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EUROPEAN COMMITTEE ON CRIME PROBLEMS
(CDPC)

Council for Penological Cooperation
(PC-CP)

**DRAFT COMMENTARY
TO RECOMMENDATION
ON ELECTRONIC MONITORING**

I. Scope

Electronic monitoring has been used in Europe since the 1990s and continues to expand. It is predominantly used to enforce curfews and home detention but newer technologies are emerging (e.g. GPS) which can monitor the behaviour and movements of suspects and offenders as well as can help create and monitor exclusion zones. Different countries have developed their own legislation and policy on electronic monitoring and the CEP has sustained a significant dialogue about EM with European probation services promoting the development of European rules in this area.

Many understandable fears have been expressed in relation to this surveillance technology and many European probation services have been concerned of the need to emphasize that the technology should never be used as a replacement for constructive professional relationships with suspects and offenders by competent staff dealing with them in the community. It is important to stress in this respect that probation helps develop person's internal control, i.e. helps a person develop resistance to aggression, violence and crime, while as EM is used to help the external control on a person by the competent authorities. As such EM can also be an efficient dissuasive tool for the period for which it is used.

EM is specifically referred to in Rec (2000)22 as a means of enforcement of community sanctions and measures and more specifically curfew orders. The CoE Probation Rules also contain rules related to EM (Rules 58 and 59). Nevertheless the 16th CDAP (Strasbourg, 2011) specifically requested the Council of Europe to develop more detailed ethical and professional standards regulating the use of EM in the criminal justice process. The present Recommendation contains basic standards but the Council of Europe member states are encouraged to go beyond the recommended principles in order to ensure efficient and human-rights based use of electronic monitoring.

II. Definitions

The definition of electronic monitoring is broad and general as this is not a single technology. In Appendix I to the commentary you can find a descriptive list of the currently used forms of electronic monitoring. As the technologies are rapidly developing this list cannot be considered to be exhaustive. The definition also reflects in general terms the stages of the criminal process during which electronic monitoring can be used. Following the specific instruction of the European Committee on Crime Problems (CDPC) the recommendation does not prescribe what national legislation should be in this respect, it only emphasizes the basic principles which should underpin such legislation. In addition it does not deal with the use of electronic monitoring inside prisons.

As stated, EM may be used at all stages of the criminal process. It can be used as a tool to ensure home arrest, implementation of a community sanction or measure, or it can be used as a stand-alone measure (for example it is used in UK as a tool to keep certain violently behaving persons away from public gatherings and manifestations, for example away from football matches).

EM may be used to prepare prisoners for release while they are still in prison, for example in case they are on a prison leave or are working outside the prison perimeter or are requested to attend meetings with their social worker, future employer or probation officer outside prison.

EM may also be used as a tool for controlling the whereabouts or behaviour of offenders released from prison earlier under certain conditions (for example to participate in training or undergo treatment for specific addictions, etc.)

EM may also be used to control the whereabouts of certain types of offenders who have served their prison sentence (for example serious sex offenders).

In some jurisdictions (like Belgium and France) EM is considered by the legislation to be a modality of execution of a prison sentence and those under EM are considered to be prisoners and are dealt with accordingly.

In UK there is currently a tendency to allow the same private companies (working under tender procedures) to run private prisons, to supervise persons under electronic monitoring, to provide prison escort services and also (since recently) to run interrogations. It should be noted that important ethical issues arise as a result of this which should be carefully considered.

In some jurisdictions, such as in France and Belgium, electronic monitoring is considered to be a modality of execution of a prison sentence and therefore specific provisions regarding its execution are contained in the court judgement. Hence those under electronic monitoring are considered to be prisoners and their number

is included in the overall prison population. The reality of their experience may be more like that of an offender under supervision in the community but the regulations to which they are subject are those pertaining to prisoners in general. This means for example that non-compliance with the requirements of EM can mean that they are recalled to prison without any judicial involvement.

In some countries electronic monitoring is managed by the penitentiary services (France and Catalonia), in others by probation services (Belgium, Denmark, the Netherlands, Switzerland, Turkey), in third countries jointly by probation and police services (England and Wales and Sweden). In other countries other competent state agencies deal with electronic monitoring, like the Ministry of the Interior (Italy) and in the case of juveniles by youth justice services (Sweden, England and Wales). In some countries while overall management is reserved for public services electronic monitoring is implemented by private companies under a service-providing contract (Italy, Sweden, UK). In Austria, in Baden-Wurttemberg (Germany) and in the Netherlands the electronic monitoring is implemented by the probation service which is run by an NGO under a contract with the Ministry of Justice. In the Russian Federation a state-owned company attached to the penitentiary administration is executing electronic monitoring.

It should be underlined that the rules contained in this Recommendation are addressed to the national authorities as well as to all competent public agencies, associations, private companies and persons involved in the execution of electronic monitoring.

In the majority of the Council of Europe member states it is the state which covers the costs for the use of electronic monitoring. In some countries the suspect or offender is contributing to the costs for its use (UK, Sweden). The original rationale for this latter case was simply to cover equipment costs but from the outset Sweden used the contribution to support a victim-compensation fund which helped to win public legitimacy for electronic monitoring. Whatever the rationale behind such financial requirement it has to take into account the offender's capacity to cover costs and in order to respect the principle of equality of treatment it has to provide for situations when a suspect or an offender is exempt from paying costs.¹

Few countries use EM for juveniles the rest consider that this tool is not applicable to juveniles. It should be noted in this respect that the Council of Europe has consistently reminded the national authorities of its member states that juveniles in conflict with the law are vulnerable and should be treated differently from adults because their personality and maturity are still developing. Therefore intervention methods based on education, training and increasing motivation should be used systematically. In case EM is used for this group careful impact assessment of this tool should be done before and during its use in order to better adapt its length and intrusiveness on the juveniles and their families and third parties. Efforts must be made to combine this measure with other interventions aimed at developing the juvenile's personality and capacity to resist involvement in crime.

III. Basic principles:

Rule 1

As in the case of the European Prison Rules and the Council of Europe Probation Rules the term "law" is used here as a general term which refers to any national legal text regulating questions related to electronic monitoring (laws passed by national parliaments, governmental legislation, by-laws, regional and internal rules, etc.). This includes policy documents which expand upon the legal provisions, and in respect of electronic monitoring, partly because of its technical and, in some instances its procedural complexity these texts can themselves become complex documents whose meaning may not be transparent to all relevant stakeholders. Effort must be made to properly explain the technical aspects and practical implications of electronic monitoring to sentencing authorities which may be otherwise unfamiliar with its technical capacities and its social impacts, and may therefore underestimate or, more rarely, overestimate its potential as a judicial or administrative intervention. It is equally important that prison, probation and police staff involved in the execution of electronic monitoring understand what it entails and that suspects and offenders understand what compliance with electronic monitoring requires, and what would constitute non-compliance. It is left to the national jurisdictions to decide in which way specific regulations should be constructed. What is of primary importance is the legal clarity and the need to provide the persons affected with legal guarantees and means for appeal against decisions which may infringe their rights.

¹ See, Rule 69 (Recommendation Rec(92)16) which states: "In principle, the costs of implementation shall not be borne by the offender."

Rule 2

It is left to the national jurisdictions to regulate in which ways decisions imposing or revoking electronic monitoring are taken. The imposition may be integrated into a court judgement, may be decided by a prosecutor, by a judge entrusted with the execution of sanctions or measures, by a prison or a probation agency. What is important here is that in cases where a decision is taken by an administrative body, including prison and probation services, effective judicial review is available to the persons concerned. Judicial review may be undertaken by a specific judicial body, a parole board or an ombudsman - where parole boards themselves make or revoke an order involving electronic monitoring, their decisions should in turn be reviewable by a judicial authority. It should be noted that in most European countries electronic monitoring is combined with other probation sanctions or measures which are imposed by the judiciary at the pre-trial or sentencing stage while in a number of electronically monitored early release schemes both the decision to grant it and the decision to order recall is administrative in the first instance rather than judicial.

Rule 3

There is always a risk of net-widening² with electronic monitoring, particularly when it is used as a stand-alone measure, partly because there is no consensus across, or even within jurisdictions, as to the risk level of suspects on whom it is most appropriately targeted. Although research shows clearly that the experience of electronically monitored curfew or home detention can be an onerous experience for suspects and their families³, practice shows that it has been used on people who pose only low risks, merely because it is perceived as a useful additional form of control. In particular, in some pre-trial cases, the judiciary has prescribed electronic monitoring to suspects who would not normally be remanded in custody because they do not present a risk of flight or of interfering with the course of justice. This is not to be encouraged, either at the pre-trial (or indeed sentencing) stage, particularly in view of its costs and intrusiveness.

On the other hand in some countries where suspects may have some difficulty coping with the onerousness of the electronic monitoring experience, "bail support projects" have been used to provide help and assistance to suspects and their families, and this practice may increase the use of electronic monitoring at the pre-trial stage on suspects who may otherwise be considered more appropriate for a remand in custody.

Rule 4

The meaning of proportionality in a sanction involving electronic monitoring is complex, because the technology can be used in very flexible and variable ways, in different legal frameworks and in conjunction with a range of measures. All of these affect the way an individual offender experiences this sanction or measure. The overall duration of the sanction is clearly important to proportionality, (and the maximum needs to be specified in law), but the intensity, onerousness and punitiveness of the experience can vary considerably depending not only on how long it lasts, but as crucially, on how electronic monitoring is deployed on a day to day basis. The radio frequency electronic monitoring which is used to enforce curfews and home confinement need not be applied for a full twenty four hours; a full day and night on electronic monitoring is arguably more punitive than an overnight curfew which is restricted by law to a 12 hour maximum, and may in practice be even less. It is technically and therefore legally possible to vary the hours of a curfew on different days of the week, fitting them around a person's hours of employment during the week, or making them longer on a weekend, for example. The longer and more intensive the daily burden of electronically monitored confinement is the harder a sanction of long duration may be; it may be that a short

² The term "net-widening" is usually taken to mean the use of a penal measure for offences below the threshold above which such a measure is used, or on lower risk offenders, than the measure was originally intended for by legislators, policymakers or penal reformers. Where a measure that was intended in law or policy as an alternative to custody (at the sentencing or remand stage) is used on offenders or suspects who would not otherwise have been at risk of a custodial decision, net-widening can be said to have occurred. It is usually understood as something unintended and undesirable; the term is invariably used pejoratively. However, there is quite often a degree of professional or philosophical disagreement between penal reformers, legislators, policymakers and sentencers as to where a measure or sanction is appropriately pitched on the threshold - and some sentencers may well use a putative alternative to custody lower than the threshold, because they think it is appropriate for that particular offender (or category of offenders) - even if they would never have considered sending the person to prison. Typically, such sentencers will not think of themselves as "net-widening" - they will simply argue that electronically monitored curfews (whether integrated with other measures or not) is too versatile or useful a measure or sanction to be reserved only for offenders who would otherwise have warranted imprisonment. Some countries do indeed use electronic monitoring, even in its integrated forms, as a useful form of supervision in the community for offenders who may never be at risk of custody. Outside observers may well judge them to be net-widening, but this would not be their own understanding. The chances are that in any given country there may always be contesting views among different groups in criminal justice as to how electronic monitoring should be properly used; net-widening is rarely an objective fact: it is a judgement based on a particular preconception of how a measure or sanction should be used.

³ Vanhaelemeesch D and Vander Beker T (2012) Electronic Monitoring: convict's experiences in Belgium. in *Social Conflicts, Citizens and Policing*. Antwerp: Government of Security Research Paper Series (GofS) Series 6

period of complete confinement (up to three months) is more bearable than a long one (for twelve or more months), and that the longer a sanction of electronic monitoring lasts the more desirable it is, if continued compliance is to be expected, for the daily hours to be flexible. Which of these is more proportionate to a particular offence - a short intensive sanction or a longer, less intensive one - is a matter for consideration in different jurisdictions.

With different modalities of execution of electronic monitoring, the question of proportionality becomes more complex. Is continuous GPS tracking of an offender's movements for several months more or less onerous than the same period under electronically monitored home confinement? Is the imposition and monitoring of exclusion zones but without continuous monitoring of one's general whereabouts a less intrusive use of GPS tracking - or a greater one, because of the restriction it imposes on a citizen's use of public space? Decisions to impose electronic monitoring - particularly GPS tracking - may not in the first instance be governed by considerations of proportionality. Public protection and the practical effect that different modalities of electronic monitoring may have on reducing offending are also to be considered by the sentencing authorities. The determining of the legitimate limits of these interventions - their proportionality in relation to particular offences and offenders - an understanding of their actual restrictiveness, and the degree of onerousness that it would impose on them, bearing in mind their family and employment circumstances is essential.

Rule 5

The decision which prescribes electronic monitoring needs to define the purpose of its use, and to tailor the restrictions it imposes, including its duration, to those purposes. If - as it should be - the general purpose of electronic monitoring when used in a sentence or as an element in a prison release programme is to help with reintegration and desistance - it should not be executed in such a way that restricts the possibility of the offender having access to appropriate and relevant services or benefitting from those aspects of community life that can act as incentives to good citizenship and law-abidingness. The agency which executes electronic monitoring must connect the overall duration of electronic monitoring, the daily time a person needs to spend at home, and/or the size of any imposed exclusion zones to broader reintegration purposes, and this connection must be made apparent to the offender. Electronic monitoring is not an inherently reintegrating measure in its own right, but it can afford opportunities to an offender to participate in and benefit from such measures.

Where electronic monitoring is used at the pre-trial stage with unconvicted persons, reintegrating considerations may be wholly absent, and there may be less incentive to give offenders access to opportunities and resources in the community which may be helpful to them. Some European schemes do impose electronically monitored home confinement for twenty-four hour periods at the pre-trial stage and it may well be that that the judiciary would not use them as an alternative to a remand in custody unless the measure was so restrictive. Such schemes permit "authorised absences" (usually at the discretion of an administrative authority) in specified circumstances (for example, medical emergencies or family funerals) but these may not necessarily be enough to enable a suspect to maintain the kind of ties to the community that his/her long-term well-being and desistance may require. Electronic monitoring can be used merely to create an experience of confinement, replicating that of imprisonment but in more congenial surroundings, and alongside one's family, and at lower cost to the state, but this is not the best use of it, given its much greater potential to add an element of oversight and controlling to suspects (and offenders) who might otherwise be leading constructive lives in the community.

Rule 6

More so than any other form of community supervision, electronically monitored home confinement affects the other people in the household with whom offenders are confined. This may be their parents, partners or children, and sometimes grandparents or other relatives. It is essential in making decisions to use electronic monitoring that appropriate risk assessments are made of the suspect/offenders likely impact on these other householders, particularly in relation to the potential for domestic violence, or the likelihood of increased tension occasioned by enforced proximity. It is also essential that the adult householders should be asked by the relevant authorities to give their consent to the presence of the monitored person, and to the installation of the monitoring equipment - and also that they should be able to withdraw that consent if their views or circumstances change (which means the monitored person can no longer reside there, and that alternative arrangements, possibly monitoring at another address, have to be made). Extensive research shows clearly that other family members do become involved in the suspect/offenders confinement⁴ - taking on additional

⁴ Gainey R R and Payne B K (2000) Understanding the Experience of House Arrest with Electronic Monitoring: an analysis of quantitative and qualitative data. *International Journal of Offender Therapy and Comparative Criminology* 44(1) 84-96; Martinovic M

burdens outside the home (shopping, collecting children from school, etc.) which the offender is prohibited from doing, making special efforts to make sure that the monitored person is at home in time for their curfew. Monitored parents may find that they cannot participate in their children's activities outside the home, even in some instances, that they cannot play with their children in their gardens (if this is beyond the range of the monitoring unit). Other family members may curtail their own social lives, and stay indoors, just because the offenders are not allowed out and they do not wish them to feel isolated, or resentful of their freedom of movement. The size of a home can affect the quality of the monitoring experience, and in smaller homes people may not be able to avoid each other even when tensions arise; the onus is always on the other householders to step outside and go elsewhere to cool down, because the offender will be in violation if he or she does it. These are all further reasons why electronic monitoring should not, ideally, be used to confine persons to their home for twenty four hours per day - this is a burden on families and third parties as much, and maybe more, than it is on offenders, and as such may be considered unfair on the former. In recognition of the domestic tensions which may be caused or intensified by the confining modalities of electronic monitoring, many jurisdictions do provide support to families to help them through the experience, and it is in the interests of judicial and penal authorities to prevent, as far as possible, these living arrangements from breaking down.

Rule 7

This rule is a general non-discrimination rule following Art 14 of the ECHR and a number of other relevant international legal texts. Its aim is to underline the need to prohibit any discrimination based on the listed grounds. In addition to this rule there may be a need for positive discrimination in some cases (see Rule 27 below).

Rule 8

There is adequate if not definitive research evidence to suggest that electronic monitoring suppresses criminal behaviour during the period people are subjected to it but not beyond it.⁵ This is consistent with an understanding of deterrence - electronic monitoring increases the risks of detection when violations occur, and also the risks of further punishment. If deterrence and immediate, short term prevention is all that is desired - for example keeping convicted football hooligans away from matches on evenings and weekends - then stand-alone electronically monitored curfews could be used, but if it is desired to reduce hooligan's general propensity to violence, then an intervention designed to change behaviour is also needed. There is evidence too that it is better suited to medium and higher risk offenders than to those of lower risk⁶. Location monitoring technology cannot in itself bring about a change of attitude or behaviour in the way that a number of probation initiatives and programmes dealing with offending behaviour are designed to do. Some evidence suggests that wearing a monitoring device can have a "shaming effect" but by itself this is insufficient to bring about long-term change. If reintegration and desistance are to be achieved electronic monitoring must be used in conjunction with measures which can accomplish this, tailored to individual offenders' circumstances (drug treatment, alcohol treatment, anger management, employment skills training, etc.⁷). It is not ideal to regard electronic monitoring merely as "the punishment part" of a multi-component sentence which also has reintegration elements, but in some jurisdictions this is how it is understood, and it serves to make community supervision legitimate with the public in ways that may otherwise be harder to achieve. It is better if electronic monitoring is itself tailored to support reintegration initiatives - confining people at home at specific times when they have been known to offend. Canadian research, albeit with a small sample, showed in the early days of electronic monitoring that it could help stabilise the lives of offenders of offenders who would otherwise not have completed rehabilitative programmes, and thereby get benefit from them⁸.

(2007) Home Detention; issues, dilemmas and impacts for detainees co-residing family members. *Current Issues in Criminal Justice* 19(1) 90-105 ; Martin, J. S., Hanrahan, K., & Bowers, J. H. (2009). Offenders' perceptions of house arrest and electronic monitoring. *Journal of Offender Rehabilitation* 48, 547-570; Vanhaelemeesch D and Vander Beker T (2012) Electronic Monitoring: convict's experiences in Belgium. in *Social Conflicts, Citizens and Policing*. Antwerp: Government of Security Research Paper Series (GofS) Series 6

⁵ Padgett K, Bales W and Blomberg T (2006) Under Surveillance: an empirical test of the effectiveness and implications of electronic monitoring. *Criminology and Public Policy* 5(1) 61-92

⁶ Renzema M and Mayo-Wilson E (2005) Can Electronic Monitoring Reduce Crime for Medium to High Risk Offenders. *Journal of Experimental Criminology* 1(2) 2005 215-237; Renzema M (2012) Evaluative Research on Electronic Monitoring. in Nellis M, Beyens K and Kaminski D (eds) *Electronically Monitored Punishment: international and critical perspectives* London: Routledge

⁷ Wennerberg I (2012) High Level of Support and High Level of Control: an efficient Swedish model of electronic monitoring? in Nellis M, Beyens D and Kaminski D (eds) *Electronically Monitored Punishment: international and critical perspectives*. London: Routledge

⁸ Bonta J, Rooney J and Wallace-Capreta S (1999) *Electronic Monitoring in Canada*. Canada: Public Works and Government Services

Rule 9

Commercial organisations in the private sector are involved in the provision of electronic monitoring more so than in other forms of community supervision, at the very least as technology manufacturers, and sometimes as full service deliverers (fitting monitoring devices, running a monitoring centre). They are usually procured by a process of competitive tendering and invariably contracted to state agencies, not necessarily central government. It must be understood that public authorities remain fully responsible for protecting the rights and freedoms of offenders and for public safety whoever is entrusted with the execution of penal sanctions or measures, and however the contract is constituted (see also Rule 9 of the Council of Europe probation Rules and Rule 71, EPR). This is a question of democratic accountability, of quality of service to the public, and of ultimate responsibility for respect of human rights. If, for whatever reason, a commercial organisation's defaults on the service it has been contracted to provide, the public authorities must take action to remedy the situation.

Rule 10

Transparency of operation, and the regular publication of accurate penal and judicial statistics in which the use of electronic monitoring both as an alternative to imprisonment and as part of community sanctions or measures can clearly be seen is essential for effective governance. It is also important to be transparent about the costs (and cost-effectiveness) of electronic monitoring, both regarding equipment and service provision, in order to make valid comparisons with the cost-effectiveness of other penal measures, and to ascertain what cost savings, if any, electronic monitoring has delivered. Financial auditing and auditing of quality of interventions are necessary to achieve this transparency. Commercial confidentiality, often claimed as a consequence of competitive tendering arrangements, cannot be regarded as valid grounds for a lack of transparency. The public has the right of access all such information in a manner regulated by law.

Rule 11

Where a suspect or offender is required to make a contribution to the costs of his or her being monitored the maximum daily amount should be set by law, and the offender's capacity to pay should be income-tested and related to his or her domestic circumstances, and the impact that such costs may have on these. There should also be an absolute limit to the overall amount paid, in order to limit the liability of offenders who are on electronic monitoring for long periods. An inability to pay a contribution should not be considered a reason to deny suspect or an offender the opportunity to be given electronic monitoring. There should be schemes allowing indigenous suspects or offenders to also be granted electronic monitoring.

In addition the rationale for the payment should be transparent to the public and to offenders themselves in order to be understood and accepted. For example Sweden requires a financial contribution of 5 euros per day in its Intensive Supervision with Electronic Monitoring (ISEM) scheme, but this is not to cover partially the costs of the equipment or the service. The money is paid into a victim compensation scheme. This has helped win and sustain legitimacy in the eyes of the public for electronic monitoring as sanction supporting crime victims⁹.

Rule 12

It is in the nature of electronic monitoring systems, particularly GPS tracking systems, to generate a great deal of computerised information, more so than other forms of community supervision. As such, legal and professional choices need to be made as to which agencies (including technology manufacturers) need to have which information and in what form, and also which information is to be used for routine monitoring purposes, and which can be used in exceptional circumstances. Data on offender's names, addresses and offences can be encrypted into number strings in such a way as to ensure that operative staff in monitoring centres do not know the identity of the person subjected to monitoring, even though they can make precise records of their movements and pass them on, in decryptable form, to criminal justice agencies, which can use this information in their face-to-face work with offenders. It may however, be decided in law that not all information about an offender's movements should be made available, for example, to probation staff - rather than having access to all whereabouts, in real-time or retrospectively, the only information they need to have should concern the violation of exclusion zone perimeters. Data on whereabouts remain stored in the computer, however, and the police may find such data useful, as a means of situating a tracked offender at a newly committed crime scene, incriminating or exonerating them. Law must specify the circumstances and

⁹ Wennerberg I, Marklund F and Nimeus (2005) *Electronic Tagging in Sweden*. Stockholm: Bra;
Wennerberg I and Holmberg S (2007) *Extended use Electronic Tagging in Sweden: the offenders' and victims' views*. Stockholm: Bra.

procedures in and through which the police can access such data. Law should also specify strictly after what time period records of a suspect's or an offender's movements shall be destroyed.

Rule 13

This Rule carries a similar message to Rule 10 of the Council of Europe Probation Rules and Rule 8 of the European Prison Rules. See also Rules 33-38 below. In view of the great availability and easy access to data in the case of electronic monitoring it is important to underline that staff need also to be trained to respect data protection rules and privacy as violation of the rules may be detrimental for rights and freedoms of persons concerned.

Rule 14

This Rule mirrors Rule 15 of the Council of Europe Probation Rules and Rule 9 of the European Prison Rules. It is important to have government inspection and independent monitoring of the agencies responsible for the execution of electronic monitoring at regular intervals. It is essential for the reports of these agencies to be publicly available. In some cases inspection may be internal, i.e. carried out by the ministry responsible for electronic monitoring, in other cases it may be undertaken by a separate governmental body (e.g. an Inspectorate) but this should not preclude the possibilities to allow fully independent monitoring from approved non-governmental agencies. This is important for reasons of both financial propriety and best professional practice, as well as from a human rights perspective.

IV. Conditions of execution of electronic monitoring at the different stages of the criminal process

Rule 15

Most jurisdictions require a suspect or an offender to formally consent to the imposition of community-based sanctions or measures, including those in which electronic monitoring is used. Some jurisdictions have different rules for different community-based intervention programmes. In England and Wales, for example, formal consent is not required where electronic monitoring is imposed as part of a community sentence, but is required to be given by short-term prisoners who are eligible for early release on electronic monitoring (in fact not all do consent to or "volunteer" for it, preferring to remain in prison). The giving of consent to supervision in the community by an offender has traditionally been understood by courts and probation services as a preliminary sign of commitment and willingness to accept the terms of such supervision, and a likely indicator of future compliance. Such signs and indicators do matter in respect of electronic monitoring, but there is, in addition, a simple practical sense in which the technology will not work to ensure compliance unless the offender/suspect agrees to abide by regulations which make monitoring possible, and co-operates with its imposition. There is little value in engaging the expenses (staff time, travel time) of fitting a tag to a person - even if he or she allows this - if he or she has declared from the outset that they have no intention of remaining indoors during required periods of curfew or home detention, or that they will cut the tag off at the earliest opportunity. In the case of GPS tracking an offender/suspect is required to return home and remain indoors in order to charge the battery which powers the monitoring equipment, without which it would not function; this requires a degree of active cooperation on the part of the monitored person that simpler radio frequency electronic monitoring does not require. Charging may be required on a daily basis, but as the quality of batteries in electronic monitoring devices improves (and battery strength increases) it may become less frequent than this. In recognition of this aspect of electronic monitoring, some of the companies which manufacture this technology aptly refer to it as "participant dependant".

Rule 16

There should be no presumption that electronic monitoring needs to be used routinely at the pre-trial stage. It is important to avoid its net-widening as many suspects - unconvicted and technically innocent - can safely be released into the community pending trial (into their homes or sometimes into specially designated hostel accommodation) without intrusive and controlling forms of surveillance. If necessary, some can be monitored by means of reporting to police stations at specified intervals and times. Some can be monitored at night by police-enforced curfews - random visits to the suspect's home to check whether they are indoors as required. In some jurisdictions social work support is offered to pre-trial suspects in the community despite them not being convicted, purely on humanitarian grounds, to meet theirs or their families' manifest needs at a stressful time of their lives. Electronic monitoring may, in some jurisdictions, be perceived as a more cost-efficient, less labour intensive means of enforcing curfews or house arrest than police-based monitoring, especially for suspects living in remote geographical areas. Equally, it may simply be regarded as a practical equivalent of police-base monitoring, and co-exist alongside it. However a jurisdiction decides to monitor suspects at the pre-trial stage - particularly if electronic monitoring is being considered - the execution of the

measure should be proportionate to the risks (absconding, re-offending, and interference with the course of justice or threatening public order) whose realisation it seeks to prevent. If there are less intrusive and more socially inclusive means of preventing such risks, or if in individual cases no such risks are perceived, then electronic monitoring should not be used at the pre-trial stage.

Rule 17

The usual reason for introducing electronic monitoring at the pre-trial stage is to reduce the costly use of remand in custody for offences for which it is required or for suspects who pose serious and well-founded risks, thus enabling more of them to remain in the community than would otherwise have been the case. While many suspects will appreciate the opportunity to avoid a custodial remand, and to remain with their families pending trial, those who anticipate a subsequent custodial sentence have less of an incentive to accept a pre-trial period of electronic monitoring if the time spent on it is not to be discounted against that subsequent sentence. Some suspects prefer to be remanded in custody for this reason. It should be acknowledged that electronic monitoring is limiting one's freedom although not completely preventing the suspect from it. Some forms and modalities of execution of electronic monitoring are rather demanding and constraining for those subjected to the measure. Therefore some jurisdictions consider electronic monitoring as a modality of execution of a prison sentence and therefore deduct time spent under electronic monitoring from the overall time [to be] spent in detention. How much of the time spent on pre-trial electronic monitoring is to be deducted from the final time to be spent in prison will depend, in any jurisdiction, on the agreed sense of equivalence between time spent on monitoring and time spent in custody as well as on the specific modalities of execution in each individual case. The procedure and way of calculation should be specified in law.

Rule 18

Individual victims of specific crimes (like victims of domestic violence, stalking or sexual assault) can in principle be protected by particular configurations of electronic monitoring technology, all of which entail giving the victims an alarm which simultaneously informs them and the police if a particular tagged offender comes within defined metres of proximity. Experiments with radio frequency electronic monitoring used in this way, at the pre-trial stage, were undertaken in the USA, judged to be of limited efficacy, and for the foreseeable future all such schemes, including those that have already developed in Europe, (Spain, Portugal and - imminently - Sweden) are likely to be based on GPS tracking. There are several different ways in which tracking can be used to protect victims, both when they are in their homes and also when they are mobile, but whatever system is chosen in a particular jurisdiction, its nature (size of exclusion zones, range of alarm-devices, likely speed of police response etc.), capacities and limitations must be described and explained in advance to the victims so that they can appraise the benefits and risks of being protected in this way, for the victim and sometimes the children, and give informed consent to the arrangement. Effectively protecting the victim also requires agreed protocols among the agencies involved to ensure that the suspects/perpetrators is not inadvertently notified of his former victim's whereabouts, by being warned to stay away from an area where they would not otherwise know the victim is now living. Current evidence from the USA suggests that former women victims of domestic violence, notwithstanding a degree of anxiety at the outset, derive benefit from well-run GPS tracking schemes used to protect them at the pre-trial stage¹⁰.

Rule 19

Where exclusion zones are imposed on the offender in the context of GPS tracking, their size and number warrants ethical consideration. A presumption should be made in respect of offenders under supervision in the community (as opposed to those who have been removed from it, and imprisoned) that they are entitled as citizens to the use of shared public space; indeed, it is the trust placed in them by judicial and penal authorities to be of law-abiding behaviour, and their everyday participation in ordinary social life, which is held to facilitate their reintegration and desistance. Temporary exclusion from particular places can, nonetheless, be a useful means of crime reduction and victim protection. In urban areas with routinely dense traffic the police may claim that only large exclusion zones, of several kilometres diameter, are feasible as a means of protecting specific victims, because once alerted to an offender/suspect's proximity to an exclusion zone perimeter they still need sufficient time to travel to the victim's location and/or the offender's last known whereabouts. This may be true, but is hardly desirable, given the amount of urban space, its facilities, and possible access to significant friends and relatives from which an offender would be prohibited. In the case of convicted child sex offenders, consideration should be given to the reasonableness

¹⁰ Erez E, Ibarra P R and Lurie N A (2004) Electronic Monitoring of Domestic Violence Cases - a study of two bilateral programmes. *Federal Probation* 68(1); Erez E, Peter R. Ibarra P R, William D. Bales W D. and Gur, O M (2012) GPS Monitoring Technologies and Domestic Violence: An Evaluation Study. Washington: Department of Justice.

or otherwise of placing (at present, technically costly) exclusion zones around every school or park in a town or city that the offender might potentially visit; over and above the undertaking of appropriate risk assessments, the offenders' own view of what they would find helpful to resist temptation and sustain desistance can be considered.

The duration as well as the degree of exclusion from prohibited zones should also be considered, with maximum periods specified in law and subject to review; consideration can be given to authorising graduated re-entry into exclusion zones, in order to motivate the offender's compliance with the principle of exclusion, to ameliorate its pains and inconvenience and for the offender to demonstrate his reliability and trustworthiness as a period of supervision comes to an end. Where offenders abide by exclusionary prohibitions, in the sense of not deliberately violating the perimeter, but must nonetheless travel across it by car or public transport in order to get to work (or indeed to any area from which they is not excluded) they should forewarn the authorities by phone of their intention to pass through it, so as to avoid false alerts been sent to protected victims, and wasteful mobilisation of police resources.

Rule 20

The remote electronic monitoring of prohibited substance use is at present largely focussed on alcohol, although it is possible that illegal drugs may be encompassed by it in the near future. This represents a move away from mere location monitoring in the community - although a great deal of control over a person can be achieved by doing that - towards the direct monitoring of behaviour, specifically in this case the prohibition of alcohol use in cases of alcohol-related criminal behaviour. Some jurisdictions have had such a prohibition for a long time, and have used other, non-electronic means of enforcing them, e.g. urine testing. In deciding when and whether to adopt electronic means of monitoring alcohol use - whether in the context of home confinement or tracking movement, or as a stand-alone measure - the question of intrusiveness to offenders, and the dignity of supervisory staff, is sharply posed - what is more intrusive, the periodic downloading of digitised data on alcohol intake to a monitoring centre, or the periodic giving of a urine sample in a probation officer. In settling such questions, the views and preferences of offenders and staff can legitimately be taken into consideration - and it may well be reasoned that urine testing is the more intrusive, less dignified measure when compared to electronic monitoring. It may also be the case that offenders, as part of their involvement in a wider treatment programme, find therapeutic and educative value in having their alcohol intake continually monitored, whether their aim is abstinence or merely reduced intake (moderate drinking). For some offenders, committed to desistance, the wearing of an ankle bracelet may act as valuable incentive to stay sober, and can thereby be integrated into a rehabilitative programme without the ethical anxieties that often attend discussion of electronic monitoring.

Rule 21

It is preferable to think of electronic monitoring not as a means of creating "jail space" in the offender's home but as something akin to the partially restrictive nature of all forms of supervision in the community which require attendance at particular locations at particular times and intervals (probation offices, employment centres, community service sites) and which leave scope, where necessary, for an offender/suspect to engage in gainful employment or in treatment or educative programmes. This has psychological benefits for the offender - confining offenders to their home for 24 hours per day, for several weeks or months, requiring nothing more than passive compliance with their confinement, is hardly conducive to stimulating responsible attitudes in them (perhaps even less so than in a well-resourced prison). Even more importantly, however, the offenders' accepted absence from home at least for part of a day relieves pressure on the other people with whom they share that home - otherwise the onus is always on the latter (the innocent) to leave the home if and when pressure and discord arises, simply because offenders are not allowed to do so. In England and Wales, where, at both the sentencing and early release stages, electronically monitored curfews have, since their inception, been lasting for a maximum of 12 hours per day (soon to be increased to 16 hours), offenders do have "free time", as well as the possibility of "authorised absences" (for medical emergencies and family funerals etc.) during curfew hours. Other countries - Portugal's pre-trial scheme and Sweden's "Intensive Supervision with Electronic Monitoring (ISEM)" demand longer hours of confinement, and allow only "authorised absences". Regular employment (or training and education), and weekly participation in specified rehabilitative activities are required features of ISEM; the rest of the time the offender is under curfew, and electronically monitored. In some jurisdictions, it is only on the basis of extensive periods of daily confinement, with discretionary "authorised absences" that sentencing authorities are prepared to give electronically monitored measures and sanctions serious consideration. The principle remains, however, the more electronic monitoring is used purely to enforce long confinement the less re-integrative this confinement is likely to be, and the more difficult and demanding the experience becomes for the third parties who share the offender's home, even if they willingly choose to bear it for the sake of keeping the offender out of prison.

Rule 22

This Rule enumerates in a non-exhaustive manner ways of using electronic monitoring in the case of imprisoned offenders. The merit of such measures in the context of graduated release programmes is twofold. Firstly, they give a degree of reassurance and legitimacy to temporary release schemes about which the public may otherwise have been more sceptical, making them difficult to sustain or implement. Secondly, they may make it possible to grant temporary leave to higher risk prisoners who would not otherwise have been considered eligible for it. Catalonia uses electronic monitoring programme to support overnight stays at home of inmates on a daily work release scheme (from what they consider an “open prison”, insofar as prisoners usually sleep there, nothing more); Sweden uses electronic monitoring in four open prisons to facilitate a relaxed regime for inmates prior to release, and has recently started a separate temporary release scheme, using GPS tracking, for serious young offenders in residential care.

Rule 23

This is manifestly a way of using electronic monitoring to reduce the use of imprisonment; to allow offenders sentenced to custody to serve their sentence, conditionally, for an equivalent or proportionately long period of time, in the community. Sweden’s “Intensive Supervision with Electronic Monitoring (ISEM)”, which can last for a specified maximum of three months, is a viable example of this.

Rule 24

This Rule does not intend to promote the use of electronic monitoring for all offenders who are released from prison earlier than their term of imprisonment as many of them would not require such use. For some prisoners though (especially those who have remained longer time in a closed prison) there is demonstrable merit in graduating the process of release from prison, rather than expecting them to make an abrupt transition from it to community. The immediate period after release is high risk for re-offending, and electronic monitoring - together with the prospect of recall for violations - can be a means of retaining, but simultaneously reducing, control. In many countries early release is discretionary, something which can be used by the prison authorities to motivate compliance in prisoners, something to be earned by good behaviour - and a period of supervision on electronic monitoring (radio frequency or GPS) can be a way of encouraging this. The degree of control imposed by electronic monitoring may also reassure the public that early release can be permitted without detriment to public safety: England and Wales, which has a longstanding electronically monitored early release scheme for short sentence prisoners, for a maximum of 135 days, and is satisfied that early release on electronic monitoring does not make the risk of reoffending any greater compared to equivalent offenders who are not released early. It is in the nature of early release schemes, whether they are electronically monitored or not, that they will be intended less to graduate an individual prisoner’s release process, and more to relieve aggregate pressure on a rising prison population - although the two purposes need not be contradictory. The cost savings of such early release schemes may be considerable¹¹, and these may act as an incentive in their own right to use electronic monitoring to accomplish them.

Rule 25

The risk posed by some serious sexual and violent offenders, who may still be considered dangerous when their period in custody comes to an end has led a number of jurisdictions to develop new forms of preventive detention or protective control in the community. The various modalities of electronic monitoring have become part of these considerations, and electronically monitored curfews have been used in respect of them, as, for example, one among several conditions in a post-release Sex Offender Protection Order (SOPO) in Scotland. As a result of an ECHR ruling against the continued preventive imprisonment of sex offenders in Germany, GPS tracking was introduced by the Federal Government for serious sexual and violent offenders released from prison after January 2011. Such offenders undeniably pose difficult ethical challenges; in Germany, their consent to GPS was not required, and all movement data collected by tracking can be given to the police for up to three months, for use in other investigations, and only thereafter deleted. While recognising legitimate concerns with public protection, the impact of these measures on offenders and their families remains important.

¹¹ It has been officially estimated that England and Wales saved £31 million per year because of electronically monitored early release - see National Audit Office (2006) *The Electronic Monitoring of Adult Offenders*. London: The Stationery Office.

V. Ethical issues

Rule 26

Notwithstanding a general presumption against non-discrimination in the application of electronic monitoring at any stage of the judicial process (see Rule 7), there may be occasions when age or disability, including psychiatric condition, warrants a more tailored, individual approach. The first person to be subject to GPS tracking in the Netherlands was an 83-year old convicted sex offender, whom the judge was reluctant to imprison even though the seriousness of the offence, and the degree of assessed risk, warranted it. Electronic monitoring may not be a suitable tool for all old or mentally ill people, even if, on its face, it seems like an appropriate alternative to prison. If neither prison nor electronic monitoring is appropriate for an offender or suspect, other alternatives should be considered. In respect of electronically monitoring juveniles, existing research is equivocal about its effect on recidivism, but in view of the importance attached to keeping young people out of prison and secure residential homes it seems unwise to rule out its use with them on the grounds of age alone, as some European countries have done. Electronic monitoring need not be used in a purely punitive fashion, and, as with adults, it can be combined with re-integrative and supportive interventions and as such may be of use in keeping young people with their families and out if they are in institutions. Some parents would find this desirable. Sweden, which was once opposed to using EM on juveniles, had recently begun using GPS tracking on young offenders convicted of serious crime, when they leave residential care to go on temporary leave.

Rule 27

Periodically, it is suggested in the media, and sometimes by technologists, that electronic monitoring would be enhanced if, along with location-finding functions, it was able to immobilise offenders by giving them a Taser-like electric shock - for example, if they approach the perimeter of an exclusion zone. It is technologically feasible to do this, using a powerful battery in the ankle bracelet which can be remotely discharged, but no such device has ever been used anywhere in the world, although it was at one time under consideration in South Africa. Such use causes physical harm amounting to inhuman treatment or punishment which is prohibited by the ECHR.

Similarly, it is sometimes suggested that the location monitoring of offenders would be more efficiently accomplished by sub-dermally implanted chips, rather than wearable devices. Implanting chips in the human body is also feasible, not necessarily or solely for location-finding purposes, and may have merit as a medical rather than a judicial intervention (for example for patients suffering from dementia). In general terms, the dangers that implants represent have already been considered by the European Group on Ethics and Science in New Technologies.¹² At present, chips have a limited range as tracking devices, and have shown no obvious or compelling advantages over small wearable devices. These potentially harmful forms of electronic monitoring, which impinge on bodily integrity in a way that wearable devices do not, cannot be legitimated by person's consent to them - as something subjectively preferable to imprisonment - and must be prohibited.

Rule 28

Electronic monitoring technologies, like all forms of modern digital technology, are susceptible to "upgrades", which are easily marketed by their manufacturers as indispensable improvements, and sometimes sought by government agencies that are keen to be thought "modern". It may well be that innovations in electronic monitoring technology - whether of infrastructure (e.g. mobile phone networks), hardware (e.g. GPS chipsets), or software (e.g. data processing programmes; encryption techniques) - do improve the quality and cost of service available to criminal justice agencies, and also the experience of offenders, suspects and their families - but care should be taken to ascertain in full, and in advance, what the implications of new technological permutations in electronic monitoring actually are. Some may be good and useful, others not. Technological improvement in electronic monitoring - which may not necessarily mean social or ethical improvement - should not be pursued for its own sake.

¹² European Group on Ethics and Science in New Technologies (2005) Ethical Aspects of ICT Implants in the Human Body. Opinion No 20 presented to the European Commission; Nellis M (2012) Implant Technology and the Electronic Monitoring of Offenders: old and new questions about compliance, control and legitimacy. in Crawford A and Hucklesby A (eds) *Legitimacy and Criminal Justice* Cullompton: Willan

VI. Data Protection

Rule 29

There are a number of detailed and binding international standards related to data protection. For example the first such instrument is the Council of Europe Convention for the Protection of Individuals with regard to Automatic Processing of Personal Data (ETS No. 108). Its Article 8 para. 1 states that "Everyone has the right to respect for his private and family life, his home and his correspondence". The European Court of Human Rights has defined in its relevant case law the limits to the exercise of each of these rights and, in particular, the extent to which, public authorities have the right to interfere.

The development of modern technologies, including electronic monitoring, make it increasingly possible to intrude into an offender's private and family life and to collect, store, process and share large amount of personal data. It is indispensable in criminal justice as in all other spheres of social life to establish a sound framework of specific principles and standards protecting the rights of the concerned individuals.

Rule 30

Probation, prison and particularly the police have access to massive quantities of information collected and stored in the framework of the criminal justice process. They have the authority and the possibility of using such data and therefore strict rules should be introduced which reflect on the one hand the broader mandate of work of such agencies and the higher level of their responsibility in using personal data which may interfere with one's rights to respect for private and family life. These rules should regulate the fair and lawful collection, automatic processing, storage and sharing of such data (for specified legitimate purposes), as well as the procedures pertaining to its deletion after a specified period of time.

Rule 31

Rule 31 draws the attention to the fact that rules are not only needed to regulate the collection, storage and sharing of data but also that effective sanctions and measures need to be provided for the intentional or careless breach of such rules. No standards and prohibitions can be efficiently or effectively respected without the provision of sanctions and measures against non-compliance.

Rule 32

In jurisdictions where private companies are entrusted with the supervision of persons under electronic monitoring it is necessary to provide for effective sanctions and measures against the unlawful or careless collecting, handling or sharing of data in the same way as for public agencies.

It should also be noted that it may be necessary and legally permissible in some jurisdictions for private companies involved in providing monitoring technology or in supervising offenders to withhold data from criminal justice agencies - e.g. in some systems probation services may not be allowed details of a GPS tracked offender's general whereabouts, only his violation of exclusion zone perimeters - but this data can and should be retained for a legally specified period so that it can be accessed on request by authorised agencies, e.g. the police, in respect of any criminal investigations to which it may be relevant. Sanctions may need to be provided also in this respect to prevent private agencies from withholding data which may be needed to prevent or sanction criminal behaviour or protect victims.

VII. Staff

Rule 33

This Rule is to remind that all relevant Council of Europe standards which apply to prison and probation staff shall also apply to staff entrusted with the execution of sanctions and measures involving electronic monitoring.

Rule 34

It is assumed in some countries that staff entrusted with the execution of electronic monitoring do not, for the majority of time, enter into prolonged contact with suspects and offenders (especially at the pre-trial stage). It is assumed that their tasks are more related to installing and handling equipment, monitoring computer screens, collecting and processing data. This is particularly true where staff are employed by the private sector. Even in those jurisdictions where probation or prison services are responsible for electronic

monitoring there may be an internal division of labour between professional staff and ancillary (less qualified) staff who merely install equipment and monitor screens. These types of staff, whether in private or statutory organisations, need to receive training which enables them to deal sensitively with suspects, offenders, their families and third persons. They need to be trained to understand and acknowledge differences in the personal circumstances among those subjected to electronic monitoring, to be trained to take (in conjunction with more senior professional colleagues) balanced decisions in cases of domestic difficulty and non-compliance. Where responsibility for individual offenders who are subject to both electronic monitoring and supportive and re-integrative services is divided between private and public sector organisations, staff on both sides must be trained to collaborate with each other.

Rule 35

It should not be assumed that an ability to work sensitively and constructively with offenders necessarily carries over into work with crime victims, and specific staff training should be provided to ensure competence in understanding their likely needs and anxieties. Particular emphasis should be placed on communicating the nature, capacities and limitations of the monitoring technologies involved.

Rule 36

It is in the nature of electronic monitoring systems that many aspects of them are automated, notably the precise registering of presence or absence at home, or (in GPS tracking programmes) one's continual location in public space, the violation of an exclusion zone perimeter, or texted instructions in respect of signal loss or low battery. The immediate response to violations - in terms of warning letters or texts, or phone calls - can also either be automated or personal. While automated systems, by removing the human factor in transactions between authorities and offenders may have the advantage of impartiality and consistency, there is a concomitant danger of impersonality. The balance of personal and automated communication should always be given careful consideration, and as far as possible offenders should not be encouraged or allowed to feel, subjectively, that they are being monitored by a machine, divorced from professionals whose personalised approach to them can help them towards desistance and law-abiding lives.

Rule 37

The Rule also underlines the importance of sufficient and regular training of staff in order to ensure professionalism of the highest possible quality. Technical training regarding installing, maintaining and repairing the equipment is essential but over and above technical competence staff involved in monitoring - whether as field or monitoring centre staff - need to be able to explain to the suspects/offenders and their families the nature of the regime that different modalities of electronic monitoring require, the patterns of timekeeping required, the procedures followed when violation occurs and the protocols governing authorised absences - as well as to be able to engage sensitively and constructively with people who may be anxious or angry about the prospect or impact of being monitored.

Rule 38

It is important to regularly update the knowledge and competencies of staff in procuring electronic monitoring equipment as technologies in this field can change quickly. It is important to find the technology that best assists with reintegration and desistance. Upgrades may sometimes be warranted, but also - sometimes not. The particular impact that new technical developments may have on the private life of suspects/offenders (and their propensity to offend), and on their families and third persons needs regular assessment in respect of potentially harmful effects.

VIII. Work with the public, research and evaluation

Rule 39

The perceived legitimacy or otherwise of penal interventions can depend on the general public having a reasonably informed understanding - based on publicly accessible information and responsible media coverage - of the range of measures and sanctions used to deal with suspects and offenders. Misconceptions about community supervision are commonplace - typically, either their worth is underestimated in comparison to imprisonment, or exaggerated claims are made for their capacity to control offenders - but some evidence suggests that when the public are properly informed about how measures and sanctions are applied to particular individuals they become more supportive of judicial decision-making, and more capable of constructive criticism. Exaggerated claims can and have been made for the various

modalities of electronic monitoring, sometimes leading to inflated expectations of what it can or could, or should achieve, and which diminish the value of merely human supervision. Dashed expectations of electronic monitoring - relating perhaps to a handful of well publicised failures (usually serious reoffending while under supervision) - can then lead to an unwarranted lack of public confidence in it, and make sentencing authorities and administrators more averse to using it constructively. At the same time, electronic monitoring does raise important issues in respect of surveillance and privacy, to a degree that other forms of community supervision do not, and it is important that these are openly debated. In some countries the introduction of electronic monitoring has been publicly controversial, in others less so, reflecting both different traditions of media reporting on criminal justice and the care and attention given specifically to the way in which government agencies wanted electronic monitoring portrayed in the media. For example the Netherlands probation service considered a media strategy essential when they introduced GPS tracking, while Sweden took several steps to ensure that electronic monitoring was perceived as an acceptable and legitimate sanction among crime victims.

Rule 40

The early adopters of electronic monitoring in Europe tended to undertake evaluations of their pilot programmes, the results of which were sufficient to justify modest use if it, with certain offenders in certain circumstances, and to justify the belief that it probably could make a small contribution to reducing the use and costs of custody.¹³ Effectiveness evaluation of penal initiatives is always good in principle - initiatives should not be capriciously imposed on offenders (or victims) for which there is no reasonable hope of success in achieving specified goals. If intervention programmes are misconceived, and their purposes unquestioned (for whatever reason), evaluation of their methods will be of little use in redirecting penal efforts - and electronic monitoring has been criticised for being more ideologically than empirically driven, for being pursued on a scale that evaluative research alone cannot justify¹⁴. Since the early days of electronic monitoring in Europe, a range of process-oriented and evaluative research has been undertaken, unevenly in different countries, and of varying methodological type and sophistication - but practice still reflects the diversity of national cultures and priorities. Taken in conjunction with American research there is some consensus that electronic monitoring has a crime suppression effect for the duration of the period that people are subject to it, but no evidence that it can effect longer term change of attitudes or behaviour (as say, probation can) - although Swiss research which compared the longer term impacts of electronic monitoring and community service on comparable groups of offenders found greater reductions in recidivism among the former than the latter.¹⁵ There is clear evidence that suspects, offenders and their families find the experience of electronically monitored home confinement onerous, if still largely preferable to imprisonment¹⁶. There is some evidence that even stand-alone electronically monitored curfews can stimulate some offenders to contemplate desistance¹⁷, but to the extent that it can have this effect it may still seem preferable to capitalise on it by providing professional support to offenders, to help them sustain the decision to give up crime. There is no clear consensus on how best to combine and integrate EM with other supportive measures, although programmes in Sweden and Hessen, Germany seem to offer models of good practice in this respect.¹⁸ There is no clear view as to the optimum duration of electronically monitored measures and sanctions - do protracted periods of home confinement become progressively more unbearable; is this offset, and can duration be extended by daily restrictions on hours under curfew, allowing the offender "free time"? There is as yet no central access point in which European research on electronic monitoring can be collated, coordinated and accessed, but it is possible that the soon-to-be-published Campbell Consortium¹⁹ meta-evaluation of electronic monitoring research worldwide will provide a definitive view of the state of current knowledge.

¹³ Mortimer and May C (1997) *Electronic Monitoring in Practice: the second year of the trials of the curfew orders*. Home Office Research Study 177. London: Home Office; Wennerberg I, Marklund F and Nimeus (2005) *Electronic Tagging in Sweden*. Stockholm: Bra;

¹⁴ Mair G (2005) Electronic Monitoring in England and Wales: evidence-based or not? *Criminal Justice* 5 257-277

¹⁵ Killias M, Gillieron G, Kissling I and Villettaz P (2010) Community Service Versus Electronic monitoring - what works better? Results of a randomised trial. *British Journal of Criminology* 50. 1155-1170

¹⁶ Vanhaelemeesch D and Vander Beker T (2012) Electronic Monitoring: convict's experiences in Belgium. in *Social Conflicts, Citizens and Policing*. Antwerp: Government of Security Research Paper Series (GofS) Series 6

¹⁷ Hucklesby A (2008) Vehicles of Desistance? The impact of electronically monitored curfew orders: *Criminology and Criminal Justice* 8. 51-71; Hucklesby A (2009) Understanding Offender's Compliance: A case study of electronically monitored curfew orders. *Journal of Law and Society* 36(2) 48-71

¹⁸ Haverkamp R (2002) *Elektronisch überwachter Hausarrestvollzug: Ein Zukunftsmodell für den Anstaltsvollzug? Eine rechtsvergleichende, empirische Studie unter besonderer Berücksichtigung der Rechtslage in Schweden*. Freiburg: Max-Planck-Institute

Appendix I

Types of Electronic Monitoring

Different EM technologies have different practical and ethical implications for the supervision of offenders. For example satellite tracking is not in fact a single system. It has a number of capacities, types of use and permutations, some of which might be regarded as less ethically acceptable than others. Data protection issues can also arise in relation to the use of modern EM technologies. New technologies are continuing to emerge and are constantly improving and the ethical implications should be considered in advance as far as possible.

Radio frequency (rf) electronic monitoring entails the wearing of an ankle bracelet (or tag), the signal from which can be picked up by a transceiver installed in the offender's home. So long as s/he remains in proximity to the transceiver his or her presence in the home will be registered in the monitoring centre, via either the landline or mobile telephone system. Radio frequency technology can be used to monitor house arrest or night-time curfews. Most straps are made of toughened plastic with optic fibres running through them, and cease to work if this fibre is cut. Straps can be made of leather with steel bands running through them: these can only be cut with powerful bolt cutters and are much harder for a wearer to remove. Wrist tags are available where health considerations are require using these instead of ankle tags. Worldwide, radio frequency technology has been understood as the "first generation" of electronic monitoring, and is still the commonest form of it: the technology has been constantly upgraded to improve performance, reliability and ease of use. Internationally, however, a professional/commercial debate has begun which suggests that this "first generation" technology should be supplemented and perhaps superseded by more versatile "second generation" technology (satellite tracking), and in the past five years at least two countries adopted this without ever having used "first generation" technology.

Satellite tracking - combined with mobile phone location technology - monitors the location or movement of a person on the earth's surface, outdoors and indoors, but not necessarily underground. It entails the wearing of an ankle bracelet (sometimes accompanied by a belt-worn computer) which can both pick up and triangulate signals from orbiting satellites (currently the American Global Positioning System (GPS)) and cell phone towers, and transmit/upload an offender's location through the mobile phone system to a monitoring centre. It can do this in "real-time", so that an offender's whereabouts are always known immediately to the monitoring centre, or retrospectively, in which a record of an offender's movements is compiled (and analysed) some hours later. Some systems combine both immediate and retrospective monitoring, and some have in-built texting facilities for giving instructions to the offender. A person being satellite tracked is required to spend part of the day recharging the battery which powers the equipment s/he wears or carries. In case of a one-piece tracking tag the person has in the past been required to remain attached to the plug-in system for recharging, but technology is emerging which can charge the tag from a short distance away. Tracking technology can be used to monitor house arrest (by creating small "inclusion zones"), to follow all of a person's movements and to create exclusion zones (areas of past offending, neighbourhoods of former victims) which the offender is forbidden to enter. Satellite tracking technology can also be used as part of a victim protection scheme which requires a victim to carry a device which warns her/him of the offender's proximity. Some satellite tracking systems can be combined with mapping software which shows the location of recent crime scenes, making it possible to see if the offender was in the vicinity of the crime at the time. This can be presented to the offender as a tangible means of demonstrating that s/he is desisting from crime, and the data may be used in legal proceedings incriminating or exonerating him/her. The cost of satellite tracking has been steadily decreasing, making it more attractive to penal and judicial authorities than it has been in the past. The availability of other satellite systems apart for the American one may make offender tracking even more feasible in the future, and rival systems of terrestrial tracking may be customised for the same purpose.

Voice verification is a form of electronic monitoring which uses a person's unique biometric voiceprint, recorded at the point of conviction. Each time the monitoring centre phones the offender his or her voice is matched to the voiceprint stored on the computer, while the location of the phone being used by the offender is simultaneously registered. Voice verification can be used to monitor the presence of a person at a single location, or to track his or her movements between a number of specified locations, e.g. a community service placement, or a jobcentre. Because it does not entail the use of a wearable device there is no risk of stigma or of using the tag as a trophy and for this reason some experts believe that this makes voice verification a more acceptable form of EM for juveniles and young offenders.

¹⁹ The Campbell Consortium undertakes meta-evaluations of research on different penal measures and is generally regarded as setting the gold standard in understanding state of the art knowledge about effectiveness. Its meta-evaluation of electronic monitoring should be published in 2013

Remote Alcohol Monitoring (RAM) exists in two forms. The first links a breathalyser to radio frequency electronic monitoring - specifically to the transceiver - in the offender's home. The offender is randomly phoned by the monitoring centre and asked to use breathalyser, whose result can immediately be transmitted by landline. The offender using the breathalyser is identified either by voice verification technology, or by photograph, or by (biometric) facial recognition technology.

The second form of RAM is mobile, and does not require the offender to be in a single location. It entails the offender wearing an ankle bracelet which picks up the presence of alcohol in the offenders system "transdermally" - through his/her skin - and periodically uploads that data to the monitoring centre via the mobile phone system. RAM can be used with offenders whose crimes have been alcohol-related, where the court has either forbidden them to use alcohol over the period of supervision, or required supervisors to help offenders reduce its intake. Some offenders value the technology because it helps them to self-manage their intake of alcohol.

Kiosk reporting is a form of electronic monitoring installed at the office of the probation agency and ostensibly designed to help probation officers manage large caseloads, focused specifically on low-risk offenders at some point in the supervision process, although not (at present) all of it. When offenders report to a probation office, instead of meeting a real probation officer face-to-face, they are required to interact with a kiosk-based computer (similar to a cashpoint machine). The machine requires them to answer certain questions about their recent activities, and may contain instructions from their probation officer. The offender identifies himself or herself to the machine – undergoes verification that it is him/her who is reporting and not a substitute - by means of a fingerprint, although a voiceprint could also be used.

It is clear from the above that different types of surveillance technology are now being combined in EM, for example biometrics and location monitoring and while we intend to explore the ethical implications of these for offenders our comments on biometrics in general will not be exhaustive.

A Note on Commercial Organisations Involved in Electronic Monitoring.

There are essentially two kinds of private company involved in the delivery of electronic monitoring. Firstly, technology manufacturers (who produce equipment - hardware and software - train public sector staff to install it, provide technical support services and manage monitoring centres). Secondly, full service providers (who employ field and centre-based monitoring officers, install equipment, manage monitoring centres and may sometimes be involved in the legal aspects of revocation, supplying technical evidence of non-compliance in respect of offenders who are not on any other kind of supervision apart from EM). All countries require some degree of partnership between their electronic monitoring providers and national telecommunication companies (e.g. in terms of access to landline and cell phone networks), and in some countries these companies may be contracted to provide monitoring services themselves, buying or renting equipment from technology manufacturers and working in conjunction with state agencies. There is a sense in which the effective operation of EM is dependent on, and constrained by the technical quality and administrative efficiency of existing telecommunication infrastructures. Some of the larger global corporations involved in full service provision may also manufacture their own technology. These larger companies may also be involved in wider security and surveillance activities (guarding and CCTV management), in the provision of private prisons, in the provision of back-office functions for police forces and a range of what have hitherto been understood as statutory probation services - hostel accommodation and community service. Both technology manufacturers and service providers may also be involved in the provision of electronic monitoring in the tele-care and tele-health fields (monitoring the locations and "life signs" of old people, or people with dementia): research and technical development in electronic monitoring overlaps in the health and criminal justice fields.