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Military drones in Europe

Ensuring transparency and accountability

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Summary

- The use of armed drones, particularly to conduct targeted killings outside formal war zones, remains highly contentious. It has brought to the fore questions on civilian casualties, the rule of law, secrecy and lack of accountability, among others.
- As governments fail to make adequate information publicly available on the use of drones, criticisms abound over how a lack of transparency might hinder democratic accountability. Lack of transparency also leads to doubts over whether European countries do enough to safeguard the rule of law.
- Many of the values and functions of transparency and accountability rely on adherence to the rule of law, or are adjacent to its being respected and enforced. When these three elements are balanced, they result in a functional level of legitimacy of operations, benefiting military operators, militaries, coalitions, states and ultimately the international community.
- With an interest in supporting a rules-based international order and defending democratic values, European countries have an opportunity to play an important role in shaping the norms on how drones are used in future, and should work to develop pathways for achieving this. This includes addressing long-standing calls for greater transparency and accountability for the use of armed drones.
- By demonstrating their willingness to address the implications of drone use, European states would keep those issues on the political agenda and could potentially exert some pressure for positive change. In light of indications that some activities on the part of European countries may feed into what could be unlawful drone strikes by the US, it is also important to ensure that this is not the case.
- The EU could spearhead the development of a guidance document on best practices for improving transparency and accountability mechanisms for the use of armed drones. While a legally binding document would make for a stronger legal framework, this would require a level of unity and commitment among EU countries that would be difficult to achieve, and might therefore end up stalling attempts to reach a common understanding on armed drone use.
- The UK, which shares the same democratic values as those on which the EU is founded, as well as an interest in promoting the rule of law, should also take part in this process. It is one of only four European countries so far (along with France, Serbia and Ukraine) confirmed as possessing armed drone capabilities, and, as such, it is critical that it should be brought into the fold.

01 Introduction

With the use of armed drones continuing to facilitate actions that challenge international legal frameworks and undermine democratic values, it is crucial to address the controversies surrounding drone use.

This research paper is the result of a project, supported by the Open Society Foundations, focusing on the policy implications of armed drones for the EU and the UK. The paper is informed by discussions that took place at two workshops and a simulation exercise, all of which were held at Chatham House in 2019. (A summary of the simulation exercise is included as an appendix to this paper.) The discussions considered the proliferation of drones across Europe, revisited the controversies posed by armed drones, and explored how European countries might address ongoing concerns on the use of armed drones, particularly with regard to lack of transparency and accountability. The recommendations provided are therefore intended for the EU and the UK, and focus on how, by virtue of a shared political interest in supporting democratic values and the rule of law, they might come together to address some of the long-standing implications of drone use. However, this is not to preclude other countries from taking part in any such endeavour.

Troubling effects

The use of armed drones,[1] particularly to conduct targeted killings outside formal war zones, is a highly contentious issue. In our contemporary context, where conflict has moved beyond the realms of traditional warfare to take place in undefined battle zones,[2] and is predominantly characterized by counterterrorism and counter-insurgency operations, the use of drones has brought to the fore questions around civilian casualties, the rule of law, secrecy and lack of accountability, among others. These questions have in turn given rise to persistent criticisms on drone use.

1 This paper focuses on the use of medium-altitude, long-endurance (MALE) drones, which fall under Class III (see Table 1).
2 Traditional warfare is understood as being fought between the formal military forces of opposing states within a clearly defined battlefield.

For example, with counterterrorist and counter-insurgency operations involving irregular combatants (who are not as readily recognizable as soldiers wearing uniforms), it is not always easy to distinguish lawful targets from civilians.[3] When a drone strike is launched, civilians therefore have no one to whom they can directly appeal if they are being targeted by mistake (as would be the case if there were troops on the ground). Although drone technology is frequently credited for allowing greater precision when a specific target is aimed at, it is not often acknowledged that precision itself begins not with the accuracy of the weapon at the point of the strike, but with the ability to identify the target correctly in the first place.[4] For instance, as exemplified by the infamous Uruzgan incident of 2010, civilians can be mistakenly targeted as a result of being incorrectly identified as insurgents, sometimes due to erroneous preconceptions and a failure to understand local and cultural contexts.[5]

Although drone technology is frequently credited for allowing greater precision when a specific target is aimed at, it is not often acknowledged that precision itself begins not with the accuracy of the weapon at the point of the strike, but with the ability to identify the target correctly in the first place.

Moreover, as Agnès Callamard, the UN Special Rapporteur on extrajudicial, summary or arbitrary executions, noted in her 2020 report on the use of armed drones for targeted killings: 'even when a drone (eventually) strikes its intended target, accurately and "successfully", the evidence shows that frequently many more people die, sometimes because of multiple strikes'.[6] Research on drone strikes in Yemen, for instance, shows that for 17 men targeted multiple times, 273 other people were killed; while in Pakistan, missed strikes targeting 24 men killed 874 other people.[7] In addition, analysis of classified data on US drone strikes in Afghanistan in 2010–11 showed that drone strikes were 10 times more likely to cause civilian casualties than conventional air attacks.[8]

With the development of drone technology and the rise of remote warfare, questions have also emerged on how the use of armed drones may contribute to i) changing the character of war – for example by lowering the threshold for the use of force due to reduced financial costs, the absence of physical risks to pilots, and the

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3 Civilians can be lawful targets in a conflict if, and only for such time as, directly participating in hostilities.
4 Zehfuss, M. (2011), 'Targeting: Precision and the production of ethics', *European Journal of International Relations*, 17(3): p. 543.
5 In February 2010 a US Air Force MQ-1 Predator drone crew mistakenly identified civilians travelling in Uruzgan province, Afghanistan, as insurgents, and subsequently called on two attack helicopters that launched airstrikes, killing between 16 and 23 people and injuring another 12. See Gregory, D. (2018), 'Eyes in the sky – bodies on the ground', *Critical Studies on Security*, 6(3); Wilcox, L. (2017), 'Embodying Algorithmic War: Gender, Race, and the Posthuman in Drone Warfare', *Security Dialogue*, 48(1); Allinson, J. (2015), 'The Necropolitics of Drones', *International Political Sociology*, 9(2).
6 Callamard, A. (2020), *Use of armed drones for targeted killings: Report of the Special Rapporteur on Extrajudicial, Summary or Arbitrary Executions*, UN Human Rights Council, https://undocs.org/en/A/HRC/44/38 (accessed 23 Oct. 2020).
7 Ibid., p. 7.
8 Ibid.

potential for plausible deniability; as well as to ii) the blurring of legal lines, with counterterrorism operations – in which drones are often used to conduct targeted killings – taking place more and more frequently through military means.[9] The latter, in turn, also leads to concerns that counterterrorism activities can erode the distinction between wartime and peacetime.[10] With these developments, in many instances, countries using armed drones and those enabling such use are carving out a path away from existing parameters of the rule of law.

Legal justifications for drone strikes also remain highly contestable, with continuing disagreements on the legality of the US's targeted killing programme under international law, including on its permissibility under *jus ad bellum*, i.e. the laws governing decisions on the use of force, and *jus in bello*, the framework that governs the conduct of hostilities.[11] As a consequence of the Royal Air Force (RAF) drone strike that in August 2015 killed British nationals Reyaad Khan and Ruhul Amin in Syria, the UK's use of drones has also come under scrutiny, particularly as the strike occurred before the government had obtained parliamentary approval for conducting airstrikes as part of the coalition forces fighting Islamic State (ISIS) in Syria. In addition, concerns have arisen as to how governments in both the US and the UK define the concept of imminence, with the latter's justification for the Khan strike indicating a conceptual shift towards the US's broader interpretation.[12]

Such criticisms are accompanied by continued calls for increased transparency and accountability as to how drones are used. These are fuelled by concerns around how decisions are made regarding targeted killings, for example with respect to signature[13] or double-tap strikes,[14] as well as around reporting on civilian casualties, numbers of which are frequently higher when counted by civil society organizations than when counted by governments. Although investigations focusing on civilian casualties by non-governmental organizations (NGOs) may be fraught with limitations due to restricted access to the affected area(s) and reliance on news reports,[15] this only reinforces the need for serious efforts by governments to investigate and report on the numbers of civilian deaths resulting from drone strikes. However, transparency and accountability on drone use suffered a significant setback with the March 2019 decision by the Trump administration to revoke a requirement for the US to report on civilian casualties resulting from strikes against

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9 Dorsey, J. (2017), *Towards an EU Common Position on the Use of Armed Drones*, European Parliament: Directorate-General for External Policies, https://www.europarl.europa.eu/thinktank/de/document.html?reference=EXPO_STU%282017%29578032 (accessed 10 Feb. 2020).
10 Entous, A. and Osnos, E. (2020), 'Qassem Suleimani and How Nations Decide To Kill', *New Yorker*, 3 February 2020, https://www.newyorker.com/magazine/2020/02/10/qassem-suleimani-and-how-nations-decide-to-kill (accessed 25 Mar. 2020).
11 Lawfare (undated), 'Legality of Targeted Killing Program under International Law', https://www.lawfareblog.com/legality-targeted-killing-program-under-international-law (accessed 5 Mar. 2020).
12 All-Party Parliamentary Group on Drones (2018), *The UK's Use of Armed Drones: Working with Partners*, http://appgdrones.org.uk/wp-content/uploads/2014/08/APPG-Drones-Master-final-amendments.pdf (accessed 24 Feb. 2021). See also Drone Wars UK (2020), *Joint Enterprise: An overview of US-UK co-operation on armed drone operations*, https://dronewars.net/wp-content/uploads/2020/06/JointEnterprise.pdf (accessed 18 Jun. 2020).
13 Signature strikes are targeted killings of individuals whose identities are not known, but whose patterns of life – such as movements, location and affiliations – are deemed to indicate that they are involved in terrorist activities; this term is used to differentiate them from personality strikes, where the identity of the targeted individual is known.
14 Double-tap strikes follow the initial drone strike on a person, targeting those who make their way to the site of the strike, on the assumption that they may also be involved in terrorist activities, seemingly without recognizing that they may be innocent civilians.
15 Lawfare (undated), 'Civilian Casualties & Collateral Damage', https://www.lawfareblog.com/civilian-casualties-collateral-damage (accessed 5 Mar. 2020).

terrorist targets outside areas of active hostilities.[16] In the case of the UK, on the other hand, the Ministry of Defence's reporting that just one civilian was killed in a series of RAF airstrikes that, between 2014 and 2019, killed or injured 4,315 ISIS fighters, has challenged credulity and was seen at the very least as a shocking revelation of limited or inadequate investigations.[17]

While the discussion around the use of armed drones is not new, not only do these concerns remain unresolved but, with drone warfare continuing to expand and evolve, new layers are being added to the controversies posed by the use of armed drones. Countries such as Pakistan, Nigeria, Iraq and Turkey now conduct drone strikes against targets within their own borders; and Israel uses drone strikes against targets in the Palestinian territories.[18] And after launching drone strikes on the autonomous Kurdish region in northern Iraq in August 2020, killing two Iraqi officers, Turkey became the latest country to be accused of violating another state's sovereignty by means of armed drones.[19] On the other hand, the Armenia–Azerbaijan conflict over the disputed Nagorny Karabakh region in 2020 was also heavily dominated by the use of drones, pointing to what the future of combat might become in a war between states.[20]

Moreover, in January 2020 the US conducted a drone strike against Major-General Qassem Soleimani, commander of Iran's Islamic Revolutionary Guard Corps' (IRGC) Quds special forces, in Iraq, where the US is not in a recognized armed conflict.[21] Although the US had previously taken the unusual step of designating the IRGC – part of a nation's military – as a foreign terrorist organization,[22] the assassination of Soleimani reinforced the notion that targeted killings via drone strikes have now become normalized for the US to such an extent that it has openly targeted another country's military official, on foreign soil and without the third-party state's consent.[23] With more and more countries acquiring armed drones, as highlighted by Agnès Callamard, this could prove to be a dangerous and regrettable precedent:

> The international community must now confront the very real prospect that States may opt to 'strategically' eliminate high ranking military officials outside the context of a 'known' war, and seek to justify the killing on the grounds of the target's classification as a 'terrorist' who posed a potential future threat.[24]

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16 Federal Register (2019), Executive Order 13862 of 6 March 2019 on Revocation of Reporting Requirement, https://www.federalregister.gov/documents/2019/03/11/2019-04595/revocation-of-reporting-requirement (accessed 7 Feb. 2021).
17 Beaumont, P. (2019), 'MoD claim of one civilian death in Isis raids ridiculed', *Guardian*, 7 March 2019, https://www.theguardian.com/uk-news/2019/mar/07/mod-challenged-over-ludicrous-claim-of-one-civilian-death-in-isis-raids (accessed 5 Mar. 2020).
18 New America (undated), 'The Future of Drone Warfare: Striking at Home', https://www.newamerica.org/international-security/reports/world-drones/the-future-of-drone-warfare-striking-at-home (accessed 5 Mar. 2020).
19 The Defense Post (2020), 'Iraq Fumes Against Turkey Over Drone Strike That Killed Two Iraqi Officers', 12 August 2020, https://www.thedefensepost.com/2020/08/12/iraq-turkey-drone-strike (accessed 17 Sept. 2020).
20 Dixon, R (2020), 'Azerbaijan's drones owned the battlefield in Nagorno-Karabakh – and showed future of warfare', *Washington Post*, 11 November 2020, https://www.washingtonpost.com/world/europe/nagorno-karabkah-drones-azerbaijan-aremenia/2020/11/11/441bcbd2-193d-11eb-8bda-814ca56e138b_story.html (accessed 23 Mar. 2021).
21 Crowley, M., Hassan, F. and Schmitt, E. (2020), 'U.S. Strike in Iraq Kills Qassim Suleimani, Commander of Iranian Forces', *New York Times*, 2 January 2020, https://www.nytimes.com/2020/01/02/world/middleeast/qassem-soleimani-iraq-iran-attack.html (accessed 5 Jan. 2020).
22 Gambino, L. (2019), 'Trump designates Iran's Revolutionary Guards as foreign terrorist organization', *Guardian*, 8 April 2019, https://www.theguardian.com/world/2019/apr/08/trump-designates-irans-revolutionary-guards-as-foreign-terrorist-organization (accessed 8 Mar. 2020).
23 Baroness Stern and Lord Hodgson (2020), 'After Killing Soleimani, We Need Clarity in UK Involvement, *The House*, 27 January 2020, https://www.politicshome.com/news/uk/defence/house/house-magazine/109386/after-killing-soleimani-we-need-clarity-uk-involvement (accessed 17 Apr. 2020).
24 Airwars (2020), 'New UN report insists Soleimani assassination by US was "unlawful", 9 July 2020, https://airwars.org/news-and-investigations/new-un-report-insists-soleimani-assassination-by-us-unlawful (accessed 30 Dec. 2020).

As the deployment of armed drones thus continues to facilitate actions that challenge international legal frameworks and undermine democratic values such as transparency, accountability and parliamentary oversight, it remains crucial to address the controversies resulting from the ways drones are being used, particularly as the use of drones continues to expand and to evolve in new ways. With an interest in supporting a rules-based international order and defending democratic values, by taking a strong stance on issues related to the acquisition, deployment and use of armed drones, European countries could play an important role in shaping the norms on how they are used in future.

It remains crucial to address the controversies resulting from the ways drones are being used, particularly as the use of drones continues to expand and to evolve in new ways.

This paper examines the proliferation of military drones in Europe and the challenges this development poses, as well as the opportunities that arise for revisiting and recommitting to fundamental democratic norms and values such as transparency and accountability and the rule of law. Informed by the simulation exercise hosted by Chatham House in November 2019, the paper also highlights some of the issues and complexities involved in decision-making around the use of armed drones.

A note on disagreements around drones

All too often, discussions around military drones can be characterized by both confusion and disagreement as to what is (or should be) under consideration: the technology, or the policy and decisions directing how drones are used. While it is important to separate the machine from the policy for the sake of precision – both in language and in argument – the view presented in this paper is that possibilities afforded by technology allow for certain policy choices, and that, conversely, certain policies would be out of reach without the current degree of technical capability. An unbreakable link therefore exists between the drone and the policies that determine how it is used. For example, with real-time video streaming, an endurance of up to 24 hours and a maximum range that could reach several thousand kilometres, armed drones allow military decision-makers to launch airstrikes in remote geographical locations, while the drone crews working on those missions can do so from the relative safety of their home countries. As we consider the use of armed drones in this paper, it is with this connection between policy and technical capability in mind.

In addition, in any discussion there may be those who contest the focus on drones by claiming that some of the purposes for which they are used, and for which they receive much criticism, are not themselves specific to the deployment of drones. For example, targeted killings can also be performed by special operations forces or civilian agencies such as the CIA: hence, it is the activity, and not the drone,

that should be centre stage. Although such activities do indeed warrant scrutiny, the fact that targeted killings can be carried out in different ways does not have to diminish efforts aimed at understanding what the particularities of drones might be.[25] In fact, reinforcing the connection between policy and technical capability, there are indications that drones lower the threshold for the use of force, and thus facilitate lethal activities.[26] This is considered to be the case by decision-makers themselves, including within the military.

For example, General Stanley McChrystal, a former commander of US and NATO forces in Afghanistan, stated in 2015 that confidence in the capability of drones could make them more palatable to military decision-makers and lower the threshold for lethal force.[27] The UK Ministry of Defence claimed in the same year that the:

> increased use [of remote and automated systems] in combat and support functions will reduce the risk to military personnel and thereby potentially change the threshold for the use of force. Fewer casualties may lower political risk and any public reticence for a military response […].[28]

In 2020, reflecting on the US drone programme, former US president Barack Obama stated that 'the machinery of it started becoming too easy […] and I had to remind everyone involved this isn't target practice'.[29]

It is also important to note that some opposition to the focus on drones as subject matter is based on the argument that there is nothing unique about drone technology, in that it forms part of a continuum of technological developments in weaponry throughout history that have progressively increased the distance between opposing forces in the battlefield. While this is undoubtedly the case, this paper is underpinned by the view that although history can help explain – and further our understanding of – the current context, it should never serve as justification for present harms, and neither does it have to be accepted as progressive or deterministic. Political relationships are often about changing the course of the present, where aspirations exist for a better future.

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25 Callamard (2020), *Use of armed drones for targeted killings: Report of the Special Rapporteur on Extrajudicial, Summary or Arbitrary Executions*.
26 As noted by Dorsey (2017) in *Towards an EU Common Position on the Use of Armed Drones*, p. 8, 'Compared to other weapons systems, drones have particular inherent advantages such as the ability to loiter over targets for long periods of time, to strike particular targets and to not place service members in harm's way. It is this capability that lowers the threshold for policymakers to resort to using force.' See also Zenko, M. (2015), 'Meet the Press Transcript', NBC News, 26 April 2015, http://www.nbcnews.com/meetthe-press/meet-press-transcript-april-26-2015-n350661 (accessed 29 Oct. 2020).
27 Norton-Taylor, R. and Ross, A. (2015), 'RAF base may be legitimate target for Isis, says ex-Nato commander', *Guardian*, 25 November 2015, https://www.theguardian.com/uk-news/2015/nov/25/raf-base-may-be-legitimate-target-isis-ex-nato-commander (accessed 28 Dec. 2020).
28 Ministry of Defence (2015), Strategic Trends Programme: Future Operating Environment 2035, 15 December 2015, https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/646821/20151203-FOE_35_final_v29_web.pdf, pp. 31–2.
29 The Late Show with Stephen Colbert via YouTube (2020), 'President Obama Reflects On The Drone Program And "The Illusion That It Is Not War"', interview posted 1 December 2020, https://www.youtube.com/watch?v=V-Q8MFjlQ2Y (accessed 28 Dec. 2020).

02
Drones in Europe

The controversies associated with armed drone use pose a risk to European democracies by bringing into question some of the political values on which such democratic regimes have been built.

Several European countries have acquired or are in the process of acquiring or developing Class III drones. The UK, France, Serbia and Ukraine are confirmed as having armed drones. In the case of the UK, the RAF is known to have conducted its first drone strike in military operations in Afghanistan in 2008;[30] and France did so in Mali in December 2019, just days after arming its fleet.[31] Italy has also deployed medium-altitude, long-endurance (MALE) drones, with its first known use being in Iraq in 2005. The Italian government obtained permission from the US to arm its drones in 2015, but no information has been made public on whether this has taken place.[32]

Germany first deployed unarmed Heron 1 MALE drones in Afghanistan in 2010.[33] More recently, in 2018, the German military obtained a leasing agreement to operate the larger Heron TP drone, which has the capability for carrying weapons.[34] While there have been calls for the weaponizing of drones, with the Minister of Defence, Annegret Kramp-Karrenbauer, notably having spoken favourably about doing so,[35] political opposition continues to be strong, with a motion calling for the procurement of armed drones being decisively rejected by the Bundestag in December 2019,

30 Drone Wars UK (2019), *British Drones: An Overview*, https://dronewars.net/british-drones-an-overview (accessed 20 Apr. 2020).
31 France24 (2019), 'France carries out first armed drone strike in Mali', 24 December 2019, https://www.france24.com/en/20191224-france-says-it-carried-out-first-armed-drone-strike-in-mali (accessed 20 Apr. 2020).
32 European Forum on Armed Drones (undated), 'Italy', https://www.efadrones.org/countries/italy (accessed 14 Apr. 2020).
33 Gettinger, D. (2019), *The Drone Databook*, Center for the Study of the Drone at Bard College, https://dronecenter.bard.edu/files/2019/10/CSD-Drone-Databook-Web.pdf (accessed 9 Mar. 2020).
34 AINonline (2018), 'Germany Confirms Heron TP UAV Contract with Airbus', 14 June 2018, https://www.ainonline.com/aviation-news/defense/2018-06-14/germany-confirms-heron-tp-uav-contract-airbus (accessed 14 Apr. 2020); Sprenger, S. (2018), 'German lawmakers approve drone deal with Israel', *Defense News*, 14 June 2018, https://www.defensenews.com/unmanned/2018/06/14/german-lawmakers-approve-drone-deal-with-israel (accessed 24 Feb. 2021).
35 NTV (2019), 'Besserer Schutz der Soldaten: AKK will bewaffnete Drohnen in Afghanistan', https://www.n-tv.de/politik/AKK-will-bewaffnete-Drohnen-in-Afghanistan-article21436950.html (accessed 22 Apr. 2020).

by 526 votes to 69.[36] On the other hand, a separate motion in the same session that called for the proscription of armed drones was also firmly defeated (by 485 votes to 54).

Subsequently, in May 2020, the Bundestag held a series of interactive events and social media discussions to promote a public debate around armed drones, and Eberhard Zorn, the inspector-general of the federal armed forces (Bundeswehr), made the case for arming them for operational reasons, emphasizing that pilots of unarmed drones cannot do anything to assist when troops on the ground are attacked. Zorn also stated that the earliest possible date for arming German drones would be 2022, and rebuffed the concern that drones could lower the threshold of violence, claiming that Germany 'does not use violence frivolously'.[37] Questions were also raised in the public debate as to the moral, ethical and legal issues around armed drones; and as to whether Germany would follow the US in terms of policy, or would carve out its own path. With these political issues being far from settled, the debate in Germany is likely to continue.

The inspector-general of the Bundeswehr stated in 2020 that the earliest possible date for arming German drones would be 2022, and rebuffed the concern that drones could lower the threshold of violence, claiming that Germany 'does not use violence frivolously'.

European countries with solid plans to purchase unarmed MALE drones from the US, and with sales already approved, include Belgium and the Netherlands. Recent developments in the Netherlands, however, reveal some appetite for armament: first, with the Dutch parliament approving, in November 2019, a motion asking for the defence ministry to investigate whether the drones should be weaponized;[38] and subsequently, in January 2020, with the Dutch government entering into talks with the US as a foreign military sales client to explore the possibilities of arming its MQ-9 Reaper fleet.[39]

The Polish government's Armed Forces Development Program for 2013–22[40] also mentions plans for the acquisition of a range of drones, including MALE

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36 Defence-Aerospace (2019), 'Applications for "Combat Drones" for the Bundeswehr Rejected', 20 December 2019, https://www.defense-aerospace.com/articles-view/release/3/208460/bundestag-rejects-procurement-of-armed-drones.html (accessed 20 Apr. 2020).
37 See Franke, U. (2020), '#Drohnendebatte2020 has started. To avoid spamming your timeline, I will only use this thread for comments', Twitter thread, 11 May 2020, https://twitter.com/RikeFranke (accessed 9 Feb. 2021).
38 European Forum on Armed Drones (2020), 'Dutch Parliament Asks Government to Investigate Arming Drones', 21 January 2020, https://www.efadrones.org/dutch-parliament-asks-government-to-investigate-arming-drones (accessed 22 Apr. 2020).
39 Visser, B. (2020), 'Reactie op de motie van het lid Bosman c.s. over bewapening voor de Reaper (Kamerstuk 35300-X-23)', letter from the State Secretary for Defence to the President of the House of Representatives of the States General, 31 January 2020, https://www.tweedekamer.nl/kamerstukken/verslagen/detail?id=2020D03809 (accessed 9 Feb. 2021).
40 Gettinger (2019), *The Drone Databook*, p. 129; see also Adamowski, J. (2016), 'Poland Plans To Spend $21B on Drones, Helos, Air Defense, Subs', *Defense News*, 20 July 2016, https://www.defensenews.com/home/2016/07/20/poland-plans-to-spend-21b-on-drones-helos-air-defense-subs (accessed 25 Feb. 2021).

models. And, amid tensions with Turkey, Greece became another EU member state to announce its intention to procure armed drones in December 2019.[41] It was subsequently reported, in May 2020, that Greece had signed a deal to lease (unarmed) drones from Israel for border defence purposes.[42] Also in 2019, outside the EU, Switzerland received its first MALE drone (unarmed) from Israel,[43] and after reports that Serbia had ordered an initial fleet of nine armed drones from China,[44] news emerged in July 2020 that six CH-92A combat drones had been delivered. The CH-92A is a tactical-level drone, falling between the low- to medium-altitude configuration of unmanned aerial vehicles.[45]

Table 1. Classification of drones[46]

Class	Typical capabilities	Ordnance
Class I (<150 kg) Subcategories: micro, mini and small drones	• Endurance: 1–3 hours • Maximum range: approx. 80 km • Payload capacity: 5 kg • Top speed: 100 km/hour	Generally unarmed[47] and designed to carry out reconnaissance and surveillance missions.
Class II (150–600 kg) Tactical drones	• Endurance: 10 hours • Maximum range: 100–200 km • Payload capacity: up to 70 kg • Top speed: 200 km/hour	Some models can be equipped with lightweight ordnance, typically air-to-ground guided missiles.
Class III (>600 kg) Subcategories: medium-altitude, long-endurance (MALE); high-altitude, long-endurance (HALE); and strike/ combat drones	• Endurance: up to 24 hours (or more) • Maximum range: depending on the communications equipment used, some Class III drones can be operated at a range of several thousand km • Payload capacity: several hundred kg • Top speed: up to 300 km/ hour (or more)	Although many of these models are capable of carrying a mix of weapons, some are designed solely for intelligence-gathering.

41 Cassarava, A. (2019), 'Greece buys armed drones to challenge Turkey in eastern Mediterranean', *The Times*, 18 December 2019, https://www.thetimes.co.uk/article/greece-buys-armed-drones-to-challenge-turkey-in-eastern-mediterranean-wj0qg0d5w (accessed 14 Apr. 2020).
42 Ahronheim, A. (2020), 'Greece to lease Heron drones from Israel for maritime surveillance', *Jerusalem Post*, 6 May 2020, https://www.jpost.com/israel-news/greece-to-lease-heron-drone-from-israel-for-maritime-surveillance-627065 (accessed 19 Sept. 2020).
43 IsraelDefense (2019), 'Switzerland Receives First Hermes 900 UAS from Elbit Systems', 11 December 2019, https://www.israeldefense.co.il/en/node/41257 (accessed 25 Feb. 2021).
44 Allison, G. (2019), 'Serbia getting nine Chinese Wing Loong drones', UK Defence Journal, 25 September 2019, https://ukdefencejournal.org.uk/serbia-getting-nine-chinese-wing-loong-drones (accessed 15 Apr. 2020).
45 Roblin, S. (2020), 'Missile-Armed Chinese Drones Arrive In Europe As Serbia Seeks Airpower Edge', Forbes, 9 July 2020, https://www.forbes.com/sites/sebastienroblin/2020/07/09/missile-armed-chinese-drones-arrive-in-europe-for-serbian-military/?sh=321f1d5979d2 (accessed 25 Feb. 2021). Military Factory (2020), 'The CASC CH-92 is a continuation of a deep line of unmanned vehicles developed and manufactured by CASC of China', 30 October 2020, https://www.militaryfactory.com/aircraft/detail.asp?aircraft_id=2304 (accessed 29 Apr. 2021).
46 Table is drawn from NATO Standardization Agreement 4670 (NATO's guidance for training drone operators) and is based on the aircrafts' maximum take-off weights. Source: Gettinger (2019), *The Drone Databook*. The focus of this paper is on the use of Class III drones.
47 Confusingly, loitering munitions may be defined as Class I drones; however, they are specifically designed to explode on impact, and are not meant to be recovered. See Gettinger, D. and Holland Michel, A. (2017), *Loitering Munitions: In Focus*, Center for the Study of the Drone at Bard College, https://dronecenter.bard.edu/files/2017/02/CSD-Loitering-Munitions.pdf (accessed 9 Mar. 2020); and Gettinger (2019), *The Drone Databook*.

In addition to the individual efforts described above, a number of European countries are also working collaboratively on programmes to develop drones. These include the European MALE Remotely Piloted Aircraft Systems project (RPAS, also known as Euro MALE RPAS or Eurodrone), a development project that is integrated within the EU's Permanent Structured Cooperation (PESCO) framework and in which France, Germany, Italy and Spain are participants,[48] and the nEUROn combat drone demonstrator, an initiative launched by the French government in 2003 and jointly developed with the governments of Greece, Italy, Spain, Sweden and Switzerland.[49]

Within NATO, a group of 15 Allies, including the US, has acquired the Alliance Ground Surveillance (AGS) System, comprising five RQ-4D Phoenix (based on the US Air Force Global Hawk) drones, along with the ground command and control stations required for conducting operations. The system is to be operated and maintained by NATO on behalf of all NATO Allies.[50] Separately, Italy, Sweden and the UK have signed a memorandum of understanding to cooperate on research, development and joint-concepting of Tempest, a Future Combat Air System (FCAS) involving manned and optionally manned modes of operation.[51]

An Anglo-French collaboration on an FCAS demonstration programme stalled in 2018 as a result of the UK's then pending departure from the EU;[52] and a separate collaboration between France, Germany and Spain to develop an FCAS system comprised of connected and interoperable manned and unmanned air platforms has apparently encountered difficulties, with reports emerging in early 2021 of rifts between the partner countries.[53]

In 2013, under the auspices of the European Defence Agency (EDA), a group of seven EU member states (France, Germany, Greece, Italy, the Netherlands, Poland and Spain) – some of which were already operating drones, with others having plans to do so in the future – formed a 'drone users' club'. The aim of the group was to share information and examine options for collaboration in the development of MALE drones.[54]

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48 PESCO (undated), 'European Medium Altitude Long Endurance Remotely Piloted Aircraft Systems – MALE RPAS (Eurodrone)', https://pesco.europa.eu; OCCAR (undated), 'MALE RPAS – Medium Altitude Long Endurance Remotely Piloted Aircraft System', http://www.occar.int/programmes/male-rpas (accessed 4 Mar. 2021).
49 See Dassault Aviation (undated), 'Introduction', https://www.dassault-aviation.com/en/defense/neuron/introduction (accessed 9 Mar. 2020).
50 NATO (2021), 'Alliance Ground Surveillance (AGS)', 23 February 2021, https://www.nato.int/cps/en/natohq/topics_48892.htm (accessed 4 Mar. 2021).
51 Royal Air Force (undated), 'Team Tempest', https://www.raf.mod.uk/what-we-do/team-tempest/the-tech; D'Urso, S. (2021), 'Italy, United Kingdom And Sweden Sign Tempest FCAS Cooperation Memorandum Of Understanding', The Aviationist, 5 January 2021, https://theaviationist.com/2021/01/05/italy-united-kingdom-and-sweden-sign-tempest-fcas-cooperation-memorandum-of-understanding (accessed 11 Mar. 2021).
52 Tran, P. (2018), 'Brexit, project delays jeopardize combat drone project, Dassault CEO warns', *Defense News*, 8 March 2018, https://www.defensenews.com/industry/techwatch/2018/03/08/brexit-project-delays-jeopardize-combat-drone-project-dassault-ceo-warns; Tran, P. (2018), 'Britain flip-flops toward ISR drone, but France keeps eye on combat capability', *Defense News*, 11 May 2018, https://www.defensenews.com/unmanned/2018/05/11/britain-flip-flops-toward-isr-drone-but-france-keeps-eye-on-combat-capability (accessed 15 Apr. 2020).
53 Reuters (2021), 'Negotiations on Franco-German fighter jet stuck, security sources say', 19 February 2021 https://www.reuters.com/article/us-germany-france-defence-idUSKBN2AJ1WX (accessed 4 Mar. 2021).
54 European Defence Agency (undated), 'Remotely Piloted Aircraft Systems – RPAS', https://www.eda.europa.eu/what-we-do/activities/activities-search/remotely-piloted-aircraft-systems---rpas; Rettman, A. (2013), 'Seven EU states create military drone 'club'', EUobserver, 20 November 2013, https://euobserver.com/foreign/122167 (accessed 23 Apr. 2020).

Although different European countries have different approaches to the acquisition of Class III drones, and the debate on drone weaponization will be ongoing in the near future, a gradual increase in the number of countries seeking to acquire, expand or arm existing drone fleets has been noted in recent years. With the establishment of collaborative projects, spurred not only by individual countries but also by NATO and the EU, and in view of changing dynamics in defence and security, the European continent is likely to see the further proliferation of drones.

Table 2. Drones in Europe[55]

Country	Class III capability	Planning future acquisition and/or involved in collaborative European/NATO R&D projects
Belgium	Unarmed	The US State Department approved the sale of four MQ-9B SkyGuardian drones to Belgium in March 2019. The MQ-9B can be armed, but there are currently no indications that this will be the case.[56]
France	Armed	Involved in the nEUROn, Euro MALE Remotely Piloted Aircraft Systems (RPAS) and Future Combat Air System (FCAS) projects.
Germany	Germany obtained a nine-year leasing agreement to operate IAI Heron TP drones in 2018. The Heron TP has capability for carrying weapons.[57]	Involved in the Euro MALE RPAS and FCAS projects. Involved in NATO's acquisition of the Alliance Ground Surveillance (AGS) system.
Greece	Three-year lease agreement for two IAI Heron drones (unarmed) signed in 2020.	Greece announced its decision to buy a fleet of armed drones from the US and Israel in December 2019.[58] It was reported in May 2020 that the country signed a deal with Israel to lease IAI Heron surveillance drones for border defence.[59] Greece is involved in the nEUROn project.
Italy	Armament unknown[60]	Italy is involved in the nEUROn, Euro MALE RPAS and Tempest projects, and is one of the Allies participating in NATO's acquisition of the AGS system.

55 For detailed information on drone capabilities by class and country see Gettinger (2019), *The Drone Databook*, and Gettinger, D. (2020), *Drone Databook Update: March 2020*, Center for the Study of the Drone at Bard College, https://dronecenter.bard.edu/files/2020/03/CSD-Databook-Update-March-2020.pdf (accessed 15 Apr. 2020).
56 Nene, V. (2019), 'Belgium's Purchase of MQ-9 SkyGuardian Drones Approved', Drone Below, 27 March 2019, https://dronebelow.com/2019/03/27/belgiums-purchase-of-mq-9-skyguardian-drones-approved (accessed 14 Apr. 2020).
57 Sprenger (2018), 'German lawmakers approve drone deal with Israel'; AINonline (2018), 'Germany Confirms Heron TP UAV Contract with Airbus'.
58 Cassarava (2019), 'Greece buys armed drones to challenge Turkey in eastern Mediterranean'.
59 Ahronheim (2020), 'Greece to lease Heron drones from Israel for maritime surveillance'.
60 In 2015, the US government approved a request by Italy to arm the latter's drones, but as yet no information is available on whether the Italian fleet has been weaponized. See European Forum on Armed Drones (undated), 'Italy'.

Country	Class III capability	Planning future acquisition and/or involved in collaborative European/NATO R&D projects
Netherlands	None	In 2018, the Netherlands signed a deal for the purchase from the US of four unarmed MQ-9 Reaper drones, which are due to arrive at the end of 2021. Parliament is currently discussing whether to arm the fleet.[61]
Poland	None	Poland's Armed Forces Development Program for 2013–22 included plans for acquiring a range of drones, including MALE category aircraft, but plans have been subject to delays.[62] Poland is involved in NATO's acquisition of the AGS system.
Spain	Unarmed	The US State Department approved the sale of four MQ-5 Block 5 Reapers to Spain in 2015;[63] two were delivered in 2019, and two at the end of 2020.[64] Spain is involved in the nEUROn, Euro MALE RPAS and FCAS programmes.
Sweden	None	Involved in the nEUROn and Tempest projects.
Switzerland	Unarmed	Switzerland plans to buy a total of six Hermes 900 MALE drones from Israel's Elbit Systems. The first of these was received in 2019.[65] The country is a participant in the nEUROn project.
UK	Armed	The UK is planning to replace its existing MQ-9 Reaper fleet with 16 MQ-9B SkyGuardian drones (renamed 'Protector' by the UK Ministry of Defence), with three under development and potentially another 13 to follow.[66] The UK is collaborating with Italy and Sweden in the Tempest project.
Ukraine	Armed	Ukraine purchased six Turkish-made Bayraktar TB2 MALE drones in 2019, with the first deployment taking place in 2020. It was reported in July 2020 that Ukraine was seeking to further expand its drone fleet.[67]

61 Insinna, V. (2018), 'Netherlands signs deal for unarmed MQ-9 Reaper drones', *Defense News*, 17 July 2018, https://www.defensenews.com/digital-show-dailies/farnborough/2018/07/17/netherlands-signs-deal-for-unarmed-mq-9-reaper-drones (accessed 15 Apr. 2020). See also, Hofman, L. (2020), 'Waarom bewapent Nederland zijn eerste drone (niet)?', *De Correspondent*, 12 June 2020, https://decorrespondent.nl/11330/waarom-bewapent-nederland-zijn-eerste-drone-niet/813086120-0264ac30 (accessed 23 Mar. 2021).
62 Gettinger (2019), *The Drone Databook*.
63 Mehta, A. (2015), 'State Department OKs Spain Buying MQ-9 Reaper Drones', *Defense News*, 6 October 2015, https://www.defensenews.com/pentagon/2015/10/06/state-department-oks-spain-buying-mq-9-reaper-drones (accessed 15 Apr. 2020).
64 Watkins, R. (2020), 'General Atomics Delivers Final MQ-9A Block 5 UAV to Spain', The Defense Post, 1 December 2020, https://www.thedefensepost.com/2020/12/01/spain-final-mq-9a-block5 (accessed 28 Dec. 2020).
65 IsraelDefense (2019), 'Switzerland Receives First Hermes 900 UAS from Elbit Systems'.
66 Royal Air Force (2020), 'MOD Signs £65m Contract For Protector Aircraft', RAF News, 15 July 2020, https://www.raf.mod.uk/news/articles/mod-signs-65m-contract-for-protector-aircraft; Chuter, A. (2020), 'UK orders first three Protector drones from General Atomics', *Defense News*, 15 July 2020, https://www.defensenews.com/global/europe/2020/07/15/uk-orders-first-three-protector-drones-from-general-atomics (accessed 9 Mar. 2021).
67 European Forum on Armed Drones (undated), 'Ukraine', https://www.efadrones.org/countries/ukraine and Daily Sabah (2020), 'Ukraine seeks to purchase armed drones from Turkey: media reports', 12 July 2020, https://www.dailysabah.com/business/defense/ukraine-seeks-to-purchase-armed-drones-from-turkey-media-reports (accessed 17 Sept. 2020).

Defence technologies cooperation

Shifting developments in defence, security and geopolitics – including US disengagement from Europe, Russia's increased military assertiveness, and instability in neighbouring countries – have led to a growing sense of uncertainty and insecurity across Europe. In response, the EU is seeking to adopt a more strategic approach and to resist the notion that it is exclusively a 'civilian power'. Set by the EU's Global Strategy document of 2016, the vision of European strategic autonomy is centred around strengthening security and defence efforts to enable the EU 'to act autonomously while also contributing to and undertaking actions in cooperation with NATO'.[68] This vision of autonomy is also seen by the EU as crucial in the context of its transatlantic partnership with the US.

The plan for increased strategic autonomy involves bolstering defence cooperation among EU member states, as well as providing support for European defence industries. Two of the instruments created as part of this framework that relate specifically to the development of drones are PESCO and the European Defence Fund (EDF).[69] Whereas the EDF is the first framework in EU history to specifically offer investment in support of defence cooperation among member states, PESCO is unusual in that, unlike other forms of cooperation, it is a binding agreement 'to invest, plan, develop and operate defence capabilities […]'.[70] There are currently 25 participating EU member states, engaged variously in a total of 46 projects across a range of different areas. As mentioned above, one of the projects coordinated within the PESCO framework is the Euro MALE RPAS.[71]

Launched to 'incentivise cooperative projects among Member States',[72] the EDF will support collaborative research in innovative defence technologies and the joint development of prototypes. Projects in the research phase will be funded by the EDF in full, whereas the joint development of prototypes involves the pooling of national contributions and will require member states to contribute at least 80 per cent of the funding. The EU will not fund the joint acquisition of capabilities, but the European Commission will offer practical support and advice to member states on these matters. Only collaborative projects are eligible for funding, and these must involve at least three participants (eligible entities) from at least three different EU member states or associated countries.[73]

Along with a direct allocation of €100 million in support of the Euro MALE RPAS programme,[74] up to 8 per cent of the total EDF budget will be used to fund innovation in disruptive technologies – i.e. technologies expected to revolutionize their field of action. While the EU has not provided specific details on which technologies might be considered disruptive, the EDA has listed, among others, artificial intelligence (AI); big data analytics; robotics; autonomous defence systems, weapons, and

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68 European Union (2016), *Shared Vision, Common Action: A Stronger Europe – A Global Strategy for the European Union's Foreign and Security Policy*, p. 20, https://eeas.europa.eu/sites/eeas/files/eugs_review_web_0.pdf (accessed 24 Apr. 2020).
69 European Union (2019), *The European Union's Global Strategy: Three Years On, Looking Forward*, https://eeas.europa.eu/sites/eeas/files/eu_global_strategy_2019.pdf (accessed 24 Apr. 2020).
70 PESCO (undated), 'About PESCO', https://pesco.europa.eu (accessed 24 Apr. 2020).
71 Ibid. Note: the Eurodrone is a project that predates PESCO, but was subsequently placed under this programme.
72 European Union (2019), *The European Union's Global Strategy: Three Years On, Looking Forward*, p. 35.
73 European Commission (2019), 'European Defence Fund – factsheet', https://ec.europa.eu/docsroom/documents/34509 (accessed 27 Apr. 2020).
74 Ibid.

decision-making; future advanced materials; and additive manufacturing.[75] The development of these technologies is significant in that it could lead to applications that might be incorporated in drone systems and thus have an impact on capabilities and drone use in the future. For example, AI can be integrated with drone technology to facilitate image recognition and data analysis: efforts have already been made in this area, for example, via the US Department of Defense's Algorithmic Warfare Cross-Functional Team (also known as Project Maven).[76]

Table 3. European and NATO collaborative projects

Project	Overview	Participants
European MALE RPAS (also known as Euro MALE RPAS and Eurodrone)	A development project integrated within PESCO and managed by the Organisation for Joint Armament Co-operation (OCCAR). The system includes interoperability with existing and future defence systems; it will be operated worldwide in support of Intelligence, Surveillance, Target Acquisition and Reconnaissance (ISTAR) missions, and armed ISTAR.[77]	France, Germany, Italy and Spain
nEUROn	An initiative, launched by the French government and led by Dassault Aviation, aiming to develop a technological demonstrator of an unmanned combat air vehicle (UCAV). The project is aimed at knowledge-building, and the nEUROn UCAV will not perform military missions.[78]	France, Greece, Italy, Spain, Sweden and Switzerland
Future Combat Air System (FCAS)	FCAS will consist of connected and interoperable manned and unmanned air platforms. This will involve next-generation fighters teaming up with remote carriers (i.e. drone swarms) as force multipliers.[79] The full system, to be operational by 2040, also includes missiles, satellites, existing aircraft and NATO navies.[80]	France, Germany and Spain
NATO Alliance Ground Surveillance (AGS) System	A group of 15 NATO Allies has acquired the AGS system, comprising five RQ-4D Phoenix high-altitude, long-endurance (HALE) remotely piloted aircraft and associated ground command and control stations. The system is operated and maintained by NATO on behalf of all allies. NATO RQ-4D is aimed at providing Intelligence, Surveillance and Reconnaissance (ISR) capability to NATO, and is being stationed at Sigonella, Italy.[81]	Bulgaria, Czech Republic, Denmark, Estonia, Germany, Italy, Latvia, Lithuania, Luxembourg, Norway, Poland, Romania, Slovakia, Slovenia and the US

75 Csernatoni, R. and Martins, B. O. (2019), *The European Defence Fund: Key Issues and Controversies*, PRIO Policy Brief 03/2019, https://www.prio.org/utility/DownloadFile.ashx?id=1798&type=publicationfile; European Defence Agency (2017), *European Defence Matters: 10 Upcoming Disruptive Defence Innovations,* Issue 14, https://eda.europa.eu/docs/default-source/eda-magazine/edm-issue-14_webadeaae3fa4d264cfa776ff000087ef0f (accessed 28 Apr. 2020).
76 US Department of Defense (2017), *Memorandum: Establishment of an Algorithmic Warfare Cross-Functional Team (Project Maven),* 26 April 2017, https://dodcio.defense.gov/Portals/0/Documents/Project%20Maven%20DSD%20Memo%2020170425.pdf (accessed 26 Jun. 2020).
77 PESCO (undated), 'European Medium Altitude Long Endurance Remotely Piloted Aircraft Systems – MALE RPAS (Eurodrone)'; OCCAR (undated), 'MALE RPAS – Medium Altitude Long Endurance Remotely Piloted Aircraft System'.
78 Dassault Aviation (undated), 'Introduction'; and Dassault Aviation (undated), 'Aim of the Programme', https://www.dassault-aviation.com/en/defense/neuron/aim-of-the-programme (accessed 9 Mar. 2020).
79 Airbus (undated), 'Future Combat Air System (FCAS): Shaping the future of air power', https://www.airbus.com/defence/fcas.html (accessed 22 Apr. 2020).
80 Aerospace (2019), 'Europe to demonstrate future air combat strength', 6 June 2019, https://www.aero-mag.com/artificial-intelligence-air-combat-future-western-european (accessed 22 Apr. 2020).
81 NATO (2021), 'Alliance Ground Surveillance (AGS)'.

Project	Overview	Participants
Tempest	Tempest is an FCAS providing several modes of operation, combining manned, unmanned and optionally manned platforms.[82]	Italy, Sweden and the UK

Controversies and risks

Several European countries have been associated with using armed drones in ways that have been controversial, including by launching or facilitating drone strikes that have prompted questions and concerns over legality, state responsibility and civilian casualties. The UK, for example, targeted and killed a British national, Reyaad Khan, in Syria in August 2015 (at the same time killing two other people, one of whom – Ruhul Amin – was also a UK national) without having first obtained parliamentary approval for conducting airstrikes in that country as part of the coalition forces fighting ISIS. Following its inquiry into the intelligence basis for the strike, the UK parliament's Intelligence and Security Committee reported that it had not been given access to key documents informing the decision to strike.[83] In the absence of such access, parliamentary scrutiny could not be conducted in full, and questions remain over the drone strike and the decision-making process behind it. Furthermore, with the UK Ministry of Defence having confirmed in February 2020 that RAF Reaper drones were taking part in missions outside Operation Shader,[84] while taking the decision to withhold information regarding the nature and location of those missions, concerns over secrecy and the limitations this poses to parliamentary scrutiny remain unheeded.[85]

In Germany, US use of the Ramstein Air Base – deemed crucial as a satellite relay station that enables US-based drone operators to communicate with their remote aircraft in countries such as Yemen, Somalia and Pakistan[86] – has prompted accusations of complicity with US drone strikes outside formal conflict zones. This resulted in legal action against the German government for the killing of three members of the bin Ali Jaber family in a strike in Yemen in 2012, as a result of which the Higher Administrative Court in Münster ruled in March 2019 that the German government must 'take action to ensure that the US respects

82 In decades to come, Tempest could operate alongside 'loyal wingman' drones, being designed as part of the separate UK Project Mosquito, which aims to design and manufacture an unmanned fighter aircraft capability demonstrator that will carry missiles, surveillance and electronic warfare technology. See Forces Net (2021), 'UK's First Uncrewed Combat Aircraft Closer To Reality With £30m Deal', 25 January 2021, https://www.forces.net/news/uks-first-uncrewed-combat-aircraft-plan-given-ps30m-boost and Reichmann, K. (2021), Project Mosquito Provides £30 Million Investment for UK Fighter Drone, Aviation Today, 2 February 2021, https://www.aviationtoday.com/2021/02/02/project-mosquito-provides-30-million-investment-uk-fighter-drone (accessed 11 Mar. 2021).
83 UK Parliament, Intelligence and Security Committee (2017), Press Release, 26 April 2017, http://isc.independent.gov.uk/news-archive/26april2017 (accessed 1 May 2020).
84 Operation Shader is the name given to the UK contribution to the military intervention targeting ISIS in Iraq and Syria.
85 Doward, J. (2020), 'Ministers refuse to reveal target of new RAF killer drone missions', *Guardian*, 6 June 2020, https://www.theguardian.com/world/2020/jun/06/ministers-refuse-to-reveal-target-of-new-raf-killer-drone-missions; Cole, C. (2020), 'FoI reveals UK flying Reaper drone missions outside of operations against ISIS in Iraq and Syria', Drone Wars, 2 March 2020, https://dronewars.net/2020/03/02/foi-reveals-uk-flying-reaper-drone-missions-outside-of-operations-against-isis-in-iraq-and-syria (accessed 8 Jun. 2020).
86 Scahill, J. (2015), 'Germany Is The Tell-Tale Heart Of America's Drone War', The Intercept, 17 April 2015, https://theintercept.com/2015/04/17/ramstein (accessed 9 Feb. 2021).

international law in its use of Ramstein Air Base'.[87] However, controversy over the incident persisted, with the initial ruling being overturned, at an appeal hearing in November 2020, by the Federal Administrative Court in Leipzig.[88]

There have also been concerns that RAF bases in the UK may be used to support US drone strikes, including through the provision of direct communication links that allow analysis of full-motion video footage to identify potential targets,[89] as well as by the use of surveillance technology to assist in 'capture-kill' missions both in conventional military operations and in countries outside formal conflict.[90] Italy, which has allowed the US to launch armed drones from Naval Air Station Sigonella, in Sicily, subject to authorization by the Italian government, has also come under scrutiny, with civil society groups requesting access to information on the legal framework covering US drone use at the airbase.[91] As armed drones proliferate, these actions will not necessarily be restricted to the few actors outlined above.

Along with the provision of military bases and operational support, there have been reports of European countries providing the US with intelligence that has subsequently been used to locate and identify targets for drone strikes.

Along with the provision of military bases and operational support, there have been reports of European countries providing the US with intelligence that has subsequently been used to locate and identify targets for drone strikes. This has led to concerns over whether these countries (among them France, Germany, the Netherlands and the UK) may be assisting the US in the conduct of unlawful drone strikes.[92] Under Article 16 of the International Law Commission's Articles on State Responsibility, a state can be found internationally responsible for aiding or assisting another state in the commission of an internationally wrongful act if (a) it does so with knowledge of the circumstances of the internationally wrongful act; and (b) the act would be internationally wrongful if committed by that state.[93]

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87 European Center for Constitutional and Human Rights (2019), 'Groundbreaking Judgement on Germany's Role in US Drone Program', 19 March 2019, https://www.ecchr.eu/nc/en/press-release/groundbreaking-judgement-on-germanys-role-in-us-drone-program (accessed 1 May 2020).
88 European Center for Constitutional and Human Rights (2020), 'Disappointing Decision of The Federal Administrative Court Leipzig' 26 November 2020, https://www.ecchr.eu/en/press-release/disappointing-decision-of-the-federal-administrative-court-leipzig (accessed 28 Dec. 2020).
89 Amnesty International (2018), *Deadly Assistance: The Role of European States in US Drone Strikes*, https://www.amnesty.org/download/Documents/ACT3081512018english.pdf (accessed 3 May 2020).
90 Gallagher, R. (2016), 'Inside Menwith Hill: The NSA's British Base at the Heart of U.S. Targeted Killing', The Intercept, 6 September 2016, https://theintercept.com/2016/09/06/nsa-menwith-hill-targeted-killing-surveillance (accessed 3 May 2020).
91 European Center for Constitutional and Human Rights (undated), 'Sicily Air Base: Freedom of Information Litigation on Italy's Involvement in US Drone Program', https://www.ecchr.eu/en/case/sicily-air-base-freedom-of-information-litigation-on-italys-involvement-in-us-drone-program (accessed 2 Jul. 2020).
92 Amnesty International (2018), *Deadly Assistance: The Role of European States in US Drone Strikes*.
93 Moynihan, H. (2016), *Aiding and Assisting: Challenges in Armed Conflict and Counterterrorism*, Research Paper, London: Royal Institute of International Affairs, https://www.chathamhouse.org/sites/default/files/publications/research/2016-11-11-aiding-assisting-challenges-armed-conflict-moynihan.pdf (accessed 4 May 2020).

More broadly, legal questions exist at all levels of legal rules: use of force under the UN Charter rules, international humanitarian law (IHL – the law of armed conflict), and international human rights law (IHRL). This paper's purpose is not to outline the work done very well by others – especially Harriet Moynihan – elsewhere.[94] However, it should be reiterated that Article 16 is an important additional obligation that attaches ancillary responsibility to those that aid or assist in the commission of a violation of one of these bodies of international law. There are similar rules to Article 16 in IHL and IHRL themselves, which in some ways are broader in scope – in IHL, Common Article 1 to the Geneva Conventions requires states to 'respect and to ensure respect' for the Conventions;[95] and in IHRL, human rights treaties and treaty bodies have confirmed positive obligations on states to protect those within their jurisdiction from harm by others (states and non-state actors).[96]

The controversies resulting from the use of drones remain unresolved, and pose a risk to European democracies by bringing into question some of the political values on which such democratic regimes have been built. For example, without enough information being made publicly available by governments on the use of drones or the provision of assistance to the US drone programme, criticisms abound over lack of transparency and on how this hinders democratic accountability. Such a lack of transparency also leads to doubts over whether European countries do enough to safeguard the rule of law. This issue is particularly relevant in relation to legal frameworks concerning the use of force, as well as state responsibility regarding the provision of assistance and how this could be feeding into potentially unlawful activities by the US.

The use of armed drones, or rather the operational and procedural framework supporting such use, therefore seems to weaken important democratic values. This in turn raises problems for governments with respect to ensuring democratic legitimacy, and continues to cause deep mistrust over the use of armed drones among civil society groups. As more countries within Europe and around the world acquire and begin to use armed drones in military operations, these controversies and challenges are likely to multiply. With a shared interest in supporting a rules-based international order and defending democratic values, European countries could play an important role in shaping the norms on how drones are used in the future, and should work to develop pathways for achieving this. This includes addressing long-standing calls for increasing transparency and accountability for the use of armed drones, and providing information about the processes that guide decision-making around drone strikes.

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94 Ibid.
95 Ibid., para. 88. See also International Committee of the Red Cross (2016), Commentary of 2016 to the First Geneva Convention, paras 154 and 158, https://ihl-databases.icrc.org/applic/ihl/ihl.nsf/Comment.xsp?action=openDocument&documentId=72239588AFA66200C1257F7D00367DBD; and International Court of Justice (1986), *Case Concerning Military and Paramilitary Activities in and Against Nicaragua (Nicaragua v. United States of America)*, 27 June 1986, para 220, https://www.icj-cij.org/public/files/case-related/70/070-19860627-JUD-01-00-EN.pdf (accessed 9 Feb. 2021).
96 See discussion in Moynihan (2016), *Aiding and Assisting: Challenges in Armed Conflict and Counterterrorism*, paras 92–94.

03 Transparency, accountability and the rule of law

Transparency and accountability contribute to establishing legitimacy and credibility of operations, along with legality, and ultimately strengthen democracy and the rule of law at all levels.

Often in discussions around armed drones and targeted killings, recommendations emerge that urge greater transparency and accountability on the part of states and actors deploying drone technology.[97] However, it is rarely clear what is meant by these notions and what their adoption would mean in terms of operational requirements (both from a legal perspective and related to their political costs in outward-facing military campaigns).[98] In this regard, calls for transparency are relevant not only in relation to where, when and how armed drones are being deployed, but also to the legal framework within which states have the ability to deploy drones in the first place. This section will not examine in depth the legal framework requirements in targeting decisions of the *jus ad bellum* (the laws governing the conditions under which states may resort to the use of force), IHRL and IHL, as this has been done elsewhere,[99] but it will note some requirements for transparency under each of the regimes.

97 See for example Emmerson, B. (2013), *Report of the Special Rapporteur on the promotion and protection of human rights and fundamental freedoms while countering terrorism*, A/68/389, 18 September 2013, http://www.un.org/Docs/journal/asp/ws.asp?m=A/68/389, and Heyns, C. (2014), *Report of the Special Rapporteur on Extrajudicial, Summary or Arbitrary Executions*, A/26/36, 1 April 2014, https://digitallibrary.un.org/record/771922?ln=ent (accessed 12 Mar. 2020).
98 Dorsey (2017), *Towards an EU Common Position on the Use of Armed Drones*.
99 See for example Heyns, C., Akande, D., Hill-Cawthorne, L. and Chengeta, T. (2016), 'The International Law Framework Regulating The Use Of Armed Drones', *International and Comparative Law Quarterly*, 65(4), doi:10.1017/S0020589316000385 (accessed 9 Feb. 2021).

Transparency is valuable to all actors involved in using armed drones, as well as to other stakeholders, such as civil society and communities that are affected by uses of force from armed drones. It must be noted that transparency and accountability, though intimately linked,[100] are separate notions: both, however, require the provision of detailed information. As Jessica Dorsey wrote in 2017:

> Transparency requires providing relevant, accessible, timely and accurate information. Accountability is the act of ensuring that relevant officials or institutions are answerable for actions and that there is recourse in situations where obligations are not met. It is imperative to note that transparency is often pre-requisite to, but does not always culminate in accountability.[101]

Transparency merely 'links access to information with accountability and oversight – in short, the existence of checks and balances on power'.[102] It is also important to note the need for nuance regarding levels of transparency in a political sense as opposed to a military sense, in which transparency may have to be limited for reasons of operational effectiveness. Political transparency is the main focus of the next section: the concept entails an outward- or public-facing ability to transfer information, disseminating it to the general public in an open manner through publication, debate and civil discourse.

Transparency rationale

As a study by Columbia University found:

> Transparency is essential for securing the rule of law. It helps to deter harm, enable oversight, and is necessary to ensure meaningful accountability for abuse. Without transparency there cannot be informed public debate and democratic accountability. Fulfillment of transparency also sets a rights-promoting positive precedent for future administrations and other governments around the world. It serves governments' own strategic interests and helps to ensure public confidence in government actions and policies.[103]

The rationale for transparency in military operations is intimately connected with the notion of accountability, both in a legal sense and with respect to the legitimacy of operations. Under a human rights framework, transparency is crucial in understanding when violations of fundamental rights (e.g. the right to life) occur, and it is key to the notion of accountability for those violations. Under the framework of IHL, the issue is brought more sharply into focus through the lens of legitimacy. As Laurie Blank remarks: 'In recent years, legitimacy's central issue has morphed from the justification for the use of force to the measure of international law compliance in the conduct of war.'[104]

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100 Martins, B. O. and Backhaus, B. (2015), 'Why and how the EU should act on armed drones', *Global Affairs*, 1(3), pp. 259–67, doi:10.1080/23340460.2015.1080008 (accessed 12 Feb. 2020).
101 Dorsey (2017), *Towards an EU Common Position on the Use of Armed Drones*, p. 27.
102 United Nations Institute for Disarmament Research (UNIDIR) (2017), *Increasing Transparency, Oversight and Accountability of Armed Unmanned Aerial Vehicles*, p. 7, https://www.unidir.org/files/publications/pdfs/increasing-transparency-oversight-and-accountability-of-armed-unmanned-aerial-vehicles-en-692.pdf (accessed 14 Mar. 2021).
103 Columbia Law School Human Rights Clinic and Sana'a Center for Strategic Studies (2017), *Out of the Shadows: Recommendations to Advance Transparency in the Use of Lethal Force*, p. 106, http://www.nuhanovicfoundation.org/user/file/2017_out_of_the_shadows_report.pdf (accessed 9 Feb. 2021).
104 Blank, L. R. (2014), 'Drones, transparency and legitimacy', The Hill, 28 May 2014, https://thehill.com/blogs/pundits-blog/defense/207352-drones-transparency-and-legitimacy (accessed 12 Apr. 2020).

The content of transparency obligations

Engagement with the process of adopting elements of transparency or accountability could be spearheaded at regional level by the EU: this process would be better framed as having its basis in guiding principles and best practices, rather than as requiring the adoption of a formal (legal) position. A legally binding document would make for a more robust framework on the use of armed drones; however, given political considerations such as acquisition and maintaining relevance for defence forces, this will likely be more difficult to achieve. Any kind of language regarding transparency at the national level must be driven by governmental actors and must include specific reference to national security, though this must not be used to preclude a reasonable amount of access to information. When it comes to civilian casualties, for example, governments should strive to provide information on the age, identity and affiliation of intended targets, although the provision of information with such a high level of accuracy may not always be possible. Interaction between governments and civil society organizations is highly desirable, especially between and among those actors who are producing differing statistics on civilian casualties versus combatant or military target casualties. Through increasing opportunities for dialogue among multiple stakeholders, the level of transparency should improve. Only an open dialogue can overcome the challenges outlined above, providing an opportunity to improve military operations and to mitigate civilian casualties in situations where force is used outside of recognized armed conflicts.[105]

Transparency benefits for multiple stakeholders

The international community and the general public

It is integral to the legitimacy of operations involving the use of armed drones, especially outside of recognized armed conflict,[106] that all actors provide full transparency. Common interests, shared by the international community, also warrant this. As highlighted later in this paper, transparency and accountability contribute to establishing legitimacy and credibility of operations (along with legality) and ultimately strengthen democracy and the rule of law at all levels.

States

Achieving greater levels of transparency is also in the interest of states. As the UN's Office for Disarmament Affairs (UNODA) reported in 2015, through greater transparency and a more robust accountability and oversight mechanism, mutual confidence in adherence to relevant international law can be increased; the unlawful use of armed drones and related technology by others can be prevented; and civilian protection can be improved. In line with European values and fundamental freedoms, greater transparency can promote international peace and security,

105 See for example Dorsey (2017), *Towards an EU Common Position on the Use of Armed Drones*.
106 Ibid. This is not to say that transparency is not required for other operations or weapons platforms, and in fact this remains an area for further study. However, the use of armed drones outside armed conflict poses a particular concern in that drones allow for plausible deniability; they can lower the threshold for the use of force and blur legal frameworks.

as well as the legitimacy of any counterterrorism operations that states may undertake; it can assist in any necessary investigation of violations of human rights; and it can facilitate the implementation of relevant export controls at the national and international levels.[107]

Militaries and military operators

In operational contexts, a shift to greater transparency can also contribute to an evaluation of the effectiveness of certain tactics in countering terrorism or during particular military operations; it can promote debate and facilitate trust-building in international relations.[108] Furthermore, it can facilitate engagement on difficult issues and allow for existing concerns to be given consideration. For militaries, transparency can be an asset in controlling the narrative and shaping public perception about particular operations or missions. By providing timely and accurate information on the use of armed drones in counterterrorism operations, states can also shape the narrative regarding extremism. Post-strike investigations and the publication of available data can counter the dissemination of inaccurate information and garner public trust in the operational value of the military strike in question.[109]

For militaries, transparency can be an asset in controlling the narrative and shaping public perception about particular operations or missions.

Another benefit of transparency concerns the well-being of armed forces, in that they are enabled to speak about their own experiences, albeit within the confines of legitimate military and national security interests (see Transparency challenges, below). For example, a Dutch pilot involved in an F-16 airstrike in 2015 on the Iraqi city of Mosul in which four civilians were killed was not authorized to speak about the incident, and was therefore unable to address some of the psychological aftermath he suffered as a result of the strike.[110] This kind of experience, from pilots of more conventional aircraft (such as the F-16, as referenced here), may be compounded for drone pilots, given that operators are, in many cases, much more intimately connected to their target through the surveillance capabilities of the platform, having observed them for sometimes hundreds of hours.[111] Some studies have indicated that as many as 75 per cent of drone operators can experience

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107 United Nations Office for Disarmament Affairs (UNODA) (2015), *Study on Armed Unmanned Aerial Vehicles*, pp. 50–2, https://www.un.org/disarmament/update/study-on-armed-unmanned-aerial-vehicles (accessed 10 Feb. 2020), as discussed in Dorsey (2017), *Towards an EU Common Position on the Use of Armed Drones*, pp. 26–8.
108 See for example Melzer, N. (2013), *Human Rights Implications of the Usage of Drones and Unmanned Robots in Warfare*, European Parliament: Directorate-General for External Policies of the Union, Directorate B, Policy Department, https://www.europarl.europa.eu/RegData/etudes/etudes/join/2013/410220/EXPO-DROI_ET%282013%29410220_EN.pdf (accessed 9 Feb. 2021).
109 Dorsey (2017), *Towards an EU Common Position on the Use of Armed Drones*, pp. 26–8.
110 Treffers, L. (2020), 'Dutch F-16 pilots break their silence on airstrikes and civilian harm', Airwars, 6 February 2020, https://airwars.org/news-and-investigations/dutch-pilots-break-silence (accessed 22 Apr. 2020).
111 Press, E. (2018), 'The Wounds of the Drone Warrior', *New York Times*, 13 June 2018, https://www.nytimes.com/2018/06/13/magazine/veterans-ptsd-drone-warrior-wounds.html (accessed 15 Feb. 2020).

grief, remorse and sadness, with many being affected by these feelings for a month or longer.[112] The US Air Force has reported that some analysts in the 'kill chain' have a higher exposure to graphic violence (specified as viewing 'destroyed homes and villages' or seeing 'dead bodies or human remains') than do their Special Forces counterparts operating on the ground.[113] Additionally, for these analysts and operators, not being able to speak about their experiences is detrimental to the optimization of operational capability.[114]

Some commentators are eager to point out an important distinction between military transparency (i.e. regarding military operations and the need for operations security – OpSec) and political transparency (i.e. information about armed drone operations, available to the public at large). Some military analysts argue that OpSec limits the possibilities of transparency before operations (although after they are conducted, OpSec may not hinder releasing particularly relevant information about the operations to the public at large). This is an intriguing distinction to note, and could be a prime area for future research and clarification.

Transparency challenges

Often, transparency (and concomitant accountability) is avoided when access to information is denied on the grounds of national security. This links specifically with the right to information for the general public and the perception of legitimacy and the rule of law. Although there are indeed times when operational sensitivities rightly prevent a full disclosure of information by states, that should not provide carte blanche for those states not to share non-sensitive information about general legal and policy frameworks for the use of armed drones, for the reasons outlined above. It is noteworthy in this context to point out that the Global Principles on National Security and the Right to Information (Tshwane Principles)[115] offer guidance on this issue that may assist states in formulating their own policy and operational guidelines. Principle 3 (Requirements for Restricting the Right to Information on National Security Grounds) reads as follows:

> No restriction on the right to information on national security grounds may be imposed unless the government can demonstrate that:
>
> (1) the restriction
>
> (a) is prescribed by law and
> (b) is necessary in a democratic society
> (c) to protect a legitimate national security interest; and

112 Ibid. For more information, see Enemark, C. (2017), 'Drones, risk and moral injury', *Critical Military Studies*, 5(2): pp. 150–67, doi:10.1080/23337486.2017.1384979 (accessed 12 Feb. 2020).
113 Press, E. (2018), 'The Wounds of the Drone Warrior'.
114 Blank, L. (2015), 'Military Operations and Media Coverage: Drones, Extrajudicial Executions, and the Interplay of Law and Legitimacy', in Lucas, G. (ed.) (2015), *Routledge Handbook of Military Ethics*, London: Routledge.
115 The Tshwane Principles are based on international (including regional) and national law, standards, good practices, and the writings of experts. They were drafted to provide guidance relating to the state's authority to withhold information on national security grounds or to punish the disclosure of such information. See *The Global Principles on National Security and the Right to Information (Tshwane Principles)* (2013), New York: OSF, https://www.justiceinitiative.org/uploads/bd50b729-d427-4fbb-8da2-1943ef2a3423/global-principles-national-security-10232013.pdf (accessed 10 Feb. 2020).

> (2) the law provides for adequate safeguards against abuse, including prompt, full, accessible, and effective scrutiny of the validity of the restriction by an independent oversight authority and full review by the courts.[116]

In summary, an appropriate level of transparency is overwhelmingly in the interests of multiple stakeholders in military operations, including – but not limited to – the international community and the general public, states, militaries and their operators. Therefore, the highest possible levels of transparency are desirable in the context of the use of armed drones, especially in situations in which they are deployed beyond recognized areas of armed conflict.

Accountability challenges

> On the question of accountability for serious violations of international humanitarian law and human rights law, the EU believes in strengthening international courts, tribunals and mechanisms which serve this purpose as well as the promotion of the rule of law, especially in conflict and post conflict situations. In our view, peace and justice go hand in hand.
> **EU statement, 2018**[117]

Many issues come to the fore in respect of accountability challenges. 'Accountability is the act of ensuring that relevant officials or institutions are answerable for actions, and that there is recourse in situations where obligations are not met.'[118] This notion 'implies consequences for wrongdoing and efforts to prevent it from reoccurring';[119] it also implies a relationship of power.[120]

As detailed above (see Transparency benefits for multiple stakeholders), the 2015 study by UNODA outlined several reasons why, in the specific case of armed drones, it is in states' best interests to establish full transparency, together with oversight and accountability mechanisms.[121]

The international law of state responsibility sets a general principle of reparations for any violation of international law, and this is augmented by more specific rules in other areas of law, such as IHRL and IHL. Within human rights, an integral element of the modern conception of the rule of law is the following principle, cited in the 2013 report to the UN General Assembly of the then UN Special Rapporteur on extrajudicial, summary or arbitrary executions, Christof Heyns: '[…] those responsible for violations must be held to account. A failure to investigate and, where applicable, punish those responsible for violations of the right to life in itself constitutes a violation of that right.'[122] Only in situations where the public has access to relevant information can there be a meaningful and effective path to enforcing

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116 Ibid., Principle 3 (accessed 10 Feb. 2020).
117 EU External Action Service (2018), EU Statement – United Nations Security Council: Upholding International Law within the Context of the Maintenance of International Peace and Security, https://eeas.europa.eu/generic-warning-system-taxonomy/404_en/44830/EU%20Statement%20%E2%80%93%20United%20Nations%20Security%20Council:%20Upholding%20International%20Law%20within%20the%20Context%20of%20the%20Maintenance%20of%20International%20Peace%20and%20Security (accessed 15 Apr. 2020).
118 Dorsey (2017), *Towards an EU Common Position on the Use of Armed Drones*.
119 UNIDIR (2017), *Increasing Transparency, Oversight and Accountability of Armed Unmanned Aerial Vehicles*, p. 7.
120 Ibid.
121 UNODA (2015), *Study on Armed Unmanned Aerial Vehicles*.
122 Heyns, C. (2013), *Report of the Special Rapporteur on Extrajudicial, Summary or Arbitrary Executions*, A/68/382, 13 September 2013, https://undocs.org/A/68/382 (accessed 15 Jan. 2020), para. 95.

international obligations and overseeing adherence to the same. Heyns goes further, noting that whenever violations of IHL or IHRL occur, states have a duty to provide accountability.[123]

IHL also outlines states' obligations as regards accountability in cases where individuals are alleged to have breached the rules of armed conflict. The Geneva Conventions contain a number of provisions (e.g. Common Article 1, the provisions related to grave breaches of the Conventions; and Additional Protocol I[124] on the protection of victims of international conflicts) that specify when investigations into alleged crimes must take place. This includes, for example, when there are allegations of the civilian population or individual civilians being the object of attack. Article 91 of Additional Protocol I states:

> A Party to the conflict which violates the provisions of the Conventions or of this Protocol shall, if the case demands, be liable to pay compensation. It shall be responsible for all acts committed by persons forming part of its armed forces.[125]

Some commentators view this as containing an individual right to compensation for victims of IHL violations.[126]

Furthermore, the EU has recently published its *Guidelines on the Promotion of Compliance with International Humanitarian Law*, which 'set out operational tools for the EU to promote compliance with international humanitarian law (IHL) through its relations with the rest of the world',[127] based on the obligations set forth in Article 3(5) of the Treaty on the European Union, which stipulates the values on which the EU is founded (principles of liberty, democracy, respect for human rights and fundamental freedoms, and the rule of law).

Accountability benefits for multiple stakeholders

The international community and the general public

Accountability is fundamental if states are to uphold their commitment to the international rule of law. Holding wrongdoers to account increases perceptions of legality and legitimacy, and can serve to strengthen the rule of law. As Deidre Curtin and André Nollkaemper write, accountability is an 'instrument to

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123 Ibid., paras. 96–97.
124 Each of the four Geneva Conventions of 1949 and Protocol 1 of 1977 provide a definition of what constitutes grave breaches. See International Committee of the Red Cross (2004), 'How "grave breaches" are defined in the Geneva Conventions and Additional Protocols', 4 June 2004, https://www.icrc.org/en/doc/resources/documents/faq/5zmgf9.htm (accessed 13 Mar. 2021).
125 International Committee of the Red Cross (undated), 'Protocol Additional to the Geneva Conventions of 12 August 1949, and relating to the Protection of Victims of International Armed Conflicts (Protocol I), 8 June 1977, https://ihl-databases.icrc.org/applic/ihl/ihl.nsf/Article.xsp?action=openDocument&documentId=F461FC196C18A52DC12563CD0051E2AC (accessed 13 Mar. 2021).
126 Greek and Italian case law has awarded compensation to victims of German acts during the Second World War – the subject of a case before the International Court of Justice in which the Court found against Italy on the basis that domestic courts cannot rule on another state's international responsibility. See International Court of Justice (2012), *Jurisdictional Immunities of the State (Germany v. Italy)*, 3 February 2012, paras. 27–29, https://www.icj-cij.org/public/files/case-related/143/143-20120203-JUD-01-00-EN.pdf (accessed 9 Feb. 2021).
127 EUR-Lex (2018), 'EU guidelines on the promotion of compliance with international humanitarian law', https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=LEGISSUM%3Aah0004 (accessed 14 Mar. 2021).

secure control of public power';[128] and Robert Keohane has also pointed out that: 'Properly applied, it can be a useful tool to limit abuses of power.'[129]

States

In coalitions and partnerships, understanding that a state is committed to following the rule of law, and enforcing this through accountability mechanisms if and when things go wrong in military or counterterrorism operations increases trust among allies or partners and establishes clear grounds for cooperation, based on a shared vision and understanding of legal, ethical and moral obligations in joint operations. The residual effect of this trust among states is also felt at the level of a state's own public. The public perception of respect for the rule of law thereby leads to an increase in trust in the legitimacy of operations.

Militaries and military operators

A full and open internal accounting mechanism allows for improvements to be made in military process, including acknowledging if and when operations go awry. This helps in establishing international standards for the respect of the rule of law by giving the chance to integrate best practices into rules of engagement for future operations.[130] Song Tianying has outlined a number of reasons why accountability is in the best interests of militaries themselves, including strengthening legitimacy and public support, providing military advantages (including efficacy, economic benefits and the realization that violations are counterproductive to military operations),[131] and fostering reciprocal respect (respect of the rules by one party may encourage the same from other parties, just as, conversely, violations may do the same),[132] as well as core values and personal integrity (adherence to core IHL values has positive effects on the morale of the military, and civilian deaths have the effect of making military operators feel violated themselves). Roberta Arnold echoes these sentiments when she notes: the 'misconduct of a few servicemen may have a boomerang effect not only on the deployed troops, who may lose the hearts and minds of the host nation's population, but also on the sending state's government, which may lose the necessary political support for the continuation or deployment of similar operations.'[133]

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128 Curtin, D. and Nollkaemper, A. (2007), 'Conceptualizing accountability in international and European law', Netherlands Yearbook of International Law, 36, p. 9, doi:10.1017/S0167676805000036 (accessed 9 Feb. 2021).
129 Keohane, R. O. (2005), 'Abuse of power: assessing accountability in world politics', *Harvard International Review*, 27(2), p. 48.
130 For an excellent overview and discussion on issues related to the motivation for accountability for militaries, see Bergsmo, M. and Song, T. (eds) (2015), *Military Self-Interest in Accountability for Core International Crimes*, Torkel Opsahl Academic EPublisher, https://www.toaep.org/ps-pdf/25-bergsmo-song-second (accessed 27 Apr. 2020).
131 Song, T. (2015), 'The International Humanitarian Law Implementation Paradigm and the Idea of Military Self-Interest in Accountability', section 4.2, in Bergsmo and Song (eds) (2015), *Military Self-Interest in Accountability for Core International Crimes*.
132 Ibid.
133 Arnold, R. (2015), *Prosecuting Members of the Armed Forces for Core International Crimes: A Judicial Act in the Self-Interest of the Armed Forces?* in Bergsmo and Song (eds) (2015), *Military Self-Interest in Accountability for Core International Crimes,* p. 341.

The intersection of legality, transparency and accountability

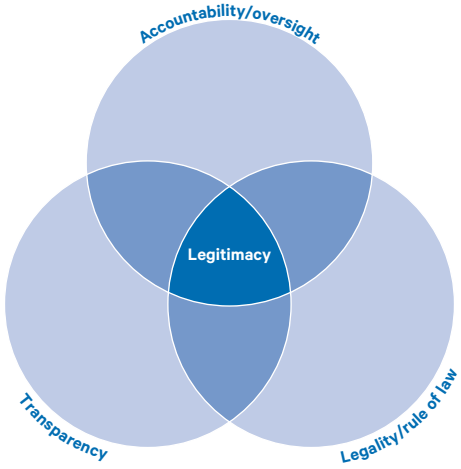
Many of the aforementioned values and functions of transparency and accountability rely on the adherence to the rule of law, or are adjacent to its being respected and enforced. When the three elements are balanced for stakeholders, they overlap and result in a functional level of legitimacy of operations, benefiting military operators, militaries, coalitions, states and ultimately the international community. If one of the three elements is lacking or less in focus than the others, this imbalance will also affect the perception and democratic legitimacy of the operation.

Military actors are interested in the perception of their operations as legitimate: in fact, some argue that it is at the heart of the success of any military operation.[134] As Larry Lewis and Diane Vavrichek point out – with reference to US operations, but equally relevant to other (European) allies:

> […] actions abroad are considered legitimate to a given audience to the extent that they are in line with that group's values and perceived norms. For instance, the government will garner legitimacy in the eyes of the West if […] actions are consistent with Western values (e.g., transparency and advancing personal and economic freedoms) and international law, which perhaps forms the perceived set of norms in the West.[135]

The value of democratic legitimacy is also important politically, with respect to the continuation of missions or the joining together of allied forces in particular operations. Three main factors are at play here: legality of operations, transparency and accountability (oversight). When these factors are in balance, legitimacy of operations is at its highest. This also serves to further reinforce respect for the rule of law, keeping the rule of law viable and keeping intact a strong system of international security.[136] See Figure 1 for a visual rendering of this concept.

Figure 1. Legitimacy of drone operations



134 Blank, L. R. (2014), 'Drones, transparency and legitimacy'.
135 Lewis, L. and Vavrichek, D. M. (2016), *Rethinking the Drone War: National Security, Legitimacy, and Civilian Casualties in U.S. Counterterrorism Operations*, Quantico, VA: CNA/Marine Corps University Press, p. 65.
136 Heyns, Akande, Hill-Cawthorne and Chengeta (2016), 'The International Law Framework Regulating The Use Of Armed Drones'.

With respect to the transparency element, according to Lewis and Varichek:

> When it comes to addressing public controversies over drone strikes […] it is the perception of legitimacy to the public more than legitimacy itself that will be effective. In other words, legitimate practices that lack public visibility will not mitigate public controversies, while effectively hiding illegitimate practices will keep public controversies from worsening.[137]

137 Lewis and Vavrichek (2016), *Rethinking the Drone War: National Security, Legitimacy, and Civilian Casualties in U.S. Counterterrorism Operations*, p. 78.

04 Conclusions and recommendations

It would be of benefit to both the EU and the UK to work together on developing guidance on best practices for improving transparency and accountability around the use of armed drones.

With more and more countries acquiring armed drones, there is a risk that the controversies surrounding how drones are used and the challenges these pose to international legal frameworks, as well as to democratic values such as transparency, accountability and the rule of law, could also increase. This is accentuated further, given that the use of drones continues to expand and to evolve in new ways, and in the absence of a distinct legal framework to regulate such use.

It cannot be assumed that European countries will use drones to conduct targeted killings outside armed conflict, or in the same permissive ways as the US has done so far. Nonetheless, given the interest that the EU has in supporting a rules-based international order, and given that it was founded on principles that include democratic values and respect for human rights, the EU has an opportunity to play an important role in shaping the norms concerning how drones are used in future. The troubling implications surrounding the use of armed drones should not be left solely as a concern for countries that may use them in permissive ways, particularly as those countries would arguably have the least interest in addressing such challenges. By demonstrating their willingness to address those implications, European states would keep those issues in the political agenda and could potentially exert some pressure for positive change. Furthermore, in light of indications that some activities on the part of European countries may feed into what could be unlawful drone strikes by the US, it is also important to ensure that this is not the case, especially as individually wrongful actions could incur criminal prosecution before domestic or international courts.[138]

138 See for example Hodge, N. (2010), 'Drone Pilots Could be Tried for War Crimes', *Wired*, 20 April 2010, https://www.wired.com/2010/04/drone-pilots-could-be-tried-for-war-crimes-law-prof-says (accessed 10 Apr. 2020).

With this in mind, the EU could spearhead the development of a guidance document on best practices for improving transparency and accountability mechanisms for the use of armed drones. While it is the case that a legally binding document would make for a stronger legal framework, this would require a level of unity and commitment among EU countries that would be difficult to achieve, and might therefore end up stalling attempts at reaching a common understanding on armed drone use.

In light of indications that some activities on the part of European countries may feed into what could be unlawful drone strikes by the US, it is also important to ensure that this is not the case, especially as individually wrongful actions could incur criminal prosecution before domestic or international courts.

Although the UK has now left the EU, it should take part in this process too; not only because it shares the same democratic values as those on which the EU is founded, but also given that, with the publication in March 2021 of its Integrated Review of Security, Defence, Development and Foreign Policy, the UK government has signalled its intention to adopt a more active role in shaping the international order of the future, including with the aim of protecting democratic values and the rule of law.[139] The UK is also one of only four European countries so far confirmed as possessing armed drone capabilities – the others being France, Serbia and Ukraine. Hence it is one of the few 'drone powers' in the region, which makes it fundamental that it should be brought into the fold. Moreover, after the UK set a precedent for conducting drone strikes outside military operations, and – as discussed above – shifted towards a broader conception of imminence, it incurred heavy criticism concerning the lack of transparency and accountability that this development has brought. It would therefore be of benefit to both the EU and the UK to collaborate on developing guidance on best practices to improve measures for transparency and accountability around the use of armed drones. In addition, with decisions on the use of armed drones being surrounded by complex issues of legality, as well as by national security imperatives and military strategies, it is imperative that these be given due attention in any such guidance.

Developing a best practices guide

The suggestions put forward here are informed by discussions that took place at a workshop at Chatham House in 2019. The authors are especially thankful to all the experts who contributed to the discussions, and remain solely responsible for the content and for any omission.

139 See HM Government (2021), *Global Britain in a Competitive Age: the Integrated Review of Security, Defence, Development and Foreign Policy*, Policy Paper, https://www.gov.uk/government/publications/global-britain-in-a-competitive-age-the-integrated-review-of-security-defence-development-and-foreign-policy, pp. 44–48 (accessed 18 Mar. 2021).

Improving transparency

The language used when including transparency requirements in national policies must be such that it will bring governments into the fold, and should therefore recognize the need to take national security into account. The existence of different legal systems in different EU member states must be given further consideration and must be taken into account in any kind of guidance document.

A best practices document could include the following measures for improving transparency:

- The provision by states of their legal and policy guidelines, both on the use of armed drones, and on the sharing of information that may feed into targeted killings;
- The publication of national government policies on security assistance;
- The publication of the relevant rules of engagement by countries using armed drones outside armed conflict zones;
- The publication of risk assessments regarding IHL, IHRL and civilian casualties;
- Details of a national process on decision-making regarding drone strikes;
- Reporting requirements for civilian casualties that detail the age, identity and affiliation of intended targets – while recognizing such a level of accuracy may not always be possible.

There should be separate consideration (in terms of transparency measures) of activities that feed into drone strikes at different levels, as set out in Table 4.

Table 4. Transparency measures for best practice

Transparency measures (to involve publication of these details)	**Activities feeding into drone strikes**		
	Information sharing	**Airbase provision**	**Conducting drone strikes**
Legal and policy guidelines on use of armed drones	•	•	•
Government policy on security assistance	•	•	•
Rules of engagement for drone use outside formal war zones	•	•	•
Risk assessments on IHL, IHRL and civilian casualties	•	•	•
Process on decision-making regarding drone strikes	•	•	•
Reporting on civilian casualties	•	•	•

Improving accountability

A best practices document for states should include the following measures for improving accountability:

- National parliaments should develop their own oversight mechanisms to ensure that operations involving drone strikes or targeted killing practices are scrutinized at the appropriate level;
- States should work to promote a wider understanding among national parliaments around legal matters with regard to security partnerships, including within NATO;
- Due diligence mechanisms should be established to assess the legal implications of providing assistance to another country;
- States should consider how to balance the need for achieving strategic aims with the need for accountability;
- National parliaments could organize inter-parliamentary learning exchanges, where parliamentary deputies from different countries would meet informally to discuss their own national mechanisms on improving transparency and accountability.

As with transparency measures, where several activities feed into drone strikes at different levels, it would be useful to consider these separately in terms of accountability measures (Table 5).

Table 5. Accountability measures for best practice

Accountability measures	**Activities feeding into drone strikes**		
	Information sharing	**Airbase provision**	**Conducting drone strikes**
Pre-assessment of risks to IHL and IHRL	●	●	●
Pre-assessment of risks to civilian casualties			●
Clear line of responsibility for decisions on strikes			●
States should set conditionality for airbase provision within their territory, to include: 1. The country receiving assistance to provide evidence that terrorist groups are present when drone strikes take place; 2. Access to strategic documents on strike decisions; 3. Ensuring relevant training is taking place (for example on IHL and IHRL); 4. Setting a time frame for use of the airbase 5. Compensation for loss to life (in the case of mistakes regarding targeted, signature and double-tap strikes)		●	●

Accountability measures	Activities feeding into drone strikes		
	Information sharing	Airbase provision	Conducting drone strikes
Regular reporting on civilian casualties	●	●	●
Post-strike investigations			●
Regular review of partner activities and outcomes of security assistance (including in relation to IHL, IHRL and civilian casualties)	●	●	
Regular review of what needs to be improved, and of whether to continue providing assistance (based on IHL, IHRL and civilian casualties)	●	●	
Training on legal and technical issues for parliamentarians	●	●	●
Parliamentary scrutiny over operations involving armed drone strikes	●	●	●

Appendix: To strike or not to strike?

In November 2019 Chatham House hosted a one-day role-playing simulation exercise to explore reactions, responses and decision-making around the use of armed drones, with a focus on legal, military and political considerations. Rather than reproducing the exact conditions and role functions under which decisions on drone strikes are made, the simulation was designed as a learning exercise, bringing together drone experts from different backgrounds to exchange knowledge and think collaboratively about critical areas concerning the use of armed drones. This was achieved through the creation of a fictional scenario, presented through the introduction of injects to the exercise during the day.

Role-playing participants included experts from military and academic backgrounds, as well as civil servants. A separate group of experts, mostly from the NGO sector, also had the opportunity to observe the exercise and listen to the deliberations. Focused on legal, military and political aspects, the discussions that took place during the simulation exercise highlighted the challenges involved in the decision-making process and drew out key issues that had a significant impact on the final decision.

The simulation exercise also involved a one-hour session that was open to Chatham House members.[140] This was held as a fictional press conference, at which, after a montage was presented summarizing the events leading to the final decision, questions were posed on that decision to preselected representatives of the decision-making group. This format ensured that, in preparation for the session, the decision-makers would consider what justifications they were willing to give publicly for their final decision.

140 Chatham House (2019), 'Simulation: The Implications of Drone Warfare', Members Event, 28 November 2019, https://www.chathamhouse.org/event/simulation-implications-drone-warfare.

The context

Participants were assigned the role of advisers as part of one of three different groups, focusing on the legal, military and political elements involved in the decision-making process concerned with launching a drone strike.

The scenario was based on deciding whether drone strikes should be launched in response to an attack by a proscribed terrorist organization (henceforth referred to as PTO) known to have a global network of fighters. The attack took place during a joint conference of military officials representing several countries engaged in an international coalition committed to preventing and suppressing terrorist acts committed by PTO. Several people were killed and others were seriously wounded in the attack, including military officials attending the conference and civilians who were in the vicinity at the time.

The international coalition had a UN mandate to conduct operations against PTO, but not in the country where the attack was carried out. The suspected leader and other members of the cell claiming responsibility for the attack were also located in countries not covered by the UN mandate. Members of this cell included five foreign fighters with dual nationalities that involved four countries in the coalition. The foreign recruits were suspected to be part of the communications arm of the cell, specifically working in the online propaganda and recruitment magazine published by PTO.

Signals intelligence indicated that several members of the cell were hiding in an abandoned storage facility. Video footage captured through drone surveillance indicated a high level of activity between the storage facility and a nearby building, suspected to be in use to store weapons and weapon-making technologies, with armed men being observed carrying what appeared to be equipment such as PVC pipes, large quantities of rocks and stones, shipments of hundreds of concave copper discs, and barrels of ammonium nitrate. These activities took place most evenings between 20:00 and 23:30.

There was evidence that many of the men present during these evening activities travelled weekly to a neighbouring country. Video footage showed convoys of eight to 10 vehicles travelling each Wednesday from the airstrip to a nearby village, where approximately 20–25 suspects gathered for two to three hours of meetings within a safe house. A group of approximately 25 children were seen playing football in the adjacent building for the duration of the meetings. On disbanding, half the vehicles returned to the airstrip and the other half dispersed elsewhere in the village. The football game stopped once the meetings disbanded.

Intelligence suggested that the attack on the joint conference could be the first of many to be carried out against high-level military and political officials from coalition countries in various locations, with unverified evidence pointing to an attack in the near future but without any clear indication on where it might take place. A Joint Task Force (JTF) comprising representatives of European countries directly affected by the attack had immediately been convened to respond to the situation, with political pressure from the main global power within the international coalition (but not represented in the JTF) for decisive action, via drone strikes, against those responsible for the attack.

At this point, the JTF decided not to launch a drone strike, citing the following legal reservations:

1. Lack of clear consent for military action from either of the countries where those responsible for the attack were found to be located;
2. There was no clear evidence that an imminent attack was to be launched, nor any intelligence regarding where this might be, therefore precluding the resort to self-defence;
3. There was a risk of significant civilian casualties if a drone strike was to be launched.

One week after this decision, simultaneous attacks took place in two European capitals, with the suspected leader and one associate in the same terrorist cell claiming responsibility and threatening more attacks. While there was intelligence on the exact location of the perpetrators for a short period of time, there had been no change to the context, except for increased political costs of not taking decisive action. At this point, the decision on whether to launch a drone strike was therefore mainly seen as a political decision. This also led to pressure for legal advisers to come up with a justification for action. There was, however, no agreement on whether to launch a drone strike in the required time, and the window of opportunity was missed.

Key determinant factors in the decision-making process

Legality

During the simulation exercise, much of the discussion revolved around what the law was or was not able to permit. Participants who had assumed roles as legal advisers were very careful to sketch the contours of the (in)abilities to launch strikes under the regime of self-defence, asking political and military advisers to clarify what kinds of self-defence they envisioned – turning largely on whether the first strike could be classified legally as an armed attack. The legal advisers outlined that the options were collective self-defence (where a territorial state could ask for assistance under the UN Charter) or self-defence for coalition states (though this option was legally insufficient). Other issues that were key in the decision-making process were the contours of consent (i.e. who are the legitimate actors who could give consent to a strike on a state's territory), and the extent to which an extension of imminence was recognized and whether 'ongoing imminence' was legally valid as a defence. A discussion took place regarding states that were unwilling or unable to respond to the threat posed. Issues concerning who could legally be targeted came up in the discussion, and participants noted that their own citizens (dual nationals) could not be targeted. The majority of this discussion was enveloped in the reference to self-defence, since the legitimacy of a target in this situation fell outside the ambit of IHL, given that the simulation outlined an area not within a recognized armed conflict.

Participants were very concerned about, and had a heightened awareness of, civilian casualty issues and considerations. There was a desire, from some, to use the controversial 'unwilling or unable' standard regarding self-defence, but this was driven by political or military considerations rather than a purely legal rationale (in the quest to find legal cover for a strike action). Participants were very interested in taking the strike, and looked for ways to get the legal coverage (e.g. asking for more intelligence, finding more support for territorial state consent). The law played an important role, but in a way that reflected its inherent vagueness or flexible nature. This openness to interpretation led to situations in which political and military (and at times even legal) advisers looked hard to find a path to justify the strike and permit the use of force. Ultimately, however, the legal arguments and 'attachment to international law' were the reasons the decision not to strike was taken. One conclusion that can be drawn from this exercise is that having more clarity on legal interpretations could allow for a more legitimate understanding of the use of force potential in situations of counterterrorism operations. Initiatives such as an EU common position on the use of armed drones could provide one avenue for this.[141]

Intelligence

The discussions highlighted that conducting pattern-of-life surveillance to obtain detailed and up-to-date information on potential targets is crucial in guiding decisions on drone strikes in counterterrorism operations. Required intelligence on individuals includes not only positive identification and physical location, but also their specific role within PTO – for example, whether someone is involved in combat as distinct from propaganda activities. In order to prevent or minimize the risk of civilian casualties, obtaining precise details on the local area is also key, including gathering information on nearby buildings and facilities, as well as on their occupants, visitors and their activities. Intelligence required on PTO includes details of its leadership as well as on its resources and capabilities. It was also highlighted that when access to information is limited or inadequate it becomes very difficult to take decisive action. However, it was pointed out that this can be the case in real-world settings in which a decision must be taken regardless.

Military options and strategy

With the simulation exercise designed to explore decision-making on drone strikes, no options were made available to employ means other than armed drones to target members of PTO. However, a set of different military options – including other targeting options, working with local forces, sending in special operations forces, or resorting to non-kinetic means such as a cyber response – would be considered in real-world settings, to determine how best to weaken or subdue an adversary. Participants with a military background were also keen to emphasize that decisions on the use of force are guided by a clear military strategy, to ensure that any desired goals are achieved successfully.

141 See Dorsey, J. (2017), *Towards an EU Common Position on the Use of Armed Drones*.

Political considerations

At the political level, the discussions highlighted how, when different countries are involved in military operations as part of a coalition, it is important to maintain cohesion across partners and therefore any course of action should be acceptable to all. Access to precise and up-to-date intelligence was also deemed essential to guide decisions over drone strikes, to ensure there would be no subsequent political fallout if information was later found to be erroneous. The risk of civilian casualties was a key element in guiding decisions; and, while bearing in mind that all necessary IHL requirements on proportionality and discrimination should be met, the question of whether civilian deaths should be acceptable or not was ultimately seen as a political rather than a military decision. It was also considered that states interested in promoting and defending a rules-based order must show leadership on this by abiding by international law and norms.

The press conference

During the press conference, questions were asked concerning the decision not to launch a drone strike in response to the attack on the joint military conference, with journalists suggesting that a strike at that time might have prevented the attacks in European capitals. In answer to these questions, the expert participants maintained that a legal threshold for launching drone strikes had not been met; and insisted that the rule of law is fundamental and therefore any obligations under international law must be followed. Related to this, the experts highlighted 1) the high risk of causing civilian casualties; 2) that there was no legal case for action to be taken on the basis of self-defence; and 3) that there was insufficient evidence of consent from the territorial state on which a drone strike would have been launched.

About the authors

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