



Creativity and effectiveness in the use of electronic monitoring: a case study of five European jurisdictions

**Anthea Hucklesby, Kristel Beyens, Miranda Boone, Frieder Dünkel,
Gill McIvor and Hannah Graham**

Key Findings

- ❖ Electronic monitoring (EM) is used extensively, for diverse purposes and in diverse ways across the 5 jurisdictions.
- ❖ Less extensive use of EM is associated with long-term reductions in prison populations and reducing imprisonment rates. By contrast, high prison populations are associated with high use of EM.
- ❖ The extent to which the size of the prison population is viewed as problematic is an important determinant of EM use.
- ❖ EM has universal appeal because it fits or can be made to fit many purposes.
- ❖ Creative use of EM is limited with isolated examples of innovative practices.
- ❖ Radio-frequency and GPS technologies have complementary and distinct advantages and uses.
- ❖ Private sector involvement in EM is associated with less integration into broader criminal justice structures.
- ❖ The greater the involvement of probation in EM the more discretionary decision-making takes place.
- ❖ Policies relating to diversity do not generally exist or do not cover all aspects of diversity.
- ❖ The limited or non-existent availability of data relating to EM hampers research and restricts judicial and public understanding of EM.

Recommendations

Consideration should be given to:

- ❖ the aims of EM to ensure that it is used according to the principles of proportionality and necessity, in the least intrusive way and incorporating support so that it positively influences individuals and assists them to lead meaningful lives
- ❖ implementing mechanisms to improve lines of communication and joint working between agencies
- ❖ the provision of alternative addresses for monitored individuals
- ❖ ways to better tailor curfew hours to the circumstances of monitored individuals and offences
- ❖ implementing progression and exit strategies including mechanisms to end EM earlier than planned when individuals are compliant
- ❖ policies and procedures relating to changes in circumstances to ensure a consistent and flexible graduated response
- ❖ procedures to ensure that informed consent is received from co-habitees independently and prior to the imposition of EM
- ❖ mechanisms to provide 24/7 support to monitored individuals
- ❖ breach policies to ensure a consistent, proportionate approach incorporating a graduated response to violations
- ❖ measures are taken to ensure consistent and fair treatment of individuals from diverse populations
- ❖ measures to ensure effective yet restricted data sharing between agencies with regard to data protection protocols
- ❖ policies and procedures to ensure staff safety including more effective communication of risk information and training in risk management



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Introduction

The project covered 5 jurisdictions in Europe: Belgium, England and Wales, Germany, the Netherlands and Scotland. An extensive literature review was undertaken alongside observations of all aspects of the EM process (75 days in total) and 190 interviews with policy-makers and practitioners involved in the provision of EM.¹

Electronic monitoring is used at all stages of the criminal justice process across the 5 jurisdictions but not in every jurisdiction. All jurisdictions use multiple modalities of EM. Table 1 summarises the applications of EM in the jurisdictions. Table 1 demonstrates that all jurisdictions use Radio Frequency (RF) technology and Scotland is the only jurisdiction which at the time of writing (January 2016) does not use GPS applications, although it is under consideration. EM can be combined with probation supervision in all jurisdictions but in Belgium, England and Scotland it is also used as a standalone measure.

The EM population

One of the largest differences between jurisdictions is the scale of use of EM. Unfortunately, directly comparable data are not available but Table 2 provides information on the number of cases in each jurisdiction. It shows that EM is used to a much greater extent in England and Wales than in the other four jurisdictions with a daily population of just under 12,000. This is 5 times the size of the next highest user Belgium, which has around 1,700 individuals on EM on any given day. Germany is the lowest user of EM with a daily population of just over 100 monitored individuals. Data on the number of commencements in the course of a year are not available in all jurisdictions. Table 2 shows

that around 5,000 individuals commenced EM in Belgium over a year compared with nearly 3,000 in Scotland and 1,500 in the Netherlands. The extent to which EM is used has important implications for the way in which it is organised and for the resources it requires to function. Managing large numbers requires more resources and more staff, although economies of scale are likely to be realised, and results in more routinised practices.

The wider context in which EM operates influences its use and the ways in which it is implemented. Less extensive use is associated with long-term reductions in prison populations and lower imprisonment rates. Germany and the Netherlands (76 and 69 per 100,000 population respectively in 2015) have significantly lower imprisonment rates than England, Scotland and Belgium (148, 139 and 105 per 100,000 population respectively in 2015).² However, the extent to which the size of prison population as a whole or particular sections of it are viewed as problematic appears to be a potentially more important determinant of the use of EM than imprisonment rates. Consequently, whether EM is seen as a mechanism to reduce the use of imprisonment either through reducing the numbers sent there or the time spent inside, generally or for specific populations, is associated with the extent to which EM is utilised. In Belgium and England, for example, there are considerably more individuals on EM at any given time than in the other 3 jurisdictions. As Figure 1 shows, their prison populations have risen over recent years resulting in capacity issues in prisons. By contrast, in Germany and the Netherlands, prison populations have decreased over the last 10 years (see Figure 1) and EM is not used as extensively.

Table 1 EM modalities										
	Belgium		England & Wales		Germany		Netherlands		Scotland	
	RF	GPS	RF	GPS	RF	GPS	RF	GPS	RF	GPS
Pre-trial		✓	✓		✓		✓	✓		
Court order/sentence	✓		✓		✓		✓	✓	✓	
Execution/alternative to imprisonment	✓						✓	✓		
Early release			✓	✓	✓		✓	✓	✓	
Post release			✓	✓		✓	✓	✓	✓	
Alcohol monitoring			✓ Pilot				✓ Pilot		✓	
Victim's programme				✓ Pilot						

Table 2 Number of adults electronically monitored										
	Belgium		England & Wales		Germany		Netherlands		Scotland	
	Day ¹	Year ²	Day ³	Year ⁴	Day ⁵	Year ⁶	Day ⁷	Year ⁸	Day ⁹	Year ¹⁰
Pre-trial	73		3617				48	188		
Court order/sentence	228		5917		43		139	257		1221
Post-custodial	1666		2208		73		136	952		1672
Total	1697	5011	11742	N/A	113	N/A	367	1562	808	2893

1. 30.05.14; 2. 2013; 3. 30.11.2015; 4. 2013; 5. 11.08.2015; 6. 2013; 7. 15.03.2014; 8. 1562; 9. 2014; 10. 11.06.2015.

England has by far the highest number of individuals on EM at any one time but its use relative to the size of the prison population is not so stark. Data are not directly comparable so figures need to be used as indicators, but when EM use is viewed as a proportion of the prison population³ England (14%), Belgium (13%) and Scotland (11%) use EM considerably more than the Netherlands (4%) or Germany (<1%).

The relative use of EM and imprisonment raises complex questions about EM's ability to reduce populations in prison and whether it plays a role in expanding rather than contracting criminal justice interventions. The jurisdictions in this study suggest that high use of imprisonment is linked with high use of EM. There is also some evidence from Belgium that EM may play a role in reducing prison populations. Since 2013, when changes to EM were introduced to increase its use, the prison population fell. Similarly, when the prison remand population in England might have been expected to rise it has stayed stable with one potential factor being the increased use of EM pre-trial.⁴ However, it is impossible to prove or disprove a causal link or a correlation between the use of EM and imprisonment.

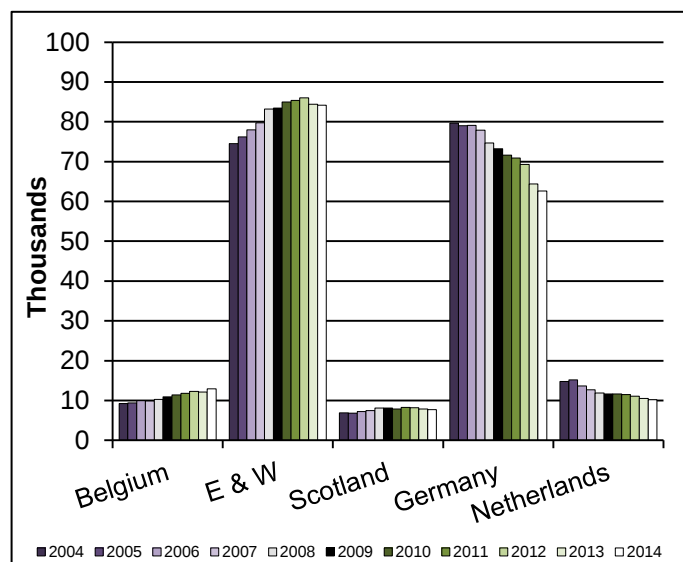
High volumes and/or increasing numbers on EM overtime are associated with a reduction in the involvement of the probation service in EM. In England the lack of credibility of probation services has contributed to the policy drive to increase the use of EM. Concerns about its work have resulted in a search for alternative community sanctions which do not require the involvement of probation services. In Belgium, where there is less and less involvement of Justice Assistants in EM, the credibility of the Houses of Justice does not appear to have contributed to this trend or indeed to the increased use of EM.

The context in Germany is different in a number of key respects and has contributed to its low use of EM. One, the extensive use of other non-custodial sanctions (fines and probation) means that EM is viewed as a disproportionate

penal response. Two, stringent data protection rules and the considerable bureaucratic hurdles they place on the day to day operation of EM limit its use. Whilst other jurisdictions are mindful of data protection requirements, they do not dictate practice to the same extent. Three, the political will to use EM does not appear to exist in most federal states.

In 3 jurisdictions (England, Germany and the Netherlands) EM has been used to monitor specific groups of high risk offenders who have high public profiles in order to address the perceived and actual threats to public safety. GPS technologies are used to monitor (mainly) sex offenders as part of a package of intensive supervision by probation staff or multi-disciplinary teams. In several jurisdictions, most notably Germany, EM may extend beyond the end of the formal sentence period.

Figure 1 Prison populations 2004-2014 in partner jurisdictions⁵



In England, concerns about the speed of, and restrictions on, the process to procure new EM contracts has resulted in police forces utilising GPS tracking technologies outside of government contracts under Integration Offender Management Schemes (IOM). The focus of these schemes is on prolific offenders with long records of acquisitive offending. In the other jurisdictions, the police are not involved in the

use of EM other than peripherally as the agency who is tasked with arresting individuals who have breached their orders.

Technologies

EM is a tool which can be used in many ways to support the purposes of criminal justice systems. The ways in which it is implemented are dictated by the goals of the system in which it operates. However, the available technology, its capabilities and credibility provide the parameters for its deployment.

Radio Frequency (RF) technology, providing static location monitoring, is used more extensively than GPS tracking technologies in 4 of the 5 jurisdictions. In most jurisdictions RF technology is used to monitor curfews or home detention. In Germany (Hesse), however, it is also used to monitor whether individuals leave their address to take part in structured activities as part of their probation programme. Most interviewees were positive about RF technology and thought that it should continue to be used because it was cheap, simple to use and understand and was tried and tested.

GPS tracking was utilised to a greater or lesser extent in all jurisdictions except Scotland. In 3 jurisdictions (Belgium, England and Germany) its use was confined to a small number of high-risk offenders and in England a small number of prolific offenders also. It is mainly used to monitor exclusion zones although inclusion zones are sometimes imposed. In Belgium, for example, GPS technology is used to enforce 24 hour home detention of individuals awaiting trial. This use is counterintuitive but GPS has the advantage over RF technology of being able to track individuals if they abscond (assuming that they do not remove the tags). This Belgian example demonstrates that GPS tracking, which is more intrusive than RF EM, is not always appropriately utilised and that the value added by its use should always be made clear.

All jurisdictions, except Germany, were exploring the greater use of GPS technologies at the time of the research. It was viewed as providing greater flexibility and freedom for individuals than RF whilst allowing closer scrutiny of their movements 24/7. The disadvantages of GPS, short battery life and weak signals, were widely recognised. In practice, most GPS technology is used passively i.e. infringement alerts and/or tracks are scrutinised retrospectively rather than in real time (active tracking). Several jurisdictions were exploring the potential to use GPS technology in bi-lateral victims' schemes

(in England a small pilot was taking place) particularly in cases of domestic violence. There was some nervousness about the potential for critical incidents to occur which resulted in a cautious approach being taken.

'Hybrid' tags providing both RF and GPS capability were being developed for use in England at the time of the research in theory overcoming disadvantages of both RF and GPS technologies. In practice, the tag has been difficult to manufacture delaying its delivery and the implementation of new contracts.

Schemes which use technology to monitor alcohol use are in their infancy in this study's jurisdictions. In England, a pilot has been funded and operated by the Mayor of London's Office for Policing and Crime (MOPAC) which enables alcohol abstinence requirements to be attached to community sentences. SCRAM technology is used which measures alcohol use sub-dermatologically via a tag worn around the ankle. So far, take-up has been low and variable and the tagged group differs from the original target group.⁶

Objectives of EM

Many different objectives were attributed to EM during this project. EM fits or can be made to fit many purposes to the extent that it has universal appeal. Yet it is also important to note that EM is a tool which is used to enforce pre-trial and penal measures. Consequently, its aims are inextricably linked with those measures rather than EM having its own specific objectives. One useful way to examine EM is to explore the ways in which it adds value to the measure(s) it is imposed alongside or as a replacement for. Using this perspective the different modalities of EM have varied aims and purposes.

The stated objectives of EM were largely shared in all jurisdictions. There were, however, differences in the prominence given to specific objectives and also a recognition that they had changed over time. Generally, rehabilitative and reintegrative goals were given priority in the Dutch system. The Belgian system had moved from one focused on rehabilitation to one which was now more focussed on systemic goals i.e. reducing prison overcrowding and cost. Scotland was moving away from a punishment model based on restriction of liberty to a mixed model focused on supporting rehabilitation and desistance as well as risk management. The picture in England was also mixed, with multiple objectives being pursued via EM.

EM is often conceptualised as an alternative to imprisonment. One of its advantages, in common with all community measures, is that it keeps individuals out of prison therefore avoiding the harms associated with imprisonment. Yet, independently of whether it replaces prison, EM has rehabilitative objectives. EM enables individuals to maintain and possibly build ties with their families, friends and communities. It allows individuals to continue with their education or work commitments. EM adds several unique elements to those commonly associated with community measures. One, RF but not necessarily GPS EM, imposes a daily structure on individuals' routines. Most often this is via a night-time curfew restricting individuals' movements. In the Hesse project in Germany, however, RF EM is also used uniquely to ensure that individuals spend the requisite number of hours *outside* of the house undertaking useful activities. Two, EM provides an excuse for individuals to use to avoid the people and places which are linked to their offending.⁷ Three, monitoring adds intensity to other forms of community supervision. Four, EM assists with the management and completion of other community sanctions e.g. individuals are better prepared for work placements because of overnight curfews. This purpose can be enhanced by probation staff being provided with progress/violation reports to discuss in supervision meetings. Many of these benefits also aid reintegration and EM can usefully support the transition from custody to the community.

There was an acknowledgement that evidence relating to offending and EM was limited but many respondents still identified reducing reoffending as a prominent goal of EM. GPS was viewed as more effective than RF EM in this regard because it acted as a greater deterrent. As the English police were keen to point out, GPS tracks can be compared with reported crime data and provide evidence to support criminal investigations and the identification of suspects. Usefully GPS, and to a lesser extent RF, can exonerate individuals as well as implicate individuals in particular offences. The potential disjuncture between curfew hours and offending patterns was also mentioned as a drawback of RF EM in several jurisdictions.

Increasing victims' and public safety, linked to preventing the risk of offending, was widely acknowledged as an objective of EM and particularly GPS. It was an especially important goal of the German federal scheme whose tar-

get group is very high-risk violent and sexual offenders where the potential for harm is high.

The use of exclusion zones was becoming more common in all jurisdictions and was seen as a major advantage of GPS over RF. Exclusion zones do not themselves protect specific individuals or the public generally but they provide a buffer zone giving the authorities time to react if they are breached. Across jurisdictions the potential to use EM as a tool to protect domestic violence victims was being actively investigated.

In England, that fact that EM provides concrete evidence of breach and is therefore enforceable was viewed as a positive purpose of EM. According to several policy-makers providing compliance information independently of probation services was viewed particularly positively because it dealt with longstanding concerns about how readily probation services enforce community sentences. In this way, EM provided a credible community measure on its own as well as bolstering the credibility of other forms of community sanction. An official objective of EM in England is punishment. Yet, despite its prominence in official rhetoric little reference was made to it in practice.

A prominent driver for increasing the use of EM particularly in Belgium and England but also to a lesser extent in the other jurisdictions is the cost of EM. Although the actual costs of EM are hotly debated, it was agreed that EM is substantially cheaper than imprisonment. In the wake of the financial crisis, fiscal concerns have become more prominent as governments have attempted to reduce the use of imprisonment. There appeared to be little awareness that EM's cost reducing capacities would be limited if it replaced other non-custodial measures instead of imprisonment.

Integration, multi-agency working and information exchange

The extent of private sector involvement in EM falls broadly into two models. The Anglo model (England and Scotland) and the European model (Belgium, Germany and the Netherlands). The private sector is responsible for provision of all of the EM services in the Anglo model including equipment and monitoring services (including installing and de-installing equipment, contacts with monitored individuals by telephone or visits to their homes, operating control rooms, reporting violations and breaches). In the European model the private sector usually provide only the equipment and associ-

ated software and technical support. There are, however, differences between jurisdictions in the extent of private sector involvement reflecting a continuum between the two extremes of the models. In Germany, for example, the installation of equipment is undertaken by a private contractor although the remainder of the service is provided by state agencies. In the Netherlands private sector involvement has been decreasing. The Transport and Support Service (TSS) of the prison service now has responsibility for installing and maintaining equipment and is expected to take over operating the monitoring services. In Belgium, two separate state run monitoring centres are responsible for all aspects of EM. Whilst the Anglo model is wholly operated by the private sector, state agencies are responsible for breach decision-making and ensuring that monitored individuals are returned to prison or court.

The extent of private sector involvement in EM is one of the determinants of the level of integration of EM into the broader criminal justice structures generally and probation services in particular. The most highly integrated model exists in the Netherlands where EM is embedded into prison and probation services to the extent that probation staff are involved throughout the process and are responsible for making all decisions relating to EM. At the other extreme, in England EM has been characterised as working in parallel to the criminal justice system with little integration of EM with probation or other criminal justice services.⁸ For example, the use of pre-trial EM, standalone EM sentencing requirements and Home Detention Curfews (HDC) in England require no state agencies to be involved until or unless orders are breached. Even where EM is one of several requirements of community sentences and offender managers oversee all aspects of the case, joint working and meaningful communication between probation services and offender managers and the EM provider are rare. Similarly, Scotland's Restriction of Liberty Orders (RLOs) can be imposed as standalone measures (i.e. EM curfew and/or exclusion zones) or in conjunction with other community orders. HDC, which comprise nearly half of all EM use in Scotland, also operate with no formalised involvement of state agencies.

Belgium has been moving from a more to a less integrated model of EM in recent years which has resulted in a bifurcated model of EM. Justice assistants from the Houses of Justice (probation services) remain heavily involved in

the supervision of monitored individuals released from prison early who are serving sentences of more than 3 years. For more recently introduced uses of EM (pre-trial and replacement of sentences of 3 years or less) the involvement of the House of Justices is non-existent or minimal. The picture which emerges from this study is for less integration with criminal justice agencies when private sector involvement is highest; when the scale of use of EM both in terms of numbers and modalities increases or is already high; and/or when EM is used more extensively pre-trial. As discussed below, the level of integration with criminal justice agencies influences how EM operates. In particular, the more highly integrated EM is with probation services the more discretionary decision-making takes place.

EM involves most criminal justice agencies to a greater or less extent and some communication issues were highlighted in most jurisdictions. Delays in information exchange were reported in Belgium between the police and monitoring centres, in England and the Netherlands between the courts and Electronic Monitoring Services (EMS) and probation services respectively. A single point of contact within both monitoring centres and other agencies was viewed as facilitating timely information flow and exchange in England. Technology also facilitated efficient information exchange. Belgium had recently effectively introduced a new information system containing all relevant information about EM processes and decisions and which is accessible to staff at the monitoring centres, Houses of Justice and prisons.

Information gleaned from RF and GPS EM is useful to the police as both an intelligence gathering and investigatory tool. However, jurisdictions are mindful of the potential for information to be misused. Consequently, in all jurisdictions the police do not have routine access to EM data. Instead, in 4 jurisdictions (all except Germany) they are required to request specific data on individuals via formal processes (usually written requests) either to the prosecutor (the Netherlands), monitoring centre (Belgium) or National Offender Management Service (NOMs) (England). Germany has extensive data protection provisions in place and agencies are very cautious and reluctant to share information about monitored individuals even within the state agencies involved in the provision of EM.

The lack of knowledge of, and engagement with, EM by criminal justice agencies was high-

lighted in several jurisdictions as a barrier to its effective use. In the Netherlands, for example, judges and prosecutors are not always aware of what is technically feasible. Similarly in England and Scotland, knowledge of judges and probation was reported to be uneven. Evidence suggests that training, education and other engagement activities can develop awareness of EM, increasing its use and ensuring it is used more appropriately.

Target groups

EM is used for a wide range of individuals across the study's jurisdictions reflecting its universal appeal, multiple objectives and different modalities and technologies. In most jurisdictions no groups are automatically excluded from EM although individuals who are mentally ill or those with learning disabilities were viewed as unsuitable candidates. The Netherlands also excludes individuals whose drug or alcohol use is problematic.

EM requires a stable address which is not linked to individuals' offending. In practice this excludes some potential candidates. In Belgium, for example, no alternative addresses are available whilst in the Netherlands supply is limited. In England, alternative accommodation is available via the Bail Support and Accommodation Scheme (BASS) which provides housing for defendants awaiting trial and prisoners released from custody on HDC.⁹

The use of GPS is currently usually, but not exclusively, limited to individuals who pose the highest risk of harm either because of the seriousness or persistence of their offending. By contrast, in the Netherlands, EM is viewed as unsuitable when the risk of reoffending is too high and/or the offences very serious. There is considerably less agreement about whether EM is suitable for low risk offenders. In the Netherlands, it was viewed as disproportionate to im-

pose EM when offences were less serious and/or the risk of reoffending is low. In England and Scotland the existence of standalone orders results in EM being used for less serious offences.

Creative use

There is a general lack of creative use of EM in the 5 jurisdictions with isolated examples of innovative practices. Generally, EM is used in highly structured and routinised ways. There were striking similarities between jurisdictions but also some differences which are discussed below.

Duration and intensity of EM use

EM has the potential to be used very flexibly and at different durations and intensities not only in relation to the technology which is deployed but the EM regime. EM was used in diverse ways in the 5 jurisdictions highlighting why EM cannot be described as a homogenous penal measure.

No maximum periods are prescribed when EM is used in the pre-trial phase. Maximum periods are prescribed at the sentencing stage but vary between jurisdictions from 12 months to several years. The time spent on EM as part of prison release schemes is variable and depends on the length of the sentence and early release criteria. Only the English and Scottish HDC schemes stipulate maximums. In Germany, the supervision of conduct order can be imposed indefinitely with a 5 yearly review. Voluntary schemes, such as those operated by the police in England, fall outside of any legislative framework and could be used indefinitely. In all jurisdictions it is possible to use EM for an indefinite period of time because different modalities can be used consecutively and/or the same modalities can be used repeatedly resulting in periods of EM being much longer than prescribed by the legal maximums for any one modality.

Table 3 Statutory restrictions on daily hours under EM					
	Belgium	England & Wales	Germany	Netherlands	Scotland
Pre-trial	24 hour curfew	Up to 24 hour curfew	None specified	2-17 hours freedom	
Sentence		2-16 hour curfew	None specified	2-17 hours freedom	12 hour curfew
Post-custodial	Min. freedom: 4 hours. Max. freedom: 12 hours	9-12 hour curfew		2-17 hours freedom	12 hour curfew

The intensity of EM relates to the regime of confinement. Mostly confinement regimes relate only to RF EM. In Belgium, however, GPS EM is used to confine individuals to their addresses 24/7. Consequently, they are reliant on others to undertake daily tasks.

An important distinction can be made between the approach of England and Scotland on the one hand and Belgium and the Netherlands on the other hand. In England and Scotland curfew requirements are discussed in terms of periods of confinement. By contrast, in Belgium and the Netherlands curfew requirements are stipulated by the number of 'free hours'. Table 3 shows that statutory restrictions on the daily hours under EM. It demonstrates that confinement periods vary from 2 to 24 hours. Most jurisdictions, except England, stick to the same hours for differently modalities.

Most statutory restrictions presume that EM will apply equally 7 days a week. In practice, this is how EM operates. The European model utilises core daily hours stifling creative use because it leaves no option to give 'days off' as a reward for compliant behaviour or as part of an exit strategy although in Belgium monitored individuals are automatically entitled to 'furloughs' (periods without monitoring because they have the legal status of prisoners). Belgium has the most rigid regime of hours especially for those serving sentences of 3 years or under. For example, the 4 hours of free time that all individuals are entitled to must be taken between 08.00 and 12.00 unless they undertake 'useful activities' when a maximum of 12 hours free time is available. In theory, the English approach (e.g. no core hours) enables greater creativity but in practice, curfew hours are applied rigidly usually for 12 hours a day, 7 days a week between 19.00 and 07.00. The Netherlands uniquely restricts hours of freedom at weekends i.e. leisure time to a greater extent than in the week i.e. working time.

A second distinction between jurisdictions is that in England and Scotland, hours remain unchanged over the period of the order unless the circumstances of individuals change. In Belgium and the Netherlands, hours for freedom are usually increased over the lifetime of the order if individuals are compliant to reward and/or incentivise compliance and facilitate re-settlement. In the Netherlands, the process is facilitated by having three levels of curfew requirements increasing free-time from 12 hours during the week and 4 hours at weekends to 17 hours throughout the week. Decisions on

the appropriate level for individuals are based on risk assessments. None of the jurisdictions have formalised processes to end EM earlier than planned because of compliant behaviour although in nearly all cases EM can be extended as a result on non-compliance.

Changes to monitoring requirements

All jurisdictions recognise that changes may be required to monitoring requirements as a result of unforeseen circumstances. This may involve temporary or permanent changes to addresses, curfew hours (RF) or exclusion zones (GPS). The process by which decisions are taken varies across the jurisdictions and depends on the EM modality and the type of change being requested. Generally, the more major or permanent the change the more scrutiny is applied and the greater involvement of prison officials, prosecutors or courts. Allowing probation staff to make these decisions, as in Germany and the Netherlands, provides an opportunity for greater interaction between staff and monitored individuals, potentially strengthening compliance messages and consideration of individuals' circumstances. The possible downsides are less consistency and credibility. Similarly the more formal the process, the longer the time taken to make decisions is likely to be. Not all required changes are foreseeable in advance e.g. attendance at funerals, so a flexible and responsive process is required to avoid unnecessary non-compliance events.

Evidence supporting the requested change was required in all jurisdictions but interviewees suggested that processes ran smoothly and, as long as reasons were valid, changes would generally be allowed. There were three exceptions to this. Changes to requirements relating to federal GPS cases in Germany were reported to be bureaucratic and difficult, changes to exclusion zones in the Netherlands and changes to 'free time' for prisoners serving sentences of 3 years or less and more than 3 years in Belgium.

The monitoring process

The monitoring process is fundamentally the same in each jurisdiction but there are some differences in the ways in which EM is implemented which are highlighted below.

Consent

The importance placed on gaining the consent of individuals varied across jurisdictions. The federal scheme in Germany is the only scheme which imposes EM on individuals whether or not they consent. The other jurisdictions gain

consent from monitored persons but some by more explicit means than others. Each of the jurisdictions requires individuals to sign a document outlining the requirements of EM and stating that they agree to abide by them. In theory, this is gaining consent. But when and how it is done during the installation process may militate against it being viewed as a real option not to consent. In several schemes within jurisdictions, individuals apply for EM (e.g. HDC in England and Scotland) or volunteer (e.g. IOM schemes in England and the Hesse pilot in Germany). In these circumstances consent may be implied. The crucial question is to what extent is individuals' consent informed and freely obtained and not coerced whether implicitly or explicitly. It is inevitable that consent is constrained to some extent given the criminal justice context and the alternative to EM often being presumed to be imprisonment. Observations suggest that: the information received by individuals prior to EM is variable; that pressure to consent is sometimes applied; and the frequency with which questions arise during the EM period suggests that individuals are not always fully informed about the implications of EM.

EM is a unique tool in criminal justice which requires that equipment is placed in monitored individuals' accommodation. In the case of RF (and sometimes GPS) EM individuals are also confined to the address for at least part of the day. Consequently, the use of EM may have considerable implications for others living at the property.¹⁰ In most jurisdictions this is recognised and at least one individual at the proposed address is expressly asked to consent to individuals being monitored. But the parameters of consent requests differ. In most jurisdictions, consent is asked of the legal owner or tenant of the property whilst others living at the property are not routinely asked. Householders' consent is also constrained by the knowledge that, if they do not agree, individuals may remain in, or be sent to, prison. The circumstances in which consent is obtained also impact upon the extent to which it is freely given. Gaining consent prior to the decision to use EM and in a way which is independent from potentially monitored individuals, i.e. when they are not present, are likely to result in consent being given more freely. Observations suggest that householders are provided with information of variable quality about the implications of having individuals subject to EM in their property leading to questions about how

informed their decisions are. All jurisdictions have mechanisms in place for householders to withdraw their consent. Evidence from Belgium appears to support a link between withdrawal of consent and not gaining householders' informed consent prior to EM starting.

Installations and deinstallations of equipment

Most commonly equipment is installed at addresses where individuals will be monitored by mobile/field teams. In most jurisdictions there are restrictions on when installations must take place. The time between notification of orders and installations is much shorter in some jurisdictions than in others resulting in logical challenges. E.g. in England and Scotland installations of court ordered EM normally must be completed between the time curfews begin (often 19.00) and midnight on the day that curfews are imposed. In Belgium and the Netherlands, EM is organised differently allowing installations to be planned more systematically. A fixed number of installations take place each day. In Belgium once all of the slots are full waiting lists are created which can include up to 1,000 individuals. In both jurisdictions certain categories of cases are prioritised and in these cases equipment must be installed within 3 (Netherlands) or 5 (Belgium) days. The disadvantage of the Belgian and Dutch system is that some individuals awaiting EM remain in prison adding to the prison population. However, their systems are logistically easier to manage than the UK systems.

In all jurisdictions, most individuals travel independently between the prison/court and their accommodation prior to the installation of EM posing a risk that they might abscond. The alternative, used in some cases in Belgium, Germany and the Netherlands, allows equipment to be installed in the prison. This 'plug and play' method also has the advantages of dealing with the logistical issues of installing equipment on large numbers of individuals and is more cost efficient but conversely, may create additional uncertainty and anxiety for monitored individuals. The number of personnel who undertake installations differs between jurisdictions ranging from 1 to 3. There was no evidence to suggest that installations were carried out differently or more thoroughly in the different jurisdictions and similar issues were discussed.

Deinstallations take place in several ways. Providers or agencies may visit individuals' homes to remove the equipment, monitored individuals may remove the equipment them-

selves and return it to a specified location or they may be required to attend a specified location (e.g. prison) to have the equipment removed. There are considerable economies of scale in using a central location to return equipment but visiting individuals at homes facilitates reinforcing positive messages about continuing new lifestyles.

Support for monitored individuals

It is important to ensure that monitored individuals are supported because EM raises a considerable number of questions and concerns from individuals both directly related and unrelated to EM. Several models for providing support exist in the 5 jurisdictions highlighting an area of divergent practices. In England and Scotland, support is available 24/7 via a control centre. In the Netherlands, support is predominantly provided by the probation service during office hours supplemented outside of these hours by an on-call probation officer to deal with violations and breaches. In Belgium, the model is moving away from support provided by Justice Assistants to a control centre model. Currently, however, support is only available to the majority of monitored individuals via the control centre between 06.00 and 22.00. Germany offers support via a control room staffed 24/7 by at least one social worker.

Compliance, enforcement and breach

One of the advantages of EM is that it provides certainty as well as evidence of non-compliance. Violation reports (detailing when monitored individuals leave and enter addresses/exclusion zones) are available and detailed reports of offenders' whereabouts may be produced from GPS. The sensitivity of EM equipment means that minor violations are common, e.g. being a few minutes late at the start of curfews (RF) or straying a short way into exclusion zones for very limited periods of time (GPS). All jurisdictions allow some leeway in their breach policies. There is a high level of concordance between jurisdictions in reasons for breach. These include: missing whole or parts of curfew hours, equipment tampers, removal of tags, entering exclusion zones and threatening behaviour towards staff. In Germany and the Netherlands alcohol or drug use may also result in breach.

Breach policies across 3 jurisdictions (Belgium, England and Scotland) are remarkable similar and are determined by the type of violation and make no reference to monitored individuals. By contrast, in the Netherlands initial decisions

about how to respond to violations are taken on the basis of risk and priority level relating to individuals rather than on the type of violation. Explanations from individuals are sought earlier in the process in the Netherlands before breach procedures are instigated whereas in other jurisdictions breach procedures begin and explanations are sought afterwards. The Netherlands, therefore, has a more discretionary system whereas Belgium, Scotland and England have a more routinised approach.

Greater probation involvement in breach decision-making results in a more discretionary process. This is illustrated by the bifurcated approach in Belgium. For sentences of imprisonment of more than 3 years, Justice Assistants are responsible for instigating breach proceedings. For sentences of 3 years or less, the monitoring centre managers make decisions to begin breach proceedings. Contrary to what might be expected, interviewees suggested that the response to violations was less strict for the former than the latter group because Sentence Implementation Courts take account of factors such as compliance with other conditions i.e. they took a more individualised approach.

In jurisdictions where different modalities of EM exist, differences also exist in breach thresholds within countries. This has the potential to be confusing for monitored individuals if they are subject to different modalities of EM at the same or different times. All breach policies have a graduated approach to violations. Responses are escalated from warning letters to enforcement via arrests or recall to prison. Violations deemed to be serious usually result in immediate enforcement action. Available punishments for violations vary depending on the jurisdictions and the type of EM but they included continuing bail/sentence/early release as before to revoking the order/licence. In several jurisdictions concerns were raised that final breach decisions, which are at the discretion of the prison governors (Belgium) or courts (England), were too lenient resulting in individuals being re-released on EM. In Belgium, inconsistencies in decision-making were reported as a result of prison governors making re-release decisions on the basis of overcrowding levels. In England breach decisions are taken by a central enforcement team at NOMs which is a mechanism to ensure more consistent and objective decision-making.

All jurisdictions have mechanisms for monitored individuals to provide explanations for

non-compliance. The actual process varies within and between jurisdictions. England is the most routinised with specific requirements and timescales dictated in a formal breach procedure. By contrast, in the Netherlands explanations may be sort more informally by telephone or during meetings with monitoring managers or probation staff. Concrete evidence to support explanations such as letters from hospitals etc. is required in every jurisdiction. If evidence is valid absences are authorised and no breach action is taken.

Violations reports which provide details of all curfew infringements and not just those which reach breach thresholds are utilised in a number of ways. In the Netherlands, they are used in supervision sessions to discuss monitored individuals' compliance. This has the advantage of making them aware that they are being watched and how sensitive the equipment is. Whilst it is clear that these reports can be useful to probation staff and others, the volume of data contained in them may be overwhelming and difficult to interpret and use in a constructive way. Wider use of progress reports would be facilitated by a more easily accessible format being devised.

The point at which the responsibility of agencies to monitor individuals ceases differs between jurisdictions. In Belgium, once breaches have been reported to the police or prison service individuals are no longer the responsibility of the monitoring centres, EM ends and the file is closed. By contrast, in England monitoring continues until the provider is notified by the courts or prisons that EM requirements are no longer in place. The English system has caused a number of difficulties because communications delays have meant that individuals may be monitored when orders have ceased and providers have been overpaid for monitoring individuals who were no longer subject to EM.

Diversity

In all jurisdictions, except Scotland, there was a lack of awareness of diversity issues particularly amongst policy makers and managers. No jurisdiction had policies specifically related to all relevant diversity issues. Ethnicity and religion were particularly poorly accounted for whereas there was more evidence that the implications of and for gender had been considered. In several jurisdictions, regulations existed relating to who could visit the home of females and/or fit their tags but this was as much about protecting the workers from accusations

of sexual misconduct than to protect monitored individuals. Some specific measures to take account of diversity had been put in place in several jurisdictions but most commonly, diversity issues were reported to be dealt with on a piecemeal basis.

Jurisdictions had different ways of dealing with individuals who were unable to speak the native language(s). In England and Scotland companies are employed to provide translation services over the telephone. By contrast, in Belgium no specific arrangements are in place.

Electronic monitoring data

EM produces a significant amount of data. GPS technologies collect considerably more detailed data on individuals' movements but both RF and GPS technologies collect data 24/7. As the length of time that EM has been used in Europe increases so do questions about the appropriate use and storage of these data. Germany's stringent data protection rules result in all data relating to EM being destroyed after 2 months unless it is required as evidence in criminal cases. By contrast, data are stored in England and Scotland indefinitely. In all jurisdictions, data are stored on the servers of private sector equipment providers. It is owned by governments yet it is not necessarily easily accessible to them.

Despite the significant data produced by EM, accessing data in a format useful for the research was challenging. In many cases, even basic statistical data are unavailable and in no jurisdiction is it routinely published. This hampered the current research and will inevitably limit future research activities as well as the public's understanding of EM. It also precluded any conclusions being drawn about the effectiveness of EM based on statistical analysis of quantitative data.

Staffing

The staff involved in the operation of EM and their professional qualifications and responsibilities differ between the Anglo and European models. EM staff in the UK are not professional probation staff and are required to have only basic educational qualifications. By contrast, in the Netherlands, probation officers trained specifically in EM oversee the process throughout and are responsible for case management. In the UK, EM staff who are employed by the private sector contractor are responsible for both the technical aspects of EM and providing information and support to monitored individuals. By contrast, in the Nether-

lands, probation officers are responsible for providing information to monitored individuals at all times including accompanying technicians to install equipment. In all jurisdictions, except Scotland, the field staff are different from the control room staff. In Belgium, the involvement of Justice Assistants in EM is decreasing so that increasingly state employed EM staff are the only points of contact with monitored individuals. Field staff work from home in several jurisdictions reducing both logistical difficulties related to geography and costs. Yet home working also increases data and equipment security concerns and limits contact between staff.

EM field staff work in challenging environments so ensuring their safety is paramount. Staff in all jurisdictions reported that incidents were rare and mainly related to verbal rather than physical aggression. Lone working, which predominates in Belgium, England and Scotland, amplifies safety concerns. Procedures for risk assessments varied between jurisdictions and information to complete them may be unavailable. All jurisdictions, except Germany, were known to have formal safety procedures in place. Yet, the extent to which staff felt able to, and would use, safety procedures differed within and between jurisdictions.

The Future of EM

There were clear expectations in all jurisdictions, except Germany, that EM would be used more in the future. Even in Germany consideration was given to using EM to reduce pre-trial detention. The growth was expected to take place in different ways via new modalities and technologies and increasing the use of existing modalities sometimes via widening eligibility criteria. New and improved technologies opened up further possibilities for expanding the use of EM. GPS was identified particularly as providing opportunities for a higher level of control and monitoring but there was a clear sense that RF technology also has advantages and should continue to play a significant role in EM going forward. The introduction of bi-lateral victim monitoring was being actively pursued in several jurisdictions and was eagerly anticipated by many.

Several jurisdictions expected changes to EM to transpire as a result of broader changes in the criminal justice process generally and specifically to the measures for which EM is employed, highlighting that drivers for change are not restricted to EM policy or technological developments.

No conclusions can be drawn about the efficacy of standalone and integrated models of EM but the historical boundaries between the Anglo and European models are being dismantled. Scotland is moving towards greater integration with social work whilst Belgium is expected to continue to increase its use of standalone EM measures.

Footnotes

1. The empirical research was conducted between the autumn of 2014 and early 2016.
2. Institute for Criminal Policy Research (2016) *World Prison Population List*. Available at: <http://www.prisonstudies.org/world-prison-brief>
3. Prison population figures for 2014 Belgium, Germany and the Netherlands and 2013 for England and Wales and Scotland (SPACE, 2015)
4. Hucklesby, A. (2009a) 'Keeping the lid on the prison remand population: The experience in England and Wales', *Current Issues in Criminal Justice*, Vol 21(1): 3-23.
5. Council of Europe Annual Penal Statistics (SPACE 1) (2012, 2015) Survey 2010 and 2014. Available at: <http://wp.unil.ch/space/space-i/annual-reports/>
6. Pepper, M. and Dawson, P. (2015) *Alcohol Abstinence Monitoring Requirement*, London: MOPAC.
7. Hucklesby, A. (2009b) 'Understanding offenders' compliance: a case study of electronically monitored curfew orders', *Journal of Law and Society*, 36(2): 248-271.
8. Criminal Justice Joint Inspectorate (CJJI) (2008) *A complicated business*, Manchester: HMIP.
9. Hucklesby, A. (2011) *Bail Support Schemes for Adults*, Bristol: Policy Press.
10. Vanhaelemeesch, D. (2014) 'Experiencing electronic monitoring', *Criminal Justice Matters*, 95: 12-13.

This briefing paper is one output from the European project: 'Creativity and effectiveness in the use of electronic monitoring as an alternative to imprisonment in EU member states' by Professors Anthea Hucklesby (University of Leeds, UK), Kristel Beyens (Vrije Universiteit Brussel, Belgium) Miranda Boone Utrecht Universiteit, the Netherlands), Frieder Dünkler (Universität Greifswald, Germany) and Gill McIvor (University of Stirling, Scotland) and Dr Hannah Graham (University of Stirling, Scotland). Further information about the project including briefing papers and full reports from each jurisdiction and a comparative report and briefing paper can be found at: www.emeu.leeds.ac.uk alternatively contact Professor Anthea Hucklesby (A.L.Hucklesby@leeds.ac.uk).