being thrown by the blast wind, and quaternary blast lesions includes all other injuries caused by the explosion not included in the first three categories. Lesions may affect any body part and include penetrating ballistic injuries, fractures, amputation, brain injury, burns, crushing injuries and suffocation.³² Furthermore, this classification does not consider the psychological trauma of the survivors and of the families of the people injured or killed and affected communities, especially in remote localities where health services are not prepared to receive such victims.

2.4 Illegal use of explosives in Central Africa

In Central African countries, explosive substances, precursors and initiating components are controlled products and need special authorizations to be produced, imported, transported, stored or used. However, they can be diverted and illegally used to manufacture improvised explosive devices or in activities such as illegal mining or fishing.

In **Cameroon**, a law and a decree regulate explosive substances and detonators. The decree lists regulated chemical substances concerned by the law. An authorization from the Ministry of Mines is necessary for the manufacture, storage, export, import, transport, destruction, transfer and purchase of explosive substances or detonators.³³ Violation of these regulations are punishable by "imprisonment from one month to one year" and by a "fine of two thousand [USD 3] to one hundred thousand francs [USD 160].³⁴

The traceability of explosives is paramount so as to avoid diversion, which can be defined as "the unauthorized transfer of ammunition

the psychological trauma of the survivors and of the families of the people injured or killed and affected communities, especially in remote localities where health services are not prepared to receive such victims.

from the stocks of legal users to the illicit market. It takes many forms, ranging from large international transfers to low-level, localized theft and resale. It may affect all countries to some degree or another, and may occur at different points in the national stockpile chain. The negative effects of poor or ineffective stockpile security can be exacerbated by corruption, negligence and poorly implemented export and border controls".³⁵ This definition of diversion also applies to commercial explosives and associated components.

In the **DRC**, a monopolistic state structure called AFRIDEX is in charge of the traceability and regulation of explosive materials in the country and delivers authorizations for the import, manufacture, transportation, storage of explosives.³⁶ Importation of ammunitions and dual use substances such as ammonium nitrate are subject to special authorisation.

Similar authorizations are necessary in **Gabon**,³⁷ where the unauthorized use of explosives is punishable by a "fine of five to twenty million CFA francs [USD 32,550] and imprisonment for one to five years." ³⁸ The use of explosives is generally not allowed for artisanal miners, like in Gabon or in the CAR.

Regarding the monitoring of explosive substances in Gabon, the General Direction of the Territory Administration is the structure which "develops and applies texts on arms and ammunition, explosives, firecrackers and fireworks," "verifies stocks of firearms, explosives and ammunition with importers and depot holders," and "keeps a national file on firearms, ammunition, explosives, firecrackers and fireworks".³⁹

In the **CAR**, the Mine Code mentions a regulation with respect to "transport, storage and use of explosive materials" so as to respect public health and safety. The Penal Code, in a section dedicated to "offenses committed with explosives or by other deadly devices," punishes the use of explosive in this case to lifetime forced labour.⁴⁰

In **Congo**, a law from 1962 and a decree of 1968 make prior authorization compulsory to import, transport, produce, and store explosives. Transportation and storage rules are outlined in the decree. 41

At the regional level, the Economic and Monetary Community of Central Africa (CEMAC), of which Cameroon, the CAR, Chad, Equatorial Guinea, Gabon and Congo are members, has released a renovated Customs Code, which does not include provisions on explosives.

Explosives used to manufacture Improvised Explosive Devices (IEDs)

The most concerning and documented illegal use of explosives in the Central African region is when it is used as a weapon, that is to say when it is included in an improvised explosive device by NSAGs. According to the UNMAS, an IED is "a device placed or fabricated in an improvised manner incorporating destructive, lethal, noxious, pyrotechnic or incendiary chemicals and designed to destroy, incapacitate, harass or distract. It may incorporate military stores, but is normally devised from non-military components."⁴²

An IED is generally composed of five elements: a container, a switch, a source of energy, an initiator and a main charge.

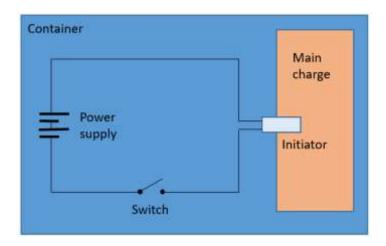


FIGURE 3 IMPROVISED EXPLOSIVE DEVICE (FROM UNMAS IMPROVISED EXPLOSIVE DEVICE LEXICON)⁴³

- 1. The **switch** is "a device for making, breaking, or changing a connection in an IED." There are arming and firing switches. The firing switch initiates the IED and falls into three main categories:
- Command switch, which is "activated by the attacker in order to control the moment of initiation." ⁴⁵ For instance the command switch can be activated thanks to a command wire or be radio controlled, e.g. with a mobile phone.
- Time switch, which "functions after a set time," 46
- Victim operated switch found on Victim Operated IED (VOIED), is a "type of switch that is activated by the actions of an unsuspecting individual." ⁴⁷
- 2. The **initiator** is "any component that may be used to start a detonation or deflagration" and can be "categorized as either a detonator or an igniter." There are commercial, military, or improvised initiators. The main type of initiators seized in Central Africa region are commercial detonators, which can be defined as "device containing a sensitive explosive intended to produce a detonation wave." Commercial detonators can be either electric or nonelectric (plain).
- 3. The **main charge** is "the explosive charge which is provided to accomplish the end result in a munition." The main charge can be made of high or low explosives. The main charge can be made of commercial, military or homemade explosives.
- 4. The power source, which can be defined as "a device that stores or releases electrical or mechanical energy." ⁵¹ For example, these include 9 volt batteries or motorcycle batteries.
- 5. The container is a vessel used to conceal the IED or/and to hold the main charge together. ⁵² Cooking pot, pipe segments or plastic canister can be used as container.

Explosives used for illegal mining and fishing

Information suggests the existence of an illicit supply chain of civil explosives and associated components and their use for illegal mineral mining in Central Africa.⁵³ Open sources also reported the illegal use of explosives for illegal mining activities in East,⁵⁴ West⁵⁵, and Southern African regions.⁵⁶

Another illegal use of explosives is blast fishing, which is the use of explosives for fishing. The blast of the explosion kills the fish and the artisanal fisher collect them at the surface of the water or at the bottom of the sea. Small-scale fishers in Cameroon reportedly illegally use explosives for fishing.⁵⁷ In Gabon, fishing with explosive devices is forbidden by decree.⁵⁸

3. CRIMINAL ACTORS INVOLVED IN THE ILLICIT FLOWS OF EXPLOSIVES AND COMPONENTS

This section summarizes some of the inferences and conclusions included in the assessment concerning organized crime groups (OCG). Further detailed information is provided throughout the report. In particular, this section examines the various dynamics of some of the OCGs found to be engaged in the illicit trafficking of explosives and components in the Central African region. It highlights how criminal networks connect across the region and focuses on the activities in which groups are involved and how. Where possible, it draws attention to specific criminal networks and outlines how they organize and operate locally, regionally, and transnationally. Based on available information, following are the profiles of the main illegal actors operating at each stage of the illegal supply chain and, when possible, their links with counterparts within and beyond the region.

Illegal final users of explosives are criminal actors involved in the illicit flow of explosives. They constitute the last step of the illegal supply chain. The purpose of this paper is not to describe how and why final users use the explosives they acquired, but rather to understand how explosive materials reach their hands. It is important to know who they are and where there are located as their position will determine one end of the illicit supply chain.

In the Central African region, the following NSAGs are suspected or confirmed as final users of explosives as weapons:

- Boko Haram and its rival offshoot the Islamic State in West Africa (ISWA) are Salafist Jihadist groups from Nigeria operating in the Lake Chad Basin region. They are active in northern Nigeria but also in northern Cameroon, southeastern Niger, and western Chad. 59 According to Africa Center for Strategic Studies, the Lake Chad Basin "remains the third most deadly on the continent, comprising 20 per cent of all militant Islamist-linked fatalities" with a total of 3,821 fatalities. 60 These groups mainly use military explosives and HME to manufacture IEDs, including Person-Borne Improvised Explosive Device (PBIED). They are likely involved in various trafficking of goods in their areas, such as cattle, commodities such as sugar or petrol, or IED components.

- Separatist non-State armed groups are active in North West and South West regions
 of Cameroon and in Nigeria. They initially used black powder to build IEDs. However,
 information suggests they also have access to TNT⁶¹ and radio command switches.⁶²
- **Retour, Réclamation et Réhabilitation Armed group** (3R) is active in the eastern part of CAR. This group funds itself thanks to illegal taxation on mining actors. The NSAG is suspected of being behind the increase of incidents since 2021 by using of IEDs or anti-vehicle mines.
- The **Allied Democratic Forces** (ADF) is a radical Islamist armed group originally from Uganda operating in the Kivu region of the DRC, which pledged allegiance to the Islamic State (IS) in 2019 and was designated by the US State Department as an IS affiliate and Foreign Terrorist Organization (FTO) in 2021.⁶³ ADF combatants were also recently recruited from Kenya and Tanzania.⁶⁴ ADF used commercial, military and homemade explosives to manufacture IEDs and Person-Borne Improvised Explosive Device (PBIED). The ADF, whose "primary motive is organised crime facilitated by terror tactics",⁶⁵ is involved in criminal activities and "controls many mines in the north of Beni and partly finances its activities by illegally exporting other minerals such as wolframite, coltan and cassiterite."⁶⁶ They are also suspected of recent mine pillages in the territory of Mambasa.⁶⁷ Its involvement in illegal mining activities is likely to facilitate its access to commercial explosives and components.
- **Illegal extractive sector actors** such as small scale miners are likely to use illegally sourced explosives for their activity.
- Some **small scale fisher**s may also use explosives for fishing.

Illegal dealers: these actors can be an authorized entity which sells explosive substances to unauthorized persons. For instance, it can be an authorized importing company which would sell explosives to the black market, or a cooperative which would illegally sell explosives to small scale miners.

Thieves steal explosive materials from authorized entities during transportation or storage. Theft can be done by internal or external persons.

Smugglers: Some intermediaries and smugglers have become the logisticians of the NSAGs. Relationships between explosive materials smugglers and NSAGs may be loose or close. In some cases, smugglers crossing the border between Nigeria and Northern Cameroon seem to smuggle explosive devices or components among all types of commodities and following the well-established smuggling routes and modus operandi.

It is likely that in some regions where illegal mining activities are ongoing, smugglers of commercial explosive substances and components feed an illegal market, mainly for these illegal mining activities. However, this illegal market can be seen as an opportunity for NSAGs

to acquire explosives and components. In some cases, smugglers and NSAGs have closer relationships. NSAGs are likely to hire smugglers to move IEDs or explosive materials, for instance from Tanzania or Uganda to the DRC.⁶⁸ In other cases, the relationship can be symbiotic between NSAGs and smugglers: IEDs are even used by NSAGs to allow and facilitate smuggling activities. In Northern Cameroon, the use of IEDs by Boko Haram on the Maltam-Fotokol road "aimed at reducing the use of this axis to clear the way for smugglers who supplied the jihadists."⁶⁹

Corrupt and/or unskilled officials: trafficking flows are likely facilitated by the complicity of some officials. Moreover, lack of training to identify IEDs components and corruption at checkpoints might facilitate the supply of components to the NSAGs.⁷⁰

Bomb makers: active bomb makers were identified in the North West and South West regions in Cameroon, the Lake Chad Basin, and in the ADF's stronghold in the DRC. They are precious and protected actors as they have the knowledge to manufacture IEDs. For NSAGs in these regions, this knowhow was shared by other NSAGs. As for Boko Haram, some bomb makers were trained in the Sahel region.⁷¹ As far as illicit flows are concerned, these players are important as they are usually in charge of "IED factories," where explosives and components are channeled.

Female smugglers: women are involved in the IED supply chain.⁷² Boko Haram knows how to exploit local perceptions of women to smuggle IED components. A woman is often wrongly perceived as disempowered by law enforcement and other actors. In this respect, she is likely less considered as a potential active element of the IED supply chain, due to her status as a woman. However, a woman was responsible for the acquisition of explosive materials by ADF in the United Republic of Tanzania and its transfer to ADF in the Beni territory.⁷³

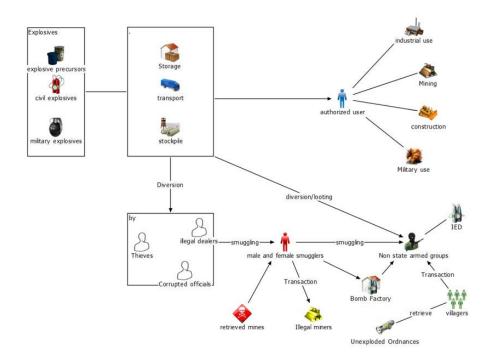


FIGURE 4 SOME ACTORS OF THE LEGAL AND ILLEGAL EXPLOSIVE SUPPLY CHAINS

4. LEGAL AND ILLEGAL FLOWS OF EXPLOSIVES AND COMPONENTS

4.1 Legal trade of civil explosives and initiating components to Central Africa 2018-2021

All countries in the region have imported civil explosives and initiators. The main importer of these products being the DRC, representing 82 per cent of the imports in the region. The availability of explosives and initiators in all the countries makes the risks of diversion and a massive flow of these products likely to increase, especially in countries were controls are weak. The diversity of supply countries leads to a potential diversity of products, which is likely to increase difficulty to identify and trace seized diverted products in the region.

According to the United Nations International Trade Statistics Database (Comtrade Database), from 2018 to 2021, five central African countries declared having imported commercial

explosives (Figure 5). Among these five countries, the DRC is by far, the most important importer of commercial explosives with 13,539 t, representing 82 per cent of the import in the region. Such a figure is not surprising since the DRC was the world's largest exporter of cobalt and a leading exporter of mineral of cooper or gold.⁷⁴ Others declared importing countries are Cameroon (2,046 tonnes), Congo (845 tonnes), the CAR (91 tonnes) and Sao Tome and Principe (15 tonnes). Over the period, a total of 16,535 tonnes were imported by these five Central African countries.⁷⁵

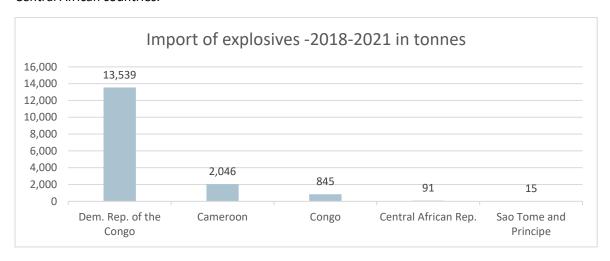


FIGURE 5 DECLARED IMPORTS OF COMMERCIAL EXPLOSIVES BY CENTRAL AFRICAN COUNTRIES FROM 2018 TO 2021 IN TONNES.

According to these five importers, source countries for explosives are shown in the chart below:

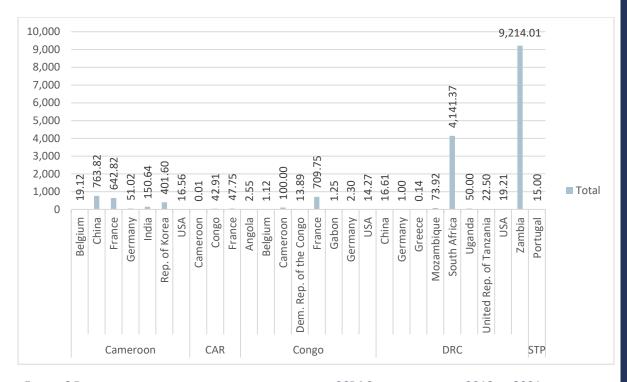


FIGURE 6 DECLARED IMPORTS OF COMMERCIAL EXPLOSIVES BY CCPAC COUNTRIES FROM 2018 TO 2021 IN TONNES AND BROKEN DOWN BY SOURCE COUNTRIES.

Figure 6 shows the five countries' declared imports of commercial explosives broken down by source countries. It shows that the DRC, which is the main importer, mainly imported explosives from two countries: Zambia (9214 tonnes) and South Africa (4141 tonnes). These two countries respectively represent 68 per cent and 31 per cent, that is to say a total of 99 per cent of the DRC imports of commercial explosives over the 2018-2021 period. The remaining 1 per cent are imports from East African countries (Mozambique, Uganda, and Tanzania), European countries (Germany, Greece), Asia (China), and North America (USA).

Cameroon imported explosives from seven countries: mainly from China (764 tonnes), France (643 tonnes), Republic of Korea (402 tonnes) and India (150 tonnes). Similarly, Congo's sourcing of explosives is diversified: Congo imported explosives mainly from France (710 tonnes), but also from Central African partners such as Cameroon (100 tonnes), the DRC (14 tonnes) and Gabon (1 tonne). Congo also has partners such as Belgium and Angola.

As only five countries declared their imports of explosives, it can be interesting to look at the data provided by exporting countries to the Central African countries. It shows that the countries which have not declared imports have nonetheless received explosives. Over the same period of time, exporting countries declared having exported a total of 554 tonnes of explosives to Gabon (mainly from France and China), 314 tonnes of explosives to Equatorial Guinea (mainly from China), 151 tonnes of explosives to Chad, mainly from France and Gabon.

 Declared imported quantity of safety fuses; detonating fuses; percussion or detonating caps; igniters; electric detonators (HS 3603)

As far as the declared imports of initiators⁷⁶ are concerned, the figures made available by the countries of the Region which declared their imports show that a total of 1,736 tonnes were imported by the CCPAC countries.

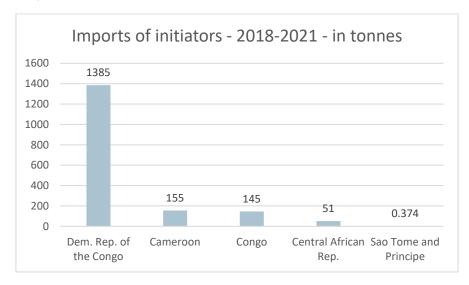


FIGURE 7 DECLARED IMPORTS OF INITIATORS BY CENTRAL AFRICAN COUNTRIES FROM 2018 TO 2021 IN TONNES.

Main declared importers of initiators over the same period were the DRC (1385 tonnes), Cameroon (155 tonnes) and Congo (145 tonnes).

Following the same pattern as for the explosives, the source countries for initiators imported in the region are very diverse, with the same important players: Zambia (901 tonnes), South Africa (290 tonnes), China (221 tonnes), France (167 tonnes), Canada (50 tonnes), India, (45 tonnes), Germany (45 tonnes), USA (7.6 tonnes), Tanzania (4.2 tonnes) and Mexico (1.2 tonnes). Under one tonne, the following countries are reported as import countries: Angola, Gabon, Spain, Portugal, Belgium, Nigeria, United Kingdom, the DRC, Australia, Lebanon and Thailand.

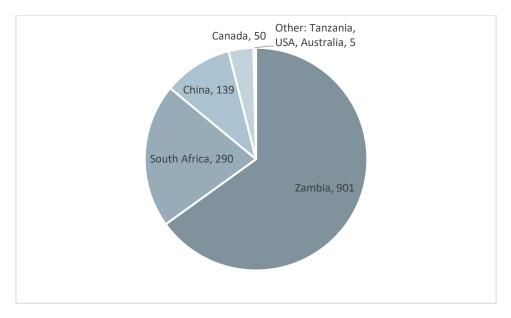


FIGURE 8 DECLARED IMPORTS OF INITIATORS BY THE RDC FROM 2018 TO 2021 IN TONNES.

Regarding the DRC, which is the main importer of initiators in the region, it has declared having sourced its equipment mainly from Zambia (901 tonnes), South Africa (290 tonnes) and China (139 tonnes).

Data provided by exporting countries to Central African countries also showed that the countries which have not declared having imported initiators, nonetheless received such equipment. Over the same period of time, exporting countries declared having exported a total of 21.7 tonnes of initiators to Chad (mainly from France and Cameroon), 17.9 tonnes of initiators to Gabon (mainly from the USA and China), and 4.9 tonnes of explosives to Equatorial Guinea (mainly from France).

The study of these legal flows of explosives and initiators shows that all Central African countries imported these products between 2018 and 2021. Import patterns are similar for both commodities, showing a wide diversity of source countries. The main importer is the DRC and the main providers are Zambia, South Africa, China and France. The availability of explosives and initiators in all Central African countries increases the risks of diversion in all these countries. Furthermore, a massive flow of these products is even more likely to increase the risk of diversion as it increases their availability. Finally, the diversification of supplying countries is likely to lead to a diversity of products, which is likely to increase difficulty to identify the diverted products in case of seizure in the region.

4.2 Illegal flows of explosives in the Central African region

Available information suggests that Cameroon is the main destination country for illicit flows of explosives from Nigeria. Seizures of civil explosives, precursors and components are higher

at borders near both conflict zones. The diverted equipment enters the country along with other goods and commodities following the usual smuggling routes by land and sea.

Information suggests the existence in Cameroon and the DRC of a black market for diverted commercial explosives and components, which are sold on local markets. These equipment is likely primarily bound for illegal mining, but their diversion make them available for NSAGs.

NSAGs in the Region use diverted military grade explosives, unexploded and diverted ordnances from Niger, Nigeria, Chad and Sudan to manufacture IEDs. NSAGs are supplied with military explosives thanks to the trafficking networks, the complicity of some national military storekeepers, and the looting of stockpiles.

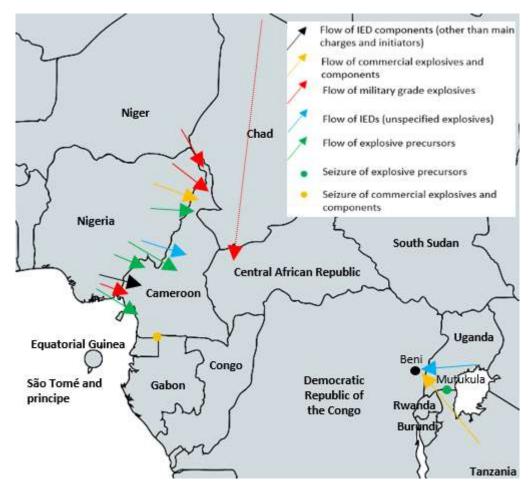


FIGURE 9 FLOWS AND SEIZURES OF EXPLOSIVES, COMPONENTS, AND PRECURSORS IN CENTRAL AFRICA BASED ON AVAILABLE SOURCES.

4.2.1 Civil explosives flows

Cameroon

Information suggests that civil explosives and components seized in trafficking zones in Cameroon are likely to be intended for illegal mining, but their diversion makes them available for the NSAGs active in the region.



FIGURE 10 MAP OF CAMEROON SHOWING CITIES OF BOUKOULA AND KYE-OSSI, WHERE INITIATING COMPONENTS WERE SEIZED. AS WELL MFOU, A CITY NEAR WHICH CIVIL EXPLOSIVES WERE STOLEN TO BE SOLD AT MOKOLO MARKET IN YAOUNDÉ.

Open source data provided by a Cameroonian custom official reported the seizure in November 2019 of 78 kg of "components of IEDs" originating in Nigeria. The seizure included cables, detonators and detonating cords and took place in Boukoula, in the Far North region.⁷⁷ This region is an important crime zone with illicit activities including smuggling of fuel, food products, cosmetics, medication and fabrics, arms, drug, and human trafficking. Some of the trafficking is controlled by Boko Haram.⁷⁸ In Kyé-Ossi, in the South Region at the tri-border zone with Gabon, Equatorial Guinea and Cameroon, also known as a trafficking zone, customs

an illegal supply chain might be also explained by the fact that illegal mining companies, obviously do not have the possibility to request and obtain the required authorizations issued by the authorities to buy explosives from the legal supply chain. Thus, they seek supplies from the illegal sector.

seized an unspecified number of detonators, as part of Operation Halcomi III.⁷⁹ It is worth noting that some regions in Cameroon,⁸⁰ close to the ones where these seizures occurred, are experiencing illicit gold mining activities. The equipment seized could be destined to support these activities.

A Cameroonian news website reported a burglary perpetrated in January 2022 in Nlobisson, near Mfou, in the department of Mefouet-Afamba, on the site of a quarry operated by a Chinese company called Zhong Guo Wu Huang. The theft involved nearly two tonnes of explosives (1991 kg) and 708 detonators. National Gendarmerie quoted in the article reportedly declared that only 25 kg of explosives and 137 detonators were recovered. One of the three suspects was arrested and acknowledged having participated in previous thefts and sold the equipment at the Mokolo market, in Yaoundé. Law enforcement reportedly feared that the unrecovered equipment could be sold on the black market or retrieved by the separatist NSAGs active in the South West and North West regions.⁸¹ In this case, it is likely that the stolen equipment was mainly intended for illegal miners. However, its introduction on the illicit market made it available to NSAGs.

Democratic Republic of the Congo

The Allied Democratic Forces (ADF) armed group based in the Democratic Republic of the Congo smuggled commercial explosives from Tanzania, where heavy regulation and the possibility of generating significant illicit profits have likely led to the development of a parallel illicit market of commercial explosives. The ADF acquired diverted commercial explosives available from the black market in Tanzania, which were likely to be initially used for illegal mining and fishing activities. An illicit supply chain of civil explosives seems to be active in some regions in the DRC.

In 2016, the United Nations Security Council Group of Experts for the DRC (DRC GoE) reported that the ADF used commercial explosives as a main charge for their IEDs. This explosive called Explogel V6 is a commercial explosive produced in South Africa. The DRC GoE determined that a South African company had sold the product legally to companies in Tanzania, Zambia, and Zimbabwe. However, the product was then diverted and "entered the black market in Tanzania, where it had been purchased by ADF collaborators and transferred to ADF in the Democratic Republic of the Congo." ⁸²

The DRC GoE explained that Explogel V6 has legitimate use in mining and construction activities, but is also extensively used for illegal

activities, such as illegal blast fishing⁸³ or mining.⁸⁴ A "legal market coexists with a sizeable black market" because the "legal sourcing of such materials is subject to cumbersome licensing, as the product must be stored in optimal conditions to ensure safety and could also be used as a weapon." ⁸⁵ In 2016, the official market price of a 25 kg case of commercial explosives cost approximately USD 80, and could be sold from USD 270 to USD 320 on the black market. ⁸⁶

In the DRC, information suggests that a parallel market for commercial explosives also flourishes. In the Ituri region, the public monopolistic company Afridex, in charge of regulating prices of commercial explosives in the country, noted that some mining cooperatives were illegally selling explosives to artisanal miners at two or three times the price.⁸⁷

The development of an illegal supply chain might be also explained by the fact that illegal mining companies, obviously do not have the possibility to request and obtain the required authorizations issued by the authorities to buy explosives from the legal supply chain. Thus, they seek supplies from the illegal sector.

Central African Republic

The United Nations Security Council Panel of Experts for the Central African Republic (CAR PoE) highlighted the risk of diversion of civil explosives legally imported in the CAR.

The CAR PoE reported that companies imported, with the authorization of the authorities, "significant volumes of commercial explosives and related material, including detonators" in the CAR. The CAR PoE noted that "in terms of explosive security, (...) relevant recommendations of the International Ammunition Technical Guidelines⁸⁸ have also not been met, presenting a high risk of loss, theft and the diversion of commercial explosive materials to armed groups."⁸⁹

Republic of the Congo

In Congo, before 2018, a NSAG used stolen civil explosives in Congo to destroy public infrastructure suggesting the existence of a potential black market or diversion of explosive equipment in the gold mining district of Pool.

Until 2018, a NSAG was active in the Pool District in Congo and destroyed two railway bridges with explosives in 2016.⁹⁰ In 2017, Congolese authorities reportedly seized "explosive charges, detonating cords and ready-to-use electric firing devices" from that NSAG,⁹¹ suggesting the availability of civil explosives in the gold bearing Pool district.

Trafficking of civil explosives in West Africa

According to the Small Arms Survey (SAS), commercial explosives are easily available on the black market and are used illegally by small scale miners and quarry companies in West Africa. Two types of commercial explosives are available: the ammonium nitrate porous prill and the explosives based on nitroglycerin or nitroglycol or nitro ester. SAS experts reported that IEDs in the West African region, which are manufactured from commercial explosives, are mainly composed of ammonium nitrate porous prill. Regular seizures of commercial explosives and components by customs in West African countries⁹² suggest an active black market.

Some NSAGs in the Chad Basin region rely on local illicit markets in relation to illegal mining "to complement and increase their offensive capabilities."⁹³ For instance, 125 meters of detonating cord were found among weapons and ammunition seized in the Diffa and Zinder regions in Niger. Detonating cord is usually used for construction and mining and can only be bought with authorization. The tracing showed that the seized detonating cord was initially imported from France by mining industries in Niger and was diverted at some point. This equipment is not considered as military equipment even if it can be used as a component for IEDs.⁹⁴ A similar pattern of diversion is likely reproduced in the Central African region.

An explosives specialist highlighted a new trend about illicit flows of civil explosives in West Africa. Until recently, Ghana was the main entry point and source for the illicit supply of civil explosives in West Africa. However, due mainly to tightened controls in Ghana, it seems that most illicit flows of civil explosives and components are now mainly originating from Nigeria. It is worth noting that the apparition of Nigerian-sourced equipment, seized by customs or used in IEDs, coincided with the recent settlement in some West African countries of new actors of the mining sector.⁹⁵

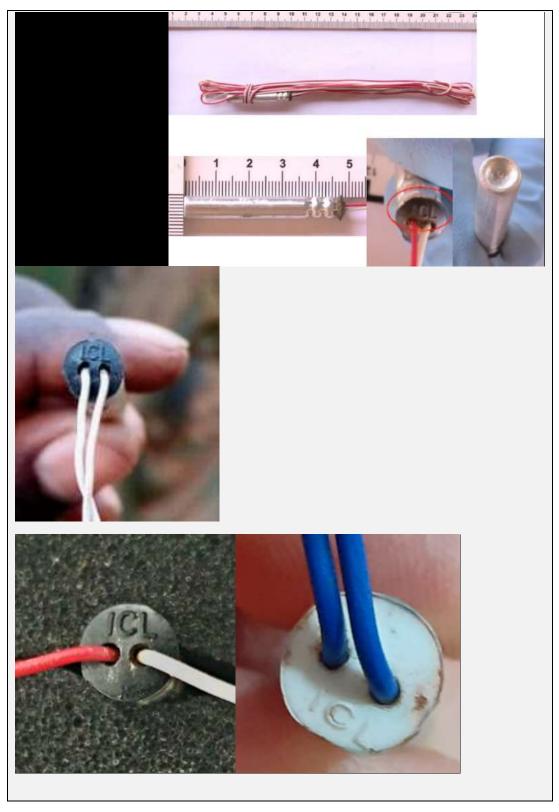


Figure 6 Various ICL detonators from Nigeria seized in Mali and Burkina Faso 96

4.2.2 Military explosives flows

Cameroon

In Cameroon, Boko Haram and separatist NSAGs use diverted military grade explosives, unexploded and diverted ordnances to manufacture IEDs. NSAGs are supplied with military explosives thanks to the complicity of some military storekeepers⁹⁷ and to the looting of stockpiles.

In the Far North region of Cameroon, Boko Haram uses military grade explosives diverted or looted from military stockpiles in the Lake Chad Basin region. According to GITOC, arms trafficking in the Lake Chad basin enables the supply of both Boko Haram and organized criminal groups involved in banditry. The flows of arms "primarily enter northern Cameroon and Nigeria from Chad, and supply both local groups and armed actors across Nigeria and in particular Cameroon"⁹⁸

Trinitrotoluene (TNT) originating from Nigeria has recently been discovered in the South West and North West regions,⁹⁹ where separatist NSAGs are active.

Unexploded ordnance (UXO): As main charge, Boko Haram uses unexploded ordnances (UXO). Since 2015, the armed group also reportedly produced IEDs based on BLG-66 cluster munitions. In a since 2015, the armed group also reportedly produced IEDs based on BLG-66 cluster munitions.

Military shells: To manufacture IEDs, Boko Haram NSAG uses munitions and explosives reportedly captured from armed forces of Cameroon, Chad, Niger, and Nigeria. ¹⁰² In 2016, the attack of Bosso military camp¹⁰³ allowed Boko Haram to steal, among other equipment, 60 cases of 122 mm shells. ¹⁰⁴

Democratic Republic of the Congo

In the DRC, military explosives, such as TNT or mortar shells, obtained from attacks against the Armed Forces of the Democratic Republic of the Congo (FARDC), are used in the south of Ituri and in the North Kivu regions by the ADF to manufacture IEDs.

A FARDC operation against ADF on 24 April 2020, permitted to retrieve, among other, 22 artisanal bombs and six pieces of TNT. Ex-ADF combatants told the DRC Group of experts that they had obtained most of the equipment from attacks on FARDC. ¹⁰⁵ Military operations against the ADF led to the seizing of IED made from mortar shells. ¹⁰⁶



FIGURE 11 PICTURES OF ADF IEDS USING MORTAR SHELLS AS MAIN CHARGES (MIDTERM REPORT OF THE DRC GOE, UN SECURITY COUNCIL, 23 DECEMBER 2020.

Central African Republic

In the CAR, the 3R NSAG is suspected of using PRB M3 anti-vehicle mines, modified as an IED main charge or utilized as such. These Belgium mines are also documented in West Africa (Mali) and are likely to come from looted Libyan stockpiles or from trafficking networks, which get their supplies by harvesting active landmines in Tibesti Region Northern Chad or Sudan.

The United Nations Security Council Panel of Experts for the Central African Republic (CAR PoE) noted an increased use of suspected landmines and IEDs incidents starting from June 2020 in the region where the 3R NSAG operates. However, it was not possible to determine what type of explosive was used as "no immediate post-blast investigation or recovery of devices for full analysis has been possible in any of the recorded incidents." ¹⁰⁷ Based on image analysis of the damages to a vehicle and adjacent crater of an incident occurred on 29 January 2021, the DRC PoE wrote that "the damage to the vehicle can be compared to that of a load of 5 to 6 kg, consistent with a PRB M3 or TC6 mine." However, it concluded that it was "not possible to confirm whether this was a mine or an explosion of an equivalent charge." ¹⁰⁸ Two unexploded Belgian PRB-M3 landmines were also recovered in the sector. ¹⁰⁹

Open sources reported that the PRB-M3 mine, a powerful Belgium-made explosive from the 1970s and 1980s, were "probably being trafficked from Libyan stockpiles or harvested from active minefields in Chad and Sudan before entering the black market." ¹¹⁰ According to a senior researcher with the Small Arms Survey, "CAR's rebels appear to be copying jihadist groups in Mali who have incorporated this type of mine into IEDs alongside other homemade explosives to create bigger blasts that destroy armored vehicles." ¹¹¹ Libya imported approximately 1 million mines of this type from Belgium in 1973-1974. ¹¹²

A specialized NGO, Conflict Armament Research, noted that these PRB M3 mines have also been observed in Mali where NSAGs used them to manufacture IEDs. Regarding their origin, it noted that it was unclear whether these mines come from looted Libyans stocks or minefields located along borders of Libya. Indeed, some officials from Chad confirmed that the "Libyan army has scattered numerous PRB M3 mines along of the border, during the conflict between Chad and Libya and the occupation of the Aouzou Strip in the 1990s." ¹¹³ People from the Tibesti region in northern Chad reportedly indicated that theses minefields occasionally serve as sources of supply for trafficking networks. ¹¹⁴ A security source reported that illegal gold miners in the Tibesti region would also use these landmines collected from minefields as main charges for quarrying purpose.

4.2.3 Explosives precursors and HME flows

Cameroon

Open source information shows a recent increase in seizures of explosive precursor chemicals in and near conflict zones in Cameroon, especially in the South West region, where most of the seizures were reported. Almost all seizures of explosive precursors, which are of great diversity, originating in Nigeria.

Open source data by Cameroon Customs on seizures of explosive precursors over a period from 2013 to 2020 shows an increase in 2020. In 2013, only two seizures occurred in Yaoundé and consisted of 2.4 tonnes of aluminum nitrate and 2,400 pieces of unspecified chemical, both products originating in Nigeria. In 2020, Cameroonian Customs reported six seizures, of which five were originating in Nigeria and occurred in the second semester of 2020. This growth in seizures might be the result of developing of the trafficking itself or the consequence of increased vigilance by customs officers. Cameroonian Customs regularly seized explosive precursors from Nigeria in the northern part of the country plagued by Boko Haram but also from the other conflict zones in the South West and North West regions.

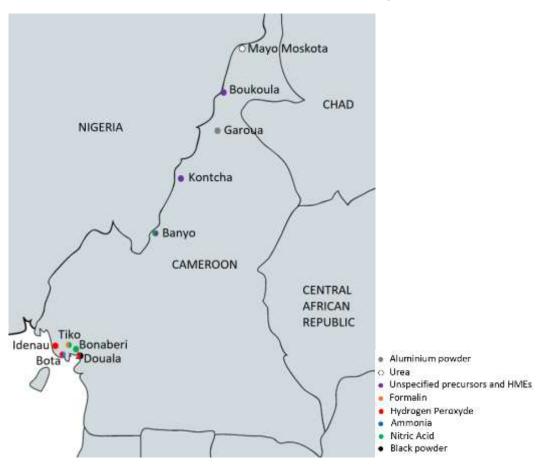


FIGURE 12 RECENT SEIZURES OF PRECURSORS AND HMES IN CAMEROON

Urea - In 2020, 2 tonnes of urea fertilizer were seized in Mayo Moskota (North region) of Cameroon near the Nigerian border.¹¹⁶

Aluminum powder - In Garoua (North region), aluminum powder was seized¹¹⁷

Unspecified precursors and Homemade Explosives - Customs seized unspecified precursors in Boukoula (Far North region) and unspecified HME in Kontcha and Banyo, two bordering cities of Adaouama region were seized. It is worth noting that the Adamaoua region is approximately equidistant from both conflict zones in Cameroon. Seizures of HME and

precursors in this region might indicate that trafficking networks have been testing new itineraries further from conflict zones and law enforcement monitoring.

Formalin – 1,870 liters of smuggled formalin were seized in Tiko¹¹⁹ in the South West region¹²⁰

Hydrogen Peroxide and Ammonia - In November 2022, the Limbe Customs Commercial Brigade seized 26 cans containing 575 litres of chemicals, in particular ammonia and hydrogen peroxide. These precursors were transported on wooden boats from Nigeria and to the Port of Bota-Limbe (South West region). Another seizure of hydrogen peroxyde was reported in the coastal city of Ideanau (South West region), near the Nigerian border. Authorities had already seized 300 liters of hydrogen peroxide in Douala as well.

Nitric Acid– Open sources reported several seizures of nitric acid by Cameroonian Customs. On 27 January 2021, the Tiko commercial brigade in the South West region seized 500 litres of nitric acid originating from the city of Calabar, in the State of Cross River in Nigeria. ¹²³ A total of 4000 liters of nitric acid were seized in Bonaberi (2000 liters) and Banyo (2000 liters), all illegally imported from Nigeria. ¹²⁴



Cameroon Customs @DGD CMR · 28 oct. 2021

Saisie à l'instant, par les éléments de la Brigade Commerciale des Douanes d'Idenau, de 04 bidons de peroxyde d'hydrogène, classé comme précurseur chimique par l'OMD.



FIGURE 13 SEIZURE OF HYDROGEN PEROXIDE, "CATEGORIZED AS PRECURSOR CHEMICAL BY THE WORLD CUSTOMS ORGANIZATION", REPORTED BY CAMEROONIAN CUSTOMS 125

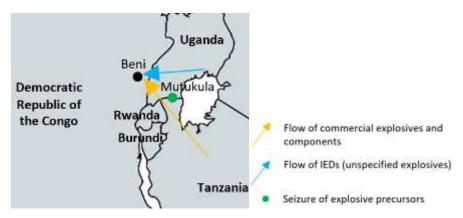
Black powder - Open sources also suggest that NSAGs in the South West and North West regions of Cameroon use black powder to build IEDs. In Douala, two bomb makers were injured in the explosion of the device they were building and the security forces recovered three bags of black powder. Black powder is traditionally produced in the Northern part of Cameroon and in the West, South West and North West regions for Fantasia performance and for therapeutic use.

Democratic Republic of the Congo

In the DRC, Allied Democratic Forces (ADF) NSAG had likely used an HME mixed with a military explosive. Smuggling of precursors in East Africa may also impact Central African countries.

The DRC GoE detailed an ADF Person-Borne IED (PBIED) incident which took place in the town of Beni on 25 December 2021 and which killed five persons, including three children. The fragments collected at the explosion site showed that the IED was probably made from commercial and military explosives. According to an IED expert assessment, the explosives used were a "particularly strong HME possibly mixed with RDX based military explosives which would have served as a booster."The total weight of explosive was estimated at five kilos. 128

During the Operation Simba III (19 – 28 March 2022) coordinated by INTERPOL across Kenya, Tanzania and Uganda, the Ugandan authorities seized 25 kg of ammonium nitrate and other materials used by terrorists to manufacture improvised explosive devices at the Mutukula border point. 129 Mutukula is a city straddling the border between Uganda and Tanzania. Trafficking between these two countries is likely to feed explosives flows towards the DRC as well, due to the proximity of their common borders from the area of operation of the ADF.



4.2.4 Flows of other IED components

Information suggests that both Boko Haram and separatist NSAGs of the South West and North West regions of Cameroon use some IEDs based on radio controlled switch. Some components to manufacture IEDs are smuggled from Nigeria. Seizures of assembled IEDs occurred in the DRC and in the Lake Chad Basin region. These IEDs are coming from factories where IED components are transported to be assembled.

Radio controlled switches are dual use items, initially for household use. These components permit the manufacture of radio command IEDs (RCIEDs) with control systems that allow operators to trigger the charge remotely. Information suggests that both Boko Haram¹³⁰ and

separatist NSAGs of the South West and North West regions use radio controlled command switches.¹³¹

Information suggests that Nigeria is the main source of external supply for the IEDs used in Cameroon.¹³²

For their supply in IEDs, Separatist NSAGs in Cameroon rely on "IEDs factories" where components are transported to be assembled by a bomb maker. Similarly, IEDs factories supplying Boko Haram were recently active in Nigeria, some of them near the Cameroonian borders like in Sambisa area or in Tella (Taraba). 135

Some seizures of ready assembled IEDs also occurred in the region. The Regional Office for Capacity Building for West and Central Africa of the World Customs Organization reported the seizures of 200 improvised explosive devices in Cameroon at the border with Nigeria. Another source specified that the weight of the seizure, about 2 tonnes, was the biggest seizure of IEDs made in Cameroon. It took place in the North region of Cameroon, more precisely in Pakete, a village in the commune of Garoua in the department of the Benue. According to authorities, "the defence forces tested and confirmed the extreme gravity of these explosives". ¹³⁷

Open sources also suggest that IEDs are imported from Uganda to the DRC. The DRC GoE reported testimonies they received from "two motorcyclists who had transported improvised explosive devices from Kampala to Beni territory." They were tasked by an ADF chief to go to Uganda in December 2019 to collect IEDs from an ADF accomplices based in Kampala. In June 2022, the Multinational Joint Task Force reported having carried out operations in the Lake Chad's surrounding areas that allowed the destruction of explosive production facilities linked to these groups. 139

Some seizures of ready assembled IEDs also occurred in the region. The Regional Office for Capacity Building for West and Central Africa of the World Customs
Organization reported the seizures of 200 improvised explosive devices in Cameroon at the border with Nigeria

4.2.5 Explosive substances and components smuggling modus operandi

Explosive substances and associated components are likely to be smuggled along with others goods and commodities, illicit or not, using the usual smuggling routes by sea or by land between Nigeria and Cameroon.

Cameroonian customs officials reportedly stated that 99 per cent of precursors and components for manufacturing IEDs come from Nigeria. This equipment reportedly travels with "thousands of goods" entering Cameroon from Nigeria and is sold by "small traders and traffickers" on the Cameroonian markets. Other smuggled goods include "cigarettes, adulterated fuel, fabrics, wines and spirits, vehicles, cell phones, vegetable oils, medicines and weapons." ¹⁴⁰ These goods are smuggled by boat from Nigeria and are mainly sold in Douala, the economic capital of Cameroon. The small islands of Bwadibo, Youpwe, Essengue or Akwa-Nord near Douala are reportedly transit places used by night to smuggle goods to the mainland. ¹⁴¹

Similarly, explosive substances and associated components cross porous borders through well entrenched trafficking routes between Nigeria and Cameroon. In the north of Cameroon, neither Boko Haram's violence nor the Covid-19 crisis brought the trafficking to a halt. Lexplosive devices are being regularly discovered in a specific type of vehicle (Toyota Starlet), known to be used to transport various smuggled goods from Nigeria to Cameroon, such as petrol food, foo

Modus operandi

Smuggling by boat between Nigeria and Cameroon

Smuggling using motorcycles between Uganda and the DRC

Smuggling by car (Starlet cars) between Nigeria and north Cameroon

Commercial explosives are often transported and hidden among other commodities

Explosives and precursors are concealed in different product packaging, for instance urea was dissimulated in cola bags¹⁴⁷

Factors that enable illicit flows of explosives

- Easy trafficking by road due to porous borders
- Equipment easy to hide and smuggle (detonators)
- Possibly outdated regulatory frameworks

5. CONCLUSIONS

Based on available information, this assessment explores the illicit flows of different explosives and components and the routes and players which permit these material to reach the hands of NSAGs in Central Africa. It describes what an explosive substance is, the different types of explosives, and their effect on victims. It noted that diverted explosives are used to manufacture IEDs, or in activities such as illegal mining or blast fishing.

The assessment examines the criminal actors involved in the illicit flow of explosives. They are the NSAGs using explosives to manufacture IEDs, that is Boko Haram and the ISWA in the Lake Chad Basin (Chad and Cameroon), the separatist NSAGs active in the North West and South West regions in Cameroon, the 3R NSAG in the CAR and the the ADF active in the DRC. Other actors includes illegal mining sector players, Illegal dealers, thieves and smugglers.

The assessment also draws attention on the fact that all countries in the region have imported the legal civil explosives and initiators, the DRC being the main importer in the region representing 82 per cent of explosive imports. The availability of explosives and initiators makes possible the risks of diversion and a massive flow of these products is likely to increase this risk. It noted that the diversity of supplying countries leads to a potential diversity of products, which is likely to increase difficulty to identify and trace seized diverted products in the region.

Based on available information, the assessment also suggests that Cameroon is the main destination country for illicit flows of explosives from Nigeria. Seizures of civil explosives, precursors and components are higher at borders near both conflict zones. Diverted explosive substances enter the country along with other goods and commodities following well entrenched smuggling routes by land and sea.

Finally, the assessment also suggests the existence in Cameroon and the DRC of a black market for diverted commercial explosives and components, which are sold on local markets. These materials are likely primarily bound for illegal mining, but their diversion make them available for NSAGs. NSAGs in the region use diverted military grade explosives, unexploded and diverted ordnances from Niger, Nigeria, Chad and Sudan to manufacture IEDs. NSAGs are supplied with military explosives thanks to trafficking networks, the complicity of some national military storekeepers and the looting of stockpiles.

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General Secretariat
200 quai Charles de Gaulle
69006 Lyon
France
Tel: +33 4 72 44 70 00

Tel: +33 4 72 44 70 00 Fax: +33 4 72 44 71 63

Twitter: @INTERPOL_HQ YouTube: INTERPOLHQ

www.interpol.int