

EUROPEAN PARLIAMENT



SCIENTIFIC AND TECHNOLOGICAL OPTIONS ASSESSMENT

STOA

PRISON TECHNOLOGIES

An appraisal of technologies of political control

Final Study

Working document for the STOA Panel

Luxembourg, July 2000

PE 289.666/Fin.St./EN

QA-ST-OA-148-EN-N

Cataloguing data:

Title: **PRISON TECHNOLOGIES**
(An appraisal of technologies of political control)

Workplan Ref.: EP/IV/B/STOA/99/14/01/B

Publisher: European Parliament
Directorate General for Research
Directorate A
The STOA Programme

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Date: July 2000

PE number: **PE289.666/Fin.St./EN**

This document is a working Document for the 'STOA Panel'. It is not an official publication of STOA.

This document does not necessarily represent the views of the European Parliament

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LIST OF ABBREVIATIONS

AFIS	Automatic Finger Imaging System
BRTC	Border Research and Technology Centre
CCTV	Closed Circuit TeleVision
CN	Alpha-chloroacetophenone (gaz)
CS	Ortho-chlorobenzylidene (gaz)
DoD	Department of Defence (US)
DoJ	Department of Justice (US)
ECHR	European Convention on Human Rights
EM	Electronic monitoring
EMHA	Electronic monitoring of people under house arrest
EU	European Union
GRIP	Group for Research and Information on Peace and Security
JPSG	Joint Program Steering Group
LECTAC	Law Enforcement and Corrections Technology Advisory Council
NCFS	National Center for Forensic Sciences
NIJ	National Institute of Justice
NLECTC	National Law Enforcement and Corrections Technology Center
OC	Oleoresin capsicum (gaz)
OLES	Office of Law Enforcement Standards
OLETC	Office of Law Enforcement Technology Commercialization
OS&T	Office of Science and Technology

VS

Videosurveillance

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PRISON TECHNOLOGIES

FINAL STUDY

EXECUTIVE SUMMARY

The present study is in line with the extension of a previous STOA research, published in 1997 and entitled “*An appraisal of technologies of political control*” (PE 166.499). The report highlighted the appearance of a trend in Europe to privatize the prison system. Furthermore, it outlined the pressures to which the public authorities are subjected to substitute technological innovations for prison personnel, with a view to reducing costs and fighting against prison overcrowding. The present report works towards five aims : **(1)** to give the European Parliament a description of the most recent technologies, used or usable in prison environment and determine their degree of penetration in the European Union **(2)** to assess the efficiency of these technologies in relation with their objectives **(3)** to analyse the impact of their use on detainees and their relatives, especially having in mind the already carried out experiments **(4)** to identify the dangers and risks they involve regarding the respect of fundamental freedoms **(5)** to present political options and recommendations to the European Parliament, in order for it to take adequate initiatives aiming at protecting the rights of people placed under surveillance or detention, while preserving European interests.

Two replies are usually offered to the problems of overcrowding and growth of the costs of the penal system : privatization of the penal function and use of new technologies ; one often entailing the other. This phenomenon, prompted by an American conception of order and security, influences today the European debates on the reform of the penal system and leads to the introduction of two types of technologies in the prisons : surveillance technologies and neutralization technologies.

SURVEILLANCE TECHNOLOGIES

Several techniques are used to carry on a monitoring of offenders. The electronic monitoring, the videosurveillance and the use of biometrical identification devices are the most used means and are successively investigated under this chapter.

The electronic monitoring, that rests on the use of a technical device including a transmitter bracelet (bangle usually fixed at the ankle of the offender), a receiver and a central computer, allows the public authorities to oblige the individuals to live in a given location, mainly at home. The electronic monitoring systems can be classified in three different categories : active, passive and combined systems.

According to the advocates of the electronic monitoring, its introduction would have the advantage : at first, of being a more economical measure than imprisonment, thus reducing the costs of the penal system ; then, of presenting an effective alternative to imprisonment for certain categories of offender and helping this way to reduce prison overcrowding ; and finally, of

proposing a sanction better adapted to the offender and consequently, reducing the rate of re-offending (recidivism).

Following the enquiries and analysis carried out and the opinion of the consulted doctrine, it does not appear clearly that those objectives are met. Firstly, a social control net-widening that accompanies the electronic monitoring of people under house arrest comprises three effects : the over-penalization of offenders, the growth of the resources conceded to the correctional system and the increase of the total use of prisons. This would have as a consequence, a global growth of the financial resources needed for the implementation and the functioning of the system. Secondly, beyond the fact that the electronic bangles are often used for offenders that would not have been put in gaol without the existence of such a measure, it is not proved that the prison population can be significantly reduced by the use of this type of surveillance. Thirdly, the experiments that have taken place in various member States give clear indications that it is illusory to believe in a reduction of the rate of subsequent offences.

But the electronic monitoring of people under house arrest contains other weaknesses. Its intensive use have a very negative impact on the mental health of people under surveillance : the drastic conditions that are imposed and the poor respect of the rules relating to the protection of privacy may be the cause of depression or tenseness in the relations, which would favour conflicts between the person under monitoring and its relatives.

A danger is also present for the security of the citizens : in the actual progress of technology, the electronic monitoring cannot prevent the offender to commit new offences. Therefrom can arise a wrong feeling of security, brought about by the technology.

An investigation carried out by the GRIP reveals that few member States resort to electronic monitoring in an intensive way (up to now, one can enumerate England and Wales, the Netherlands and Sweden). Experiments have however taken place in several other States and it is not impossible to see the measure applied in half the Union in a short term.

Progress made in the development of these technologies of surveillance will soon eliminate most of the functioning shortcomings, and new applications, proceeding to the GPS technology (*Global Positioning System*), will soon permit the 'tracking' of individuals. Moreover, a new generation of 'reactive' equipments is currently under investigation. The resort to such technologies presents important dangers of misuse, since they will allow a combination between technologies of surveillance and neutralization, thus offering the possibility of a corporal intervention (through the use of small transmitters) on the people being monitored.

If it is true that the resort to electronic monitoring can, in many cases, avoid the incarceration with all its bad consequences, it does not constitute the only kind of surveillance that permits the house arrest. It is thoroughly possible to imagine another form of control, less intrusive and more 'human', for instance an intensive social support. Therefore, either the offender should be considered as dangerous for the population and has to be incarcerated, or he deserves a certain degree of confidence and it should be possible to consider a measure of rehabilitation, better adapted to the offender and that does less violate his fundamental rights. This second approach is the one defended by the GRIP.

The videosurveillance, besides, appeared more recently on the European continent. The use of cameras to transmit images onto closed circuit televisions (*CCTV*), has seen developments without

precedent in the last few years : cameras cover today not only public areas and private places, but also prisons. The drawbacks linked to the use of cameras have almost been removed thanks to the progress of the technology : they become very small and can tap pictures in sometimes very difficult conditions. In addition, the computer assistance permits to realize more, especially in the handling of data.

It is possible to find out several positive aspects in the resort to videosurveillance, for instance the dissuasive effect of the sole presence of the cameras and the possibility of recording data that can be very useful in case of subsequent problems. However, some drawbacks are also present that can lead to violation of rights of the people under surveillance.

On the one hand, some people may feel an oppression having negative effects on their state of mind ; as a matter of fact, some depressions and other psychological problems have been found on offenders under intensive monitoring. On the other hand, the reduction of contacts between the prison personnel and detainees leads to frustrations from both parts, and the guardians are less able to perceive any tensions that may exist and react in a more adequate fashion.

Among other propositions, the GRIP suggests, regarding videosurveillance, that guarantees should be set to make sure that monitoring is not carried out without strict conditions as to the use of data recorded in the framework of the surveillance.

The resort to videocameras is often accompanied by techniques of biometric control that allows, especially in the access control, the identification of individuals according to physical or behavioural characteristics (face recognition, Iriscan, etc.). Thanks to the crossing of information from various sources, it is possible to get a complete portrait of the persons monitored, often without their knowledge. Technologies of biometric identification are very efficient, but also very dangerous, because they offer a possibility of an increasing intrusion in the private life of individuals. As it is the case for videosurveillance, the GRIP draws the attention on the dangers of an intensive use of these technologies that can lead to a misuse towards a maximum control society, and proposes the resort to such technologies in the sole cases where it is not possible to obtain comparable results thanks to measures including more human contacts.

NEUTRALIZATION TECHNOLOGIES

Military developments made in the field of “non-lethal” weapons have also reached the prisons. Several technologies excel thus in the art of neutralizing people, while diminishing – at least in principle, the lethal risk or permanent injuries. It is the case for stunning technologies and chemical incapacitating agents that have no sales restrictions in several member States of the European Union. Most recent developments in optic and acoustic weapons are also detailed in the study.

In the various choices that are presented to them, the authorities often have to face an important lobbying of private companies – that bring about the new fascination for technology – while having to respect compulsory rules of protection of fundamental freedoms.

The privatization of prisons, trend imported from the United States, often entails a increasing resort to new technologies, given the fact that they may help reducing the costs of functioning. The objectives of the penal justice and those of private companies do not coincide and it could be

appropriate to enquire about the risks of diversion that are present in such a conception of the criminal justice.

Through this study, the GRIP invites the European Union to continue to work towards the construction of its own model of values in the field of criminal justice. This can imply, if not the refusal, at least the adaptation to its specificity of answers brought by the United States to solve, amongst others, the problems of increase of costs and prison overcrowding. The prisons, that constitute a microcosm, authentic mirror of a society as a whole, can constitute the entrance door for advanced technologies that could eventually threaten the respect of the fundamental freedoms of the entire population. For these reasons the GRIP calls for a debate, that implies transparency, for a reform that must work towards more human contacts and relations.

Every technological innovation shall not necessarily be excluded of a penal model respectful of Human Rights and human dignity, but their introduction should be assessed with consciousness and carefulness and the role of technologies should not go further than an auxiliary and 'facilitator' of social relations with offenders.

OPTIONS

Considering the failure of electronic monitoring (in the sense of the wearing of an electronic bracelet by offenders) to meet the objectives to which it was devoted,
Noting the threats to the respect of public freedoms posed by the introduction of electronic monitoring in the penal sector,
Regretting the constantly increasing recourse by the Member States of the Union to electronic monitoring as a technical method of ensuring the enforcement of sentences or preventative measures,
Facing the growing trend towards videosurveillance networks, especially within penitentiary establishments,
Lamenting the few specific measures implemented by the Member States of the European Union for dealing with the harmful aspects of videosurveillance,
Noting the perverse effects that this can have on the mental state of persons placed in custody,
Considering that it is important to manage the private areas where the offender knows that he will not be monitored,
Observing the growing trend towards the use of control technologies,
Given the common opinion of specialists met on this matter,

Having regard to the European Convention for the protection of Human Rights and Fundamental Freedoms, especially article 8,
Having regard to Article 6.2 of the Treaty of the European Union,
Having regard to Directive 95/46/CE of 24 October 1995 relating to the protection of personal data,
Having regard to the *Règles de Groningue* relating to non-prison measures and sanctions (International Penal and Penitentiary Foundation, October 1988),
Having regard to Resolution (73) 5 on the standard minimum rules for the treatment of prisoners and Recommendation R (87) 3 on the European prisons rules, adopted by the Committee of Ministers of the Council of Europe,
Having regard to the philosophy of the Report (A4-0369/98) and the Resolution on prison conditions in the European Union (improvement and alternative penalties),
Having regard to the Report PE 166.499 of 19/01/1998 (*An appraisal of technologies of political control*),
Having regard to the initiatives of the European Parliament in the area of respecting fundamental rights (and particularly, the 16.03.2000 Resolution on the elaboration of a Charter of fundamental rights of the European Union),

GRIP formulates the following options and recommendations :

REGARDING ELECTRONIC MONITORING

- 1.** The European Union, led by the European Parliament should make sure to be an actor of its own culture whilst taking into account constructions such as Human Rights. This means on the one hand, renouncing some solutions (presented under the lobbying of the private security industry, largely dominated by the United States), and on the other, developing in accordance with European specifications, new solutions to remedy the problems linked to the increase of the prison population in the Member States
- 2.** Facing the “desocialising” character of incarceration, the European Union should repeat its encouragement to the Member States for the development of alternative sanctions (promote so-called rehabilitative sanctions)
- 3.** This encouragement should be done by refusing to resort to technologies such as electronic monitoring, which present grave dangers of misuse towards a maximum control society and constitute a threat of violation of public freedoms. In this respect, the European Parliament is

invited to review its position on the use of electronic monitoring (adopted in points 29 and 30 of the Resolution relating to prison conditions – implementation and alternative sanctions)

4. Any new reform advocated in the sector of enforcing sentences should work toward more *humanity*, understood as a necessary accompanying of the offender in his social rehabilitation process, making the offender more responsible and bringing attention to the victim ; which implies the introduction by Member States of a coherent criminal policy that offers means (financial and human) for the realization of the objectives
5. The European Parliament is invited to adopt a **Resolution** aiming :

On the one hand, at encouraging the Member States of the European Union who resort to electronic monitoring :

1. To implement democratic supervisory mechanisms, namely :
 - a) to ensure that the decision of placement being monitored is surrounded by adequate legal and judicial guarantees
 - b) to ensure the follow-up and supervision of the monitoring by an adequate commission
2. To progressively abandon the use of electronic monitoring in favour of *human* monitoring measures (development of alternative sanctions such as house arrest with social accompanying)

On the other hand, at discouraging the adoption of similar mechanisms by states who, although at the stage of experimentation, do not yet practice electronic monitoring systematically

6. It is proposed to the European Parliament to adopt a **Declaration** aimed at taking a political stance against the growing reliance on measures of control such as electronic monitoring which violate some of the most basic public freedoms and constitute a threat of a maximum monitoring regime
7. It is suggested that the European Parliament open a debate on the use of electronic monitoring technologies (and even on a larger scale, on the use of technologies of control) ; which could take the form of a **discussion in a public meeting** within the Parliamentary Assembly

REGARDING VIDEOSURVEILLANCE

8. The European Union should be seen as a democratic leader in videosurveillance, which implies transparency, and should move towards the adoption of rules in the subject. The European Parliament should ensure urgently that a debate takes place on the introduction of videosurveillance within Member States, as much within as outside jails
9. The European Parliament should invite the Member States to implement democratic vigilance mechanisms to control the use of videosurveillance
10. The European Parliament should seek to adopt, with regard to videosurveillance, a clear and coherent position, which should take into account the harmful effects that too intense observation may have on offenders (and more generally, on the citizens of the European Union). Thus, it should declare itself in favour of a limitation of videosurveillance to

situations where the possibility of implementing other surveillance systems which encroach less on the private lives of offenders does not exist

11. The European Parliament is invited to implement a **Code of Conduct** with regard to videosurveillance (which is applicable within prisons). This should address the rules to be respected by both the individuals who carry out the surveillance and the people responsible for the installing of the equipments.
It should also :
 1. Include a prohibition on all sale or exchange of data (images or not) from video observation systems
 2. Take its inspiration from existing rules in certain Member States of the European Union (United Kingdom, Belgium), especially with regard to the adoption of three principles :
 - a. Principle of legitimacy (use only failing other less restrictive methods for achieving the intended objective)
 - b. Principle of conformist use (use in accordance with the objectives, which implies that the purposes should be announced in advance)
 - c. Principle of proportionality (which implies not keeping data beyond the date where it is noted that the aim for which they were recorded has not been achieved)
 3. Prohibit the use of hidden cameras that allow the tapping of pictures without the person's knowledge
 4. Deal carefully with private areas where the offender knows that he is not and will never be observed
 5. Make the communication of the existence and placement of cameras obligatory
 6. Prohibit all recording of data without the consent of the person concerned
12. It is suggested to the European Parliament to establish a **Commission** which can, after having studied the use made of videosurveillance, propose the adoption of legislation or specific measures
13. It is proposed to the Parliament to implement the necessary means to ensure the **adaptation** of existing regulations to videosurveillance (particularly Directive 95/46/EC of 24 October 1995 relating to the protection of personal data)
14. It would be desirable for the European Parliament to commission a study on the psychological effects that resorting to intensive videosurveillance may have on the offenders. This could be done through a **request** to the Committee for the prevention of torture and inhumane or degrading treatment

REGARDING BIOMETRIC IDENTIFICATION TECHNIQUES

15. In view of the possibilities for obtaining personal data (relating to physical or behavioural characteristics of individuals) offered by these biometric identification technologies and considering the possible abuses that could occur during their use, the European Parliament is advised to adopt a position and rules relating to the protection of the data obtained, similar to those provided for in the discussion of videosurveillance

16. Having regard to the dangers that the use of biometric identification technologies carries in relation to the respect of the private life (namely the notion of *privacy*), it is suggested to the European Parliament to invite the Member States to only resort to the intended technologies if it impossible to achieve comparable results using measures that risk breaching the respect of fundamental freedoms less ; the risk against which one tries to fight by using new technologies being often disproportionate regarding the breach of liberties

REGARDING TECHNOLOGIES OF NEUTRALIZATION

17. The European Parliament should make sure that the use of technologies for the maintenance of order is reserved for public and security services and possibly, for certain private approved companies. Urgent provisions should be adopted to stop the rapid expansion in the sale of these devices to the general public (notably by mail order) and private security services. Public access to these technologies strengthens the ideology of self-defence and comfort, in a way, defiance towards public authority
18. It is suggested to the European Parliament to ask the COARM Group to examine the possibility of explicitly including in the common list, security and police equipments provided for in point 5 of the European Union Code of conduct on Arms Exports, adopted by the Council on 25 May 1998, with particular attention to the new electroshock equipment and technologies. This list should be frequently revised in order to remain adapted to the speed of technological evolution
19. The European Parliament is advised to invite the Commission and the Member States to take a stance in favour of a revision :
- a) Of the 1993 Convention on the prohibition of the development, production, stockpiling and use of chemical weapons and on their destruction, in view of a clarification and reinforcement of the rules relating to the use of anti-rioting chemical agents in civil and military operations for the maintenance of peace
 - b) Of the 1980 Convention on prohibitions or restrictions on the use of certain conventional weapons which may be deemed to be excessively injurious or to have indiscriminate effects, with a view to extending the effects to the case of using these weapons outside situations of war and to examine the need to adopt new additional protocols, namely to limit or prohibit the use of electroshock devices
20. It is suggested to the European Parliament to commission a specific study on the use of electroshock equipments and incapacitating chemical sprays and agents whose use appears contrary to Article 3 of the European Convention for the protection of Human Rights and fundamental freedoms, which stipulates that “*no one shall be subjected to torture or inhuman or degrading treatment or punishment*”
21. Whilst waiting for specific provisions regulating the use of neutralization technologies, the European Parliament is advised to ask the Commission to bridge the legal gap concerning electroshock devices by inviting the Member States to adopt a moratorium, in the name of the principle of precaution, by which they undertake to prohibit the production, import, export and distribution of these devices

STUDY

APPRAISAL OF THE TECHNOLOGIES AVAILABLE IN THE PRISON ENVIRONMENT

Options for the European Union

“The penal system is too heavily dependent on technology. We must not let technology define criminal policy”.

Don HEAD, Executive Director of Corrections in the province of Saskatchewan, Canada.

1. INTRODUCTION

The present research is in line with the extension of a STOA study published in 1997 entitled “An appraisal of the technologies of political control” (PE 166.499)¹. This study, drafted by the Omega Foundation of Manchester, mainly highlighted the appearance of a trend in Europe to place part of the management of the penitentiary system in the hands of the private sector, namely the supervision and transportation of prisoners or the management of institutions. Furthermore, the report outlined the pressures to which the public authorities are subjected to substitute prison personnel for technological innovations, with a view to reducing costs and fighting prison overcrowding. The report also made it clear that this policy of “storing” prisoners under technological control to the detriment of a human rehabilitation policy could have strong social and political consequences, to which we will add economic and ethical.

This study was carried out between 1 January and 20 May 2000 by the “Group for Research and Information on Peace and Security” (GRIP), an independent research institute founded in Brussels in 1979 which studies questions of defence, security and disarmament. Through its work, GRIP aims to contribute to a better understanding of these problems from the point of view of an improvement of security, in Europe and throughout the world.

This work is the result of numerous consultations, interviews and lectures. We must in particular express our thanks to Professor Pierre LANDREVILLE of the University of Montreal in Quebec and Professor Dan KAMINSKI of the Université Catholique de Louvain in Kingdom of Belgium, for their collaboration and the precious advice that they gave us by a final reading of the file.

We would also like to thank the following for their amicable co-operation (in alphabetical order) :

Mr Georges KELLENS, Professor of criminology, Université de Liège
Mr Marcel LAMOUREUX, Assistant Director, Quebec correctional service
Mr Philippe MARY, Professor of criminology, Université Libre de Bruxelles
Mme Sonja SNACKEN, Professor of criminology, Vrije Universiteit Brussels
Mr Gilbert SOUCY, Director, Quebec correctional service
Mr Pierre TREMBLAY, Advisor, Correctional service of Canada
Mr Steve WRIGHT, Omega Foundation, Manchester

and all the Directors and governors of the prison administrations in the Member States of the Council of Europe, who were kind enough to answer our queries and questions.

The technologies mentioned in this final report were mostly developed in the United States of America, where the fascination with technology dominates the entire debate surrounding the reform and functions of the penal system. The impact of these technologies on European society will therefore be examined in the light of experiences across the Atlantic, the context of which is described in Section 2.

Noting that the technicalisation of the penitentiary system is generally accompanied by its privatisation, Section 3 will assess whether these two trends are concomitant and actually led by the public authorities or whether, on the contrary, privatisation results in its own technicalisation dynamics, guided by private industrial interests and contrary to the general interest.

Sections 4 and 5 will tackle the actual technological devices. For practical reasons and clarity, we have chosen to divide this presentation in two distinct parts. The technologies referred to by our study are, in effect, of fundamentally different natures and therefore have different implications according to whether they relate to :

- b) In Section 4, monitoring systems : namely, electronic monitoring, videosurveillance networks and biometric techniques for recognition.
- c) In Section 5, neutralisation systems : the devices anticipated in this section are to be considered as weapons and are the direct product of, on the one hand, the evolution of military doctrines in the non-lethal weapons sector in the United States and, on the other hand, the close technological collaboration between the departments of Justice (DoJ) and Defence (DoD) in this country.

In each of these two parts, the study will successively discuss :

- a) The availability of the technologies, their description and possibly, the companies concerned ;
- b) The effectiveness of these technologies, regarding the objectives that they are supposed to meet, especially the reduction of costs and the costs of prison overcrowding ;
- c) The physical and mental impact on the individual and his relatives ;
- d) The abuse, recognised or potential, in the use of these technologies ;
- e) The respect of national, European and international regulations.

In the prison environment, we encountered an overvaluation of technology, supposed to meet as far as possible, all the economic and security constraints and obviously finding a growing number of enthusiasts in Europe. Of Anglo-Saxon inspiration, the programs aiming at substituting human methods for technology are multiplying in the European Union. They are based on the privatization of the penal system, for the purpose of reducing the costs, the fight against prison overcrowding and in the name of protection of society.

“*Technofallacy*” or universal cure-all ? This final report will provide *its* answer but not *the* solution. Above all, it wishes to make members of the European Parliament and the competent organs of the European institutions aware of the consequences of a technological development, which represents, beyond the treatment of prisoners and their rights, a threat to the liberty and privacy of all European citizens.

2. THE AMERICAN PENAL EMPIRE AND EUROPEAN TEMPTATIONS

According to a recent study of the *Justice Policy Institute*², the United States will enter the third millennium with an imprisoned population at the three levels of the prison system – town and county gaols, state prisons and Federal prisons – which verges on two million individuals for a total population of around 275 million inhabitants (making around 700 prisoners per 100,000 inhabitants). Furthermore, if persons placed on probation – around 3.26 million – and those on parole – some 685,000 individuals – are counted, that makes almost 6 million Americans who are under penal supervision, a figure that represents 5% of men over eighteen and one black man out of five³. By way of comparison, in the European Union, for a population of around 375 million (Eurostat), the number of people in prison is estimated at 400,000, making around 100 prisoners per 100,000 inhabitants)⁴.

The databases of the American penal machinery, to which not only the public services (social services, FBI etc.) have access but also occasionally private individuals and bodies (notably employers), today include 55 million “rap sheets” concerning around thirty million individuals, making almost one third of the country’s adult male population⁵. Some of these files are accessible by means of the Internet, as it is the case, among many others, for sex offenders, even those freed after having served their sentence, as we show in *figure 3* with an extract from the web site of Alaska’s prison authorities. These databases will continue to grow, thanks to the rapid development of genetic filing.

To meet this expansion of the penal system, 213 new prisons have been built during the last five years under the Clinton administration, not to mention the proliferation of private establishments. At the same time, the number of employees in Federal and state prisons alone has gone from 264,000 to 347,000, making a growth of more than 31%. In total, the American penitentiary system had, in 1993, more than 600,000 employees, which makes it the country’s third biggest employer after General Motors and the Wal-Mart supermarkets.

This expansion is the immediate consequence of the “zero tolerance” doctrine, defined by WACQUANT as *an instrument for the justification of judicial and police management of the poverty that disturbs*, and which is, from New York, *propagated across the globe at a lightening pace. And with it the military rhetoric of the “war” against crime and the “recovery” of public space(...)*.

On the European Continent, it is initially in the United Kingdom of Great Britain and Northern Ireland that the concepts and devices promoted by the American neo-conservative *think tanks* are taking hold, *to the point that it is difficult today for an official of a European government, WACQUANT believes, to express himself on “security” without some “made in the USA” slogan emerging from his mouth*. The European “study missions” are multiplying across the Atlantic, inescapably leading to the adoption of American concepts and instruments of a resolutely offensive penalty, certainly suited to the needs and national traditions of each one, but uniformly in accordance with the expansion of the police and criminal machinery indispensable to the requirements of advanced neo-liberalism : the “restoration” of order and “less of State”.

Although the American experience of the brutal regression of the social State to the penal State can be partially explained by an economic culture and a racial caesura peculiar to the United States, WACQUANT nevertheless observes that *the temptation to lean on judicial institutions and penitentiaries to stifle the effects of the social insecurity generated by the imposition of precarious employment and by the correlative shrinkage of social protection is also making itself felt throughout Europe, that the neo-liberal ideology and the politics that it inspires are being gradually spread as much in the subject of employment as in justice*⁶. As proof of this, WACQUANT gives the rapid and constant increase in the number of incarcerated persons in almost all the Member States of the European Union – during the period 1980-1997, the detention rates of imprisonment have grown of 20 to 30 %, whilst they have multiplied by 3 in the US. Only a few countries have managed, with a voluntarist policy, which takes a very particular analytical and political value in this context, to reduce or stabilise their prison population, by enlarging parole releases and making judges aware of the concrete realities of the prison world (*table 1*).

This expansion of the penal machinery and especially prison overcrowding, weighs heavily on the effective functioning of the correctional services and is also rapidly becoming an unbearable burden for the State. Faced with this social and budgetary challenge, the response of the public authorities is often summed up by two words : privatisation and technology.

**Table 1. Prison inflation/deflation in the European Union
Period 1983-1997**

	1983	1990	1997	Variation
England – Wales	43,41 5	50,10 6	61,940	+ 43 %
Federal Republic of Germany	62,52 5	48,54 8	60,489	- 4 %
French Republic	39,08 6	47,44 9	54,442	+ 39 %
Italian Republic	41,41 3	32,58 8	49,477	+ 20 %
Kingdom of Spain	14,65 9	32,90 2	42,827	+ 192 %
Republic of Portugal	6,093	9,059	14,634	+ 140 %
The Kingdom of the Netherlands	4,000	6,662	13,618	+ 240 %
Belgium	6,524	6,525	8,342	+ 28 %
Republic of Austria	8,387	6,231	6,954	- 8 %
Hellenic Republic	3,736	4,786	5,577	+ 49 %
Kingdom of Sweden	4,422	4,895	5,221	+ 18 %
Kingdom of Denmark	3,120	3,243	3,299	+ 6 %
Republic of Finland	4,709	3,106	2,798	- 41 %
Ireland	1,466	2,114	2,433	66 %

Source : Pierre TOURNIER, *Annual penal statistics of the Council of the Europe, 1997 study*, Strasbourg, Council of the Europe, 1999 ; extract from the book of Loïc WACQUANT, *The prisons of misery*, Le Seuil, Dijon, 1999, pp. 97 and 149.

3. PRIVATIZATION AND TECHNOLOGIES : A MUTUAL STIMULATION

The privatisation of several activities of the prison system is not a new phenomenon. Since the 19th century, service and rental contracts have linked prison authorities and private entrepreneurs, especially for the transport of prisoners and the use of the latter as cheap labour. Nevertheless, the prison system, at least in the Western countries, has, until recently, remained a fundamentally public and centralised system.

Since the beginning of the eighties however, we are witnessing in several countries, mainly Anglo-Saxon, the transfer of complete prison management to the private sector. Several factors can explain this new trend towards the privatization of prisons ⁷ :

- The explosion of the prison population, which is pushing the public authorities to create new capacities ;
- A public finance crisis which has forced governments into budgetary restriction and reduction of public expenditure ;
- A general trend towards the privatization of State businesses and the dismantling of public services, which appeared among the agenda priorities of the conservative governments of this period, namely Thatcher and Major in the United Kingdom and Reagan and Bush in the United States, forerunners in the privatization of prisons.

Simultaneously, the governments also saw in privatization, a method of reducing the influence of unions whilst stimulating innovation, as much managerial as technological.

In the United States, the privatization of prisons has seen strong development since the mid-eighties, mainly in the Southern states. It forms today an industrial sector showing a growth of 35% a year, according to Charles THOMAS, professor of criminology at the University of Florida ⁸. In 2000, it can be seen that a small group of 5 companies currently share 120 private prisons, housing a total of some 120,000 prisoners (about 6% of the number of prisoners in the American territory).

According to the New York Times, this growth has given birth to a new profession : that of “prisoner placement consultant”. These “brokers” – pivots of a strong competition between public and private prisons – are responsible for transferring prisoners, often from one state to another, from overcrowded public prisons to private prisons, which, like any hotel, are anxious to fill the beds in order to ensure their profitability ⁹.

In 1995, some 100,000 prisoners were moved from one state to another despite protests from lawyers and families, often making it impossible to still visit them. Texas is the main host state : one third of the private prisons are located there while several public prisons, recently constructed, are almost empty.

Table 2. The main private prison management firms in the United States

<i>CORRECTIONS CORPORATION OF AMERICA</i>	Leader of the American market, with a turnover of USD 400 million and almost 50,000 prisoners in its institutions http://www.correctionscorp.com
<i>AVALON COMMUNITY SERVICES</i>	Based in Oklahoma, mainly manages prisons in the states of Oklahoma, Texas and Colorado. http://avaloncomsvs.com
<i>CORNELL CORRECTIONS</i>	Management of 55 correctional institutions for young offenders or adults, spread among 12 states. http://www.cornellcorrections.com
<i>CORRECTIONAL SERVICES CORPORATION</i>	Management of correctional institutions for young offenders or adults in 12 states and Puerto Rico. http://www.correctionalservices.com
<i>PRISON REALTY TRUST</i>	Management of 50 prison establishments in the United States and the United Kingdom. http://www.prisonreit.com
<i>WACKENHUT CORRECTIONS</i>	Number two in the United States and market leader outside the United States. http://wackenhut.com/wcc-pr.htm

Source : GRIP DATA 2000

These transfers organised by private brokers are often done without the host state's knowledge and can lead to complex situations. In 1996, two prisoners escaped from a private prison in the suburbs of Houston. The Texan authorities were unaware of the presence of these prisoners on their territory and for a good reason : they originated from Oregon and had been transferred through a private channel. Allan POLUNSKI, President of the *Texas Board of Criminal Justice*, admits to being in total ignorance with regard to the arrival in Texas of prisoners from other states.

Questions are also raised concerning detention conditions in prisons run by private companies. On 30 March 2000, the DoJ lodged a complaint against the major private prison operator in the United States, the *Wackenhut Corporation*, accused of abusing mechanical, medical and chemical methods of constraint, of economising on their budget by cutting back on food and the costs of educational and health costs, and of employing underpaid and incompetent guards. The complaint concerned the youth detention centre in Jena, one of the two private prisons in Louisiana. The other, located in Tallulah, was handed back to the State after the discovery of similar facts¹⁰. Despite its complaint against the *Wackenhut Corporation*, the DoJ signed at the same time a contract with this company for the construction, financing and management of a private 1200-bed prison in North Carolina.

The *Wackenhut Corporation* shows a turnover of USD 2.2 billion, increasing from 23% in 1999, and controls 55% of the non-American private market. For such companies, anxious to expand outside the United States, the bridgehead for penetrating the European market is naturally the United Kingdom. The privatisation movement there is heavily influenced by the *Adam Smith Institute* and supported by the *Home Affairs Committee* since its visit to private American prisons and this despite objections from the *Prison Officers Association*, several Labour members of Parliament and organisations such as the *Prison Reform Trust* ¹¹. Currently, a good dozen British prisons are privatised, mostly with the participation of an American company : the Agecroft prison is managed by the American firm, *Prison Realty Trust* of Leavenworth (Kansas) ; the prisons at Doncaster, Lowdham Grange, Marchington, Medomsley and Pucklechurch in England, as well as that at Kilmarnock in Scotland, are managed by the American firm, *Wackenhut Corrections Corporation* of Palm Beach Gardens (Florida), to mention but a few.

Table 3. The main private prison management firms in the United Kingdom

<i>GROUP 4</i>	Subsidiary of the Swedish conglomerate, <i>Securitas International</i> and leader of the British market.
<i>UKDS (United Kingdom Detention Services)</i>	Subsidiary of the American imprisonment market leader, <i>Corrections Corporation of America</i> and the French fast food company <i>Sodexho</i> , which already serves a number of semi-private French prisons, opened within the framework of the “Plan 13,000”, launched under the Chirac government in 1986.
<i>PREMIER PRISONS SERVICES</i>	Born out of the alliance between the <i>Wackenhut Corporation</i> , the American number two, and the English <i>Serco</i> , mainly responsible for the retention centre for foreigners at Gatwick.
<i>SECURICOR CUSTODIAL SERVICES</i>	A British company.

Source : GRIP DATA 2000

The situation in the United Kingdom remains at present an isolated case in Europe. Nevertheless, although initiated by the conservative governments, the majority changes have done nothing to curb the trend towards privatisation. Other countries traditionally attached to their public services – namely, Belgium, France and The Netherlands – are now turning towards “semi-private” prison formulas, “alternative financing” or the subcontracting of various tasks (escorts, catering, etc.).

This brings us to several more fundamental considerations. When privatised, the prison must make a profit. Perhaps it is possible in certain cases to show, even though several recent scandals ¹² tend to show the opposite, that private prisons can be cleaner, safer, better equipped, more efficiently managed and, in the short term, provide an immediate and flexible answer to the problem of prison overcrowding. The essential question remains no less than whether or not such a prison

corresponds to the objectives of imprisonment and criminal policies in a Europe that desires an “area of peace, justice and freedom”.

We think there are enough reasons to believe that it is none of those possibilities.

Firstly, in our liberal economy, market forces will act in this sector as in any other. The development of the private prison sector, supported by effective lobbying, will exert constant pressure for an increase in the number of private prisons and their capacity, a condition indispensable for its survival and growth. The positive impact of privatisation on overcrowding is therefore illusive in the long term : the state prisons will certainly be unblocked but to better optimise a greater number of private prisons. Seen from this angle, the privatisation of the prison system will lead to a definite expansion of the prison system.

Secondly, the reduction of costs and the maximisation of profits will lead, as in the commercial sector, to the desire to minimise the number of staff necessary for the functioning of the institutions. A private prison system will therefore encourage investments in extensive control and electronic monitoring devices ¹³, and neutralisation and repression equipment whose implementation authorises a reduced staff whilst ensuring maximum security. The technological solution could thus be substituted for the presence of staff with the consequential disappearance of social relations between the prisoners and prison staff and a dehumanisation of the prison world.

Criminologists, almost unanimously, warn against this evolution towards a policy of “storing” prisoners in a panoptic system, completely incompatible with the objectives of justice.

Professor DE GREEFF, psychiatrist and criminologist, proposed to define human relations by reference to two instincts : that of defence and that of sympathy. It is possible to notice here a over-valorization of the instinct of defence regarding the one of sympathy. The disappearance of a risk of direct confrontation against the former Soviet Union and the difficulty to identify a new dangerous enemy for the United States can, at least partially, explain the reconversion of industries and authorities in the defence towards “internal enemies”. The over-estimation of the risks and of the means of protection against these risks, appears to be unavoidable, in a society that confuses *certainty, safety and security* ^{14 and 15}.

4. SURVEILLANCE TECHNOLOGIES

4.1. ELECTRONIC M

4.1.1. General considerations

Electronic monitoring (EM) or electronic tagging – *surveillance électronique* in the French terminology – refers to the technologies used outside prisons within the framework of the enforcement of sentences or preventative measures. *Stricto sensu*, it covers the technologies used to physically control the presence of an offender (it will therefore not be a matter in this section of email monitoring or other types of electronic monitoring).

EM is not to be confused with the electronic monitoring of people under house arrest (EMHA). While EMHA consists of a sentence or a measure restricting freedom imposed by a public authority and obliging the individual being monitored to live in a given location, EM is only the technical method used to ensure that the sentence or measure is respected. Even if it is true that it is the appearance of EM that has brought about the craze for house arrest that we are seeing today, the two measures are not to be confused in any way. Since the application of EM in the penal sector has, until now, been used exclusively as a measure accompanying the house arrest, both are analysed together.

The concept of “house arrest” covers several terms according to the degree of severity of the measure¹⁶. The *curfew* offers the lightest constraint. In this case, the person being monitored is only obliged to remain at his residence during certain fixed hours, usually the night. *Home detention*, the intermediate stage, is more rigorous. In this situation, the individual may only leave his designated premises during certain periods, for professional or medical reasons, or any other motive considered serious. *Home incarceration* itself is the most severe form of house arrest. Here, the person being monitored may not leave his residence, except occasionally for brief and limited periods.

After having presented the different existing technologies, this section of the study examines the effectiveness of the EM methods with regard to the objectives that have been fixed for it and the promises made by its promoters. The dangers engendered by the implementation are analysed at the same time. This is done in the light of the experiments carried out and taking into account the effect of using these monitoring mechanisms on the different actors (individuals being monitored, their family and friends and citizens).



4.1.2. Description of the technologies

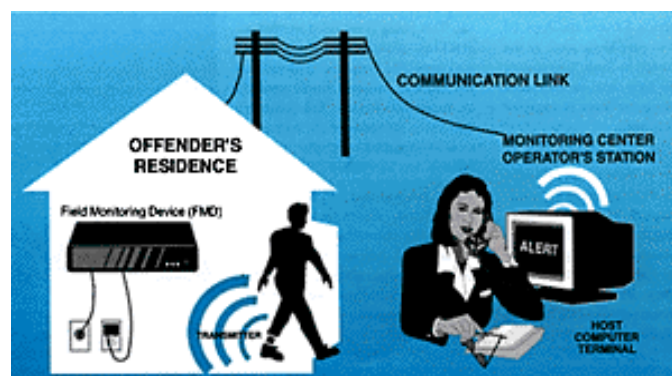
The different EM systems are based on the use of a technical device consisting of a transmitter, a receiver and a central computer. Active monitoring systems can be distinguished from passive systems, to which combined systems must be added¹⁷.

4.1.2.1. The active system

The active monitoring system, also known as the *continuously signalling system*, is the most commonly used system. The technical device does not require the co-operation of the person being monitored and enables, as its name suggests, the individual to be followed in an uninterrupted fashion. It is made up of three elements (*Figure 1*) :

- a miniature transmitter, about the size of a packet of cigarettes and a weight of 100 to 142 grams, presented in the form of a bracelet (or bangle) fixed to the ankle or wrist of the person being monitored, which transmits a detectable coded and continuous signal within a range of 50 to 70m (*Figure 2*);
- a receiver-transmitter, linked to the telephone at the home of the person being monitored, which picks up the bracelet's signal and transmits it to the central computer via the telephone line;
- a central computer, situated at the premises of the supervisory services, which receives the signals and generates a warning report in the event of an absence or anomaly in the signal transmitted by the bracelet.

Figure 1. **Diagram of an active monitoring system**



Source : <http://www.bi.com>

A variant of this system uses radio waves for the transmission rather than the telephone line : the signal sent by the offender's bracelet is then picked up by a portable receiver, generally located in the car of a monitoring patrol, in a certain range around the offender's residence, workplace or a place where he may not go (a pub for example).

These active devices may also be completed by a receiver worn by a victim (previous or potential) who may fear the presence of the person. If the offender comes within a certain range of the victim's home, a proximity detector instantly informs the latter who may then automatically dial the emergency services number. This device is especially used in cases of domestic violence. Its range is around 60m inside a building and 200 metres outside.

4.1.2.2. The passive system

The passive system or *programmed contact system* uses the telephone to check whether or not the offender is at the designated location. The system is based on a central computer programmed to telephone the offender during the hours of house arrest, either randomly or according to a predetermined schedule. Two options exist for this passive system :

- In the first situation, the person being monitored is fitted with an irremovable electronic bracelet on the wrist or ankle. The bracelet is programmed to show a specific number on each call. The offender must then dial that number on his telephone in response to the call from the central computer. A variant consists of having to insert a small module contained in the bracelet into a device linked to the telephone during the supervisory call.
- In the second situation, the system is based on a voice verification (*Voice Recognition System*). During a call, the central computer compares the voice of the person who responds with the electronic record of the offender's voice recorded when he was enrolled into the system. Facial recognition may be used instead of voice recognition.

The most recent passive systems may also include an *Alcohol Testing Device*, which enables a breath test to be carried out to check if the offender has respected the ban on alcoholic drinks¹⁸. The system is coupled with a voice recognition test and some manufacturers are even currently proposing to link a video system to it which enables the transmission of a photo of the individual to the central computer.

Figure 2. Photograph of a transmitter bracelet



Source : <http://www.bi.com>

4.1.2.3. *The combined systems*

Various combinations of the systems mentioned above are conceivable. Thus, it is possible, occasionally or if the transmission signal is of poor quality in an active system, for the presence of the offender at the premises of house arrest to be verified by voice recognition. These different combinations are designed to ensure greater reliability in the method of control.

4.1.2.4. *Emerging technologies*

Professor P. LANDREVILLE (University of Montreal) distinguishes three generations in EM technologies¹⁹. The techniques described above form part of the first generation which covers the monitoring of an individual in a given location.

The second-generation techniques, currently in development²⁰, refer to tracking the individual (the *tracking tag*). It will be possible with the perfection of these technologies, to follow the movements of a person wherever they are in real time. In fact, explains LANDREVILLE, many objects or animals have already been tracked by technologies which operate on systems such as triangulation or mobile phone technology. It is conceivable to fit this equipment with devices enabling habits to be followed and the registration of certain physiological signs such as the heart rate, blood pressure, adrenaline level or even the presence of alcohol or drugs in the blood.

It is in this second generation that, among others, systems based on the *Global Positioning System* (GPS) should be classified, of which *Sandia National Laboratories* in the United States is currently proceeding with the evaluation (thanks to subsidies granted by the *National Institute of Justice* at the *American Probation and Parole Association*). Organised around a group of 24 satellites in orbit, linked to atomic clocks, GPS is a system created at the end of the seventies and developed by the *US Department of Defense* (DoD), which enables the determination by triangulation of the position of an object or individual (here the offender equipped with a GPS transmitter bracelet). The device can locate the transmitter 24 hours a day and in three dimensions (longitude, latitude and altitude) with a precision within around 10m²¹. President Clinton has announced the demilitarisation of this system with effect from 1 May 2000 and Europe, in turn, has for some time been preparing the implementation of its own satellite network, named “Galileo” (it should be in place by 2008)²².

Although the GPS adapted to the monitoring of offenders or the accused has not yet been perfected, namely because of its high cost (from 30 to 40\$ a day)²³, it is nevertheless one of the probable developments of EM. In the penal sector, pilot experiments are in progress for the application of various second-generation technologies including GPS²⁴. It will not take ten years to see the first applications of these new technologies which appeared heavily futuristic a few years ago, but which could soon be taking the place of the first generation of equipment.

As for the third generation, it will no longer be monitoring alone, but more likely, an interaction with the individual. When, after detecting certain signals transmitted by the monitoring system, the mechanism indicates that the person enrolled in the program is about to commit an offence, it will be capable of acting on the offender’s body. LILLY²⁵ (US) and NELLIS²⁶ (UK) talk about miniaturisation and this future possibility of placing small transmitters under the skin or in the body. This “reactive” system would then be able, in the form of an audible signal or an electric shock etc. to warn, punish or attempt to prevent the person from committing the prohibited act. As

LANDREVILLE writes, although this third generation of electronic monitoring is perceived as more hypothetical by engineers²⁷ or more futuristic by the industry representatives²⁸, it must nevertheless be seriously considered and not as a simple speculation. The research is in progress.

4.1.3. The experiments

A long time ago, renegades were branded in order to be identified in the community ; and in the 19th century, the United Kingdom government anticipated the possibility of marking released prisoners with indelible ink²⁹. This was, to a certain extent, the forerunner to what the technology implemented in various marking and EM programs permits today.

EM was first thought up in the United States in the sixties as a method for locating people with psychiatric illnesses who were not inmates. The idea was granted to Dr Ralph K. SCHWITZGEBEL and his team who, since 1964, have advocated the application of EM to offenders. It has since seen constant development. At the beginning of the eighties, the explosion of the prison population in the United States, the fruit of a redefinition of criminal policies based on security and general or selective neutralisation³⁰, favoured the proliferation of EMHA and the development of monitoring technologies.

The way having been opened by the United States who organised the first pilot projects on prisoners in 1983, it had taken 6 years for Europe, starting with England and Wales, to follow the trend.

4.1.3.1. In North America

Although the **United States** were the first to introduce the measure, as much in the Federal entities as the federate, they are still far ahead in the number of individuals monitored electronically. In 1995, the population under EM was already between 50,000 and 70,000³¹ and in January 1998, according to the monthly bulletin of the *National Law Enforcement and Corrections Center*³², 1,500 EM programs involving 95,000 individuals were in progress across the whole of the United States. This exponential growth can be explained by the interest accrued in alternative sentences and the need to reduce prison overcrowding, but also by the development of the technology market. It is once again in the United States that the extension of EM programs concerning categories of people monitored has made the most progress. In certain states, minors³³ may be subject to monitoring measures and apart for convicted persons the sentenced, the enrolment of accused persons is also being accepted³⁴.

The good results seen with their southern neighbours and the proof that technology offers new possibilities has prompted **Canada** to also launch itself into experimentation with EM. Projects of placement under EM have been initiated in four provinces. After one experiment started in British Columbia in 1987 succeeded, Ontario, Newfoundland and Saskatchewan have also launched themselves in the program development. Not all the experiments were conclusive but the failures have been noted and new, revised experiments take the place of the previous ones.

In this context, the **Quebec** situation is worth mentioning in that it strongly distinguishes itself, through its choices, from the policies of the other states³⁵, and even from the general trends surrounding EM. Being of the same opinion on this point as LANDREVILLE, the deputy minister

for correctional services has, on several occasions, opposed the introduction of EM³⁶. Similarly, in May 1997, the General Direction of the Correctional Services of the Public Security Ministry produced an analysis that was very critical of the use of this measure.

After a thorough analysis of the facts³⁷ and despite the problems encountered through prison overcrowding, the Quebec services have, since 1995 and up to now, opted for a reform of criminal politics as a whole without including programs of placement under EM³⁸. Without a doubt, this ambitious work will only see the fruits of its labour in the long term but the political courage which underlies such a decision and which necessitates the implementation of means, as much financial as human, for the service of the project, must certainly be admired³⁹.

4.1.3.2. In Europe⁴⁰

According to a study on the introduction of EM technologies, carried out by GRIP within the Departments of prisons in the Ministries of Member States of the Council of the Europe, the American “model” aims to impose itself, little by little and in accordance with the sensitivities and experiences of each state. Most of the great European states have already introduced or anticipate the possibility of introducing EM into their penal system. The presentation of this development is done in two ways : firstly, an explanation, state by state on the degree of penetration of the technologies ; then, an analysis of the framework of application of the measure.

a. Degree of penetration and equipments used in Europe

England and **Wales** launched the first pilot projects in 1989. The failure of these initial experiments did not shake the will of the *Offender Tag Association (OTA)*, seconded by an important lobbying of technology manufacturing companies, to introduce the measure into the arsenal of sentences and preventative measures. Three laws were adopted which provided the necessary basis for the application of EM to prisoners.

On the basis of the *Criminal Justice Act 1991*, 1,128 offenders are subject to EMHA as a sentence depriving them of freedom ; on the basis of the *Crime Sentences Act 1997*, 20 minors, 5 young offenders and 10 people having defaulted on fine payments are currently being monitored ; and under the *Crime and Disorder Act 1998*, 2,083 offenders are placed under EM as a method of enforcing penalties, 237 of which are only monitored at the weekend. In total therefore, the population being monitored today amounts to 3,246 individuals, against a prison population of 64,632 prisoners. Passive technologies are used by private companies who ensure monitoring (*Premier Monitoring Services Ltd.*, *Securicor Custodial Services* and *GSSC of Europe Ltd.* with equipment supplied by : *Premier Geografix Ltd.*, *Elmo Tech* and *EMSI - Canada*). In many cases, the voice recognition system is used (*Voice Track/Texas* and *Group4*).

A new bill for the future use of EM (*Criminal Justice and Court Services Bill*) is currently under discussion in Parliament. This will allow the tracking of individuals. New equipment would therefore be implemented.

With regard to **Scotland**, the data obtained within the GRIP study must be approached with caution, the services declaring that no program or study was in progress when pilot experiments had been carried out there since August 1998 and were due to continue until March 2000⁴¹. The

adoption of the *Crime and punishment Act* in 1997 made house arrest accompanied by EM a possibility as a sentence restricting freedom. *GSSC (USA)* and *Geografix Ltd.* (England) were granted the contracts for the implementation of the programs.

In **Sweden**, a law that came into effect in August 1994 made an experiment based mainly on the American model possible. After noting good results from the experimentation⁴², the Minister for Justice decided to generalise the system throughout the country for the period 1997-1998⁴³. Since 1 January 1999, EM can be practised systematically within the framework of a house arrest. Currently, 340 offenders are placed under monitoring according to the active system. The technology suppliers are *BI Inc.* for the first experiments and *Elmotech Ltd.* (Israel) for the implementation of the definitive program.

In **The Netherlands**, a two-year pilot project was begun in 1995⁴⁴. To our knowledge, EM is not subject to any legislation and the only texts dealing with the subject are of an administrative nature. After the conclusive results of the experiment, the system of placement under electronic monitoring was adopted definitively and 100 people are today enrolled in a continuous monitoring program⁴⁵. *ADT* (Netherlands) is handling the implementation of the program with the technical assistance of *BI Inc.* (USA).

In **France**, the principle of placement under EM was adopted in 1997⁴⁶ according to the bill of Senator G-P. CABANEL⁴⁷ with no prior experimentation. No individual is currently subject to an EM measure but studies have been carried out⁴⁸ and experimentation using four different systems is due to start in July 2000 (continuous signalling, programmed contact, hybrid systems and also systems for permanent location)⁴⁹. Calls for tenders are in progress to award the contracts. It is nevertheless to be emphasised that there is a long way to go from here to the actual implementation of the system. Automatic oppositions exist. Thus, Professor J-C FROMENT (University of Grenoble) instituted a debate in 1996, on the use of EM⁵⁰.

In **Belgium**, the disappointing results of a first experiment carried out in late 1996 (using active monitoring and voice recognition technologies) did not discourage the succeeding governments. A new experimentation, regulated by various ministerial circulars and based this time on wearing a bracelet (American equipment developed by *Belgacom Alerts Services* and *Security Link from Ameritech*), has been undertaken since March 1998 with approximately 30 offenders.

In 1996, a regulation from the Penitentiary Administration of **Catalonia** introduced the possibility of offering house arrest to certain categories of offender who agreed to be subjected to these measures of supervision, this being done either in some form of EM or other. Since 1996, 149 offenders have benefited from similar measures but nevertheless without EM being used : visits and telephone calls were the only checks done⁵¹.

Experiments are still underway in other Member States of the European Union, Italy for instance. However they did not want to transmit any informations relating to this subject.

b. Framework of the application of EM in Europe

The flexibility of application is one of the main characteristics of EM. It is possible to adapt it and combine it with various other measures throughout the penal system, from being remanded in custody to the end of the sentence. Furthermore, this is one of the arguments put forward by its

promoters and which is in part responsible for its growing success. Always added to one form or another of house arrest, it is used in several ways in Europe.

EMHA can be designed as an enforcement measure for those sentenced to short term imprisonment (from 3 months to 3 years depending on the state concerned) or the end of sentences. The objective, according to the case, is to avoid any time spent in prison, an environment considered too “desocialising” or to prepare the offender for a “gentler” return to society life. The phase is thus seen as transitory. It is within this framework that most European states (Netherlands, England and Wales, Belgium, France and Sweden) have turned to EMHA.

EMHA can also be a sentence in itself. One does not talk in this case about a sentence of deprivation of liberty but rather of restriction of liberty. England and Wales and the Netherlands opted for the introduction of this type of punishment as an alternative sentence (placement under EM is therefore decided upon by the judge as a full time sanction).

EM can also be an additional condition to probation or parole. It is in this situation that the greatest risk of *net widening* (*confer infra*) exists as EM is no longer an alternative but is added to the existing measures. This possibility has been the object of experimentation in England, but today only France is still seriously considering it.

EM can also be applied to those charged with crimes, as is frequently the case in the United States. England and Wales have resorted to EM in a pilot experiment as a condition of release under caution within the framework of remand in custody. Italy applies it in the form of special house arrests⁵². France will also look at this possibility in the tests to come⁵³. Questions need to be asked about this. With regard to the objectives, firstly, placement on remand may be ordered for safety reasons, protection of the investigation or to avoid attempts to escape; it is difficult to understand how EM can meet one of these objectives. Then, from the point of view of the criminal procedure, prior and justified reasons are required for placing someone on remand, these reasons are not always present in the heading of EM.

Through the fact that EM offers no security guarantees, certain categories of offender are automatically excluded from the various EMHA programs. These are generally violent offenders, those convicted of sexual offences or drugs offences or even reoffenders. In certain states, placement under EM is used almost systematically for certain categories of offence. This is the case for traffic offences in Sweden.

4.1.4. Appraisal of the technologies

4.1.4.1. Objectives

Three motives have been evoked by advocates of EM to call for the introduction of the system into the arsenal of sentences and measures restricting liberty. The introduction of EM, coupled with house arrest, would have the advantage :

- of being a more economical measure than imprisonment and thus reducing the costs of the penal system;
- of presenting an effective alternative to imprisonment for certain categories of offender and thus helping to reduce prison overcrowding;

- of proposing a sanction better adapted to the offender and consequently, reducing the rate of re-offending (recidivism).

Numerous studies have been carried out in an attempt to demonstrate on the effectiveness of EM with regard to its initial objectives. We will successively examine the answers provided by EM to the light shed by the experiments carried out.

4.1.4.2. Effectiveness of the technologies

a. Economic efficiency

The reduction of financial costs generated by the management of penal establishments has for some time, been one of the main preoccupations of many governments of the Member states of the Union⁵⁴. The trend towards privatization of penal establishments is not a strange phenomenon. With costs linked to the quantity of prisoners and with their numbers, in general, rising, motivation is high to find alternatives to imprisonment. The pragmatic argument of cost reduction for public finances, generated by resorting to EMHA, weighs in favour of the introduction of EM.

The simplest method used to evaluate the economic efficiency of EM consists of dividing the total spending for this alternative measure by the total number of days that the probationer has spent on the program for a given period. If this daily cost is less than the daily cost for a prisoner, then the alternative measure is considered efficient. Several studies have thus tried to show the economic efficiency of the measure⁵⁵, but there are strong opinions about this method of calculation.

According to PALUMBO *et al.*, the studies, which compare the average daily costs of EMHA with those for imprisonment, are limited in approach⁵⁶. In the same sense, J-C. DALLAIRE, in his 1997 analysis for the Directorate General of Correctional Services of Quebec⁵⁷, supports that the method of calculation used does not reflect the true costs of the EM system. Its economic efficiency cannot, in effect, be evaluated without having a more global view of the economic impact of the measure. This involves taking into account the effects of enlargement of the social control net which accompanies the measure. Its effects are threefold : the over-penalisation of offenders (*offender net widening*), an increase in resources for the correctional system (*system net widening*) and an increase in the total use of prisons.

An analysis of the literature demonstrates that the EMHA programs are targeted at low risk offenders, namely those who would have been suitable for other measures, such as probation, rather than EMHA. Therefore the measure principally applies to those offenders who would not, in any way, have been incarcerated if the measure had not existed. With probation programs being generally less expensive than EM, there is already a factor of increased costs. Furthermore, from a more general point of view, over-penalisation leads to further economic weight on public finances.

According to several authors (MAINPRIZE, 1992 ; PALUMBO *et al.* 1992) the existence of these programs creates a expansion of the system, which adds to the basic equipment and human resources of the correctional system. In this context, the method of comparison of costs does not take into account marginal cost, meaning, the cost of adding or subtracting a prisoner to the existing population, this marginal cost being relatively weak.

According to PALUMBO⁵⁸, the introduction of EMHA has for consequence an increase in the resort to imprisonment. Space freed in the penal establishments is, in general, occupied by new prisoners, which signifies that prisons continue to work to a quasi-identical regime. The result translates as a prison expansion (increase of flows), but not by a decrease in costs.

Moreover, as well as the investments and the costs inherent to the running of the system, certain elements increasing the cost are often discarded. For example, it has been proved that, in most cases, EM programs have increased the correctional personnel⁵⁹. Electronic monitoring requires more personnel and more qualified persons than those who will eventually be spared from amongst the traditional prison personnel. This helps to add to costs, or at best, transfers them.

From an economic point of view, you will notice, the efficiency of the measure appears quite uncertain. The effects of EMHA on the reduction of the prison population will now be considered.

b. Effect on prison overcrowding

The pressures born from the growth in prison overcrowding are often high on the list of repressive policies, in particular with regard to the especially high costs of imprisonment, which are caused by the quantity of prisoners. The acknowledgement of “desocialising” cause and effect that prisons can generate plays equally in favour of a reduction of the prison population : penal and financial objectives tend to coincide here.

According to some, resorting to EMHA would constitute an efficient alternative to a prison sentence for certain categories of convicts, and would thus participate in the reduction of prison overcrowding. The opinions are far from unanimous.

A decrease in the prison population would imply that EMHA is an effective measure as an alternative and a competitive sanction for a significant proportion of the prison population. Even if the system develops, American studies estimate that only a small proportion of convicted people will be placed on a similar program in a given year. In the DALLAIRE report, these studies refer to EM programs on the scale of those in the United States⁶⁰, it seems clear that these programs *could not divert a high enough number of people to make a significant notch in prison overcrowding*. Moreover, we have already explained in the previous section that EM “captures” those offenders who would not be imprisoned.

The danger of over-penalization is especially evident when you learn that judges often tend to give short prison sentences, when they know that it is possible to carry out these sentences in the form of an EM placement (which will not always be the case, given the rigorous conditions for granting a program.)

For LANDREVILLE, reducing overcrowding is more a question of the duration of a sentence (the impact of this duration on the actual number, that is to say the number of people imprisoned at a given moment), than the flow (departures and admissions). Because of their small scale, EM programs only have a limited impact on the actual number, whereas they increase the flow by an expansion of the social control net, as has already been analysed.

According to Professor D. KAMINSKI (Université Catholique de Louvain), a radical reduction in penal overcrowding can only come about through measures which reduce prison admissions,

measures taken on departures only having a very relative impact on the prison population. EMHA constitutes a measure, which is aimed, for the most part, at departures from these establishments ⁶¹. According to him, *the EM measure consists less of a new alternative to prison than of an increase in the conditions of early release. The necessity of reducing the prison population demands that radical decisions be made, which would annihilate the specific usefulness of a technological device.*

With regards to what we have already seen, we can conclude on the doubtful nature of the efficiency of the measure vis-à-vis the decrease of the prison population. This leads us to turn our attention to the response EMHA can bring to the problem of re-offending.

c. Effect on the rate of re-offending

The problem of recidivism should be distinguished from that of the immediate safety of citizens who could come into contact with the person being supervised. This second point is analysed further in this study.

According to DALLAIRE, two main conclusions are drawn from the literature consulted : firstly, EM does not seem to be more efficient than other measures of manual monitoring ; and secondly, the fad of measures orientated towards EM, based on the illusion that technology is a cure for all complex human problems, seems to have passed, and a decline has become apparent across the Atlantic, in aid of a resurgence of the support, escort and treatment dimension.

Following the experiences of the different States, no analysis has been carried out in order to prove the efficiency of the measure vis-à-vis the “re-socialisation” of offenders. Moreover, the few studies undertaken, had a great deal of difficulty in showing a correlation between the introduction of EM and a drop in the level of re-offending. The positive results which can be taken from the different experiments ⁶² are for the most part linked to the conditions of these experiments (intensive social support, choice of offenders). These are conditions, which, alone, could have an influence on the level of re-offending.

The official and government studies show apparently convincing figures and arguments to demonstrate, on the whole, the efficiency of the measure. In selecting the figures and statistics, they ultimately say what is expected of them because it is difficult, at this precise time, to prove the efficiency of EM at this level. Besides, the empirical evidence shows that, without a psychosocial component, a reduction in the level of re-offending is altogether illusory. Placement under EM does not constitute treatment, but as its name indicates, is a simple monitoring measure. It is difficult to see how this may help the offender in his work for social reinsertion.

In the same way, the installation of an EM system requires guarantees that can only be found in the trust placed in the person being monitored, it is for this reason that the conditions for obtaining EMHA are very restrictive. In order for the program to work properly, it is necessary to lay down, after the candidates have been accepted, additional conditions that the person being monitored must respect throughout the program (only done in order to avoid technical transgressions). This done, the number of rules that must be respected and, at the same time, the chances of disobedience are increased (technology this time helping to identify the infringements). Recreation of an area of comparable liberation (life at home) with monitoring and too restrictive conditions increases the risk

of revolt. According to this view, it could be said that control technologies, condemn to re-offending rather than prevent from it ⁶³.

Once more, the fact that EMHA does not play the desired role can be lamented, if EM does not meet the objectives from the outset, should the question not be asked: who will benefit from the introduction of EM ? It is having in mind this questioning that we will analyse the measure on the person being monitored and his relatives.

4.1.5. Effects on the individual and his relatives

Having analysed EM from the angle of the authority who envisages such a measure, it is proper to look at it from the side of the individual who is subject to the measure, the person being monitored and his family circle, who are affected as well by placement under EM.

The presence of the offender at the heart of his family has earned encouragement for EM. The families questioned (and in particular the husband or wife) saw EMHA as a gentler alternative to a prison sentence ⁶⁴. It is the reasoning which is generally followed, but which is based on a comparison that is not appropriate to the object being considered.

In the introduction we touched on the distinction that it is proper to make between house arrest (HA) and EM. The comparison between EMHA and imprisonment is badly chosen: most of the advantages that you can recognise in EMHA are found in the use of house arrest and not in EM ⁶⁵. EM is not the only type of monitoring, which makes house arrest possible. It is altogether conceivable to imagine other less intrusive and more humane ways. We are not going to enter into a debate about the development of alternative sanctions, but turn our attention to the fact that alternatives do exist and it is advisable to take advantage of them. The question should rather be : are we going to offer the means necessary to put into place measures of probation and social support, real “keys” to social re-insertion ? ⁶⁶

LANDREVILLE recalls that every penal measure should assess itself in relation to a principle of moderation, according to which it is advisable to use the least severe means, the least coercive, to attain the desired, legitimate goals. EM has not satisfied this principle : it replaces confidence schemes (probation, parole) with control ones ; without taking into account that it leads to a technicalisation of the work of correctional personnel, while favouring control to the detriment of psychosocial support.

Another point which it seems important to mention : the context in which the choice is proposed to the offender, between EMHA and imprisonment. The offender who fulfils the conditions and finds himself faced with this alternative will do anything to escape prison. The situation offers a choice which is not really a choice and the option for EMHA will without doubt, be quickly preferred. In this fair’s-fair logic, the person being monitored is not always able to evaluate the rights he waives. If he can even manage it, he will often be ready to tolerate a lot (too much) to escape imprisonment.

The most important problem for the person being watched is the impact that it can have on an individual’s private and family life and that of the family circle. Many specialists highlight the too intrusive nature of this measure and remark that monitoring increases a negative impact on the mental health of the person being watched. In addition to a poor respect of rules concerning the

protection of 'privacy', it has been shown that the drastic conditions imposed on the person being monitored can have a very negative effect on his spirits. The image of the 'electronic ball and chain' is given to depict the EMHA program. Some offenders (very few) have refused EMHA and prefer to stay in prison rather than "*be sunk in liberation under intolerable conditions, which often lead to re-imprisonment in increased numbers*"⁶⁷. It is true that the fact of remaining at home, especially concerning *home incarceration*, can provoke tensions in relations between the person being monitored and his family circle. A stay-at-home scheme imposed on the person being monitored, faced with the comings and goings of those close to him, tends to increase the need for freedom and therefore favours the hatching of conflicts.

EM could be considered, as we have written, as a more humane measure, since it enables the individual to stay in the community and remain available for work and in contact with family and friends. However, it leads to a fundamental alteration in the type and degree of control that the State can exercise over offenders, to the extent where it redefines public and private places, which have always been the object of free choice without control of the citizens.

EM uses the family circle and the employer of the prisoner to ensure informal control and replace public agents. This leads to interference between the private and public spheres, which is difficult to bear for the detainee and those close to him⁶⁸.

The recent testimony of a young Swede placed under EM says much about the conditions he must face : "*it allowed me to continue to work and see my friends (...) I couldn't refuse. It isn't easy to adapt, (...) it was during the week-ends, when I only had an hour to get some fresh air, that it was the most difficult.*" In order to ensure respect of the conditions, the controllers turned up at his house unexpectedly several times a week, especially in the evenings⁶⁹.

Moreover, the EMHA implies that the person being watched supplies a financial participation for the use of the equipment. This privatisation of costs generates discrimination between the people who can have recourse to the measure according to their wealth.

If second or third generation technologies are once applied, the impact on the private and family life will be all the more marked and the intrusions will be even bigger.

4.1.6. Dangers and risks of abusive use

4.1.6.1. Dangers for public safety

EM, as applied at present, permits the control of the presence of an individual who is being monitored in the assigned place. In any case, it does not enable the authority to intervene the latter, noting an offence, having no other alternative than to begin investigations against the offender. This method will not prevent an individual who is determined to commit new offences. The reactions, as immediate as they are, could never exclude all risk of offence. The efficiency of EM with regards to public safety is therefore relative and will depend entirely on the selection of individuals where, as for all other measures of release, the confidence placed on the individual is the determining factor.

Furthermore, the current craze for using new technologies can be explained by the belief in the '100% efficiency' of the latest technologies. If, in a case of doubt, a judge shall operate a choice between a measure carrying a risk and another presenting a bigger degree of reliability, the second

possibility will be chosen 'as a precaution'. The fact that to this day no absolute confidence can be placed in the new technologies developed on the subject is however often lost sight of. As previous experiments show, dysfunctions and sabotages, can occur which will be the obvious source of problems.

Technical defaults will, without doubt, be removed thanks to future progress, but they will not remove the choice that must be made between imprisonment and the renewal of confidence in the offender. The Quebec reasoning seems simplistic but it can make one point clear for us. It consists of presenting an alternative ⁷⁰ : either the behaviour is highly reprehensible and in this case EMHA is not a severe enough measure to punish it, or EMHA is adequate to denounce the behaviour and then other measures (such as community service or the traditional probation measures) can easily substitute it without presenting the offences to EM and eventually offering the offender better chances of social re-insertion.

4.1.6.2. Dangers of the movements for the privatisation of EM

Resorting to EM is part of a larger movement for privatisation of the management of penal systems. It is always private companies who provide the monitoring equipment (and in some countries, such as The Netherlands or Sweden, they alone are responsible for their installation, verification and removal), but it still happens that the monitoring itself is entrusted to private companies (this is the case we have seen in England and Wales).

It is easy to imagine the lobbying to which the public authorities are subjected by these companies who seek to exploit new markets ⁷¹. Once the technologies are developed, the manufacturers and retailers try to find new outlets for their products and consequently, new applications within the penal environment. Furthermore, the companies who ensure the monitoring are also those (or their subsidiaries) who are responsible for the management of private prisons. Now, the economic objectives of the private sector and penal objectives are fundamentally different and to a certain extent, conflicting. On the one hand, is (in addition to the need for protection of society) the desire to socially rehabilitate the offender, which implies the idea that prison is temporary and transitory ; and on the other, that of the conservation and development of the monitoring and security markets : two irreconcilable objectives, that a single actor seeks to monopolize.

4.1.6.3. Threats to public freedoms

According to Professor G. KELLENS (University of Liège), we must be wary of the technical aspect of these new monitoring technologies, in that they permit misuse, which could be prejudicial to public freedoms. According to him, the question of introducing EM may be regarded as a tension between private (market) interests and respecting public freedoms.

This does not mean to say that all progress must be refused and developments in the technology rejected. They prove to be as useful or even necessary, for investigating offences, especially serious crime (international or organised) ; but the application of the measure should not be extended to very limited and clearly defined frameworks, such as that described above, on pain of becoming a sizeable threat to the respect of our fundamental freedoms.

For a more detailed analysis of the various dangers posed by EM to public liberties, we refer you to the next section. Nevertheless, we would point out that the heavily intrusive nature of EM in the private life of the individual is one of the reasons that warranted the opposition in England and Wales.

4.1.6.4. The spectre of the hyper-controlled society

One conclusion has emerged from the analyses carried out following consultation of the literature and meetings with specialists : the reality of the extension (described below) and intensification (described under the next point) of the supervision undertaken.

The development of technologies makes much greater monitoring of citizens possible today. Great, firstly in the sense that the supervised activities and locations are growing in number: EM, videosurveillance, electronic payment systems, phone tapping, many techniques exist to track an individual 24 hours a day. Next, greater in the ever-growing number of people subjected to monitoring.

At the outset, EM was intended to be limited to offenders who would thereby avoid serving a prison sentence. The system has quickly been generalised and it is those people who, but for the existence of EM, would be placed in custody who have been subjected to the measure. In Canada, it has even been suggested to promote the possibility to judges of placing the offenders under EM for the duration of the trial without needing to prove any fact against them whatsoever. EM is therefore seen as preventative supervision, without any particular objective to justify the imposition of the measure ⁷² (we know that it can be the case with phone tapping). Professor KELLENS warns against the introduction of such a possibility, recalling the fact that in authoritarian regimes, prevention was the best measure for avoiding resorting to the law.

One of the first to have depicted a hypercontrolled society such as the one threatening us, was without a doubt George ORWELL (1984), fifty years ago. Since then, others have taken turns to warn against the passage “*from a disciplinary society to a society of control*” ⁷³. In 1971, MEYER suggested a monitoring system practised in large American cities and involving millions of suspected and convicted offenders. G. T. MARX talks more cynically of a maximum-security society whilst warning against the false idea of technical neutrality ⁷⁴.

EM is directly concerned because its introduction constitutes a first step in the implementation of this process. The great danger with the introduction of EM is the justification of its presence by a whole series of good motives. The supervision is done in the name of good arguments (protection of the citizen, detection of offences, etc.), but it is this justification by security reasons which poses the problem here : the criminal sector is the main entrance to maximum monitoring (what industrial or commercial spying is unable to justify). To convince yourself of this, look no further than the practices in effect in various American states ⁷⁵ and envisaged for a time by the Belgian Minister for Justice, which consists of communicating the identity and location of offenders having committed crimes of a sexual nature on the Internet (*Figure 3*).

Another danger appears together with the privatization of monitoring. Within private companies, there is a growing tendency to resort to access control technologies. That is an aspect which enables the prediction of an extension which could mean supervision of employees. A second aspect however, interests us more : the danger of seeing EM largely entrusted to private companies.

Supervision of the individual is therefore practised by companies who may take information on the person and, where applicable, may use it for other purposes. It is obvious that a diversion from the initial objectives of the monitoring is happening : firstly used as a measure designed to ensure the effective implementation of an alternative solution to imprisonment, it could quickly be used for the information it provides for the observer. In the words of LANDREVILLE, “*it is these [companies] who will realize this panopticon, if we’re not careful*”⁷⁶.

We find ourselves faced with what is called a *transformation of social control*, where the distinction between public and private spheres tends to disappear. The dangers concealed by a society of maximum control are obvious, where permanent observation violates private areas and the need to remain free in ones actions⁷⁷. The consequence of this intensification of social control, which rather leads to the restriction of freedom, has a tendency to increase the inequalities within the social body.

4.1.6.5. Dangers of misuse

Beside the fact that we are witnessing an extension of the monitoring carried out, the intensification or increase of this presents serious risks of misuse.

Technological progress will enable second and third generation monitoring techniques to be implemented very easily. A very in-depth supervision, mentioned almost 30 years ago by INGRAHAM and SMITH, today enables behaviour to be monitored and not just bodies⁷⁸. This may, we have seen, go as far as a coupling of monitoring technologies and neutralisation technologies, as the third generation technologies do not stop at tracking but attempt to intervene with the person being monitored.

It is most often offenders who are the subjects of experiments – or should we call that abuses ? – such as these. The offender is often considered as a “separate” marginal being, whose wrongdoing suffices to justify these measures which up to now could not, in principle, be applied to free citizens. But to what extent should we allow this type of experimentation on individuals whose freedom of choice is heavily reduced ? The criminal law is often a too easy way for the introduction of “new solutions”. Far from refusing any idea of advancement in scientific discoveries in this field, we think it would be better to warn against perverse use of the innovations.

Figure 3. Example of a file relating to sexual abusers released in Alaska



Source : Department of Public Safety, Alaska.

There are certain sectors where the risks of misuse are more significant, emphasises KELLENS⁷⁹, thus there is nothing more intrusive than the healthcare sector. “By crossing information from the social security database, methods of electronic payment email etc., a fearsome cocktail can be obtained, far beyond the control imagined by ORWELL”. This form of permanent tracking of the individual is not as far away as we might think.

In academic environments, voices are raised, especially in French speaking communities, to bring up pertinent questions relating to the introduction of EM, but also to regret the absence of discussion in the political world on the possibility of implementing an EM system, a forerunner of the maximum control society.

In England, it is more the probation services who are very well organised there and are – like the EM lobby – a completely separate industry, to whom the reticence regarding resorting increasingly to the measure of EM is owed. Competition between the sectors, if it can be analysed in this way, encourages discussion on the advantages and disadvantages of EM. But the question “*to what extent should control be tolerated ?*” will lose all its sense if a sufficient political reaction is not rapid enough.

4.1.7. Legal aspects

From a legal point of view, the different problems posed by EM are stated in a more systematic way. The analyses are limited to reporting the conformity of the EM measure with the European Convention for the protection of Human Rights and Fundamental freedoms (ECHR), the only body of rules which is, in this field, commonly obligatory for the Member States of the European Union. For information, it is worth mentioning the existence of the *Règles de Groningue* (elaborated by the FIPP – Fondation internationale pénale et pénitentiaire – adopted in October 1988), which constitutes the equivalent of the Standard minimum rules for the treatment of prisoners, regarding non-prison measures and sanctions. These rules have however no mandatory force⁸⁰.

4.1.7.1. Rights of persons placed under EM

The ECHR does not of course, provide for the status of individuals who may be placed under EM. Nevertheless, there is reason to believe that the European Court of Human Rights would take a reasoning comparable to that followed within the framework of the application of the Convention to detained persons. The Commission has established that detention does not have the effect of depriving people who are subjected to it of the guarantees offered by the Convention⁸¹. It would be the same, *mutatis mutandis*, for the treatment of persons being monitored.

4.1.7.2. Private and family life

It seems that the resort to EM could violate private space in several ways. The introduction of EM takes place in the offender’s home, which constitutes his private space above all. This could lead to the non-respect of article 8 of the ECHR. One cannot invoke the argument of the agreement of offenders to the introduction of the device, as it has already been explained. It would also be wrong to claim that the limitation to the right conferred by the Convention is necessary to the implementation of the sentence, because other measures are possible.

What about *privacy*? This is distinguished from the Convention’s only protection of the private life, in that it is “*not only a defence against any intrusion into the private life, but above all, a condition of the production and maintenance of a personality, understood as the feeling being his own*”⁸². As we have shown in the section relating to the effect of EM on the individual and his

family and friends, we are witnessing an “interference of spheres”, both private and public, which inevitably leads to a profound negation of *privacy*.

Another danger comes from supervision without the knowledge of the person being monitored. This does not come into this section of the study although one can imagine that plenty of information could be obtained simply from the use of the electronic bracelet.

4.1.7.3. Equality and non-discrimination

A violation of the guarantee of equality and non-discrimination (Article 14 ECHR) can be noted at several levels by the use of EMHA.

Regarding selection, firstly, the privatisation of costs, previously mentioned, leads *de facto* to a social selection effect of candidates able to access the measure. In the Belgian experiment for example, the conditions for the promotion of EMHA (own residence, telephone line and an undertaking to participate in the costs of 5000 BEF per month), soon showed the differences that can be made between candidates who can access this measure according to their wealth.

As to the persons to whom this measure could be granted, next, there is a danger of seeing this type of sentence applied solely to certain categories of people. Thus, EMHA could : either be reserved for a privileged few (white collar criminality) which would be a less great or less immediate danger for the population; or on the contrary, imposed on the most disadvantaged populations. In 1992, PALUMBO *et al.* noted that EM measures tended to mainly target minority groups : in the United States, the blacks and the Hispanics were enrolled in these programs in proportions fifteen times greater than their representation in the population. It could be asked whether EM risks leading to a form of segregation of the disadvantaged populations (which is already the case for people suffering from HIV or other contagious diseases), in places where measures of control and traditional support are too costly and even ineffective.

With regard to the living conditions during placement under EM, we have noted that offenders tolerate EMHA better if they benefit from a larger, better-equipped or more luxurious residence.

4.1.7.4. Individual freedom

Many authors think that EMHA contravenes Article 5 of the ECHR which protects liberty and security. On the one hand, the application of the measure to offenders could be problematic with regard to the objectives pursued by placement under EM. On the other, that poses questions when the regime is not provided for by the law, as is the case in The Netherlands.

One argument has been raised to reverse this opinion : it consists of comparing EMHA with the prison sentence and pointing out that the first affects individual liberty on a much smaller scale than the second and that this is an advantage that allows it to keep a production capacity for the individual. In this hypothesis, EMHA would be better than imprisonment and would therefore be more acceptable. We have already explained in what way such a comparison is not acceptable.

4.1.7.5. Presumption of innocence

Placement under EM still goes against one of the main guarantees afforded under the ECHR : the presumption of innocence. When faults are noted in the operation of monitoring devices and the computer registers the offender's absence from the place of arrest, it will be for the latter to prove the contrary. This reversal of the burden of proof appears to be completely contrary to Article 6.2 of the ECHR.

This phenomena bears witness to the current philosophy of confidence that reigns in technology, where when an irregularity is noted, the offender himself will have to prove, with sometimes many difficulties, the system's dysfunctions.

4.1.8. Options and recommendations

Considering the failure of electronic monitoring (in the sense of the wearing of an electronic bracelet by offenders) to meet the objectives to which it was devoted,

Noting the threats posed by the introduction of electronic monitoring in the penal sector to the respect of public freedoms,

Regretting the constantly increasing recourse by the Member States of the Union to electronic monitoring as a technical method of ensuring the enforcement of sentences or preventative measures,

Observing the growing trend towards the use of technologies of control,

Given the common opinion of specialists met on this matter,

Having regard to the European Convention for the protection of Human Rights and Fundamental Freedoms,

Having regard to Article 6.2 of the Treaty of the European Union,

Having regard to the *Règles de Groningue* relating to non-prison measures and sanctions (International Penal and Penitentiary Foundation, October 1988),

Having regard to the initiatives of the European Parliament in the area of respecting fundamental rights (and particularly, the 16.03.2000 Resolution on the elaboration of a Charter of fundamental rights of the European Union),

Having regard to the philosophy of the Report (A4-0369/98) and the Resolution on prison conditions in the European Union (implementation and alternative sentences),

GRIP formulates, for the section concerning electronic monitoring, the following options and recommendations:

- The European Union, led by the European Parliament should make sure to be an actor of its own culture whilst taking into account constructions such as Human Rights. This means on the one hand, renouncing some solutions (presented under the lobbying of the private security industry, largely dominated by the United States), and on the other, developing in accordance with European specifications, new solutions to remedy the problems linked to the increase of the prison population in the Member States
- Faced with the 'desocialising' character of incarceration, the European Union should repeat its encouragement to the Member States for the development of alternative sanctions (promote so-called rehabilitative sanctions)

- This encouragement should be done by refusing to resort to technologies such as electronic monitoring, which present grave dangers of misuse towards a maximum control society and constitute a threat of violation of public freedoms. In this respect, the European Parliament is invited to review its position on the use of electronic monitoring (adopted in points 29 and 30 of the Resolution relating to prison conditions – implementation and alternative sentences)
- Any new reform advocated in the sector of enforcing sentences should work toward more *humanity*, understood as a necessary accompaniment of the offender in his social rehabilitation process, making the offender more responsible and bringing attention to the victim ; which implies the introduction by Member States of a coherent criminal policy that offers means (financial and human) for the realization of the objectives
- The European Parliament is invited to adopt a **Resolution** aiming :

On the one hand, at encouraging the Member States of the European Union who resort to electronic monitoring :

1. To implement democratic supervisory mechanisms, namely :
 - a) to ensure that the decision of placement being monitored is surrounded by adequate legal and judicial guarantees
 - b) to ensure the follow-up and supervision of the monitoring by an adequate commission
2. to progressively abandon the use of electronic monitoring in favour of *human* monitoring measures (development of alternative sanctions such as house arrest with social accompaniment)

On the other hand, at discouraging the adoption of similar mechanisms by states who, although at the stage of experimentation, do not yet systematically practice electronic monitoring

- It is suggested that the European Parliament adopt a **Declaration** aimed at taking a political stance against the growing reliance on measures for control such as electronic monitoring which violate some of the most basic public freedoms and constitute a threat of a maximum monitoring regime
- It is proposed to the European Parliament to open a debate on the use of electronic monitoring technologies (and even on a larger scale, on the use of technologies of control) ; which could take the form of a **discussion in a public meeting** within the Parliamentary Assembly

4.2. VIDEOSURVEILLANCE

4.2.1. General considerations

Videosurveillance (VS) is not a new invention. The use of cameras to transmit images onto closed circuit televisions (CCTV) has nevertheless, in the last few years, seen developments without precedent : the growth of this market is estimated at between 15 and 20 % a year. In the United Kingdom, between 150 and 300 million pounds is spent annually on this industry and some 300,000 cameras already cover both public areas (car parks, crossroads, residential areas) and private places (shops, offices). In England, experiments have been carried out to establish a video connection between prisons, courts and tribunals which would then avoid all transportation of prisoners. Sweden, previously strongly reticent with regard to the system, is today envisaging to relax its legislation pertaining to the protection of the private life in view of the introduction of VS in public places. But the cameras have also made their appearance in the prisons of the European Union, where it is being resorted to increasingly.

After a brief description of the technological progress in this field, we will analyse the advantages that this may engender and the dangers that its widespread use may generate. In accordance with that, we will give a few directional lines and then proceed with some recommendations for the use of VS in the jails of the Member States.

4.2.2. Description of the technologies (Figure 4)

Cameras were previously cumbersome, barely manageable and regularly had technical problems (little resistance to moisture and strong changes in temperature). Furthermore, they had the disadvantage of being expensive. These obstacles have, for the most part, been removed thanks the technological progress. Data compression and the development of optical fibre have enabled considerable progress to be made.

Figure 4. Diagram of a closed circuit television network



Source : <http://www.delta-protection.fr/gamsurvideo.htm>

Ten times less expensive, the new cameras can now operate ultra-rapid movements around 360°, whilst still providing images of exceptional quality. They can operate as cordless and are more and more discreet to the point of sometimes being concealed in furniture or household appliances⁸³ (Figure 5). The development of lenses made it possible for these very small cameras to zoom in so

as to be able “to read the brand name on a packet of cigarettes at a distance of a hundred or so metres”. The lack of light no longer poses difficulties : infrared enables nocturnal pictures to be obtained with a definition comparable to that of those taken during the day (surveillance through walls or partitions is also possible).

The possibility however which is now offered of computer assisted surveillance enables much more to be achieved. In addition to automatic movement detection, computerised face recognition (CFR)⁸⁴ can help research, as is often the case in the surveillance of risky football matches. It also seems advantageous to be able to record the images, keep them and also to operate research and analyses on different criteria.

Along with this progress, synergies can be imagined between several technologies. Thus, it is possible to combine audio systems with visual surveillance. An American company is combining surveillance and intervention : while VS allows possible troubles to be monitored, a console can activate the release of a neutralising gas by remote control in the premises being monitored (see *TG Guard* ® system, Figure 13).

Figure 5. Miniature water resistant camera (3.5cm in diameter)



Source : <http://www.crelec.com/ccd.htm>

4.2.3. Appraisal of the technologies

4.2.3.1. Objectives

According to the advocates of VS, several reasons justify the introduction of cameras in penitentiary establishments. Four main arguments can be raised in favour of the presence of such a system which would then have the advantage :

- of eliminating the chances of breach of prison regulations (dissuasive effect) ;
- of reducing violence in the establishments ;
- of reducing the number of guards necessary for the safe management of the establishment ;
- of providing proof which could be useful in the event of subsequent problems.

Few studies have buckled down to studying to what extent VS meets these objectives in the prison environment. We will try to answer that in a few lines.

4.2.3.2. Effectiveness of the technologies

With regard to respecting the rules of the prison, one could imagine that the dissuasive effect of the implementation of a VS device would have positive consequences. The fear or risk of being discovered more easily is an important factor in this sense. If this objective is therefore met in relation to small offences, we are nevertheless witnessing a phenomenon of a change in the places where the offences are committed : the infringements of the rules will be more perpetrated in places not being monitored.

With regard to violence in jails, it is shown that the presence of cameras tends to reassure the victims of violence from other prisoners as well as from guards. This effect is not however very positive because it leads to a passive attitude on the part of the victim and the guardians, who rely on the VS rather than their own vigilance. The person who observes can only give a warning, this consequently gives a wrong feeling of security.

No data could be obtained to support the assertion of a reduction in penitentiary staff. In most of the cases, the guards necessary to ensure safe management of the establishment tend to be transferred. VS is carried out by the staff themselves and a reduction of the workforce, due to the fact that one guards can control several screens at the same time (what entails a worse quality of the surveillance), cannot be sufficient to decrease substantially the management costs.

As for the proof it may bring, it is clear that elements recorded on videotape could prove useful ⁸⁵. Nevertheless, the extent to which the data from these recordings would be admissible before a court should be borne in mind ; it will all depend on how the recordings were made.

4.2.4. Impact on the individual and prison staff

VS can present numerous disadvantages for those being observed ⁸⁶. What was said in the previous chapter about the negative aspects of electronic monitoring is even truer where VS is concerned. The current trend, which is towards placing cameras in all possible locations, leads to oppression, which makes itself felt in a pronounced fashion on the mental state of some detainees subjects. The fact of being permanently spied on wakes in many the feeling of no longer having privacy, in an environment that already greatly violates the little private space that offenders do possess. The consequences would be depressions or other psychological problems.

Some television games, very popular for the moment in the Netherlands, in Sweden and in since recently in Spain as well, consists of confining for several weeks a dozen of candidates and filming them permanently ⁸⁷. These television programmes that testify a new society phenomenon, are broadcasted 24 hours a day. The 'games' can provide somewhat information over the mental effects on volunteers : a psychological support is always indispensable in order to cure the unbalancies caused by the situation in which they were placed. The suicide of a candidate, agitated in his mind because of his elimination of the game, has even been noted ⁸⁸.

Furthermore, resorting to VS has the corollary of reducing contact between the people monitoring and those being monitored. This lack of human contact is not devoid of inconvenients either. This leads to isolation of the offenders and it is when this lack of relationships and interactions tends to

be too heavy that violent reactions will appear. Several riots were thus observed recently in Manchester prisons, which are high surveillance detention centres.

Moreover, the phenomena of reducing contact can prove harmful also for monitoring people. In addition to the psychological effects that may be produced, it is enough to think that Milgram's experiment is completely transposable to this situation... Having observed these perverse effects of VS, some detention centres, especially in Canada, tend to come back to systems where prisoners and guards are brought together (for which systems of VS and automatic opening and closing of the doors were substituted). Those guardians who live among the prisoners are better able to perceive any tensions that may exist and can react in a more adequate fashion, more effectively and without a doubt, more humanely to the problems that may arise there.

4.2.5. Dangers and risks of abusive use

The main danger concealed in VS is that of violating the private life of offenders⁸⁹. The use of cameras threatens the private life and freedom of action of the prisoners in two different respects⁹⁰: on the one hand, when surveillance is operated without the knowledge of the offenders, it leads to *"the extraction of information, consisting of certain behaviour or attitudes, that the person concerned may not have wished to divulge"*; on the other, when the people to be observed are aware of it, it may force them to adopt certain behaviour or attitudes that they would not adopt in the absence of the surveillance.

The right to protection of privacy also includes the right to image, which means the freedom to use your own picture, in other words to keep it as much as to broadcast it. That is where practices consisting of unveiling data or prohibiting the presentation of interviews to offenders (even if the objectives underlying such a decision may appear completely commendable) should be condemned⁹¹.

The notion of privacy⁹², of which we have already spoken in the previous chapter, also needs analysing with regard to VS. It implies that surveillance does not harm the development of the person being surveyed. However, most of the time, the simple fact of being placed under VS substantially alters the behaviour of offenders.

Another danger is that of discrimination between the categories of person observed. In reality, unjustified differences in treatment can be observed between the race, age, class or sex of the persons under observation⁹³. Blacks and young persons for example, are monitored more often; women are sometimes the objects of voyeurism. When an offender is sentenced to prison, individual freedom (the freedom to come and go) is not the only right of which he is deprived. All freedoms necessary for the enforcement of the sentence may be limited within this strict measure: to ensure that the offender serves his prison sentence. When the data collected is broadcast in such a way as to compromise the image of the person being monitored, this may constitute humiliating or degrading treatment in the sense of Article 3 of the ECHR.

Faced with the State's growing powers of control, certain regions or towns in the United States have refused the installation of cameras under the pretext that the breach of privacy is too great in comparison with the security benefits gained from VS. This is evidence of the awareness which is making itself felt on the American continent. In Europe, attitudes vary greatly from state to state and go from Denmark's position (where it is prohibited) to that of the United Kingdom where its

presence is increasing constantly⁹⁴. The implementation of discussion forums and adequate legislation to ensure the respect of fundamental freedoms is nevertheless slow to appear. Given the fact that VS is, for the main part, outside the scope of all legislation, respect for the rules depends solely on the way in which VS is implemented or carried out (where the cameras are placed, aim of the surveillance).

For these reasons, GRIP believes that it is important for the European Parliament to be a leader in the definition of a new policy for the use of VS⁹⁵.

4.2.6. Political options and recommendations

Facing the growing trend towards videosurveillance networks, especially within penitentiary establishments,
Noting the perverse effects it can have on the mental state of persons placed in custody,
Lamenting the few specific measures implemented by the Member States of the European Union for dealing with the harmful aspects of videosurveillance,
Considering that it is important to manage the private areas where the offender knows that he will not be monitored,

Having regard to Article 8 of the European Convention for the protection of Human Rights and Fundamental Freedoms,

Having regard to Resolution (73) 5 on the standard minimum rules for the treatment of prisoners and Recommendation R (87) 3 on the European prison rules, adopted by the Committee of Ministers of the Council of Europe,

Having regard to Article 6.2 of the Treaty of the European Union,

Having regard to Directive 95/46/CE of 24 October 1995 relating to the protection of personal data,

Having regard to Report PE 166.499 of 19/01/1998 (*An appraisal of technologies of political control*),

Having regard to the projects of the European Parliament in the area of the respect of fundamental rights (and particularly, Resolution 16.03.2000 on the drafting of a Charter of fundamental rights of the European Union),

GRIP presents, for the section concerning videosurveillance, the following options and recommendations:

- The European Union should be seen as a democratic leader in videosurveillance, which implies transparency, and should move towards the adoption of rules in this topic. The European Parliament should ensure urgently that a debate takes place on the introduction of videosurveillance within Member States, as much within as outside jails
- The European Parliament should invite the Member States to implement democratic vigilance mechanisms to control the use of videosurveillance
- The European Parliament should seek to adopt, with regard to videosurveillance, a clear and coherent position, which should take into account the harmful effects that too intense observation may have on offenders (and more generally, on the citizens of the European Union). Thus, it should declare itself in favour of a limitation of videosurveillance to situations where the possibility of implementing other surveillance systems, which encroach less on the private lives of offenders does not exist

- The European Parliament is invited to implement a **Code of Conduct** with regard to videosurveillance (which is applicable within prisons). This should address the rules to be respected by both the individuals who carry out the surveillance and the people responsible for the installing of the equipments.

It should also:

1. Include a prohibition on all sale or exchange of data (images or other) from video observation systems
 2. Take its inspiration from existing rules in some Member States of the European Union (United Kingdom, Belgium), especially with regard to the adoption of three principles :
 - a) Principle of legitimacy (use only failing other less restrictive methods for achieving the intended objective)
 - b) Principle of conformist use (use in accordance with the objectives, which implies that the purposes should be announced in advance)
 - c) Principle of proportionality (which implies not keeping data beyond the date where it is noted that the aim for which they were recorded has not been achieved)
 3. Prohibit the use of hidden cameras that allow the tapping of pictures without the person's knowledge
 4. Deal carefully with private areas where the offender knows that he is not and will never be observed
 5. Make the communication of the existence and placement of cameras obligatory
 6. Prohibit all recording of data without the consent of the person concerned
- It is suggested to the European Parliament to establish a **Commission** which can, after having studied the use made of videosurveillance, propose the adoption of legislation or specific measures
 - It is suggested to the Parliament to implement the necessary means to ensure the **adaptation** of existing regulations to videosurveillance (particularly Directive 95/46/EC of 24 October 1995 relating to the protection of personal data)
 - It would be desirable for the European Parliament to commission a study on the psychological effects that resorting to intensive videosurveillance may have on the offenders. This could be done through a **request** to the Committee for the prevention of torture and inhuman or degrading treatment

4.3. BIOMETRIC IDENTIFICATION TECHNIQUES

4.3.1. Definition and description of the technologies

Biometry is the science which uses digital techniques for identifying individuals by their unique biological or physical characteristics. Biometric techniques can be classified in two categories : those based on physiological characteristics and those based on behavioural characteristics.

The devices based on behavioural characteristics are essentially voice recognition systems – also used as a complement to the electronic bracelet for electronic monitoring – or handwriting recognition, rarely used due to the wide-ranging possibilities of fraud.

Devices based on physiological characteristics are those that measure and compare fingerprints, the geometry of the hand or features, properties of the iris or the retina, the ultimate technique – today within reach – being the analysis of DNA.

Fingerprinting is the most common and oldest of the biometry techniques. Its development is due particularly to the recent and quick improvements in the power of computers and methods of telecommunication. AFIS (*Automated Finger Imaging Systems*) currently enable a fingerprint to be compared with those contained in several computerised databases, this being, in addition, from a distance and in a time reduced to a few seconds or minutes.

The community of Los Angeles developed a computerised database for its penal system containing more than 7 million entries and accessible to the police and probation service.

Another technique to identify athletes and their staff (tried for the first time at the Olympic Games in Atlanta in 1996) consists of measuring the geometric characteristics of the whole hand. More than 8000 systems of this type are now in operation in the United States and the DoJ has decided to introduce it into all Federal prisons : any individual likely to enter the prison – caretakers, employees, offenders, lawyers or visitors – will be enrolled in this identification system which, in addition to encoding a digital image of the hand, will also contain an image of the features and other personal data.

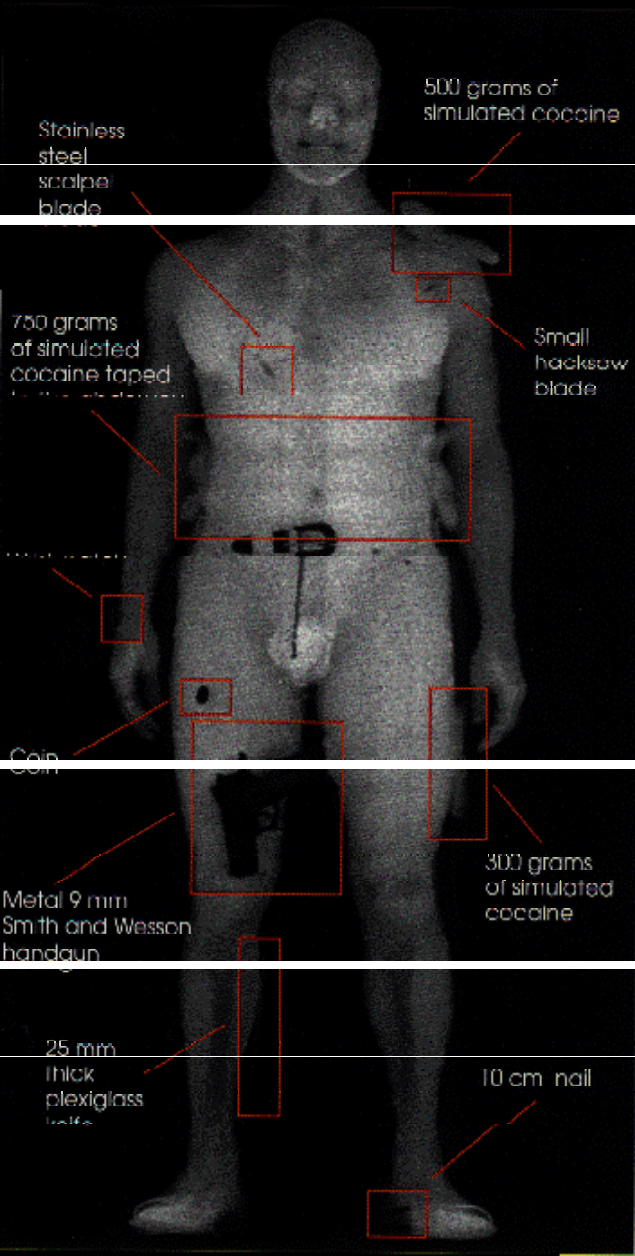
Techniques for measuring characteristics of the eyes are also used. The first, available since 1985, consists of scanning the retina using a weak intensity beam and recording the typography of the eye's blood vessels. This vein typography measure is however slow and the results may vary during the life of an individual, which means a regular update of the database. More recent systems are orientated more towards measuring the iris, more reliable: an individual's iris is unique and does not change throughout the life of a person.

Facial recognition devices, such as the EIDOS system developed by the *University of Southern California*, can combine and compare measurements of several physical traits in the face – such as the distance between the pupils, the width of the mouth, the characteristics of the iris etc. – and can flush out any attempt at disguise.

Finally, progress in x-ray radiography and video imaging spares no detail of our anatomy. The *Bodysearch* system developed by the American company, AS&E enables an individual to be

stripped naked virtually : the device makes it possible to “see” through the clothes and detect any suspicious object concealed in them or about the body (Figure 6). Could one imagine the synergy of this device with CCTV in premises under surveillance ?

Figure 6. Individual radiographed by AS&E’s Bodysearch system



Source : www.privacy.org/pi

4.3.2. Objectives

According to Tom MILLER from the American Department of Justice (DoJ), around 40% of escapes from Federal prisons are made through the main entrance to the establishment, mainly at visiting times, the offenders pass themselves off as one of the visitors. In response to this problem,

the DoJ introduced, after a conclusive test at Jesup prison in Georgia in 1993, an identification device based on irrevocable recognition of the geometry of the hands of visitors, prison staff and offenders, the characteristics of which are digitized and stored in the prison's central computer.

It is also a matter of equipping the probation assistants with analogue devices in so far as, on the evidence, it is impossible for these, in their small number, to establish a real social relationship and identify with certainty almost 4 million individuals on probation or parole.

4.3.3. Efficiency of biometric identification

Biometry presents obvious advantages over all the other techniques for identification and control :

- The criteria for identification is unique and personal and can not be lost ;
- There is no authorisation code that can be forgotten, exchanged or used secretly by a third party ; furthermore it does not need to be periodically modified.

Despite these advantages, the industry in this sector regrets the fact that biometry is not more popular. It attributes this to a number of technical factors : the increased costs, the time necessary to carry out the measurement and checking, the cumbersome nature of the devices (which would benefit from being lighter and portable) and the absence of common technical standards for developers.

Secondarily, some manufacturers recognise that the expansion of databases that accompanies the development of biometry could also lead to legal conflicts in respect of current laws regulating the protection of privacy. This, to us, is the main problem : all the biometry techniques require electronic storage of personal, physiological or behavioural data in more and more powerful and interconnected computer networks, or at least capable of being so one day.

4.3.4. Acceptance and abuse of biometric identification

These techniques, initially developed to meet the needs of legal studies (fingerprints, DNA analysis for example), or to perfect access control in prisons or other security areas (the site of the Olympic Games for example), today constitutes a flourishing market, with a growth of more than 30% a year and in the process of spreading through all society's activities :

- Private companies impose them on their staff for access to establishments ;
- Local authorities resort to them to identify social beneficiaries, hospital patients, etc. ;
- Airports use biometric techniques to ensure that only "genuine" registered passengers enter the departure area.

The most surprising thing, faced with this invading tendency to scan the individual from every possible angle, is the tacit acceptance of the public : in view of the origin and the criminal connotations of these methods, in particular fingerprinting, one would expect to notice a mistrust and resistance in the public opinion. It seems that it is not the case : according to a recent national survey carried out by *Columbia University*, 83% of the people questioned approved of these

methods and by no means revealed the feeling of being treated like criminals. The logic that prevails is that according which the most important is to avoid criminality. A man who is not a criminal has nothing to hide : that is the common argument. Surprisingly, non-technological techniques of *profiling* used by the police in *drug courier* or customs matters do usually worry more people.

Other enquiries carried out in Australia, Canada, the United States and New Zealand nevertheless and fortunately, temporize the results of this survey. Simon G. DAVIEM, Professor at the Universities of Essex and Greenwich in the United Kingdom and advisor of the *British Medical Association*, lists some of the fears raised by the public questioned on the subject of modern identification techniques :

- They threaten the sense of individuality by dehumanising the individual and reducing him to an electronic code ;
- They increase the power of control held by government and organisations over the individual ;
- They lead to an inversion of the relation of appropriation between the State and the citizen ;
- They emphasise the feeling of living in a society led by bureaucracy rather than an elected government ;
- They induce the conviction that exceptions and exemptions will always exist for the powerful, while they will become new vectors of fraud and criminality.

During its short history, biometry has already shown that these techniques, developed initially for a public under supervision within environments where the notion of security reaches its peak – prisons and military establishments mainly – are furtively slipping towards new functions unannounced and in no way anticipated at the outset. It is through this mechanism that a simple identification number at social security could now identify us in all our relationships with public bodies : taxation, education, healthcare, unemployment office, public libraries etc. “For our convenience”, this information is given to us in the form of a magnetic card or an electronic smart card. Progressively, informations collected by new generations of biometric devices will be added according to our future administrative dealings, until having a precise and multi-criteria profile of each individual.

In 1995, New York was the first State to extend the AFIS (*Automated Finger Imaging Systems*) throughout its territory in order to better identify the 750,000 beneficiaries of public benefits : this “improvement” of the identification methods has enabled the exclusion of 30,324 social beneficiaries from the right to social aid and therefore a saving of 256.2 million USD.

The popular fascination for information and networking technologies – this feeling of being able to conquer the world with a modem as sole ‘weapon’ – is progressively eradicating the individuality in favour of a feeling of belonging to a global cyber-community, supposed to share the same values, the same culture and the same desires. It is this collective apathy which progressively enables a monolithic system of information to be introduced with the dilution of *privacy* as its inflexible consequence.

This tendency is more the fact of a cultural development than technological innovation ; laws and policies are from that of little use in curbing or keeping a check on this process.

4.3.5. Options

Taking into account the growing use of biometric identification systems in access control for penitentiary establishments and observing the risks that such use carries, GRIP presents, for the section devoted to these technologies, the following options:

- In view of the possibilities for obtaining personal data (relating to physical or behavioural characteristics of individuals) offered by these biometric identification technologies and considering the possible abuses that could occur during their use, the European Parliament is advised to adopt a position and rules relating to the protection of the data obtained, similar to those provided for in the discussion of videosurveillance
- Having regard to the dangers that the use of biometric identification technologies carries in relation to the respect of the private life (namely the notion of *privacy*), it is suggested to the European Parliament to invite the Member States to only resort to the intended technologies if it impossible to achieve comparable results using measures that risk breaching the respect of fundamental freedoms less ; the risk against which one tries to fight by using new technologies being often disproportionate regarding the breach of liberties

5.

NEUTRALIZATION TECHNOLOGIES

5.1. GENERAL CONSIDERATIONS

The analysis of the American situation shows a strong militarization of the methods of maintaining order and prison management. This militarization leads to the introduction in the prison environment of equipment or devices which are products directly derived from the latest military research on the development of new generations of “non-lethal” weapons⁹⁶.

The tardy awareness of the new options made possible by non-lethal weapons in operations – civil or military – to maintain or restore order, has been compensated for in the United States by the speed of decisions over the last five or six years, as much in respect of defining doctrines as for the technological choices that go along with them.

All these decisions are registered within a very precise framework, defined and oriented by Federal authorities by means of specific agencies, but interdependent in the departments concerned (*Department of Defense, Department of Justice and Department of Commerce* mainly) and working in close collaboration with the private sector which they subsidise heavily.

5.2. THE “NON-LETHAL” CONCEPT : HISTORY AND DEFINITION

The “non-lethal” concept, already spoken of 2500 years ago in “The Art of War” by Sun Tzu, was only very recently brought to the fore in questions of security.

The end of the cold war and the rapid progress made in weapons technology led armies to a fundamental revision of their operational and strategic concepts. From this “Revolution of Military Affairs”, a huge consensus became apparent in the United States to confirm that the technological innovation would enable most security problems to be solved.

This revision of doctrines mainly rested on great confidence in the “non-lethal” concept which was seen, in the eyes of a growing number of politic, military and legal powers as a logical solution and appropriate to the new secure atmosphere.

In March 1991, the American Secretary of Defence, Dick CHENEY decided to form the “*Non-Lethal Warfare Study Group*”. The recommendations of this working group however remained a secondary preoccupation until a conjunction of events, linked both to foreign policy (the



American military undertakings in Bosnia, Somalia and Haiti) and internal affairs such as the siege of the Davidian cult in Waco (Texas), revived the debate.

Decisions will therefore develop quickly : on the military level, the Lieutenant-General, Anthony Zinni, commanding the Marines for the withdrawal of the United Nations forces ONUSOM II from Somalia and principal advocator of non-lethal weapons, obtained on 9 July 1996, the publication of Directive 3000.3, “*Policy for Non-Lethal Weapons*”⁹⁷, a document considered as the founder of the non-lethal concept. In the sector of internal and legal affairs, co-operation agreements were signed in 1994 between the Department of Justice and that of Defence.

The more complete definition of non-lethal weapons appears in Directive 3000.3 “*Policy for Non-Lethal Weapons*” from the American Defence Department :

Non-lethal weapons are those explicitly designed and primarily employed so as to incapacitate personnel or material, while minimizing fatalities, permanent injury to personnel, and undesired damage to property and the environment.

1. Unlike conventional lethal weapons that destroy their targets principally through blast, penetration and fragmentation, non-lethal weapons employ means other than gross physical destruction to prevent the target from functioning.

2. Non-lethal weapons are intended to have one, or both, of the following characteristics:

a. They have relatively reversible effects on personnel or material.

b. They affect objects differently within their area of influence.

This official definition insists above all on the temporary, reversible and discriminatory nature of the effects of non-lethal weapons, although this character is clearly not guaranteed in all scenarios. In fact, it is not so much the intrinsic characteristics of a weapon than the context of its use that defines its lethal nature or lack of it. In conclusion however, “non-lethal” remains an ambiguous term, simply clothed in reassuring connotations. It does not eliminate fatal danger, it simply reflects the intention not to kill or engender a permanent handicap.

Finally, it is interesting to note that the term “*non-lethal*” seems to be definitively imposed in military literature while programs with civil objectives seem to prefer the term “*less-than-lethal*”. It is nevertheless the same categories of equipment to be found under the two terms.

5.3. THE AMERICAN “MODEL” : LED BY THE FEDERAL AUTHORITY

Despite the numerous privatizations of prisons, it seems that the whole process of choice, research and development and commercialisation of the technologies and equipment considered useful for the maintenance of order, are relatively well controlled by the Federal authorities in the United States, who subsidise the private companies’ R&D according to the technological priorities defined in the programs.

Several agencies and specific programs contribute to this mechanism. Their description and organisation is instructive, to the extent that this mechanism limits the risks of misuse in comparison to the choices established by the public authorities : the NIJ retains control of the technological orientation of the penal system, from the research and development stage through to marketing of the products. We are not suggesting here that these technological choices made by the American

administration are right, quite the opposite, and even less that they are transposable within the context of the European Union. Nevertheless, we think that the absence of public evaluation of these emerging technologies, the lack of common standards and the disparity of legislation relating to these technologies and the privatization of prisons in the European Union risks favouring the anarchic importation of elements of this American “model” in the short term.

The **National Institute of Justice (NIJ)** ⁹⁸ is the research and development agency of the U.S. Department of Justice. It was established by Congress to prevent and reduce crime and to improve the criminal justice system by sponsoring research projects and development programs, developing new technologies to fight crime, evaluating the effectiveness of criminal justice programs, and identifying and recommending programs that have been successful or are promising. In order to reach its objectives, the NIJ :

- Is continuously determining new technological needs for the police
- Sustains and subsidizes research and development in private companies in order to meet these needs
- Defines rules of procedure and of conformity
- Ensures the information and distribution

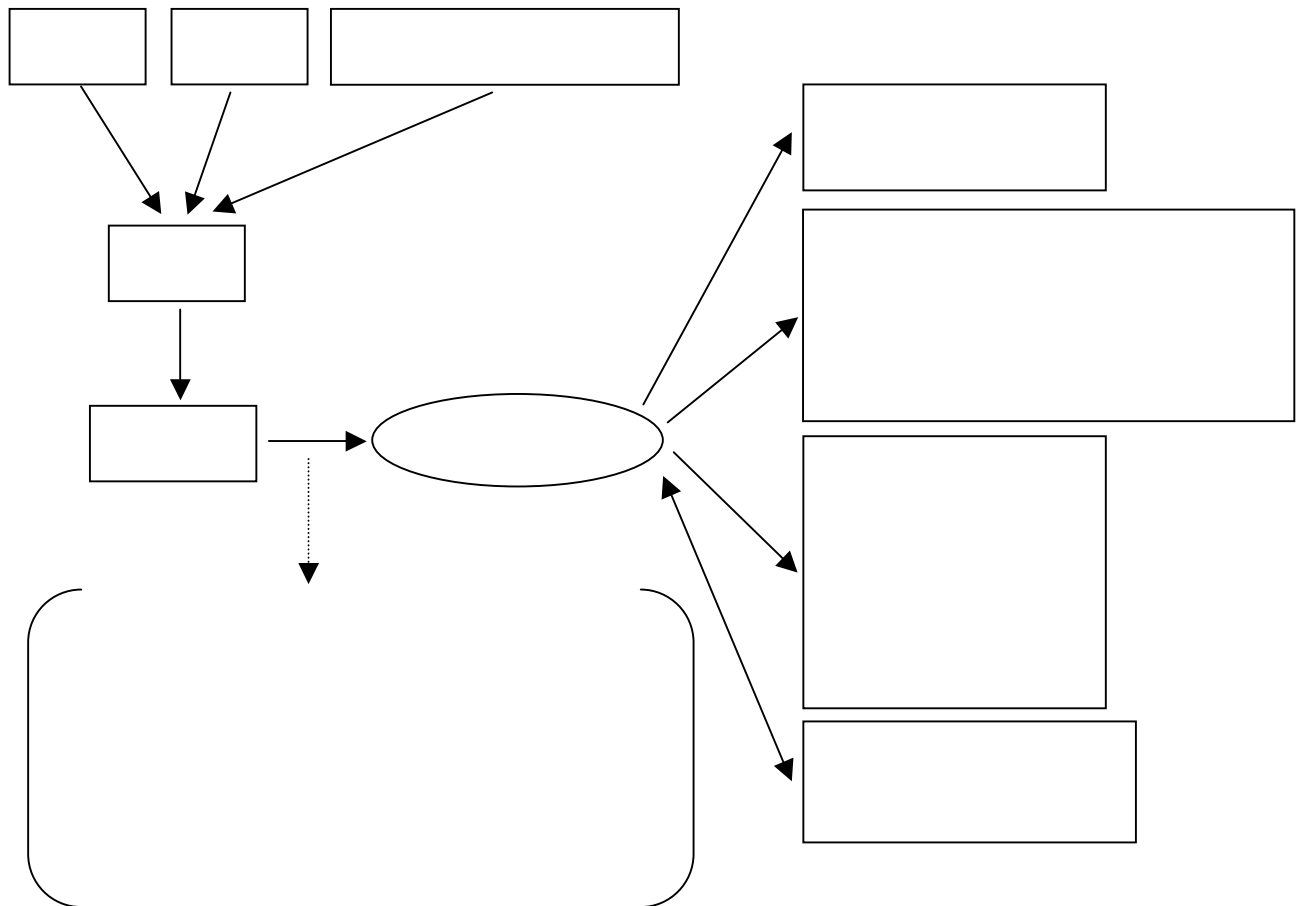
For this purpose, it disposes of an administration and specialised agencies :

The mission of the **Office of Science and Technology (OS&T)** ⁹⁹ is to provide State and local law enforcement and corrections agencies access to the best technologies available and help them develop capabilities essential to the improvement of efficiency and effectiveness in every aspect of the criminal justice system. It is also to support the development of new technologies to support national needs served by Federal law enforcement and corrections agencies, while avoiding unnecessary duplication of effort. The OS&T is the focal point for the development of standards, testing, and dissemination of information on law enforcement equipment and technologies. The Office funds numerous projects a year and works with the U.S. Department of Defence and other Federal agencies to fund and develop new innovative technologies to support the criminal justice community.

The **National Law Enforcement and Corrections Technology Center (NLECTC)** ¹⁰⁰ is a program of the Office of Science and Technology (OS&T). NLECTC provides criminal justice (law enforcement, corrections, and the courts) professionals with information on technology, guidelines and standards for these technologies, objective testing data, and science and engineering advice and support to implement these technologies. In the NLECTC, the (OS&T) has six portfolios of technology programs :

- 1) *Officer Protection / Crime Prevention*
- 2) *Less-Than-Lethal Technologies Program*
- 3) *Investigative and Forensic Sciences*
- 4) *Information Technologies*
- 5) *Counter-terrorism Technologies*
- 6) *Technology Tools for Training and Simulation*

Figure 7. Process of development of technologies for the correctional services of the United States



Source : GRIP DATA 2000

The NLECTC organisation is composed of a national centre in Rockville (MD), four regional centres and four special offices :

- *The Office of Law Enforcement Technology Commercialization (OLETC)¹⁰¹ was established in 1995 : its mission is to develop and deploy an active, broad based national program to assist in the commercialization of innovative technology for use by the law enforcement and corrections community. OLETC's primary objective is to bring research and private industry together to put affordable, market-driven technologies into the hands of law enforcement and corrections personnel. OLETC actively solicits manufacturers to commercialize technologies based on requirements identified by the NIJ and its Law Enforcement and Corrections Technology Advisory Council as well as from law enforcement and corrections practitioners.*

- *The **Office of Law Enforcement Standards (OLES)** ¹⁰² was established in 1971 through a Memorandum of Understanding between the U.S. Departments of Justice and Commerce. While its major objective is to develop minimum performance standards, OLES also undertakes studies leading to the publication of technical reports and guides. OLES assists law enforcement and criminal justice agencies in acquiring, on a cost-effective basis, the high-quality resources they need to do their jobs.*
- *The **Border Research and Technology Center (BRTC)** is working in the development and implementation of SENTRI (Secured Electronic Network for Travelers' Rapid Inspection) technology as well as human presence detection, seismic sensor upgrade demonstrations, evaluation of night vision and thermal imaging technologies, vehicle immobilization, and communications interoperability.*
- *The **National Center for Forensic Science (NCFS)** provides research, education, training, tools and technology to meet the current and future needs of the forensic science and law enforcement communities.*

Finally, the **Law Enforcement and Corrections Technology Advisory Council (LECTAC)** is the advisory organ of the NLECTC, created in order to identify the technological and equipment needs for the maintenance of order and penitentiary establishments. It examines all the NLECTC's programs and recommends priorities among the projects in its portfolio. Members of the LECTAC council are divided into ten sub-committees and represent Federal, State or local agencies, workers organisations in the legal sector and national and international organisations for the maintenance of order, penitentiary authorities and criminal justice. The number of non-American members is however nominal : two Canadians (*Forensic and Investigative Sciences* sub-committee), an Israeli (*Contraband and Detection* sub-committee) and the director of the *Police Scientific Development Branch* from the United Kingdom (*Law Enforcement Operations* sub-committee). LECTAC contributes to tightening the links between the NIJ and the various agencies by analysing the present and future technological needs of justice. It also advises the NLECTC on the drafting of standards, directives and technical reports.

5.4. TECHNOLOGIES AVAILABLE IN THE PRISONS

The technologies described below were developed, jointly, for military purposes by the *Department of Defense* and for civil purposes by the *National Institute of Justice*, within the framework of the "*Joint Program Steering Group*" (JPSG), which has linked the DoD and the DoJ since 1994. They concern the priority projects identified by LECTAC and were developed within the NLECTC's "*Less-Than-Lethal Technologies*" program. They were developed by private companies, subsidised by the NIJ.

Many of these devices are already operational in American prisons. Some have obtained certificates of conformity in the European Union countries. Others are still in the process of development. Only the most common devices have been considered here as it is not easily possible to carry out an exhaustive analysis of all the available devices.

5.4.1. Laser Technologies

5.4.1.1. *Description and effectiveness of the technologies*

- “Laser Dissuader TM”¹⁰³

This device has the appearance of an ordinary torch and was developed by *Systems Engineering Associates, Inc. (SEA)*¹⁰⁴ with the support of *Phillips Laboratory* of the *U.S. Air Force*. The “Laser Dissuader TM” uses a red laser diode working at a wavelength on 650 nanometres and generates a coherently intense beam of red light. The focal length is adjustable so as to obtain a narrow or wide beam for illuminating an individual or a group. The system has two methods of functioning : a continuous mode which generates a sufficiently dazzling light to enable the neutralisation of an individual and a low frequency pulse mode, like a strobe lamp, which can provoke disorientation or confusion in the individual towards whom it is directed.

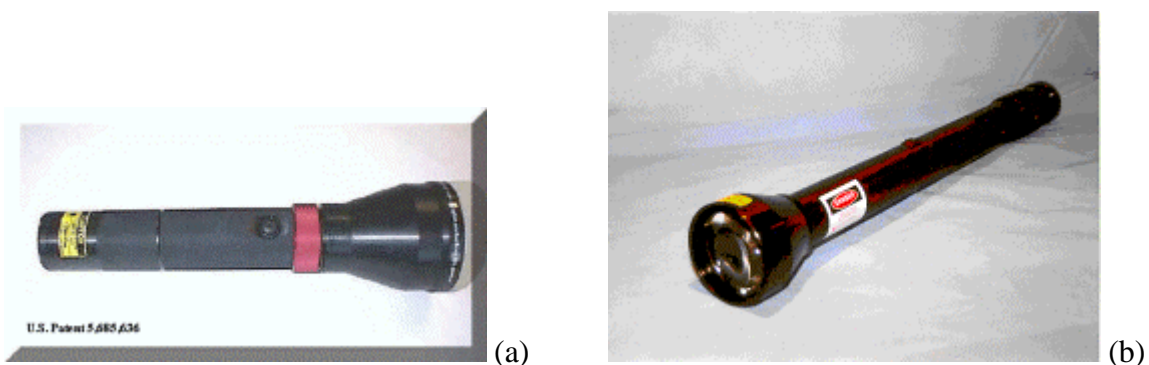
The “Laser Dissuader TM” is a product based on the technology of SABER 203, a non-lethal military laser developed by SEA for the *U.S. Air Force* and successfully tested by the *U.S. Marines* during the withdrawal of UN forces from Somalia.

- “Laser Dazzler TM”:

This device¹⁰⁵ also looks like a common torch and was developed by *LE Systems, Inc.* within the framework of the *Joint Program Steering Group* (DoD and DoJ) with the aid of the NIJ and the DARPA¹⁰⁶. It uses a green laser diode (wavelength of 532 nanometres) to produce random lights in order to disorientate an individual. The laser has a power of 70 mW in strobe mode (at the rate of 20 impulses a second) and 140 mW in continuous mode ; it is effective up to a distance of 50 metres in daylight.

Ten prototypes were supplied to the *U.S. Air Force Research Laboratory (USAFRL)* for safety and efficiency tests. The system does not yet provide complete satisfaction and *LE Systems* is currently working to reduce the costs, weight and size of the equipment. The NIJ plans to finance the USAFRL from the tax year 2000 for the continuation of this project.

Figure 8. **Laser Dissuader (a) and Laser Dazzler (b)**



Source : OLECTC

5.4.1.2. Physical and mental effect on the individual

The “Laser Dissuader™” from DEA has been certified according to international standards as being inoffensive to the human eye and approved for civil use by the *U.S. Food and Drug Administration*¹⁰⁷. The “Laser Dazzler™” requires additional testing.

In stroboscopic mode, these devices can create symptoms of the “Bucha” effect in individuals, in other words disorientation, even nausea and dizziness caused by a high intensity strobe lamp working at a very low frequency (around 10 or 20 pulses a second).

Because of their resemblance to an ordinary torch, the offender will not perceive these devices as an immediate threat which minimises the risks of escalation in the confrontation and increases the effect of surprise and confusion when the offender is affected by the laser beam¹⁰⁸.

5.4.1.3. Abuse of the technologies

The “Laser Dissuader™” was demonstrated, with the support of the OLETC during a simulation of prison riots organised in April 1998 at the *West Virginia Penitentiary*. No case of routine use in the prison environment seems to have been recorded yet.

5.4.2. “Stunning Technologies”

5.4.2.1. Description and effectiveness of the technologies

- “Stun Belt” or “REACT”

The “REACT” belt (*Remote Electronically Activated Control Technology*), or “Stun Belt” is a product from *STUN TECH Inc.*, of Cleveland (Ohio). It is a belt worn around the waist by the prisoner and equipped with two electrodes at the height of the left kidney. Using a remote control with a range of around 90 metres, the guard can inflict electric shocks of 50,000 volts on the offender for 8 seconds. When the device is activated, it is no longer possible to interrupt it (and therefore reduce the 8-second period). The weak amperage (3 or 4 milliamperes) avoids, in theory, any lethal risk. *STUN TECH* offers two versions : the *High Security Transport Belt* (HSTB) used in conjunction with classical retention instruments (handcuffs, chains) for the transportation of dangerous prisoners, and the *Minimal Security Belt* (MSB) used mainly for prisoners appearing before the courts.

STUN TECH claims to have sold 1400 belts in the United States and dominates 90% of the American market. *NOVA Products* of Cookeville (Tennessee) is the number two in the market with its RACC (*Remote Activated Custody Control*) product.

According to an *Amnesty International* report¹⁰⁹, the United States and South Africa are the only two countries known to officially use the “Stun Belt” to neutralize offenders.

- Air Taser

The TASER ®, an acronym of *Thomas A. Swift's Electric Rifle*, is a handgun enabling a shock of 25,000 volts of very weak amperage, to be inflicted on an individual. Developed in the sixties, the TASER only came into service for the first time in 1980 in the Los Angeles police. According to reports of the Los Angeles police department, the rate of use of the TASERs had become five times higher than those for pepper sprays or teargas.

TASER International Inc. ¹¹⁰ is currently producing an improved version of the TASER which is dominating the American and international market and tends to become standard equipment for the forces of order in numerous American states: the AIR TASER ® (its successor, the ADVANCED TASER ®, has already been perfected).

The AIR TASER uses a cartridge of compressed air to propel two hooked electrodes which fix themselves to the clothes of the individual at a range of around 5 metres. The victim's nervous system closes the circuit between the two electrodes which remain connected to the gun by two fine electrical wires. The system is fed by a 9-volt battery whose tension enables, after transformation, a condenser to be loaded with 0,22 µF up to a tension of 2000 volts DC. When this maximum load is reached, the condenser discharges itself into an exit coil which increases the tension tenfold. The AIR TASER can thus generate 10 to 15 impulses per second. When the electrodes are connected on a charge of 4000 Ohms (in this case, the human body), each impulse corresponds to a peak tension of 23,600 volts DC for a duration of 3,5 µs ¹¹¹. The system remains effective even through several layers of clothing and causes loss of all muscular control in the victim.

Recently, 22nd February 2000, the San Diego Police Department decided to equip all its officers with the AIR TASER from *TASER International*.

Figure 9. Extract from *Security Plus Inc. Catalogue*



65,000 Volt Mini Stun Gun
ITEM# E709
Price: \$24.95
Includes Belt Clip



300,000 Volt Stun Gun
ITEM# E716
Price: \$49.95
Safety Switch, Wrist Strap,
Belt Clip



160,000 Volt Stun Baton
ITEM# E701
Price: \$69.95
Pistol Grip, Wrist Strap, Hand
Guard.

Source : www.stunguns.net

Numerous companies, including in Europe, market devices designed according to the TASER technology under other names. Several present their products via the Internet : from the Taser handheld gun to the electric truncheon of 160,000 volts, *Security Plus Inc.* proposes its range at

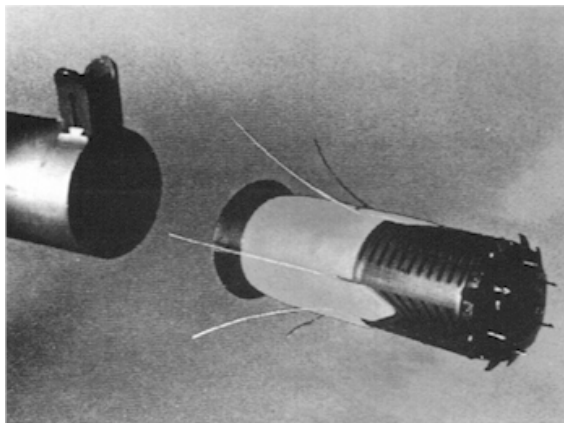
laughable prices from 24.95 USD to 69.95 USD. Destined *a priori* for the order forces, this equipment is deliverable throughout the world and payable by credit card ; the manufacturer simply invites the purchaser to first find out about the legislation applicable to these devices in their own country.

- “Sticky Shocker ®”

The “Sticky Shocker ®”¹¹² is an electroshock projectile developed by *JAYCOR* with funds from the NIJ and the DARPA. The “Sticky Shocker ®” launches a wireless projectile from a distance of 10 metres, which fixes itself to the target by means of glue or small claws. The projectile contains a small battery and the electronics necessary to inflict impulses of 50 kV, using the same principle as the TASER, even through several layers of clothing.

The “Sticky Shocker ®” can be propelled by a large variety of launchers, compressed gas or powder, of 37 to 40mm calibre such as the M203 and M79 grenade launchers or SL-6 gas guns.

Figure 10. The “Sticky Shocker ®” from *JAYCOR*, propelled by a powder or gas launcher (a), fixes itself or sticks to the victim (b)



(a)



(b)

Source : Alexander (US corp.), 1999

5.4.2.2. Physical and mental effect on the individual

Defined as non-lethal, electroshock weapons can nevertheless have serious consequences for people suffering from cardiac or neurological illness or those under the influence of drugs.

Several deaths have been attributed to TASERs. A study carried out in 1998 by *SEASKATE Inc.* for the *National Committee on Criminal Justice Technology* of the NIJ, also described a particularly horrifying case : the use of the OC spray (pepper gas) having proved ineffective to control a violent offender, the officer in charge decided to use the TASER. However, one of the ingredients of the OC spray of which the offender was impregnated, was flammable : the offender was turned into a human torch when he was touched by the electric discharge of the TASER ¹¹³.

In the case of the “Stun Belt”, at least one case with fatal consequences is recorded. In the United States, some agents must try the belt out on themselves during the course of their training. The prison guard, Harry Landis died from the effects of a cardiac arrhythmia after having endured two consecutive discharges from the “Stun Belt”. In fact, it turned out that the victim had already had cardiac incidents previously.

In fact, no serious scientific study has ever been attempted to evaluate the consequences of these devices on the human being. Claims relating to the harmlessness of the “Stun Belt” for the human are based solely on a study carried out by Robert STRATBUCKER at Nebraska University : this researcher tested the effects of the “Stun Belt” on anaesthetised pigs ¹¹⁴.

On a healthy individual, the physical effects of these electroshocks may consist, in addition to burns at the points of contact with the electrodes, of an intense pain with a total loss of neuromuscular control (generally resulting in the individual collapsing on the ground), and thus risks of involuntary defecation or micturition.

On a psychological level, the effects are of two kinds :

- an anxiety induced by the simple fact of having to wear the belt ;
- psychological effects resulting from the fact of having effectively been electrified.

According to Lawrence M. HINMAN ¹¹⁵, an important variable is the perception that the victim has of the remote control operator. If a relationship of trust exists and the offender knows that the belt will only be activated in the event that he commits a clearly prohibited act, the anxiety will probably be less than if the offender suspects his guard to be capable of activating the belt in a random or temperamental fashion. In other words, it can be supposed that the anxiety will be reduced by as much as the offender feels able to control the situation with his behaviour alone.

This is however far from the case in the American reality : on the one hand the accidental activation due to malfunctions or errors in the operation are frequent and on the other, studies carried out by *Amnesty International* ¹¹⁶ and *Human Rights Watch* ¹¹⁷ showed numerous cases where the belt was activated with the sole aim of humiliating the victim, punishing in a disproportionate manner or even through sadism.

5.4.2.3. Abuse of the technologies

“Electricity speaks every language known to man. No translation necessary. Everybody is afraid of electricity, and rightfully so”. This reflection of Denis Kaufman, President of *STUN TECH Inc.*, perfectly illustrates the cynical spirit of the advocates of this type of technology. In the report previously mentioned, *Amnesty International* notes that electricity has long been one of the torture instruments most appreciated by torturers throughout the world. It is therefore not surprising that *Amnesty International* identified so much abusive use of these devices by prison guards or unscrupulous police officers.

One of the main arguments put forward to justify the generalisation of the “Stun Belt” is economic. The cost of a belt is around \$700. The sales argument of *STUN TECH Inc.* is therefore to compare this sales price to the cost of the additional hours regularly worked by the guards in overcrowded prisons. The carrying of a belt would thus enable a significant reduction in security and escort personnel in penitentiary establishments each time an offender needs to be presented before the judge, driven to the hospital or infirmary, or when teams of offenders at work need to be supervised. The belt is also routinely imposed and almost permanent for the most dangerous offenders in some high security areas.

These different uses of the belt can nevertheless include very different categories of the prison population. Imposed on dangerous offenders, it is also often imposed on non-violent offenders and people remanded in custody, with the sole purpose of reducing the strength of the escort staff.

In fact, in the absence of rigorous criteria and procedures for the use of the “Stun Belt”, its use is left to the complete discretion of the local authorities who impose it and activate it in a completely arbitrary fashion. In the *Old Parish Prison* at New Orleans (Louisiana), the “Stun Belt” is applied systematically to offenders carrying the HIV (AIDS) virus who are also relegated to a high security wing regardless of their dangerousness. In the community of El Paso (Colorado), the Sheriff considers the “Stun Belt” as a “level 1” device¹¹⁸, in the same level as handcuffs. In June 1998, Ronnie HAWKINS, a black offender suffering from AIDS, was also “belted” with a “Stun Belt” when he appeared before a court in Long Beach, although he was accused of having stolen 200 dollars worth of aspirin. Considering that he spoke too much, the judge ordered a clerk to activate the belt and HAWKINS instantly found himself pinned to the ground. Being black, having AIDS, a thief and too chatty : that really deserved a punishment...

How can such popularity for all electroshock devices be explained ?

L. HINMAN risked asking whether or not the explanation should be sought in the shameful desire of the population to see prisoners suffer. Of course, it is not morally acceptable to inflict injury and suffering on prisoners through pure popular condemnation. Nevertheless, the combination of technology and the need for security provides the population with the opportunity to satisfy its need to see prisoners suffer at a price that morality, at least on the other side of the Atlantic, considers to be acceptable.

Abuses can in fact be noted in two ways:

- on a local level, or at the individual agent level, the “Stun Belt” risks being imposed in a discriminatory way according to criteria independent of the dangerousness of the offender (blacks, those suffering from AIDS, sexual offenders etc.) ;
- on the institutional level, the generalisation of the belt (or other electroshock devices) also carries risks, without a doubt aggravated when prisons are privatized and become a source of profit for the companies that manage them. Overcrowding, poor conditions of hygiene or diet are the most common causes of rioting in prisons. If all offenders wore the belt, the risk of riots – very costly for a private manager – would consequently be avoided whatever the conditions imposed on the offenders.

The development of mentalities in the United States makes this scenario possible. What appears to us today as inhumane and degrading treatment could tomorrow become a tool of control accepted with a view to a rigorous reduction in costs and maximisation of profits.

5.4.3. Capture nets : Description and effectiveness

Capture nets were initially designed to capture and immobilise threatening animals. In its *Less-Than-Lethal* Technologies program, the NIJ financed research in order to adapt the same principle to the capture and arrest of people.

Figure 11. Description of the capture net from *Foster-Miller, Inc.*



Source : OLECTC, Foster-Miller Inc.

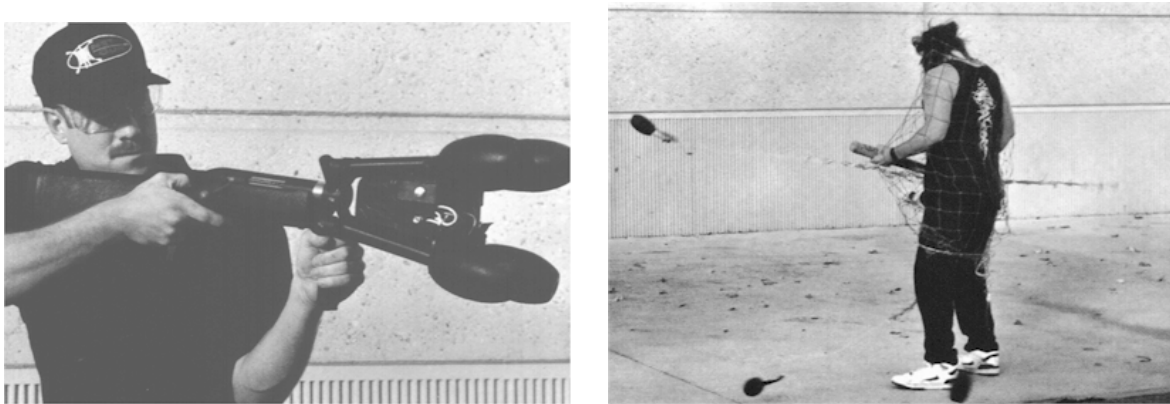
Developed by *Foster Miller, Inc.*, the WebShot™ NET is a capture net compacted into a projectile with a length of around 12.5cm for a diameter of 3.8cm. The projectile can be fired from

guns with a calibre of 37 to 40mm up to a distance of 30 metres. During its journey, the projectile releases and deploys the net, in large mesh ultra-resistant KEVLAR, of a diameter of around 5.2 metres.

There are also variants on this device, equipped with various “optional extras”. The Pepper-NET is a capture net which, on impact when deployed, disperses a pepper gas (OC, *oleoresin capsicum*). The Sting-NET is another variation : after deployment, it enables, thanks to a remote control, the release of an electric shock of 60 kV in order to immobilise the individual.

These “Capture Net” projects were financed by the NIJ and are currently finished. The products are operational and marketed by *Mace Securities International, Inc.*

Figure 12. Firing and deployment of a capture net



Source : Alexander (US corp.), 1999

5.4.4. Chemical incapacitating agents

5.4.4.1. *Description and effectiveness of the technologies*

The most popular teargas sprays are CN (chloroacetophenone) and CS (ortho-chlorobenzylidene malononitrile). These are progressively being ousted however by the growing use of *oleoresin capsicum*, or OC, commonly known as pepper gas or “pepper spray”. The most common OC spray is that produced by *ZARC International, Inc.* under the brand CAP STUN ®, but dozens of other firms market equivalent products throughout the world. OC is a substance naturally present in peppers and chillies.

The disadvantage of the sprays is their weak range with the result that the agent who uses them and the people around him may often find themselves just as affected as the individual who is really the target. The NIJ has therefore financed research by the company, *DELTA DEFENSE* for the development of a projectile which can launch a capsule of OC up to 30 metres, is capable of going through a window and dispersing, within the second, a sufficient quantity of OC to saturate a volume of 10 m³.

Furthermore, *MACE SECURITY INT.* also markets a device for the automatic dispersion of incapacitating gas destined for prisons. This device, the TG GUARD ® System, is made from a network of jets spread around the prison premises (comparable to the automatic sprinkler systems installed in the ceilings in case of fires), and controlled electronically from a console located in a control room. When a security agent notices – from an observation window or on the video screens of a CCTV network – trouble in an area of the prison, he can automatically order, from his control panel, the dispersion of an incapacitating agent (OC or teargas) in the desired location. A coloured additive can ultimately be mixed with the chemical agent in order to mark the individuals causing the disturbance for later identification.


Figure 13. Advertisement for the TG GUARD ® SYSTEM

**SECURITY
PROTECTION SYSTEM**
Stop Trouble Fast With No Hostages

The TG GUARD® SYSTEM is a fixed mounted, electrically initiated agent system that can be tailored to specific needs to protect personnel and facilities by using agent to control disturbances, uprisings and riots. The major components of the System include the firing console, the agent dispensers and the dispenser mounting fixtures. The System is adaptable to a broad range of requirements. A strategically placed dispenser, or a network of dispensers located throughout a complex, can be selectively activated from a remote firing location.

Several standard agent loadings are available containing OC or tear gas powder. Also available is a loading with a red non-toxic dye additive for later personnel identification; and an inert talc powder for verifying the degree of area coverage per dispenser installation as a final systems check or for training purposes.

Custom loadings are also available with varying levels of active agent powder according to the customer requirements. FEDERAL LABORATORIES
DIVISION OF MACE SECURITY INTERNATIONAL



Source : Omega Foundation, Manchester

5.4.4.2. Physical and mental effect on the individual

Unlike the traditional CN and CS, the OC sprays do not irritate the lachrymal glands but provoke a strong and immediate irritation of the mucous membranes, resulting in the a reflex of closing the eyes and a violent cough. *ZARC* claims that these effects more or less subside in 45 minutes and that thorough toxicological tests have not revealed any secondary effect on an allergic, cardiac or neurological level. However, given the multiplication of devices using these chemical

agents and the growing frequency of their use, the absence of thorough toxicological studies on the effects of prolonged and repeated exposure to these substances can only be lamented.

The toxicity and risks can also be the result of substances in which the OC is diluted or mixed to make a spray. No standard is imposed on the composition of OC sprays by either the *Food and Drug Administration*, the *Environmental Policy Agency*, or the *Consumer Product Safety Council*. The thinners can be isopropyl alcohol, or chloromethane ; even some Freon was used in the United States until the *Clean Air Act* came into effect. OC can still be mixed with CS teargases.

5.4.5. Future technologies

Undoubtedly, numerous weapons systems currently developed within the framework of the *DoD Joint Non-Lethal Weapons Program* ¹¹⁹ will quickly find new applications in the civil sector. The few devices described below probably only illustrate the beginnings of the new repressive arsenal available to the forces of order and security in 5 or 10 years time.

5.4.5.1. *Immobilising agents*

This category includes varieties of super adhesive substances (*Sticky Foam*) or glues, capable of hindering progress or immobilising people and vehicles. These agents exist in two forms :

- a condensed polymer, fired by means of an individual gun whose form brings to mind a large children's water pistol (*figure 14*), and which, upon contact with the air, forms a thick sticky foam which can surround an individual and freeze him on the spot ;
- a super adhesive liquid substance which can be sprayed into the air with the aim of clogging or obstructing the intake of air by engines, refrigeration systems or blocking the mobile parts of weapons.

These technologies were developed and demonstrated by the SANDIA laboratories who produced a polymer foam which can be fired up to twelve metres. These laboratories also demonstrated the effectiveness of these techniques on the undercarriages of planes. The Marines charged with covering the withdrawal of the UNOSOM II troops from Somalia had this type of equipment [Schneider, 1997], which they only used however to protect themselves from barbed wire (*concertina*) and to prevent the sandbags on the barriers and shelters from being easily moved. The training of the Marines nevertheless provided for the use of *Sticky Foams* against people and their use is perfectly possible in a prison environment, including inside buildings.

The claimed non-toxicity of these foams and glues is obviously an aberration. The risks of inhalation and the obstruction of the bronchial tubes are significant. Furthermore, they are particularly strong, especially if cleaning them off is delayed, and research has not yet allowed the introduction of an efficient and effective solvent for the individual. They therefore constitute a lethal danger when ingested through the mouth or nose and accumulate in the bronchial tree. Finally, the situation of people who find themselves trapped in a fog of super glue released into the air would be even more dramatic. Inhalation, contact with the eyes and the skin of super glue in an aerosol would, in all likelihood, have inevitable lethal consequences.

Figure 14. Use of the *Sticky Foam Dispenser*



(a)



(b)

Sources : (a) Janes International Defense Review 2/1996, (b) Alexander, 1999

5.4.5.2. Acoustic devices

The use of acoustic energy to repel an adversary or to damage property has been anticipated since the sixties [Schneider, 1998]. The human ear responds to a range of frequencies included between

20 and 20,000 Hertz approximately. Research into acoustic weapons is concerned with infrasonic vibrations, in other words, frequencies lower than the threshold of audibility for a human being. Researchers believe that acoustic vibrations of very low frequency, an infrasonic vibration of around 16 Hertz but of great intensity, may be the cause of nausea, disorientation, disturbed vision and even internal wounds whose effect may vary from temporary discomfort to death in extreme cases.

It must be noted however that such devices have long since met with technical problems difficult to resolve. The size of a loudspeaker is proportional to the intensity of the sound it is desired to produce and inversely proportional to the frequency of this sound. The effects researched in the area of non-lethal weapons, at least of an intense infrasonic vibration, therefore required gigantic loudspeakers whose operation would require a great deal of power.

Figure 15. **The US Marines test a unidirectional acoustic infrasonic weapon developed by SARA.**



Source : Alexander (US corp.), 1999

This problem was recently bypassed by the American firm, *American Technology Corp.* of San Diego who have just developed, as part of a R&D collaboration with the *Naval Post Graduate School* of Monterey in California, a technique for generating sounds, called *Hypersonic Sound*, using air as the resonance surface instead of a loudspeaker with a membrane [Mulholland, 1998].

The process consists of generating two ultrasounds of slightly different frequencies (200,000 Hz and 200,150 Hz for example). These two signals, inaudible to the human ear, are combined to create two additional signals, one with a frequency equal to the sum of the frequencies of the two original signals and the other with a frequency equal to the differences between these two frequencies (thus, in our example, 400,150 Hz and 150 Hz). While the high frequency sound signals quickly dissipate

in the atmosphere, the low frequency signal persists and can be directed with precision towards a group of individuals.

The difficulty lies in designing a sufficiently unidirectional system. In effect, the low frequency sound waves, *a fortiori* with the intensity suggested, spread easily and deeply. Consequently, weapons based on this principle could be considered as non-discriminating (therefore prohibited by the Convention of 1980 on “inhuman weapons”) and could also have a significant impact on the stability of certain equipment (metal fatigue, delamination of composite equipment, broken windows) and on the environment.

According to ALEXANDER co., the leader for the development of infrasonic acoustic weapons is the Californian company, *Scientific Applications and Research Associates* (SARA) who developed an operational system for the *U.S. Army Armaments Research, Development and Engineering Command* (Figure 15).

In Europe, Sweden seems to be at the fore thanks to an acoustic weapon developed by the *Swedish National Defense Research Establishment*.

5.4.5.4. Optical devices

These devices are mostly based on the “Bucha effect” which reveals that high intensity strobe lamps functioning at frequencies of around 1 to 20 Hertz only, in other words, frequencies intervening in cerebral functions, can provoke symptoms such as dizziness, nausea or disorientation.

Isotropic radiators (ODR, *Omni Directional Radiator*) use an inert compressed gas which is released by exploding an extremely powerful and bright light to dazzle or temporarily blind the adversary or to damage his optical sensors. This optical form of ammunition can be presented in the form of grenades, bombs or artillery shells. Similar systems use unidirectional radiators or strobe lamps [Lewer and Schofield, 1997 ; Schneider, 1998].

5.4.5.5. Devices affecting behaviour

The “*Physiological Responses to Energetic Stimuli*” project from the *Oak Ridge National Laboratory* in Tennessee is currently carrying out research on the various technologies which may produce temporary physiological symptoms (nausea, dizziness, disorientation etc.) in the individual, in response to external stimuli such as certain sound or light frequencies or ionising or non-ionising electromagnetic radiance. The laboratory is currently studying, among other things, a prototype of a thermal gun which could produce disorientation following an increase in the body temperature. Other projects use certain frequencies to provoke epilepsy attacks¹²⁰.

Furthermore, several military documents make explicit reference to research in the area of “*Biological Process Control*”, by noting the possible applications in operations for maintaining control. The “*Biological Process Control*” can be defined as a process that interferes with the biological and/or psychological process of the human body by subjecting it to physical, chemical or electromagnetic stimuli with the aim of inducing a determined behaviour and altering the mental faculties or the influence of the memory.

An article published recently in the journal “*Parameters*”, edited by the *U.S. Army War College*, is particularly enlightening in this area of behavioural manipulation [Thomas, 1998]. Raising the theories of the information war and their gaps, the author notes that they neglect an essential data handling system: the human being. He continues by claiming that : *the body is capable not only of being deceived, manipulated, or misinformed but also shut down or destroyed – just as any other data-processing system. The “data” the body receives from external sources – such as electromagnetic, vortex, or acoustic energy waves – or creates through its own electrical or chemical stimuli can be manipulated or changed as the data (information) in any hardware system can be altered* ¹²¹.

In the same register, a document published in 1996, by the Scientific Advisory Committee of the U.S. Air Force provides for the possibility of developing “*electromagnetic energy sources (...) that can couple with the human body in a fashion that will allow one to prevent voluntary muscular movements, control emotions (and thus actions), produce sleep, transmit suggestions, interfere with both short-term and long-term memory, produce an experience set, and delete an experience set. (...) It would also appear possible to create high fidelity speech in the human body, raising the possibility of covert suggestion and psychological direction. When a high power microwave pulse in the gigahertz range strikes the human body, a very small temperature perturbation occurs. This is associated with a sudden expansion of the slightly heated tissue. This expansion is fast enough to produce an acoustic wave. If a pulse stream is used, it should be possible to create an internal acoustic field in the 5-15 kilohertz range, which is audible. Thus, it may be possible to “talk” to selected adversaries in a fashion that would be most disturbing to them*” [US Department of Commerce, 1996] ¹²².

5.5. SITUATION IN EUROPE

GRIP sent a questionnaire to 44 directors of Prison Department in the Ministries of the Member States of the Council of Europe. Part B – devoted to neutralisation technologies – contained 4 questions about the weapons used in their establishments (*Table 4*). Out of the 44 questionnaires sent, 25 responses were received ¹²³. With regard to the Member States of the European Union, 11 responses out of 15 were returned to GRIP, only Italy, Greece, Portugal and Belgium did not offer their collaboration.

All the authorities except one, having answered the questionnaire, claimed they did not use any electroshock device – of the Taser, *Stun belt* or electric truncheon type – and indicate that they have no intention of doing so in the near future. Only the Slovakian Republic recognised that its correctional services are examining the possibility of using such equipment and explains that is already uses an “electronic paralysers”, “*Thunder Bluster*”, about which we were unable to gather more information.

Table 4. **Questionnaire submitted to the prison authorities.**

B. NEUTRALIZATION TECHNOLOGIES

1. Are security staff in prison establishments usually armed?
 - yes no
 - If yes, what is their weapon?
2. Do the staff in charge of maintaining order in prison establishments use devices enabling an individual to be neutralised by electroshocks?
 - Yes no
 - Where applicable, do they use the following equipment? If possible, indicate the rules for use.
 - Stun belt yes no
 - Air Taser yes no
 - Electric truncheon yes no
 - Other (clarify)
 - Which companies, national or foreign, have you contacted for the supply and implementation of these devices?
3. Do the staff responsible for maintaining order in prison establishments use chemical sprays to neutralise an individual?
 - yes no
 - In the affirmative, do they use any of the following equipment? Indicate if possible the rules for use.
 - Teargas sprays (CN, CS, ...) yes no
 - Pepper spray (OC) yes no
 - Other (clarify)
 - Which companies, national or foreign, have you contacted for the supply and implementation of these devices?
4. If the security staff in detention centres do not use any of this equipment, does your authority nevertheless envisage suggesting their use in the near future? In this hypothesis, would you please list the techniques envisaged and any possible studies or experiments carried out?

Source: GRIP DATA 2000

Furthermore, 9 authorities declared that they did not use any incapacitating chemical – teargas or pepper gas – to neutralise unmanageable prisoners; these prison authorities are those of England (*HM Prison Service*), Croatia, Scotland, Northern Ireland, Ireland, the Republic of Macedonia, Liechtenstein, the Grand Duchy of Luxembourg and Sweden. The other authorities admit to using these substances in certain circumstances and according to strict regulation.

On the whole, the responses are therefore reassuring : electroshock weapons were completely absent from the prison environment in the 25 countries who answered the questionnaire while the use of incapacitating gases was exceptional and severely regulated.

We cannot however be sure that these responses, even if they were formulated in good faith by the prison authorities, accurately translate the actual on site situation. Cases of abuse of teargas in prisons are of public notoriety ¹²⁴, while certain indications allow the presumption that electroshock weapons are arousing growing interest within the authorities ¹²⁵ ; besides and without any intention, we could ask ourselves about the reasons that led 19 of the 44 authorities questions to not answer the questionnaire.

However, it can be claimed that beyond pepper gas and teargas, none of the neutralisation methods considered in this report and largely widespread in American prisons - Taser, *Stun belt*, etc. – are not currently in use in European prisons. But for how long ? It is in effect shown that these technologies are available in Europe, either through European distributors of American products or through European companies developing and marketing similar technologies.

By way of example, a study¹²⁶ carried out in 1997 by the *Observatoire des transferts d'armements*, established in Lyon, identified, for France alone, 18 companies producing or distributing electroshock equipment and some 26 companies producing or distributing teargas and incapacitating devices. Furthermore, all these companies export their products throughout the entire world. Independent from the particular appeal that the prison market represents for these companies, several reasons should incite vigilance faced with the rapid development of these “security traders”.

On the one hand, it is observed that the marketing strategies of these companies are increasingly targeting the general public, taking advantage of European legislation relating to these new devices which varies from country to country. In France for example, the AIR TASER with which numerous police departments in the United States are equipped, is on sale completely freely. Thus, in periodicals such as the economic magazine “*Entreprendre*”, an advertisement for the AIR TASER at a price of FRF 1990 (303 Euro) can be found; the sale occurs by mail requiring a simple photocopy of proof of identity (*Figure 16*). The AIR TASER has also obtained a certificate of conformity in Germany¹²⁷. And very recently, 12 January 2000, the ADVANCED TASER, a new product from *TASER INTERNATIONAL Inc.*, was also approved by the German *Bundeskriminalamt* (Federal Criminal Police Office)¹²⁸.

In addition, TASER technology has found other civil “general public” applications, widely marketed in the European Union : *TASER INTERNATIONAL Inc.* has developed an anti-theft device for cars, called the AUTOTASER, having no sales restrictions in many European countries, including France, Germany, Italy, Spain and the United Kingdom.

On the other hand, these companies have largely turned to export, as much intra-community as extra-community, and take advantage there also of the great disparity between the legislation of Member States, as much with regard to the detention of these devices as the rules for export. This study did not allow an exhaustive analysis of all the legislation in effect in the Member States relating to the detention of weapons by individuals or products concerned by laws requiring the transfer of weapons. Nevertheless, it is clear from our research that more often than not, these new devices escape current legislation or are at best in a grey area. The electroshock devices and incapacitating gas dispensers are weapons and should be treated as such.

Figure 16. Advertisement for the AIRTASER in the French magazine “*Entreprendre*”



SECURITE PERSONNELLE HI-TECH



1990*

KIT DE BASE	1990 F
2 CARTOUCHES	430 F
OPTION LASER	1290 F
HOLSTER	410 F

L'auto-défense par excellence !
 Airtaser, le microscopique défensif sans contact, permet de neutraliser à 400 m de distance tout agresseur. Airtaser est un véritable "bouclier invisible" qui agit à distance et permet de neutraliser tout agresseur sans contact physique. Airtaser est un véritable "bouclier invisible" qui agit à distance et permet de neutraliser tout agresseur sans contact physique. Airtaser est un véritable "bouclier invisible" qui agit à distance et permet de neutraliser tout agresseur sans contact physique.



FRANCE

e-mail: Export@airtaser.com

Oui
 Non
 Peut-être
 Je ne sais pas

Article	Quantité	PU	Total
TOTAL TTC			

100% satisfaction ou remboursé ! Paiement en 3 mensualités possible. www.airtaser.com

Source : <http://www.airtaser.com>

5.6. LEGAL FRAMEWORK

It is essential to analyse the various technological innovations mentioned above with regard to the multiple international or community rules relating to Human rights, conditions for the treatment of offenders and arms trading.

5.6.1. Human Rights

All the declarations and conventions relating to human rights contain provisions on the prohibition of torture and inhuman and degrading treatments. The aforementioned articles are moreover drafted in very similar terms. The Universal Declaration of Human Rights provides in Article 5 that “*no one shall be subjected to torture, cruel punishment or treatment, or inhumane or degrading treatment*”. Article 7 of the International Covenant on Civil and Political Rights contains the same provision, clarified in a UN Convention on this issue and also stipulating Article 10.1 that “*any person deprived of his liberty shall be treated with humanity and respect for the dignity inherent in the human being*”. This formal prohibition of torture and inhumane and degrading treatment is again found in Article 3 of the European Convention for the protection of Human Rights and fundamental freedoms, the difference between this text and the previous ones residing in their mandatory force (unlike the Declaration and Pact, the Convention is in effect, equipped with a mechanism of control).

It seems obvious to us that electroshock devices or the extensive use of the OC spray for example and the combination of these devices with one another (namely the Sting-NET) constitutes treatment which if not inhumane is at the very least degrading in the sense of the aforementioned articles and consequently, their use contravenes these basic rules. The prohibition on making people suffer such treatment constitutes an intangible right which implicitly contains the idea that no suffering may be inflicted on offenders deliberately and without just reason ¹²⁹.

By the very risks that it engenders, the presence of the devices described should be prohibited in jails ¹³⁰.

5.6.2. Minimum standards for the treatment of prisoners

The Committee of Ministers of the Council of Europe adopted in 1973 a Resolution (73) 5 on the Standard minimum rules for the treatment of prisoners. These rules rest on six principles :

1. Conformity of equipment and moral conditions to the respect of the dignity of the human person ;
2. Complete impartiality in the application of these rules ;
3. Preservation of dignity and health ;
4. Regular inspection and control by independent authorities ;
5. Respect for individual rights ;
6. Notification of staff as well as offenders of these minimal rules.

Any technological innovation introduced into the prison environment should enable these rules to be respected which should become mandatory ; a Recommendation was made on this

subject in 1987 by the same Committee of Ministers (Recommendation (87) 3 on the European prison rules). The use of technologies considered in this chapter violates several of the principles contained in the Resolution.

5.6.3. International law of disarmament and weapons control

Since the declaration of Saint Petersburg of 11 December 1868, the first international treaty imposing restrictions on the conduct of war and the use of certain weapons, numerous treaties and conventions have attempted to prohibit or limit the use of certain categories of weapons. Several devices developed for the maintenance of order, including in the prison environment, have already been shown to be contrary to this international law of disarmament and weapons control. Others are in a grey area but, whatever they may be, open up a wide gap in a law which struggles to follow the lightening evolution of techno-sciences.

The legality of these devices should notably be examined with regard to two conventions in particular¹³¹ :

1. Convention on the prohibition of the development, production, stockpiling and use of chemical weapons and on their destruction, Paris 13 January 1993

In the sense of this Convention, the sprays that we are considering are effectively “toxic chemical products”, defined as “*any chemical product, which, by its chemical action or biological process, may provoke death, temporary incapacity or permanent damage in human beings or animals*” (article I-2).

The Convention considers that toxic chemical products are chemical weapons, except if they are used for purposes not prohibited by the Convention, namely, for instance for : “*military purposes having no relation to the use of chemical weapons*” and “*purposes of maintaining public order*” (article II-9).

The proliferation of anti-rioting agents (CN, CS, OC) and the increasingly vague border between the militarization of policing and prison methods and the “civilianisation” of military operations for the maintenance of peace (“*Operations-Other-Than-War*”, OOTW) requires a clarification and reinforcement of this convention.

2. Convention on prohibitions or restrictions on the use of certain conventional weapons which may be deemed to be excessively injurious or to have indiscriminate effects, concluded at Geneva on 10 October 1980

This convention, called Convention on “inhuman weapons” fixes a general framework to which annexed protocols are attached relating to protection against certain classical weapons. These protocols currently number four. The 1st protocol prohibits any weapon whose fragments can not be located in the human body using x-rays ; the 2nd Protocol prohibits or limits the use of mines ; the 3rd Protocol prohibits or limits incendiary weapons and the 4th Protocol, adopted in 1995, concerns blinding laser weapons.

In a general manner, the Convention prohibits weapons which produce “*excessive traumatic effects*”. But how is the platform which is “*excessive*” evaluated in the suffering inflicted ?

Moreover, this Convention only applies to victims of war in international armed conflicts. In this case also, taking into account the more and more pronounced penetration of weapons and technologies of military origin in certain civil functions (police, prison, private security), it would be desirable to extend the field of application of the Convention to any situation where weapons are used, to clarify the notion of “*excessive traumatic effects*”, and where applicable, to complete the treaty with additional Protocols, notably regulating the use of electroshock weapons.

5.6.4. Legislation on the trading of arms and police and security equipment

By reason of the diversity of new equipment destined for the maintenance of order in prisons and police operations, it is noted that no European country has a unique legislative system to control them. Part of these equipment concern legislation on arms trading and another is labelled as simple industrial products. Furthermore, the national regulations of the countries of the European Union are either non-existent or ineffective and in no case harmonised for these new equipment¹³². It is therefore necessary to bridge this legal gap or uncertainty and that new common provisions should be adopted within the EU.

Point 5 of the European Union Code of Conduct on Arms Exports, adopted by the Council on 25 May 1998, provides that “*the Member States of the EU shall strive to adopt in the shortest time possible, a common list of military equipment covered by the code, founded on similar national or international lists*”.

The need to establish such a list was reaffirmed in the first annual report drawn up in application of point 8 of the clause of the Code of Conduct. This report, approved on 25 September 1999 by the “Exports of conventional arms” group stipulates in paragraph 5 entitled “*Priorities for co-ordinated action in the future*” that “*I. The finalisation of the common European List of military equipment is a top priority. It is necessary that this list reflect the present threats to international peace and security and to the respect of human rights. The list is to be a cornerstone of the Code of Conduct and should not be limited to the lowest common denominator of existing national control lists.*”

The COARM group (*Conventional Arms Exports Working Group*) should examine the possibility of explicitly including in this common list, security and police equipment with particular attention to the new electroshock equipment and technologies. This list should be frequently revised in order to remain adapted the speed of technological evolution.

5.7. OPTIONS

In view of the dangers with regard to the respect of fundamental freedoms that the introduction of the technologies described in this report into prisons presents, and given the lack of considerations that they are subject to, the GRIP presents the following recommendations :

- The European Parliament should ensure that the use of technologies for the maintenance of order is reserved for public and security services and possibly, certain private approved companies. Urgent provisions should be made to stop the rapid expansion in the sale of these devices to the general public (notably by mail order) and private security services. Public access to these technologies strengthens the ideology of self-defence and comfort, in a way, defiance towards public authority¹³³.
- It is suggested to the European Parliament to ask the COARM group to examine the possibility of explicitly including in the common list, security and police equipment provided for in point 5 of the European Union Code of Conduct on Arms Exports, adopted by the Council on 25 May 1998, with particular attention to the new electroshock equipment and technologies. This list should be frequently revised in order to remain adapted to the speed of technological evolution.
- The European Parliament is advised to invite the Commission and the Member States to take a stance in favour of a revision :
 - a) Of the 1993 Convention on the prohibition of the development, production, stockpiling and use of chemical weapons and on their destruction, in view of a clarification and reinforcement of the rules relating to the use of anti-rioting chemical agents in civil and military operations for the maintenance of peace
 - b) Of the 1980 Convention on prohibitions or restrictions on the use of certain conventional weapons which may be deemed to be excessively injurious or to have indiscriminate effects, with a view to extending the effects to the case of using these weapons outside situations of war and to examine the need to adopt new additional protocols, namely to limit or prohibit the use of electroshock devices
- It is suggested to the European Parliament to commission a specific study on the use of electroshock equipments and incapacitating chemical sprays and agents whose use appears contrary to Article 3 of the European Convention for the protection of Human Rights and fundamental freedom, which stipulates that *“no one shall be subjected to torture or inhuman or degrading treatment or punishment”*
- Whilst waiting for specific provisions regulating the use of neutralization technologies, the European Parliament is advised to ask the Commission to bridge the legal gap concerning electroshock devices by inviting the Member States to adopt a moratorium, in the name of the principle of precaution, by which they undertake to prohibit the production, import, export and distribution of these devices

6. CONCLUSION

“The degree of civilisation of a society can be judged by going into its prisons”

Dostoïevski (1821-1881)

No one can escape the fact that we are witnessing in Europe, a growing privatization of security, along the lines of what has been observed in the United States, pioneers in the area. The American approach is developing, according to a logic identical to that seen in the development of military doctrines since the beginning of the nineties, a supposed technological overvaluation to meet as far as possible, all economic and security obligations.

Privatisation and technological innovations, on which the reforms and the American penal system are based, are not however immediately transferable in most members of the European Union, for reasons as varied as there are different concepts of order, law and ethics.

Despite these differences, KAMINSKI believes that *“the powerful argument of economic effectiveness, combined with the mirage of total security, is amply sufficient to understand the irresistible attraction that the technological innovation holds for the decision makers”*¹³⁴. This form of technological fascination rests too often however on incomplete evaluations or biased data and overshadows the indispensable debate regarding the essential functions of the penal system and the economic and social effect of these new technological tools.

Traditionally, the correctional system placed emphasis on punishment, separation and isolation. Some believe we should go back to that system or remain with these traditional isolational and repressive practices. Others favour social accompanying and rehabilitational sanctions and for this, demand reforms and an increased protection of the individual rights of offenders¹³⁵.

At the beginning of the year 2000, a working group on security in prisons introduced by the Federal correctional service of Canada noticed that *the examination of incidents relating to security revealed on many occasions that security problems in the establishments arise where there is little positive interaction between the staff and the offenders*. It consequently recommended the concept of *“active security”*, that should be refined and that should include *all actions which contribute to the blooming of professional positive relations between staff members and offenders*.

The position of the Canadian working group is original and interesting: it encourages the adoption of an *elegant but discreet concept of security which respects the dignity of people while using leading technology*. In other words, it proclaims itself without a doubt in favour of an evaluation and standardisation, in view of the implementation, of advanced monitoring technologies, biometric devices or control devices based on the GPS system, but it also recommends prudence and states some changes of a non-technological nature which are necessary for the management of establishments. In particular, we will particularly pinpoint :

1. *The need for a staff presence in all sectors of the establishments occupied or used by offenders. Technology should not replace the presence of staff members.*
2. *It is good to limit the use of barriers and doors which are harmful to human interactions.*
3. *Videosurveillance, cameras and wire fencing reduce the opportunities for interaction between staff and the offenders. Strict guidelines should be respected in relation to these applications.*

In several European countries, numerous social workers and criminologists – even those in charge in the prison authorities – are also worried, and fortunately, about this propensity in Europe to copy the United States in the penal sector, as if it was incapable of thinking for itself and resisting the pressures of the industries. Importing technological innovations into the prison environment is above all beneficial to a private sector anxious to develop a new market. The economic or social advantages remain to be demonstrated – at the most, technology installs an illusion of security to reassure public opinion – but the threat to the fundamental freedoms is, in the short term, very real.

“Prison is a microcosm of our society whose defects are aggravated” declared H  l  ne DORLHAC ¹³⁶, former secretary of state for prison conditions in France, a few days after the sensational publication of Doctor V  ronique VASSEUR's book ¹³⁷ denouncing the deplorable detention conditions at the Prison de la Sant   in Paris.

Prison is also an easy entrance door for innovative technologies of control, surveillance and repression. The conquest of the prison market could however simply be a stage, a testing ground, for an industrial sector that will not be satisfied for long with the narrowness of this market and which actively seeks new openings in other activities of society.

Finally, penal policies centred solely on the privatisation and technicalisation of tasks eludes the entire debate on the role that our society wishes to see prison play. Is the sole function of the criminal justice to protect society by isolating individuals it considers dangerous or undesirable, or do we assign it a role of reintegration and rehabilitation into society – that can contain a reparation of the damages caused to the victims ¹³⁸ – ?

The American technological “model” has made prison an asocial and non-law place. It is for Europe to oppose it with a penal model respectful of Human Rights and human dignity. Any technological innovation should not necessarily be excluded, but it should be evaluated with prudence and given back its true value : a role of auxiliary and ‘facilitator’ of social relations with the offenders, but in no way, their substitute.

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8. NOTES

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¹² *The Times* noted in its 22 May 2000 edition, the record fine of 1 million £ inflicted on the British firm, SECURICOR due to its poor management and the multiplication of incidents in Parc prison (South Wales); GROUP 4 has also been subjected to a fine of £212,000 for its defects in Altcourse Prison in Liverpool.

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¹⁴ Z. BAUMAN, *Globalization : the Human Consequences*, Cambridge, Polity Press, 1998.

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¹⁷ K. DE BUCK and K. D'HAENENS, *Electronic monitoring*, Nationaal Instituut voor Criminalistiek en Criminologie, Departement Criminologie, Brussels, 1997, p. 5.

¹⁸ Among the largest suppliers of monitoring technologies, BI Inc. markets this type of device: BI Sobrietor™, http://www.bi.com/MK/BI9300_Sobrietor.html

¹⁹ P. LANDREVILLE, *La surveillance électronique des délinquants : un marché en expansion*, in *Déviance et Société*, 1999, Vol. 23, n°1, p. 114.

²⁰ J. HOSHEN, J. SENNOTT and M. WINKLER, *Keeping Tabs on Criminals*, Institute of Electronical and Electronics Engineers, *Spectrum*, February, 26-32.

²¹ LIBERATION, Wednesday 3 May 2000.

²² LE MONDE, Thursday 4 May 2000; see also the Communication of the Commission: GALILEO: L'engagement de l'Europe dans une nouvelle génération de services de navigation par satellites, Brussels COM(1999)54 final.

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- ³² NLECTC, op. cit., Bulletin, October 1999.
- ³³ T. L. BAUMER and M. G. MAXFIELD, Electronic monitoring in Marion County, Indiana, in *Intermediate sanctions in overcrowded times*, NUP, Boston, 1995, p. 108.
- ³⁴ P. HASSETT, The use of Electronic Monitoring for Pretrial Release, British and Irish Legal Education Technology Association (BILETA) Conference.
- ³⁵ The Federal Canadian policy is, according to it, more sensitive to the level of use of EM. Some Federal offenders are nevertheless subjected to the measure.
- ³⁶ Data extracted from an interview with Professeur P. LANDREVILLE and from his article La surveillance électronique des délinquants : un marché en expansion, in *Déviante et Société*, 1999, Vol. 23, n°1, p. 107.
- ²² See for example le Rapport DALLAIRE: La surveillance électronique a-t-elle répondu aux attentes suscitées?, Les leçons de dix ans de développement des punitions intermédiaires, Direction générale des Services correctionnels du Québec, Ministère de la Sécurité publique, March 1997.
- ³⁸ Small leaflet on the orientations for action, For the services adapted to social and penal challenges, Direction générale des services correctionnels du Québec, March 1996.
- ³⁹ Actualiser le changement et bâtir l'avenir, Direction générale des services correctionnels du Québec, Gouvernement du Québec, 1998.
- ⁴⁰ The data for this section is from a study carried out by GRIP at the Directions Générales des Etablissements pénitentiaires in the Member States of the Council of the European Union. The study was carried out in April 2000 and recovered the application of EM and the introduction of neutralisation technologies in prisons of the states concerned.
- ⁴¹ This may bear witness to two things: either the will to conceal certain aspects (and sometimes right to concealing the very existence of experiments), or the profound ignorance and lack of consistency within the different ministerial services responsible for the implementation of penal policies.
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	<u>Subject</u>	<u>Officer</u>
Level I	Compliant / Cooperative	Verbal commands
Level II	Passive resistance	Contact controls
Level III	Active resistance	Compliance techniques
Level IV	Assaultive / bodily harm	Defensive tactics
Level V	Assaultive / serious bodily harm or death	Deadly force

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