

Geneva Guidelines on Less-Lethal Weapons and Related Equipment in Law Enforcement

Text for Consultation

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1. INTRODUCTION

- 1.1 Less-lethal weapons¹ and related equipment have an important role in law enforcement, which aims to protect individuals and uphold the law. They may be used as a less dangerous alternative to firearms, in order to reduce the risk of harm to members of the public and to criminal suspects, or in situations where some degree of force is necessary but where the use of firearms would be disproportionate. Nonetheless, less-lethal weapons and related equipment may also kill or inflict serious injury or other harm, especially when they are not used in accordance with specifications, general principles on the use of force, and fundamental human rights.
- 1.2 The purpose of these Guidelines is to provide guidance to states, law enforcement agencies, human rights bodies and mechanisms, private security companies, manufacturers, and individuals or agents of any bodies using force for law enforcement purposes, human rights defenders, and individuals seeking to assert their rights on the lawful and responsible design, production, procurement, testing, training, transfer, and use of less-lethal weapons and related equipment. The Guidelines are also intended to promote accountability for the design, production, testing, transfer, deployment, and use of such weapons.
- 1.3 The Guidelines are based on international law, in particular international human rights law, as well as international standards and good practice in law enforcement. They may assist in the interpretation of fundamental human rights and freedoms, especially the rights to life, to security of person, to freedom from torture or other forms of cruel, inhuman, or degrading treatment or punishment and to freedom of peaceful assembly.²
- 1.4 The 1979 United Nations (UN) Code of Conduct for Law Enforcement Officials (1979 Code of Conduct) requires that in the performance of their duty, law enforcement officials shall respect and protect human dignity and maintain and uphold the human rights of all persons.³
- 1.5 The 1990 UN Basic Principles on the Use of Force and Firearms by Law Enforcement Officials (1990 Basic Principles) call on states and law enforcement agencies to develop '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'.⁴ The 1990 Basic Principles further call for the development and deployment of

¹ The Guidelines avoid referring to weapons and equipment as 'non-lethal' since the use of any weapon can have fatal consequences.

² These rights are protected, for example, in Articles 6, 7, and 9 of the 1966 International Covenant on Civil and Political Rights and in the regional human rights treaties.

³ Article 2, Code of Conduct for Law Enforcement Officials, adopted by UN General Assembly Resolution 34/169 on 17 December 1979 (1979 Code of Conduct).

⁴ Principle 2, Basic Principles on the Use of Force and Firearms by Law Enforcement Officials, welcomed by UN General Assembly Resolution 45/166, adopted without a vote on 14 December 1990.

such weapons to be 'carefully evaluated in order to minimize the risk of endangering uninvolved persons', and affirm that 'the use of such weapons should be carefully controlled'.⁵

- 1.4 In 2014, Resolution 25/38 of the UN Human Rights Council encouraged states to make 'non-lethal weapons available to their officials exercising law enforcement duties, while pursuing international efforts to regulate and establish protocols for the training and use of non-lethal weapons'.⁶ In 2018, the UN Human Rights Council further encouraged the establishment of protocols 'for the training and use of non-lethal weapons, bearing in mind that even less-lethal weapons can result in risk to life'.⁷

2. DEFINITIONS

- 2.1 **Assembly** refers to an intentional and temporary gathering in a private or public space for a specific purpose. Assemblies may take the form of demonstrations, meetings, strikes, processions, rallies, or sit-ins with the purpose of voicing grievances, aspirations, or celebrations.⁸ The term extends also to incorporate other public gatherings, such as sporting events or music concerts.
- 2.2 **Custodial setting** refers to any form of detention, imprisonment, or institutionalisation of a person in a public or private institution which that person is not permitted to leave at will, by order or under de facto control of a judicial, administrative, or any other authority.⁹ Detention in a vehicle, such as a police car or van, also falls within the definition of a custodial setting as does detention in a ship or other maritime vessel in the context of maritime law enforcement. Those responsible for securing and protecting detainees are **custodial staff**.
- 2.3 **Discrimination** means any distinction, exclusion, or restriction on the basis of prohibited grounds which has the purpose or effect of impairing or nullifying the recognition, enjoyment, or exercise, on an equal basis with others, of human rights and fundamental freedoms.
- 2.4 **Impending threat** is one that is expected to occur within a matter of minutes, and which is likely to lead to harm.

⁵ Principle 3, 1990 Basic Principles.

⁶ Human Rights Council Resolution 25/38, adopted on 28 March 2014, para. 14.

⁷ Human Rights Council Resolution 38/11, adopted on 6 July 2018, para. 15.

⁸ 'Joint report of the Special Rapporteur on the rights to freedom of peaceful assembly and of association and the Special Rapporteur on extrajudicial, summary or arbitrary executions on the proper management of assemblies', UN doc. A/HRC/31/66, 4 February 2016, para. 10.

⁹ Inter-American Commission on Human Rights, 'Revision of the United Nations Standard Minimum Rules for the Treatment of Prisoners', UN doc. UNODC/CCPCJ/EG.6/2014/INF/2, 8 October 2013, p. 3.

- 2.5 **Imminent threat** means one that is expected to occur in a split second or at most a matter of several seconds, and which is likely to lead to harm.¹⁰
- 2.6 **Law enforcement agency** means any entity or body that is formally entrusted or contracted by a state with the prevention, detection, and investigation of crime and the arrest and detention of criminal suspects and offenders. Law enforcement agencies may be local, provincial, national, or supranational. The relevant body or unit of the military and other security forces will be considered a law enforcement agency when it is conducting law enforcement tasks, whether that occurs domestically or in any other jurisdiction.¹¹
- 2.7 **Law enforcement official** means any officer of the law, whether appointed or elected, who exercises police powers, especially the powers of arrest or detention.¹² Where police powers are exercised by the military, whether uniformed or not, or by state security forces, the definition of law enforcement official includes any officers of such services.¹³
- 2.8 **Legitimate law enforcement objective** refers to one that is recognised in both international and national law, such as preventing the perpetration of a criminal offence, arresting a person suspected of having committed a criminal offence, or detaining a convicted criminal pursuant to a lawful sentence. It also refers to the duty of law enforcement agencies and officials to facilitate and protect the right of peaceful assembly.
- 2.9 **Less-lethal weapons** mean weapons designed or intended for use on individuals or groups of individuals which, in the course of expected or reasonably foreseen use, have a lower risk of causing death or serious injury than do firearms. Less-lethal weapons do not include firearms, as that term is generally understood in national and international law,¹⁴ when the firearms are employed to discharge metal-jacketed rounds, shot, or a slug. They also do not mean other weapons whose expected or reasonably foreseen use would result in life-threatening injuries.
- 2.10 **Related equipment** includes personal protective equipment such as shields, helmets, body armour, and other equipment that is provided to law enforcement officials to minimise injury. Equipment may be general in nature or specific to certain situations, such as assemblies, and includes equipment that may be used remotely, automatically, or autonomously, as well as information communication technology used by law enforcement. The term also covers restraints used in custodial settings.

¹⁰ Report of the Special Rapporteur on Extrajudicial, Summary or Arbitrary Executions, Christof Heyns, UN doc. A/HRC/26/36, 1 April 2014, para. 59.

¹¹ Commentary (a) and (b) to Article 1 of the 1979 Code of Conduct; footnote to the 1990 Basic Principles.

¹² Commentary (a) on Article 1, 1979 Code of Conduct.

¹³ Commentary (a) and (b) to Article 1 of the 1979 Code of Conduct; footnote to the 1990 Basic Principles.

¹⁴ See Art. 3(a), Protocol against the Illicit Manufacturing of and Trafficking in Firearms, Their Parts and Components and Ammunition, Supplementing The United Nations Convention Against Transnational Organized Crime (2001 Firearms Protocol). In the United Kingdom, for instance, a firearm is a 'lethal barrelled weapon of any description from which any shot, bullet or other missile can be discharged'. S. 57(1), 1968 Firearms Act (as amended).

2.11 **Use of force** refers to the use or the threat of imminent use of physical means to coerce or influence behaviour, harm a person, or damage property. Such means may be kinetic in nature, as well as chemical, electrical, or otherwise.

3. GENERAL PRINCIPLES ON USE OF FORCE

- 3.1 Law enforcement officials shall at all times respect and protect fundamental human rights and freedoms, in particular when they consider any use of force. The rights of law enforcement officials to life and to security must also be respected and ensured. Law enforcement officials should, as and where necessary, be equipped with appropriate personal protective equipment,¹⁵ such as helmets, shields, stab-resistant gloves and vests, and bullet-resistant vests.
- 3.2 In carrying out their duties, law enforcement officials should, as far as possible, apply non-violent means before resorting to the use of force and firearms. They may use force only if other means remain ineffective or without any promise of achieving the intended result.¹⁶ Appropriate personal protective equipment may decrease the need for law enforcement officials to use weapons of any kind.¹⁷
- 3.3 Any use of force by law enforcement should comply with the principles of legality, precaution, necessity, proportionality, non-discrimination, and accountability. The use of force shall be regulated by domestic law in accordance with international law.¹⁸ National policies shall be adopted on the use of force by law enforcement agencies and officials that comply with international law and standards.

THE PRINCIPLE OF LEGALITY

- 3.4 Only weapons duly authorised by the relevant state authorities for use in law enforcement may be deployed by law enforcement agencies and used by law enforcement officials. Where necessary, domestic law shall specify conditions for the use of less-lethal weapons and related equipment and impose limitations on the use of specific less-lethal weapons in order to mitigate the risks of harm, including those identified in these Principles.

THE PRINCIPLE OF PRECAUTION

¹⁵ Principle 2, 1990 Basic Principles.

¹⁶ Principle 4, 1990 Basic Principles.

¹⁷ Human Rights Council Resolution 38/11, adopted without a vote on 6 July 2018, para. 15.

¹⁸ Principle 1, 1990 Basic Principles; African Commission on Human and Peoples' Rights, General Comment No. 3 on the African Charter on Human and Peoples' Rights: Article 4, the Right to Life', adopted in November 2015, para. 27; Inter-American Court of Human Rights, *Cruz Sánchez and others v. Peru*, Judgment, 17 April 2015, para. 261; European Court of Human Rights, *Nachova and others v. Bulgaria*, Judgment, 6 July 2005, paras. 99, 100.

3.5 Law enforcement operations and actions shall be planned and conducted taking all necessary precaution to avoid or at least minimise the risk of recourse to force by law enforcement officials as well as members of the public.¹⁹ Where appropriate, law enforcement officials may delay direct contact or engagement with members of the public, if doing so would make the need to use force less likely.²⁰

THE PRINCIPLE OF NECESSITY

3.6 In carrying out their duty, law enforcement officials may use force only when strictly necessary and only to the extent required for the performance of their duty. In other words, law enforcement officials should only use force when it is absolutely necessary in the prevailing circumstances to achieve a lawful and legitimate law enforcement objective.

3.7 Necessity requires that no reasonable alternative, other than resorting to the use of force, is available at that moment, to achieve a legitimate law enforcement objective.²¹ When the use of force is necessary in the circumstances, only the minimum force required to achieve that objective shall be used.²²

THE PRINCIPLE OF PROPORTIONALITY

3.8 The use of force and the potential harm it may cause must be proportionate to the threat posed by an individual or group of individuals, and the offence that is being, or is about to be, committed.²³ In no case should force be used which is disproportionate to the legitimate objective to be achieved.²⁴ At all times, law enforcement officials must consider and limit to a minimum the possible impact of their use of force on third parties, including journalists and bystanders.

¹⁹ European Court of Human Rights, *McCann and others v. United Kingdom*, Judgment, 27 September 1995, para. 194; Inter-American Court of Human Rights, *Nadege Dorzema and others v. Dominican Republic*, Judgment, 24 October 2012, para. 87; Principle 5(b), 1990 Basic Principles; Report of the Special Rapporteur on Extrajudicial, Summary or Arbitrary Executions, Christof Heyns, UN doc. A/HRC/26/36, 1 April 2014, para. 63.

²⁰ European Court of Human Rights, *Shchiborshch and Kuzmina v. Russia*, Judgment, 16 January 2014, para. 240.

²¹ Principle 4, 1990 Basic Principles; Article 3 and Commentary (a), 1979 Code of Conduct.

²² Report of the Special Rapporteur on Extrajudicial, Summary or Arbitrary Executions, Christof Heyns, UN doc. A/HRC/26/36, 1 April 2014, para. 60; Commentary (a) on Article 3, 1979 Code of Conduct.

²³ Report of the Special Rapporteur on Extrajudicial, Summary or Arbitrary Executions, Christof Heyns, UN doc. A/HRC/26/36, 1 April 2014, para. 66; Principle 5(a), 1990 Basic Principles; Commentary (b) on Article 3, 1979 Code of Conduct.

²⁴ Commentary (b) on Article 3, 1979 Code of Conduct.

THE PRINCIPLE OF NON-DISCRIMINATION

- 3.9 In carrying out their functions, law enforcement officials shall not discriminate against any person on the basis of race, colour, sex, language, religion, political or other opinion, national or social origin, property, birth, or other similar criteria, including disability. In order to ensure non-discrimination and de facto equal treatment of persons subject to the use of force, a heightened level of care and precaution shall be exercised with respect to individuals who are known or are likely to be especially vulnerable to the effects of a particular weapon.²⁵

²⁵ For example, in the case of conducted electrical weapons, the United Kingdom's Defence Scientific Advisory Council Sub-Committee on the Medical Implications of Less-Lethal Weapons advises that 'individuals with heart disease, or who have taken certain prescription or recreational drugs, may be more likely to experience adverse cardiac effects as a result of Taser discharge'. Defence Scientific Advisory Council Sub-Committee on the Medical Implications of Less-Lethal Weapons, 'Statement on the Medical Implications of Use of the Taser X26 and M26 Less-Lethal Systems on Children and Vulnerable Adults', 2012, para. 77, at: <https://bit.ly/2tFIS8f>.

4. ACCOUNTABILITY

- 4.1 Law enforcement officials shall be held accountable for their actions, including any decision to use force. They also have an obligation to protect the public, so in certain circumstances they shall also be held accountable for omissions.²⁶ Accountability is facilitated by the marking of all arms²⁷ and other weapons, and, where feasible, ammunition, munitions, and projectiles, and by prompt and comprehensive reporting of incidents where officials have used force.
- 4.2 Effective police accountability involves many different actors including government representatives, parliament, the judiciary, civil society actors, and independent oversight bodies such as national human rights institutions. Primarily, it involves the police themselves.²⁸ Members of the government and other political authorities should promote a culture of accountability for law enforcement and should be held responsible if they encourage or promote unlawful behaviour. Internal and external oversight systems should be in place with respect to every law enforcement agency. States are obligated to regulate and control the actions of private security companies operating on or from their territory in domestic law that complies with international law.
- 4.2 States should consider requiring all law enforcement agencies to document every use of force involving less-lethal weapons or related equipment. A subsequent report should contain sufficient information to establish whether the use of force was lawful, necessary, and proportionate, and include the details of the incident including the surrounding circumstances; the type and manner of force employed, including specific weaponry; the reasons for use of force; its effectiveness; and the consequences. The report should identify any lessons learned from the incident.
- 4.3 Every law enforcement official is responsible for his or her decisions and actions, including commanders. Each use of force must be justified and justifiable.²⁹ Obedience to a manifestly unlawful order from a superior to use force shall not excuse any illegal act.³⁰ The government and law enforcement agencies shall ensure that no criminal or disciplinary sanction is imposed on a law enforcement official who refuses to carry out an

²⁶ See, e.g., European Court of Human Rights, *Tagayeva v. Russia*, Judgment (First Section), 13 April 2017 (rendered final on 18 September 2017); 'Police officers jailed over Bijan Ebrahimi murder case', *The Guardian*, 9 February 2016, at: <https://www.theguardian.com/uk-news/2016/feb/09/bijan-ebrahimi-murder-bristol-police-sentenced>.

²⁷ According to Article 8(1) of the 2001 Firearms Protocol, for example, each state party is required, at the time of manufacture of each firearm, to require 'unique marking with the name of the manufacturer, the country or place of manufacture, and the serial number', or any alternative marking that permits 'ready identification by all States of the country of manufacture'.

²⁸ UN Office on Drugs and Crime (UNODC), *Handbook on Police Accountability, Oversight and Integrity*, Criminal Justice Handbook Series, Vienna, July 2011.

²⁹ See, e.g., United States (US) Court of Appeals (Fourth Circuit), *Meyers v. Baltimore County*, 713 F.3d 723 (2013), pp. 733–34.

³⁰ Principle 26, 1990 Basic Principles; European Court of Human Rights, *Gäfgen v. Germany*, Judgment, 1 June 2010, paras. 176, 177.

illegal order to use a less-lethal weapon, or who reports such illegal orders, or such use of force by other officials.³¹

- 4.4 Where a violation of domestic or international law or administrative regulation occurs, in addition to any criminal law or disciplinary sanction or civil law penalty that may be imposed on responsible law enforcement officials, retraining or requalification may be required. States should ensure, including through internal periodic review, that lessons learned from situations where human rights have been violated by the use of less-lethal weapons or related equipment are fully reflected in policies, procedures, and training.
- 4.5 Where death or injury is caused by the use of a less-lethal weapon or related equipment by any law enforcement official, the incident must be reported promptly to the official's superiors.³² This obligation applies to any private security company undertaking law enforcement activities. All injury from an unlawful or potentially unlawful use of less-lethal weapons or related equipment, including any breach of the present Guidelines, should be investigated effectively and promptly.
- 4.6 The use of force in a custodial setting shall be reported immediately to the Director of the institution or individual of equivalent authority.³³ Notwithstanding the initiation of an internal investigation, the prison director shall report, without delay, any custodial death, disappearance or serious injury or incident in which there is reasonable grounds to believe that torture or other cruel, inhuman or degrading treatment or punishment has been committed to a judicial or other competent authority that is independent of the prison administration and mandated to conduct prompt, impartial and effective investigations into the circumstances and causes of such cases.³⁴
- 4.7 Under international human rights law, there is an obligation on the State to investigate all alleged or suspected violations of human rights, in particular the rights to life, to security, and to freedom from torture or other forms of cruel, inhuman, or degrading treatment or punishment.³⁵ Such investigations must be impartial, independent and effective, and conducted in a prompt and transparent manner. All law enforcement officials shall cooperate fully with any such investigation and investigators must be able to compel the production of evidence. This includes independent police oversight mechanisms, which strengthen the accountability of law enforcement agencies and officials.
- 4.8 When law enforcement officials deprive an individual of liberty, for instance by detaining or placing that person in custody, they assume a heightened level of responsibility to protect that individual's rights, in particular, the right to life. Where a person dies in custody, including as a result of the use of less-lethal weapons, there is a presumption of

³¹ Principle 25, 1990 Basic Principles.

³² Principles 6 and 22, 1990 Basic Principles.

³³ Rule 82(1), UN Standard Minimum Rules for the Treatment of Prisoners, adopted without a vote by UN General Assembly Resolution 70/175 of 17 December 2015 ('2015 Nelson Mandela Rules').

³⁴ Rule 71(1), 2015 Nelson Mandela Rules.

³⁵ See generally the *Minnesota Protocol on the Investigation of Potentially Unlawful Death (2016)*, Office of the High Commissioner for Human Rights (OHCHR), Geneva, 2017.

state responsibility, and the burden of proof rests upon the state to prove otherwise, through a prompt, impartial, independent and effective, and transparent investigation carried out by an independent body.³⁶

- 4.9 Where an investigation involving law enforcement officials reveals evidence that a death or serious injury may have been caused unlawfully, the State must, as and where appropriate, ensure that perpetrators are prosecuted through a judicial process and, if convicted, given a suitable punishment.³⁷ Punishment for unlawful use of force by law enforcement officials shall be effective, proportionate, and dissuasive.
- 4.10 Victims of unlawful use of force by law enforcement officials shall have an effective right to a remedy.³⁸ Forms of remedy include compensation, guarantees of non-repetition, rehabilitation, reparation, restitution, and satisfaction.
- 4.11 International mechanisms of accountability include the United Nations treaty bodies and special procedures, regional human rights courts, tribunals and mechanisms, and, in certain circumstances, the International Criminal Court. Accountability for unlawful use of force in law enforcement contexts has also been dealt with by international commissions of inquiry and fact-finding missions, and in reports of the Office of the United Nations High Commissioner for Human Rights (OHCHR).

³⁶ *Minnesota Protocol on the Investigation of Potentially Unlawful Death (2016)*, para. 17.

³⁷ *Minnesota Protocol on the Investigation of Potentially Unlawful Death (2016)*, para. 8(c).

³⁸ Basic Principles and Guidelines on the Right to a Remedy and Reparation for Victims of Gross Violations of International Human Rights Law and Serious Violations of International Humanitarian Law, adopted by UN General Assembly Resolution 60/147, 21 March 2006; Human Rights Committee, General Comment No. 31 on The Nature of the General Legal Obligation Imposed on States Parties to the Covenant, UN doc. CCPR/C/21/Rev.1/Add.13, 26 May 2004, para. 15.

5. GENERAL PRINCIPLES PERTAINING TO LESS-LETHAL WEAPONS AND RELATED EQUIPMENT

5.1 DESIGN AND PRODUCTION

- 5.1.1 Less-lethal weapons and related equipment intended for use in law enforcement shall be designed and produced to meet legitimate law enforcement objectives and comply with international human rights law. This duty applies to the State and its agents and also to companies manufacturing weapons for law enforcement.³⁹
- 5.1.2 Public and private manufacturers of less-lethal weapons and related equipment should make public relevant information about the risks from less-lethal weapons and related equipment they produce. They should, where appropriate, bring specific risks to the attention of the user. States, law enforcement agencies, and manufacturers should be transparent about the technical specifications of weapons in use. This should include their design features and parameters⁴⁰ with a view to facilitating medical treatment and public acceptance.
- 5.1.3 The nature of policing places special constraints on the extent to which force may be delivered remotely or automatically or may be autonomously released. This has implications for the design of less-lethal weapons and related equipment.

5.2 LEGAL REVIEW, TESTING, AND PROCUREMENT

- 5.2.1 States shall ensure that a legal review is conducted prior to deployment, to determine whether the use of a less-lethal weapon or item of related equipment would, in some or all circumstances, be prohibited by any rule of international or domestic law, in particular human rights law.⁴¹

³⁹ See, e.g., *The Guiding Principles on Business and Human Rights: Implementing the United Nations “Protect, Respect and Remedy” Framework*, OHCHR, Geneva/New York, 2011.

⁴⁰ Thus, for example, in the case of any chemical irritant, this would encompass its strength and the type of solvent used.

⁴¹ Human Rights Council Resolution 38/11, para. 16. Art. 36, 1977 Additional Protocol I to the 1949 Geneva Conventions.

- 5.2.2 As part of the legal review, testing shall be conducted independently of the manufacturer. Testing should take full account of both the required and the potential capabilities and effects of the weapon, and should be based on impartial legal, technical, medical, and scientific expertise and evidence.⁴² Testing should evaluate the effects of all expected uses of the weapon. Particular consideration shall be given to assessing the potential effects of using less-lethal weapons and related equipment against individuals who may be especially vulnerable.⁴³
- 5.2.3 Less-lethal weapons and related equipment whose designated, expected, or intended use does not comply with the rules governing law enforcement, or which presents undue risks of loss of life or serious injury to criminal suspects or bystanders (or law enforcement officials themselves), shall not be authorised for procurement, deployment, or use.
- 5.2.4 Less-lethal weapons and related equipment that deliver force through remote control, automatically, or autonomously should only be authorised if, in the context of their intended or ordinary use, it can be ensured that such use would comply with domestic law and international law, in particular international human rights law.

5.3 MONITORING

- 5.3.1 States and law enforcement agencies shall monitor the use and effects of all less-lethal weapons and related equipment they procure, deploy, and use for law enforcement purposes.
- 5.3.2 Monitoring should include contextual information about the circumstances of use. Relevant data on those on whom force is used should be disaggregated, to the extent possible, for example by age, sex/gender, disability (where that exists), and ethnic group.
- 5.3.3 Monitoring should include spot checks on less-lethal weapons and related equipment. The use of body-worn cameras when less-lethal weapons are used should also be considered.

⁴² Human Rights Council Resolution 25/38, para. 15. See also Report of the Special Rapporteur on torture and other cruel, inhuman or degrading treatment or punishment, Nils Melzer, 'Extra-custodial use of force and the prohibition of torture and other cruel, inhuman or degrading treatment or punishment', UN doc. A/72/178 (2017); and UNODC/OHCHR, *Resource Book on the Use of Force and Firearms*, United Nations, New York, 2017.

⁴³ See, e.g., Taser International, 'TASER® Handheld CEW Warnings, Instructions, and Information: Law Enforcement', 1 March 2013, p. 3; Environmental Defender's Office (ACT) (Australia), *The Risks of Use of Capsicum Spray and Pain Compliance Techniques against Public Gatherings, Police Powers of Crowd Control*, Submission to ACT Legislative Assembly Legal Affairs Committee Inquiry, June 2005.

- 5.3.4 Analysis of data should inform changes to training, guidance, deployment, and policy, as and where necessary.

5.4 TRANSPARENCY

- 5.4.1 States, law enforcement agencies, and manufacturers should be transparent about the guidance surrounding the use of less-lethal weapons and related equipment and the policies on, and criteria for, their lawful use.
- 5.4.2 The results of data collection on the use and impact of less-lethal weapons should be made publically available on a regular basis. Anonymity may be preserved where necessary and appropriate. Where there are legitimate limitations on the detail included in transparency measures, such limitations should not be used as a justification to suppress publication of aggregate data.

5.5 TRAINING

- 5.5.1 Law enforcement officials shall be trained in the lawful use of force. This should include training on applicable human rights standards, how to avoid the use of force, including through de-escalation techniques, mediation, and effective communication, and on how less-lethal weapons can offer a safe and effective alternative to firearms. Training should be scenario-based as well as theoretical in nature, and should not be provided solely by the manufacturer of a particular weapon.
- 5.5.2 Law enforcement officials shall receive appropriate initial and refresher training in the use and effects of any less-lethal weapons with which they may be equipped or deployed, including on the particular vulnerabilities of certain individuals to the effects of a particular weapon.⁴⁴ They shall be made aware of not only the primary risk of injury or harm arising from use of any less-lethal weapons with which they may be equipped but also the secondary injuries that may result (for example, as a result of the person against whom the weapon is used falling from an elevated position or onto a hard surface). These effects and risks must also be reflected in standing operating procedures.
- 5.5.3 Appropriate emergency first-aid training should be provided to all law enforcement officials to enable them to respond appropriately to the injuries or other impacts that may result from the use of the weapons with which they are equipped.

⁴⁴ Principles 19 and 20, 1990 Basic Principles; Report of the Special Rapporteur on Extrajudicial, Summary or Arbitrary Executions, Christof Heyns, UN doc. A/HRC/26/36, 1 April 2014, para. 106.

5.6 MEDICAL ASSISTANCE

- 5.6.1 Medical assistance shall be rendered to any injured or affected person at the earliest possible moment.⁴⁵ The duty to assist applies without discrimination of any kind. Thus, assistance must be duly provided irrespective of whether or not the injured person is a suspected offender. Distinctions as to the medical assistance provided are only justifiable on medical grounds, for instance the urgency of the medical needs.
- 5.6.2 Where feasible, appropriate first-aid equipment should routinely be accessible by law enforcement officials (for example, in police vehicles and during assemblies).
- 5.6.3 Law enforcement officials shall at all times facilitate and cooperate with those providing medical assistance, including by making available pertinent information relating to the less-lethal weapon or related equipment that has been used.⁴⁶

5.7 TRANSFER

- 5.7.1 States shall regulate all transfer, including export and import, of less-lethal weapons and related equipment in accordance with their international obligations.⁴⁷
- 5.7.2 Less-lethal weapons and related equipment whose designated, expected, or intended use is of a nature to amount to torture or other forms of cruel, inhuman, or degrading treatment or punishment, shall never be transferred.⁴⁸
- 5.7.3 Less-lethal weapons and related equipment that present undue risks of loss of life or injury in designated, expected, or intended use shall not be transferred.

5.8 INTERNATIONAL COOPERATION AND ASSISTANCE

- 5.8.1 States in a position to do so should consider responding positively to requests for technical and financial cooperation and assistance, including the supply of appropriate less-lethal weapons and related equipment (including personal protective equipment), in

⁴⁵ Principle 5(c), 1990 Basic Principles.

⁴⁶ European Court of Human Rights, *Finogenov and Others v. Russia* (application Nos. 18299/03 and 27311/03), Judgment of 20 December 2011.

⁴⁷ Such obligations may result, inter alia, from their adherence to the 2013 United Nations Arms Trade Treaty, under international human rights law, or from their membership of regional organisations or adherence to relevant regional treaties.

⁴⁸ See, e.g., Omega Research Foundation, *Ending the Trade in the Tools of Torture: Five Key Principles*, United Kingdom, 2017, at: <https://bit.ly/2IAADPH>.

particular where the weapons or equipment are expected or are likely to result in greater compliance with international human rights law.

- 5.8.2 The provision of assistance should be accompanied, wherever possible, by training in the appropriate use of the less-lethal weapons and related equipment, and how to mitigate any negative consequences associated with use.

6. PROHIBITED LESS-LETHAL WEAPONS AND RELATED EQUIPMENT

6.1 UNLAWFUL LESS-LETHAL WEAPONS

6.1.1 The use of the following weapons cannot serve a legitimate law enforcement objective and would violate fundamental human rights and should be considered unlawful weapons:

- Body-worn conducted electrical weapons⁴⁹
- Spiked or electrified batons⁵⁰
- Explosive tear gas grenades
- Rubber-coated metal bullets
- Blinding lasers⁵¹
- Lasers designed to burn skin or hair as a means of pain compliance.⁵²

6.2 UNLAWFUL RELATED EQUIPMENT

6.2.1 The following equipment is inherently degrading or unnecessarily painful and would violate fundamental human rights and shall not be used:

- Chains
- Irons (leg or wrist)
- Spiked or electrified instruments of restraint
- Weighted instruments of restraint.⁵³

⁴⁹ UN Committee Against Torture Concluding Observations on the United States, UN doc. A/55/44, 15 May 2000, para. 179(e); Report of the Special Rapporteur on torture and other cruel, inhuman or degrading treatment or punishment to the UN Human Rights Council, 2017.

⁵⁰ European Commission Council Regulation No. 1236/2005 concerning trade in certain goods which could be used for capital punishment, torture, or other cruel, inhuman, or degrading treatment or punishment (as amended), 27 June 2005.

⁵¹ 1995 Protocol IV on blinding laser weapons to the 1980 Convention on Certain Conventional Weapons.

⁵² See, e.g., 'China firm develops "laser gun"', *The Business Times*, 3 July 2018, at: <https://www.businesstimes.com.sg/technology/china-firm-develops-laser-gun>.

⁵³ Rule 47(1), 2015 Nelson Mandela Rules. According to Rule 43(2), 'Instruments of restraint shall never be applied as a sanction for disciplinary offences'.

7. USE OF FORCE IN SPECIFIC SITUATIONS

7.1 DURING ARREST

- 7.1.1 Force is often used by law enforcement officials during the course of an arrest. Arrest and detention can never be used to justify excessive use of force or any form of degrading treatment or punishment. The use of an official's hands and arms are not covered by the present Guidelines, but the same principles apply to such use of force as they do to less-lethal weapons or related equipment.
- 7.1.2 When police dogs are present during arrest, they shall be properly trained and should be under the effective control of their handlers at all times, including when they are not on a leash. Police dogs may cause serious and life-long injuries to a victim. There is also a risk of secondary infection from dog bites.⁵⁴
- 7.1.3 Disorientation or distraction devices, such as pyrotechnic flash-bang grenades, are not less-lethal weapons and should not be used as such. Rather than weapons, they are devices that are designed to help facilitate a safe arrest, especially in the course of high-risk operations. The improper use of pyrotechnic flash-bang grenades may cause serious burns or blast injuries and there may even be a risk of fragmentation in certain cases.

7.2 CUSTODIAL SETTINGS

- 7.2.1 Individuals are especially vulnerable to harm in custodial settings. In accordance with the 2015 Nelson Mandela Rules, all prisoners shall be treated with the respect due to their inherent dignity and value as human beings. No prisoner shall be subjected to, and all prisoners shall be protected from, torture or other forms of cruel, inhuman, or degrading treatment or punishment, for which no circumstances whatsoever may be invoked as a justification. The safety and security of prisoners, staff, and visitors shall be ensured at all times.⁵⁵
- 7.2.2 Regulations for custodial settings should clearly state which less-lethal weapons and related equipment are authorised for use, by whom, and what types of force may be used. They should establish rules and procedures for use that comply with international standards.
- 7.2.3 Custodial staff shall not, in their relations with persons in custody or detention, use force except as a last resort, and only in cases involving in self-defence, attempted escape, or

⁵⁴ See, e.g., P. C. Meade, 'Police and domestic dog bite injuries: What are the differences? What are the implications about police dog use?', *Injury Extra*, Vol. 37, No. 11 (November 2006), pp. 395–401.

⁵⁵ Rule 1, 2015 Nelson Mandela Rules.

active/passive physical resistance to an order based on law or regulations.⁵⁶ Proportionate force may also be used, where necessary, to protect a detainee, including where he or she is self-harming.

7.2.4 The carrying and use of weapons by custodial staff should be prohibited in any facility where juveniles are detained.⁵⁷

7.3 DURING ASSEMBLIES (PUBLIC ORDER MANAGEMENT)

7.3.1 Law enforcement officials shall respect and protect the right to freedom of peaceful assembly without discrimination and in accordance with international law.⁵⁸ Whether or not an assembly is authorised by the authorities, the fundamental rights of the participants shall be respected and protected.⁵⁹ Where force is necessary to achieve a legitimate law enforcement objective, all possible precautionary steps must be taken to avoid, or at least minimise the risk of injury or death.⁶⁰

7.3.2 In an assembly in which certain individuals are behaving violently, law enforcement officials have a duty to distinguish between those individuals and the rest of the assembly participants, whose individual right to peaceful assembly should be unaffected. If it is decided that less-lethal weapons are an appropriate means of addressing individual acts of violence, then due care should be given to the likely close proximity of third parties and bystanders.

7.3.3 The use of less-lethal weapons to disperse an assembly is an indiscriminate tactic, and should only be considered a last resort. Dispersal may be considered where violence is serious and widespread and represents an imminent threat to bodily integrity or property, and where law enforcement officials have exhausted all reasonable measures to facilitate the assembly and protect participants from harm.⁶¹ Before approving dispersal, law enforcement agencies should seek to identify and isolate any violent individuals separately from the main assembly, which may allow the assembly to continue.⁶² Before action to disperse an assembly is taken, a warning must be given, unless to do so causes delay that risks serious injury or is futile, in addition time must be given for protestors to obey the warning, and a safe space or route for them to move to must be ensured.

⁵⁶ Rule 82(1), 2015 Nelson Mandela Rules.

⁵⁷ Rule 65, 1990 United Nations Rules for the Protection of Juveniles Deprived of their Liberty.

⁵⁸ Human Rights Council Resolution 25/38, paras. 3, 4.

⁵⁹ 'Joint report of the Special Rapporteur on the rights to freedom of peaceful assembly and of association and the Special Rapporteur on extrajudicial, summary or arbitrary executions on the proper management of assemblies', UN doc. A/HRC/31/66, 4 February 2016, paras. 13–17 and 25.

⁶⁰ *Ibid.*, para. 52; and Human Rights Council Resolution 25/38, para. 9.

⁶¹ Joint report of the Special Rapporteur on the rights to freedom of peaceful assembly and of association and the Special Rapporteur on extrajudicial, summary or arbitrary executions on the proper management of assemblies, UN doc. A/HRC/31/66, 4 February 2016, para. 61.

⁶² *Ibid.*, para. 61.

- 7.3.4 When the use of any less-lethal weapons or related equipment is envisaged against assembly participants, due attention should be paid to the potential for panic in a crowd, including the risk of a stampede.
- 7.3.5 Physical barriers should never be such as to pose a risk to safety. Barbed wire, razor wire, or other spiked barriers create an unacceptable risk of injury to participants in an assembly. Safer alternatives should be employed where a barrier is needed.

8 USE OF SPECIFIC LESS-LETHAL WEAPONS AND RELATED EQUIPMENT

8.01 This section describes key issues and specific considerations with respect to use of certain less-lethal weapons. This is not an exhaustive list of less-lethal weapons, but includes those most commonly used in contemporary law enforcement. Certain weapons are designed to be used against individuals, while others are less discriminate, intended for use against groups of individuals. The guidance provided in this section supplements the general principles set out above on the use of force and less-lethal weapons, which relate to all less-lethal weapons and related equipment.

8.1 POLICE BATONS

UTILITY AND DESIGN

8.1.1 The police baton (also called a truncheon or nightstick) is the most common less-lethal weapon with which law enforcement officials are equipped. Police batons are most often made out of wood, rubber, plastic, or metal, and vary in length from less than thirty centimetres to more than ninety centimetres. The most widely sold products on the market today are straight batons, side-handle batons ('tonfa'), and telescopic batons.⁶³

8.1.2 Batons have many uses in law enforcement, some unrelated to their function as a weapon for use against a person, but are typically used as a less-lethal weapon to enable law enforcement officials to defend themselves against violent assailants or to effect the lawful arrest of a suspect who is violently resisting.

CIRCUMSTANCES OF POTENTIALLY LAWFUL USE

8.1.3 Batons are, in general, a weapon that is used against specific individuals engaged in or threatening violence against a law enforcement official or member of the public. Baton strikes should be targeted against the arms or legs of an assailant.

⁶³ Omega Foundation, 'Police Batons', Unpublished document, 2014.

SPECIFIC RISKS

8.1.4 Officials should avoid baton strikes to sensitive areas of the body, such as the head, neck and throat, spine, kidneys, and solar plexus. Overarm baton strikes on bones and joints can result in dislocations, fractures, and soft-tissue injuries.⁶⁴ In particular, jabs or driving strikes with a baton at the torso should be avoided because of the risk of injury to, and even rupture of, vital organs.

UNLAWFUL USE

8.1.5 Neck-holds using batons should not be employed as they present an especially high risk of death or serious injury as a result of large blood-vessel or airway compression. There is also the risk of injury to the larynx, trachea, and hyoid bone.⁶⁵

8.2 HAND-HELD CHEMICAL IRRITANTS

UTILITY AND DESIGN

8.2.1 A range of hand-held chemical irritants (also called lachrymatory agents) exist for use in law enforcement. The most common are pepper spray (also known as OC: oleoresin capsicum), PAVA and CS spray. Pepper spray contains capsaicin, a chemical extracted from the fruit of certain plants and which is incorporated in water and pressurised to turn it into an aerosol. PAVA contains a small solution (typically less than 1%) of pelargonic acid vanillylamide (PAVA), a synthetic capsaicinoid, in a solvent of aqueous ethanol. PAVA is significantly more potent than CS.⁶⁶ Sprays can come in the form of jets or 'fogger' variants, with jets being more discriminating. CS and PAVA sprays have different characteristics, with PAVA spray needing to be sprayed at the face to be effective while CS spray is active over a wider area. However, CS spray will result in greater cross contamination.⁶⁷

8.2.2 Chemical irritants are used to incapacitate a violent assailant or help effect a lawful arrest of a suspect who is violently resisting.⁶⁸

⁶⁴ M. Stark (ed.), *Clinical Forensic Medicine: A Physician's Guide*, 2nd Edn, Humana Press, New York, 2005, p. 198.

⁶⁵ G. M. Vilke, 'Neck Holds' in D. L. Ross and T. C. Chan (eds.), *Forensic Science and Medicine: Sudden Deaths in Custody*, Humana Press, New York, 2006, pp. 15–27.

⁶⁶ Association of Chief Police Officers of England, Wales and Northern Ireland, *Guidance on the Use of Incapacitant Spray*, United Kingdom, 2012, para. 2.3.2, at: <https://bit.ly/2IN177n>. See the section below on chemical irritants dispersed at a distance for details of CS gas.

⁶⁷ See, e.g., UK Home Office, *Comparison report on CS and PAVA Sprays*, Publication Number: 24/14, London, 2014.

⁶⁸ Omega Foundation, 'Crowd Control Technologies: An Appraisal of Technologies for Political Control', 2000.

CIRCUMSTANCES OF POTENTIALLY LAWFUL USE

8.2.3 Chemical irritants should only be deployed where a law enforcement official believes there is an imminent threat of violence. They are intended to be used to spray the face of a person at a distance of up to four metres, delivering the active chemical to the eyes, nose, and mouth. This causes irritation to the eyes, upper respiratory tract, and skin.⁶⁹ Maximum accuracy is achieved when used at a distance of between 1.25 and 2 metres.⁷⁰

SPECIFIC RISKS

8.2.4 The effects of chemical irritants when used appropriately are normally transient. Exposure to fresh air and treating the eyes with cool water⁷¹ typically remedies the effects within an hour. Certain people, though, have exceptionally severe reactions to irritant spray and children and infants are likely to be particularly susceptible to prolonged harm. Restraining a suspect by placing them in the prone position should be avoided after exposure. If individual suffering from the effects of a chemical irritant is restrained, breathing must be monitored constantly. Any unexpected or long lasting effects should be referred for relevant specialist assessment.⁷²

UNLAWFUL USE

8.2.5 Irritants that contain carcinogenic substances or hazardous levels of active agent should not be used. Repeated exposure should be avoided. Some solvents are toxic, may cause corneal erosion, or are flammable.⁷³

8.2.6 Chemical irritants should not be used in situations of purely passive resistance.⁷⁴

⁶⁹ J. McGorrigan & J. Payne-James, 'Irritant Sprays: Clinical Effects and Management', Faculty of Forensic and Legal Medicine, United Kingdom, 2014, at: <https://bit.ly/2tRWCMt>.

⁷⁰ Association of Chief Police Officers of England, Wales and Northern Ireland, *Guidance on the Use of Incapacitant Spray*, United Kingdom, 2012, para. 1.2.3.

⁷¹ This is because hot water will reactivate the irritant.

⁷² McGorrigan & J. Payne-James, 'Irritant Sprays: Clinical Effects and Management'.

⁷³ M. Holopainen et al.; 'Toxic carriers in pepper sprays may cause corneal erosion', *Toxicology and Applied Pharmacology*, No. 186 (2003); and P. Rice, D. Jones, and D. Stanton, *A literature review of the solvents suitable for the police CS spray device*, Chemical & Biological Defence Establishment, Salisbury, 1997.

⁷⁴ US Court of Appeals (Ninth Circuit), *Headwaters Forest Defense v. County of Humboldt*, 240 F.3d 1185 (2000), pp. 1205–06.

8.3 CHEMICAL IRRITANTS DISPERSED AT A DISTANCE (TEAR GAS)

UTILITY AND DESIGN

8.3.1 A range of chemical irritants⁷⁵ are available which can be launched at a distance against groups of individuals engaged in violent acts. Tear gas is used to describe a variety of lachrymatory agents used by police forces in certain countries. The most widely used chemical irritant dispersed at a distance is CS (either micronised powder or pyrotechnically generated smoke), which is typically discharged either in the form of projectiles or from grenades shot from a launcher.

CIRCUMSTANCES OF POTENTIALLY LAWFUL USE

8.3.2 The aim of using chemical irritants dispersed at a distance is usually to cause the members of the group to disperse and to refrain from further violence.

SPECIFIC RISKS

8.3.3 A stampede may result when irritants are used against a crowd in enclosed areas, such as a football stadium.⁷⁶ In such cases, the consequences may be lethal.⁷⁷ Pyrotechnic irritants may result in death as a result of fire generated by the round burning near combustible material.⁷⁸

8.3.4 When chemical irritants are deployed behind a group of violent individuals, this may prompt them to move towards law enforcement officials and agencies, increasing the risk of a violent confrontation. Irritants will also affect law enforcement officers if they are not adequately protected from cross contamination caused by movement of the irritant cloud/particles.

⁷⁵ The term riot control agent is employed in the 1992 Chemical Weapons Convention. Therein they are defined broadly as 'Any chemical not listed in a Schedule, which can produce rapidly in humans sensory irritation or disabling physical effects which disappear within a short time following termination of exposure.' Art. II(7), 1992 Chemical Weapons Convention. Their use is not restricted to a riot, as defined by States under domestic law.

⁷⁶ Report of the International Commission of Inquiry mandated to establish the facts and circumstances of the events of 28th September 2009 in Guinea, UN doc. S/2009/693, 18 December 2009, para. 62.

⁷⁷ Y. Karagama *et al.*, 'Short Term and Long Term Physical Effects of Exposure to CS Spray', *Journal of the Royal Society of Medicine*, Vol. 94, No. 4 (2003), pp. 172–74; M. Crowley, *Chemical Control*, Palgrave, London, 2015, p. 48.

⁷⁸ See, e.g., 'Sheriff's Acknowledge Using Fire-Starting Pyrotechnic Tear Gas Against Dorner', *CBS Los Angeles*, 13 February 2013.

8.3.4 Use of chemical irritants can temporarily cause breathing difficulties, nausea, vomiting, irritation of the respiratory tract, tear ducts, and eyes; spasms; chest pains; dermatitis; and allergies. In high doses, it can cause necrosis of the tissue in the respiratory tract and the digestive system, pulmonary oedema, and internal bleeding.⁷⁹ Repeated exposure of chemical irritants should be avoided. A detainee who has been exposed should be decontaminated immediately.

UNLAWFUL USE

8.3.5 Projectiles shall not be fired at the head or torso of an individual owing to the risk of death or serious injury from impact trauma.⁸⁰

8.3.6 Chemical irritants should not be used in confined spaces, such as prison cells,⁸¹ where there is no viable exit, owing to the risk of death or serious injury from asphyxiation. Low cross contamination sprays (e.g. PAVA) may be better suited to this application.

8.3.7 Chemical irritants that contain hazardous levels of active agent should not be used. Where an irritant is found to have had long-term effects on individuals, it should be determined whether these effects can be prevented through better supervision and training of law enforcement officials or whether the use of the particular type of agent should be discontinued.

8.4 CONDUCTED ELECTRICAL WEAPONS

UTILITY AND DESIGN

8.4.1 Conducted electrical weapons generally use a high voltage but low amperage electrical charge to cause the victim's muscles to contract uncontrollably, resulting in temporary paralysis. This enables an arrest to be made safely by a law enforcement official. Many models, such as the Taser® brand,⁸² use compressed air to fire two darts that trail electric cable back to the weapon's handset. When the darts strike the human body, a high voltage charge passes down the cable.⁸³ Many conducted electrical weapons can also deliver an electric-shock when pressed directly against an individual (a use sometimes referred to as drive-stun mode), though this relies on pain compliance and does not result in neuro-muscular incapacitation. There are also direct-stun conducted electrical weapons.

⁷⁹ European Court of Human Rights, *Abdullah Yaşa and others v. Turkey*, Judgment, 16 July 2013, para. 30.

⁸⁰ European Court of Human Rights, *Ataykaya v. Turkey*, Judgment, 22 July 2014, paras. 56, 57.

⁸¹ OHCHR, *Human Rights and Law Enforcement, A Manual on Human Rights Training for Law Enforcement Officials*, 2017, Chap. 5.

⁸² Taser® is a market-leading brand of conducted electrical weapon and sometimes the word 'taser' is sometimes used generically to describe this type of weapon.

⁸³ Taser® affirms that only 1,200 volts enter the victim's body. US Court of Appeals (Ninth Circuit), *Bryan v. McPherson*, Opinion (Case No. 08-55622), 28 December 2009, para. 2 and note 4.

CIRCUMSTANCES OF POTENTIALLY LAWFUL USE

8.4.2 Conducted electrical weapons allow law enforcement officials to stop and arrest individuals posing an impending threat of harm⁸⁴ at a distance, without the need to use firearms. Conducted electrical weapons also offer an alternative to other less-lethal weapons that might prove more dangerous, in the prevailing circumstances, either to the law enforcement official or the individual being targeted.

SPECIFIC RISKS

8.4.3 To avoid a prolonged charge being applied to a suspect, every conducted electrical weapon should have an automatic cut-off of the electrical charge after no more than five seconds. This feature is not incorporated into every weapon. The risk of inflicting pain or suffering that may rise to the level of torture or other forms of cruel, inhuman, or degrading treatment or punishment in drive-stun mode, where the weapon directly applies electricity to an individual, is especially severe.⁸⁵

8.4.4 The risks from a conducted electrical weapon discharge are involve primary injury from the electrical charge or the barbs imbedded in the skin.⁸⁶ The elderly may be more prone to musculo-skeletal injury from the muscle contractions produced by the weapon.⁸⁷ There is also a significant risk of secondary injury, particularly as a result of falling to the ground from height or onto a hard surface, since subjects who have received the electrical charge will typically be physically incapable of breaking their fall using their hands.

8.4.5 The risk of significant injury is heightened in certain conditions, including where the individuals who have been electrically shocked have heart disease, have taken certain prescription or recreational drugs, or are more susceptible for other reasons to adverse cardiac effects. Children and slender adults may be at greater risk of internal injury from tissue-penetrating barbs as their body-wall thickness is generally less.⁸⁸ Taser discharge may trigger seizures in those affected by epilepsy, irrespective of barb location.⁸⁹ The risk of severe secondary injuries is exacerbated when the suspect is on an elevated surface

⁸⁴ US Court of Appeals (Fourth Circuit), *Armstrong v. Village of Pinehurst*, Judgment, 11 January 2016, pp. 19, 21.

⁸⁵ Independent Police Complaints Commission (IPCC), *IPCC Review of Taser Complaints and Incidents: 2004–2013*, United Kingdom, 2014, p. 12.

⁸⁶ J. Payne-James and B. Sheridan, 'Taser: Clinical Effects and Management of those subjected to Taser Discharge', Faculty of Forensic and Legal Medicine, United Kingdom, 2017, at: <https://bit.ly/2EXzCmV>.

⁸⁷ DOMILL

⁸⁸ Defense Scientific Advisory Council Sub-committee on the Medical Implications of Less-lethal Weapons (DOMILL), Statement on the Medical Implications of Use of the Taser X26 and M26 Less-Lethal Systems on Children and Vulnerable Adults, United Kingdom, 2012, at: <http://data.parliament.uk/DepositedPapers/Files/DEP2012-0729/96605%20Library%20Deposit.pdf>.

⁸⁹ Ibid

or position, such as a roof, a ladder, or a wall.⁹⁰ Use in the presence of flammable liquid or explosive vapour may result in fire, deflagration, or even an explosion.⁹¹

8.4.6 Use against an individual who is self-harming may be justified in serious cases, but this remains a controversial measure. Drive-stun use of conducted electrical weapons may not be effective on persons with serious mental health issues or on others who may not respond to pain due to a mind-body disconnect. In such instances, a heightened risk of serious harm or injury exists.⁹²

UNLAWFUL USE

8.4.8 Conducted electrical weapons should not be used by law enforcement officials as a form of punishment for perceived wrongdoing or with a view to overcoming purely passive resistance to an official's instructions through the infliction of pain.⁹³

8.5 KINETIC IMPACT PROJECTILES

UTILITY AND DESIGN

8.5.1 A range of kinetic impact projectiles are used to stop violent individuals as a less-lethal alternative to metal-jacketed ammunition. Various names are used to describe kinetic impact projectiles including rubber bullets, plastic bullets, baton rounds, and attenuating energy projectiles. Their design ranges from rubber-coated steel projectiles of small calibre to large diameter (37mm or 40mm) plastic or rubber projectiles which may or may not have an energy attenuation mechanism typically formed by a soft nose (e.g. the Attenuating Energy Projectile).⁹⁴

⁹⁰ For instance, Los Angeles Police Department policy and training cautions against use against an individual who is danger of falling 'which would likely result in death or serious bodily injury'.

⁹¹ Scientific Advisory Committee on the Medical Implications of Less-Lethal Weapons (SACMILL), 'Statement on the Medical Implications of Use of the TASER X2 Conducted Energy Device System', 2016, at: <https://bit.ly/2KjxHMU>.

⁹² US Department of Justice, *Investigation of the Baltimore City Police Department*, 10 August 2016, p. 62; and see also Police Executive Research Forum (PERF) & Community Oriented Policing Services (COPS), *2011 Electronic Control Weapon Guidelines*, United States, 2011, p. 14, at: <https://bit.ly/2MzSFUt>.

⁹³ US Department of Justice (Civil Rights Division), *Investigation of the Ferguson Police Department*, Washington DC, 4 March 2015, p. 28; US Court of Appeals (Eighth Circuit), *Brown v. City of Golden Valley*, 574 F.3d 491, 499 (2009).

⁹⁴ According to the College of Policing for England and Wales, 'The projectile has been designed with a nose cap that encloses a void. This design feature is intended to attenuate the delivery of the impact energy by extending the duration of the impact and minimising the peak forces.' College of Policing Authorised Professional Practice (APP), 'Armed policing: Attenuating energy projectiles', Last updated 11 December 2014, at: <https://bit.ly/2Nc4otB>.

CIRCUMSTANCES OF POTENTIALLY LAWFUL USE

8.5.2 Kinetic impact projectiles should generally only be used in direct fire against the lower body of a violent individual when a substantial risk exists of immediate serious injury to either a law enforcement official or a member of the public. They are often used to support operations where firearms are deployed and an accurate less-lethal option with an extended range may reduce the likelihood of lethal weapons being used.

SPECIFIC RISKS

8.5.3 Targeting the face or head may result in skull fracture and/or permanent damage to the eyes and even blindness. Targeting the torso may cause damage to the vital organs. The calibre and velocity of the projectiles, as well as the material of their construction, will also affect the likelihood and seriousness of injury. Certain projectiles are highly inaccurate. To meet international standards, impact projectiles should be capable of striking an individual to within a 10-centimetre diameter of the targeted area when fired from the designated range.⁹⁵

8.5.4 Skip-firing off the ground causes an unacceptable risk of serious injury.

UNLAWFUL USE

8.5.5 Kinetic impact projectiles shall not be fired in automatic mode. Multiple projectiles are inaccurate and their use cannot comply with the principles of necessity and proportionality; they should never be used.

8.5.6 Kinetic impact projectiles shall not be targeted against the head.

8.6 DAZZLING LASERS

UTILITY AND DESIGN

⁹⁵ A. Mahajna *et al.*, 'Blunt and penetrating injuries caused by rubber bullets during the Israeli-Arab conflict in October, 2000: a retrospective study', *The Lancet*, Vol. 359, No. 9320 (2000), pp. 1795–1800.

8.6.1 Dazzling lasers are used by the military in law enforcement to hail and warn individuals, especially those in a moving vehicle. One model engages targets up to 16 kilometres away. The beam's intensity can be increased to achieve 'voluntary compliance'.⁹⁶

CIRCUMSTANCES OF POTENTIALLY LAWFUL USE

8.6.2 Dazzling lasers, including those using LEDs, may have a utility in high-risk scenarios as an alternative to the use of firearms. There are, though, other, potentially safer alternatives to stop a vehicle. Laser range finding should be incorporated as part of a weapon's safety controls, but this is not the case with every model on the market.

SPECIFIC RISKS

8.6.3 Dazzling lasers may cause blindness or, when used against drivers, result in the vehicle crashing. Consequently, they should only be considered for use in exceptional circumstances, such as in counterterrorism operations.

UNLAWFUL USE

8.6.4 Lasers shall not be used with intent to blind or where permanent blindness is a likely outcome.

8.7 WATER CANNON

UTILITY AND DESIGN

8.7.1 Water cannon are weapons used to project water at a variety of pressures for the purpose of dispersal of groups, to protect property, or to put an end to violent behaviour.

CIRCUMSTANCES OF POTENTIALLY LAWFUL USE

8.7.2 Water cannon should only be used in situations of serious public disorder where there is the potential for violence that may cause loss of life, serious injury or widespread destruction of property. In order to meet the requirements of necessity and proportionality, the deployment of water cannons should be carefully planned and managed with rigorous command and control at a more senior level.⁹⁷

⁹⁶ T. South, 'This is the laser that Marines have chosen to dazzle, hail and warn', *Marine Times*, 29 May 2018, at: <https://bit.ly/2tPIODv>.

⁹⁷ UNODC and OHCHR, *Resource Book on the Use of Force and Firearms in Law Enforcement*, New York, 2017, p. 90.

SPECIFIC RISKS

8.7.3 Water cannon should not be used against persons in elevated positions owing to the risk of secondary injury. Other risks including hypothermia in cold weather (especially if the water is not heated) and the risk of slipping or being forced by the jet against walls and other hard objects. Certain water cannon are indiscriminate in their effects because they are unable to target groups of individuals accurately.

UNLAWFUL USE

8.7.4 Water cannon shall not target a jet of water at the face of an individual or group of individuals at short range owing to risk of causing blindness.

8.8 ACOUSTIC WEAPONS AND EQUIPMENT

UTILITY AND DESIGN

8.8.1 Acoustic warning or hailing devices are sometimes used as sonic weapons.⁹⁸ A well-known brand is the Long Range Acoustic Device (LRAD), although the manufacturer denies that the LRAD is a weapon.⁹⁹ One model is said to be capable of clearly broadcasting messages up to 5.5 kilometres away 'in any type of terrain and environment', allowing operators 'to safely alter behaviour'.¹⁰⁰ Other authorities have asserted that the LRAD has been used successfully as a weapon.¹⁰¹

CIRCUMSTANCES OF POTENTIALLY LAWFUL USE

8.8.2 In the maritime environment, the risks of indiscriminate effects from acoustic weapons are vastly reduced and they may dissuade potential pirates in counterpiracy operations.

SPECIFIC RISKS

8.8.3 A number of serious health risks are associated with the use of the weapon, particularly at close range, loud volume, and/or excessive lengths of time. Such risks range from

⁹⁸ INCLO and PHR, *Lethal in Disguise: The Health Consequences of Crowd-Control Weapons*, United States, 2015, pp. 70–77; J. Altmann, 'Acoustic Weapons – A Prospective Assessment', *Science & Global Security*, Vol. 9 (2001), pp 165–234.

⁹⁹ LRAD Corporation, 'Law Enforcement', 2017, at: <https://bit.ly/2IP07A1>. It is said that 'LRAD systems safely broadcast highly intelligible messages, warnings, notifications, instructions and commands from close range up to 3 kilometres to individuals or large crowds in a wide variety of law enforcement situations.' Ibid.

¹⁰⁰ LRAD Corporation, 'LRAD 2000X: The World's Longest Range AHD', 2017, at: <https://bit.ly/2IIT63t>.

¹⁰¹ Telemar, 'LRAD deterrent and defence against piracy attack', at: <https://bit.ly/2KoVnjj>. See also M. Evers, 'Sonic Canon Gives Pirates an Earful', *Spiegel Online*, 15 November 2005, at: <https://bit.ly/2KAYxw4>.

temporary pain, loss of balance,¹⁰² and eardrum rupture,¹⁰³ to deafness. To mitigate the risks, a safe and appropriate decibel limit and a minimum range should be set in advance for all use of warning devices to avoid harm, especially where the device does not have a rangefinder and automatic cut-off.

- 8.8.4 The 'alert' function is relatively indiscriminate, targeting sections of the crowd instead of focusing on individuals within it. A review by the Royal Canadian Mounted Police found that 'while the manufacturer's claim that their LRAD has a very narrow band of audio directivity (+/- 15 degrees)', independent field testing has questioned the accuracy of this claim.¹⁰⁴ This increases the risk that uninvolved persons may be affected.¹⁰⁵

UNLAWFUL USE

- 8.8.5 Use of an acoustic weapon at a range where the decibel output would be likely to cause permanent hearing damage would be unlawful.¹⁰⁶

¹⁰² Bradford Non-lethal Weapons Research Project, *Non-lethal weapons: saving lives but still serious areas of concern*, Paper presented at Jane's 8th Annual Less Lethal Weapons Conference, Royal Armouries, Leeds, 2005.

¹⁰³ R. Vinokur, 'Acoustic Noise as a Non-Lethal Weapon Sound and Vibration', *Sound and Vibration*, 2004.

¹⁰⁴ CCLA, *Factum of the Moving Parties*, 2010, at: <https://bit.ly/2NbL7IE>.

¹⁰⁵ Evidence of Dr. Harrison in *Canadian Civil Liberties Assn. v. Toronto (City) Police Service* [2010] O.J. No. 2715 2010 ONSC 3525 Court File No. CV-10-404640.

¹⁰⁶ NATO, *Non-Lethal Weapons and Future Peace Enforcement Operations RTO Technical Report*, Doc. TR-SAS-040, 2004; see *Canadian Civil Liberties Assn. v. Toronto (City) Police Service* [2010] O.J. No. 2715 2010 ONSC 3525 Court File No. CV-10-404640p8.

9 DISSEMINATION, REVIEW, AND IMPLEMENTATION

- 9.1 The present Guidelines shall be disseminated as widely as possible, in particular to law enforcement agencies and officials, judges, prosecutors, the military, United Nations peacekeepers, and private security companies.
- 9.2 The Guidelines should be reviewed by experts every five to ten years.
- 9.3 At domestic level, states and law enforcement agencies are encouraged to take the Guidelines into account in developing policies, training manuals, and standing operating procedures related to less-lethal weapons and related equipment. In addition, these policies, manuals, and procedures should be under continual review to ensure that lessons learned are effectively fed back into practice.