

Why and How the African Union Should Act Against the Spread of Drones

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Project ●●●
Drones as Weapons
in Armed Conflicts

Non-state armed groups (NSAGs) on the African continent are increasingly using drones for attacks against state forces and civilians. Due to the simplicity of drone technology, their proliferation cannot be stopped completely. However, the African Union and its member states can take several measures to curb the proliferation of drones to NSAGs—for example, national regulation and continental coordination.

Recommendations

1 IMPROVE BORDER AND MARKET CONTROLS FOR DRONE COMPONENTS

A complete prohibition of commercial drones is neither realistic nor desirable. However, African Union member states can make it more difficult for non-state armed groups (NSAGs) to acquire, modify and use drones. This requires targeted border, customs and market controls that focus not only on the drone as a single finished product, but also on the wider supply chain for parts and components.

2 ESTABLISH NATIONAL REGULATION AND CONTINENTAL COORDINATION WITH A CODE OF CONDUCT ON DRONES

Governments should introduce more consistent import and retail rules for advanced commercial drones and their parts and components. The African Union could support harmonisation by developing model regulations and implementation templates. A Code of Conduct on drones and on countering their proliferation could be the central framework for continental coordination. The ECOWAS Convention on Small Arms and Light Weapons could inform such as Code of Conduct through its rules and monitoring mechanisms.

3 USE INTERNATIONAL INSTITUTIONS TO RAISE AWARENESS OF NSAG DRONE USE

More advanced unmanned aerial vehicles that require external state sponsorship need a different policy response than small commercial drones. The African Union should coordinate pressure at the international level for a ban on drone transfers to NSAGs and for states to improve export control. The United Nations and the Arms Trade Treaty provide opportunities to strengthen non-proliferation norms for drone technology. There might be shared interests between African states and China.

Background

Unmanned aerial vehicles (UAVs), often referred to as drones, have become common in violent conflicts. They are used not only for propaganda, intelligence, surveillance and reconnaissance (ISR) but also to spread fear and conduct strikes against ground targets. Their comparatively low cost and easy operation make them a central asset for many states and—increasingly—non-state armed groups (NSAGs). The latter rely particularly on commercial platforms that are easy to acquire. These commercial off-the-shelf (COTS) drones are inexpensive, mass-produced items for civilian use—such as photography or mapping—and can be modified for military purposes. They can be used to scout enemy positions and provide live surveillance data to coordinate attacks. With modifications such as attaching grenade-drop mechanisms, they can be weaponised to attack enemy troops and civilians.

NSAGs can reportedly produce explosive-carrying drones at a low cost of approximately US \$650–1,000 per drone.

NSAGs adopt drones gradually rather than with a single technological leap. The transition from initial experimentation to systematic drone use can take years. Comparative cases suggest that NSAGs need roughly one to five years to achieve repeated operational use, while developing a sustained armed-drone programme can take three to more than ten years. Jama'at Nusrat al-Islam wal-Muslimin (JNIM) illustrates this trajectory: about five years elapsed between its early use of UAVs to gather intelligence, monitor enemy movements and coordinate attacks against state security forces and rival armed groups, and its first confirmed armed drone attack in 2023. Since 2025, the group has regularly deployed weaponised drones, dropping improvised explosive devices (IEDs) on military positions in Burkina Faso and Mali.

The Islamic State West Africa Province (ISWAP) followed a similar pattern. The group employs commercial drones like the Chinese DJI Phantom and DJI Mavic-type quadcopters. They can remain airborne for up to an hour, transmit HD video at distances approaching 15 km and fly up to roughly 28 km in range and 6 km in altitude. Built-in automated flight controls mean that they require minimal training to operate. ISWAP modifies them into

strike systems using lightweight, air-dropped explosives—primarily grenades of 30/40 mm calibre, such as the Russian VOG-17 or VOG-30. Stabilising fins are improvised and attached to increase accuracy. Payload release kits are commercially available. By combining off-the-shelf technology and low-tech components, NSAGs can reportedly produce explosive-carrying drones at a low cost of approximately US \$650–1,000 per drone.



DJI Mavic 2 Pro at Embry-Riddle Aeronautical University
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In ISWAP's attacks on Nigerian military bases, UAVs support coordinated ground assaults by providing real-time information on troop movements, defensive positions and weaknesses in base perimeters. They also improve the accuracy of mortar and improvised rocket fire. In addition, since December 2024, ISWAP has used grenade-dropping UAVs in coordinated attacks on various military bases, as a diversionary tactic or to weaken defensive positions before ground forces advance.

But JNIM and ISWAP are not the only examples. In Somalia, the al-Qaeda-affiliated group Al-Shabaab has employed COTS drones since 2018 for ISR and propaganda. Al-Shabaab has carried out confirmed weaponised drone strikes, and evidence suggests that the group has sought training and equipment from the Houthis in Yemen to expand its UAV arsenal.

In northern Mozambique, the Islamic State-affiliated group Ahlu-Sunnah wal-Jama'a (ASWJ) has used UAVs for reconnaissance and to guide attacks on security forces during major offensives. The Islamic State in Somalia (ISS) and the Allied Democratic Forces (ADF) in the Democratic Republic of the Congo used them for similar operations. In the Central African Republic, the Coalition of Patriots for Change (CPC) has also attempted to weaponise COTS drones. These examples illustrate a broader trend across several African conflict theatres: NSAGs increasingly rely on inexpensive commercial UAVs for ISR, propaganda and the coordination of attacks, while their use of weaponised systems is gradually expanding.

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NSAGs can access more sophisticated drones when they receive external state support. The Rapid Support Forces (RSF) in Sudan illustrates this point. Supported by external partners—most prominently the United Arab Emirates and Russia—the paramilitary group has significantly upgraded its drone fleet. The

RSF operates MALE (medium-altitude, long-endurance) platforms such as the Chinese Wing Loong II and FH-95, which are military-grade weapons systems that significantly differ from the models mentioned above.



Wing Loong II side view, Dubai Air Show 2017

Source: ©Mztourist, 16 November 2017; <https://creativecommons.org/licenses/by-sa/4.0>

These systems can carry guided munitions, remain airborne for extended periods and conduct surveillance and strike missions at operational ranges far exceeding those of commercially available drones. Since 2024, the RSF has conducted dozens of strikes against airports, dams, energy and civilian infrastructure, as well as military installations across Sudan. More recently, evidence has emerged of long-range kamikaze drones, consistent with the Shahed 136-style loitering munitions, including the Sunflower-200 (Cobtec) and the ZT-180 (Xi'an Bingo Intelligent Aviation Technology), which have a reported radius of 1,500 to 2,500 km.

The African Union has realised that the availability of drones to NSAGs can pose a serious threat to state forces and civilians.

Sustained by various external sponsors—most prominently the United Arab Emirates, but also Egypt, Russia, France, Pakistan and Saudi Arabia—General Haftar's Libyan Arab Armed Forces (LAAF) also operates sophisticated drones. During Haftar's 2019–20 Tripoli offensive, LAAF- and UAE-operated Wing Loong drones armed with precision-guided munitions (PGMs) conducted thousands of strikes not only against military targets but also against civilian infrastructure and densely populated areas, contributing to significant civilian harm.

The African Union has realised that the availability of drones to NSAGs can pose a serious threat to state forces and civilians. As early as 2022, its Peace and Security Council (PSC) called on its member states to endorse legislation regulating the acquisition and use of drones so that non-state actors are not allowed to access them.¹ Due to the relative simplicity of the technology, the proliferation of drones to NSAGs cannot be stopped completely. However, this *bicc policy brief* presents key elements for an AU strategy to curb the proliferation of drones to NSAGs.

1 Improve border and market controls for UAV components

A complete prohibition of COTS drones is neither realistic nor desirable. Commercial UAVs have legitimate civilian uses (for instance, in agriculture), and their affordability and availability make them difficult to remove from the market altogether. The more realistic objective is to increase the costs, risks and logistical complexity for NSAGs to acquire, modify and deploy them. This requires targeted border, customs and market controls that focus not only on the drone as a single finished product, but also on the wider supply chain that turns these systems into operational tools of insurgency.

A priority should be to identify and monitor the components that make commercial drones tactically useful.

A priority should be to identify and monitor the components that make commercial drones tactically useful. These include advanced UAV airframes, high-discharge batteries, spare propellers and flight controllers, long-range video-transmission links, antennas, payload-release mechanisms and components clearly designed for improvised UAV frames, including some 3D-printed or modular parts. No single public watch list currently covers this spectrum. However, useful partial models exist, including dual-use export-control lists, such as the US Commerce Control List and the EU Dual-Use Control List; sanctions-related high-priority battlefield-goods lists, such as the UK and US Common High-Priority Items Lists; and UN sanctions lists targeting designated terrorist organisations and their facilitators.

African states could build on these models and develop a UAV-components watch list that combines controlled-item classifications, customs codes, sanctions screening, battlefield-recovery data and law-enforcement indicators of suspicious procurement. The African Union, working through AFRIPOL (its Mechanism for Police Cooperation) and relevant regional economic communities, could maintain a regularly updated central reference list and circulate it through secure channels to customs, police and military authorities, making it harder for NSAGs to exploit differences in national regulations or acquire components piecemeal through informal markets. Such a list would also help identify suspicious procurement patterns, such as repeated purchases of signal boosters, release kits or replacement airframes by the same intermediaries.

These measures are particularly relevant along traditional trade and smuggling corridors. In the Lake Chad Basin, ISWAP exploits cross-border trade routes used for fuel, vehicle parts, weapons, food and explosive materials. Similar dynamics exist elsewhere in the Sahel, where porous borders and weak state presence allow armed groups to move equipment between Mali, Burkina Faso, Niger and neighbouring coastal states. Complete control of very long borders across rough terrain is virtually impossible.

It is therefore particularly important to exchange intelligence on relevant trade and smuggling corridors and enhance checkpoints and patrols along these routes. Relevant frontline units include, for example, customs officers inspecting trucks, buses and cargo at formal land crossings; border police or gendarmerie patrols operating along informal routes; and military or joint-security personnel manning checkpoints in conflict-affected areas. These units require practical training to identify UAV components, to understand how they fit together and how to preserve relevant technical and procurement information following a seizure—itself no easy task.

Seizure data should be integrated into existing national and regional police-information and tracing systems. In West Africa, for example, the INTERPOL-supported West African Police Information System enables authorities to exchange information on suspects, weapons and other objects. INTERPOL's Illicit Arms Records and Tracing Management System and Firearms Reference Table could eventually be augmented to trace recovered UAVs and relevant parts and components. Relevant regional mechanisms, including the Regional Centre on Small Arms' tracing system in Eastern and Central Africa, could similarly be connected through common case references and information-sharing procedures.

The African Union could play an important coordinating role through its Border Programme and AFRIPOL by developing UAV-specific identification modules, model seizure-reporting templates and train-the-trainer courses in affected regions. These activities should build on, rather than duplicate, training and capacity-building programmes already implemented in the field. INTERPOL and UNODC operations in West Africa and the Sahel, for example, have combined pre-operational training, database use and physical searches at airports, seaports and land borders. The INTERPOL Support Programme for the African Union in relation to AFRIPOL (ISPA) is also strengthening AFRIPOL's information systems, analytical capacity and access to secure international police-communications channels.

The African Union could play an important coordinating role by developing UAV-specific identification modules, model seizure-reporting templates and train-the-trainer courses in affected regions.

The African Union's added value would therefore lie in integrating UAV-specific content into existing programmes, harmonising standards across regions and ensuring that lessons and seizure data are shared among customs, police and military authorities. Training could be delivered with regional economic communities and existing joint-security mechanisms, while external partners, including the European Union and states like Germany, could support curriculum development, equipment, forensic documentation tools and sustainable financing.

2 Establish national regulation and continental coordination with an African Union Convention on Drones

At the regulatory level, governments should introduce more consistent import and retail rules for advanced commercial drones.

Customs authorities should capture serial numbers (most modern, commercially manufactured civilian UAVs have a unique manufacturer-assigned serial number) and model information at the point of import, while retailers should be required to record buyers of high-end models through basic know-your-customer procedures or licensing systems. These requirements should apply especially to drones with long flight times, extended transmission ranges, high-quality optical sensors, swappable batteries or payload-carrying potential.

The most important step towards curbing the proliferation of drones to NSAGs in Africa is coordination at the continental level.

The African Union could support harmonisation by tasking relevant bodies, including the African Civil Aviation Commission and the AU Border Programme, with developing model regulations and implementation templates that member states could adapt to their national legal systems. These could set out common risk categories, minimum import-documentation standards, retailer due-diligence obligations, serial-number reporting requirements and procedures for sharing information on suspicious purchases across borders. Where technically feasible, authorities should also work with manufacturers and distributors to require geofencing around sensitive sites such as military bases, airports and major humanitarian facilities. Geofencing will not stop determined actors, but it can reduce opportunistic misuse and create additional barriers for less technically capable groups.

The most important step towards curbing the proliferation of drones to NSAGs in Africa is coordination at the continental level. The impact of border and market controls, as well as national regulation, is limited if only one or a few states implement them, as NSAGs can adapt their supply chains to circumvent these obstacles. The more states participate, the harder this becomes. The African Union can play a central role here as a forum to negotiate and facilitate this coordination.

Therefore, the process to develop a Continental Strategic Framework on NSAGs in Africa, initiated by the African Union in 2026, should also discuss drone use by NSAGs and agree on non-proliferation measures. The central framework for these coordination activities could be a Code of Conduct on drones and on countering their proliferation which, at a later stage, might provide the basis for an AU Convention that prohibits the unauthorised transfer of drones to NSAGs.

The ECOWAS Convention on Small Arms and Light Weapons covers a different category of weapons but its rules and best practices could nonetheless inform such a Code of Conduct on drones. It prohibits the “[...] transfer of small arms and light weapons to Non-State actors that are not explicitly authorised by the importing Member” (Art. 3). Furthermore, the ECOWAS Convention details several useful rules and mechanisms, including the establishment of National Commissions as focal points, databases, registers and reporting systems to increase transparency, the strengthening of border controls and the harmonisation of national legislative provisions.

The ECOWAS Convention on Small Arms and Light Weapons could inform such a Code of Conduct on drones.

A Code of Conduct on drones could also establish rules for how states themselves use drones. States must lead by example in how they use drones. The proliferation of military UAVs across Africa has created a dangerous legitimacy problem: governments cannot credibly condemn NSAG drone strikes if their own drone campaigns are opaque, indiscriminate or weakly bound by international law. Strict adherence to distinction, proportionality and precaution is therefore not only a legal obligation, but also a strategic advantage. Meeting this standard calls for transparent targeting procedures, legal review of strikes, collateral-damage assessments, post-strike investigations and accountability for civilian harm.

Cases such as the UAE drone campaign in Libya or Yemen, in which strikes repeatedly hit civilian infrastructure and populated areas, show how state drone warfare can normalise precisely the forms of remote violence that later spread to non-state actors such as the LAAF. By setting and enforcing clear standards for how states themselves acquire, export and use drones, the African Union can set an example for the international community.

3 Use international institutions to raise awareness of NSAG drone use

More advanced systems like MALE drones and long-range loitering munitions require a different policy response than small COTS drones since they depend on external state sponsorship for access to trained operators, logistical infrastructure, satellite links, spare parts and modern PGMs.

Measures aimed only at domestic and regional retail markets will therefore have limited effects on NSAGs with state sponsors. Raising the political, legal and reputational costs for suppliers that enable NSAGs to acquire and operate advanced UAVs is crucial. Achieving this requires coordinated pressure at the international level for a ban on UAV transfers to NSAGs and for states to strengthen export controls on drones and their components. Existing end-user controls should become mandatory and be applied not only to complete drones, but also to critical

subsystems, covering supplier screening, no-diversion clauses, standardised component classification, buyer due diligence, post-shipment and end-user verification—to ensure that drones and sensitive components remain with the declared end user. Currently, several major drone suppliers such as Turkey and China impose no end-use requirements.

The Arms Trade Treaty (ATT)—a legally binding international treaty that established standards and criteria to govern the international arms trade—is a key instrument for addressing global arms transfers. African states account for more than one-quarter of ATT members (31 of 118 states parties) and can wield significant influence on the agenda. As armed drones are subsumed under the category of ‘combat aircraft’ by the UN Register of Conventional Arms (UNROCA), UAVs like the Wing Loong clearly fall within the ATT’s scope, which draws on UNROCA’s categories.

Raising the political, legal and reputational costs for suppliers that enable NSAGs to acquire and operate advanced UAVs is crucial.

During the ATT negotiations, several states (including the African Group) called for an explicit, general ban on arms transfers to non-state actors to be included in the ATT, but without success. However, the ATT rules prohibit arms transfers when there is an ‘overriding risk’ that they would undermine peace and security or could be used to commit or facilitate a serious violation of international humanitarian law. Furthermore, the ATT requires each state party involved in the transfer of arms to take measures to prevent their diversion. On this legal basis, AU member states could use the annual conference of states parties and its preparatory meetings to raise awareness of the problem of drone proliferation to NSAGs and create political pressure on export and transit states to pursue more restrictive policies on drones and strengthen efforts to prevent their diversion.

While not all major drone-producing countries have ratified the ATT (for instance, the United States or Turkey are signatories only), China ratified it in 2020. China is keen to present itself as a supporter of international arms control and has been among the most outspoken advocates of a ban on arms transfers to NSAGs during ATT negotiations. It might be worth exploring any shared interests between African states and China on drone proliferation to NSAGs.

Of course, such attempts to promote international norms for the non-proliferation of drones and their components to NSAGs do not have to be limited to the ATT. The UN Secretary General’s New Agenda for Peace report highlights the perils of the proliferation of drones among both state and non-state actors in the absence of sufficient governance frameworks. And the increasing global misuse of drones by terrorist groups has been a particular concern of the UN Security Council Counter-Terrorism Committee. A UN General Assembly resolution highlighting concerns about the increasing proliferation of drones to NSAGs and suggesting joint efforts by states to counter it would be another useful step.

Endnote

1. Communiqué adopted by the Peace and Security Council (PSC) of the African Union (AU) at its 1085th meeting on Disarmament and Control of Illicit Small Arms and Light Weapons in Africa held on 18 May 2022 (PSC/PR/COMM.1085 (2022)), <https://papsrepositary.africanunion.org/server/api/core/bitstreams/13bfe89f-1e66-4ab0-b150-f07f3cb6fb35/content>

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