

Written evidence from Drone Wars UK (TFP0009)

1. Drone Wars UK is a UK based non-government organisation which undertakes critical research into the use of armed unmanned systems, commonly known as drones, and other emerging military technology (see www.dronewars.net for more information). We scrutinise the increasing use of technology for military security purposes, undertaking research, education, and campaigning on these issues and advocating a human security approach.
2. Drone Wars UK welcomes the Foreign Affairs Select Committee's inquiry into 'Tech and the future of UK foreign policy' and welcomes the opportunity to give evidence to the committee. The evidence focuses on the risks posed by drone technology, military artificial intelligence and autonomous systems, and technological developments driven by the arms industry.

Question 1. What technologies are shifting power? What is the FCDO's understanding of new technologies and their effect on the UK's influence?

Technologies contributing to a shift in power

3. Emerging novel technologies have the potential to dramatically improve quality of life, enrich the lives of workers, enhance global communication, and help in safeguarding human rights. However, these technologies may also be used to control human social activity, manipulate political and economic systems, and wage war. Either way, they can be expected to have a transformative and probably disruptive impact on society.
4. Drone Wars UK would like to highlight three areas of technology which are beginning to shift power balances and which may be problematic in their impact upon human rights. These are the following:
 - Drones.
 - Artificial Intelligence (AI).
 - Autonomous robotic technologies.
5. Although these are not the only technologies with the potential to undermine human rights, they are technologies which Drone Wars UK has studied and feels qualified to comment on. All three of the technology areas we have listed have dual use potential – they can be used for both peaceful and military purposes, and are thus particularly difficult to control. Compared to traditional technologies, they are often relatively easily accessible and inexpensive to acquire.
6. As a readily accessible technology, drones are already playing a role in changing the balance of power between states themselves and between states and non-state actors. They have been used in warfare to decisive effect over recent months by countries not generally considered to be 'first division' international powers such as Turkey, Iran, and the United Arab Emirates in combat in Azerbaijan, Yemen, and Libya. Drones – as well as military AI and autonomous technologies - undermine security and human rights norms by lowering the threshold for the use of force, transferring the risks and costs of war from soldiers to civilians, expanding the use of extra-judicial assassination, and helping to enable a state of permanent war.¹

FCDO's understanding of new technologies

7. In our experience the Foreign, Commonwealth, and Development Office (FCDO) is one of the less transparent government departments, and it is not easy to establish how the department and different units within it view new technologies. An increase in transparency on decision-making and policy on new technology is needed within FCDO and across government in general.
8. The broad range of applications of new technologies means that responsibility for their control extends across government, and not just to FCDO, and that all government departments engaging with new technologies have an obligation to take action to mitigate risks and address ethical concerns arising from their development and use. Given that military technologies pose a particularly high risk of harm, in our view the Ministry of Defence has important responsibilities in setting controls for their use and development.

1 Drone Wars UK: 'The Danger of Drones'. <https://dronewars.net/the-danger-of-drones/>

9. The 2021 Integrated Review of Security, Defence, Development and Foreign Policy indicates that FCDO and the government see the development of new technology as a solution to many issues, perhaps especially to security problems. It is seen as a rapid, cheaper and more effective option than either tackling underlying causes of conflict or traditional military action. However, technology should be seen as much as a problem as it is a solution. Particularly in fields such as military action, policing, and border control a 'technology first' approach can give rise to significant abuses of human rights. The use of technology in these fields is often led by military thinking and approaches, resulting in an excessive reliance on militarised solutions to problems rather than early-stage intervention or diplomacy. A mutually reinforcing spiral operates here, with a military approach encouraging reliance on technology, and the technology itself requiring a military approach to problem solving.
10. While it is argued by government that the development of new military technologies will benefit the UK politically and economically, the UK has a duty to ensure that new technologies are developed and used responsibly. The ethical dimension to the development of new technologies is rarely emphasised and there is little evidence that the government wishes to see any meaningful controls over the development and use of technology. FCDO appears to prioritise the UK's economic and political interests, while risks and human rights take second place.
11. The background context to the Integrated Review and much of the government's pronouncements is that the UK and its allies are involved in intense rivalry with Russia and China, and that firm action is needed to contain these nations and limit their freedom of action. Although we are concerned about the atrocious human rights records of Russia and China, we do not accept this viewpoint. There is a general need to improve the international security situation and we are concerned that the government seems to have developed a Cold War perception of Russia and China – blaming them for a breakdown in relations, making assumptions about their motives and ethics, and making accusations of bad behaviour – yet making little effort to understand a problem from their point of view or consider how our own behaviour appears to them. This narrative has an important role in shaping the perception that technology can be used to gain an advantage over Russia and China – particularly in the security and military arena.
12. The UK should use its influence to ensure that technology is used responsibly and in a way which increases human rights and freedoms, rather than undermines them. In a capitalist economy the use of technology serves two basic purposes: to increase profit to the commercial sector and cut costs for the public sector. Both approaches raise risks that technology will be used in ways which erode human dignity.² In setting the domestic economic climate and playing a role in shaping the global economy, the government must take positive measures to ensure that technology is used to enrich the quality of life and not degrade it. This means emphasising the following in policy on new technologies:
 - Preserving, strengthening, and enforcing international human rights law and international humanitarian law as an absolute top priority.
 - Aiming to control and mitigate harm through the regulation of technology and by taking a precautionary approach to the risks posed by new technology.
 - Supporting multilateral controls on the use of technology and upholding a rules-based international order.
 - Encouraging good behaviour by others and supporting the development of international norms through the UK's own good behaviour.

Question 2. How can the FCDO engage with private technology companies to influence and promote the responsible development and use of data and new technologies?

13. While Silicon Valley social media companies have recently been in the headlines because of inadequate data management and safeguarding procedures, the technology sector is far broader than this. Private technology companies are playing a large part in driving forward the development and uptake of new technologies, but their interests will not be the same as those of government or the public. In many cases research and development work takes place in collaboration with universities who are in a position to provide academic expertise and research facilities to support commercial partners.
14. The arms industry is an area of particularly high concern to Drone Wars UK. Companies such as UK-based BAE Systems are at the forefront of developing artificial intelligence and autonomous technology for military applications.³ Their intention is to sell products to the export market, not just to the UK government, and to extend this export market to include as many purchasers as possible. This raises obvious questions as to the extent to

² Frank Pasquale: 'New Laws of Robotics. Defending Human Expertise in the Age of AI'. Belknap Press, 2020. Chapter 7, P170-198.

³ Drone Wars UK: 'Off The Leash: The Development of Autonomous Military Drones in the UK'. 10 November 2018. Section 4.3, P35-42. <https://dronewars.net/wp-content/uploads/2018/11/dw-leash-web.pdf>

which the government should intervene to prevent sales of high-end technology to states with dubious human rights records. Close regulation of such matters by government is essential.

15. The arms industry is also able to push the boundaries of technology development beyond limits which government may set. An example is the 'Taransis' combat stealth drone prototype developed by BAE Systems. Although current UK policy is that "the operation of our weapons will always be under human control as an absolute guarantee of human oversight and authority and of accountability for weapon usage"⁴, Taransis appears to have the capacity to identify and attack targets autonomously - that is, without human involvement. In interviews with the national media about the drone, BAE's Taransis Programme Manager, Clive Marrison, pointed out that although it was "highly likely" that the UK would continue to require a human to determine target decisions, "the Rules of Engagement could change,"⁵ and the project was proceeding on the basis that an autonomous strike capability could be required in the future.⁶ In this example industry is pushing the development of technology beyond ethical boundaries set by government.
16. The shift in the balance of power which new technologies facilitate increases the vulnerability of the UK, its citizens, and its soldiers. New technologies may make UK citizens both abroad and at home more vulnerable to crime, surveillance with malicious intent, and possibly more serious breaches of their human rights. For this reason FCDO and the government as a whole should use regulation with respect to the development of new technologies to protect human rights through the following steps:
 - Government funding for technology development programmes should include conditions setting out 'red lines' on areas of ethical concern and place protection of human rights as an absolute priority.
 - Regulation is needed to place duties on the developers and users of emerging technologies to comprehensively assess and mitigate against risks arising from their use.
 - Government should engage first and foremost with technology developers with a good track record in addressing ethical and other risks, and should clearly state this as a policy position. Incentives and benefits are needed to help encourage a responsible approach to technology development, and foster a research culture where ethics are seen as important and a core part of the development process, rather than as an optional extra.
 - In consultation with academia and civil society, the government should introduce a mandatory code of practice for universities on an ethical approach to the development of sensitive and dual use technologies.
 - Article 36 weapon reviews (Additional Protocol 1 to the Geneva Conventions) require states to determine whether new weapons, means and methods of warfare may be lawfully employed under international law by assessing them against all relevant rules of international law. The UK should continue to stress the importance of the Article 36 process to arms manufacturers and FCDO should undertake diplomatic engagement to encourage other states to adopt the Article 36 process.
 - The Centre for Data Ethics and Innovation is doing good work to address some of the ethical issues in this area, but there is little evidence of its thinking being taken up in government or by industry. CDEI's role should be expanded to give it more teeth and a greater regulatory role and FCDO should appoint a high-level 'champion' with the authority to ensure that CDEI's recommendations are incorporated within the department's policy and practices.
 - Dual use implications need to be carefully considered in the development of technology. It is not acceptable for researchers to push ahead with technology development on the grounds that their intention is for it to be used for beneficial purposes, and at the same time ignoring potentially harmful applications. There must be obligations – if necessary legal, as well as ethical and commercial - on the developers and vendors of new technologies to safeguard against the abuse of new technologies. In order to start a conversation on this complex topic, the government should publish a Green Paper on the control of new technology and dual uses, and consult widely on appropriate control measures.
 - The government should recognise that the use of advanced technology is not the only – or even the best – way of addressing security concerns. It should consider alternative approaches for maintaining national security based on placing the protection and well-being of people at the heart of security policy.⁷

4 Ministry of Defence: Development, Concepts and Doctrine Centre: 'Unmanned Aircraft Systems'. Joint Doctrine Publication 030.2, 12 September 2017. Para 4.14, p42.

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/673940/doctrine_uk_uas_jdp_0_30_2.pdf

5 John Ingham: 'WATCH: Unmanned test plane can seek and destroy heavily defended targets'. Daily Express, 9 June 2016. <https://www.express.co.uk/news/uk/678514/WATCH-Video-Unmanned-testplane-Taransis>

6 James Dean: 'RAF drone could strike without human sanction'. The Times, 10 June 2016. <https://www.thetimes.co.uk/article/raf-drone-could-strike-without-human-sanction-mzpjmr786>

7 For more information please see <https://rethinkingsecurity.org.uk/>

Question 3. How can the FCDO engage with private companies to encourage internationally accepted norms for the use of social media as well as to maximise the benefits for diplomacy presented by social media?

17. The government should take a carrot-and-stick approach to working with private companies. As well as engaging with private companies to develop norms, the government should also be ready to regulate and sanction poor performers. Given the power of some companies in the tech sector, this will require co-operation and coordination with other governments (see answer to Question 4 below).
18. On the broader issue of developing norms for the responsible use of technology, it is important to look beyond the private sector alone. Over the long term the government must work with universities, civil society researchers, and service providers to help develop understanding of the ethical responsibilities underlying the development of new technologies. Early stage interventions, for example with early career researchers and start-up companies, are likely to be particularly productive.

Question 4. How can the FCDO use its alliances to shape the development of, and promote compliance with, international rules and regulations relating to new and emerging technologies? Is the UK taking sufficient advantage of the G7 Presidency to achieve this?

19. The UK needs to show by actions, not words, that it is itself committed to complying with international rules and regulations. Recent behaviour by the government – for example, the UK's use of drones to conduct extra-judicial assassinations;⁸ statements from Ministers last year that the government intended to breach the Brexit Treaty in relation to the Northern Ireland protocol; and the announcement of a unilateral increase in the UK's nuclear weapons stockpile regardless of obligations under the Non-Proliferation Treaty, send out a clear message that the UK will turn a blind eye to international law when it is convenient for it to do so. Under these circumstances the UK government cannot expect other governments to take heed of its pronouncements on compliance with international rules and regulations, or expect allies to view it as an 'honest broker' in international alliances.
20. In order to project a positive international influence, the UK needs follow best practice itself. Underpinning this is a need to work to improve the general international situation and improve relations with rival nations.
21. A number of steps are needed to promote compliance with international rules and regulations relating to new and emerging technologies. As a case study, we examine the export of drone technology.

Export of drone technology

22. FCDO should emphasise the importance of existing arms control regimes and take action to support them if they need bolstering. This includes regimes to control the export of armed drones.
23. Under the Trump administration in 2020, the US government unilaterally reinterpreted the terms of the Missile Technology Control Regime (MTCR) - a 33 year old arms proliferation agreement between 35 countries - to allow US firms to sell large military drones to foreign governments. The Biden administration is reportedly studying whether to keep Trump's policy in place and is asking allies and other countries that sell drones to adopt the US position, while in the long term hoping to negotiate a whole new agreement just for drone exports.
24. Such action not only releases sensitive military technology to a wide range of countries, but also undermines multilateral agreements and sends a signal to other nations that it is acceptable to selectively apply rules to suit one's own advantage. The Committee should press FCDO to hold the line on this issue and clearly state that the government does not accept that large drones should be exempt from the MTCR, and over the longer term work to extend participation in the regime. The government must resist being unduly influenced by the US government on this matter and should withstand pressure to protect the US drone technology sector.
25. More broadly the FCDO should support the recommendations of the United Nations Human Rights Council's Special Rapporteur on extrajudicial, summary or arbitrary executions in relation to the export of armed drone technology. These would require states that export armed drone technology to:

8 For a full account of the targeted assassination of British ISIS fighters see Joanna Frew: 'In The Frame: UK media coverage of drone targeted killing'. Drone Wars UK, January 2020. <https://dronewars.net/wp-content/uploads/2020/01/InTheFrame-Web.pdf>

Chris Cole: 'New UN Special Rapporteur report on armed drones and targeted killing – its relevance for the UK'. Drone Wars UK, 9 July 2020. <https://dronewars.net/2020/07/09/new-un-special-rapporteur-report-on-armed-drones-and-targeted-killing-its-relevance-for-the-uk/>

- Enact stricter controls on the transfer of military and dual-use drone technology and apply clear criteria to prevent irresponsible transfers.
- Include civilian protection and adherence to international humanitarian law for approval and continuance of support, sale and training on armed drones.
- Adopt a dedicated process of operational end-use monitoring to analyse the outcome of drones' strikes and civilians' impact.⁹

Regulation of new and harmful technologies.

26. The government should take a risk-based approach to the use and regulation of emerging and potentially disruptive technologies, and should be prepared to ban certain uses of technologies and control their export. The EU's draft regulation on AI proposes banning AI systems that are considered to be a clear threat to the safety, livelihoods and rights of people. High risk AI systems will be subject to strict obligations and would be recorded on a database managed by the European Commission.¹⁰ The UK should introduce legislation giving protections of at least the same standard.
27. Instead of taking a complacent view on the effectiveness of arrangements for licensing export of arms and technology, the government should undertake a root-and-branch review of the process with input from civil society organisations with expertise in human rights protection.
28. The UK should support international regulation, where necessary, to control the most harmful technologies. In particular, the FCDO should support the international initiative to introduce a treaty to ban lethal autonomous weapons systems and ensure that weapon systems remain under meaningful human control at all times.

Other actions

29. In the post-Brexit climate the government is seeing to secure trade agreements with a number of countries. Trade deals should contain provisions to protect and uphold human and employee rights and allow regulation of harmful technologies.
30. Article 36 Reviews (see paragraph 16 above) play an important role in determining whether the adoption of new technologies by armed forces might cause concern from a humanitarian perspective. The government should work to encourage greater uptake of and transparency in the Article 36 process, especially among G7 nations.
31. In a speech to the United Nations in September 2019 the Prime Minister invited the international community to attend a summit in London to help shape the norms and standards that will guide the development of emerging technology.¹¹ To date no progress seems to have been made in arranging this summit. Action should be taken to organise the event as soon as is practicable, and use it to provide a forum where governments can engage in dialogue with industry on these matters.

Question 5. Should the Government's approach to meeting the challenges of technology nationalism and digital fragmentation be based on self-sufficiency, joining with allies or like-minded nations or supporting a coherent global framework?

32. Drone Wars UK strongly feels that the government's approach to meeting the challenges of technology should be based on supporting a coherent global framework. Given that the major technology and arms companies are now as powerful as many governments there are limits to the degree of influence that the UK can have on its own. A selective approach based on the self-interests of a group of allies runs the risk of exacerbating tensions and rivalries with those outside the group. An equitable approach in which all nations have a stake is required, based on trust, co-operation, and openness.

⁹ 'Extrajudicial, summary or arbitrary executions. Report of the Special Rapporteur on extrajudicial, summary or arbitrary executions. United Nations Human Rights Council, 29 June 2020.

https://www.ohchr.org/EN/HRBodies/HRC/RegularSessions/Session44/Documents/A_HRC_44_38_AUV.docx

¹⁰ European Commission: 'Europe fit for the Digital Age: Commission proposes new rules and actions for excellence and trust in Artificial Intelligence'. 21 April 2021.

https://ec.europa.eu/commission/presscorner/detail/en/ip_21_1682

¹¹ Prime Minister's Office: 'PM speech to the UN General Assembly: 24 September 2019'.

<https://www.gov.uk/government/speeches/pm-speech-to-the-un-general-assembly-24-september-2019>

Question 6 What opportunities and challenges do cryptocurrency and distributed ledger technologies such as blockchain present for the way the FCDO does diplomacy (for example, enforcing sanctions), and how can the FCDO harness these technologies as new tools of influence or to promote compliance and transparency in international agreements?

33. We have no comments to make on this question.

Question 7. How can the FCDO help build resilience in civil society, in Government, business and foreign relations against the threats posed by abuses of new technologies by state and non-state actors? Can the FCDO support trust-building networks?

34. People will be inclined to trust and understand technology if they feel that it is being used to benefit them, if it is used in a way which is democratic, transparent and accountable, and is visibly for the public good. Resilience will develop if the public is well educated about the uses and risks of technology and understand how it can be used to manipulate.
35. If technology is used to enrich people's lives, rather than replace their livelihoods or bring benefits to the state or private corporations at their expense, then they will be more likely to feel that they have a stake in the use of technology and less likely to feel suspicion and resentment at new technologies. Again, the government needs to set a good example. This would include the introduction of rules which protect citizens by requiring the safe and responsible use of AI, and redistributive mechanisms to ensure that a share of the profits from new technologies are invested into programmes such as a Green New Deal and improved health care.

Question 8. What would the implications be of the dollar losing its dominant position for international transactions? Will digital currencies force a change in the balance of power?

36. We have no comments to make on this question.

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