

“The electronic bracelet as a manifestation of the use of modern technology in Algerian penal legislation “

**The electronic bracelet as a manifestation
of the use of modern technology
in Algerian penal legislation**

السوار الإلكتروني كمظهر لإستخدام التكنولوجيا الحديثة

في التشريع العقابي الجزائري

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Abstract:

The modern era has witnessed rapid technological developments that have greatly affected various aspects of life, including the field of criminal justice. Among these developments is the emergence of the electronic bracelet as a new tool for implementing alternative punishments, as it is used to monitor convicts outside penal institutions. It has gained wide acceptance in many developed countries. Algeria is the first Maghreb country to adopt this system, and despite the many advantages it offers. However, he faces difficulties. This is what we will try to study and analyze.

In this research study, we provide an overview of the electronic bracelet as a modern monitoring method. We explain how modern technology is used in the penal sector, focusing on the main challenges that hinder its application.

Key words: electronic bracelet, alternatives to punishment, punitive policy, electronic surveillance.

Introduction:

The world today is witnessing rapid development in the field of applying modern scientific technology, which has greatly affected various aspects of life, including in the field of law and its branches. The judicial and procedural system is one of these legal fields that has been affected by these developments, as the emergence of the remote tracking system as a modern tool for electronic monitoring has many benefits for convicts, and for the entire justice system, as it is employed in many countries As a partial or complete alternative to pretrial detention, modern judicial systems are constantly looking for more humane and effective solutions to manage crime and punishment, which offer an alternative to traditional punishments through these systems, which rely on accurate tracking devices, allowing convicts to serve their sentences outside prison while ensuring that they do not commit new crimes. This technology has proven successful in many countries.

Practical reality has proven the ineffectiveness of traditional methods of reform and rehabilitation, which has resulted in the emergence of many problems faced by penal institutions and those in charge of their management, such as the problem of prison overcrowding, the mixing of inmates with each other, the spread of diseases, the acquisition of criminal patterns among inmates, and other problems.

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“The electronic bracelet as a manifestation of the use of modern technology in Algerian penal legislation “

Algeria is the Arab country that was the first to adopt electronic surveillance systems as part of the reforms of its judicial system, while legalizing these systems through a series of legislations that specified the conditions and procedures related to their application, as the Algerian legislator first approved it as an alternative system to temporary detention under Law 15-02 amending and supplementing the Code of Criminal Procedure, then developed it to keep pace with comparative legislation in this field through its successful field experiences. The electronic monitoring system was implemented as a system for adapting the custodial sentence, which does not exceed three years, which came in accordance with Law 18-01, which includes the Prisons and Social Reintegration Law for Detainees, and the electronic monitoring system is considered a new mechanism for implementing short custodial sentences.

Then came Law 24-06 issued in April 2024 amending and supplementing the Penal Code, which adopted electronic monitoring as one of the original alternative penalties to imprisonment, i.e. an independent penalty in itself that can be sentenced instead of imprisonment for some crimes, according to specific conditions. These are the most important amendments that occurred in the Algerian penal system with regard to electronic monitoring through the electronic bracelet.

This is what prompted us, through this article, to ask : **How effective is the electronic bracelet adopted by the Algerian legislator as an alternative to traditional punishment in light of the challenges facing its application?**

To answer this problem, we will divide the text of the article into two points. We will devote the first point to giving an overview of the electronic bracelet as a new method for electronic monitoring and employing modern technology in the punitive aspect, while we will devote the second point to explaining the conditions for its application and the most important challenges facing this application in Algeria.

The descriptive analytical approach was used to address the most important ideas related to the electronic bracelet and electronic monitoring systems, taking into account their general framework, then analyzing the role of the electronic bracelet as an alternative to the traditional punishment in Algerian penal legislation and revealing its positive impact through the rules for its use and the most important problems it faces in application.

1-The general concept of the electronic bracelet as a new method for electronic monitoring and the use of modern technology in the punitive aspect

Various terms have been used to describe electronic surveillance, including "placement under an electronic surveillance system using an electronic bracelet, home confinement, placement under a mobile or fixed electronic surveillance system, and house arrest for an electronic surveillance system" . In this section, we will discuss the definition of this penalty at the jurisprudential, technical and legal levels:

1.1- The jurisprudential dimension of the concept of the electronic bracelet:

Many jurisprudential definitions have given a broad concept to the electronic bracelet, and this is in criminal jurisprudence, as there are those who define it as the use of electronic media to ensure the presence of the person subject to it during a specific period in the place and time previously agreed upon between its holder and the judicial authority ¹ .

Others have also defined it as an electronic monitoring system or what is called an electronic bracelet, or home confinement, which means obligating the convict or pretrial detainee to reside in his home, or place of residence, within specific hours, so that the person subject to electronic monitoring is followed up ² .

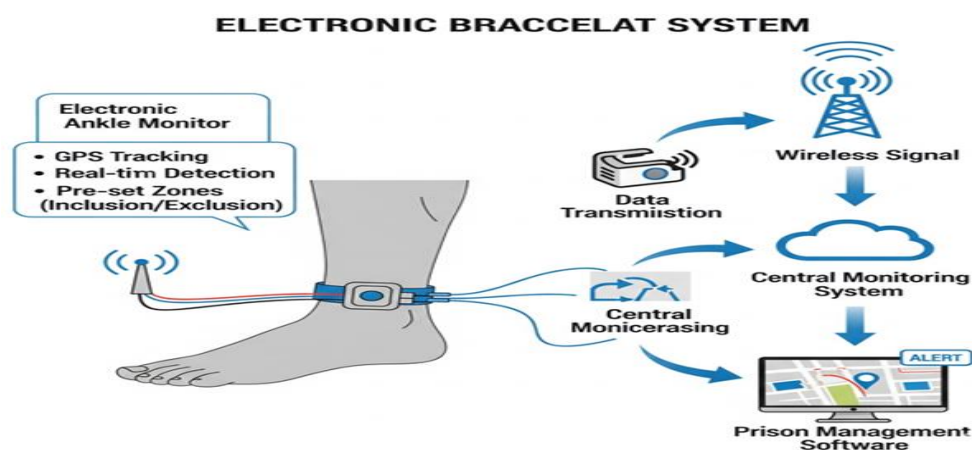
There is another aspect of jurisprudence that believes that electronic monitoring is monitoring carried out remotely by electronic devices, with the aim of determining the times and places of the convict's presence within the permitted area, as evidence of the extent of his commitment to the conditions and controls of the penalty imposed on him, according to which it can be confirmed the

“The electronic bracelet as a manifestation of the use of modern technology in Algerian penal legislation “

presence or absence of a person from the place designated for his residence, pursuant to a judicial ruling³.

1.2- The technical dimension of defining the electronic bracelet:

The term electronic surveillance is derived from the French expression (Surveillance électronique) or electronic bracelet (Bracelet électronique)⁴. An electronic device has been invented that is placed on the leg or hand of the convict, and is connected directly to a central electronic device and allows the observer to track the perpetrator's steps and know his whereabouts. It sends signals every 30 seconds, which another device receives and sends via the telephone line it connects to to the central device, which puts the perpetrator in a position that does not allow him to exercise his freedom except within the scope determined for him by the judicial order or ruling. In the event of an attempt to damage the device, warning signals are sent to take the necessary measures⁵. The figure below shows an approximate picture of how this system works :



Source :

Gemini (2025) , "Explanatory diagram of the electronic bracelet system," created by a large language model .

1.3- The legal dimension of defining the electronic bracelet:

Many contemporary legislations have approved the status under the electronic monitoring system of the electronic bracelet and the mechanisms for its implementation have varied. However, most penal laws, and even special penal and procedural texts, are primarily concerned with clarifying the methods of implementing its procedures, without providing a definition for it⁶.

For example, the French legislator, in Article 137 of the Code of Criminal Procedure, stipulated its implementation as an alternative to temporary detention within the framework of judicial control by determining residence ARSE, and in the French Penal Code it stipulated the possibility of subjecting dangerous criminals who suffer from psychological disorders upon their release to electronic monitoring at the end of the sentence as a middle stage between deprivation of freedom within the penal institution and final release, as well as as an alternative to deprivation of freedom. However⁷, France was not the one who took the initiative in applying modern technology in the field of custodial sentences, as it was preceded in this by several countries such as the United States of America, England, Ireland, the Netherlands, Sweden, Australia, Canada, and New Zealand⁸.

As for the Bahraini legislator, he defined it in Article 7 of Law No. 18 of 2017, regarding penalties and alternative measures, stipulating that subjection to electronic monitoring is by monitoring the movement and travel of the convict electronically using one or more of the

“The electronic bracelet as a manifestation of the use of modern technology in Algerian penal legislation “

electronic monitoring methods available at the Ministry of Interior. As for the Emirati legislator and the electronic monitoring system, he defined it in Article 355 of the amended Code of Criminal Procedure No. 17 of 2018 Describing it as depriving the accused or convict of being absent from his place of residence, or any other place designated by the order issued by the Public Prosecution or the competent court, as the case may be, and implemented through electronic means that allow remote monitoring, and oblige the subject to carry a built-in electronic transmitter throughout the period of being placed under monitoring ⁹ .

As for **the Algerian legislator**, he introduced this system for the first time as an alternative measure to temporary detention in Order No. 15-02 amending the Code of Criminal Procedure in Article 125 bis 1 as a measure that the investigating judge can order in implementing judicial oversight obligations ¹⁰ . However, in the Prisons and Social Reintegration Law, the system of placement under electronic supervision was defined in the second paragraph of Article 150 bis as a procedure that allows the serving of a person sentenced to a custodial sentence not exceeding 3 years, or in the event that the remaining sentence does not exceed this period, an electronic bracelet that allows knowing his presence at the place of residence specified in the placement decision issued by the judge applying the penalties ¹¹ .

As for the Algerian Penal Code, through its latest amendment (2024), the situation under electronic surveillance was defined in Article 5 bis 7 as one of the original alternative penalties to imprisonment and as a restrictive measure of individual freedoms, and aims to monitor the behavior of the finally convicted person throughout the period of the sentence imposed on him By using an electronic bracelet that allows knowing his presence in the place specified by the judge applying the penalties, who must not leave it except with his permission, in order to ensure the implementation of the penalty. As for bis 8 and 9 of the same article, the Algerian legislator addressed the conditions that must be met, as well as the rights and duties of the person subject to supervision ¹² .

We can conclude from the various advanced definitions that the essence of electronic monitoring is the use of an electronic device in the form of a wristwatch placed on the wrist or lower leg, which allows ensuring the presence of the person concerned during a specific period of time in a place and time agreed upon in advance between the person concerned and the competent judicial authority, and is installed in a penal institution and the center and communication by telephone, is concluded, Compliance with the imposed obligations can also be verified through visits by the administration of the penal institution to prisoners, and this allows prisoners to work, study, train or receive treatment while serving their sentence outside the closed environment, which is prison .

2- Controls for applying the electronic bracelet and the obstacles facing this application in Algeria

The Algerian legislator has adopted the electronic control system as part of its efforts to develop the justice sector. This system is subject to a set of terms and conditions enacted by the legislator within Law on the Organization of Prisons and the Social Reintegration of Detainees, as well as Law Algerian Penal Code. Despite the motives or reasons that led to the adoption of this system, it faces some difficulties in its implementation :

2.1- Provisions relating to the application of the electronic bracelet in Algerian legislation :

2.1.1- Restrictions related to the penalty and the competent authority:

The conditions relating to the penalty and the competent authority for implementing the electronic bracelet are subject to two different approaches in Algerian legislation. According to Prison Regulation Law (2018) , the electronic bracelet is considered an alternative to the custodial penalty, and a convict can benefit from it if the remaining period of his sentence does not exceed

“The electronic bracelet as a manifestation of the use of modern technology in Algerian penal legislation “

three years. In this case, "Article 150 bis 1", the decision to place the person under electronic supervision is issued by the judge applying the penalties based on the opinion of the Public Prosecution and the Penalty Application Committee. This is done based on a request from the convict or his lawyer. The judge decides on the request within a maximum period of 10 days with a decision that is not subject to appeal, with the possibility of renewing the request after six months.

As for Penal Code (2024) , the legislator has expanded the scope of its application, as the electronic bracelet has become an original penalty that the judge can rule directly on, in cases where the prescribed penalty does not exceed 5 years, or the penalty used does not exceed 3 years, and this is what is stipulated in Article 5 bis 7 of this law, and in the event of recidivism, this penalty cannot be applied. In addition, crimes of terrorism, corruption, smuggling and organized crime, as well as crimes of exchange and capital movement, are excluded from this penalty .

On the one hand, this system is considered an original penalty that the judge can impose directly during the pronouncement of the ruling, in accordance with Law Penal Code , in the case of crimes whose prescribed penalty does not exceed 5 years or in which a penalty not exceeding 3 years has been pronounced.

On the other hand, the electronic bracelet is considered an alternative measure to the custodial sentence, applied during the execution phase of the sentence in accordance with Prisons Law. The judge applying the sentences may grant the convict this privilege upon his request to complete the remaining period of his sentence, provided that it does not exceed 3 years. Thus, there is no conflict between the two laws, but rather a functional integration that allows the application of the electronic bracelet at different stages of criminal proceedings.

The judge applying the penalties may also, as stipulated in Article 150 bis 6, subject the person holding the electronic bracelet to one or more measures, such as practicing a specific activity, pursuing a specific education or training, not going to certain places, and not meeting with some convicts, such as partners and original perpetrators of the crime. According to the same Article bis 10, the Algerian legislator allows the judge applying the penalties to cancel the benefit of this procedure in cases specified by law, which are ¹³ :

- ✓ In the event that the meaning does not respect its obligations without legitimate justification.
- ✓ New conviction case.
- ✓ Upon request of meaning.

According to same Article bis 3, paragraph 1, the application of the electronic monitoring system requires that the issued sentence be final, that the convict prove the existence of a permanent residence or domicile, and that wearing the electronic bracelet does not negatively affect his health, in addition to paying all amounts of fines imposed on him. In addition to these conditions, the sentence must not be subject to a stay of execution, and the system does not apply to cases of conditional release. Which distinguishes it as an alternative to custodial punishment and not as a form of early release.

The legislator also granted the Attorney General the authority to cancel electronic surveillance if it poses a threat to public security, and considered that tampering with the electronic bracelet is an escape crime punishable by law. If the Attorney General sees that the situation under electronic surveillance negatively affects security and public order, he may request its cancellation from the Penalty Implementation Committee. In this case, the person concerned carries out the rest of his sentence within the penal institution after deducting the period he spent under electronic surveillance. The Algerian legislator also addressed, through "Article 150 bis 14" of same Law, the person concerned's attempt to evade electronic surveillance, especially by removing, damaging or disabling the electronic bracelet, which exposes him to the penalties stipulated for the crime of escape stipulated in the Penal Code ¹⁴ .

“The electronic bracelet as a manifestation of the use of modern technology in Algerian penal legislation “

Thus, we conclude that the electronic monitoring system is not just a technological tool, but rather a **system of dual monitoring** practiced on the convict, and an integrated process subject to continuous administrative and judicial supervision . So that the same article bis 8 of Prisons Law confirms that the external services of the prison administration shall work to socially reintegrate detainees, by monitoring the convict remotely, through field visits, and by telephone, and thus sending periodic reports to the judge applying the penalties. The latter shall supervise the follow-up and implementation procedures related to the situation under electronic monitoring, after ensuring that the convict may not be exposed to any health damage that affects his safety as a result of wearing the electronic bracelet ¹⁵ .

2.1.2- Restrictions relating to the convict :

In addition to the conditions of the sentence, Algerian legislation focuses on personal conditions related to the convict himself. According to Article 150 bis 3/ 2, of Prisons Law, when applying electronic monitoring, the convict's family situation is taken into account, in addition to his pursuit of medical treatment, professional or educational activity, or if he shows serious guarantees of his integrity. Moreover, the convict's consent is a basic condition The law stipulates that the request is "based on a request from the convict or his lawyer," which confirms that this procedure is not imposed on him without his acceptance or the approval of his legal representative if he is a minor. The dignity, safety, and private life of the person concerned must also be respected when implementing the situation under electronic monitoring .

The same condition was stipulated in the Penal Code in the text of Article 5 bis 8, which is that the accused must agree to this penalty and his explicit consent must be recorded in the judicial ruling. The judge also warns the convict that if he violates any of the conditions, the alternative penalty will be cancelled and the original prison sentence will be imposed on him. This is what was stated in the same Article 9 bis of the same law ¹⁶ .

2.2- Obstacles facing the application of the electronic bracelet in Algeria :

Despite the many advantages offered by the electronic surveillance system as an alternative to custodial sentences, its implementation in Algeria faces a number of obstacles, which can be summarized in the following points:

2.1.1- Technical and social barriers:

- ✓ **Device maintenance problem :** The devices used (electronic bracelet) may face malfunctions or technical problems , which requires the presence of specialized and responsive maintenance teams to ensure continuous monitoring. Also, in terms of communication networks and accurate tracking system, it requires an advanced technological infrastructure, not to mention remote areas. Also, purchasing and maintaining devices requires specialized competencies so that ineffective devices are not imported ¹⁷ .
- ✓ **Concerns about social acceptance and ensuring the rights of the convict :** The system may face difficulty in achieving full social acceptance, as society may not fully trust the effectiveness of this type of punishment. The application of the electronic bracelet may also raise questions about the extent of respect for the rights of the convict, especially with regard to his privacy and freedom of disposal of his body, as he is monitored 24 hours a day. Let us not forget that it is not suitable for everyone, especially those who have health problems These are issues that raise some concerns about the sanctity of private life or the possibility of compromising the health of the body of the convict using this device ¹⁸ .

2.1.2- Organizational, administrative and financial obstacles :

- ✓ **Obstacle to coordination between different parties:** The system requires tight coordination between the various concerned parties: the prison administration, the penal enforcement judge, and the public prosecution, in order to ensure smooth implementation and quick decision-making in cases of violation. This coordination may lead to slow

“The electronic bracelet as a manifestation of the use of modern technology in Algerian penal legislation “

administrative procedures, which may take a long time and hinder the speed of implementation, especially in the process of exchanging information and documents .

- ✓ **Financial cost obstacle:** The high cost of purchasing an electronic bracelet from specialized and qualified international companies, not to mention its maintenance, in addition to the cost of training employees and managing the system, constitutes a large financial burden on the state budget, especially when its application is expanded on a large scale.
- ✓ **Obstacle to the lack of continuity in training human cadres in order to keep pace with the development of system technologies:** Implementing the system requires specialized cadres trained to deal with new technology and understand the legal and administrative aspects of the system. It is not enough to train cadres once, but rather requires continuous training programs to keep pace with technological developments and system updates ¹⁹ .

Conclusion :

The electronic bracelet represents a radical shift in the methods of punishment philosophy, as it moves away from the traditional model based on imprisonment and exclusion, to adopt a reform approach that focuses on reintegrating convicts into society, and its concept is based on remote monitoring technology, which allows individuals to serve their sentences outside prison walls, while ensuring compliance with specific legal controls .

Results :

- ✓ Electronic bracelet technology offers great opportunities to maintain family, social and professional ties, and reduces pressure on penal institutions.
- ✓ This system allows convicts to gradually return to normal life without direct exposure to the stigma associated with imprisonment.
- ✓ The system requires continuous maintenance to ensure that the devices operate accurately and are not subject to tampering or malfunctions. Poor network coverage in some areas may also affect the effectiveness of monitoring.
- ✓ The laws regulating the operation of the electronic bracelet must be clear and precise to avoid any violation of personal rights or electronic monitoring conditions, such as exceeding the specified areas or attempting to remove the bracelet, which requires rapid intervention.

Recommendations

- ✓ Work must be done to develop and modernize technical infrastructure, including communication networks, to ensure comprehensive and reliable coverage.
- ✓ The role of civil society must be highlighted in order to organize awareness campaigns to remove negative stereotypes about convicts and encourage their acceptance in the labor market and society.
- ✓ Laws and regulations must be constantly reviewed to keep pace with technical developments and ensure the protection of the rights of all parties in particular
- ✓ Rehabilitation programmes and psychological and social support should be provided to convicts, under the supervision of specialists, to enhance their chances of full reintegration.
- ✓ Better modern technologies must be sought in Algeria than just the electronic bracelet, especially those that focus on rehabilitation and integration rather than just monitoring. Finland is a leading example in this field with its "smart prison" concept.

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“The electronic bracelet as a manifestation of the use of modern technology in Algerian penal legislation “

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