



**THE HUMAN RIGHTS  
IMPACT OF LESS  
LETHAL WEAPONS  
AND OTHER LAW  
ENFORCEMENT  
EQUIPMENT**

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# THE HUMAN RIGHTS IMPACT OF LESS LETHAL WEAPONS AND OTHER LAW ENFORCEMENT EQUIPMENT

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# EXECUTIVE SUMMARY

The United Nations Basic Principles on the Use of Force and Firearms by Law Enforcement Officials (henceforth BPUFF)<sup>1</sup> encourage States to develop less lethal weapons for law enforcement officials in order to enable a graduated response in the use of force and to offer a less injurious alternative to equipment currently in use.<sup>2</sup> In the 25 years since the BPUFF were adopted, the technology of such less lethal equipment and weapons has developed considerably.<sup>3</sup> There has also been an increase in the number of companies manufacturing and trading in such equipment and in their geographical spread into countries with weak or non-existent controls over product development, manufacturing quality or trade and export. Not all the developments in the field have been positive. Far from, “restraining the application of means capable of causing death or injury to persons,”<sup>4</sup> certain items of equipment are inherently more injurious than others and increase, not decrease, the risk of injury. Other items of law enforcement equipment may, in general, enable a particular law enforcement task to be achieved with a lesser use of force but can cause death or serious injury if used in inappropriate or illegitimate ways.

For example, the use of equipment usually classified as riot control devices such as water cannons, kinetic impact rounds (also known as plastic and rubber bullets or projectiles), and chemical irritants such as pepper spray and tear gas can result in serious injury and even death.

This paper focuses on a selection of less lethal law enforcement weapons and equipment commonly used in places of detention and in the policing of protests in the following five categories: restraints, kinetic impact devices, chemical irritants (including riot control agents),<sup>5</sup> electric shock devices, and other technologies such as acoustic devices. It includes those commonly used for, or that have no other purpose than, torture or other ill-treatment. In each category it assesses whether the equipment has particular physical/medical effects, specific human rights concerns, and whether it has a legitimate use and, if so, the necessary controls that should apply to prevent misuse, or whether the use of the device should be prohibited outright or suspended pending further research by independent experts.

The paper also highlights that it is necessary to look not just at how a particular weapon or restraint is used, but also at whether, and to what extent, it should be made available for use in the first place. It concludes by listing a number of cross-cutting issues common to many, if not all, equipment and restraints included in this paper. It also highlights how some categories of weapons, such as body worn electric shock devices, spiked batons and thumb-cuffs, have no legitimate law enforcement purpose and should never be issued to law enforcement officials.

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**1** Basic Principles on the Use of Force and Firearms by Law Enforcement Officials.

**2** Article 2 of the Basic Principles states that, “Governments and law enforcement agencies should develop a range of means as broad as possible and equip law enforcement officials with various types of weapons and ammunition... These should include the development of non-lethal incapacitating weapons for use in appropriate situations, with a view to increasingly restraining the application of means capable of causing death or injury to persons.”

**3** Although the term non-lethal is used in the BPUFF, this report will use the term less lethal in recognition of the fact that the use of all types of weapons and devices can carry some risk of causing injury or death.

**4** Article 2 of the Basic Principles on the Use of Force and Firearms by Law Enforcement Officials, see above.

**5** Under some national and international laws, for example in the Chemical Weapons Convention, some types of chemical irritants are also known as Riot Control Agents.

# LEGAL FRAMEWORK

Law enforcement officials have a duty to serve the community and to protect individuals against illegal acts, including violent crime.<sup>6</sup> At times, this may require the use of force; for example, to arrest an individual posing a threat of violence if other means remain ineffective or without any promise of achieving the intended result.<sup>7</sup> Yet the legal power to use force also brings with it a responsibility to use such force in compliance with human rights standards. These standards require force to be used only in strictly defined circumstances and only when its use is lawful, necessary, and proportionate for the law enforcement objective.<sup>8</sup> As stated in the BPUFF, the protection of uninvolved persons must be given absolute priority. In particular, no law enforcement operation may be planned or conducted in a way that accepts from the onset the killing of uninvolved persons by the intervening law enforcement officials. In terms of the use of force as a response to violence, law enforcement officials shall distinguish between those individuals who are engaged in violence and those who are not (be they peaceful demonstrators or uninvolved bystanders) and carefully target only those engaged in violence.<sup>9</sup> Those exercising such force, as well as those authorising or supervising its use, must be held accountable for any misuse of this power. Restrictions on the use of force derive from the Convention against Torture (CAT) and the International Covenant on Civil and Political Rights (ICCPR), as well as in the BPUFF, the UN Code of Conduct for Law Enforcement Officials (CCLEO) and the UN Standard Minimum Rules for the Treatment of Prisoners (SMRs). Such treaties and standards play a key role in setting out universal guidelines for the use of weapons and restraints by police and correctional officers.

Amnesty International and Omega acknowledge the importance of developing less lethal weapons, equipment and techniques to decrease the risk of death or injury inherent in police use of firearms or existing weapons such as batons and other kinetic impact devices. Much of this equipment can have a legitimate use in law enforcement if used correctly and in line with international standards for law enforcement outlined above. When used responsibly by well-trained and fully accountable law enforcement officials, such equipment can help prevent and minimize deaths, injuries and harm to assailants, suspects and detainees, while also protecting the police and prison officers themselves. Yet such equipment can have unintended dangerous and even lethal effects if not used in compliance with human rights standards, and is also open to abuse. Amnesty International has documented a wide range of human rights violations – including torture and other ill-treatment in custody, as well as excessive, arbitrary and unnecessary use of force in the policing of public assemblies – perpetrated by law enforcement officials using such legitimate equipment, often by the misuse of devices as simple as handcuffs.<sup>10</sup>

Both less lethal weapons and restraints have developed considerably since the adoption of the international standards mentioned above. For example, when the BPUFF was adopted in 1990, neuromuscular incapacitating projectile electric-shock weapons had not yet been developed.<sup>11</sup> The Taser brand of such weapons is now reportedly used by more than 17,000 law enforcement and military agencies worldwide.<sup>12</sup> Similarly, the SMR, adopted in 1955, mention “chains and irons” but do not mention, for example, restraint chairs or body worn electric shock devices.<sup>13</sup> Rules for the use

<sup>6</sup> Article 1 of the Code of Conduct for Law Enforcement Officials states that, “Law enforcement officials shall at all times fulfil the duty imposed upon them by law, by serving the community and by protecting all persons against illegal acts, consistent with the high degree of responsibility required by their profession.”

<sup>7</sup> Principle 4, Basic Principles on the use of Force and Firearms by Law Enforcement Officials.

<sup>8</sup> Article 3 of the Code of Conduct for Law Enforcement Officials states that, “Law enforcement officials may use force only when strictly necessary and to the extent required for the performance of their duty.”

<sup>9</sup> Principle 3, Basic Principles on the use of Force and Firearms by Law Enforcement Officials.

<sup>10</sup> Examples can be found in the following report, Amnesty International, Annual Report 2014/2015, available at <https://www.amnesty.org/en/annual-report-201415>, last accessed 26 March 2015.

<sup>11</sup> According to Taser International, the market leader of such devices, an earlier model, the Air Taser Model 34000 was approved in 1993, but it was not until December 1999 that the company’s first Neuro Muscular Incapacitation device, the ADVANCED TASER M Series Systems was released. Available from <http://www.taser.com/corporate-history>, last accessed 17 March 2015.

<sup>12</sup> Taser International, Taser International Statistics, 2012. Available from <http://www.taser.com/press-kit>, last accessed 17 March 2015.

<sup>13</sup> Amnesty International, *The Pain Merchants: Security equipment and its use in torture and other ill-treatment*, 2003, states that, “For almost half a century, international human rights standards have required governments to prohibit the use of chains and irons, such as shackles, on prisoners. The standards have not been updated, so for instance do not mention other materials such as plastic. Rule 33 of the United Nations Standard Minimum Rules for the Treatment of Prisoners, adopted in 1955, states: “Chains or irons shall not be used as restraints” and, moreover, that “Instruments of restraint, such as handcuffs, chains, irons and strait-jackets, shall never be applied as a punishment.””

of less lethal weapons are not clearly defined partly due to the complexity and variety of less lethal weapons available today and the huge range of situations where law enforcement officials may be required to use them. Preferences for different types of less lethal weapons and restraints, and views about appropriate use, vary widely among different law enforcement agencies in different States, and there is often insufficient medical and scientific research to assess their efficacy and safety.

The Report of the Special Rapporteur on extrajudicial, summary or arbitrary executions, Christof Heyns, to the Human Rights Council of April 2014 cites the BPUFF and developments in technologies since it was adopted and confirms the need for, “A more nuanced and analytical approach.” The report recognizes that the increasing availability of various less lethal weapons can lead to greater restraint in the use of firearms and allow for graduated use of force, although notes that this depends on the characteristics of the specific weapons and the context of its use and that in some cases less lethal weapons are indeed lethal and can lead to serious injuries. Such risks will be dependent on the type of weapon, the context of its use, and the vulnerabilities of the persons against whom they are used; bystanders may also be affected where weapons cannot be aimed at one individual. The report notes that the growing, largely self-regulated market of less lethal weapons cannot solely determine policing weapons technology, especially when it could involve unacceptable human cost. It identifies the, “Need for independent guidelines on the development and use of these weapon technologies, over and above standards that may be set by individual police forces or the manufacturers,” and notes that it may be necessary to place restraints on the international trade and proliferation of these weapons.<sup>14</sup>

These issues were raised again in the Special Rapporteur’s 2014 Report to the UN General Assembly.<sup>15</sup> The report underscored that, “The use of force against the human person, including the use of deadly or potentially deadly force by agents of the State, is a central human rights concern.” The report reminds that whilst less lethal equipment enables law enforcement officials to respond to situations with a graduated use of force as cited by BPUFF Principles 2, 4 and 5, “Almost any use of force against the human person can under certain circumstances lead to loss of life or serious injury.” Moreover, under human rights law the requirement is, “Not merely to distinguish between lethal and any non-lethal force. Even if it is unlikely to lead to death, the force used must still be the minimum required by the circumstances of each case.” The report also places emphasis and importance on precautionary measures such as appropriate independent testing of and training in each type of device issued, in a range of situations, and in accordance with agreed standards.

## THE RIGHT TO FREEDOM OF PEACEFUL ASSEMBLY

Less lethal weapons and devices are often deployed and frequently misused during the policing of protests. The following section outlines international standards and also provides examples of when less lethal devices have resulted in serious and unnecessary injuries and even death. The right to freedom of peaceful assembly, together with the closely related rights of freedom of association and freedom of expression, is enshrined in human rights treaties including the ICCPR.<sup>16</sup> States have an obligation to respect, protect and fulfil these rights, that is, to ensure that their own agents do not violate these rights and that no restrictions are imposed on these rights other than those which are prescribed by law and are lawful, necessary and proportionate for a legitimate purpose permitted under international law; to protect the exercise of these rights against interference by third parties; and to ensure that individuals within their jurisdiction are able to exercise these rights in practice.

As the UN Special Rapporteur on the rights to freedom of peaceful assembly and of association, Maina Kiai, has underlined, this means that states have a positive obligation under international human rights law not only to actively protect peaceful assemblies, but to facilitate the exercise of the right to freedom of peaceful assembly.<sup>17</sup>

<sup>14</sup> Report to the Human Rights Council of the Special Rapporteur on extrajudicial, summary or arbitrary executions, A/HRC/26/36, Section II, E.

<sup>15</sup> Report to the UN General Assembly of the Special Rapporteur on extrajudicial, summary or arbitrary executions, A/69/265, Section IV.

<sup>16</sup> ICCPR, Article 21; see also Article 25.

<sup>17</sup> Report of the Special Rapporteur on the rights to freedom of peaceful assembly and of association, reports to the Human Rights Council, A/HRC/20/27, para. 27, and A/HRC/23/29, para. 49.

The Organization for Security and Cooperation in Europe (OSCE) Office for Democratic Institutions and Human Rights (ODIHR), together with the Council of Europe's European Commission for Democracy through Law (Venice Commission), has issued detailed Guidelines on Freedom of Peaceful Assembly with a view to assisting states in ensuring that their law and practice on freedom of peaceful assembly complies with European and international standards.<sup>18</sup> The UN Special Rapporteur on the rights to freedom of peaceful assembly and of association has stated that he considers these guidelines to be the most advanced set of good practices available.<sup>19</sup>

The right to freedom of peaceful assembly can be exercised by individuals, groups and associations. Facilitating participation in peaceful assemblies helps ensure that people have the opportunity to express opinions they hold in common with others and facilitates dialogue within civil society and among civil society, political leaders and government,<sup>20</sup> as well as being important for the full enjoyment of other human rights.<sup>21</sup>

The UN Special Rapporteur on the rights to freedom of peaceful assembly and of association has highlighted the presumption in favour of holding peaceful assemblies, also stressed in the OSCE/ODIHR Guidelines, which means that an assembly should be presumed lawful and not constituting a threat to public order.<sup>22</sup> The OSCE/ODIHR Guidelines make clear that the peaceful intentions of organisers of demonstrations should be presumed unless there is compelling and demonstrable evidence that those organizing or participating in that particular event themselves intend to use, advocate or incite imminent violence.<sup>23</sup>

Analysis of law enforcement events where less lethal weapons or equipment have been used highlights the risk that their use can amount to arbitrary or excessive use of force amounting to torture - as outlined in the Report of the Special Rapporteur on torture and other cruel, inhuman or degrading treatment or punishment which includes details of excessive use of force during demonstrations in Morocco. "The Special Rapporteur reiterates that excessive use of force is prohibited under international law and that law enforcement officials, in carrying out their duties, are to apply non-violent means before resorting to the use of force and firearms. Depending on the seriousness of the pain and suffering inflicted, excessive use of force may constitute cruel, inhuman or degrading treatment or even torture."<sup>24</sup>

## PROHIBITION ON TORTURE AND OTHER CRUEL, INHUMAN OR DEGRADING TREATMENT OR PUNISHMENT

Despite the prohibition on torture clearly established in international law, there are some types of less lethal weapons that are commonly used for, or have no other purpose than, torture or ill-treatment. Torture and other cruel, inhuman or degrading treatment or punishment is prohibited under international law and is a rule of customary international law,<sup>25</sup> binding on all states whether or not they are parties to particular treaties which contain the prohibition. The prohibition on torture is also considered a norm of *jus cogens*.<sup>26</sup> The prohibition on torture or other ill-treatment is absolute and can never be subject to any limitation or suspended, even in times of war, threat of war, internal political instability or states of emergency.

<sup>18</sup> OSCE Office for Democratic Institutions and Human Rights (ODIHR), Guidelines on Freedom of Peaceful Assembly, 2nd Ed, 2010, referred to hereafter as OSCE/ODIHR Guidelines.

<sup>19</sup> Report of the Special Rapporteur on the rights to freedom of peaceful assembly and of association, report to the Human Rights Council, A/HRC/20/27, footnote 7.

<sup>20</sup> See, for example, OSCE/ODIHR Guidelines, p. 23, para. 2. See also European Court of Human Rights, *Djavit An v. Turkey*, No. 20652/92, 9 July 2003 para. 56.

<sup>21</sup> See, for example, UN Human Rights Council Resolution 24/5, A/HRC/RES/24/5, adopted without a vote 26 September 2014, para 5, Available from [http://ap.ohchr.org/documents/dpage\\_e.aspx?si=A/HRC/RES/24/5](http://ap.ohchr.org/documents/dpage_e.aspx?si=A/HRC/RES/24/5), last accessed 26 March 2015.

<sup>22</sup> Report to the Human Rights Council of the Special Rapporteur on the rights to freedom of peaceful assembly and of association, A/HRC/23/39, para. 50.

<sup>23</sup> OSCE/ODIHR Guidelines, para. 25.

<sup>24</sup> Report to the Human Rights Council of the Special Rapporteur on torture and other cruel, inhuman or degrading treatment or punishment, Mission to Morocco, A/HRC/22/53/Add.2, para. 22.

<sup>25</sup> See e.g. International Court of Justice, *Case Concerning Ahmadou Sadio Diallo (Republic of Guinea v. Democratic Republic of the Congo)*, Judgment of 30 November 2010, para. 87.

<sup>26</sup> *Jus cogens* refers to certain fundamental, overriding principles of international law, which cannot be contradicted by treaty law or by other rules of international law, and which may also invalidate any provisions of any international treaties which are inconsistent with such norms.

In 2014, Amnesty International recorded and investigated human rights abuses in 160 countries and territories worldwide and found that in 82% (131 out of 160) of the countries people were tortured or otherwise ill-treated.<sup>27</sup>

The use and misuse of less lethal devices can have a particularly severe impact on certain vulnerable groups of individuals, such as children, pregnant women, people with pre-existing medical conditions, and the elderly. This is acknowledged for example, in the Bangkok Rules (for Treatment of Women Prisoners) which state, “Instruments of restraint shall never be used on women during labour, during birth and immediately after birth.”<sup>28</sup>

Similarly measures to UN Member States on how to protect children from the excessive use of force when in contact with the justice system acknowledge them as a vulnerable group. The UN Model Strategies and Practical Measures on the Elimination of Violence against Children in the Field of Crime Prevention and Criminal Justice specifically refer to the use of force and types of law enforcement equipment and calls for the prohibition of, “The use of firearms, electric shock weapons and violent methods to apprehend and arrest children and to adopt measures and procedures that carefully limit and guide the use of force and instruments of restraint by the police while apprehending or arresting children.”<sup>29</sup> Further, it calls for states, “To adopt and implement strict policies guiding the use of force and physical restraints on children during their detention,”<sup>30</sup> and, “To adopt policies prohibiting the carrying and use of weapons by personnel in any facility where children are detained.”<sup>31</sup>

Concerns were also outlined in the 2012 report of the Office of the Special Representative of the UN Secretary General on Violence against Children. The report, Prevention of and responses to violence against children within the juvenile justice system, specifically notes that, “The use of Tasers during the arrest of children is a situation of particular concern,”<sup>32</sup> and that, “The use of restraints or force, except in specified exceptional circumstances,” should be prohibited.<sup>33</sup>

The interim report of the Special Rapporteur on torture and other cruel, inhuman or degrading treatment or punishment, Juan Méndez, of 9 August 2013 stated that, “The use of physical restraints that are inherently inhuman, degrading or painful (such as electro-shock stun belts and restraint chairs) has humiliating and degrading effects and has been condemned and prohibited by both the Special Rapporteur and the Committee against Torture as methods of restraining those in custody.”<sup>34</sup>

With particular reference to types of law enforcement equipment, in 2000 the Committee against Torture recommended that the USA, “Abolish electro-shock stun belts and restraint chairs as methods of restraining those in custody; their use almost invariably leads to breaches of article 16 of the Convention.”<sup>35</sup> Article 16 of the Convention includes, “Each State Party shall undertake to prevent in any territory under its jurisdiction other acts of cruel, inhuman or degrading treatment or punishment which do not amount to torture as defined in article I, when such acts are committed by or at the instigation of or with the consent or acquiescence of a public official or other person acting in an official capacity. In particular, the obligations contained in articles 10, 11, 12 and 13 shall apply with the substitution for references to torture of references to other forms of cruel, inhuman or degrading treatment or punishment.”<sup>36</sup>

<sup>27</sup> Amnesty International, Annual Report 2014/2015, available from <https://www.amnesty.org/en/annual-report-201415>, last accessed 26 March 2015.

<sup>28</sup> United Nations Rules for the Treatment of Women Prisoners and Non-custodial Measures for Women Offenders (the Bangkok Rules), Resolution 2010/16, available from <http://www.un.org/en/ecosoc/docs/2010/res%202010-16.pdf>, last accessed 26 March 2015.

<sup>29</sup> United Nations Model Strategies and Practical Measures on the Elimination of Violence against Children in the Field of Crime Prevention and Criminal Justice, A/C.3/69/L.5, para. 34.c.

<sup>30</sup> United Nations Model Strategies and Practical Measures on the Elimination of Violence against Children in the Field of Crime Prevention and Criminal Justice, A/C.3/69/L.5, para. 39.c.

<sup>31</sup> United Nations Model Strategies and Practical Measures on the Elimination of Violence against Children in the Field of Crime Prevention and Criminal Justice, A/C.3/69/L.5, para. 39.d.

<sup>32</sup> Prevention of and responses to violence against children within the juvenile justice system, September 2012, p.11, available from [http://srsg.violenceagainstchildren.org/sites/default/files/publications\\_final/web\\_juvenile\\_justice\\_final.pdf](http://srsg.violenceagainstchildren.org/sites/default/files/publications_final/web_juvenile_justice_final.pdf), last accessed 26 March 2015.

<sup>33</sup> Ibid. p.23.

<sup>34</sup> Interim Report to the General Assembly of the Special Rapporteur on torture and other cruel, inhuman or degrading treatment or punishment, A/68/295, Section III, para. 58.

<sup>35</sup> Report of the Committee against Torture, A/55/44, para. 180(c).

<sup>36</sup> Article 16 of the Convention against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment.

## CONTROLS OF TRADE AND TRANSFER

The international trade in equipment intended for law enforcement is, in most states subject to considerably less stringent controls than apply to trade in most types of conventional military weapons and munitions. Chemical irritants and associated launchers are often covered under strategic export controls, for example as agreed in the Wassenaar Arrangement of 41 arms exporting states.<sup>37</sup> However the trade in other security and law enforcement equipment is, with the exception of the EU and the USA, in many cases unregulated.

The UN General Assembly has repeatedly called upon all states, “To take appropriate effective legislative, administrative, judicial and other measures to prevent and prohibit the production, trade, export, import and use of equipment that have no practical use other than for the purpose of torture or other cruel, inhuman or degrading treatment or punishment.”<sup>38</sup> Certain jurisdictions – notably the EU (see below) – have already adopted a regulation on the transfer of certain law enforcement equipment, prohibiting the international trade in such equipment and imposing controls on the trade in a range of law enforcement and security equipment which has the potential to be misused for such violations of human rights.<sup>39</sup>

Some equipment should be considered inherently abusive when measured against the legal obligations of the CAT, as well as against international standards on policing and detention outlined in this text. The promotion, trade and export of such equipment (including body worn electric shock belts and spiked batons for example) is already prohibited by the EU – a position reinforced by the 2013 UN General Assembly resolution on torture and other cruel, inhuman or degrading treatment.<sup>40</sup> Other equipment - for instance ordinary handcuffs or certain types of crowd control equipment – can have a legitimate role in law enforcement, but its trade and use need to be strictly controlled in line with international standards for law enforcement to safeguard against potential misuse.

In 2006 the EU introduced the world’s first multilateral trade controls to prohibit the international trade in equipment which has no practical use other than for the purposes of capital punishment, torture or other cruel, inhuman or degrading treatment or punishment; and to control the trade in a range of policing and security equipment misused for such violations of human rights. Council Regulation (EC) No 1236/2005 of 27 June 2005 concerning trade in certain goods which could be used for capital punishment, torture or other cruel, inhuman or degrading treatment or punishment (the Regulation) filled a major gap in human rights based export controls. It introduced unprecedented, binding trade controls on a range of equipment which is often used in capital punishment, torture and other ill-treatment, but which has not usually been included on EU Member States’ military, dual-use or strategic export control lists. A new legally binding EU regulation adopted on 16 July 2014, EC Regulation No 775/2014, expanded the list of equipment that must be banned and expanded the list of security equipment that must be strictly controlled. The lists of prohibited goods now include weighted leg restraints, restraint chairs and whips.<sup>41</sup>

In the US, the Export Administration Act of 1979 and accompanying subsequent regulations require companies to obtain licences for the export of a range of goods including mechanical restraint devices (e.g. leg irons and handcuffs), electric shock equipment (e.g. stun guns and stun cuffs) and tear gas cartridges, grenades and launchers. The category, “Specially designed implements of torture,” (thumb-screws, thumb-cuffs, finger-cuffs and spiked batons) is included in the US export control lists, but authorizations for these items are placed under a ‘presumption of denial’ so in prac-

<sup>37</sup> Wassenaar Arrangement, available from [www.wassenaar.org/introduction/index.html](http://www.wassenaar.org/introduction/index.html), last accessed 26 March 2015.

<sup>38</sup> See for instance UN General Assembly resolutions entitled “Torture and other cruel, inhuman or degrading treatment or punishment,” resolutions 66/150, 19 December 2011, para. 24; 67/161; 20 December 2012, para. 25; 68/156; and 18 December 2013, para. 30.

<sup>39</sup> Council Regulation (EC) No 1236/2005 of 27 June 2005 concerning trade in certain goods which could be used for capital punishment, torture or other cruel, inhuman or degrading treatment or punishment, published in Official Journal of the European Union, L200/1, 30 July 2005, available from <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2005:200:0001:0019:EN:PDF>, last accessed 26 March 2015.

<sup>40</sup> See Council Regulation (EC) No 1236/2005 of 27 June 2005 concerning trade in certain goods which could be used for capital punishment, torture or other cruel, inhuman or degrading treatment or punishment, published in Official Journal of the European Union, L200/1, 30 July 2005, available from <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2005:200:0001:0019:EN:PDF>, last accessed 26 March 2015; and United Nations, General Assembly resolution 68th Session, Third Committee, Torture and other cruel, inhuman or degrading treatment or punishment, 68/156, A/68/456/Add.1), para. 30, available from [www.un.org/en/ga/search/view\\_doc.asp?symbol=A/RES/68/156](http://www.un.org/en/ga/search/view_doc.asp?symbol=A/RES/68/156), last accessed 26 March 2015.

<sup>41</sup> Council Regulation (EC) No 1236/2005 of 27 June 2005, see above.

tice such items are banned from export.<sup>42</sup> However, the US export laws and regulations have certain deficiencies and Amnesty International and Omega have called for them to be strengthened. For example, the control lists do not include water cannon, and the activity of brokering is not regulated. Nevertheless, the export control laws and regulations of the US are more developed than those of most other states.

Given the risks to human rights posed by weapons and equipment used for law enforcement and states' extra-territorial obligations under international law,<sup>43</sup> Amnesty International and Omega believe that all states must have in place robust regulatory mechanisms. These should include a licensing system for transfers that safeguard against potential abuse of such equipment by the end user.

The next section presents a small selection of specific types of law enforcement and equipment used in custodial contexts currently in use worldwide, with associated human rights concerns, measured against existing international human rights standards. It is not exhaustive but the methodology could be extended to any type of equipment in use.

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<sup>42</sup> See Overview of US Export Control System, available from [www.state.gov/strategictrade/overview](http://www.state.gov/strategictrade/overview), last accessed 26 March 2015; and Final Rule Revisions to the commerce control list to update and clarify crime control license requirements. RIN 0694-AE42. Federal Register / Vol. 75, No. 135, 15 July 2010.

<sup>43</sup> Extra-territorial obligations are obligations of states under international law which extend beyond their territorial borders. They are linked to the ability or obligation of states to exercise their jurisdiction beyond borders.

# RESTRAINTS

This section presents a selection of restraints which are items of equipment applied to the body to restrict the movement of an individual. In some extreme cases they are used to prevent movement altogether.

## THUMB-CUFFS



### Description

Restraint device designed to be placed around the detainee's thumbs consisting of two small cuffs connected by a chain or a solid metal bar. Some cuffs are internally serrated.

### Physical/medical effects

Risk of direct injury to thumbs by excessive pressure, high risk of fracture of delicate bones, nerve damage. Increased risk of injury from falls because the detainee cannot cushion the fall.

### Human rights concern

Risk that they may be used to facilitate torture or other ill-treatment through ease of inflicting pain or used in 'stress positions' to restrain prisoner's thumbs behind their back.

### Amnesty International and Omega position

Its use does not meet a legitimate law enforcement objective that cannot be effectively accomplished with safer alternatives.

### Amnesty International and Omega recommendation

Prohibit the use of thumb-cuffs in law enforcement and corresponding production and transfer. Ensure that law enforcement officials, in cases where it is necessary to restrain a detainee or prisoner, do so using ordinary handcuffs or soft restraints in a humane manner so that its use does not violate the prohibition of torture and other ill-treatment.

## CUFFS – FIXED



### Description

A single (or double) cuff to restrain a person to a solid fixing in a wall, floor or other fixed object through means of an integral bolt or other fixing device.

### Physical/medical effects

Loss and restriction of mobility and movement. Bruising/cutting into the skin (eg wrists or ankles), dislocation of limbs, nerve damage.

### Human rights concern

Significantly restricts movement. Risk that they may be used to facilitate torture or other ill-treatment e.g. in 'stress positions', or suspending prisoners from walls etc.

### Amnesty International and Omega position

Its use does not meet a legitimate law enforcement objective that cannot be effectively accomplished with safer alternatives and would be considered inhuman and degrading treatment.

### Amnesty International and Omega recommendation

Prohibit the use of fixed wall and floor restraints in law enforcement and production and transfer.

## LEG IRONS



### **Description**

Metal rings, hinged or non-hinged, fixed around the ankles by means of bolt or screw arrangement, non-adjustable, linked with a bar or chain.

### **Physical/medical effects**

Often attached for prolonged use which can lead to nerve damage, soft tissue injuries and lacerations (risk of blood poisoning) and other long term physical impairments.

### **Human rights concern**

Significantly restricts movement. Risk that they may be used to facilitate torture or other ill-treatment e.g. in punishment or 'stress positions'.

### **Amnesty International and Omega position**

Its use does not meet a legitimate law enforcement objective that cannot be effectively accomplished with safer alternatives.

### **Amnesty International and Omega recommendation**

Prohibit the use of leg irons in law enforcement and production and transfer.

## WEIGHTED LEG IRON



### Description

A leg restraint which is unnecessarily heavy over and above the physical strength of material needed to adequately restrain a human. It may have weights added (for example on the chain link) or be made from heavy or extra thick material. Fixed around the ankles and non-adjustable.

### Physical/medical effects

Nerve damage, soft tissue injuries and lacerations (risk of blood poisoning), ankle damage and other long term physical impairments. Leg injuries due to additional weight. Restricted movement.

### Human rights concern

Significantly restricts movement. Infliction of unwarranted pain and risk of injury.

### Amnesty International and Omega position

Its use does not meet a legitimate law enforcement objective that cannot be effectively accomplished with safer alternatives.

### Amnesty International and Omega recommendation

Ban the use of weighted leg irons, and all other weighted leg restraints in law enforcement and production and transfer.

## RESTRAINT CHAIRS



### Description

A chair arrangement (metal, plastic or other material) in which a detainee is restrained by means of a multiplicity of straps or restraints at points which can include the wrist, elbow, shoulder, chest, waist, thigh or ankle. Restraints may be soft, fabric, leather or metal (adjustable or fixed). Can be wheeled for transporting a prisoner.

### Physical/medical effects

Risk of injury if subject is left unattended. If restrained for long periods loss of movement, pressure sores and injury from restraints. Chest or other restraints can restrict breathing, or become a ligature around the neck and lead to strangulation. Additional risks if the subject is under the influence of drugs or alcohol.

### Human rights concern

Can restrict all movement, even of hands and arms with which to defend oneself. Heightened vulnerability of restrained person. Risk of abuse if any additional force is used on restrained person e.g. using pepper spray. Risk of degrading treatment if the person is unable to relieve themselves in the normal way.

### Amnesty International and Omega position

Its use does not meet a legitimate law enforcement objective that cannot be effectively accomplished with safer alternatives.

### Amnesty International and Omega recommendation

Prohibit the use of restraint chairs in law enforcement and production and transfer.

# KINETIC IMPACT DEVICES

This section presents a selection of kinetic impact devices included hand-held devices such as batons, truncheons, sticks and clubs, as well as launched kinetic impact projectiles.

## SPIKED BATON



### Description

A baton with sharp spikes the entire length. Can be made from metal or other material.

### Physical/medical effects

If scraped across a subject it would cause lacerations, skin wounds and bruising. If used to strike a subject will cause puncture wounds, lacerations and bruising. Severe physical pain and injury would result from any use of a spiked baton.

### Human rights concern

Severe pain and injury as well as the threat of causing pain and unnecessary injury. The use of a spiked baton would amount to the use of excessive force and would also violate the prohibition on torture and other cruel, inhuman or degrading treatment.

### Amnesty International and Omega position

Its use does not meet a legitimate law enforcement objective that cannot be effectively accomplished with safer alternatives.

### Amnesty International and Omega recommendation

Prohibit the use of spiked batons in law enforcement and production and transfer.

## HAND-HELD KINETIC IMPACT 'STRIKING WEAPONS'



### Description

Hand-held devices such as batons, truncheons, sticks and clubs are used to strike an individual to cause or threaten physical pain and injury. They can be made of wood, plastic, metal or other material and can be short or long (20cm – 2m), telescopic, collapsible or side-handled.

### Physical/medical effects

Can include bruising, laceration, broken bones, concussion and other head injuries, including death. Longer batons can inflict high levels of force. Used end-on to impact into or poke a subject's body they can cause internal organ injury and bleeding.

### Human rights concern

This equipment is widely misused by law enforcement officials to inflict unnecessary or excessive force in a manner that can easily cause unwarranted injury. Risk of brain injury or death if head or other sensitive areas are impacted by over-arm strikes.

### Amnesty International and Omega position

Strict human rights based scenario training is required in order for law enforcement officials to use correctly to mitigate the risk of excessive or unnecessary use of force causing unwarranted injury.

### Amnesty International and Omega recommendation

Strictly control the use of hand-held kinetic impact striking weapons and regulate the development and transfer of such weapons.

## KINETIC IMPACT PROJECTILES INCLUDING PLASTIC AND RUBBER BULLETS AND OTHER PROJECTILES SUCH AS BEAN BAGS



### Description

Similar to conventional rounds of ammunition with a cartridge case but when fired, propel a range of different projectiles to the target. Projectiles can be made of wood, rubber, plastic or other materials (e.g. fabric bags weighted with lead shot). Single and multiple projectiles can be fired including e.g. balls, segments, blocks or cylinders of wood, plastic or rubber. On impact they are designed to cause blunt trauma (i.e. non-penetrating trauma). They are fired from a wide range of types of launchers and vary between direct fire impact rounds and indirect fire (also known as 'skip fired') rounds which are intended to be fired into the ground in front of the target.

### Physical/medical effects

Blunt trauma causes bruising. More serious injuries are common including, lacerations, broken bones, concussion, head injuries, internal organ damage or failure/bleeding. Launched projectiles can cause serious injury or death especially if fired at close range or aimed at sensitive parts of the body e.g. the head, chest and abdomen. Even when used according to the manufacturer's instructions they can cause serious and life threatening injuries. In particular, small projectiles increase the risk of eye injuries and penetration of the eye or skin.

### Human rights concern

Launched projectiles are inherently inaccurate and multiple projectiles are indiscriminate with a high risk of uninvolved bystanders being hit. Many such projectiles impact the body with excessive energy leading to injury risk, especially at short ranges.

### Amnesty International and Omega position

The effects and the proper use of kinetic impact projectiles and launchers must be independently evaluated and controlled. Many launched projectiles cannot be used safely as they are inherently inaccurate and cannot be targeted to project force in accordance with human rights standards.

### Amnesty International and Omega recommendation

Ammunition firing multiple projectiles is notoriously inaccurate, indiscriminate and arbitrary and should be prohibited.

In the case of those other types of impact projectiles which are so inaccurate or impact with excessive energy {such as rubber coated metal bullets} that they cannot be used safely Amnesty International and Omega recommend such types are prohibited.

For all other types strictly control the design, transfer, selection and testing and ensure a thorough, independent review based on international human rights law and standards is carried out by independent medical, legal, police and other experts to ascertain whether the equipment is fit for use in law enforcement.

The use of kinetic impact projectiles should be strictly limited to situations of violent disorder posing a risk of harm to persons, where the projectiles are used in order to contain and stop the violence and only when less extreme means are insufficient to achieve this objective. The projectiles must be carefully targeted and aimed only at persons directly involved in such violence and must never be aimed at the head, upper body or groin areas. They should not be intentionally rebounded off the ground before striking the target. Where possible, clear warnings should be given before firing them. Medical care must be promptly made available to anyone injured by such projectiles. Multiple projectiles are inaccurate, cannot be targeted only to an individual engaged in violence and cause unwarranted injury and therefore have no legitimate law enforcement use.

# CHEMICAL IRRITANTS

This section presents 2 examples of chemical irritants.

## CHEMICAL IRRITANTS (INCLUDING RIOT CONTROL AGENTS).



### Description

Chemical irritants are designed to temporarily deter or disable an individual by producing sensory irritation. They are commonly defined as locally acting chemical agents that rapidly produce disabling physical effects through sensory irritation of the eyes and upper respiratory tract which disappear within a short time following termination of exposure. A number of chemicals are used, most commonly: CN, CS, OC/Pepper and PAVA. Chemical irritants are commonly delivered through hand-held sprays, hand thrown grenades or from weapon launched projectiles. Chemical irritants such as those listed above are often referred to as tear gases. This is a generic, non-specific name for such equipment. Under some national and international laws, for example in the Chemical Weapons Convention, these types of chemical irritants are also known as Riot Control Agents.

### Physical/medical effects

Can include: lacrimal tearing of the eyes, breathing difficulties/coughing/choking sensation, chemical burns, vomiting, suffocation, severe allergic reaction/blistering of the skin and in extreme cases death. In some instances, launched projectiles containing chemical irritants can, if they hit a person directly, cause penetration wounds, concussion, other head injuries as well as, in severe instances, death. The risk of physical injury, suffocation and (in some cases) death can increase when chemical irritants are used alongside other equipment, such as on an already restrained (e.g. handcuffed) person.

### Human rights concern

This equipment has the potential for use in arbitrary and/or indiscriminate manner. The use of such equipment at mass public gatherings is a concern as it can spread panic and cause further injuries due to stampedes.

### Amnesty International and Omega position

The inherent effects and the proper use of chemical irritants and launchers must be independently evaluated and controlled.

### Amnesty International and Omega recommendation

Strictly control the design, transfer and use of all chemical irritants and launchers. Training is required in order for law enforcement officials to use correctly to mitigate the risk of unnecessary or arbitrary injury or other harm. Prohibit the direct firing of any projectile or grenade against a person. Grenades and wide area use of chemical irritants should only be used when the level of violence has reached such a degree that law enforcement officials cannot contain the threat by directly targeting violent persons only.

## FIXED INSTALLATION CHEMICAL IRRITANT DISPENSERS



### Description

Attached e.g. to a wall, fence or ceiling these dispense a range of chemical irritants via aerosol, spray, powder or from an explosive grenade. They can be manually operated or automatic using motion sensor technology.

### Physical/medical effects

Chemical irritants can cause death through asphyxiation or toxic poisoning, especially in confined spaces. A wide range of other medical effects and injuries can result which may be life threatening to those particularly vulnerable to those effects including those with compromised health e.g. the elderly, children, or those who are pregnant or who have respiratory problems. These effects include chemical burns, asthma, breathing difficulties, skin blisters, and vomiting.

### Human rights concern

Chemical irritants are indiscriminate as they affect all who happen to be in a space. If individuals affected by them are unable to escape the effects, and even if there is a way out, the exit route is restricted or not easily accessible the use of such irritants can create or increase the risk of a panic-driven stampede.

### Amnesty International and Omega position

This equipment has the potential for use in arbitrary and indiscriminate manner that could amount to torture or other ill-treatment.

### Amnesty International and Omega recommendation

Ban fixed installation chemical irritant dispensing devices in places of detention or for use in other law enforcement contexts and from corresponding production and transfer.

# ELECTRIC SHOCK

This section presents a selection of electric shock equipment.

## PROJECTILE ELECTRIC SHOCK DEVICES



### Description

A pistol shaped weapon which holds a cartridge. On activation this fires two darts attached to the weapon by fine wires, which on impact with the target deliver an electric shock to the person. The shock can be continuous and prolonged if the trigger is held down (up to minutes), repeated numerous times if retriggered, or can be interrupted. Most models can also display a spark across the electrodes and can be used as direct contact stun weapons, administering a painful localised electric shock.

### Physical/medical effects

Extreme pain on impact. The electric shock delivered causes almost immediate neuro muscular effects and incapacitation, with the target collapsing without control. Secondary injuries from collapse/falls can be severe and life threatening. They cause different degrees of pain and incapacitation and occasionally lead to death. The effects vary depending on the power of the device, the physical condition and underlying health of the person targeted (e.g. a child, a person with a heart condition) and the environmental factors (e.g. moisture). In addition, darts can cause injury to skin

and (less often) bone and may require medical attention to remove. The darts can cause penetration injuries including to the skin, eyes, head and internal organs, which can be severe.

### **Human rights concern**

They are inherently open to abuse as they are easy to carry and easy to use and they can inflict severe pain at the push of a button without leaving substantial marks. The capacity to use such weapons close-up as ‘touch stun’ weapons, often when individuals are already in custody and under control makes them even more prone to abuse which may amount to torture. The capacity of these devices to inflict repeated and/or prolonged electric shocks could amount to torture or other cruel, inhuman or degrading treatment or punishment.

### **Amnesty International and Omega position**

They have a high physical impact and cause extreme pain, and should never be used as a general force tool. They should be deployed only by specialist officers who are subject to rigorous training and accountability systems which conform to UN standards on the use of force. Officers authorized to use such weapons must abide by international policing standards on the use of force and should always be under a strict system of supervision and accountability so as to ensure that such standards are fully met. The use of these weapons should be subject to the same reporting and accountability requirements as the use of firearms. The effects of the use of all types of projectile electric shock devices, regardless of voltage, must be independently evaluated.

### **Amnesty International and Omega recommendation**

Their use should be limited to situations where they can be effectively used to avoid the resort to lethal force or firearms.

As a less lethal alternative to firearms, their deployment should be subject to a similar standard to that which applies to the use of firearms, i.e. their lawful use should be limited to situations where, in accordance with UN standards, officers are faced with an imminent threat of death or serious (i.e. potentially life-threatening) injury which cannot be contained by less extreme options. This would allow appropriately trained officers to deploy such weapons as a last resort at or just before the point at which they would otherwise be justified in resorting to firearms. The primary objective of the use of such a weapon is as a ‘stand-off’ weapon as a less lethal alternative to firearms to protect lives and avoid unwarranted injury.

Use in “drive stun” mode as a direct contact electric shock stun gun poses a substantial risk of torture or other cruel, inhuman and degrading treatment or punishment, and therefore should be expressly forbidden. Only those weapons that record every mode of use should be permitted.

## STUN BATONS



### Description

A portable hand held weapon that can be used to inflict a painful electric shock by touching electrodes onto the skin of the subject. They usually have 2-4 electrodes on the tip and some models have electrode strips of metal along the length of the baton. Some can also be used like an ordinary baton as a striking weapon, but some only function as an electric shock weapon. Many models allow a spark discharge across the electrodes, producing a loud crackling sound and visible sparks.

### Physical/medical effects

Intense localised and general pain, but no incapacitation. Injuries can include: burns, puncture wounds, scars/welts. In some circumstances an individual subjected to an electric shock may fall. This can lead to secondary injuries such as cuts, bruises, broken bones, concussion etc.

### Human rights concern

This weapon is designed to cause compliance through pain not incapacitation and is open to misuse through sustained or prolonged use, multiple shocks, particularly to intimate areas of the body such as the genitals. Displays of the sparking function can be threatening and intimidating. In addition, there is a lack of research into the effects of electric shock equipment as there have been a number of deaths after the use of such weapons. There is also lack of research into how the use of electric shock equipment affects those with underlying health issues or who are under the influence of drugs or alcohol at the time of use.

### Amnesty International and Omega position

Its use does not meet a legitimate law enforcement objective that cannot be effectively accomplished with safer alternatives.

### Amnesty International and Omega recommendation

Prohibit stun batons for use in law enforcement and from production and transfer.

## STUN SHIELDS



### Description

Applies instant electric shocks to the body. Shields of various shapes and sizes with integrally mounted electrode strips that discharge electric shocks when in contact with the subject. Available in flat, convex and concave designs (for pinning a person to the floor or wall or capturing a person), and a variety of shapes including round, rectangular and square. Can usually administer a continuous electric shock if the trigger is held down with no automatic safety cut-out.

### Physical/medical effects

Intense localised and general pain, but no incapacitation. Injuries can include: burns, puncture wounds, and scars/welts.

### Human rights concern

This device is designed to cause compliance through pain rather than incapacitation. Convex shields where an individual can be pinned down and unable to move are particularly open to misuse through sustained use/multiple shocks/shocks in inappropriate areas of the body such as the genitals and as a punishment on prisoners. In addition, there is a lack of research into the effects of electric shock equipment, especially how it affects those with underlying health issues or who are under the influence of drugs or alcohol at the time of use. The adequacy of training given to officers using the devices and the widely documented misuse of such devices for torture or other cruel, inhuman or degrading treatment or punishment, is also of concern.

### Amnesty International and Omega position

Its use does not meet a legitimate law enforcement objective that cannot be effectively accomplished with safer alternatives.

### Amnesty International and Omega recommendation

Prohibit stun shields for use in law enforcement and production and transfer.

## BODY WORN ELECTRIC SHOCK EQUIPMENT (STUN SLEEVE, STUN CUFF, STUN BELT)



### Description

A remote control device with capabilities to deliver electric shocks. Designed to be worn around the waist, arm, wrist, leg or ankle. Remote control activation varies between models but can be up to 100m/328 feet and can control single and multiple devices.

### Physical/medical effects

Can include: burns, puncture wounds, scars/welts. In addition to causing pain, some types of electric shock equipment uses high voltage-low amperage electrical signals which, when administered, cause the subject to lose neuromuscular control including loss of bladder and bowel control when devices are placed around the waist. Muscles contract involuntarily, rendering the subject immobile. In some circumstances an individual subjected to an electric shock from such equipment may fall. This can lead to secondary injuries such as cuts, bruises, broken bones, concussion etc.

### Human rights concern

The European Committee for the Prevention of Torture consider the device ‘inherently degrading’<sup>44</sup> and oppose their use.<sup>45</sup> The European Commission has classified such devices as having, “No practical use other than for the purpose of torture and other cruel, inhuman or degrading treatment or punishment.”<sup>46</sup> The UN Committee against Torture has recommended that stun belts should be, “Abolish(ed)...as methods of restraining those in custody.”<sup>47</sup>

### Amnesty International and Omega position

Its use does not meet a legitimate law enforcement objective that cannot be effectively accomplished with safer alternatives.

### Amnesty International and Omega recommendation

Prohibit all body worn electric shock equipment for use in law enforcement and the production and transfer of such devices.

<sup>44</sup> Council of Europe, European Committee for the Prevention of Torture (2010) 20th General Report of the European Committee for the Prevention of Torture and Inhuman or Degrading Treatment or Punishment (CPT) (1 August 2009 – 31 July 2010), paragraph 74, pp. 37, <http://www.cpt.coe.int/en/annual/rep-20.pdf>

<sup>45</sup> Council of Europe (2010) Press Release: Council of Europe Anti-Torture Committee Calls for Strict Regulation of Electrical Discharge Weapons, 26th October 2010, <http://www.cpt.coe.int/en/annual/press/2010-10-26-eng.htm>

<sup>46</sup> Annex II of EC Trade Regulation 1236/2005, as amended, <http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1398468874828&uri=CELEX:02005R1236-20130701>

<sup>47</sup> Referenced in Amnesty International (2003) The Pain Merchants: Security Equipment and its use in Torture and other III-Treatment, Amnesty International Index: ACT 40/008/2003, pp. 41

# OTHER TECHNOLOGIES

This section presents 2 examples of other technologies in use.

## ACOUSTIC DEVICES OR WEAPONS EMPLOYING AUDIBLE SOUND WAVE TECHNOLOGY



### Description

Emit a deterrent tone to disperse a crowd or can be used as a megaphone type device to convey instructions over a wide area. Can be free standing, vehicle mounted, embedded in a riot control shield or carried (e.g. over the shoulder).

### Physical/medical effects

Risk of serious long-term, and even permanent, damage to hearing (including Tinnitus), ear drum rupture and loss of equilibrium/balance.

### Human rights concern

This equipment is indiscriminate as it cannot be targeted towards a particular person and affects bystanders.

### Amnesty International and Omega position

Whilst acoustic devices may have a range of legitimate uses as a communication tool, the principal concern is with its use in alert function, which emits a high decibel, narrow frequency, focused set of sound waves - especially when this is set at high volume and used within close proximity to people for prolonged periods.

### Amnesty International and Omega recommendation

Suspend the use of all types of acoustic devices in alert function until an independent body of medical, scientific, legal and other experts has subjected the effects and potential uses of the type of device in question to rigorous assessment and can then demonstrate a legitimate and safe use of the device for law enforcement subject to specific operational rules consistent with human rights standards.

## WATER CANNON



### Description

Water cannon can be free standing, vehicle mounted, building mounted or backpack style and are essentially high pressure pumping systems designed to shoot jets of water at people. The pressure of the water can be varied from low pressure to soak the person and deter or demoralise, to high pressure to impart a blunt trauma which can push back a person or knock them to the ground. Water cannon can also be enhanced to fire small volumes ('slugs' or 'bullets') of water. The water can have additives including marker dye (for later identification of persons) or a range of chemical irritants for additional effects.

### Physical/medical effects

The power of the water can knock a person over, push them into fixed objects or pick up loose objects and propel them as missiles. The eyes are vulnerable to direct impact leading to injury, including severe injuries and permanent loss of sight.

### Human rights concern

This equipment is inherently indiscriminate and can affect bystanders. If marker dye is used this can lead to later unwarranted harassment or detention. In addition, the use of a mixture of water and chemicals makes it impossible to deliver accurate targeted doses of the irritant.

### Amnesty International and Omega position

The inherent effects and the proper use of water cannon must be independently evaluated and controlled.

### Amnesty International and Omega recommendation

Water cannon should only be used proportionately, lawfully and to the minimal extent possible in cases where it is strictly necessary to contain or disperse individuals or a group participating in a public assembly and should only be used when the level of violence has reached such a degree that law enforcement officials cannot contain the threat by directly targeting violent persons only.

An independent body of medical, scientific, legal and other experts should subject the effects and potential uses of water cannon to rigorous assessment and demonstrate a legitimate and safe use of the device for law enforcement subject to specific operational rules consistent with human rights standards.

# CONCLUSION

This paper demonstrates the human rights risks associated with different less lethal weapons and restraints, highlighting the need for clear standards for the testing, selection, use and evaluation of such equipment. International law and standards in this area provide a robust starting point and this report has aimed to further operationalise such standards by applying them to a selection of equipment in use today. The result has been a series of recommendations for police and correctional agencies and policy makers on the use of specific less lethal weapons and restraints, as detailed in each section.

There are also some cross-cutting issues common to many, if not all, less lethal equipment and restraints. These include:

- Issues of accuracy, presenting additional risks not only to the intended target but potentially to uninvolved persons.
- Reliability and consistency of key attributes, which may sometimes be due to design flaws and sometimes due to manufacturing quality concerns. One particular concern is the compatibility of such weapons with the test for proportionality. If the 'dose' or level of force they deliver cannot be varied, or is found to be unreliable, then they cannot deliver a discriminate or proportional level of force.
- Incomplete information about the medical risks, and risk of longer-lasting consequences.
- The potential for particular groups and individuals (vulnerable groups) to have heightened sensitivity to the use of equipment, with vulnerability characteristics (such as heart disease and asthma) not always obvious – or fully known.
- Inappropriate or insufficient rules on the use of less lethal weapons and restraints, which are often not in keeping with international human rights norms and standards.
- The misuse and abuse of equipment in practice, especially in places where there is a culture of excessive use of force and of impunity.
- Function creep – weapons being used in ways, and for purposes, that were not originally intended by law enforcement policy makers.
- Inappropriate or insufficient training.

Some categories of weapons, such as body worn electric shock devices, spiked batons and thumb-cuffs, have no legitimate law enforcement purpose and should never be issued to police or correctional officials. Other weapons, for example, kinetic impact projectiles may have a legitimate law enforcement purpose. However, if the particular weapon selected is inaccurate or causes unwarranted injury it will be impossible for officers to use it appropriately. If, as required by Article 5 of the BPUFF, damage and injury is to be minimized, it is necessary to look not just at how a particular weapon or restraint is used, but also at whether, and to what extent, it should be made available for use in the first place.

WHETHER IN A HIGH-PROFILE CONFLICT OR A FORGOTTEN CORNER OF THE GLOBE, **AMNESTY INTERNATIONAL** CAMPAIGNS FOR JUSTICE, FREEDOM AND DIGNITY FOR ALL AND SEEKS TO GALVANIZE PUBLIC SUPPORT TO BUILD A BETTER WORLD

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## **THE HUMAN RIGHTS IMPACT OF LESS LETHAL WEAPONS AND OTHER LAW ENFORCEMENT EQUIPMENT**

This paper focuses on a selection of less lethal law enforcement weapons and equipment commonly used in places of detention and in the policing of protests in the following five categories: restraints, kinetic impact devices, chemical irritants (including riot control agents), electric shock devices, and other technologies such as acoustic devices. It includes those commonly used for, or that have no other purpose than, torture or other ill-treatment.

In each category it assesses whether the equipment has particular physical/medical effects, specific human rights concerns, and whether it has a legitimate use and, if so, the necessary controls that should apply to prevent misuse, or whether the use of the device should be prohibited outright or suspended pending further research by independent experts.



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