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# The Arms Trade Treaty and Drones

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#### INTRODUCTION

Unmanned aerial vehicles, more commonly referred to as drones, have become a mainstay of military operations around the world. Drones share a set of distinct characteristics that have traditionally made them attractive for governments and increasingly for non-State actors:

- Drones are equipped with an array of sensor and communications technologies that allow them to capture and transmit images in nearreal time and maintain greater situational awareness of a specific area.
- Drones are persistent and can loiter over a given area for a sustained period and thus augment information collection capabilities.
- Drones offer long flying times and allow users to project force and expand their operational reach into areas that might otherwise prove too risky - either politically or militarily - to access by other means.
- Drones can be equipped with a range of armaments and are able to provide close air support for ground troops.

Drones can provide considerable support for a variety of military and intelligence operations. The United States has remained the world's leader in possessing and using armed drones, though it does not maintain a monopoly on lethal drone technology. Other countries have acquired and used and/or are seeking to acquire and use lethal drone technology to serve a variety of national and international security interests. Research conducted by academics and civil society estimates that over 90 countries and non-State groups operate drones, and more than 20 countries are believed to have armed drones. Ten countries are believed to have used armed drones to conduct lethal strikes: Azerbaijan, Iran, Iraq, Israel, Nigeria, Pakistan, Turkey, the United Kingdom, the United Arab Emirates, and the United States.

Yet with their unique characteristics, drones present several challenges. Countries have sought to integrate drone technology, and in particular lethal drone technology, into their armed services in part because of the perception that the costs and risks of using drones for a given objective are comparably lower than for other weapons systems. Such perceptions could make governments more willing to resort to the use of lethal force via armed drones, thereby lowering the threshold for engaging in armed conflict. These effects have arguably been made evident in the ways in which drones have been used, including outside traditional battlefields, though the consequences of such use have not been fully examined.

<sup>&</sup>lt;sup>1</sup> Michael Horowitz, Sarah Kreps, and Matthew Fuhrmann, "Separating Fact from Fiction in the Debate over Drone Proliferation," *International Security* 41, no. 2 (Fall 2016): 7-42; New America Foundation, "World of Drones," https://www.newamerica.org/in-depth/world-of-drones/1-introduction-how-we-became-world-drones/

<sup>&</sup>lt;sup>2</sup> Azerbaijan reportedly used a Harop drone manufactured by the Israeli Aerospace Industries, which functionally serves as a loitering munition where the weapons platform itself is used as the primary munition to strike designated targets. For more information, see: New America, "World of Drones: Who Has What: Countries with Drones Used in Combat," https://www.newamerica.org/in-depth/world-of-drones/2-who-has-what-countries-drones-used-combat/; Samuel Oakford, "Libya's Lawless Skies," *Airwars*, June 20, 2018, https://airwars.org/conflicts/libya/news-analysis/libya-lawless-skies/

New technological developments – focused on miniaturizing and swarming, for example – may lead to an expansion of demand and of drone capabilities. These new technological developments may also present additional challenges related to use and control. Regardless of their type, as drones continue to proliferate around the world, it will be important for States to assess the impact of increasing drone use and understand the mechanisms in place that regulate the transfer and use of drones.

To help inform such discussions, the Stimson Center conducted an analysis of how drones relate to various multilateral regulatory regimes. This report offers a particular focus on the international Arms Trade Treaty (ATT) and examines the ways in which drone transfers and use are regulated by the ATT. For the purposes of this paper, references to drone(s), unmanned aircraft, and unmanned aerial vehicle(s), or UAVs, will be made interchangeably.



#### DRONES IN THE ARMS TRADE TREATY

The ATT is the first treaty to establish legally binding standards for regulating the global trade in conventional weapons. The treaty was adopted by the United Nations General Assembly in April 2013 and aims to increase transparency and promote responsibility and accountability in international arms transfer decisions.

The ATT covers eight categories of conventional weapons, as identified in Article 2.1 of the treaty text: battle tanks, armoured combat vehicles, large-calibre artillery systems, combat aircraft, attack helicopters, warships, missiles and missile launchers, and small arms and light weapons. Though the text of the ATT does not provide definitions for these categories of weapons, Article 5.3 of the treaty requires that national definitions of these weapons systems "not cover less than the descriptions used in the UN Register of Conventional Arms" at the time of the treaty's entry into force.<sup>3</sup>

Following the treaty's entry into force on 24 December 2014, key questions emerged as to whether drones fell under the ATT's scope and how the treaty applied to concerns about drone use.<sup>4</sup>

#### Scope

Though the ATT does not *explicitly* reference drones within its scope, the treaty does *implicitly* apply to drones.

The UN Register of Conventional Arms (UNROCA) offers definitions for seven categories of conventional weapons that are also covered by the ATT: battle tanks, armoured combat vehicles, large-calibre artillery systems, combat aircraft, attack helicopters, warships, and missiles and missile launchers. As Article 5.3 of the ATT states, national definitions of these categories shall, at a minimum, reflect the definitions provided by UNROCA at the time of the ATT's entry into force. The UN Register's "combat aircraft" category implicitly covers drones, according to the opinion of the 2006 Group of Government Experts (GGE) to UNROCA, which states that

category IV [combat aircraft] already covered those unmanned platforms that were versions of combat aircraft or that otherwise fell within the existing definition but not specially designed UAVs.<sup>5</sup>

<sup>&</sup>lt;sup>3</sup> United Nations, The Arms Trade Treaty, https://unoda-web.s3-accelerate.amazonaws.com/wp-content/uploads/2013/06/English7.pdf

<sup>&</sup>lt;sup>4</sup> Matthew Bolton and Wim Zwijnenburg, "Futureproofing: Making Sure the Arms Trade Treaty Controls Drones and New Robotic Weapons," *Control Arms Blog*, November 7, 2013, https://controlarmsblog. wordpress.com/2013/11/07/futureproofing-making-sure-the-arms-trade-treaty-controls-drones-and-new-robotic-weapons-2/

<sup>&</sup>lt;sup>5</sup> United Nations General Assembly, Report on the Continuing Operation of the United Nations Register of Conventional Arms and Its Further Development, 15 August 2006, UN Document A/61/261, http://undocs.org/A/61/261

In 2009, the UN Register GGE considered a proposal to add a new category to UNROCA for "armed unmanned aerial vehicles," as some States began transferring drones to a limited number of countries around the world at that time. Some experts within the 2009 UN Register GGE also considered creating a subcategory under category IV for combat aircraft to explicitly reference unmanned aerial vehicles. The 2013 UN Register GGE also considered these proposals, but expressed a preference for dividing the combat aircraft category into two subcategories, one for manned combat aircraft and one for unmanned combat aircraft. Additionally, the 2013 UN Register GGE noted that unmanned aerial vehicles were covered by categories IV (combat aircraft) and V (attack helicopters) of the UN Register, and recommended that States report international drone transfers in their annual reports to the UN Register using the subcategory for unmanned combat aircraft.

Thus, although the description of the combat aircraft category in the UN Register did not explicitly reference unmanned aerial vehicles at the time of the ATT's entry into force in December 2014, the inclusion of unmanned aerial systems, or drones, in category IV of the UN Register was implied and commonly understood, according to the UN Register GGEs. However, the implicit nature of such reference led to continued questions about whether the combat aircraft category of the UN Register covered drones and, by extension, whether the scope of the ATT covered drones as well.

In part as a result of these ongoing questions, the 2016 UN Register GGE recommended that UNROCA's category title and description for combat aircraft be adjusted to include an explicit reference to unmanned aerial vehicles. As a result, States are now requested to use the following description when reporting transfers of combat aircraft to the UN Register:

#### Combat aircraft and unmanned combat aerial vehicles (UCAV)9

Includes fixed-wing or variable-geometry wing aerial vehicles as defined below: **(a)** Manned fixed-wing or variable-geometry wing aircraft, designed, equipped or modified to engage targets by employing guided missiles, unguided rockets, bombs, guns, cannons or other weapons of destruction, including versions of these aircraft which perform specialized electronic warfare, suppression of air defence or reconnaissance missions.

**(b)** Unmanned fixed-wing or variable-geometry wing aircraft, designed, equipped or modified to engage targets by employing guided missiles, unguided rockets, bombs, guns, cannons or other weapons of destruction.

The terms "combat aircraft" and "unmanned combat aerial vehicles (UCAV)" do not include primary trainer aircraft, unless designed, equipped or modified as described above.

<sup>&</sup>lt;sup>6</sup> United Nations General Assembly, Report on the Continuing Operation of the United Nations Register of Conventional

Arms and Its Further Development, 14 August 2009, UN Document A/64/296, http://undocs.org/A/64/296 <sup>7</sup> Ibid., 19.

<sup>&</sup>lt;sup>8</sup> United Nations General Assembly, Report on the Continuing Operation of the United Nations Register of Conventional Arms and Its Further Development, 15 July 2013, UN Document A/68/140, http://undocs.org/A/68/140

<sup>&</sup>lt;sup>9</sup> UN Register of Conventional Arms, "Categories of major conventional arms," https://www.unroca.org/categories

The updated description for combat aircraft is reflected in Annex 1 of the ATT annual report template, which captures excerpts of all UN Register definitions for weapons described in Article 2.1 of the treaty.<sup>10</sup> Indeed, the ATT annual report template has sub-headings for the categories of "combat aircraft" and "attack helicopters," allowing States Parties to report separately on imports and/or exports of manned or unmanned aerial vehicles in these categories.

Some States began specifying transfers of drones in their annual reports to the UN Register even before the adoption of the ATT, thereby setting an example for further reporting on such transfers by other States. For example, in its 2007 UN Register report, the United Kingdom reported imports of two unmanned "Reaper (or Predator) UAVs."

#### United Kingdom UN Register Report: Imports ▶ 2007

Major conventional arms (Category I-VII) - Imports										
Category(I-VII)	Exporter state	Number of Items	State of origin (if not exporter)	Intermediate location(s) (if any)	Description of Items	Comments on the transfer				
II. Armoured combat vehicles	United States	95			Cougar (or Mastiff) APC					
IV. (a) Combat aircraft	United States	2			Reaper (or Predator) UAV					

The United Kingdom also noted its procurement of US MQ-9 Reaper systems when reporting on its military holdings in its UN Register reports from 2007 through 2012, as well as in 2015. In its 2013, 2014, 2016, and 2017 UN Register reports, the United Kingdom utilized subcategory (b) under category IV for combat aircraft, which specifies armed UAVs (fixed or variable geometry wing), to designate its holding of Reaper drones. Such designations align with the recommendations of both the 2013 and 2016 UN Register GGEs for reporting on unmanned aerial vehicles.

<sup>&</sup>lt;sup>10</sup> Specifically, definitions contained within the ATT annual report template are excerpted from the 2014 UN Register reporting template.

<sup>&</sup>lt;sup>11</sup> UN Register of Conventional Arms, "Original Report: United Kingdom 2007," https://www.unroca.org/united-kingdom/report/2007/

lbid.; UN Register of Conventional Arms, "Original Report, United Kingdom 2008," https://www.unroca.org/united-kingdom/report/2008/; UN Register of Conventional Arms, "Original Report: United Kingdom 2009," https://www.unroca.org/united-kingdom/report/2009/; UN Register of Conventional Arms, "Original Report: United Kingdom 2010," https://www.unroca.org/united-kingdom/report/2010/; UN Register of Conventional Arms, "Original Report: United Kingdom 2011," https://www.unroca.org/united-kingdom/report/2011/; United Kingdom Register of Conventional Arms, "Original Report: United Kingdom 2012," https://www.unroca.org/united-kingdom/report/2012/; UN Register of Conventional Arms, "Original Report: United Kingdom 2015," https://www.unroca.org/united-kingdom/report/2015/

<sup>&</sup>lt;sup>13</sup> UN Register of Conventional Arms, "Original Report: United Kingdom 2013," https://www.unroca.org/united-kingdom/report/2013/; UN Register of Conventional Arms, "Original Report: United Kingdom 2014," https://www.unroca.org/united-kingdom/report/2014/; UN Register of Conventional Arms, "Original Report: United Kingdom 2016," https://www.unroca.org/united-kingdom/report/2016/; UN Register of Conventional Arms, "United Kingdom: 2017," https://www.unroca.org/united-kingdom/report/2017/

#### **United Kingdom UN Register Reports: Military Holdings** ▶ 2012

Major conventional arms (Category I-VII) - Military holdings									
Category(I-VII)	Number of Items	Description of Items	Comments on the transfer						
IV. (a) Combat aircraft	136	Tornado GR4							
IV. (a) Combat aircraft	16	Tornado F3							
IV. (a) Combat aircraft	105	Typhoon							
IV. (a) Combat aircraft	5	Reaper UAV							

#### **United Kingdom UN Register Reports: Military Holdings** ▶ 2015

Major conventional arms (Category I-VII) - Military holdings									
Category(I-VII)	Number of Items	Description of Items	Comments on the transfer						
IV. (a) Combat aircraft	79	Tornado GR4							
IV. (a) Combat aircraft	0	Tornado F3							
IV. (a) Combat aircraft	133	Typhoon							
IV. (a) Combat aircraft	10	Reaper UAV							

#### **United Kingdom UN Register Reports: Military Holdings** ▶ 2017

Major conventional arms (Category I-VII) - Military holdings								
Category(I-VII)	Number of Items	Description of Items	Comments on the transfer					
IV. (b) Armed UAVs (fixed or variable geometry wing)	10	Reaper						

Some States have sustained this practice of reporting on drone transfers in recent UN Register reports, including major drone exporters such as the United States. In its 2017 annual report to the UN Register, the United States reported exports of one MQ-9 Reaper drone to France and one Predator XP drone (the unarmed variant of the MQ-1 Predator) to the United Arab Emirates. United States help to further cement the practice of reporting on drone transfers both to the UN Register and the ATT.

#### United States UN Register Report: Exports ▶ 2017

Major conventional arms (Category I-VII) - Exports									
Category(I-VII)	Final importer state	Number of Items	State of origin (if not exporter)	Intermediate location(s) (if any)	Description of Items	Comments on the transfer			
IV. (b) Armed UAVs (fixed or variable geometry wing)	France	1			MQ-9				
IV. (b) Armed UAVs (fixed or variable geometry wing)	United Arab Emirates	1			Predator XP				

States Parties to the ATT have also adopted the practice of reporting on international drone transfers in their ATT annual reports, reinforcing the understanding that drones are captured within the scope of the ATT. For example, in its 2016 and 2017 ATT annual reports, Italy utilized the subcategories under combat aircraft in the ATT annual report template to indicate that it authorized the exports of two unmanned aircraft to unidentified importers, one each during the 2016 and 2017 calendar years.¹⁵ Similarly, in its 2017 ATT annual report, Belgium indicated that it authorized the export of unmanned aircraft to both the United States and the United Kingdom, valued at approximately €1.6 million and €10.5 million, respectively.¹⁶ Belgium also indicated that it imported approximately €23.7 million in unmanned aircraft from France during the 2017 calendar year.¹⁷ Slovakia also utilized the subcategories under combat aircraft in the ATT annual report template for its 2017 annual report to indicate that it imported two MicroFalcon UAVs from Israel.¹৪

<sup>&</sup>lt;sup>14</sup> UN Register of Conventional Arms, "Original Report: United States 2017," https://www.unroca.org/united-states/report/2017/

ATT Secretariat, Reporting, "Annual Reports 2016: Italy," http://thearmstradetreaty.org/images/Annual\_Reports\_2016/Italy\_Annual\_Report\_2016P.pdf; ATT Secretariat, Reporting, "Annual Reports 2017: Italy," http://thearmstradetreaty.org/images/Annual\_Reports\_2017/Italy\_Annual\_Report\_2017P.pdf
ATT Secretariat, Reporting, "Annual Reports 2017: Belgium," http://www.thearmstradetreaty.org/images/Annual\_Reports\_2017/Belgium\_Annual\_Report\_2017P.pdf
Ibid 9

<sup>&</sup>lt;sup>18</sup> ATT Secretariat, Reporting, "Annual Reports 2017: Slovakia," http://www.thearmstradetreaty.org/images/Annual\_Reports\_2017/Slovakia\_Annual\_Report\_2017P.pdf

#### Belgium 2017 ATT Annual Report

	Catégorie d'armes <sup>4</sup>		Exportations autorisées ou réelles <sup>5</sup> Volume des exportations <sup>6</sup> (choisir l'une de ces options ou le deux)		ces options ou les	État importateur	État d'origine	Observations <sup>11</sup>		
	[I-VIII]			Réelle s	Nombre de pièces <sup>7</sup>	Valeur <sup>8</sup>	final <sup>9</sup>	(autre que l'exportateur) <sup>10</sup>	Description de la pièce	Remarques concernant le transfert
	1		2	3	4	5	6	7	8	9
III.	III. Systèmes d'artillerie de gros calibre		$\boxtimes$			4.230.000 €	Indonésie		M109	
IV.		a) avec équipage			nihil					
IV.	Avions de combat	b) sans équipage				1.648.745 €	Etats-Unis			
			$\boxtimes$			10.484.969 €	Royaume-Uni			
V.	Hélicoptères de	a) avec équipage			nihil					
٧.	combat	b) sans équipage			nihil					
VI.	Navires de guerre				nihil					
VII.	Missiles et lanceurs de missiles	a) Missiles etc.			nihil					
v 11.		b) MANPADS			20		Italie			

#### **Italy 2016 ATT Annual Report**

	Category of arms <sup>4</sup> [I-VIII]			Authorised or actual exports <sup>5</sup> Extent of exports <sup>6</sup> (choose one or both)			Final importing	State of origin	Remarks <sup>11</sup>	
			Auth.	Act.	Number of items <sup>7</sup>	Value <sup>8</sup>	State <sup>9</sup>	(if not exporter) <sup>10</sup>	Description of Item	Comments on the transfer
	1		2	3	4	5	6	7	8	9
II.	II. Armoured combat vehicles		$\boxtimes$		1.012					
III.	Large-calibre artillery systems		$\boxtimes$		2					
IV.	Combat Aircraft	a) manned	$\boxtimes$		28					
IV.		b) unmanned	$\boxtimes$		1					
V.	Attack	a) manned	$\boxtimes$		18					
٧.	helicopters	b) unmanned	⋈		0					
VI.	Warships		$\boxtimes$		0					
	Missiles & missile launchers	a) Missiles etc	$\boxtimes$		922					
VII.		b) MANPADS	$\boxtimes$		0			-		

#### **Italy 2017 ATT Annual Report**

	Category of arms <sup>4</sup>			rised or exports <sup>5</sup>	Extent of exports <sup>6</sup> (choose one or both)		Final importing	State of origin (if not exporter) <sup>10</sup>	Remarks <sup>11</sup>	
	[I-VIII]			Act.	Number of items <sup>7</sup>	Value <sup>8</sup>	State <sup>9</sup>		Description of Item	Comments on the transfer
	1		2	3	4	5	6	7	8	9
III.	II. Large-calibre artillery systems		X		2					
	6 1 1 1 1 6	a) manned	X		3			L		
IV.	Combat Aircraft	b) unmanned	×		1					
V.	Attack	a) manned	X		15					
٧.	helicopters	b) unmanned	X		0					
VI.	VI. Warships		X		10					
VII.	Missiles &	a) Missiles etc	X		1.061					
VII.	missile launchers	b) MANPADS	X		0					

#### Slovakia 2017 ATT Annual Report

	Category of arms <sup>4</sup> [I-VIII]		actual imports <sup>5</sup>			imports <sup>6</sup> ne or both)		State of ordela	Remarks <sup>11</sup>	
			Auth.	Act.	Number of items <sup>7</sup>	Value <sup>8</sup>	Exporting State <sup>9</sup>	State of origin (if not exporter) <sup>10</sup>	Description of Item	Comments on the transfer
77.	C1-1-10	a) manned		$\boxtimes$	2		Italy		C-27J SPARTAN	
IV.	Combat aircraft	b) unmanned			2		Israel		MicroFalcon UAV	

Though States have taken varied approaches to including drones in their reports on conventional arms transfers, there remains a lack of clarity on how best to identify armed UAVs and UAVs that can be modified to carry munitions. It will be up to States to apply the recommendations of the GGE to the UN Register, and States have shared differing interpretations of their obligations to report on drone transfers under the ATT. It is likely that more discussions will take place in order to develop common standards and good practice with regard to reporting on drones and applying the ATT criteria to future transfers.

#### Use

A central concern in ongoing discussions about the development and proliferation of drones is the ways in which armed drones have been used, particularly in areas that are not considered traditional battlefields.

In addressing the use of eight categories of conventional weapons, the ATT includes provisions that apply to the responsible use of drones. Specifically, the treaty text underscores the importance of attending to proper use and protecting against potential consequences that could arise from misuse of conventional arms. The ATT emphasizes human rights concerns, such as genocide, crimes against humanity, breaches of the Geneva Conventions, attacks against civilian objects, or other war crimes. Article 6.3 of the treaty prohibits a State Party from authorizing any transfer of weapons covered by the ATT (which can include drones) if the State Party has knowledge at the time of authorization that the weapons would be used in the conduct of such abuses.<sup>19</sup> The ATT also requires States Parties to assess the risk that arms may be used to commit or facilitate violations of international humanitarian law and international human rights law, or may be used to commit or facilitate acts constituting an offense under international conventions or protocols relating to terrorism or transnational organized crime. These provisions take important steps toward establishing responsible and appropriate standards for use of conventional arms.

<sup>&</sup>lt;sup>19</sup> United Nations, The Arms Trade Treaty, https://unoda-web.s3-accelerate.amazonaws.com/wp-content/uploads/2013/06/English7.pdf

# Joint Declaration for the Export and Subsequent Use of Armed or Strike-Enabled Unmanned Aerial Vehicles (UAVs)

In October 2016, the United States initiated a multilateral effort to examine the implications of drone proliferation and use. The United States drafted a "joint declaration for the export and subsequent use of armed or strike-enabled unmanned aerial vehicles (UAVs)," and 53 UN Member States subsequently signed on to the declaration and agreed to begin a process to develop global standards on export and subsequent use of armed drones.<sup>20</sup> The United States is now leading a small group of States to build on the joint declaration and draft more detailed, politically binding standards for the transfer and use of drones. However, these efforts have stalled in the first 18 months of the Trump administration.

The joint declaration shares many commonalities with the ATT regarding language on responsible use, and raises certain questions about how any finalized standards that may result from the joint declaration process will support or lead to effective regulations for drone transfers and use that do not undermine existing standards and regimes, including the ATT.

The joint declaration identifies five principles to guide the transfer and use of armed drones, of which two explicitly reference issues pertaining to use. Specifically, the declaration highlights the applicability of international law, including both the law of armed conflict and international human rights law, as applicable, to the use of armed drones and says that those States who sign on to the declaration will continue discussions on how to ensure responsible transfer and use of armed drones by all States.

The joint declaration is arguably vaguer than the ATT in terms of how it identifies and addresses responsible (and by extension irresponsible) use of drones, and may inadvertently work to undermine some of the criteria captured within the ATT and thereby weaken existing regulations that guide the transfer and use of drones. However, if a State has both signed the joint declaration and is an ATT State Party, the legally binding ATT should take precedence over a voluntary declaration.

#### Supporting the ATT

The joint declaration underscores States' commitments to existing international and multilateral export control agreements and regimes that already apply to the transfer and use of armed drones, such as the Missile Technology Control Regime (MTCR), the Wassenaar Arrangement, and the Arms Trade Treaty. Additionally, the joint declaration notes the importance of transparency measures as they pertain to exports of armed drones, including reporting on exports "through existing mechanisms." which could include the UN Register as well as annual ATT reports.

#### Risking Weakened Controls

The principles listed in the joint declaration are less clear and less stringent than those set out in the ATT. The joint declaration text includes several qualifying words and phrases that, in effect, work to weaken the principles identified in the text and detract from the broader principles to ensure lawful and responsible use of arms as contained within the ATT.

<sup>&</sup>lt;sup>20</sup> U.S. Department of State, Bureau of Political-Military Affairs, "Joint Declaration for the Export and Subsequent Use of Armed or Strike-Enabled Unmanned Aerial Vehicles (UAVs)," October 16, 2017, https://www.state.gov/t/pm/rls/fs/2017/274817.htm

#### A WAY FORWARD

Differing standards or rules guiding drone transfers and use – that is, those enumerated in the joint declaration, in the ATT, and in other export control regimes – can lead to confusion for States, both exporters and importers, over which rules and standards to follow or to apply.

A first step to eliminate this confusion is to **develop an inventory of best practices and lessons learned with regard to other control mechanisms that apply to drones**. Such a step would allow States to understand what they can learn from existing regimes, what might be needed to supplement those controls, and how to better identify transparency measures already in place. Included in this process should be **confidence-building measures**, which would involve multiple stakeholders – including civil society and industry – to ensure that the international standards being developed are understood, applicable, and transparent. For example, ATT States Parties should make it explicit in their statements and in their practice that the UN Register definitions agreed to in the 2016 GGE apply to the scope of items covered in the ATT.

Relevant stakeholders, including States, civil society, and industry, must also **ask** themselves whether more is in fact needed to better control, regulate, or establish international standards for drone proliferation and use. It is often a tempting diversion to develop new processes and procedures, but the reality is that many tools already exist that address drones.

Indeed, these stakeholders **should ask several important questions**. First among them is "Is more needed? Are current tools sufficient, or would different tools fill potential gaps?" The joint declaration may be welcome in theory, for example, but is it necessary? Ongoing discussions about the challenges raised by continued drone proliferation *may* imply a need for distinct measures to specifically control the export and use of drones, but is this truly the case? Would strengthening or more fully implementing other control regimes sufficiently address concerns about drones?

Stakeholders must also consider what characteristics of drones make them particularly unique for pursuing standards and norms to guide their transfer and use. Is transfer of more concern than use, or vice versa? Is it the platforms themselves that pose concerns or how States have used them that is of primary concern? Or is it perhaps a combination of both – that is, are there specific attributes of drones that make certain operations or uses more viable or even desired? Are drones really that exceptional that they require special control mechanisms, or is it simply how they are being used, and the lack of transparency surrounding such use, that drives current concerns? Should concerns about restraint apply to other systems used in the same way? If the same standards should be applied to drone technology as to other systems in terms of the threshold for using lethal force, what are the ramifications of separating out drones from other weapon systems? Should strike-enabled drones that launch land, sea, or air munitions be considered separately or differently from manned platforms that launch the same munitions?

If the answers to these questions lead the international community to conclude that military or armed drones do require specific regulation, it may also be worth asking whether regulations should also apply to commercial systems because of the relative ease of adapting commercial platforms for military purposes. Such an approach could impact controls enumerated in the ATT as they pertain to other conventional weapons that are not explicitly mentioned within the text of the ATT but are implicitly covered by the treaty. As part of the risk assessment for exports undertaken by States in fulfilling their ATT obligations, do and should States consider the potential misuse of drones that violate human rights law or international humanitarian law?

Next, States must consider whether they **could/should simply amend preexisting tools that help control the transfer and use of conventional weapons.** Drones could explicitly be added to the ATT at the first review conference – amendments are allowed six years after entry into force, in 2020. One could alternatively add specific interpretations or declarations to existing tools, such as the Wassenaar Arrangement, to the effect that extra care should be taken with regard to export of armed drones, which, in theory, could lead to the development of stronger controls.

Finally, it is important for stakeholders to ask **how to make controls over drone technologies sustainable.** When thinking about technological innovations for UAVs – particularly outside military categories – it is helpful to identify characteristics of drones that pose particular security concerns that require greater oversight and control. These may include characteristics beyond the traditional MTCR Category I threshold, which maintains a strong presumption of denial for the export of systems that can carry a payload of at least 500 kg up to at least 300 km. – such as speed, radar cross-section, swarming capability, surveillance payload, low observable features, and armor and anti-aircraft countermeasures. Stakeholders may seek to propose differing levels of restrictions based on the technological advantage such features create.

Ultimately, drones will continue to proliferate, and their uses will continue to grow. States, in partnership with industry and civil society, must identify strategies and norms that can keep better pace with technological development and innovation. Setting a strong norm of the inclusion of drones within the ATT is good practice for ATT States Parties and sets an important precedent for current non-ATT States Parties.



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