Experts Meeting: Notes of the Day.

The TASER™ Experts Meeting took place on March 18th 2015, and was organized by the Universities of Exeter and Bristol and the Criminal Justice Centre at Queen Mary, University of London and funded by the ESRC via the South West Doctoral Training Centre. It was attended by a wide range of stakeholders including representatives from ACPO, the College of Policing and the Home Office; NGOs; lawyers representing individuals subject to TASER; the IPCC; academics working on use of force issues; TASER trainers and Single Points of Contact; DSTL and SACMILL; the Police Federation and industry representatives. There were three plenary sessions (one on testing and selection, two on policy and practice), with the fourth session dedicated to small group discussion. The majority of the meeting was held under the Chatham House Rule. However, some participants expressed a preference that, whilst respecting the anonymity of others, they wished to waive their own anonymity and were happy for their remarks to be attributed to them. Where this is the case, this has been reflected in this document. The notes below give a general overview of these sessions, providing a public record of the event.

Session 1: Testing and Selection.

Speaker One: Mr Smith, CAST.

The first speaker gave a historical overview of the initial testing that was done on conducted energy devices (CEDs) prior to the introduction of the TASER M26™ into the UK in 2003 (which comprised testing four different models of weapon from two different companies) and then gave an overview of the different features of the new electric-shock technologies that may replace the X26™ model which is currently in use (the X2™ and X26P™, manufactured by TASER International [1], and the 'Phazzer' supplied by Civil Defence Supply), their cartridges and batteries. These differ in a number of aspects including: the way the length of shock is regulated; the internal diagnostic systems and the wave-forms used. Assessments of CEDs are based on the operational requirements of the police and test a variety of measures including; accuracy; probe spread; reliability (e.g. of cartridge); the waveform and its characteristics; and how the weapons perform in typical situations in which they might be used.

Speaker Two (Dr. Sheridan, DSTL) and Speaker Three (Professor Flower, Chair of the Scientific Advisory Committee on the Medical Implications of Less-Lethal Weapons - SACMILL):

Speaker Two outlined the role of the Defence Science and Technology Laboratory (Dstl, an agency of the MOD) in supporting the work of DOMILL, and its successor committee SACMILL, which had its inaugural meeting in 2012. Dstl draws upon its in-house expertise as well as expertise sourced via links with national and international contacts. Although Dstl is part of government, it was emphasised that the advice provided to the independent committee is impartial. Any weakness in this impartiality is tested by rigorous challenge from the independent experts and the credibility of Dstl's advice is continually tested in this way. DOMILL produced medical statements on a range of less-lethal weapons, including six statements on the TASER M26 and X26. The Home Office Code of Practice on Police Use of Firearms and Less-Lethal Weapons requires that these weapon systems are authorised for use by the Home Secretary, and DOMILL (and now SACMILL) medical statements form part of the evidence used to inform this decision. While the HO Code of Practice mandates that Chief Officers "have a duty to have regard to this Code of Practice", Chief Officers do not have a legal obligation to comply with the Code. The ineffective use of the TASER XREP™ in 2010 was cited as an isolated example. The use of authorised weapons provides reassurance to Chief Officers that every aspect of a weapon system has been systematically assessed, including its medical effects, the appropriateness of the training and guidance, the maintenance of the weapon, the likely operational utility of a specific weapon under defined conditions of use, and other factors.

Speaker Three then went on to explain the function of SACMILL, which fulfils the same role as DOMILL but is constituted slightly differently. SACMILL comprises a mix of medically qualified and lay members. Like DOMILL, its role is to provide advice to ministers and to furnish independent statements on the medical implications of these weapons as part of a system. SACMILL does not 'approve' weapon systems, provide advice to non-government suppliers of equipment or services or commission independent research (although

[1] TASER®, M26, X26, XREP, X26P and X2 are registered trademarks of TASER International, Inc., registered in the U.S. All rights reserved.

the committee can make recommendations). SACMILL members have a wide spread of clinical expertise including forensic medicine, emergency medicine, clinical toxicology, anaesthesiology, clinical neurophysiology, and trauma and orthopaedic surgery. There are also three non-clinical lay members covering pharmacology, criminology and ethics. Members are appointed by interview following public advertisement. There are also three ex-officio members representing the Home Office, the Ministry of Defence and Dstl, who provide the formal links into government but who are excluded from decision-making by the independent committee. SACMILL's role might expand in future to cover more military less-lethal weapons, though at present the requirement came primarily from the UK police. SACMILL (and previously DOMILL), had not been asked to consider police irritant sprays (CS and PAVA) but this could change – irritant sprays, specifically their toxicity, are currently reviewed by the Committee on Toxicity of Chemicals in Food, Consumer Products and the Environment. SACMILL is forging links with the IPCC and others to enhance understanding of the operational implications of less-lethal weapons where use is associated with injury.

Speaker Four, Dr Ho, Medical Director, TASER International.
The speaker noted that TASER International created a medical team in 2004 in recognition that, whilst theoretical data was available, there was not a lot of human data. The team started by comparing a range of baseline criteria before, during and after exposure to TASER , with the result published via peer review in 2006. Such tests didn't find anything that was remarkable, and they started looking at efficacy and the minimum probe spread necessary for incapacitation, with the results published in peer reviewed journals. The team moved onto comparing the effects of TASER to other options and / or to what would happen if a TASER wasn't available, again with the results published in peer review journals. The speaker stated that such work has evolved into the gold standard for human testing of electronic weapons, and that TASER International are committed to continuing to produce more effective and even safer technology based on the work of the medical team.

Speaker Five: Mr Bauer, Director, Civil Defence Supply (UK) and Phazzer Electronics Inc (USA).
The fifth speaker explained that certain key TASER patents have expired which produces an opportunity for other companies to offer copies resulting in the launch of a new CED, the Phazzer Enforcer, with almost identical waveform and technical characteristics to the TASER X26E with totally cross-compatible cartridges including pepper ball, pepper powder and kinetic impact. He also noted that projectile electric-shock weapons are not the only distance weapon available as the CAST Approved CapTor incapacitant in widespread UK police use has a range of up to 25 feet. He argued that there was a need to rethink how less lethal weapons work in the UK and to listen to feedback around training. In this respect the importance of human rights and ethical compliance cannot be over-rated. Current training is static and only meets basic certification of skills. Deployment of less-lethal has to be akin to firearms training in adopting synthetic training, the best option being video simulation emulating real-life situations that truly challenge an officer in decision-making, particularly important when dealing with metal health issues, the aged, infirm, adolescent, drugged and other scenarios.

Speaker Six: Omega Research Foundation, representative.
The sixth speaker stressed the importance of independent testing of less lethal weapons. At the domestic level, the baton round, and the closed process for testing it, and the issues with that process, resulted in a system with excess injuries, deaths, and a loss of public confidence. This was exacerbated by weak and unclear guidelines for its use, and lack of accountability and effective sanctions. Much has changed since this time; however the case of the TASER XREP that was used in the UK without receiving Ministerial approval still indicates that there is work to be done. This is compounded by the fact that there are no common standards for amount of electricity that can incapacitate and no build standards for electric-shock weapons. This highlights the need for a precautionary approach to the use of such weapons, and the need for a truly independent testing process.

General discussion:

- There was a discussion on the Home Office Code, and the loophole mentioned above. It was noted that the Code had specifically been written in such a way so as to enable action to be taken against Chief Constables should this be necessary, that there is to be a review of the Code of Practice, and that this will be discussed.

- It was noted that pharmaceutical drugs are obliged to undergo rigorous testing in a way that doesn't universally happen with less lethal weapons. Such information is important so that we can interpret and understand why such a device is used. It was also noted that there is a lack of longitudinal studies following-up people who have been subjected to less-lethal weapons.

- There is a need for more knowledge on who less lethal weapons and TASER are being used against, and the context of their use, particularly with regards to detainees. Body-worn cameras may help here

- It was noted that the Braidwood report highlighted the gaps in our knowledge around TASER .

- One person queried the testing that had been done on the effects of the electric-shock on cocaine addicts, as the combination of the two may affect the heart differently. No human testing had been done for ethical reasons but that animal models had been used as surrogates.

- More comprehensive use of force reporting for TASER and other less lethal force would help build our knowledge and understanding of their respective effects.

Session Two: Policies and Practices.

Speaker Six: The National Lead on Less Lethal Weapons, Commander Basu.
The speaker underscored how important to policing this event was. He noted that TASER is one of the most controversial subjects in policing, for a number of reasons; the poor reputation of device when used overseas; the perception that it is an instrument of torture; public perception of the weapon rooted in an unconscious bias towards electricity. The public has an obvious concern around the use of these weapons, and it is important to be completely open and honest about the use of TASER and TASER statistics, to discuss with critics and to engage with the concerns raised today. He noted that the mission for TASER hasn't changed since the roll out to Specially Trained Officers, but is an option for use on people who are committing or about to commit extreme violence. TASER is not a panacea for all violent incidents, it can't be a default weapon of choice, and there can be no more accountable things than a police officer that has used force. The speaker noted that whilst experience tells us that suspects and police officers are less likely to be injured when TASER is used, there is a need for further use of force reporting both for TASER and for other weapons. The police need to start recording use of force much more comprehensively, and Chief Constable David Shaw is leading a Programme to address use of force reporting. Correct and comprehensive recording will take time, but is coming.

Speaker Seven; Mr Sprague, Amnesty International UK.
The Speaker gave an overview of Amnesty International and its work, noting that it calls on all governments to tighten controls on transfer and use of a variety of Military, Security and Police equipment, including TASER . They consider TASER to be a weapon that requires stringent, careful scrutiny and control; it can be misused but, if used in line with effective accountability measures and professional standards, and in appropriate circumstances, then it can be an effective tool. Risks around TASER were stated (for example, use on people with underlying health conditions or who are under the influence of drugs and alcohol; people of small stature; extended/prolonged use; use with other equipment that can restrain breathing), but it is all too easy to look at concerns purely through the lens of relative safety. TASER also produces severe and intense pain, whilst leaving few marks. For these reasons there is a need for specific and additional safeguards in place to mitigate against its misuse. Specific Amnesty recommendations for TASER use in the UK include; greater clarity around where TASER should be placed in the use of force continuum, and when TASER should be used; a

basic presumption against use of weapon in drive stun mode, and on people already under effective control; further restrictions on its use on vulnerable groups; further accountability and transparency, with further statistics on TASER collected and published, and additional work needed so that the public understand the different uses of TASER.

Speaker Eight: Ms Khan, Sophie Khan & Co Solicitors and Higher Court Advocates.
The speaker explained their perspective as someone bringing claims against the police, especially with regards to TASER related injuries. It is six months since Home Secretary has said the level of TASER use out of control, and we don't know what terms of reference are for the review of use of force, or how people who have been TASER ed can feed into that. Since 2009 it has been a mandatory requirement for all TASER use to be referred to the IPCC, but still not all forces report all uses. This means that some serious cases of misuse of TASER have not all been looked at all. Clients have a range of injuries resulting from TASER use, ranging from minor, to nerve injury, to serious and life threatening conditions. There are also psychological consequences, with individuals who have had no history of mental health issues developing serious consequences, including memory loss. It is crucial that anyone that is TASER ed, or subject to use of force, needs to be referred to IPCC. There are also questions over whether the legislation in the UK provides adequate safeguards to prevent TASER misuse, and whether it is compatible with Articles 2 and 3 of the ECHR. The law at present allows officers to use reasonable force, but should this be force that is 'absolutely necessary', as stated by the College of Policing? As such there is a need to ensure that TASER training is compatible with human rights legislation, and to consider revision of the guidance around TASER .

Speaker Nine: Ms Edmundson, Children's Rights Alliance for England (CRAE).
The Speaker noted that a failure to differentiate between different types of TASER use can cloud the debate which does really need to take place. In September 2014 CRAE requested information on TASER use across England broken down into deployment type, age of subject, and circumstances of use. They received responses from 20 police forces; some were helpful and transparent, many were not, and some said such information was not readily available to them. The speaker recognised that efforts that have been made with the current statistics, but not these are not broken down by age, and fail to give more contextual details. Until this happens it will be difficult to move the debate forward. In response to earlier comments from police officers, the speaker recognised that some children are capable of violence, but that those in contact with the police in circumstances where TASER may be used are often uniquely vulnerable with a large proportion having had experiences of mental health conditions, physical and sexual abuse and drug or alcohol misuse. There is a need for a human rights based approach, under which TASER is used only on children when it is absolutely necessary and proportionate, and there is a fundamental question as to whether this is currently the case at present. Indeed responses to CRAE's February 2014 FOI Requests to the Metropolitan Police suggest that it is possible for police to do their job effectively without using TASER on children at all, as happened in 9 London boroughs that responded to the Request. The speaker concluded that a clear statement of policy--backed up by training and regulation-- could have an impact on practice, reducing or eliminating use of TASER on children, and the speaker welcomed the chance to have this debate and to engage on discussion on these questions.

General Discussion:

- It was clarified that since 2009 the IPCC has a mandatory requirement to investigate TASER complaints and cases involving serious injury or death. The importance of a broader system of referral, one not solely based around complaints, was highlighted. It was also noted that one wouldn't necessarily know if forces weren't referring complaints and that people with mental health difficulties could be considered a specific group that don't have the capacity to complain. One speaker also asked whether there was a need to include more referral criteria for TASER .

- It was noted that it can be difficult to assess the age and mental health of an individual, and there is a need to look at the whole context in which a particular use of force occurs, but that there is a lack of information available to help do this. Further speakers also echoed the point made earlier about more comprehensive statistics for TASER and other uses of force.
- The priority of the police when dealing with those with mental health issues in crisis is to sort out the weapon, the threat posed, before doing anything else. It was noted that the police don't make choices

lightly. On occasion, an officer may sometimes use force that other officers might not, if they don't have back up available to them.

- It was also noted that, due to lack of use of force recording, we wouldn't necessarily know if force other than TASER was used on an individual with mental health concerns. There is a need for use of force reporting not just for TASER , but for other less lethal force, too. One commentator further noted that TASER has a full audit trail for use, unlike most other use of force options.

- It was noted that even medical practitioners can't always tell if people have a specific mental illness or not. Other force options can also cause serious injuries, and much depends on context. Sometimes force has to be used but when that happens it is helpful if we can see and understand each other's perspectives, which is what this event is doing.

- Another speaker commented that the UK had moved away from use of force continuum, and moved towards the National Decision Model, precisely because context matters, and a force option appropriate in one circumstance might not be appropriate in another.

- There is an appreciation that here in the UK we police by consent and that issues around TASER can affect public perception and consent. For this reason the National Lead on Less Lethal Weapons has advised Chief Officers not to role out TASER further unless in response to a very clear threat / risk.

Session Three: Policies and Practices.

Speaker Ten: Dr Casey-Maslen, University of Pretoria.
The speaker gave an overview of TASER policy in the USA. American has no national use of force standards, but there are over 500 examples of case law, and forces also have their own guidelines. The limits to such guidelines should be stressed—the Ferguson police department has a policy that the weapon can only be used in order to overcome overt actions of aggression, but have TASER ed numerous handcuffed African Americans in cases where they had shown no aggression—but they remain important to look at, alongside training and case law. Studies have shown large variations in guidelines, as well as the length of training given to police officers on the weapon, which vary between 2 - 40 hours, with the majority of forces providing 8 hours on the weapon. Case law presents a mixed picture but rulings include that the weapon; should not be used to target sensitive areas (e.g. genitals or the head); can be used when a suspect remains aggressive even if handcuffed; should not be used to forcibly remove drugs from the person; that multiple uses may be reasonable; that use against a 6 year old child was found to be unacceptable in certain circumstances but that, in other circumstances, use against a 12 year old and a 73 year old was not unacceptable. Case law plays an important role illustrating both the limits and parameters for use of TASER , as well as risks associated with it.

Speaker Eleven: Dr Payne-James, Consultant Forensic Physician.
The speaker noted how grateful he was for the opportunity to bring people working on use of force and TASER together. He talked to the FOI requests himself and colleagues had issued to ascertain the total number of deployments of different weapons, and their (recorded) injury rates. They found the data was very poor; of those forces that had data, no police service could provide any data on medical complications related to the use of any LLW. There were important inconsistencies between data in terms of the terminology used (e.g. used and deployed) between national and local datasets and of different reporting periods. Irritant sprays and TASER have recognised medical complications, recorded in scientific peer reviewed journals. The use of TASER is a traumatic event for subjects, officers and all those involved and it is a matter of general public concern that these techniques are used appropriately. Whilst information is currently gathered on TASER , the system doesn't allow for the capture of all relevant medical information, and does not collect appropriate clinical data. More-over the systems which are in place are not always properly used. The current systems are not fit for purpose. All adverse outcomes from less-lethal options should be medically assessed and centrally recorded. Such assessments will: i) identify true incidence of adverse outcomes; ii) enable proper medical determination of clinical significance; iii) allow comparisons between options and relative risk to those against whom the option is used vs risk to public vs risk to police personnel. Without such data, speculative and anecdotal opinions will continue to circulate.

Speaker Twelve: Mrs Dymond, University of Exeter.
The speaker presented some initial, draft statistics from one part of her ESRC funded doctoral research, looking at use of force statistics between 2007 – 2012 from a predominantly rural police force in England / Wales. This analysis, based on cases where one officer used force in one incident, found that TASER was only used 1% of times, with open-handed techniques used 70% of the time across the data set. Often cases involving the use (firing) of TASER also involved the use of other force techniques, complicating efforts to assess the injury rates associated with different weapons. The data also shows a larger increase in the amount of times officers have used, and increases in reported subject resistance, but as TASER use in the force in question has only increased by relatively small numbers, this alone cannot account for such an increase. Whilst incidents involving TASER were more likely than all instances involving physical force to involve a weapon, the statistics show that, in the majority of cases, TASER was used on unarmed individuals, or individuals not recorded as having a weapon. Enhanced use of force reporting from other police forces for weapons other than TASER ; complimenting officer's subjective assessments of injury with medical assessments; and historical use of force data prior to the introduction of TASER ; would be helpful in assessing the impact of the weapon.

Speakers Thirteen and Fourteen:
The speakers noted that their interest in TASER is centred around mental health and therapeutic care. The police may be increasingly likely to come into contact with those in mental distress, as a result of the budget cuts in mental health care, and some evidence suggests that individuals who are mentally distressed may be more likely to have TASER used on them, whilst at the same time the potential for longer term mental health risks from the use of the weapon are under-researched. As psychiatry has moved away from coercive practices, there is a need to look at how TASER use may impact individuals suffering from poor mental health, and may impact therapeutic care. Their pilot study of FOI requests from UK police forces illustrated; inconsistencies in how mental health is defined; issues with the standardisation of terms, and the need for access to Forensic Medical Examiner reports in cases where the subject is listed as having psychological effects. It also highlighted there is also a need for post-incident review of occasions where force is used on individuals who have mental health issues, and a need to focus on the decision-making processes that police undertake when deploying TASER s in such cases, with a view to formulating good practice guidelines for TASER use on this population.

General discussion:

- Forces are starting to share medical records via electronic means. Some stated that information on mental health / medical records needs to be released to officers so they can have access to such information in advance; others noted that some people would feel uncomfortable about police having access to their records. Certain forces work with an emergency crisis team, and other forces have multi-agency teams in place. In some cases support from crisis teams could help.

- Alternatively perhaps the police could have access to a database that might contain some relevant information without listing full medical records. A combined 999 control rooms and centres might also help, so that medical professionals could triage the calls.

- Other noted that it will never be possible to differentiate between whether someone has a mental health condition or is temporarily extremely distressed, which points to limits to its helpfulness in assessing whether the person is mentally disturbed at that point in time. There is need to be clear about why police might need access to sensitive information. If the suspect is being violent, they need to deal with the threat, which might not necessitate access to their medical records. At the same time, he more information that can be made available after a particular incident the better. Perhaps police could also be given a checklist of symptoms to look out for (e.g. excited delirium).

Session Four: Small Group Discussions.

In the final session, participants were invited to discuss, in small groups, i) How can the 'mismatch' between the public and police view of TASER best be addressed; ii) How can TASER and less lethal weapons in England and Wales be carefully controlled and evaluated; iii) How can the debate around TASER in the UK be improved. Rapporteurs from each group relayed the key points to emerge from small group discussions. These included:

- Differences in police and public perception between the USA, where TASER is seen as an intermediate use of force, and in the UK, where it is controlled under Section 5 of the firearms act. In the UK, views of TASER will also vary considerably depending on the section of the community in question.

- The need for ongoing research into TASER , including on mental health issues, was noted. It was also noted that the College of Policing is doing a piece of work on mental health and policing. The focus has tended to be on the physical impact of TASER , with research needed on the psychological impact.

- TASER cannot be discussed in isolation from broader issues. For example, changes in officer demographics may means that certain officers are less confident using empty hand techniques, and resource constraints also play a part, as many officers may be single-crewed.

- Technology, including body worn cameras, were seen as potentially playing an important role in improving the evaluation of the contribution that TASER can make to particular incidents.

- Training was seen as generally good, but it was felt that there might be need for more of an emphasis on the concerns around drive stun, given the complaints about it.

- This is partly an educational issue, as TASER is a complex piece of equipment, but there is also a need to make more information available to the public, and for an active engagement process.

- It was also noted that the guidelines offer scope for selective interpretation, and that training scenarios focus on incidents with a clear, distinct threat of violence, whilst scenarios that are less clear-cut, and more ambiguous, may also have a role to play.

- The need for a national use of force database and to make this database available to academics for analysis. In particular, i) recording of medical effects from ALL police use of force that could go into national records in an anonymised way; ii) the need for more comprehensive data collection on incapacitant sprays and TASER ; and iii) enhanced data collection, and further standardisation of the data on TASER that is collected. The advantage of having such data would include helping police officers make decisions about the proportionality of different force options. Lessons could be learnt from the NHS and pharmaceutical industry and any data gathered should be independently collated and independently evaluated. This could then be supplemented by 'self-reporting' of effects associated with TASER and other force techniques.

- The value of this event, and of similar events in the future, was also noted.

The Meeting was closed with thanks to all for their participation, and with special thanks to the University Partners for their assistance, and to the Economic and Social Research Council, via the South West Doctoral Training, for the funding and support that made the event possible.

Bibliography / additional reading:

College of Policing Authorized Professional Practice Armed Policing: Conducted Energy Devices (TASER) https://www.app.college.police.uk/app-content/armed-policing/conducted-energy-devices-TASER /

DOMILL/SACMILL (2012) Statement on the Medical Implications of Use of the TASER X26 and M26 Less-Lethal Systems on Children and Vulnerable Adults http://data.parliament.uk/DepositedPapers/Files/DEP2012-0729/96605%20Library%20Deposit.pdf

Dymond, A (2014) 'The Flaw in the TASER Debate is the TASER Debate': What do We Know about TASER in the UK, and How Significant are the Gaps in Our Knowledge? *Policing: A Journal of Policy and Practice*: 8 (2).

Home Office Use of TASER Statistics www.gov.uk/government/collections/use-of-TASER -statistics

IPCC (2014) IPCC Review of TASER Complaints and Incidents: 2003 – 2014. https://www.ipcc.gov.uk/sites/default/files/Documents/guidelines_reports/TASER _report_fnal_2014.pdf

IPCC (2014) Learning The Lessons: Bulletin 21 – TASER www.ipcc.gov.uk/sites/default/files/Documents/learning-the-lessons/21/LearningtheLessons_Bulletin21_July2014.PDF

(NB ACPO have responded to the two IPCC reports. This response is currently with the Commissioners and will be published in due course, but was not available at the time of writing. Please see ACPO Questions & Answers on TASER www.acpo.police.uk/ThePoliceChiefsBlog/201302TASER Blog.aspx)

Payne-James et al (2014) Trends in less-lethal use of force techniques by police services within England and Wales: 2007–2011 Forensic Sci Med Pathol (2014) 10:50–55.

Payne-James JJ, Sheridan RD, Smith G. Medical implications of the TASER (editorial). BMJ 2010; 340:c853

UN Committee against Torture (2013) Concluding observations on the fifth periodic report of the United Kingdom, adopted by the Committee at its fiftieth session www.gov.uk/government/uploads/system/uploads/attachment_data/file/398272/cat-c-gbr-cco-5-16598- e.pdf

UN Basic Principles on the Use of Force and Firearms www.ohchr.org/EN/ProfessionalInterest/Pages/UseOfForceAndFirearms.as