II. Humanitarian arms control regimes: key developments in 2016

IAN DAVIS, VINCENT BOULANIN, MARK BROMLEY, LINA GRIP AND MAAIKE VERBRUGGEN

Many arms control and disarmament regimes have a strong humanitarian underpinning (see section I).[1] In the case of conventional technologies, much of the focus in recent years has been on cluster munitions and landmines as well as on efforts to restrict the proliferation of small arms. These efforts include steps taken to improve standards in the production, trade and use of weaponry as well as bans on an entire class of weaponry. The 1981 Convention on Prohibitions or Restrictions on the Use of Certain Conventional Weapons which may be Deemed to be Excessively Injurious or to have Indiscriminate Effects (CCW Convention) covers both approaches. The 1997 Convention on the Prohibition of the Use, Stockpiling, Production and Transfer of Anti-Personnel Mines and on their Destruction (APM Convention) and the 2008 Convention on Cluster Munitions (CCM) both ban an entire class of weapons. The 2001 United Nations Programme of Action on Small Arms and Light Weapons (POA) provides the framework for activities to counter the illicit trade in small arms and light weapons (SALW).[2]

This section reviews the negotiations that took place in these four humanitarian arms control regimes in 2016.[3] It also looks at ongoing efforts to expand the scope of these regimes, including discussions on lethal autonomous weapon systems (LAWS), mainly within the CCW Convention, and some fledgling efforts by the outgoing Obama Administration to regulate the international transfer and use of armed unmanned aerial vehicles (UAVs) and to increase transparency in their use.

One of the greatest current challenges to the protection of civilians in armed conflict is the use of explosive weapons in populated areas (EWIPA) (see section I). In 2016 close to 42 000 civilians were reported as killed or injured by explosive weapons, with the bombardment of the city of Aleppo the nadir of this form of warfare.[4] The CCW Convention, in particular, was designed to protect civilians and combatants in situations of armed conflict,

[1] See also the discussion of a convention to ban nuclear weapons in chapter 12 in this volume.

[2] The 2014 Arms Trade Treaty (ATT) also has relevant provisions but is mainly focused on issues relating to controls on the trade in conventional arms; accordingly, developments in the ATT are discussed in chapter 15 in this volume.

[3] The sections on the SALW POA and US proposals to regulate armed unmanned aerial vehicles (UAVs) were written by Mark Bromley; the section on LAWS was written by Vincent Boulanin; the case study on landmines in Ukraine was written by Lina Grip; the section on armed UAVs was written by Ian Davis and Maaike Verbruggen; all other sections were written by Ian Davis.

[4] Deaths and injuries from explosive weapons totalled 41 868 (Jan. 2016–end of Nov. 2016). See Action on Armed Violence, <https://aoav.org.uk/>. On Aleppo see chapter 3, section I, in this volume.

but the 2016 Review Conference to update the convention failed to effectively address issues related to EWIPA, incendiary weapons and new technology in warfare. This raises questions about the relevance and effectiveness of the CCW Convention.

The Fifth Review Conference of the Certain Conventional Weapons Convention

The 1981 CCW Convention and its five protocols ban or restrict the use of specific types of weapon that are considered to cause unnecessary or unjustifiable suffering to combatants or to affect civilians indiscriminately.[5] It is a so-called umbrella treaty under which specific agreements can be concluded in the form of protocols. As of December 2016 there are 123 states parties to the original convention and protocols. However, not all member states have ratified the amended and additional protocols. The CCW Convention is also important in addressing challenges posed by the development or use of new weapons and their systems with respect to international humanitarian law (IHL).

The CCW Convention originally contained three protocols prohibiting the use of weapons that employ fragments not detectable in the human body by X-ray (Protocol I); regulating the use of landmines, booby traps and similar devices (Protocol II); and limiting the use of incendiary weapons (Protocol III). In subsequent years states added two new protocols (Protocol IV, prohibiting the use and transfer of blinding laser weapons, in 1996; and Protocol V, on explosive remnants of war, in 2003) and amendments that expanded and strengthened the convention, including an expansion in its scope in 2001 to situations of non-international armed conflict. These earlier developments demonstrated that—given the political will—the CCW Convention could be a dynamic instrument for responding to advancements in weapons technology and developments in the nature and conduct of armed conflict.

Review conferences are held every five years to review the implementation of the convention and its protocols, as well as to explore the possibility of developing new protocols. The Fifth Review Conference took place on 12–16 December 2016 in Geneva under the presidency of Ambassador Tehmina Janjua, Permanent Representative of Pakistan to the UN, following a year-long preparatory process. In addition to procedural debates and a review of progress towards universalization of the CCW Convention,

[5] This section draws on the six CCW Convention reports on the Fifth Review Conference published daily by the Reaching Critical Will programme of the Women's International League for Peace and Freedom, available at <http://www.reachingcriticalwill.org/disarmament-fora/ccw>. For a summary of the Certain Conventional Weapons Convention, see annex A, section I, in this volume.

discussions at the Fifth Review Conference centred around four thematic issues: improvised explosive devices (IEDs), incendiary weapons, EWIPA and LAWS. In broad terms, states are divided on these issues between those suggesting new measures or reviews of some of the protocols to address the humanitarian harm arising from their use, and those arguing that no action is needed because existing law is sufficient and states simply need to comply with their existing obligations.[6]

Improvised explosive devices

Earlier discussions on IEDs under Amended Protocol II sought to address the threats posed by the use of IEDs by terrorists and non-state actors. These discussions continued at the Fifth Review Conference and concluded with the adoption of a declaration on IEDs drafted by a group of experts.[7] Among other things, the declaration indicates that the High Contracting Parties to Amended Protocol II will take all necessary steps to 'prevent the diversion of precursors and components that may be used for the manufacture of IEDs for committing terrorist acts or indiscriminate acts'; exchange information on measures to mitigate the threat of IEDs and IED attacks; raise awareness and explore synergies with international organizations and networks; pursue IED risk education campaigns; and provide financial and technical support for capacity building.

However, the declaration does not address state use of IEDs or their uses beyond 'acts of terrorism'. Thus, for example, it does not cover the Syrian Government's use in 2016 of barrel bombs—an improvised unguided bomb, sometimes described as a flying IED—in populated areas (although such use is still covered by IHL in general).[8]

Incendiary weapons

Protocol III to the CCW Convention prohibits certain uses of incendiary weapons, but its restrictions have failed to stop the civilian harm seen in Syria and elsewhere. There are two major loopholes in the protocol: weaker regulation of ground-launched incendiary weapons compared with air-dropped models, and inadequate cover of multipurpose munitions, such as white phosphorus.[9] The Syrian Government has used both air-dropped and ground-launched incendiary weapons in Syria since 2012, and their use

[6] See e.g. Acheson, R., 'Editorial: existing law is not sufficient', *CCW Report*, vol. 4, no. 4 (15 Dec. 2016), pp. 1–2.

[7] 'Declaration on improvised explosive devices', Annex V of the Final Document CCW/AP.II/CONF.18/6.

[8] Amnesty International, 'Syria: terrifying eyewitness video of life under siege and barrel bombs must spur humanitarian lifeline', Press release, 19 Apr. 2016.

[9] Human Rights Watch and International Human Rights Clinic (IHRC), Human Rights Program and Harvard Law School, 'Time to act against incendiary weapons: memorandum to delegates at the Fifth Review Conference of the Convention on Conventional Weapons', Dec. 2016.

appeared to increase in 2016, especially in Aleppo in May and June.[10] A video posted by Russia Today on 18 June 2016 showed a Russian Su-34 combat aircraft equipped with RBK-500 ZAB-2.5SM incendiary cluster weapons at Russia's airbase in Syria.[11] However, allegations that Russia was using incendiary weapons in Syria have been denied by the Russian Government.[12]

Since 2010 several states, along with the International Committee of the Red Cross (ICRC), the UN Secretary-General and non-governmental organizations (NGOs), have condemned recent incendiary weapon attacks and called for Protocol III to be revisited and strengthened for the first time since its adoption more than 35 years ago.[13] At the Fifth Review Conference, however, states remained divided over the best approach to take. During the general debate at least 20 states, together with NGOs, indicated support for a review of the protocol to discuss strengthening its provisions. On the other hand, several other states, including Canada, France, Russia and the United States, argued that the best way to minimize harm from incendiary weapons is through CCW Convention universalization and compliance with Protocol III, rather than by developing new restrictions.[14] This lack of consensus meant that the Final Declaration of Main Committee I was limited to the inclusion of language condemning use of incendiary weapons and making Protocol III an agenda item for the November 2017 meeting of states parties. Although the substance of those discussions is not specified, it is the first time since 1980 that states parties have set aside time to discuss the topic further.[15]

Explosive weapons in populated areas

Where explosive weapons are used in populated areas, over 90 per cent of the casualties are normally civilian (with the likelihood of a high proportion being women and children), vital infrastructure is destroyed and the weapons are a key driver of displacement.[16] Conflicts in Iraq, Syria, Ukraine, Yemen and elsewhere have provided clear evidence of this persistent pattern

[10] Human Rights Watch and IHRC (note 9), pp. 6–12.

[11] Ensor, J., 'Russians "caught out" using incendiary weapons in Syria by own channel Russia Today', *The Telegraph*, 22 June 2016.

[12] Statement of Russia, CCW Fifth Review Conference Preparatory Committee, 31 Aug. 2016, cited by Human Rights Watch and IHRC (note 9), p. 7.

[13] For more information on the recent use of incendiary weapons, states' positions and recommendations for the CCW Convention, see Human Rights Watch and IHRC (note 9).

[14] Crupi, J. and Khalfaoui, A., 'Incendiary weapons: progress but not panacea', *CCW Report*, vol. 4, no. 5, 16 Dec. 2016, p. 2. Many of the statements by states parties are available at United Nations Office at Geneva, 'Fifth Review Conference'; and Reaching Critical Will, 'Statements from the Fifth CCW Review Conference'.

[15] Final Document of the Fifth Review Conference, Advance Version CCW/CONF.V/10, 23 Dec. 2016.

[16] ICRC, 'Explosive weapons in populated areas', Fact sheet, 14 June 2016; the International Network on Explosive Weapons (INEW) website, <http://www.inew.org/>; and 'Women and explosive weapons', Women's International League for Peace and Freedom, 2014.

of destruction and in 2015 led the UN Secretary-General and the head of the ICRC to call on states to stop the use of heavy explosive weapons in populated areas.[17]

Since the current rules of IHL do not on their own draw a clear boundary against the use of EWIPA, some states and NGOs see a need for a specific treaty-based restriction that would provide clear and universal guidance on the application of IHL to the use of EWIPA. Discussions aimed at developing a political instrument to address this humanitarian problem are being led by Austria, which hosted a meeting on the issue with the UN Office for the Coordination of Humanitarian Affairs (OCHA) in September 2015.[18] The issue was also raised as a key issue at the World Humanitarian Summit in May 2016.[19] Finally, a meeting in October 2016 in New York hosted by Austria with other states considered options for improving the protection of civilians from such harm and in particular focused on identifying and discussing the possible elements of a political declaration.[20]

Some states now wish to bring the use of EWIPA within the framework of the CCW Convention and the issue was raised by several states parties at the Fifth Review Conference during both the general debate and Main Committee I. Germany proposed that the CCW Convention mandate a group of experts to discuss the impact of explosive weapons in densely populated areas to minimise the humanitarian harm by ensuring greater compliance with IHL. Other states proposed amendments to Germany's text.[21] After an intensive debate on the relevance of discussing this issue, and after removing both the phrases 'explosive weapons' and 'populated areas' from the discussion mandate, the conference did agree that in 2017 the CCW Convention would explore the 'challenges presented by the use of conventional weapons in armed conflicts and their impact on civilians, particularly in areas where there are concentrations of civilians'.[22]

[17] ICRC, 'World at a turning point: heads of UN and Red Cross issue joint warning', News release, 30 Oct. 2015.

[18] OCHA, 'There is not an hour that we do not think of that day and what we lost', News release, 22 Sep. 2015.

[19] 'Commitments to Action', World Humanitarian Summit, Istanbul, 23–24 May 2016.

[20] International Network on Explosive Weapons (INEW), 'States meeting to discuss political declaration addressing civilian harm caused by explosive weapons', News release, 4 Oct. 2016; and Statement by Austria at the 2016 United Nations General Assembly First Committee Debate on Conventional Weapons, New York, 20 Oct. 2016. The key elements that such a declaration might contain are discussed in 'A declaration to prevent harm from the use of explosive weapons in populated areas', INEW Briefing Paper, Sep. 2016.

[21] Cited in Reaching Critical Will, *CCW Report*, vol. 4, no. 2 (13 Dec. 2016); and Reaching Critical Will, *CCW Report*, vol. 4, no. 3 (14 Dec. 2016). Many of the statements by states parties are available on the websites of the UN Office at Geneva and Reaching Critical Will (note 14).

[22] Final Document of the Fifth Review Conference (note 15), Decision 5.

Lethal autonomous weapon systems

Since 2014 the CCW Convention has been the focus of international discussions on the risks posed by LAWS.[23] LAWS still lack a generally agreed definition but are often described as weapons that could select and attack targets, including human targets, without the direct involvement of a human operator. Although some systems in use can already select and attack targets autonomously once activated (including some types of missile and rocket defence weapons, vehicle active protection weapons, anti-personnel sentry weapons, and guided missile and loitering munitions), these have been excluded from CCW Convention discussions so far in order to focus on more futuristic types of weapon systems that would feature self-determination capabilities that are currently not available.[24]

In the first part of 2016 the discussions on LAWS took place, as in 2014 and 2015, within the framework of an informal meeting of experts. The meeting was held in Geneva on 11–15 April 2016 and its mandate was purely exploratory: to discuss LAWS in the context of the CCW Convention.[25] The only notable difference from the previous meetings was that the states parties could agree by consensus on considerations for the Fifth Review Conference in December 2016. The programme of work of the 2016 informal meeting of experts had six components: (*a*) a general debate; (*b*) a technical session on the characteristics and development of autonomy; (*c*) a session exploring possible working definitions for LAWS; (*d*) a session on compliance with IHL, which tackled both prevention through a discussion on the implementation of legal reviews of new weapons, means and methods of warfare as commanded by Article 36 of the 1977 Additional Protocol I to the 1949 Geneva Conventions, and responsibility and accountability in case of violation of IHL; (*e*) a session on the applicability of human rights law and ethical challenges raised by the use of LAWS; and (*f*) a session focused on the security issues and notably the risk that LAWS might pose in terms of regional and global stability, accessibility and use by non-state actors.

As in 2014 and 2015, the general debate and each of the expert sessions showcased contrasting views between and within delegations and experts on the above subjects.[26] However, the chairperson, Ambassador Biontino,

[23] Anthony, I. and Holland, C., 'The governance of autonomous weapons', *SIPRI Yearbook 2014*.

[24] Marsh, N., 'Defining the scope of autonomy: Issues for the Campaign to Stop Killer Robots', Oslo Peace Research Institute (PRIO), Policy Brief no. 2, 2014; Horowitz, M. C., 'Ban killer robots? How about defining them first?', *Bulletin of the Atomic Scientists* (24 June 2016); and United Nations Institute for Disarmament Research (UNIDIR), *Framing the Discussions on the Weaponization of Increasingly Autonomous Technologies* (UNIDIR: Geneva, 2014).

[25] For a more detailed account of the 2014 and 2015 discussions see Boulanin, V., 'Mapping the debate on LAWS at the CCW: taking stock and moving forward', EU Non-Proliferation Paper no. 49 (SIPRI: Stockholm, 2016).

[26] Boulanin, V., 'Lethal autonomous weapon systems and the Convention on Certain Conventional Weapons', *SIPRI Yearbook 2015*, pp. 589–95. For a comprehensive review of statements given

noted some points of convergence in his final report, including: (*a*) a general understanding that a fully autonomous weapon system does not yet exist and that there was a widely shared view that a working or conceptual understanding of the characteristics of LAWS was necessary to frame and progress the discussion; (*b*) a general consensus that, as with all weapon systems, the rules of IHL are fully applicable to LAWS and that states will bear the legal and political responsibility and establish accountability for action by any weapon system used in accordance with applicable international law, especially IHL; and (*c*) the emergence of an area of common understanding that delegating decision making over human life and death to a machine would be morally unacceptable and that views on appropriate human involvement with regard to lethal force and the issue of delegation of its use are of critical importance to further consideration of LAWS among the High Contracting Parties.[27]

While participants in the informal meeting of experts recommended that the Fifth Review Conference 'may decide to establish a Group of Governmental Experts (GGE) in accordance with established practice' (i.e. an open-ended group that would include the participation of all parties to the CCW Convention as well as representatives from civil society), the informal talks leading up to the recommendation were contentious.[28] It took several long rounds of informal negotiations between states parties to agree, first of all, on whether a GGE was the appropriate format to continue discussion of the topic—China and Russia expressed the strongest doubts in this regard—but also on what its programme of work should include.[29] Consensus was eventually reached on a recommendation that stressed, among other things, that the GGE should consider the identification of characteristics of LAWS and the elaboration of a working definition of LAWS, as well as the application of the relevant principles and rules of international law, in particular IHL. The recommendations also included a long list of topics for the GGE to further examine, namely: compliance with international human rights law when applicable; legal and political responsibility and accountability; ethical and moral questions; effects on regional and global security and stability; effects on the threshold for armed conflicts; the risk of an arms race; proliferation risks, including to and by non-state actors; and related risks posed by cyber operations.[30]

by states at the 2016 informal meeting of experts see Wareham, M., '*Report on activities: Convention on Certain Conventional Weapons third informal meeting of experts*', Campaign to Stop Killer Robots, 2016.

[27] Biontino, M., Chairperson of the informal meeting of experts, 'Report of the 2016 informal meeting of experts on lethal autonomous weapons systems (LAWS)', CCW/Conf.v/2, 10 June 2016.

[28] Biontino, M., '*Recommendations to the 2016 Review Conference*', p. 1.

[29] Author's observation at the meeting.

[30] Biontino (note 28), p. 2.

At the Fifth Review Conference discussions were focused on the creation of a GGE. With the notable exception of Russia, which reiterated that it was premature to move into a GGE format, states parties unanimously welcomed the recommendations of the informal meeting of experts, including language on the purpose and scope of the programme of work. It was agreed that the GGE would meet for 10 days in 2017.

Outside of the decision to create a GGE, there were relatively few other noteworthy developments. Argentina, Guatemala, Panama, Peru and Venezuela joined the 14 states that supported a pre-emptive ban on LAWS.[31] China presented a national position on LAWS for the first time. In a position paper prepared for the conference, China argued that it found there to be considerable uncertainty with regard to the adequacy of international law to deal with the challenges raised by LAWS and expressed support for the development of a legally binding instrument on issues relating to the use of LAWS, similar to the Protocol on Blinding Laser Weapons.[32] China is the first permanent member of the UN Security Council to argue that a new international law is required on fully autonomous weapons.[33]

The Convention on Cluster Munitions

The 2008 Convention on Cluster Munitions (CCM) is an international treaty of more than 100 states—including former major producers, users and affected states—that addresses the humanitarian consequences and unacceptable harm caused to civilians by cluster munitions. It establishes an unconditional prohibition and a framework for action.[34] It also requires destruction of stockpiles within 8 years, clearance of areas contaminated by cluster munition remnants within 10 years and the provision of assistance for victims of the weapon. In 2016 Cuba and Palau joined the CCM. As of the end of December 2016 it had 100 states parties and 19 signatory states.

In December 2015 the first-ever UN General Assembly resolution on the implementation of the CCM was passed, with 139 votes in favour, 2 against (Russia and Zimbabwe) and 40 abstentions.[35] Of the non-signatories, 32 voted in favour, demonstrating their support for its humanitarian aims.

Most of the states that are still outside the convention abide de facto by the ban on the use and production of the weapon. However, despite international condemnation, cluster munitions continued to be used in two

[31] The other 14 states were Algeria, Bolivia, Chile, Costa Rica, Cuba, Ecuador, Egypt, Ghana, Holy See, Mexico, Nicaragua, Pakistan, the State of Palestine and Zimbabwe.

[32] Government of China, 'The poistion [sic] paper submitted by the Chinese delegation to the CCW 5th Review Conference'.

[33] Campaign to Stop Killer Robots, 'Moving forward in 2016', 30 Dec. 2016.

[34] For a summary of the Convention on Cluster Munitions see annex A, section I, in this volume.

[35] United Nations, General Assembly Resolution 70/54, 'Implementation of the Convention on Cluster Munitions', 7 Dec. 2015.

countries in 2016: Syria and Yemen. According to *Cluster Munition Monitor 2016*, between April 2015 and March 2016 a coalition of states led by Saudi Arabia used cluster munitions in at least 19 attacks in Yemen, and cluster munition attacks in Syria became more widespread after Russia began its joint military operations with Syria at the end of September 2015.[36] Between July 2012 and July 2016 at least 360 cluster munition attacks in Syria were documented. None of these countries has signed the CCM. In addition, there were allegations of cluster munitions being used in Nagorno-Karabakh in April 2016 (both Azerbaijan and Armenia denied deploying cluster munitions while accusing each other of use) and in Somalia in January 2016 (although Kenya, a signatory to the CCM, denied that it had used BL-755 cluster munitions in an attack against al-Shabab).[37]

As a result of the impact of cluster munitions on civilians in Yemen, in May 2016 the USA suspended any further transfers of the weapon to Saudi Arabia. Textron—the only remaining US producer of cluster munitions (the CBU-105 Sensor Fuzed Weapon, SFW) that could be considered as falling under the CCM definition of cluster weapons—announced in August 2016 that it would stop production.[38] The CBU-105 SFW had previously been transferred to Saudi Arabia and used in Yemen.[39]

Under the convention, 29 states parties have completed the destruction of nearly 1.4 million stockpiled cluster munitions containing 172 million submunitions. This represents the destruction of 93 per cent of all cluster munitions and 97 per cent of all submunitions declared as stockpiled under the treaty. During 2015 nine states parties destroyed 79 000 cluster munitions and 8.7 million submunitions. Germany, Italy, Japan, Mozambique and Sweden completed stockpile destruction in 2015, and France followed suit in June 2016.[40]

Conflict and insecurity made clearance of cluster munitions more challenging in several countries, but in 2015 at least 70 square kilometres of contaminated land was cleared, resulting in the destruction of 120 000 submunitions. At least 24 states and 3 other areas remain contaminated by cluster munitions; it is unclear whether 5 additional states are contami-

[36] The report *Cluster Munition Monitor 2016* covers the period from the second half of 2015 to the first half of 2016, sometimes later where data is available. International Campaign to Ban Landmines–Cluster Munition Coalition (ICBL–CMC), *Cluster Munition Monitor 2016* (ICBL–CMC: Geneva, Aug. 2016), pp. 19–29; and Human Rights Watch, 'Russia/Syria: daily cluster munition attacks', 8 Feb. 2016.

[37] ICBL–CMC (note 36), pp. 29–31.

[38] Hudson, J., 'Last remaining US maker of cluster bombs stops production', *Foreign Policy*, 31 Aug. 2016.

[39] Human Rights Watch, 'Yemen: cluster munitions wounding civilians', 14 Feb. 2016.

[40] ICBL–CMC (note 36), pp. 40–44.

nated. Only 3 states (Bosnia and Herzegovina, Croatia and Mozambique) are judged to be on track to meet their mandated 10-year clearance deadlines.[41]

The Sixth Meeting of states parties to the CCM took place on 5–7 September 2016 in Geneva. Under the presidency of the Netherlands, it was the first formal meeting of the CCM after the adoption of the 2015 Dubrovnik Action Plan, a five-year action plan that provides a roadmap for states to implement and universalize the convention.[42] The meeting adopted a political declaration (as an Annex to the Final Report) that commits all states parties to fully implement all of their individual and collective outstanding obligations as quickly as possible and as conditions in affected states would allow, with the aim of full implementation before 2030.[43]

The Anti-Personnel Mines Convention

The 1997 Convention on the Prohibition of the Use, Stockpiling, Production, and Transfer of Anti-Personnel Mines and on their Destruction (APM Convention) prohibits, among other things, the use, development, production and transfer of anti-personnel mines (APMs). In 2016 no states joined the convention, which had 162 states parties at the end of the year; only 35 states remained outside the treaty.[44] In 2014, treaty members set a shared goal of completing landmine clearance by 2025.

New use of APMs by states is now extremely rare, with only Myanmar, North Korea and Syria—all states outside the treaty—having recorded use in 2016. However, a continuing problem is the use of APMs by non-state armed groups in conflicts, including victim-activated improvised mines. Such improvised mines were used by non-state armed groups in at least 10 countries between October 2015 and October 2016: Afghanistan, Colombia, Iraq, Libya, Myanmar, Nigeria, Pakistan, Syria, Ukraine (see below) and Yemen.[45]

According to *Landmine Monitor 2016*, global casualties from APMs are at a 10-year high, while clearance funding hit a 10-year low.[46] Armed conflicts in

[41] States and other areas contaminated with cluster munitions are Afghanistan, Bosnia and Herzegovina, Cambodia, Chad, Chile, Croatia, Democratic Republic of the Congo, the Falkland Islands/Malvinas, Germany, Iran, Iraq, Kosovo, Lao PDR, Lebanon, Libya, Montenegro, Mozambique, Nagorno-Karabakh, Serbia, Somalia, South Sudan, Sudan, Syria, Ukraine, Vietnam, Western Sahara and Yemen. States where contamination is unclear are Angola, Azerbaijan, Colombia, Georgia and Tajikistan. ICBL–CMC (note 36), pp. 69–81.

[42] The Dubrovnik Action Plan was adopted at the First Review Conference of the CCM in Dubrovnik, Croatia, on 11 Sep. 2015. For the text of the plan see <http://www.clusterconvention.org/wp-content/uploads/2016/04/The-Dubrovnik-Action-Plan.pdf>.

[43] Convention on Cluster Munitions, 'Annex I: political declaration', Final Report, CCM/MSP/2016/9, 30 Sep. 2016.

[44] For a summary of the APM Convention see annex A, section I, in this volume.

[45] International Campaign to Ban Landmines–Cluster Munition Coalition (ICBL–CMC), *Landmine Monitor 2016* (ICBL–CMC: Geneva, Nov. 2016), pp. 1, 8–17.

[46] ICBL–CMC (note 45), p. 1.

Afghanistan, Iraq, Libya, Syria, Ukraine and Yemen contributed to the sharp spike in the number of people killed and injured in 2015 by mines and other explosive remnants of war (ERW). For 2015 (the latest year for which data is available) the Landmine Monitor recorded 6461 mine/ERW casualties, marking a 75 per cent increase from the number of casualties recorded for 2014, and the highest recorded total since 2006 (6573).[47]

By contrast, international support for mine action in 2015 suffered a decrease of almost $77 million compared with 2014: 35 donors contributed $340.1 million to 41 states and 3 other areas. This marked the first time since 2005 that international support fell below $400 million.[48] It is too early to judge whether the trend in declining support was reversed in 2016, although donors did host a major international pledging conference in Geneva in March where resources were committed to support mine action activities.[49] Two other pledging conferences were held in 2016 to support specific de-mining initiatives in Colombia and Iraq.[50]

Annual meetings of treaty member states are held at different locations around the world. The 15th Meeting of States Parties to the APM Convention took place in Santiago, Chile, from 28 November to 1 December 2016 (having been reduced by one day owing to insufficient funding).[51] Progress and plans to implement the 2014 Maputo Action Plan (adopted at the Third Review Conference) were discussed, and landmine clearance extension deadlines were granted to Ecuador, Niger and Peru. The meeting also expressed concern that Ukraine was in non-compliance with Article 5 after missing its 1 June 2016 mine clearance deadline (see below), and called on it to submit a deadline extension request as soon as possible. The meeting also agreed to establish an informal working group on the universalization of the convention.[52]

Poland announced that it had completed the destruction of its stockpiled landmines, bringing the total number of states that no longer hold stocks to 158.[53] However, as of October 2016, some 64 states and areas remain con-

[47] ICBL–CMC (note 45), pp. 2, 43–52.

[48] ICBL–CMC (note 45), pp. 2, 71–81.

[49] International Pledging Conference for the Implementation of the Anti-Personnel Mine Ban Convention, 'Summary', Geneva, 2 Mar. 2016.

[50] International Campaign to Ban Landmines–Cluster Munitions Coalition (ICBL–CMC), 'Extraordinary pledges to support mine action in 2016', Fact sheet, Nov. 2016.

[51] The deficit of cash received from member states with respect to 2016 planned costs was more than $80 000. United Nations, Secretariat, 'Status of contributions of BWC, CCW, CCM, OTW as at 31 December 2016', 31 Dec. 2016.

[52] Fifteenth Meeting of the States Parties to the Convention on the Prohibition of the Use, Stockpiling, Production and Transfer of Anti-Personnel Mines and on their Destruction, Santiago, Chile, 28 Nov.–1 Dec. 2016, APLC/MSP.15/2016/10, 9 Dec. 2016.

[53] APM Convention, 'Poland formally declares it has destroyed its anti-personnel mines stockpile, Europe closer to eliminating landmines', Press release, 29 Nov. 2016; and APM Convention, 'Landmine Treaty meeting concludes with advances in stockpile destruction, 158 countries no longer hold anti-personnel stockpiles', Press release, 5 Dec. 2016.

taminated by landmines and several have seen contamination grow owing to new use of APMs, including improvised landmines.[54]

Case study: Ukraine

Ukraine is a state party to the APM Convention and, as per Articles 4 and 5, was obliged to destroy its APM stockpile within four years of entry into force (i.e. by 1 June 2010), as well as to make every effort to identify and clear mined areas under its jurisdiction or control as soon as possible, but not later than 10 years after becoming a state party (i.e. by 1 June 2016). Those areas not under state control must be cleared of APMs as soon as control has been re-established. States parties that consider themselves unable to complete their mine clearance obligations within the deadline may submit a request for a deadline extension of up to 10 years. Having missed its clearance deadline without submitting a request for an extension, Ukraine is now in violation of Article 5 of the convention. However, given that the majority, if not all, of the landmine contamination is most likely new—prior to 2014, Ukraine did not report any mine contamination under Article 5—an extension is likely to be granted should Ukraine make a request. The extent of mine contamination in Ukraine is not known, but new contamination has been reported since 2014. In June 2015 the Ukrainian Government estimated that 8 per cent of eastern Ukraine was either affected or suspected to be affected by APMs, IEDs and ERW from the current conflict.[55]

APMs have been used on a limited and localized scale since the start of the ongoing conflict in eastern Ukraine in 2014, including some that are capable of being victim-activated and therefore prohibited.[56] Several media outlets in Russia and Ukraine have alleged that APMs and multipurpose munitions equipped with victim-activated fuses and tripwires were used by non-state armed groups supporting the self-proclaimed Donetsk People's Republic and People's Republic of Luhansk.[57] Victim-activated booby traps have also reportedly been used; however, it is unclear who is responsible.[58]

A variety of APMs have been recovered from separatist armed groups and mines of these types are reported to have been placed near Donetsk, in both command-detonated and victim-activated configurations, the latter fitted with pull fuse and tripwire. Ukraine has stated that its MON-type and OZM-type APMs can be used in command-detonated mode and are therefore outside the definition of an APM under Article 2(1) of the convention.[59] However,

[54] ICBL–CMC (note 45), pp. 3, 29–42.

[55] International Campaign to Ban Landmines–Cluster Munitions Coalition (ICBL–CMC), *Landmine Monitor 2015* (ICBL–CMC: Geneva, Nov. 2015), pp. 18–19.

[56] Human Rights Watch, 'Landmines in Ukraine: technical briefing note', Apr. 2015.

[57] Ferguson, J. and Jenzen-Jones, N. R., *Raising Red Flags: An Examination of Arms and Munitions in the Ongoing Conflict in Ukraine*, ARES Research Report no. 3 (Nov. 2014), pp. 61–62.

[58] Ferguson and Jenzen-Jones (note 57), p. 61.

[59] Ferguson and Jenzen-Jones (note 57), pp. 61–62.

several OZM-72 bounding APMs initiated by a tripwire have been observed in Ukraine. The use of a tripwire or any other victim-activated mechanism to initiate an explosive device is prohibited by the APM Convention.[60]

The Ukrainian Government has stated that it has not used or placed APMs during the conflict, although it notes that new contamination has occurred.[61] It has also stated that retained or stockpiled APMs under its control are not available for issue to troops and remain strictly controlled. Ukraine reported that some mines were stored in the Crimea and are no longer under Ukrainian government control.[62]

The total number of mine/ERW casualties in Ukraine during 2014–15 is not known, but according to the Landmine and Cluster Munition Monitor at least 46 people were killed and 102 injured by APMs in Ukraine in 2014.[63] In 2015 landmine casualties in Ukraine increased to 589, 316 of which were civilians. Casualties from victim-activated IEDs and anti-vehicle mines (AVMs) are likely to be included in those numbers, along with APMs.[64]

Ukraine is also in violation of Article 4 of the APM Convention because it failed to complete the destruction of its stockpiles by 1 June 2010. A total of 5.4 million APMs remain to be destroyed in Ukraine out of a total global stockpile of 7 million reported by states parties to the convention.[65] The Ukrainian Ministry of Defence, the Support and Procurement Agency of the North Atlantic Treaty Organization and the Pavlograd Chemical Plant agreed to destroy a total of 642 960 PFM-1 APMs between 2015 and the end of 2016. By 1 May 2016 some 233 496 APMs had been destroyed.[66]

The UN Programme of Action on Small Arms and Light Weapons

Since the 1990s a range of legally binding and voluntary measures have been created to improve controls on small arms and light weapons (SALW).[67] Two of the most important elements of this framework are the UN Programme of Action to Prevent, Combat and Eradicate the Illicit Trade in Small Arms

[60] ICBL–CMC (note 55), pp. 6–7.

[61] Submission of Ukraine, Third Review Conference of the APM Convention, Maputo, Mozambique, 18 June 2014; and Statement of Ukraine, Intersessional Meeting of the Committee on Cooperative Compliance, Geneva, 26 June 2015 (in Ukrainian).

[62] Ferguson and Jenzen-Jones (note 57), pp. 61–62.

[63] Landmine and Cluster Munition Monitor, 'Ukraine: casualties and victim assistance', updated 2 Feb. 2016.

[64] ICBL–CMC (note 55), pp. 45, 48. According to SIPRI's AVM project, Ukraine had the highest number of AVM casualties in 2015, with 25 recorded incidents and 97 casualties (36% civilians). Geneva International Centre for Humanitarian Demining (GICHD) and SIPRI, *Global Mapping and Analysis of Anti-vehicle Mine Incidents in 2015*, Joint report (GICHD and SIPRI: Geneva, Apr. 2016).

[65] ICBL–CMC (note 45), p. 23.

[66] Statement of Ukraine, Intersessional Standing Committee on Stockpile Destruction, 20 May 2016.

[67] For a fuller account of this process see Bromley, M. and Grip, I., 'Small arms control measures', *SIPRI Yearbook 2015*, pp. 600–605.

and Light Weapons in all its Aspects (POA), agreed in 2001, and the International Instrument to Enable States to Identify and Trace, in a Timely and Reliable Manner, Illicit Small Arms and Light Weapons (International Tracing Instrument, ITI), agreed in 2005.[68] Both are politically binding instruments negotiated on the basis of consensus under the auspices of the First Committee of the UN General Assembly. Other key elements include the wide range of regional and subregional SALW control instruments that have been established, particularly in Europe, Latin America and the Caribbean, and sub-Saharan Africa.[69] Although most of these instruments lack effective verification measures, they nonetheless collectively represent a set of normative standards detailing the steps states need to take in order to improve controls over the production, trade, storage, use and disposal of SALW.

In recent years the amount of attention paid to the POA and ITI by states and NGOs has been limited, largely owing to resources being redirected towards the negotiation of the Arms Trade Treaty (ATT).[70] With the entry into force of the ATT in December 2014, states and NGOs have sought to reinvigorate the POA process, which has been given further added urgency by a range of regional crises fed by the illicit trade in SALW, not least in the Sahel. Since 2011 the conflicts in Mali and other parts of the region have been exacerbated by the flow of weapons from looted stockpiles in Libya.[71]

In June 2016 states met in New York for the Sixth Biennial Meeting of States (BMS) to Consider the Implementation of the POA and the ITI. The BMS allows states to consider implementation of the instruments. Review conferences that were more in depth were held in 2006 and 2012 and a third is planned for 2018. The final outcome document of the 2016 BMS was agreed by consensus and, despite resistance from a number of states, contains strong language in a range of areas.[72] Most significant were the inclusion of detailed language on the gendered aspects of SALW proliferation and violence, the role women play in arms control processes, and the

[68] United Nations, General Assembly, Draft Programme of Action to Prevent, Combat and Eradicate the Illicit Trade in Small Arms and Light Weapons in All Its Aspects, A/CONF.192/L.5/Rev.1, 20 July 2001; and United Nations, General Assembly Decision 60/519, International Instrument to Enable States to Identify and Trace, in a Timely and Reliable Manner, Illicit Small Arms and Light Weapons, 8 Dec. 2005.

[69] For an overview of these regional instruments see Small Arms Survey, 'Regional measures', <http://www.smallarmssurvey.org/regulations-and-controls/levels-of-action/regional.html>.

[70] For a description of recent developments in the ATT process see chapter 15, section I, in this volume.

[71] Conflict Armament Research, *Investigating Cross-Border Weapon Transfers in the Sahel* (Conflict Armament Research: London, Nov. 2016).

[72] United Nations, General Assembly, Outcome of the Sixth Biennial Meeting of States to Consider the Implementation of the Programme of Action to Prevent, Combat and Eradicate the Illicit Trade in Small Arms and Light Weapons in All Its Aspects, A/CONF.192/BMS/2016/WP.1/Rev.3, 10 June 2016.

UN Sustainable Development Goals (SDGs), which were adopted in 2015.[73] SDG 16 focuses on peace and security issues and target 16.4 specifically commits states to significantly reduce illicit arms flows. Generating meaningful data that can be used to measure the attainment of this goal presents numerous challenges.[74] As such, it is significant that the BMS outcome document encourages the development of 'national-level indicators, based on the POA and ITI, which could be used to measure progress made in the implementation of SDG Target 16.4' and calls for the utilization of national reports under the POA and ITI 'to support data collection for relevant SDG indicators'.[75]

Although there is clear logic in linking POA reporting with monitoring the implementation of SDG 16.4, the reality is that there has been a steep decline in both the number and quality of states' reports on POA implementation as well as in accompanying efforts by NGOs to analyse their content. States submitting reports on their national implementation of the POA and ITI reached 89 in 2016—a figure higher than the 76 states in 2014 but lower than the 111 in 2010.[76] Meanwhile, the analyses of states' reports, previously produced by the Small Arms Survey of the UN Institute for Disarmament Research and the International Action Network on Small Arms, have not appeared in recent years.[77]

The BMS outcome document also included an indirect reference to ammunition. Many states and NGOs have long sought to include ammunition in the scope of the POA and ITI but have always faced stiff opposition from several states, particularly the USA. The outcome document notes that some states apply relevant provisions of the POA to material additional to that mentioned in the ITI definition of small arms and light weapons, whereas other states do not—a clear reference to ammunition.[78] Some states argued that highlighting differences in national interpretation of the POA and ITI risks setting a dangerous precedent. However, others clearly felt that the inclusion of this language was a potential stepping stone to a more explicit reference to ammunition in the POA and ITI at the 2018 Review Conference.

Attempts to block a direct reference to the ATT in the outcome document were also successful. An early draft noted that 'States welcomed the inclusion of small arms and light weapons in the scope of the Arms Trade

[73] Reaching Critical Will, *Small Arms Monitor*, vol. 8, no. 6 (13 June 2016). For more information on the SDGs see chapter 6 in this volume.

[74] McDonald, G. and De Martino, L., 'Measuring illicit arms flows: SDG target 16.4', *Small Arms Survey* (May 2016).

[75] United Nations, General Assembly (note 72).

[76] See national reports on the Programme of Action, <http://www.poa-iss.org/Poa/NationalReportList.aspx>.

[77] The most recent example is Parker, S., 'National implementation of the United Nations Small Arms Programme of Action and the International Tracing Instrument: an analysis of reporting in 2009–10', Small Arms Survey working paper, June 2010.

[78] United Nations, General Assembly (note 72).

Treaty'.[79] Despite this being the same language that was adopted at the First Committee of the UN General Assembly in late 2015, it was removed from the final outcome document at the insistence of key ATT sceptics, including Egypt and Iran. As with ammunition, it was replaced with an indirect reference to 'the linkages between the implementation of the POA and other relevant subregional, regional and global instruments'.[80] Given the significant overlaps between the POA and ATT, there is clear logic to building links between the two instruments. However, the way in which the text of the ATT was adopted—by a vote in the UN General Assembly—continues to be a source of bitterness for states wanting to uphold the principle that all disarmament-related matters at the UN should be adopted by consensus.

The successful outcome of the BMS was due in no small part to the effective chairmanship of Ambassador E. Courtenay Rattray of Jamaica. Ambassador Rattray carried out many months of preparatory work that laid the groundwork for success in New York. Although the results may seem marginal—and the efforts involved disproportionate—it is worth recalling that 20 years ago tackling the illicit trade in SALW and linking these efforts to achieving sustainable development, as a topic of consensus-based discussion and agreement at the UN, would have been essentially unthinkable. Even less likely would have been states setting concrete goals for achieving these ends and reporting on national implementation measures. At the same time, there is also a clear sense in which the framework of SALW control-related instruments—of which the POA and ITI are two of the most important elements—has done little to check the spread of illicit SALW in the Sahel and the Middle East in recent years. As such, the effectiveness of these instruments and the efforts they promote are clearly prey to broader political constraints as well as to the will and capacity of individual states.

Armed unmanned aerial vehicles: towards greater transparency and regulation of international transfers and use?

In recent years it has become clear that armed unmanned aerial vehicles (UAVs) or armed drones are no longer predominantly the domain of the USA.[81] Armed drones have proliferated both vertically and horizontally: vertically, with significant advancement of existing UAV technologies (mainly in the USA but also in some of the relatively few other countries already possessing armed drones, such as Israel and China); and horizontally, with

[79] United Nations, General Assembly, Outcome of the Sixth Biennial Meeting of States to Consider the Implementation of the Programme of Action to Prevent, Combat and Eradicate the Illicit Trade in Small Arms and Light Weapons in All Its Aspects, 8 June 2016.

[80] United Nations, General Assembly (note 72).

[81] For a discussion on early developments in UAV technology see Gormley, D., 'New developments in unmanned air vehicles and land-attack cruise missiles', *SIPRI Yearbook 2003*, pp. 409–32.

an increasing number of states including armed UAVs in their arsenals and with many, including Turkey, Saudi Arabia and the United Arab Emirates, deploying them on the battlefield. Rudimentary UAV technology has also proliferated among non-state actors in the form of explosives strapped to commercial UAVs.[82]

Whether armed UAVs pose threats that need to be controlled under specific rules—especially their use in so-called signature strikes or targeted killings—has been discussed in several international forums in recent years.[83] However, outside of a US proposal in August 2016 to internationally regulate the sale and use of armed drones (see below), there is very little international agreement on the need for new regulatory approaches.[84] In recent years over 30 states have made statements on armed drones at the UN General Assembly's First and Third Committees and at the UN Human Rights Council. In 2014 a Human Rights Council resolution was passed urging states to comply with international law and to ensure transparency, accountability and redress in their use of military drones.[85] In 2015 the UN Office for Disarmament Affairs published a study recommending that states work with civil society to develop transparency and confidence-building measures to increase trust between states regarding their use of military drones.[86]

At the 2016 First Committee meeting only one resolution was relevant to armed drones, namely L.21 on transparency in armaments, which adopts and requests the implementation of the recommendations of the Group of Governmental Experts (GGE) on the UN Register of Conventional Arms. In its 2016 report one of the GGE's recommendations was that 'unmanned combat aerial vehicles' be included in the categories of reporting for the register.[87] In April 2016 the European Forum on Armed Drones (a network of NGOs) issued a call to action from European governments, and in June

[82] Sayler, K., *A World of Proliferated Drones: A Technology Primer* (Center for a New American Security: Washington, DC, 2015); Holland Michel, A., '2016 drone year in review', Center for the Study of the Drone, 27 Dec. 2016; and Cole, C., 'Drone strikes spread as proliferation surges', Drone Wars UK, 6 Dec. 2016.

[83] See e.g. Anthony and Holland's discussion of the reports by UN special rapporteurs Heyns and Emmerson (note 23), pp. 429–31.

[84] US Department of State, 'Fact sheet: Joint Declaration for the Export and Subsequent Use of Armed or Strike-enabled Unmanned Aerial Vehicles (UAVs)', Office of the Spokesperson, Washington, DC, 5 Oct. 2016.

[85] United Nations, General Assembly, Human Rights Council, Resolution 25/22, 'Ensuring use of remotely piloted aircraft or armed drones in counter-terrorism and military operations in accordance with international law, including international human rights and humanitarian law', A/HRC/25/L.32, 24 Mar. 2014.

[86] United Nations Office for Disarmament Affairs, *Study on Armed Unmanned Aerial Vehicles: Prepared on the Recommendation of the Advisory Board on Disarmament Matters* (United Nations: New York, 2015).

[87] United Nations, General Assembly, 'Continuing operation of the United Nations Register of Conventional Arms and its further development', A/71/259, 29 July 2016.

the European Parliament held a hearing on the subject.[88] Furthermore, at the First Committee in October 2016 another group of NGOs signed a joint statement on armed UAVs, encouraging states, civil society and other parties to work towards an international agreement to prevent and mitigate harm resulting from their use.[89]

The US proposal to internationally regulate the sale and use of armed drones

During 2016 the USA sought to establish a set of multilaterally agreed standards for the export and use of armed UAVs. The effort resulted in the release of a statement in October 2016 laying out the key principles that states should apply in this area.[90] The statement notes that armed UAVs have the potential for misuse and 'could fuel conflict and instability, and facilitate terrorism and organized crime'. It cites a number of 'principles' that the signatories 'continue to recognize', including 'The applicability of international law, including both the law of armed conflict and international human rights law, as applicable, to the use of armed or strike-enabled UAVs', 'The importance of engaging in the responsible export of armed or strike-enabled UAVs in line with existing relevant international arms control and disarmament norms' and 'The importance of appropriate voluntary transparency measures on the export of armed or strike-enabled UAVs'. The declaration also sets the scene for further discussion to establish 'how these capabilities are transferred and used responsibly by all States'.[91]

Aside from the USA, the declaration was signed by over 40 states.[92] However, several significant producers and exporters of armed UAVs—in particular, Israel, China and Russia—did not sign. Reports indicated that the USA had pushed Israel to sign the statement but that domestic producers within Israel had resisted owing to their perception of the statement's potential to harm exports.[93] It was also reported that during the process of negotiating the statement several caveats were inserted that reduced the strength of the document. These included the insertion of language making it clear that its provisions should do nothing to 'undermine the legitimate interest of any

[88] European Forum on Armed Drones, 'The European Forum on Armed Drones (EFAD) Call to Action', 7 Apr. 2016; and Banks, M., 'MEPs adopt call for action on use of armed drones', *Parliament Magazine*, 30 June 2016.

[89] United Nations, General Assembly, First Committee on Disarmament and International Security, 'Civil society statement on armed drones', 12 Oct. 2016.

[90] US Department of State, 'Media note: Joint Declaration for the Export and Subsequent Use of Armed or Strike-enabled Unmanned Aerial Vehicles (UAVs)', Office of the Spokesperson, Washington, DC, 5 Oct. 2016.

[91] WorldECR, 'US and Allies Seek Standards for Armed Drone Exports', Sep. 2016.

[92] The states were Argentina, Australia, Austria, Belgium, Bulgaria, Canada, Chile, Colombia, Czech Republic, Estonia, Finland, Georgia, Germany, Hungary, Ireland, Italy, Japan, Latvia, Lithuania, Luxembourg, Malawi, Malta, Montenegro, the Netherlands, New Zealand, Nigeria, Paraguay, Philippines, Poland, Portugal, Republic of Korea, Romania, Serbia, Seychelles, Singapore, Slovakia, Slovenia, South Africa, Spain, Sri Lanka, Sweden, Ukraine, the United Kingdom and Uruguay.

[93] Cohen, G., 'Israel refuses to sign US document regulating attack drones', *Haaretz*, 23 Oct. 2016.

State to indigenously produce, export, or acquire such systems for legitimate purposes' and that the principles noted should be applied with 'due regard to national security considerations'. It was also reported that several governments had privately expressed concerns that the statement could be seen to legitimize the drone strike policies of the USA and potentially those of any other government that signed up to the statement.[94]

Increased transparency in the USA

The last six months of the Barack Obama presidency saw an outpouring of transparency initiatives on US drone strikes and other counterterrorism measures with the apparent aims of presenting clear guidelines on US policies, setting norms for other countries to follow (given the increased proliferation) and attempting to bind the succeeding US administration to similar policies. Overall, these initiatives demonstrate a level of transparency about such matters that is unmatched by any other state. In the United Kingdom, for example, the apparent change of policy signified by the country's first lethal drone strike in Syria on 21 August 2015 was not preceded by any parliamentary scrutiny or debate, and the government had not published any formulated policy.[95]

On 1 July 2016 the Obama Administration released official data on counterterrorism strikes and civilian casualties. It claimed that between 2009 and 31 December 2015, 473 strikes were launched outside 'areas of active hostilities', mostly with UAVs, killing between 2372 and 2581 terrorist combatants and between 64 and 116 civilians.[96] Coinciding with this data release, President Obama published an executive order—which does not require Congressional approval to take effect but has the same legal weight as laws passed by Congress—requiring the US Government to investigate allegations of civilian casualties resulting from US operations involving the use of force, including drone strikes, and taking responsibility and providing compensation to family members of the victims if the allegations are confirmed.[97] Since then, a coalition of human rights groups has started to press

[94] Stohl, R., 'New draft on drone export rules "more problematic" than original', *Defense News*, 29 Sep. 2016.

[95] Pressure from the UK's Joint Committee on Human Rights in due course opened up the debate. See Joint Committee on Human Rights, *The Government's Policy on the Use of Drones for Targeted Killing*, Second Report of Session 2015–16, HC 574/HL Paper 141, 10 May 2016; and Joint Committee on Human Rights, *The Government's Policy on the Use of Drones for Targeted Killing: Government Response to the Committee's Second Report of Session 2015–16*, Fourth Report of Session 2015–16, HC 747/HL Paper 49, 19 Oct. 2016.

[96] These figures exclude 'areas of active hostilities' such as Afghanistan, Iraq and Syria, where the bulk of US armed drone strikes have been carried out. Office of the Director of National Intelligence, 'Summary of information regarding US counterterrorism strikes outside areas of active hostilities', ODNI News Release no. 17-16, 1 July 2016.

[97] White House, 'Executive order: United States policy on pre- and post-strike measures to address civilian casualties in US operations involving use of force', Office of the Press Secretary, 1 July 2016.

for investigations of several cases involving suspected civilian fatalities from UAV strikes.[98]

As a result of a lawsuit by the American Civil Liberties Union, the US Administration released a redacted version on 5 August 2016 of the government's policy framework for drone strikes 'outside the United States and areas of actual hostilities', often called 'The Playbook'.[99] On 15 November 2016 the US manual on target development standards was released (or leaked). This contains the targeting procedures for both manned and unmanned strikes.[100] The US Administration announced on 25 November 2016 that it would expand the power of the Joint Special Operations Command to conduct attacks on terrorist cells, carried out by the 'Counter-External Operations Task Force'.[101] On 5 December 2016 the US Administration released the 'Report on the Legal and Policy Frameworks Guiding the United States' Use of Military Force and Related National Security Operations', which provides an overview of the legal policy positions on national security operations and the use of force overseas.[102] This document was accompanied by a presidential memorandum on transparency that urged future administrations to keep the public continuously informed on these issues.[103] Finally, on 6 December 2016 President Obama publicly defended his administration's record on counterterrorism in a major speech.[104]

Together, the speech and the newly published documents set out the broader US counterterrorism strategy based on a light military footprint, building local capacity in conflict zones and avoiding major overseas commitments. More specifically, they also sought to make the case that targeted killings of terrorist leaders, US Special Operations incursions and airstrikes in Afghanistan, Iraq, Libya, Pakistan, Somalia, Syria and Yemen are grounded in law.

However, several of the policy positions and legal principles set out in these announcements remain contested, especially outside the USA. For example, there is continuing uncertainty as to how the administration

[98] Devereaux, R. and Currier, C., 'Testing Obama's transparency pledge, groups send list of drone strikes to investigate', The Intercept, 6 Oct. 2016.

[99] Presidential Policy Guidance, 'Procedures for approving direct action against terrorist targets located outside the United States and areas of active hostilities', White House Memorandum, 22 May 2013.

[100] Chairman of the Joint Chiefs of Staff Instruction, *Target Development Standards*, CJCSI 3370.01B, 6 May 2016.

[101] Gibbons-Neff, T. and Lamothe, D., 'Obama administration expands elite military unit's powers to hunt foreign fighters globally', *Washington Post*, 25 Nov. 2016.

[102] White House, *Report on the Legal and Policy Frameworks Guiding the United States' Use of Military Force and Related National Security Operations* (White House: Washington, DC, Dec. 2016).

[103] White House, 'Presidential memorandum: steps for increased legal and policy transparency concerning the United States' use of military force and related national security operations', Office of the Press Secretary, 5 Dec. 2016.

[104] White House, 'Address to the Nation by the President', Office of the Press Secretary, 6 Dec. 2016.

decides whether to capture or kill 'high-value targets', makes the distinction between combatants and non-combatants and interprets 'imminent threats'. Furthermore, the numbers of civilian casualties reported by the USA seem very low compared with several NGO estimates. For example, estimated civilian fatalities of drone strikes in Pakistan alone range from 158 civilians according to the Long War Journal to somewhere between 424 and 966 according to the Bureau of Investigative Journalism.[105] Whereas the Obama Administration considered its counterterrorism standards to be scrupulous and drone strikes retained the support of much of the US public and Congress, critics in other countries, including some senior UN officials, human rights NGOs and potentially large parts of the Muslim world, viewed them as representing part of an arbitrary, clandestine and dangerous apparatus of targeted killing.[106]

[105] Roggio, B., 'Charting the data for US airstrikes in Pakistan, 2004–2017', Long War Journal, updated 16 June 2016; and Bureau of Investigative Journalism, 'Drone strikes in Pakistan'.

[106] Pew Research Center, 'Public continues to back US drone attacks', 28 May 2015; Bowcott, O., 'Drone strikes by US may violate international law, says UN', *The Guardian*, 18 Oct. 2013; Amnesty International, '"Will I be next?" US drone strikes in Pakistan', 22 Oct. 2013; and International Human Rights and Conflict Resolution Clinic (Stanford Law School) and Global Justice Clinic (NYU School of Law), *Living Under Drones: Death, Injury, and Trauma to Civilians from US Drone Practices in Pakistan*, Sep. 2012.