

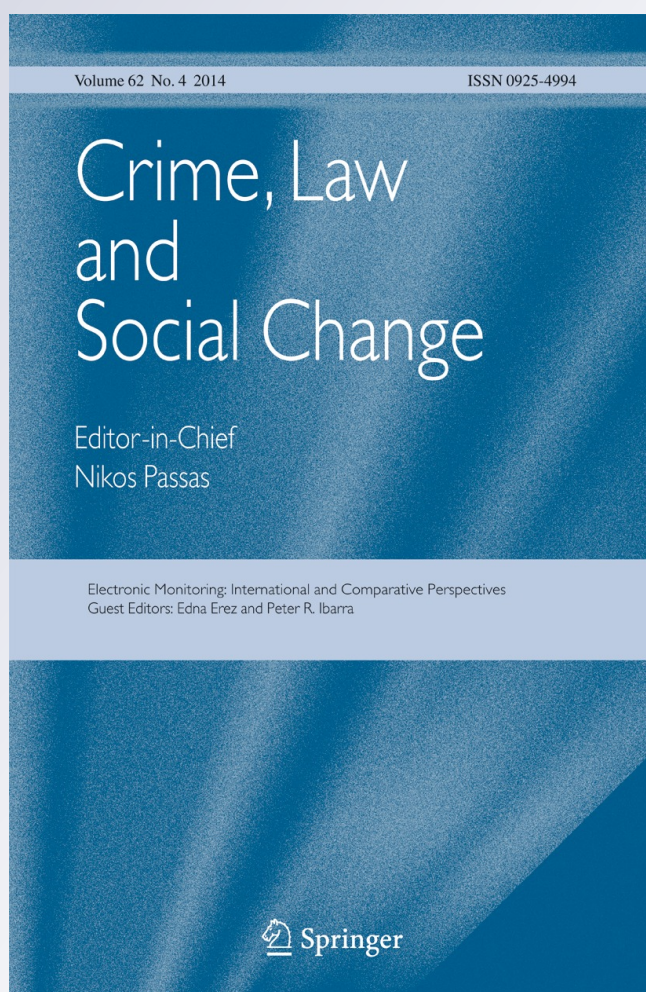
Understanding the electronic monitoring of offenders in Europe: expansion, regulation and prospects

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Understanding the electronic monitoring of offenders in Europe: expansion, regulation and prospects

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Abstract The electronic monitoring (EM) of offenders, mostly using radio frequency (RF) technology to enforce home confinement, has been practiced in Europe for a quarter century. At least twenty seven countries make use it, at a range of points in the penal process. More seem likely to adopt it in the future. Few countries use it on a very large scale, compared to prisons and other community sanctions. Nowhere has it had a transformative effect on penal practice, although some countries have used it more wisely than others. In Western Europe, Germany has been the most reluctant user of RF EM, while the Scandinavian countries, Denmark especially, have arguably made the most creative use of RF EM in the context of their conditional prison sentences, to augment existing support and rehabilitation services for offenders. Some Eastern European and Balkan countries have sometimes used EM without the constraining effects of “probation values”. Pan-European attempts by the CEP (The European Probation Organisation) and the Council of Europe to shape and constrain the development of EM, given the perception that it could easily become a repressive technology, have been of some value. GPS tracking of high risk offenders now exists on a very small scale in a number of European countries, but government aspirations in England and Wales, which may or may not come to fruition, to develop a large scale GPS-based programme in the near future may signal the beginnings of an attempt to use EM in more penally transformative ways, although it is probation rather than prison use which may be diminished as a result. The conclusion suggests that EM should be understood as a form of e-governance, that it should be theorized in terms of the “network society” and that its expansion is an expression of neoliberal penality.

Introduction

Electronic monitoring (EM) - the use of remote surveillance technologies to pinpoint the locations and/or movements of offenders and/or defendants - was first used in Europe a quarter century ago, and has become an established - although by no means ubiquitous or uncontested - feature of the continent’s “penal imaginary”, its imagined

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and projected sense of what is possible, necessary and ethically defensible to do with a range of criminals and suspects. Defining Europe¹ at its broadest, EM was used (or at least legislated for) in 2010, according to Council of Europe surveys by Aebi, Marguet and Delgrande's [1] and Aebi and Marguet [2], in Andorra, Austria, Belgium, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Georgia, Germany, Iceland, Italy, Luxembourg, Netherlands, Norway, Poland, Portugal, Romania, Spain, (including Catalonia), Sweden, Switzerland, England and Wales, Northern Ireland and Scotland (27 countries). It is not used in Armenia, Azerbaijan, Bosnia-Herzegovina, Greece, Ireland (although it has been piloted), Latvia, Malta, Moldova, Monaco. San Marino, Slovenia and Turkey – although the latter is certainly planning it (12 countries). Aebi, Marguet and Delgrande list Lithuania as a non-user of EM, but more recent data indicates that it ran a pilot in 2011 [68]. Lichtenstein, Serbia and Macedonia did not respond to Aebi and Marguet's survey, so EM's status there is unclear - although Vanja [88] reports that Serbia legislated for it in 2006, and Nellis [68] that it began using it in 2011 (see also 2). Useful as it is to know the number of "the jurisdictions using EM", such lists nonetheless fail to capture the widening range of EM technologies, their very varied modalities (different legal forms and purposes), whether schemes are restricted to particular regions or are nationwide - as well as begging the question as to how penally significant EM has actually become in a particular jurisdiction, in comparison to more traditional penal measures [72, 84].

First generation EM - the use of radio-frequency (RF) technology to monitor "presence" in a single location - can safely be said to be an established penal option in contemporary Europe, and increasingly an object of research, debate and regulation by pan-European bodies - the Council of Europe [1], the Council of the European Union [27], the Conference Permanente Europeene de la Probation (CEP) [75] and even NGOs such as the Quaker Council for European Affairs [51]². Second generation EM - using the American Global Positioning System (GPS) satellites to monitor mobility - is gaining ground. As a proportion of all community sentences made in any user country in 2012, EM still errs on the low side - Belgium, for example, has 11.2 %, - albeit with some apparently striking exceptions in countries lacking a range of probation interventions, notably Serbia, at 53.7 % [2], pp36-39, but across the continent, over time, it has created new modalities of penal experience for thousands of offenders, which warrants penological attention [22]. The perceived need to reduce prison overcrowding at both the remand and sentencing stages, the desire to make existing forms of offender supervision in the community more controlling, and the

¹ Defining "Europe" is best done via the frameworks used by its core institutions. The Council of Europe was formed in 1949 to support and protect democratic principles, and to promote shared legal norms and standards: the European Convention, and European Court, of Human Rights, founded simultaneously in 1950, are expressions of this. Its membership rose from 10 to 47 countries; this includes Russia (since 1996), which does have nascent EM schemes, but is not included in the present study for logistical reasons. The European Union (EU) was formed as a political and economic entity in 1992, its membership rising from an initial 10 to 27 in 2007

² In the 2004 EU Green Paper on the *Approximation, Mutual Recognition, and Enforcement of Criminal Sanctions*, which opened up a debate on the harmonisation of penal measures, EM was deemed too rare to warrant much attention. While the Council of The European Union's "Probation Framework Decision" of 2008, implemented in 2011, acknowledged that EM *could* be used to support probation measures, it was also recognised that not all countries which used, or planned to use, EM defined it as a probation measure [27], p517-519.

pursuit of improved cost-effectiveness are the usual (entwined) national reasons given for adopting either or both forms of EM, but few user-countries are without their sceptics, even outright opponents, among professionals, policymakers and/or academics [12]. There is rarely a national consensus about EM's best use, and often unease about its future trajectory and implications for existing agencies and practices, especially where governments encourage strong private sector involvement in service delivery, potentially creating a commercial incentive to expand its use. The ethical, political and administrative issues raised by "curfews", "home confinement" and "tracking" seem intuitively to be different in kind from those pertaining to existing community measures and sanctions, many with roots in longstanding humanitarian sentiments and public service institutions, and underpinned now by human rights principles. The persistent questions about EM are new variants of enduring intellectual concerns about the scale and impact of "technology" on cultural and political life, but as relatively little work has been done on the penal affordances of information and communication technology (of which EM is one), or on its connection to emerging "surveillance architectures", or to the possible and likely timescales of technocorrectional change, they remain difficult to answer [59] - but see [41, 66].

Nonetheless, over twenty five years, there has been a pragmatic acceptance of EM by many European governments, degrees of reconciliation with probation services, and a sense that EM's use can be shaped for the "liberal" good by policy and law. Initial uncertainties, exaggerated hopes and/or dystopian anxieties have, especially in the countries which pioneered it, been dissipated by professional experience and reliable academic research, although a more general cultural shift in attitudes towards the place of mobile communication technologies and electronic data gathering in public (and everyday) life, and a consequent lessening of concern about one's "locational privacy", may actually be framing the way it is understood - its punitiveness or otherwise - and may better explain its increasing acceptance. In both Western and Eastern Europe there is a younger generation of politicians, criminal justice professionals and administrators, variously committed to versions of e-governance, who have never worked without the possibility of using EM, and for whom, if penal modernisation is desired, it is a versatile and appealing option.

This paper will only *sketch out* policy developments in EM in Europe, on a broad region-by region basis, since it first received attention in the 1980s and 1990s; much more detailed localised and comparative studies would be needed to understand it fully. It will note common trends, whilst recognising with Murakami-Wood and Webster [61], in an important article on surveillance more generally in Europe, that the emergent legal and institutional forms of EM in any particular jurisdiction reflect the contingent dynamics of particular cultures, constitutions and actor-networks, both state and non-state, as well as cross-fertilisation ("policy transfer") across jurisdictions. It will explore the use of EM in Western and Eastern Europe (and the Balkans), note the apparent exemption (at least to date) of Germany, Greece and Italy from the common trends and register the consistent achievements of Scandinavian countries in using EM to reduce the use of short custodial sentences. The Conference Permanente Europeene de la Probation (known as "the CEP") and the Council of Europe's efforts to ensure that the implementation of EM has been commensurate with probation ideals and practices have mostly been successful, but are not binding and remain precarious. Current adverse policy developments in England and Wales, in respect of both EM and

probation itself, whilst still localised, may yet be the harbinger of penal reconfigurations elsewhere in Europe - because they are at root embedded in broader, technological infrastructures which give politicians, if they are so minded, new political options that may reduce reliance on probation services. The paper will end with a preliminary attempt to better theorise the nature of EM as a new penal measure, so as to better anticipate it - and probation's - prospects in Europe (on the latter, see [3, 23]).

EM in Western Europe

England and Wales, Sweden and the Netherlands were the first European countries to show serious interest in EM in the mid-1990s, and to visit and learn from the USA's decades worth of experience [63, 73]. While they all shared a rhetorical and substantive commitment to "modernising" criminal justice, moving in greater or lesser degree away from purely rehabilitative approaches towards something more "actuarial" and "managerial", they chose to implement EM in distinctively different ways. England and Wales had had a head start in that a private individual, journalist Tom Stacey, had been promoting EM since 1981, as something superior to the probation service as a means of reducing the use of custody, and after a government delegation to the USA reported back, a small, short-term EM-bail pilot was established in three English cities in 1989/90. Lacklustre results (underuse by courts, a smaller sample than expected, significant reoffending) did not deter the then Conservative government, which was trying to push the probation service away from its social work base towards becoming an agency of punishment and law enforcement, openly (if far fetchedly, at that time) threatening its replacement with voluntary or private sector organisations - probably using EM - if it did not embrace internal cultural change. Stand-alone EM curfew orders were piloted as a sentence from 1996, less now as an alternative to prison and more as a punitive form of community supervision, and these pilots segued into a national roll-out under a New Labour government in 1999, at which point an EM-early release from prison programme was also introduced, an emergency measure to reduce prison overcrowding. A (pre-trial) bail scheme, a parole scheme and two schemes for juveniles (one stand-alone, one part of an intensive supervision programme) quickly followed, making England and Wales the largest EM scheme in Europe, a position it has continued to hold [62, 71]. The government continued to contract-out the delivery of EM to regionally-based commercial organisations (three in the first contract (1999–2004), two in the second (2005–2013)), a practice usually dubbed "privatisation", although, conceptually, that underplays the extent to which state agencies retain tight control over the companies concerned [76, 77].

Sweden and the Netherlands had already piloted (in 1994) and then established national EM-home confinement schemes (in 1996 and 1998 respectively) but, in marked contrast to England and Wales, both had embedded them within their respective Probation Services and integrated them with social work, doubting whether stand-alone EM had any rehabilitative value. All three became potential models for other European countries, with Lehner [46]:p115 noting, for example, that "Swiss authorities visited England, Sweden and Holland beforehand and copied the Dutch version to a large extent", establishing EM in six cantons (administrative regions) in 1999. Switzerland itself took a less strategic approach to using EM as an alternative to short custodial

sentences, but achieved a similar reduction in their use without initially embedding EM in probation: a halfway house run by social services in Basel housed the original monitoring centre, but gradually, as probation resistance to it declined, local probation services assumed responsibility for it on a canton-by-canton basis. The deliberate embedding of EM in state agencies by the Swedish, Dutch and Swiss authorities reflected the strength of their indigenous social democratic and liberal traditions, but also their fear that the English approach, by separating EM and probation institutionally, and tainting EM with the stigma of punishment-for-profit, would polarise debate on it and risk losing the useful element of control that EM could add to existing probation and social work measures.

Whilst in actual practice, Belgium arguably created the European EM scheme which was most subordinated to social work values, in 2000, using it to execute custodial sentences for periods of upto 3 years, and as a form of early release [6], it was Sweden that gained the most prominent reputation for welfare-oriented “intensive supervision with EM”. Writing in the early days of the Swedish pilot, Norman Bishop (an Englishman who had a long career in the Swedish prison service) insisted that political and professional effort be put in to actively shape the use of EM, to subordinate it to social work, precisely because of the threat to probation that its untrammelled, stand-alone development otherwise presaged:

Over the past few years electronic monitoring has aroused both great interest and strongly divided attitudes. Particularly in Europe, many persons, including reformers anxious to reduce reliance on imprisonment have seen it as a dangerous threat to personal integrity and urged that it should find no place in our criminal justice systems. I believe personally that there is room for a more moderate attitude to electronic monitoring, and that like many other forms of technological innovation, it is neither good nor bad in itself. What is important is how it is used [8], p10

In England and Wales, Chief Probation Officer Dick Whitfield [93, 94] came to share this view, championing the Swedish model over that of his own country, and promoting rational, evidence-based debate. By encouraging the Conference Permanente Europeene de la Probation (CEP) to take an interest in EM (see below), he became an influential European spokesperson on its possible uses and inherent dilemmas. By the early years of the 21st century EM pilot (and sometimes mainstream) projects had begun in Belgium (2000), France (2000), the Hesse region in Germany (2000), Italy (2001), Portugal (2002), Scotland (2002), Spain (2000) and Catalonia (2000). All these early European schemes were state-based, rather than “privatised” (except Scotland, which in service-delivery terms, followed the English model [64]), relying on commercial organisations only to make and supply the monitoring technology and technical back-up. They were not necessarily run from within Probation Services - Belgium and Catalonia ran theirs from within Prison Services. Those countries which used EM as a conditional (substitute) prison sentence or a form of early release considered those on EM as prisoners, rather than as probationers undergoing community supervision. The influential Max Plank Institute had organised a major academic/policy seminar in 2002 to consider EM's likely future in Europe, picking up on emerging debates about the relation of EM to social work and to punishment; the prospect of net-widening; the potential displacement of “humanistic” measures by “technological” ones, and the urgent need for evaluative research [58]. European commentators were mindful that in the USA the early expansion of EM after

1982 had been unduly vendor-led, a technology in search of a solution, and agreed that while watchfulness was needed, that was less likely to happen in the more tightly governed, often centralised and invariably professionalised criminal justice systems of western Europe [47]. Among some academics there was interest in the relation of EM to the increased legitimacy and accelerated normalisation of surveillance practices that arose in the USA after the 9/11 attacks in 2001 which, arguably, diffused into Europe in greater or lesser degree see [56].

Curfews and home confinement were the only forms of constraint that RF EM made available, but there was considerable variety in the legal frameworks and types of programme in which they were used, and in the discourses - punitive, managerial and rehabilitative - used to rationalise them. Sweden and the Netherlands piloted remote alcohol monitoring but were not satisfied with the breathalyser-based technology; more recently Scotland (Glasgow) and England (London) have piloted transdermal alcohol monitoring, but it is far from certain that this will become widespread. Voice verification technology has been little used. The Netherlands used it briefly to keep convicted football hooligans away from weekday and weekend matches. Belgium, introduced it in 2012 as a stand-alone means of monitoring under 8-month conditional prison sentences [7], and Spain uses it, alongside RF and GPS, as one possible form of surveillance in its early release scheme.

Provisional information is available on the time served on EM measures, and the daily duration of EM regimes [68]. The vast majority of offenders on RF EM seem only to be subject to it for relatively short periods, under six months, even if the specified legal maximum is greater than this - the exceptions, which may run to several years, have largely been in relation to bail and parole. Caiado's [10] successful EM-pre-trial detention scheme in Portugal entails full-day home confinement, with only discretionary "authorised absences", and some probation service oversight; its judicial credibility as an alternative to a remand in custody has depended on this time limit. For all its welfare-orientation of its "intensive supervision with EM", Sweden's conditional custodial sentence is similarly stringent, albeit with an expectation that those subject to it will be involved in work or education during the day. England and Wales's predominantly stand-alone use of RF EM, on the other hand, has always operated with 12 h per day maxima (recently raised to 16 h) - they use EM to monitor night-time curfews rather than full time home confinement, leaving offenders with considerable free time compared to other European schemes. *Pace Roberts* [80], EM need not function as a "virtual prison"; it can structure a wide range of disciplinary regimes, without ever quite becoming as fully incapacitative as locks, bolts and bars. There is certainly no agreed sense in Europe of what the optimum period of EM is (in terms of bearability for individuals and families), because its "punitivity" can be modulated by varying its intensity over time, graduating the daily curfew hours, reducing or increasing the number of requirements with which it is combined, actively alleviating the domestic tensions it may create with social work support, and relaxing the severity of enforcement (see Herzog-Evans [36] for reflections on time limits).

The satellite tracking of offenders, using the American-based but internationally available Global Positioning System (GPS), used in law enforcement in the US since 1997, has been the only major technological innovation in European EM around which momentum has gathered. England and Wales was the first European country to legislate for GPS tracking, in 2000, but did not begin a pilot scheme (targeted on sentenced and

released sex offenders, domestic violence perpetrators, persistent and prolific offenders and juvenile offenders) until 2004–2007. It had become satisfied by this time with the reliability of the technology, and anticipated using it to selectively reduce the use of custody. The official evaluation [83] suggested that it was not yet cost-effective as a means of supervision, and while this was a relevant factor in the government decision not to mainstream it, a sudden reversal of policy - allowing the prison population to *increase*, starving the nascent GPS scheme of resources - was arguably more important [65]. Even if it had been mainstreamed, there was no sense then that GPS could or would be other than a supplement to RF EM-curfews, an additional means of managing higher risk offenders who could now be tracked retrospectively or in real-time, or prohibited from entering designated exclusion zones, as well as curfewed. The GPS pilots had, however, brought the police into the administration of EM for the first time, and among some officers, at least, stimulated lasting interest in the potential of tracking.

The Netherlands were prompted to pilot GPS tracking in one region in 2004, by a judge who refused to send an octogenarian sex offender to prison; the scheme grew incrementally but was not fully national until 2011. France (currently the second largest user of RF EM in Europe), followed suit, piloting GPS in 2006, making it nationwide in 2007. In a bid to demonstrate serious commitment to tackling domestic violence - long under-reacted to - a socialist government in Spain introduced Europe's first EM "victim protection" scheme. This entailed tracking both perpetrator and victim, electronically warning both "her" and the authorities of "his" proximity to prohibited zones and people [31]. Portugal piloted GPS-based victim protection schemes as, more recently has Sweden, together with a tracking scheme for juvenile offenders in residential care when they go on work placements or home leave [73]. Numbers are small in all these mainland schemes - under 100 at any one time, often much less - and while some expansion is likely there is no emerging policy debate, as there has been in the US, that GPS tracking might significantly displace RF technology [21]. England and Wales is seemingly becoming the exception to this (see below). Ireland piloted the satellite tracking of released sex offenders in 2009–2010 without ever having used RF EM-house arrest beforehand - the first country in Europe to go direct to "second generation" technology (and to be monitored across a national border, using the G4S monitoring centre in England). That pilot was not deemed cost-effective, but a new early release programme, using both RF and GPS, is currently underway, with a new technology supplier. Austria introduced both RF and GPS EM simultaneously, for the first time, in 2010.

National Resistance and Impediments to Using EM

Despite a broad affirmative trend towards using EM, not all western European countries have adopted it, which, without undermining the general idea of "common trends" do suggest that distinct cultural traditions and constitutional configurations, particular national experiences, memories and aspirations, as well as immediate political contingencies, still shape policy and affect patterns of implementation. Thus, uniquely among countries with well-established probation services, Germany never implemented RF EM-curfews/house arrest as a nationally available measure. Individual federal states (lander) had the discretion to do so, but initially only Hesse did so, in 2000, followed

much later by a brief trial, now discontinued, in Baden-Wurttemberg in 2010 [40, 24, 25]. There was and remains strong opposition to EM-home confinement from the German Probation Service, for whom house arrest and state surveillance were perceived as both incompatible with the essentially dialogical and constructive nature of social work, and also from prosecutors who have feared it would be too lenient a measure. [48]³. The Hesse scheme, however - modelled in part on the Swedish intensive supervision scheme, focused on offenders whose lifestyles would not otherwise be sufficiently stable to gain benefit from a community sanction, has been successful in terms of completion and reduced recidivism. Paradoxically perhaps, given the cultural resistance to RF EM, the Federal German government more readily adopted GPS satellite tracking for high risk sex offenders in 2011, potentially for periods of five years or over, following a European Court of Human Rights (ECHR) that ruled against the continued use of “protective” imprisonment beyond the end of their original sentence. GPS tracking has also been used with paroled sex offenders in the state of Mecklenberg-Western Pomerania since 2011 [25].

Neither Greece nor Italy have extensive or influential probation services. Greece, like Germany, has traditionally shown antipathy towards all surveillance technologies, certainly public space CCTV, even including speed cameras, associating them with its years of military dictatorship in the 1970s [82]. In 2013 RF EM-house arrest was mooted as a possible cheaper alternative to prison, partly because of the country's dire economic situation, but also - cynics have suggested - because it is politicians who have been incriminated in the recent financial crises who will most want to avoid serving time in prison. In Italy, attempts to implement EM, despite a seemingly auspicious start [18], have simply been a fiasco, reflecting more general difficulties of implementing any penal innovation in an administratively disorganised criminal justice system. Italy legislated to use EM in 2003 as a means of enforcing an existing house arrest measure at the pre-trial stage, under the control of the police and the Ministry of the Interior, using Telefonica Italia as the technology provider [53]. Only 14 orders had been made up to 2013 and while Flore et al. [27], p271 are not quite right to claim that “currently, there is no system of EM in use in Italy”, it is clear that initial central government support for it was either never followed through, or subverted from below, or both. EM is not apparently valued by the judiciary, nor by the police, whose traditional enforcement of house arrest sentences by random home visits is ostensibly threatened by it. This failure to implement EM occurred despite Italy having seriously overcrowded

³ Much of the pan-European debate on EM is conducted in English, and while numerous non-British academics have published in English language journals and books there are important scholarly publications in other national languages which may well have had influence in their own countries but not in the Anglophone debate on EM. Michael Lindenberg [49], a German social work academic, seems to have written the first “European” book on EM, based in part on visits to US EM schemes, which was very critical of its likely use in Europe. A later, more substantial work, based on his PhD thesis [50] developed these criticisms, and the combined academic weight of this with two more published empirically-based theses [34, 57] from the prestigious Max Planck Institute - though neither were hostile to EM - may well have informed German caution towards EM. A strong critical literature on EM has emerged in Belgium [4, 5, 19, 20, 52], although as in England and Wales this does not seem to have impeded adverse policy developments. Much of the evaluative research on EM in Sweden, undertaken by a government-funded research body, and only partially available in English, does appear to have had a direct influence on EM policymaking. Anna Vitores Gonzales's [31] Spanish PhD remains the only scholarly study of EM to combine a critical “sociology of science and technology” perspective with a penological one, an important standpoint largely absent from Anglophone research on EM.

prisons and resorting to an emergency early release programme in October 2012, which suggests that other, non-penal factors – the availability of a digital communication infrastructure *and* a political willingness to use it innovatively – must be in play before EM can become a solution to perceived penal problems.

EM and Scandinavian Exceptionalism?

Nordic/Scandinavian countries have seemingly resisted - or at least muted - the “punitive turn” and “the culture of control” that emerged more strongly elsewhere in the 1980s and 90s, retaining a strong commitment to social democratic and communitarian values, to high levels of state-funded welfare provision, to low rates of imprisonment and to substantively rehabilitative and re-integrative goals in their (jointly managed) prison and probation services [78]. Incrementally, Sweden, Denmark and Norway have adopted EM (and some in the region see this as evidence of their own unwelcome “punitive turn”, particularly in Sweden [87]) have all made systematic attempts to use intensive supervision programmes with RF EM to reduce the use of short (unproductive and costly) custodial sentences. They have done so more systematically and consistently than European countries which have pursued the same goal, so Scandinavia might well be considered “exceptional” in respect of EM as well as its parsimonious and humane approach to prison. Certainly, “the Swedish scheme” has been upheld “as a model for any jurisdiction developing electronic monitoring’ and contrasted adversely with the British model [92, 94], p47. By setting EM within the framework of a pre-existing, and publicly accepted model of “conditional custodial sentencing” - waiving/suspending periods in custody if offenders consent to being supervised in the community, by probation officers - EM has enabled a significant expansion of that practice - albeit with drunk drivers, road traffic offenders, low level fraudsters; some violent offenders and drug offenders who may not be as at risk of custody in other jurisdictions. In Sweden, perhaps paradoxically, the introduction of community service as a penalty reduced reliance on intensive supervision with EM, itself a somewhat “exceptional” occurrence in punitive times, and evidence that a humanistic measure can still, in part, displace a technological one [73]. Sweden also pioneered the use of EM to increase the security of open prisons by monitoring both their perimeters and inmate locations within them: the Netherlands and Finland both undertook similar pilots see [42].

Denmark emulated Sweden in 2005, developing an “intensive electronic monitoring and control” programme as a conditional sentence for low risk (but hitherto imprisoned) target groups and progressively expanding it to more serious offenders. It first introduced EM as a substitute for under three month custodial sentences for traffic offenders in 2005, then for offenders under 25 in 2006, then for offenders of all ages in 2008 (except those imprisoned for up to 14 days under the Weapons Act) [35]. In 2010 it increased the length of custodial sentence for which EM could substitute to five months, and in 2013 to six months (at which point an early release scheme using EM was also introduced). As in Sweden, not all offenders who are eligible apply, some preferring imprisonment; of those who do apply 25 % are refused it, mostly because of pending charges, a continuing drug habit, and/or a refusal to cooperate with probation supervisors. At 20.7 % of all community sentences made in 2012 (ie 3719 out of 11,693

offenders supervised by probation) , Denmark's proportionate use of EM is high by western European standards, although Norway's despite its late start with EM has risen to 27.9 % (1400 out of 5361 offenders) [2].

Norway's longstanding social democratic government resisted EM for a number of years. When it did finally decide to introduce a multi-regional pilot, modelled on the Swedish and Danish schemes, in 2008, it was opposed both by the political right on the grounds of being soft on crime, and by liberals who still questioned the legitimacy of using home as a prison, even for lower risk offenders. Cost considerations were decisive: 70 % of Norway's prison population were serving sentences of under four months, and EM was targeted on them and on longer sentence prisoners with less than four months custody left to serve. [44], p91. The inclusion of EM's rightwing opponents in a new coalition government in 2013 is unlikely to jeopardise EM now that it is perceived to have proven its worth, but it may slow down its expansion to the whole of the country, and cast doubt on a planned pre-trial EM scheme (from which Norway learned from Portugal); financial incentives to stick with it may override ideological predispositions.

Finland, famously, found ways of effecting major reductions in its prison population without recourse to EM, which, despite the country's vigorous expansion of information and communication technology, was only used intermittently (in the form of mobile phone tracking) in the first decade of the twenty first century [45]. A more systematic use of EM seems to be beginning, using GPS tracking for those on early release (since 2006), RF EM for sentenced offenders (since 2011), as well as monitoring the inmates of open prisons (since 2012), emulating Sweden. EM is also used in Iceland. Among the Baltic states, Estonia has introduced EM as a penal measure for between one and 12 months: from 2011 it could specifically be used as a substitute for a custodial sentence of up to six months. Both RF EM and GPS are available (via ElmoTech), the choice of which is decided by the probation service according to an offenders risk level [27], p158-9. Lithuania piloted a post-release scheme in 2011, using RF EM, making it permanent the following year, while Latvia has been considering it since 2012, and anticipates introducing it as an early release scheme in 2014/15.

EM in Eastern Europe and the Balkans

Major changes to criminal and penal codes took place after 1989 in countries that had hitherto been satellite states of the Soviet Union. Some of these post-communist "transition states" already had rudimentary social work services for first time offenders and discharged prisoners - and longstanding use of conditional custodial sentences - but in the main were typified by widespread use of imprisonment, poor prison conditions and limited understanding of human rights, especially in a penal context [30]. Many have high rates of pre-trial detention and "alternatives to pre-trial detention are under-used in the region despite the high costs [it] represents to national budgets", [38:5]. Modernisation entailed experimentation with a range of non-custodial measures at both pre-trial and sentencing stages, and for those countries that aspired to EU membership a range of state and philanthropic mechanisms for policy transfer from western Europe were soon effected, centred primarily on the creation of probation services and the associated community measures and sanctions [91]. Although western security

companies were among the quickest to take advantage of new commercial opportunities in the East, EM was not a priority in the first decade of the 21st century - outside their main cities, some countries did not have national telephone systems, or even consistent electricity supplies - but when it did begin it was without the prior constraint of established probation values or embedded human rights traditions. Some countries which had previously used house arrest as a penal measure, enforced by the police, have claimed that a "24 h lockdown" model of EM is actually consistent with human rights, even a desirable expression of them, simply because the prison conditions in which the offender would otherwise be serving time are so poor that any measure which is not "prison" is better.

Poland introduced EM as a full substitute for a six month custodial sentence in 2009, and for the last six months of a 12 month custodial sentence, later making it a substitute for a full 12 month sentence. EM-home confinement is understood as "a specific type of imprisonment ... a form of serving a prison term", although it is supervised by probation officers [27], p360-1. The programme uses both RF (for sentence, bail and early release) and GPS for victim protection - with 7000 people per day on EM, it has quickly become Europe's third largest scheme. Bulgaria had a pilot run free of charge by G4S in which 11 people were tagged across the country. House arrest already existed there as a penalty - but this was not what EM was added to. It was created as one of six probation conditions which prohibited leaving home. The pilot was not pursued. Flore et al. [27], p45-7 say that voice verification technology was to be used on offenders aged 16 and above as a condition in a suspended sentence, a conditional sentence, conditional release and an alternative sanction.

Some of the difficulties in implementing EM in this region stem from the absence of established and influential probation services; in such situations definitions of "best practice" may be generated instead by commercial organisations. In Albania, which has a probation service, and which devised an RF and GPS EM pilot programme with the assistance of the English Probation Inspectorate, inexperience with private contracting has hampered its operation. Similarly, Georgia was persuaded in 2010 to introduce GPS tracking as a means of enforcing participation in community service work groups, sometimes sent to relatively remote places, but in the absence of related supportive services, the project foundered, and is currently suspended.

Across Eastern Europe EM is caught up in complex debates between competing groups of modernisers, managerial technocrats who want effective alternatives to prison, including EM, and human rights activists who oppose EM as an acceptable penal measure. Among the latter, memories understandably linger of just how oppressive police-based forms of house arrest (and tracking) could be [33], and even if, in practice, EM was to be used less intrusively than past police approaches, its symbolic associations with totalitarian statecraft still work against it. The Czech Republic has used house arrest as a probation-supervised sentence of up to two years since its inception, and the use of RF EM as a means of enforcing it was briefly piloted in 2012, by the Probation and Mediation service, who are not in fact keen on it. Hungary does make use of house arrest, compliance with which is enforced by police patrols: EM is not used "because the technical means for implementing such measures is missing" [27], p224. Serbia introduced a police based EM-scheme in 2006 [88]. Neither Slovenia nor Slovakia has plans to introduce EM. Romania has planned to use EM "as a way of supervising probation measures" [27], p395 but human rights activists resist this.

The CEP Electronic Monitoring Conferences

The Conference Permanente Europeene de la Probation (CEP), established in 1981 as a forum to discuss mutual learning among European probation services, first discussed EM in an Oslo seminar in autumn 1994, the year Sweden began its pilots [32]. Under the influence of Dick Whitfield and Ruud Boelens, the initial Dutch EM coordinator, the CEP was persuaded to set up a commercially-sponsored EM conference in 1998, because EM, at the very least, posed a challenge to conventional probation thinking. It was not initially anticipated that such conferences would become a regular fixture in the CEP calendar, but the steady expansion of EM (and the growing confidence that it could be used wisely, partly inspired by CEP itself), ensured that further conferences took place in 2001, 2003, 2005, 2007, 2009, 2011 and 2012. No other topic in the CEP has received such sustained attention, or been commercially-sponsored, on this scale, reflecting the manifest complexity of the issue, the constant upgrading of the technology and the many possible models of EM practice, as well the emergence of the “accession countries” in the EU - newcomers with a growing interest in penal modernisation [14]. The core focus has been on probation policy-makers and managers rather than on frontline practitioners - and sometimes lawyers - the aim being to facilitate dialogue amongst them, and with the sponsoring technology companies, for whom the event was a “trade fair” and a useful business opportunity. There was at the beginning considerable reliance on American expertise - academics Bob Lilly and Marc Renzema, and Peggy Conway (editor of the *Journal of Offender Monitoring*) were regular speakers - but as Europe's home grown experience consolidated and dispersed, this became more muted. Simultaneously however, because of the unique combination of commercial, political and professional expertise which the CEP-EM conferences brought together they increasingly attracted wider international attention, and have been attended by professional and commercial representatives from Australia, Korea, Singapore and South Africa, as well as the USA.

After Whitfield's retirement, the drive to maintain the CEP-EM conferences came largely from Leo Tigges, Director-General of the CEP (2005–12).⁴ The conferences, all initially in the Netherlands, continued to be concerned with existing and possible relationships between a) probation and EM as strategies for supervising offenders and b) between probation services and the private sector. The seventh conference (in Portugal, in 2011, focussed more specifically on the integration of EM and probation, making more explicit than previously the contribution of EM to core probation concerns such as rehabilitation, reoffending, resettlement, public protection and the future of the Service itself [74]. The eighth (in Sweden, in 2012) conference sought to pinpoint the “gold standard” in EM use, noting that momentum was finally gathering around the use of GPS tracking, and recognising growing police interest in this technology [75]. The conferences have showcased research, pointing out, until recently, the paucity of good evaluative work on EM, and the absence of any apparent benefits in terms of reduced

⁴ There was a brief hiatus between Whitfield and Tigges's guiding influence when two conferences were planned at arm's length from the CEP (because its interest had faltered), by James Toon and Dominik Lehner, the civil servants in charge of implementing EM in England and Wales and Switzerland respectively. The success of their conferences was important in ensuring continuity and revitalising CEP's own interest in EM.

recidivism where EM is used alone, despite some cost-effectiveness in terms of reduced prison numbers. (The quality of applied research in Europe has grown better and more interesting - Marklund and Holmberg [55]; Hucklesby [37]; Killias et al. [43]; Vanhaelemesch and Vander Beken [89]; Vanhaelemesch, Vander Beken and Vandeveldel [90]; Renzema [79]). Nonetheless, Mair's [54] point, made in respect of England and Wales, that political investment in EM has outstripped what research evidence can actually justify, could usefully be pondered by researchers in other European countries). Pockets of good EM practice in England and Wales - for example, the use of RF EM in post-release public protection arrangements - have always been acknowledged at CEP EM conferences. Scepticism, however, has sometimes been expressed by participants about the domination of Anglo-Welsh speakers at them, given that the extensive use of stand-alone EM-curfews and the scale of commercial organisations' involvement in service delivery in England and Wales has not, in general, been favourably regarded. Examples of integrated practice from across Europe have repeatedly been showcased by the CEP in plenaries and workshops, supplemented by occasional forays into more critical perspectives, for example on EM and the surveillance society, and on the dangers - awkward to articulate in a *commercially sponsored* conference - of privatisation (for details of all presentations and conference reports see www.cep-probation.org).

The early conference sponsors included US monitoring companies BI and ProTech as well as the first wave of EM-contracted service providers in England and Wales - Reliance, Premier and Securicor, but have latterly been supported by the second wave G4S (Securicor and the Danish security firm Group 4 combined in a single company), Serco (formerly half of Premier, until it separated from its US partner Wackenhut) and Israeli-firm ElmoTech (the longstanding technology provider to Sweden, Belgium and the Netherlands which became, once incorporated in the American corporation 3 M, 3MEM) (see Paterson [77]). Stealing a march on its competitors, ElmoTech had twice run its own EM conferences, in Italy (2004) and France (2009) respectively, for established and prospective customers in Europe, and if the CEP EM conferences were ever to end, it is likely that there would be more independent commercial ventures of this kind.

EM and the Council of Europe

The Council of Europe has been a leading player in devising human rights-derived regulations for best penal practice, in respect of both prisons and community sanctions. It has found EM to be a contentious development. The 1992 formulation of the Council of Europe's European Rules on Community Sanctions and Measures did not specifically mention EM but alluded ominously to the "dangers of new technologies" (quoted in Morgernstern 60, p131). In the late 1980s, several European countries (France, the Netherlands) had had inconclusive debates on the use of EM, but in 1992 only England and Wales had experimented with it (as a pre-trial measure), and legislated for its future use as a sentence, and it was arguably the main focus of the Council's concern. The Council's position may well have influenced some countries not to pursue EM - or to pursue it less assiduously - but by 2000, when the Rules were next revised, several

more had done so, although evaluations were limited (see [11, 12]. The Rules's observation that "house arrest and curfews with electronic monitoring without social assistance would amount to a breach of ER CSM" (*idem*) could still be taken as a criticism of England and Wales stand-alone use of it. Of the shift towards acceptance of EM in 2000, Morgernstern remains critical, saying that "in my view this change of attitude clearly corresponds to a changing zeitgeist and European influences together with very active promotion strategies by the [commercial] providers" [60]. She cites evidence from Estonia (a state strikingly committed to e-governance) which suggests that EM was not in fact needed to bring about the conditional early release from prison that it was claimed to have facilitated, raising - though without exploring - the social and policy conditions under which governments will adopt "technology" as a solution to perceived social or administrative problems.

The current European Rules on Community Sanctions and Measures have only limited things to say about EM – citing only two rules - although between them they capture the essence of European anxieties about the measure – the need to entwine it with the probation ideal of rehabilitation, and the traditional fear that it will netwiden - be used on lower risk offenders than is warranted:

58. When electronic monitoring is used as part of supervision, it shall be combined with interventions designed to bring about rehabilitation and to support desistance.

59. The level of technological surveillance shall not be greater than is required in an individual case, taking into consideration the seriousness of the offence committed and the risks posed to community safety [15].

The first rule was intended to ensure that the subordination of EM to larger probation purposes and is foursquare in that sense with the aspirations of the CEP conferences, although it begs the question of whether or not it is acceptable to use stand-alone EM for the purpose of reducing custodial remands. The second rule is more problematic - as guidance - because it leaves considerable room for argument as to what a "proportional" use of EM should be, given the varied intensities with which it can be deployed. It does not really point towards a solution to the kind of difficulty CEP has had with countries which want to use a "24 h lockdown" model of EM, and who regard this as consistent with human rights.

In 2011, following a request from the CEP, the Council of Europe's Committee on Crime Problems (CDCP) authorised its Council for Penological Cooperation (PC-CP), chaired by Andre Vallotton, to undertake further work on the ethics of using EM.⁵ Although initially conceived as an expansion of the Probation Rules, it evolved towards becoming a freestanding "Recommendation" (a type of non-binding "soft law" which may be used by member states to guide and critique their national policies, and by the European Court of Human Rights to inform its legal judgements) of relevance to prisons, police and legal professionals, as well as to probation. Precisely because not

⁵ Lawyer Dominik Lehner, who along with Andre Vallotton had established EM in Switzerland, and criminologist Mike Nellis were appointed as expert advisers to the committee. Commenting from the US on the Recommendation, George B Drake, manager of the NLECTC-Corrections Technology Center of Excellence considered it "a very important guide that should help agencies around the world use EM technology responsibly, effectively and with concern for the rights and best interests of the participants (personal email, communication 24th March 2014).

all European jurisdictions use or envisage EM as a probation measure [27], p517-519, something to be constrained and shaped by “probation values”, which is largely what the CEP has focused upon, it is vital that additional institutional mechanisms are found to restrain its development. The Recommendation was adopted by Council of Europe Ministers in February 2014, and will hopefully be helpful to this [16].

It might nonetheless be argued that the Council of Europe’s largely legalistic and penal perspective on EM does not fully grasp EM’s wider socio-technological context, or the potential that evolving forms of EM (or “neurotechnology”) may have for transforming methods of social control, which Bishop [9] first warned against at the Max Plank Institute conference. In 2005, however, the European Group on Ethics in Science and New Technology (EGE), twelve experts who advise the European Union on the ethical issues generated by scientific and technological innovation, expressed concern about the future use of “ICT implants in the Human Body”, fearing that legitimate medical innovations (cardiac pacemakers and brain implants to alleviate Parkinson’s tremors, among others) could segue into unacceptable forms of social and psychological control. Implant-based versions of EM have had occasional “techno-utopian” champions in the USA [86], and while they are not likely to be implemented any time soon - not least because of the continuing versatility of wearable devices and the focus on locatability rather than “behaviour modification” - the EGE’s (and Bishop’s) attempt to anticipate technologically-based “systems of untenable restriction and or even negation of basic rights” is commendable [26, 67], unpaginated;

England and Wales: Upgrading EM, Downgrading Probation?

New developments in EM in mainland Europe - notably the cautious addition of GPS tracking to existing RF EM schemes in several countries, and the nascent shift in Belgium away from an exclusively social work-based model of EM towards one which includes EM-curfews as a stand-alone measure [7] - are still largely incremental, but in England and Wales the Ministry of Justice is aspiring to something far more transformational. England and Wales has always been the largest EM scheme in Europe (with 26,000 people tagged per day in 2012), as well as one of the largest prison populations. It has also been the most overtly “privatised” EM scheme and the one which, from the outset, has been cast as a political rival to probation, rather than a part of it, or a complement to it. Under a Conservative-led Coalition government, which has used the aftermath of the 2008 financial crash to “marketise” public services, the Ministry has intensified reforms to criminal justice that had been gestating under previous governments and taken them further, at a faster pace, than might otherwise have been possible without the excuse of “austerity measures”. Chief among these is the contracting-out the bulk of the statutory probation services to 21 regional Community Rehabilitation Companies in June 2014, in which a mix of private and voluntary (not-for-profit) organisations will undertake the supervision of sentenced and released offenders, on a “payment-by-results” basis (higher fees for significantly reduced reoffending), leaving only high-risk offenders in the hands of state-based probation officers (co-working with the police).

Running parallel to this is a plan to expand the use of EM, with a “super-tag” combining both GPS and RF capacities, by imposing it not just on the minority of high-

risk offenders and domestic violence perpetrators that other European countries have done, but also on the much larger numbers of persistent and prolific offenders, building on a series of pilot schemes already undertaken by the police. The roots of this plan lie with an influential Conservative think tank, Policy Exchange [29] which indicted the existing, and unduly expensive, system of EM contracting and service delivery, dominated by G4S and Serco. It argued that, as real-time GPS monitoring of offender mobility was both much cheaper and a more effective form of control than mere RF EM curfews, it should completely replace it, suggesting that within five years there could be 140,000 tracked offenders at any one time. In its new EM contract - the third since EM began in England and Wales - the Ministry of Justice began implementing this plan, forcing G4S and Serco out of the bidding process for seriously overcharging on the previous contract, and awarding, in autumn 2013, “preferred bidder” status to four different companies who began working together to deliver a new EM programme from summer 2015: Capita an English outsourcing company, to provide two monitoring centres and “a field force” of staff; Buddi (an upcoming British GPS technology manufacturer with a track record in monitoring dementia patients, to supply the monitoring devices; Astrium (a French aerospace company with expertise in mapping software) and Telefonica/O2 to provide the GSM network through which location data is transmitted. Following a dispute over technical specifications for the new GPS-RF tag, Buddi was replaced by another technology manufacturer, which may disrupt the intended implementation schedule. The Ministry of Justice’s target numbers of 76,000 people on EM by 2020 may not be as high as Policy Exchange, but still gives substance to Capita’s claim that “when fully live this is expected to be the largest and most advanced ‘tagging’ system in the world” quoted in [17, 71].

For all that is it emanating from a right-wing Conservative government, the planned expansion of EM in England and Wales owes more to “actuarialism” and “techno-managerialism” than to the emotive “popular punitivism” with which such governments have been traditionally associated, (and which has in the past been mobilised *against* the alleged leniency of RF EM curfews). While the government is firmly in control of the process, it is harnessing commercial organisations and “good business methods” to redefine and manage pressing problems of crime control, in a quintessentially neoliberal fashion that as yet has no parallel in mainland Europe. Traditional knowledge bases and institutionalised forms of expertise - not only the probation service’s professional knowledge but also the accumulated expertise in G4S and Serco (even if Capita takes over their monitoring workforce) - are being ruthlessly dispensed with. Although the once world-respected English Probation Service has been weakened by sustained hostility and relentless organisational restructuring from governments of all complexions since the late-1980s - when government first took EM seriously, in fact - the ease with which it is being dismantled, unsupported by any political party or strong media voice, is a sign of a deep cultural shift in how the community supervision of offenders should be undertaken, in which the easy availability of EM has played a part. Fears that “the humanistic” could be subordinated to “the technological” are being realised in a nation that has long been to the fore in implementing surveillance technology, with, for instance, the largest per head use of public CCTV cameras in the world. The coming expansion of EM in England and Wales lends further support to Murakami-Wood and Webster’s general argument that the scale and depth of surveillance in England is already a “bad example” for the rest of Europe, its own form of

“exceptionalism”, not to be emulated. “The most exceptional”, they write, “should not come to be seen as the most normal” [61], p270. The likelihood of its doing so will not depend on technological change alone, but on what politicians make of the particular social affordances it provides. Nonetheless, with the inauguration of Europe’s own system of high precision geolocation satellites, Galileo, between 2012–2019, which can potentially be synchronised with America’s GPS and Russia’s GLONASS systems, the increased use of satellite tracking on offenders may become irresistible [81].

Conclusion

While it is becoming easier to map policy developments in EM in Europe, to get some sense of its scale and variety, it is more difficult to grasp the nature of the change it represents, or to predict whether (and why) it will flourish or flounder, and at what possible expense to existing institutional arrangements. There is, as yet, no sociologically compelling way to account for the advent and expansion of EM in European countries, or indeed elsewhere in the world: technocorrections in general have been under-theorised. There is thus an urgent need for comparative historical ethnographies of EM policy-making in Europe, which take account of both socio-technical *and* penal developments in particular countries at particular times, because it is at the intersection of these that concrete forms of EM emerge. EM is not just a penal phenomenon; the decision to adopt it reflects a moment, a general readiness among governments to infuse technology into particular spheres of social life, particular forms of social practice, (for example, education, healthcare or criminal justice) where it did not exist before (or exist in the same way), and a readiness on the part of citizens to accept, or at least not actively reject, this. This readiness - a sensibility receptive to the social utility of technical devices and systems - is not formed in any direct sense by specifically penal discourses, but subconsciously, subliminally out of attitudes towards existing, already normalised, everyday communication technologies and their ubiquitous representations as “cool”, ultramodern and desirable possessions in contemporary media [39]. A decision to promote (or impose) new technology on the part of government, to claim political legitimacy for it, may initially be in tension with prevailing norms and values in the particular sphere of life where it is to be introduced, even among a technophile citizenry. Some may consider it ethically or practically inappropriate to adapt and apply *this* technology in *that* way, but once a particular technology has constituencies and champions, and been marketed as a plausible solution to an old problem, or a desirable solution to a newly constructed one [85, 69], the challenge to the status quo becomes very real, and some degree of change – accommodation if not full transformation - becomes ever more likely.

It is not difficult to see an “elective affinity” between the highly individuated focus of EM, and its emergence as an “industry”, and processes of “neoliberalisation” in Europe, the varying intensities of which in different states may help explain the varying prevalence and forms of EM. EM came into being, and has certainly evolved technologically, alongside the emerging preference for free (or quasi-) markets as policy instruments, the denigration (and contracting-out) of public services and reduction of public expenditure, the weakening of social democratic ideals of citizenship, welfare

and rehabilitation, the deregulation of labour and product markets, and the valorising of technoscience as a solution to political problems [28]. Even when neoliberalism has been factored in, mainstream theories of penal change have neglected EM and treated it as a somewhat marginal phenomenon. At the very least some insights may have been gained from the work of Manuel Castells [13], because the very existence of EM (unlike say, probation or community service) derives from the local availability of the global information and communication technology infrastructure that neoliberalism has galvanised into being. It emerged independently of, and still transcends, any specific penal concerns but it has afforded late modern governments a multitude of opportunities for e-governance, including a versatile penal resource *if and when they wish to customise it for this purpose*. While the tangible materiality of the architecture needed to make EM viable - the monitoring centres and staff, the cables and nodes of the internet, cellular communication networks and even high-orbit satellites - should not be underestimated, the monitoring process itself introduces an element of “virtuality” and “telepresence” into offender supervision which can indeed complement its traditionally personal, face-to-face elements, but which can also be marketed in ways which seemingly render them anachronistic and obsolete, poor and paltry qualities in comparison to EM’s meticulous “real-time” oversight of mobility and location, which makes possible new modalities of offender compliance and control [70].

From the outset, albeit without fully understanding the bigger technological picture, European probation services, and the CEP, recognised that the advent of EM potentially jeopardised the reputation and influence of traditional penal agents like themselves, and created the possibility of new configurations in offender supervision: with the new developments in England and Wales this has ceased to be merely hypothetical. A modern, twenty-first century criminal justice system *without* a professional probation service - except in residual form, for high risk offenders, (although even this may only be a temporary stop-gap) - is being politically imagined, and the first steps towards its implementation have already been taken. As part of a plan to subject unprecedentedly high numbers of offenders to electronic surveillance, the delivery of EM is being diffused into a matrix of commercial organisations - an outsourcing company with roots in accountancy, an aerospace company, a GPS technology manufacturer and a GSM provider - who have no meaningful history in offender supervision, no allegiances with or connections to the policy networks, bodies of evidence or professional values that have governed its operation in the past. Offender supervision is to be accomplished in a new way, with a new product, and new suppliers. The police may well become important in the new dispensation, (indeed, may be vital to its public credibility), but the relational, humanistic expertise built-up by the probation service is patently being dissipated, downgraded into non-professional (or at least *less* professional) mentoring services provided by an uncoordinated array of private and voluntary organisations whose quality in their early years of operation will in no way substitute for what has been lost. While the imminent demise of the probation service in England and Wales has not been directly caused by the advent and growth of EM, the former could not have been politically contemplated without EM’s prior existence (and the electronic infrastructure which supports it), and also - in the eyes of government - the perception of its unrealised potential for offender control. The rest of Europe, by no means unsuccessful in constraining the use of EM - so far - will doubtless cast a weary, suspicious eye on these dispiriting English developments. They should not, however,

feel themselves immune to the reverberations of the neoliberalism that is driving penal change across the English Channel, and they should further strengthen the legal, institutional and policy mechanisms they have already developed to ensure EM's appropriate and limited use⁶.

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