

**Notes for Guidance on Police Use of Attenuating Energy Projectile - AEP**  
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**1. Preface**

- 1.1 Managing conflict and responding to violence are core police functions. Police response is underpinned by Human Rights and in particular the obligation under Article 2 of the European Convention on Human Rights, to uphold the right to life.
- 1.2 This guidance is intended to inform the storage, carriage and use of the approved 37mm soft nosed impact projectile designated the L60A1. This is an Attenuating Energy Projectile (hereafter referred as the AEP) and is intended for use as a less lethal kinetic energy device. Operational use of the AEP will be limited within UK Police Services to authorised officers who have been specifically trained in the use of the system.
- 1.3 The use of the AEP will be informed by reference to the ACPO Conflict Management Model, and is intended to provide officers (including those armed with conventional firearms) with an additional means of dealing with threats of serious violence.

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- 1.4 In accordance with ACPO policy on other less lethal weapons, the availability or deployment of the AEP should not be considered as a replacement for conventional firearms in situations where the deployment of conventional firearms has been authorised.
- 1.5 The AEP has not been designed for use as a crowd control technology but has been designed for use as a less lethal option in situations where officers are faced with individual aggressors whether such aggressors are acting on their own or as part of a group.
- 1.6 The AEP may be deployed in a variety of operational situations, however the objective will remain the same. The AEP is intended for use as an accurate and discriminating projectile, designed to be fired at individual aggressors.
- 1.7 In the event of it becoming necessary to use an AEP in a public order situation this must be restricted to use against clearly identified individuals who are presenting a threat which must be countered and other tactical options available for countering the threat posed are considered inappropriate in the circumstances.
- 1.8 It must be recognised that the use of a kinetic energy device in a situation of public disorder may have a profound impact on crowd dynamics with implications for public safety and order.
- 1.9 If officers armed with the AEP system are deployed the initiation and command of the operation will, dependant on the circumstances be in accordance with the provisions set out in the ACPO:
  - Manual of Guidance on Police use of Firearms
  - Keeping the Peace Manual.
- 1.10 Similarly, command and operational competencies, training standards and tactics will be in accordance with the ACPO:
  - National Police Firearms Training Curriculum
  - Manual of guidance on public order standards, tactics and training.
- 1.11 Throughout the United Kingdom there are both authorised firearms officer trained in the Use of the AEP system, as a less lethal option in any situation to which they are deployed and officers who are not authorised firearms officers but specifically trained to use the AEP system in a situation of serious public order situation. This guidance applies to all officers involved in the training, authorisation, deployment, command and use of this less lethal option irrespective of the circumstances in which they are deployed.

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1.12 Where Authorised Firearms Officers trained in the AEP are expected to also be deployed with the system in a public order situation then they will be trained in public order theory and tactics.

1.13 As with deployment of authorised firearms officers in situations of serious public disorder deployments of officers armed with AEP should be authorised by an officer of Assistant Chief Constable/Commander rank subject to the chief officer having agreed to AEP's being used in such circumstances. Officers armed with the AEP who are to be deployed within a public order situation should be fully trained in public order policing and regularly complete AEP training within that context.

1.14 Authorised Firearms Officers (AFO's) <sup>1</sup>may, in accordance with the ACPO Manual of Guidance, on Police Use of Firearms, be issued with firearms where the authorising officer has reason to suppose that they, in the course of their duty, may have to protect themselves or others from a person who is

- in possession of a firearm; or
- has immediate access to a firearm; or
- is otherwise so dangerous that the officer's use of a firearm may be necessary.

1.15 Officers trained in use of the AEP system may also be deployed in situations of serious public disorder where their use is judged to be necessary to reduce a serious risk of:

*(i) loss of life or serious injury or;*

*(ii) substantial and serious damage to property where there is, or is judged to be, a sufficiently serious risk of loss of life or serious injury to justify their use.*

1.16 In assessing the risk of loss of life or serious injury occurring, in a public order situation, account should be taken of the risks to police

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<sup>1</sup> In recognition of the special circumstances prevailing in Northern Ireland, the Chief Constable of PSNI has given standing authority for all officers, subject to successful training, to be issued with a personal issue handgun. This standing authority is kept under regular review in and is set out at Chapter 3 paragraph 8.5 of the ACPO Manual of Guidance on Police use of Firearms. Standing Authority arrangements also exist in other force areas within the UK. PSNI have, in keeping with national best practice provided a less lethal capability as and alternative to resort to conventional firearms in situations where officers are faced with individual aggressors whether such aggressors are acting on their own or as part of a group. Should it be necessary to deploy officers armed with an AEP in a Public Order or any other situation PSNI operational instruction will be in accordance with this ACPO Guidance and will contain additional requirements as deemed appropriate by the Chief Constable of PSNI to meet local legislation and oversight arrangements.

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officers and members of the emergency services as well as to members of the public and others.

- 1.17 The AEP should be aimed to strike directly (i.e. without bouncing) the lower part of the subject's body i.e. below the rib cage. Officers are trained to use the belt-buckle area as the point of aim, at all ranges thus mitigating against upper body hits.
- 1.18 Unless there is a serious and immediate risk to life, which cannot otherwise be countered, use at under one metre or aiming the weapon to strike a higher part of the body at any range is prohibited. In these circumstances the risk of serious and even fatal injuries is increased and the firer must be able to justify the increased use of force.
- 1.19 This guidance recognises that the use of force involving firearms is an extreme measure. The guidance therefore incorporates Article 3 C of the UN code of Conduct for Law Enforcement Officers, which deals and is specific in addressing use of force and firearms against children.
- 1.20 The police use of force is governed by:
  - Common Law;
  - Section 3 Criminal Law Act 1967;
  - Section 117 Police and Criminal Evidence Act 1984;
  - The Human Rights Act 1998.
- 1.21 It is recognized that the use of a kinetic energy projectile has, in certain circumstances the potential for lethal consequences and, as such, Article 2 of the ECHR is of particular relevance when they are used.
- 1.22 The test of absolute necessity found in Article 2 provides a stricter test of proportionality than is required in other areas of the Convention. It is also a stricter test than is provided by the concept of reasonable force within s. 3 Criminal Law Act 1967, s. 117 of Police and Criminal Evidence Act 1984, the equivalent Northern Ireland legislation and Common Law. Even where the use of force may be seen as being reasonable it may not be absolutely necessary. In addition, the use of force must be based on an honestly held belief that it is necessary, which is perceived for good reasons to be valid at the time.
- 1.23 Article 2 of the UN Basic Principles on the use of Force and Firearms 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 that would allow for a differentiated use of force and firearms'.*

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- 1.24 The availability of the AEP is intended to provide officers including those issued with conventional firearms, with a differentiated use of force and firearms. The AEP will, where appropriate, be deployed alongside conventional firearms and other less lethal technologies already on issue to firearms officers.
- 1.25 Police officers responsible for the planning and control of operations where the use of AEP or other uses of force are a possibility, shall so plan and control them to minimize, to the greatest extent possible, recourse to force and, in particular, potentially lethal force.
- 1.26 Standards of competence and related training requirements, as set out in the National Police Firearms Training Curriculum apply to those:
  - who use the system,
  - who provide tactical advice in its use,
  - who might be called upon to command operations
- 1.27 In forces where officers authorised in the use of AEP are not trained in conventional firearms the training provided will include a basic understanding of conventional firearms theory and tactics including issues associated with ricochet potential.
- 1.28 The issue, deployment and use of the AEP will conform to the well-established guidance already laid down in the ACPO Manual of Guidance on Police Use of Firearms. The following issues are therefore relevant:
  - The command issues as set out in the ACPO Manual of Guidance deal with the management of incidents at which firearms officers are deployed as opposed to specific use of force options.
  - The authorisation to deploy firearms will include the full range of conventional firearms and less lethal weapons available to those officers.
  - The post incident procedures set out in the Manual are specific to the use of conventional weapons.
- 1.29 AEP's should be issued only to officers assessed as competent to use them in accordance with the training and assessment procedures approved by ACPO.
- 1.30 Appropriate post incident procedures following the operational firing of the AEP will be implemented depending on the nature of the injury or harm occasioned or in accordance with the specific instruction pertaining in the force area where the firing took place.
- 1.10 This guidance will be regularly reviewed and it is anticipated that the use of the AEP will inform the development of operational good practice.

## **2 Introduction**

- 2.1 The purpose of this guidance is to inform and support decision making in relation to training, deployment and use of the AEP.
- 2.2 The intention is to provide Chief Officers, operational commanders and officers trained in the use of the AEP system with written guidance on the use of the equipment.
- 2.3 Detailed instruction on the characteristics, operation and use of the AEP will be covered in the training and documentation provided to officers to be accredited in its use.

## **3 Description of the AEP System**

- 3.1 The AEP forms part of the common weapon system approved for use by members of the police service or HM forces in the United Kingdom. It is therefore essential that a 'system approach' is applied to storage, maintenance, zeroing and operational use.
- 3.2 The common weapon 'system' comprises
- The weapon
  - The sight
  - The munition
  - The Zeroing Instructions
  - Maintenance and storage instructions
  - ACPO Guidance on Use and MoD rules of Engagement
- 3.3 The AEP is fired from a 37 mm breech loaded weapon. The approved launcher is the L104A1 equipped with an approved L18A1/A2 optical sight.
- 3.4 A collimator has also been provided to assist in checking the zero of the weapon, instructions on its use are contained at appendix D.
- 3.5 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. It thereby delivers a high amount of energy to maximise its effectiveness, with reduced potential for life threatening injury. Reducing the rate of onset of the impact force and reducing the magnitude of the peak force, have both been shown in human impact to reduce the severity of injuries.

## **4 Human Effects of the AEP**

- 4.1 The AEP is designed to deliver an impact which is not intended to cause serious or life threatening injury, but is of sufficient force to dissuade or

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prevent a violent or potentially violent person from their intended course of action and thereby neutralise the threat. However as with all applications of force, there is a potential for unintended serious and even fatal injury either as a direct result of an impact or as a result of secondary injuries caused by a subject falling. It should, however, be remembered that no weapon system, including conventional firearms, are universally effective.

4.2 The reaction of a person struck by the AEP will vary depending on the area of the body struck and the degree of motivation being exhibited by the individual. Persons who are under the influence of alcohol, drugs or who are suffering from mental health issues or exhibiting acute behavioural disorders may also exhibit a wider range of responses. Officers using the AEP should not rely on an immediate incapacitant effect and should always be in a position to consider other tactical actions should the individual continue to pose a threat.

4.3 Unless follow up action is taken a subject struck with an AEP may continue with their previous behaviour. It is therefore important that officers should continually assess the threat being posed and as necessary consider other tactical options.

## **5 Issue/Possession**

5.1 The AEP will only be issued to authorised officers who have successfully completed approved ACPO training in the use of the device. The authority for the issue of AEP will therefore be in line with operating procedures pertaining in each Forces area for the issue of such equipment.

5.2 The authorised launch platform for the AEP is the Heckler and Koch L104A1 which may also be used for launching other projectiles which would bring it within the scope of a Section 5 Firearms Act 1968 (and equivalent legislation in Scotland and Northern Ireland). Police officers, whilst acting in their capacity as such, are exempt from the requirements of the legislation and do not need any additional legal authority to possess the AEP.

5.3 The AEP should not be regarded as a replacement for other routinely issued protective equipment or for conventional firearms but rather as part of the range of tactical options. An officer may also need to resort to another option if the device does not have the effect intended.

5.4 In circumstances where specialist firearms officers have been deployed to a situation, the authorisation to utilise their firearm will also include the authority to use any other less lethal option or technology with which they have been issued including where appropriate the AEP. In these situations it would be inappropriate for commanders or supervisory officers to attempt to restrict officers to a particular less lethal technology or use of force option.



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- 5.5 However, in certain circumstances it may be appropriate to deploy firearms officers equipped with the AEP in public order situations. As with the deployment of specialist firearms teams in situations of public disorder this must be closely co-ordinated and gives rise to specific command issues. For this reason specialist firearms resources should not, in these circumstances, be deployed without the express authority of an officer of at least Assistant Chief Constable / Commander rank.

### **6 Possession outside Force area**

- 6.1 Officers armed with the AEP system may on occasions be deployed outside of their immediate Force area. Chief Officers will agree a protocol with neighbouring Forces (Appendix A) that enables officers equipped with the an AEP capability to utilise the device should they be required to respond in a neighbouring Force area. Individual Chief Officers will remain vicariously liable in civil law for their own officers' actions. Guidance for the use of the AEP, whether within or outside the Force area, is set out below.

### **7 Specific Risk factors**

- 7.1 The Defence Scientific Advisory Council (DSAC) sub-committee on the Medical Implications Of Less-Lethal Weapons (DOMILL) have provided an independent view for the UK Government on the medical implications of the use of the Attenuating Energy Projectile (AEP) L60A1 system. in the UK, based on the policy and guidance of the Association of Chief Police Officers (ACPO) set out in this document, and also that provided to UK Armed Forces.
- 7.2 A full copy of the Domill statement is attached at Appendix 'B'. The Domill statement provides specific advice as to risk factors associated with strikes to certain parts of the body. This is predicated on the system being used in accordance with guidance and being zeroed in accordance with instructions set out at 'appendix 'C'.
- 7.3 All risk factors must be considered when assessing the 'appropriateness' and 'necessity' of using a AEP.
- 7.4 It is recognised that there are circumstances where the discharge of an AEP or other Less Lethal technology may be an appropriate alternative to the use of a conventional, potentially lethal firearm, and the discharge of the AEP irrespective of the additional risk is absolutely necessary to protect life.
- 7.5 Users should be made aware that AEP's can ricochet in some circumstances and that the presence of obstacles and of personnel other than the intended target should form part of their risk assessment in the decision to fire the weapon.



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7.6 Consideration should also be given to the possibility of striking individuals behind the identified subject who is being fired at. This risk assessment should include to possibility of direct strikes and as a result of Ricochet.

7.7 The Article 3 C of the UN Code of Conduct for Law Enforcement Officers is specific in stating that:

*'The use of firearms is considered an extreme measure. Every effort should be made to exclude the use of firearms, especially against children. In general, firearms should not be used except when a suspected offender offers armed resistance or otherwise jeopardizes the lives of others and less extreme measures are not sufficient to restrain or apprehend the suspected offender.'*

7.8 Whilst the discharge of an AEP represents an option which is potentially a less lethal alternative to conventional firearms every effort should be made to ensure that children are not placed at risk by the firing of an AEP. This is particular relevant in public order situations where children may be amongst a crowd and be placed in danger should an AEP miss its intended target.

7.6 Occasions will arise where it is necessary to use the AEP on a person who is exhibiting violent behaviour and who is also suffering from a mental disorder or illness. Where it is possible to discuss options with mental health professionals present at the scene, this should be considered.

7.7 In pre-planned operations or joint activities such discussions could form part of any briefing for the event. Consultation with friends, relatives etc. who are likely to know the person well may also assist in deciding on the most appropriate use of force response. Consultation with Health Authorities and Social Services in this respect will form part of the implementation plan. The final decision as to appropriate use of force options in these circumstances will rest with the officer concerned.

7.8 Similarly where it becomes apparent that the subject has an existing medical condition or is under the influence of drugs, assessment of these additional risk factors should be made in determining the appropriate option.

## **8 Training**

8.1 Training standards and tactics will be in accordance with the ACPO:

- National Police Firearms Training Curriculum
- Manual of guidance on public order standards, tactics and training

8.2 Tactical training in the use of the AEP should emphasise precautions in relation to the specific risk factors contained in this guidance.

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8.3 Qualification and zeroing of weapons must take place using the operationally approved L60A1 AEP.

8.4 Officers trained in the AEP are also trained in conflict management and must be aware of the dangers associated with the conditions known as positional asphyxia and acute behavioural disorder. This is relevant to the after care of any person who has been the subject of any use of force option.

8.5 It is important that officers have an appreciation of the physical and psychological effects of a strike by the AEP.

### **9 Use**

9.1 Use of the AEP is one of a number of tactical options available to an officer who is faced with violence or the threat of violence. The purpose of using the AEP is to dissuade or prevent a potentially violent person from their intended course of action and thereby neutralise the threat.

9.2 The initial discharge and any subsequent discharge must be proportionate, lawful, appropriate, necessary and non-discriminate, in all the circumstances. Ultimately, the decision to discharge the AEP is an individual one for which the officer will be accountable. The Conflict Management Model should assist officers in making such judgements.

9.3 Officers will carry out functions checks as set out in the ACPO documentation on the weapon approved to launch the AEP whenever the weapon is issued and where possible prior to actual deployments.

9.4 It is essential that the AEP launcher is zeroed for the individual officers in accordance with the directions set out in the ACPO documentation.

9.5 As with conventional firearms AEP's should not be fired from moving vehicles.

### **10 Oral and Visual warnings**

10.1 In a situation where the police can justify the use of force or an escalation in the use of force, warning messages should be given, if practicable and time permits. If a tactic is to be used over a period of time, or a large area, it may be desirable to repeat the warning messages.

10.2 In a public order situation warning can be invaluable in alerting the crowd of police intentions and providing the opportunity for the crowd to disperse or remove themselves from danger. Unless circumstances do not permit, AEPs are only to be fired after an oral warning, for example by means of a loud hailer or PA system, has been given telling the crowd to disperse and informing individuals that force will be used against them. The warning should make clear that if individuals do not stop their violent action that force will be used without further warning. A record is to be kept of the

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words used in giving the warning. The following words should be used whenever possible:

*“Attention, attention, this is a police message. The crowd should disperse immediately as force is about to be (or will again) be used against individuals engaged in violent activity. No further warnings will be given.”*

- 10.3 The above warning(s) should be given on as many times as is reasonably practicable in the circumstances, ensuring that police intention to deploy tactical options and/or use force are clearly communicated prior to use. When the use of a specific tactical force option is imminent, a final warning should be given, using words such as:

**‘If you do not stop impact rounds will be fired’**

- 10.4 It may in certain circumstances be appropriate to provide a visual display of officers visibly armed with an AEP launcher as this may also have a deterrent effect.
- 10.5 Officers should be aware that the pointing of a weapon at an individual represents a use of force and may in certain circumstances constitute an assault.

### **11 Aftercare**

- 11.1 Steps should be taken to ensure that early medical attention will be provided for persons struck by an AEP.
- 11.2 The provision of appropriate medical aid should always be considered at the earliest possible stage. This might involve such measures as the availability of officers trained in relevant First Aid measures and/or the placing of an ambulance on standby.
- 11.3 Where officers are informed or come to believe that a person has been struck by the AEP has a pre-existing medical condition that might lead to increased medical risk immediate referral to a hospital should be considered.
- 11.4 A Forensic Medical Examiner must examine all arrested persons who have been struck by an AEP, as soon as practicable.
- 11.5 Close monitoring of a subject throughout the period following a direct strike from any kinetic energy device is of utmost importance. If there are any signs of adverse or unusual reactions then medical attention should be provided immediately and if necessary this must be given precedence over conveying the subject to the police station. When a person who has been struck by an AEP is detained in a cell they should

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be subject to the same cell supervision provided for persons who have consumed alcohol or drugs.

- 11.6 Experience from previous incidents involving the use of any form of force has shown that the persons most likely to be at greatest risk from any harmful effects are those who are under the influence of alcohol, drugs or suffering from any existing medical condition. In addition, and as highlighted in other guidance, if there is any suspicion at all that the violent behaviour of any subject is being caused by acute behavioural disorder, they should be treated as a medical emergency and conveyed directly to hospital. In the event of a child or physically vulnerable person being struck with an AEP they should if at all possible receive immediate medical assessment and if necessary conveyed directly to hospital.

### **12 Post Incident Procedures**

- 12.1 The AEP weapon system will have been issued under a firearms authority. Chapter 6 of the ACPO Manual on Police Use of Firearms sets out guidance to be followed where conventional police firearms are discharged.
- 12.2 In situations where an AEP is fired operationally, appropriate post incident procedures will be implemented depending on the nature of the injury or harm occasioned. An investigation will be undertaken by an Initial Investigating Officer.
- 12.3 Whenever possible, fired AEP should be recovered, as should spent cartridge cases.
- 12.4 All firings of an AEP must be immediately reported [initially by radio] and the firer must complete a report pertaining to the reason for firing the AEP and information about the outcome and number of rounds fired. The record should also list any known injuries that may have occurred as a result of using AEP's. All firings will be reported to either the IPCC, NI Police Ombudsman or in Scotland to the Procurator Fiscal.
- 12.5 If used in a situation of public disorder in England and Wales the Chief Officer should supply to the Home Secretary a written report on the circumstances surrounding the firing of AEP's as soon as possible after the incident, similar arrangements will exist in Scotland. In Northern Ireland there is a requirement to inform the Northern Ireland Policing Board of any operational discharge of an AEP. The Police Ombudsman is also informed.
- 12.6 In the event of an unintentional discharge in a non-operational situation where there has been no danger to the public, this will be subject to an internal investigation. In this case referral to the IPCC / Police

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Ombudsman or Procurator Fiscal will, in accordance with local policy directives, be a matter for individual Force management.

- 12.7 The welfare of principal officers must be considered when undertaking any investigation following a critical incident even where little or no injury has been caused.

### **13 Weapon Maintenance**

- 13.1 Proper maintenance of the AEP launch platform and sights is vitally important, as is proper storage and carriage of the AEP's. Guidance on this issue is included Appendix 'D' & 'E'.
- 13.2 It is essential that weapon function checks are carried out when the weapon is issued and repeated whenever possible prior to deployment or intended use.
- 13.3 Any weapon or munitions failures should, in addition to any local police force instructions, be reported to the Police Scientific Development Branch of the Home Office in accordance with the guidance contained in the ACPO Manual of Guidance on Police Use of Firearms.
- 13.4 In the event of a misfire procedures should conform with those set out in the ACPO documentation.

### **14 Evaluation of the AEP**

- 14.1 The introduction of the AEP will be subject of a first year evaluation.
- 14.2 Operational usage will be reviewed at regular intervals to ensure that emerging issues are properly reflected in training and operational guidance. Representatives of DSTL, DOMILL and PSDB will be invited to contribute to the process. Evaluation questionnaires will be completed on every occasion where AEP is deployed to a policing operation where the use of firearms has been authorised.
- 14.3 This policy will be subject to regular review.

### **15 Storage and Administration**

- 15.1 In storing the AEP the following legislation must be complied with:  
MoD Instructions for storage and carriage of the AEP:
- Health and Safety at Work etc. Act 1974;
  - Control of Substances Hazardous to Health Regulations 1989;
  - Management of the Health and Safety at Work Regulations 1992.
- 15.3 A generic risk assessment regarding the AEP is attached at Appendix 'F'. Individual forces should undertake appropriate risk assessments in

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respect of storage and carriage. Electrical devices should not be stored alongside pyrotechnics, ammunition, specialist munitions or flammable products.

- 15.4 A comprehensive list of Health and Safety legislation is provided at Appendix 'G'.
- 15.5 A use of force reporting (see Appendix 'H') is to be completed for every operation where the AEP is deployed.

## **Appendix A**

### **Cross Border Protocols**

#### **CROSS-BORDER / MULTI AGENCY OPERATIONS**

Occasions may occur when a Chief Officer agrees to assist another law enforcement agency (e.g. Customs and Excise, UK Atomic Energy Authority Constabulary, HM Prison Service) with an operation, which is within the force area and where the appropriate authority to issue firearms is given. This raises issues over the structure of Command and any necessary transfer of responsibility.

Similar issues arise where operations involving the deployment of armed officers enter the jurisdiction of another force area (including the different legal jurisdictions of England and Scotland).

When firearms including less lethal weapons such as the AEP system are issued in any of these circumstances it is important that everyone involved should understand who is in Command of each part of the operation (a Command Protocol may be a useful means of clarifying this). Close co-ordination and detailed planning between the organizations concerned is fundamental and should normally be agreed at ACPO level or its equivalent level of management in the organizations concerned.

Further guidance, including protocols agreed with specific organizations, is included in Part II of the ACPO Manual of Guidance on Police Use of Firearms (Chapter 10). It is clear that the Chief Constable of each Constabulary has a duty of care to their officers regardless of whether they are operating within their own Force boundaries or in adjacent Force areas.

In order to achieve a unified approach to this issue, the following protocol will be followed:

*It is agreed that the Chief Constable of a Constabulary has a duty of care to their officers, regardless of whether they are operating within their own or other force areas. It is agreed, therefore, that Forces will allow the carriage and operational use of the AEP, as per national guidance in line with the Conflict Management Model.*



## **Appendix B**

DSAC Sub-committee on the Medical Implications of Less-lethal Weapons (DOMILL).

DRAFT Statement on the comparative injury potential of the Attenuating Energy Projectile (AEP) L60A1, and the L21A1 Baton Round.

### **1 Introduction**

1. This statement has been produced by the Defence Scientific Advisory Council (DSAC) sub-committee on the Medical Implications of Less-Lethal Weapons (DOMILL). It provides an independent view for the UK Government on the medical implications of the use of the Attenuating Energy Projectile (AEP) L60A1 system in the UK, within the policy and guidance of the Association of Chief Police Officers (ACPO), and the UK Armed Forces. Specifically, it compares the predicted medical risks associated with AEP, and the L21A1 Baton Round; both are fired from the L104A1 Gun Riot fitted with an L18A1/A2 weapon sight.

### **2 The Attenuating Energy Projectile (AEP) L60A1**

2. **Role:** The AEP is a projectile designed to deliver an impact to a violent individual in order to dissuade or prevent an intended course of violent action, and thereby mitigate the threat to law enforcement personnel and members of the public. It is not intended to cause serious or life-threatening injury.
3. **Requirement:** The AEP is a potential replacement for the L21A1 Baton Round. It has been developed by the UK Government and forms part of its response to:
  - a recommendation in DSAC's statement on the medical risks of the L21A1, to undertake research on energy attenuation features for future kinetic energy projectiles, in order to reduce the severity of head injuries<sup>2</sup>;
  - recommendations 69 and 70 in the report of the Independent Commission on Policing for Northern Ireland (the Patten report)<sup>3</sup> to find an acceptable, effective and less potentially lethal alternative to the Baton Round;
  - its desire, supported by the Association of Chief Police Officers (ACPO), to offer appropriately trained police officers a broader range of less-lethal systems for use against violent individuals in the management of conflict.
4. The research and development of the AEP has been undertaken by a multi-departmental Steering Group, in consultation with ACPO. The

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<sup>2</sup> "Statement on the comparative injury potential of L5A7 baton round fired from the L104A1 Anti-riot gun using the battle-sights, and the L21A1 baton round fired using the XL18E3 optical sight". Defence Scientific Advisory Council. 21 August 2000.

<sup>3</sup> "A New Beginning: Policing In Northern Ireland". The report of the Independent Commission on Policing for Northern Ireland. September 1999.

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Steering Group is chaired by the Northern Ireland Office (NIO). Reports summarising the work of the Steering Group are available on the NIO web-site<sup>4</sup>.

5. The AEP has been developed by Government principally because despite an exhaustive review and assessment of commercially available less-lethal weapons (LLW) reliant on impact or the threat of impact for effectiveness, no system met the operational, technical or safety requirements of the Steering Group.
6. **Timescales:** The development of the AEP has been undertaken with some urgency, to fulfil the Government's requirements regarding alternatives to the Baton Round. The Steering Group required that, subject to satisfactory development, manufacturing capability, safety and suitability assessment, training and Strategic Audit<sup>5</sup>, the AEP should be available for use by 31 December 2004. Subject to Ministerial approval, full operational deployment is scheduled for 21 June 2005.
7. **Further reduction of the risk of serious injury:** The principal life-threatening hazard from the impact of Baton Rounds is injury to the brain resulting from the transfer of energy through the overlying skull. There is also a risk of direct damage to the brain from fragments of fractured skull, or from the intruding projectile. The operational frequency of this injury is very low.
8. The L21A1/L104A1 system is an accurate and consistent system, and is designed to minimise the risk of the projectile striking the skull, or the chest. The technical performance is complemented by operational guidance and appropriate training. Its operational use, and the medical issues arising, are reviewed annually by DOMILL.
9. The AEP is a new LLW system. The principal technical requirements of the AEP with regard to risk of serious and life-threatening injury are that:
  - a. it should reduce the clinical consequences of an inadvertent impact to the head, compared to the L21A1;
  - b. its accuracy and consistency should at least match those of the L21A1, to maintain the very low risk of impact to the vulnerable areas of the body.
  - c. The AEP is designed to have the same mass and velocity at the gun muzzle as the L21A1.

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<sup>4</sup> "Patten Report recommendations 69 and 70 relating to public order equipment: A research programme into alternative policing approaches towards the management of conflict". Four reports on Phases 1-4 prepared by the Steering Group led by the Northern Ireland Office, in consultation with the Association of Chief Police Officers. [www.nio.gov.uk/policing/](http://www.nio.gov.uk/policing/)

<sup>5</sup> "Patten Report recommendations 69 and 70 relating to public order equipment: A research programme into alternative policing approaches towards the management of conflict". Second Report by the Steering Group led by the Northern Ireland Office, in consultation with the Association of Chief Police Officers. Pages 40-44. November 2001.

10. **Principle of operation:** The energy attenuating feature of the AEP is a void in the nose of the projectile. The collapse of the void extends the duration of the impact forces, and thereby reduces the peak force on a stiff surface such as the skull. Distortion of the nose will also increase the contact area and distribute the forces over a larger area (i.e. a reduction in the average pressure). Energy is also expended by doing work on the nose during its collapse.

### **3 Role of DOMILL**

11. DOMILL reports to the Secretary of State for Northern Ireland and the Secretary of State for the Home Office, as appropriate. The tasks, technical support and the distribution of DOMILL statements are coordinated through the Biomedical Sciences Department, Defence Science and Technology Laboratory (Dstl) at Porton.
12. The role of DOMILL is to provide:
  - a. advice on the biophysical, biomechanical, pathological and clinical aspects of generic classes of LLW;
  - b. independent statements on the medical implications of use of specific LLW systems given specific guidance to users;
  - c. advice on the risk of injury from specific LLW systems striking specific areas of the body in a format that will assist users in making tactical decisions, and developing guidance to users to minimise the risk of injury.
13. DOMILL was requested by the Steering Group to provide this statement for Ministers on the medical implications of the operational use of the AEP in the UK. This statement assumes that the system is used and maintained within ACPO and UK Armed Forces policy and guidance for the AEP, and that the system is zeroed according to the extant policy.
14. The technical data to support DOMILL's considerations were produced by Dstl and its contractors. The technical plan for the work was produced by the Official Member of DOMILL, and subsequently reviewed and endorsed by DOMILL in May 2004.

### **4 Technical work areas**

15. A substantial body of work was undertaken to compare the hazards and risks from the AEP and L21A1. The principal technical work areas were:
  - a. Firing trials: a comparison of the dispersion and average trajectories of the AEP and L21A1 over their operational range, and ammunition temperature specifications;

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- b. Basic interactions: physical tests and mathematical modelling to characterise and contrast the performance of the AEP and L21A1 against targets of different stiffness, and the change of this performance with ammunition temperature.
- c. Skull and brain injury: one physical model and two independent mathematical models were used to compare two indices of clinical risk for the two LLW systems:
  - skull fracture frequency and type (including intrusion of projectile and bone into the brain);
  - stresses in the skull, and pressures generated within the brain.
- d. Skin/body wall penetration: mathematical and physical models were employed to compare stresses on the abdominal skin surface, and the effects of those stresses.
- e. Non-penetrating (blunt) impact to torso: a physical model of the chest wall was used to compare the chest wall peak displacement and peak wall velocity; these responses indicate the risk of chest injury.
- f. Post-ricochet injury potential: a public-order training facility in Northern Ireland was used to compare the speed, orientation and trajectory post-ricochet of the AEP and L21A1 after contact with complex surfaces such as rubble.

### 5 Conclusions

- 16. **Accuracy and consistency:** The AEP is at least as accurate and consistent as the L21A1, and in some respects is superior. The risk of impact to vulnerable areas such as the head and the chest will not exceed the already low risk of such impacts from the L21A1.
- 17. **Skin penetration:** The risk of skin penetration from the L21A1 is very low operationally; the AEP will have a lower risk.
- 18. **Non-penetrating torso injury:** Although the peak velocity of the chest wall was predicted to be lower with the AEP, the magnitude of the reduction is unlikely to offer significant benefits in the hazards to the chest wall and contents, upon impact to that body region. The AEP does not offer a greater hazard to the chest than the L21A1.
- 19. The hazard to the abdominal contents from the two projectiles is likely to be the same.
- 20. **Post-ricochet risk:** There is no evidence that AEP has a greater post-ricochet risk to personnel, nor that it is likely to offer significant benefit (notwithstanding the energy attenuation features in its nose, should a post-ricochet impact occur in this orientation).

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21. **Head injury:** Both mathematical models of the interaction of the projectiles with the skull showed that the stresses in the bones of the skull, and the energy transferred to the brain were consistently less with the AEP. The severity and incidence of skull fracture is likely to be lower with the AEP, and should a fracture occur, the intrusion into the brain will be less. The AEP will result in less damage to the brain and the overlying skull than the L21A1, if an impact to this region occurs.
22. The clinical impact of the reduction in damage to the brain and overlying skull from the AEP cannot be assessed confidently because of limitations in current models for this type of impact. Notwithstanding the uncertainties in the actual clinical consequences, the AEP certainly demonstrates the potential for less severe clinical outcomes, compared to the L21A1.

### **6 Summary**

23. The risk of serious and life-threatening injury to the head from the AEP will be less than that from the L21A1 Baton Round, which already has a low risk of such injury.

### **7 Recommendations**

24. DOMILL re-affirms the recommendation in its statement on the L21A1<sup>2</sup>, that operational research should be undertaken on the features of kinetic energy based weapon systems that are intrinsic to their use as deterrents, in order to provide the analysis tools for maintaining the required operational effectiveness but at a reduced risk of life-threatening injury. Specifically, there should be a prospective study of the operational effectiveness of the AEP in the hands of all users. The independent audit undertaken on the trial of the M26 Advanced Taser may be an appropriate model.
25. Twelve months after the first operational use of the AEP (and yearly thereafter), the Home Office should provide DOMILL with a report outlining the circumstances of every use of the AEP, the post-incident medical assessments undertaken by the Forensic Medical Examiners (FME), and the clinical consequences noted by the FME or clinical staff. DOMILL should be advised as soon as practical of any injury that could be classed as life-threatening, unexpected, or potentially leading to disability.
26. A paper should be prepared for a medical journal outlining the evidence considered by DOMILL in its assessment of the AEP.
27. DOMILL should be advised of any changes in:
- a. the consistency of the system from the production rounds used in this assessment;

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- b. the design, specification or performance of the AEP system;
- c. the guidance to users and training practices;
- d. the policy and practice of deployment (including deviations from the extant zeroing policy), use and audit.

Chairman, CBRN and Human Sciences Board, DSAC.

## **Appendix C**

### **Zeroing Instructions**

It is mandatory that the sight and the gun combination is zeroed to the individual by live Firing.

The firer cannot zero the weapon until he can achieve a five round group size at the specified range (5 round group in 200mm area at 20 metres)

Collimators are individually numbered and should be matched to the firers. Firers provided they use the same collimator can apply their readings to any weapon.

Weapons must be bore sighted, zeroed and the PZP (Personal Zero Point) recorded using the same firer/collimator combination

Under NO Circumstance is a different collimator to be used to check PZP. If this is necessary the weapon must be re-zeroed and the reading retaken.



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**Appendix D**  
**Operational Storage and Carriage**

**ATTENUATING ENERGY PROJECTILE**  
**INFORMATION SHEET** Dated: 16 Mar 05

Nomenclature:	Round, 37mm, Attenuating Energy Projectile
NSN:	1310-99-244-4219
ADAC:	46120-01
Model No:	L60 A1
Service Drawing No:	W2768
Ammunition Drawing No:	AMD 2579
ESTC No:	T3289
Contractors Drawing No:	0400400A3
NEQ:	0.25gm (0.00025Kg)
Contract No:	DGM4/04/022
Hazard Class:	1.4S
UN Ser No:	0012
Correct Technical Name:	Cartridges For Weapons Inert Projectiles.

Storage: **Storage & Transit Limits = +58°C to -21°C**

The initial recommended storage life within the UK is: (Climatic categories A3, B3 + C0)

a. When stored in “**Good Storage**” conditions in either an F632 or H83 ACA with the delivery seal “**Unbroken**” the storage Life should be: **18 months.**

Definition: “Good Storage”. Building designed for the purpose of storing explosives.

**(Either; Air conditioned, Temperature or Humidity Controlled) (These controls are only required if Storage temperatures will exceed the Max or Min temperature of the Munition to be Stored - Not likely in the UK therefore the life of AEP in this store will be 18 months)**

b. When stored in “**Unit Storage**” conditions in either an F632 or H83 ACA with the delivery seal “**Unbroken**” the storage Life should be: **12 months.**  
(Whilst not exceeding the overall 18 months)

Definition: “Unit Storage”. Building not designed to contain explosives but Licensed to contain a quantity of explosives.

**(Well ventilated storehouse giving complete protection from sun and rain but where the inside temperature would be expected to follow variations in shade temperature) (This is normal storage for the UK)**

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**as the storage temperatures are unlikely to be exceeded in Max or Min, therefore the life of AEP in this store will be 18 months)**


c. When stored in “**Operational Storage**” conditions (eg. In a vehicle) in either an F632 or H83 ACA with the delivery seal “**Broken or Unbroken**” the storage Life should be: **6 months.** (Whilst not exceeding the overall 18 months)

Definition: “Operational Storage”. Explosives stored in its original packaging stored in a vehicle for ready use.


**Unventilated storage (Thin walled structures, canvas or containers (vehicles)) giving direct cover from the sun and precipitation but limited or non-existent ventilation therefore the life of AEP in this store will be 6 months).**

d. When being carried in “**Tactical Operational Usage**” conditions (In Tactical Vest or Pouch), the storage life should be: **3 months.** (Subject to ammunition physical condition whilst not exceeding the overall 18 months)

Definition: “Tactical Operational Usage”. Explosives contained in a Tactical Vest or Pouch for immediate use.

Packaging:	<b><u>H83 Mk2</u></b> NSN	= 1310-99-495-3686
	To Hold	= Qty 12
	UN Pack Code	= 
<b>4A/Y19/S/**/GB/0355</b>		
		= Box Steel 305x155x193mm
	Weight Empty	= 2.9Kg - SV 553A
	Volume of ACA	= 0.009m <sup>3</sup>
	Weight Full	= 5.3Kg
	NEQ	= 0.003Kg
	ACA No	= L239 A188
	Contractors Drawing No	= 0403704A3
	Service Drawing No	= W2785
	AMD No	= AMD 2588
Packaging Furniture: Service Drawing No:		= W 2788 - Moulding
		= W 2815 - Top Pad
	AMD No:	= AMD 2593
Unit Load Specification No:		= 224
	Cont. Layer:	= Qty 24
	Pallet Layers:	= 6
	Cont. per Pallet:	= Qty 144
	Total Weight Cont:	= 763.2Kg
	NEQ Per ULS:	= 0.432Kg
	<b><u>F632 Mk1</u></b> NSN	= 1310-99-185-5289
	To Hold	= Qty 48

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	UN Pack Code	= 
	<b>4A/Y29/S/**/GB/1081</b>	
	Weight Empty	= <b>Box, Steel, 447x363x211mm</b>
	Volume of ACA	= <b>5.9Kg - SV 433A</b>
	Weight Full	= <b>0.034m<sup>3</sup></b>
	NEQ	= <b>17.5Kg</b>
	ACA No	= <b>0.012Kg</b>
	Service Drawing No	= <b>L239 A189</b>
	AMD No	= <b>W2787</b>
Packaging Furniture:	Service Drawing No:	= <b>AMD 2590</b>
	AMD No:	= <b>W 2789 - Top Pad</b>
	NSN: 4440-99-224-6996	= <b>W 2786 - Moulding</b>
1000gram	NSN: 4440-99-224-6995	= <b>AMD 2589</b>
DEF STAN 93-116,	Bag:	= <b>Desiccant Pack Silica Gel</b>
		= <b>Desiccant Pack Silica Gel 500gram</b>
		= <b>Type 1 Polythene Lay-Flat Tubing To</b>
		<b>Size 530mm x 704mm x 500um Thick (or 2</b>
	<b>off 250u Thick)</b>	
Unit Load Specification No:		= <b>297</b>
	Cont. Layer:	= <b>Qty 8</b>
	Pallet Layers:	= <b>5</b>
	Cont. per Pallet:	= <b>40</b>
	Total Weight Cont:	= <b>700Kg</b>
	NEQ Per ULS:	= <b>0.48Kg</b>

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**Appendix E**  
**Generic Risk Assessment – Attenuating Energy Projectile**

<b>Activity / Task Assessed:</b> Use of AEP		<b>Name of Assessor:</b> AEP Operational Sub Committee				<b>Assessment No: 1</b>		<b>Type of assessment</b> Corporate <input type="checkbox"/> Specific <input type="checkbox"/>	
<b>Date:</b> 14.03.2005		<b>Date of last assessment:</b> 14.03.2005				<b>Review date:</b> 13.03.2007			
No.	ACTIVITY/ WORKPLACE	HAZARDS	*PERSONS AT RISK	Severity of Hazard H,M,L	Likelihood of Risk H,M,L	Overall Risk Level H,M,L	Control Measures / Comments	Result #	Further action req'd ? (Y/N) ‡
1.	<b>Storage of AEP</b>	Operational shelf life of the projectile will be reduced dependant on conditions	<b>E, Pub</b>	4  M	2  L	8  M	Specific Instructions issued on best practice for storage  See Appendix  Persons Responsible a. Central Stores Officer b. Local Armoury Officers c. Officer to whom issued	<b>A</b>	<b>N</b>

\* **Persons at risk** include **E**mployed, **V**ulnerable **P**ersons such as new or temporary staff, young persons, lone workers, disabled persons or new/expectant mothers, **C**ontractors, **P**ublic and **V**isitors

# **Key to result:** **T** = Trivial Risk    **A** = Adequately controlled    **N** = Not adequately controlled    **U** = Unable to decide.    Seek advice from DOH.

‡ If further action required, complete - **Management Action Plan**

**Name of Assessor**..... **Signature**.....

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**Appendix E**  
**Generic Risk Assessment**

No.	ACTIVITY/ WORKPLACE	HAZARDS	*PERSONS AT RISK	Severity of Hazard H,M,L	Likelihood of Risk H,M,L	Overall Risk Level H,M,L	Control Measures / Comments	Result #	Further action req'd ? (Y/N) ‡
2.	Control & Issue	Account for all AEP's	E	4  M	2  L	8  M	Force Ammunition Instructions  ACPO Guidance – Section 5  Persons Responsible a. Central Stores Officer b. Local Armoury Officers c. Officer to whom issued	A	N

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\* **Persons at risk** include **E**mployed, **V**ulnerable **P**ersons such as new or temporary staff, young persons, lone workers, disabled persons or new/expectant mothers, **C**ontractors, **P**ublic and **V**isitors

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**Name of Assessor**..... **Signature**.....

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**Appendix E**  
**Generic Risk Assessment**

No.	ACTIVITY/ WORKPLACE	HAZARDS	*PERSONS AT RISK	Severity of Hazard H,M,L	Likelihood of Risk H,M,L	Overall Risk Level H,M,L	Control Measures / Comments	Result #	Further action req'd ? (Y/N) ‡
3.	Use	Ricochet	E, Pub, VP	4  H	2  L	8  M	Scientific Evaluation Training Situational Evaluation  ACPO Guidance – Section 7  Persons Responsible a. Dstl b. Trainers c. Operational Officers	A	N

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\* **Persons at risk** include **E**mployed, **V**ulnerable **P**ersons such as new or temporary staff, young persons, lone workers, disabled persons or new/expectant mothers, **C**ontractors, **P**ublic and **V**isitors

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**Name of Assessor**..... **Signature**.....

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**Generic Risk Assessment**

No.	ACTIVITY/ WORKPLACE	HAZARDS	*PERSONS AT RISK	Severity of Hazard H,M,L	Likelihood of Risk H,M,L	Overall Risk Level H,M,L	Control Measures / Comments	Result #	Further action req'd ? (Y/N) ‡
4.	Use	Strikes to the Head or Upper Body	Pub, VP	4  H	2  L	8  M	ACPO Operational Guidance Operational Training Individual Weapon Zeroing Domill Medical Statement  ACPO Guidance – Section 7, Para 1.14 – 16  Persons Responsible a. Trainers b. Force /Local Armourers c. Operational Officers	A	N

\* **Persons at risk** include **E**mployed, **V**ulnerable **P**ersons such as new or temporary staff, young persons, lone workers, disabled persons or new/expectant mothers, **C**ontractors, **P**ublic and **V**isitors

# **Key to result:** **T** = Trivial Risk    **A** = Adequately controlled    **N** = **Not** adequately controlled    **U** = Unable to decide.    Seek advice from DOH.

‡ **If further action required, complete - Management Action Plan**

**Name of Assessor**..... **Signature**.....



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**Generic Risk Assessment**

No.	ACTIVITY/ WORKPLACE	HAZARDS	*PERSONS AT RISK	Severity of Hazard H,M,L	Likelihood of Risk H,M,L	Overall Risk Level H,M,L	Control Measures / Comments	Result #	Further action req'd ? (Y/N) ‡
5.	Use	Strikes on Children or other vulnerable persons	VP	4  M	2  L	8  M	ACPO Operational Guidance Command & Control Operational Training Individual Weapon Zeroing  ACPO Guidance – Section 7  Persons Responsible a. Commanders & Supervisors b. Trainers c. Operational Officers	A	N

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\* **Persons at risk** include **E**mployed, **V**ulnerable **P**ersons such as new or temporary staff, young persons, lone workers, disabled persons or new/expectant mothers, **C**ontractors, **P**ublic and **V**isitors

# **Key to result:** **T** = Trivial Risk    **A** = Adequately controlled    **N** = Not adequately controlled    **U** = Unable to decide.    Seek advice from DOH.

‡ If further action required, complete - **Management Action Plan**

**Name of Assessor**..... **Signature**.....

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**Hazard (consequence) x Likelihood (of exposure) = Risk**

	<b>8 Hazard</b>					
<b>Likelihood</b>		<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
	<b>1</b>	1	2	3	4	5
	<b>2</b>	2	4	6	8	10
	<b>3</b>	3	6	9	12	15
	<b>4</b>	4	8	12	16	20
	<b>5</b>	5	10	15	20	25

### *8.1 Risk Levels*

- 1, 2            Very Low    (Act in due course)
- 3, 4, 5        Low            (Maintain local controls)
- 6, 8, 9        Medium       (Review controls & take action if required)
- 10, 12, 15    High           (Improve controls, examine contingency planning)
- 16, 20, 25    Very High    (Improve controls immediately & consider stopping the task)

## **Appendix F**

### **Relevant Health and Safety at Work Legislation.**

#### **Health and Safety at work Legislation.**

Since 1 July 1998, all police activities have been subject to health and safety at work legislation. This legislation is criminal law and breach of the legislation can result in criminal prosecution by the Health and Safety Executive (HSE) who are the enforcing authority.

The main pieces of health and safety legislation that cover the use of less lethal options are:-•

The Health and Safety at Work etc. Act 1974;

- The First Aid at Work Regulations 1989;
- The Electricity at Work Regulation 1989;
- The Personal Protective Equipment (PPE) Regulations 1992;
- The Manual Handling Operations Regulations 1992;
- The Police Health and Safety Act 1997;
- The Provision and Use of Work Equipment Regulations 1998;
- The Control of Substances Hazardous to Health (COSHH) Regulations 1998;
- The Management of Health and Safety at Work Regulations 1999;
- The Pressure Systems Safety Regulations 2000.
- Mod Explosive regulations-Joint Service Publication (JSP) 482 MOD Explosive Regulations.

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**APPENDIX G**  
**REPORT**

**Force reference number:**

THIS DEPLOYMENT FORM MUST BE COMPLETED ON EACH OCCASION THAT THE AEP IS Fired and should be forwarded to the ACPO Secretariat on Police Use of Firearms

- 1) Date of Incident
- 2) Time of Incident
- 3) Location (address) of incident Postcode (first 3 characters, or full if known)
- 4) Brief details of incident including:
  - a) Whether this was a Spontaneous or Pre-planned
  - b) Visibility: i.e. Poor, Average, Good and lighting conditions
  - c) Profile (gender, build, approximate age, mental/emotional state) of the subject at whom the AEP was discharged
  - d) Range at which each AEP was fired
  - e) Number of AEP's fired and hits (including area of the body struck)
  - f) Reaction of the subject upon being struck with the AEP
  - g) Injuries incurred
- 5) Other resources in attendance:
  - a) Number of AFO's:
  - b) Dogs: GPD Firearms or Other Dog in attendance
  - c) Number of officers armed with AEP's in attendance:
  - d) Was a Taser used:
- 6) If more than one AEP was used/fired, then please complete an additional form for each AEP Use.

NB In addition to the above PSNI will supply the Police Ombudsman and Policing Board for Northern Ireland with details of all AEP firings in accordance with locally agreed procedures.

In order to comply with the Domill recommendations, *that twelve months after the first operational use of the AEP (and yearly thereafter), the Home Office should provide DOMILL with a report outlining the circumstances of every use of the AEP*, evaluation criteria will be agreed with ACPO and issued separately. This will include any specific data that requires to be collected for the evaluation.