

Strasbourg, 23 September 2013  
pc-cp\docs 2013\pc-cp(2013)13E

PC-CP (2013) 13

**EUROPEAN COMMITTEE ON CRIME PROBLEMS**  
**(CDPC)**

**Council for Penological Co-operation**  
**(PC-CP)**

**SURVEY OF ELECTRONIC MONITORING (EM) IN EUROPE:  
ANALYSIS OF QUESTIONNAIRES 2013**

**By Mike Nellis**  
**Professor of Criminal and Community Justice**  
**University of Strathclyde, School of Law**  
**Glasgow, United Kingdom**

**Introduction**

This questionnaire is a result of the continuing thrives of the European organisation of Probation (CEP) to survey member countries use of EM, to document the nature and scale of their programmes, and identify new developments. It has been further adapted by the PC-CP in 2013 and sent to designated individuals responsible for EM in all the member countries of the Council of Europe. With promptings from the Secretariat, the response rate was respectable, but by no means complete: 23 countries responded, some to inform us that they did not do EM. However, some countries which have been doing EM for some time did not respond. The resulting tables are thus only a partial picture of the scale and nature of EM in Europe. They are grouped around three areas:

Table 1 Organisational Arrangements, Costs and Numbers

Table 2 Monitoring Processes

Table 3 Supplementary Issues

This questionnaire asked - in a way that original CEP version never did - whether any countries had decided against using EM, and while some mentioned pilots that had been run and not pursued or mainstreamed for a range of reasons, usually to do with perceived cost effectiveness, no country seems to have rejected the use of EM in principle, or seen it as a penal measure that they would never use, other things been equal.

Many of the answers on the questionnaires do not permit exact comparisons: people answered the same question in different ways, with different emphases. Any judgements about exactly what is happening in a given country should be made with care.

**Table 1 - Organisational Arrangements, Costs and Numbers**

Countries are evenly balanced between those who have multiple EM schemes, and those who have only one or two.

EM remains predominantly RF, but GPS is increasing in significance. Except where GPS is used, offenders on RF EM tend to be those who have committed less serious offenders

In most countries state agencies are responsible for administering EM, but often in conjunction with a local company who may do installations and provide technical back up, as well as buying or renting equipment from well-established on the market private suppliers. The use of a private company to deliver a full monitoring service is rare.

Numbers of people on EM remain relatively low. There is nothing to suggest EM is significantly displacing other forms of community supervision, where it exists, but this too warrants further investigation

Costs per day still vary - but this data in particular should be read with caution. Even though countries have explained what the daily costs take into account (typically costs of equipment, installation of the devices in people's homes and monitoring them from a monitoring centre the precise forms of accounting remain opaque.

<b>Country Type of scheme</b>	<b>Type of Tech</b>	<b>Service delivery by</b>	<b>Daily Cost (and components of cost)</b>	<b>Daily Numbers on 31.12.2012</b>
<b>Albania</b> pre-trial bail. court order. condition of court order. execution of prison sent. early release parole.	RF and GPS  (all schemes - regional pilots - started on 03.01.2013)	Probation Service and a contracted private company, GPS Global	Not available	Not available (because the scheme is so new)
<b>Austria</b> court order. condition of court order. execution of prison sentence	RF and GPS	Probation Service (NEUSTART)	22 Euros cost of social work and equipment	3 on condition of court order, 142 on execution of prison sentence, 50 on early release
<b>Belgium</b> execution of prison sentence, early release	voice verification for under 8 months, RF for 8months- 3 years	Prison Service and a contracted private company (3MEM) for the equipment only	29 Euros cost of equipment and probation and monitoring staff.	924 on execution of prison sentence, 371 on early release
<b>Cyprus</b>	RF  nationwide pilot	Prison service and G4S	no information	no information

<b>Country Type of scheme</b>	<b>Type of Tech</b>	<b>Service delivery by</b>	<b>Daily Cost (and components of cost)</b>	<b>Daily Numbers on 31.12.2012</b>
<b>Czech Republic</b>  court order early release	RF nationwide pilot scheme between 1.8.12 and 30/11/12	Probation and Mediation Service and a contracted private company, unnamed	25 euros  cost of equipment and monitoring service	41 on court order, 2 on early release (at end of pilot)
<b>Denmark</b>  Execution of a Prison Sentence	Mobile telephone frequency tagging	Probation Service and a contracted private company, 3MEM	56 Euros  cost of equipment and supervision programmes for inmates	317 on execution of a prison sentence
<b>Germany - Hessen</b>  pre-trial bail; condition of a court order; execution of a prison sentence; early-release post-release	RF	Probation Service and a contracted private company, using 3MEM equipment	30.03 Euros for all schemes  equipment, installation and monitoring costs	50 people on pre- trial bail; 41 in all on the condition of court order, execution of prison sentence and early release; 1 on post release
<b>Germany - Baden- Wuerttemberg</b>  execution of prison sentence	RF and GPS  pilot 10.2011 to 3/2012.	Probation Service and a contracted private company, Total Walther, using 3MEM equipment	27 Euros  equipment, installation and monitoring costs	0 - the pilot was over at this point
<b>Germany - Mecklenberg - Westerm Pomerania</b>  post-release	GPS	Prison Service and a contracted private company, Securitas, with 3MEM for the equipment only	109.76 Euros  equipment, installation and monitoring costs	5 people
<b>Germany - Federal GPS Scheme.</b>  post-release	GPS	Joint Monitoring Centre of the Federal States, using a private company and 3MEM as suppliers of equipment	cost data not available	28 people

<b>Country Type of scheme</b>	<b>Type of Tech</b>	<b>Service delivery by</b>	<b>Daily Cost (and components of cost)</b>	<b>Daily Numbers on 31.12.2012</b>
<b>Finland</b> execution of prison sentence, early release, inmate monitoring in open prisons	RF for execution of prison sentence and inmate monitoring,  GPS with mobile phone for early release	Criminal Sanctions Agency and unnamed private company	180 Euros for RF and 67 Euros for GPS  cost of equipment and installation, staff and training; cost of inmate monitoring unavailable	18 on execution of prison sentence; 150 on early release; inmate numbers not available
<b>Ireland</b>  early release	GPS including RF  scheme running nationwide between March 2013 March 2015	Prison Service and a contracted private company, Chubb Ireland (using Buddi technology, for the equipment only	6.45 Euros  cost of equipment	none on 31/12/12;  30 people monitored since start of scheme in March 2013
<b>Lithuania</b>  Post-release	RF  nationwide	Probation Service and a contracted private company, Serco Geografix	4 euros (approx.)  rental of EM equipment	5 on post - release
<b>Netherlands</b>  pre-trial, condition of court order, execution of prison sentence, early release	RF and GPS for all schemes, except execution of a prison sentence, which is RF only	Probation Agencies, with private companies supplying technology - RF by 3MEM and GPS by G4S	75 Euros for all schemes except Execution of a prison sentence , which costs 45 Euro.	94 on pre-trial bail, 23 on condition of court order, 132 on early release
<b>Norway</b>  execution of a prison sentence  early release	RF and GPS	Probation Service and a contracted private company, G4S	100 Euro for each scheme  costs of equipment, installation, monitoring and travel.	109 on execution of a prison sentence, 33 on early release

<b>Country Type of scheme</b>	<b>Type of Tech</b>	<b>Service delivery by</b>	<b>Daily Cost (and components of cost)</b>	<b>Daily Numbers on 31.12.2012</b>
<b>Portugal</b> pre-trial bail; execution of a prison sentence; post-release: and a Domestic Violence tracking scheme	RF and GPS	Probation Service and a contracted private company, SVEP (using 3MEM equipment)	14.2 Euros for each scheme, except the GPS domestic violence scheme which is 21.12 Euros  cost includes equipment, installation, staff and operations	495 on pre-trial bail, 100 on execution of a prison sentence; 15 on post release and 105 on GPS domestic violence scheme.
<b>Scotland</b> court order, condition of court order; early release; post-release. juvenile scheme	RF and GPS	Contracted private company G4S	data not available	241 on court order, 7 in condition of court order; 398 on early release; 17 on post release; 2 juveniles
<b>Serbia</b> execution of a prison sentence	RF	Prison Administration (using 3MEM technology)	data not yet available	284 on execution of a prison sentence
<b>Spain</b> early release	RF, voice verification and GPS	Prison Service using CLECE to install and 3MEM equipment	5.5 Euros  costs include savings on prison, equipment and monitoring	1746 on early release
<b>Sweden</b> execution of prison sentence; early release, inmate monitoring of open prisons	RF and GPS	Probation Service using 3MEM equipment	3.5 Euros  cost of equipment, installation monitoring	386 on execution of a prison sentence; no figure for early release; 381 for inmate monitoring
<b>Switzerland (Basel city)</b>  Execution of a Prison Sentence	RF	Prison Service and a contracted private company (3MEM) for the equipment only	65 Euros per day  costs of equipment, installation and monitoring	17 on execution of prison sentence, 5 on early release

**Table 2 - Monitoring Processes**

Some form of assessment, by one or more agencies, does take place before people are placed on EM - but exactly how this is done and what it entails - the assumptions made about the good that EM might do - warrants more attention.

Even where the law allows the electronic monitoring of juveniles as young as 14, the majority of offenders on it are adults.

Consent is the norm, both for the offender and his/her fellow occupants in a house - but in those countries who do not require consent - often, but not always, GPS schemes for higher risk offenders do not require consent of other householders either.

Most, but interestingly not all countries, have specified minimum and maximum periods in EM sentences and licences. Only where GPS is used with higher risk offenders do periods on EM extend beyond a year - three -four months seems to be the norm, although there is considerable variation.

Periods of full 24 hour lockdown are not uncommon, but this may disguise the fact that offenders are allowed time away from home, at the discretion of the authorities. This should not be a case of complacency, however the longer period of daily confinement the less tenable is the idea of using EM for rehabilitation in the community.

Revocation may be done by an executive agency as well as a judicial authority. Revocation rates - where, for whatever reason, the EM-order is not completed - are mostly low, suggesting that offenders selected for EM are well assessed for their likely compliance, or are offenders with low risks of reoffending.

A range of offenders are placed on RF EM, including some violent offenders (actual bodily harm rather than anything more serious) - but in the main they are non-violent. Sexual and violent offenders are the main exclusions from general EM schemes, but some GPS schemes are focussed specifically on them.

Country	Assessment by	Duration of Order	Daily Monitoring Periods	Revocation by	Commonest Offences
	Min. Age limit			Revocation Rate (RR)	Exclusions
	Offender Consent				
Albania	Assessment by probation service, only for execution of a prison sentence.	No minimum or maximum	24 hours	Prosecution and court.	no data available
	No age limit.			No data on rate	
	Consent not required				
Austria	by Neustart and monitoring centre	1 year max for both condition of a court order execution of a prison sentence	No minimum or maximum hours.	Prison	Crimes against property, assaults, torts of negligence
	14 upwards			RR 14.30% for condition of court order:	

Country	Assessment by	Duration of Order	Daily Monitoring Periods	Revocation by	Commonest Offences
	Min. Age limit			Revocation Rate (RR)	Exclusions
	Offender Consent				
	Consent required	Average days: 106		5.70% for execution of prison sentence	but special care in domestic violence and sexual offences
<b>Belgium</b>	Psychosocial Service in prison minimum of 18, except for juveniles aged 16-18 who are sentenced as adults at the court's discretion	Execution of prison sentence - minimum: 1 week. Early release: minimum 3 months.  No specified maximum	no minimum hours, maximum 24 hours, with a 12 hour maximum of unmonitored time	Prison Director or sometimes central government; in early release - a special tribunal	drug and theft offences for execution of a prison sentence; unknown for early
	Consent required	Average days on execution of a prison sentence 95.76; on early release 209.57 days		13.73% averaged across both programmes	No exclusions
<b>Cyprus</b>	no data yet available	no data yet available	no data yet available	no data yet available	no data yet available
<b>Czech Republic</b>	by Probation and Mediation service	8-121 days for court order; 37-56 days for early release	full 24 hours	Probation and Mediation Service	For court orders: obstructing arrest; neglect of compulsory maintenance; theft; menace due to intoxication
	15 upwards  Consent is to house or arrest or conditions of release, not specifically to EM; consent of fellow occupant not required	Average days on court order 50; Average days on early release 47 days		RR: 9.74 on court order; 0 on early release	in cases of early release: Obstructing arrest and actual bodily harm
					No exclusions
<b>Denmark</b>	Probation service	min 7 days, maximum 5 months from July 2013 - 6 months)	24 hours	Prisons and Probation Department	44% violence, 23% traffic code
	No age limit				
	Consent required				

Country	Assessment by	Duration of Order	Daily Monitoring Periods	Revocation by	Commonest Offences
	Min. Age limit			Revocation Rate (RR)	Exclusions
	Offender Consent				
<b>Finland</b>	The Criminal Sanctions Agency does all assessments		24 hours, but with discretionary periods of absence from home; on early release the offender is expected to stay home between 9pm and 6am		drunk driving, property crime; there are no restrictions offences eligible for early release
	15 upwards				exclusions include aggravated violence, domestic violence, or where offending can be done from home, e.g. drug dealing
	Consent required				
<b>Germany - Hessen</b>	Prosecutor /courts may ask Probation for report.	Average days: 42	at the discretion of the court	10% approx.	fraud, theft, robbery, drug related offences, traffic incidents bodily harm
	14 upwards				No exclusions
	consent required				
<b>Germany - Baden-Wurttemberg</b>	No assessment	30-180 days	tracking data collected 24 hours	Prison Director revokes	theft
	18 upwards	90 days average			RR: 10%
	Consent required			offenders excluded	
<b>Germany - Mecklenberg-Western Pomerania</b>	Multi-agency Assessment	2 years - 5 years (with possibility of indefinite extension)	tracking data collected 24 hours	Court revokes	high risk sexual and violent offenders
	age 14, but in practice, adults	No data on average		No data yet available on revocation, because of newness of scheme	no exclusions
	Consent not required, nor for fellow occupants				



Country	Assessment by	Duration of Order	Daily Monitoring Periods	Revocation by	Commonest Offences
	Min. Age limit			Revocation Rate (RR)	Exclusions
	Offender Consent				
<b>Germany - Federal GPS Scheme</b>	Multi-agency Assessment	5 year maximum, with exceptional possibility of extension to life, with 2 yearly reviews	tracking data collected 24 hours	Court revokes	sexual and violent crimes
	age 14, but in practice, adults			RR: no data yet available	offences not punishable by a sentence of under 1 year (unless a sexual offence) are excluded
	Consent not required, nor for fellow occupants				
<b>Ireland</b>	Prison Service assesses	variable length	12 hours for inclusion, 24 hours for exclusion zones	Prison Service revokes	variable offences
	18 upward	no average figures available		RR - 0%	no exclusions
	consent required				
<b>Lithuania</b>	Probation Service assesses	3-12 months	no data available	Probation Service	no data available on offences or exclusions
	above 14 upwards	no average figure available		RR: 6%	
	consent required				
<b>Netherlands</b>	Probation always assess	no minimum or maximum for pre-trial bail; no specified minimum or maximum for condition of a court order, though in practice it's 4 years)	24 hours in all instances	public prosecutor or judge in respect of community measures: prosecutor and prison service in respect of early release	Violent offences, theft and sex offences.
	16 upwards				no exclusions, except for sex offenders in exclusion from prison sentence
	consent required				

Country	Assessment by	Duration of Order	Daily Monitoring Periods	Revocation by	Commonest Offences
	Min. Age limit			Revocation Rate (RR)	Exclusions
	Offender Consent				
		average time on pre-trial and condition of court order - 3-4 months; on execution of prison sentence 27 days, on early release 4 months		RR: 3% for pre-trial bail and condition of court order; 6.5% for execution of prison sentence	
Norway	Probation Service assesses	14 days - 4 months	in both schemes - no minimum in practice - people serve 16-21 hours indoors  21 hours maximum	Probation Service in both schemes	traffic offences, drink drive and theft for execution of prison sentence; property and drug offences for early release;
	15 upwards	Average time: 33 days		no data on revocation rate	
	Consent required				Domestic violence is excluded from both
Portugal	Probation service assesses	No specified minimum or maximum.	full 24 hours	RR: for pre-trial scheme 3.13%; for execution of prison sentence 0.88%; for post-release 0%: for domestic violence scheme 4%	for pre-trial and post release: property offences and drug trafficking; execution of prison sentence: road crimes, drink driving;
	16 upwards	Average on pre-trial 6-12 months; on execution of prison sentence 9 months; on post release 6 months			
	consent required				No exclusions

Country	Assessment by	Duration of Order	Daily Monitoring Periods	Revocation by	Commonest Offences
	Min. Age limit			Revocation Rate (RR)	Exclusions
	Offender Consent				
<b>Scotland</b>	criminal justice social work assesses for court orders: prison service(with input from criminal justice social workers) assesses for early release and post release: childcare social workers assess for juveniles	12 month maximum  minimum of 14 days only where EM is imposed as a breach condition of a court order; early release 2 weeks - 6 months  no average figures available	12 hours for inclusion, 24 hours for exclusion zones	Courts for both court orders, Prison service for early release, Parole Board for post release, children's hearings for juveniles.	breach of the peace, vandalism theft and assault for court orders; data not available for early and post release
	16 upwards, with some juveniles below this	RR for court orders 30% approx.; for early release 19% unavailable post-release		there are some exclusions from early release, e.g. sex offenders	
	consent required				
<b>Serbia</b>	Assessment may be required	1 day - 12 months	12-24 hours	Penitentiary Administration  RR: 2-3 cases per year	Crimes on public transport, abuses of power
	Adults only	Average: 6 months			Crimes warranting prison sentences greater than one year are excluded
	Consent of the offender is not required, but the consent of fellow residents is				
<b>Spain</b>	Treatment Commission at the Penitentiary Centre	4 days - 6 months  average: 284 days	8-24 hours	Prison Service revokes	All offences are eligible, except sexual crimes and domestic violence, which are excluded
	40-45 year olds			RR - 2%	
	Consent is required				

Country	Assessment by	Duration of Order	Daily Monitoring Periods	Revocation by	Commonest Offences
	Min. Age limit			Revocation Rate (RR)	Exclusions
	Offender Consent				
Sweden	Probation and prison service both involved in assessment	Execution of prison sentence 14 days - 6 months -	8-23 hours	Probation Board	for execution of a prison sentence: drunk driving and assault
	Adults (with some juveniles)	early release 1-12 months approx.		RR for execution of a prison sentence 10%; for early release 6%	all offences on early release and in open prisons
	Consent required	average of 2-4 months in both cases			exclusions from executions of prison sentence: those who can offend from home and foreign citizens due for deportation after sentence

**Table 3 - Supplementary Issues**

Of these, the question of whether EM is integrated into support and rehabilitation structures. is arguably the most important. In the main, the questionnaires suggest that is - but there is still much room for a more detailed understanding of exactly what kind support is undertaken, and how well EM is actually integrated into it, and used (or not) to contribute to rehabilitative purposes. Unsurprisingly, most countries who did offer support indicated that it was provided by the Probation Service.

Remote alcohol monitoring is little used.

Victim notification of an offender’s involvement in EM is not uncommon. Some countries have regulations (victim registers) which make it mandatory in some instances. for others it is discretionary. The use of “bilateral” EM - where the victim carries a receiver which tells her if the GPS tracked offender comes within proximity of her - is not common.

Most countries seem to understand the importance of embedding EM within data protection practices. Some use existing national legislation on data protection, or existing offender management protocols, or both: some have devised EM-specific forms of data management. Only Germany specified clear periods by which data would need to be erased. More research into this - not wait countries mean by data protection in this context - is warranted.

Country	Remote Alcohol Mon.	Use of Support Programme	Victim Notification	Data Protection
<b>Albania</b>	no	yes, for execution of a prison sentence; early release and post release, not in pre-trial, court order or execution of a prison sentence	yes, conditions of court orders, not in other schemes	yes, in compliance with existing data protection legislation
<b>Austria</b>	yes	yes	only in the case of sexual offences, if the victim has requested prior information	no data available
<b>Belgium</b>	no	yes	no for execution of a prison sentence; in respect of early release victim has right to be heard before the court, and may learn of the decision that way.	yes, “by law and contract”
<b>Cyprus</b>	no data available	no	no data available	no data available
<b>Czech Republic</b>	no	no	no	anonymisation of private data through ID number, confidentiality agreements for staff
<b>Denmark</b>	no	yes	no	use of encrypted data; limited staff access to networks

Country	Remote Alcohol Mon.	Use of Support Programme	Victim Notification	Data Protection
<b>Germany - Hessen</b>	no	yes	"not necessarily"	data erased after 6 weeks
<b>Germany - Baden-Wurttemberg</b>	no	no	no	no
<b>Germany - Mecklenberg Western Pomerania</b>	available, but not in use	yes	discretionary decision: bilateral EM may be used	yes, data will routinely be deleted, staff are security cleared
<b>Germany - Federal GPS scheme</b>	no	yes	"not necessarily"	data erased after 2 months, in accordance with criminal code
<b>Finland</b>	no	yes	no	yes, in compliance with Criminal Sanctions Agency protocols
<b>Ireland</b>	no	no	yes, if victims is registered with the Prison Service	anonymisation of data through ID numbers.
<b>Lithuania</b>	no	yes	no	yes, regulated by general data protection legislation, and standard computer security
<b>Netherlands</b>	no	yes	yes, in all schemes where a specific victim needs protection	yes, in compliance with existing data protection legislation, and probation service privacy regulations.
<b>Norway</b>	no	yes	yes, in appropriate cases	yes, in compliance with data protection rules in the correctional services
<b>Portugal</b>	no	yes, even in the pre-trial scheme	victims not notified in the RF schemes, but bilateral monitoring is used in the GPS domestic violence scheme	Yes, in compliance with general data protection law.

Country	Remote Alcohol Mon.	Use of Support Programme	Victim Notification	Data Protection
<b>Scotland</b>	no	yes, for high risk post release cases and juveniles, at the courts discretion where Em is a condition in a court order - but use is predominantly stand-alone as a court order and early release	yes, if victim is registered in a victim notification scheme	yes, in compliance with general data protection law.
<b>Serbia</b>	yes	yes	no data available	yes
<b>Spain</b>	sometimes	no	yes, with GPS cases, the bilateral EM is not used.	yes, in compliance with general data protection law.
<b>Sweden</b>	no	yes	no	yes, in compliance with other offender management protocols
<b>Switzerland - Basel</b>	no	yes	no	no data available