

# Artificial Intelligence and its Application to Public Procurement \*

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**ABSTRACT** This article analyses the legal and administrative particularities of Artificial Intelligence application to public-procurement procedures. Firstly, a general approach is made as to what the current institutional and legal framework is. Secondly, an analysis of the risk and modulating factors is undertaken, paying special attention to those affecting Public Administration and public procurement. Finally, the paper contains an in-depth analysis of some AI experiences in public procurement, identifying possible risks and calibrating the degree of guarantees to be required in each case. We conclude that although explainability is understood as one of the key elements of AI application to the public sector, current AI uses in public procurement rather lay their legitimacy on other aspects such as transparency on approval, efficiency and human filters.

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## 1. Strategy and data as a premise for effective implementation

In recent years, different documents have been published, both at the European and national level, trying to develop a strategy for the effective implementation and regulation of digital tools, and especially Artificial Intelligence, in the Public Administration. The origin of this trend can be traced back to the Tallinn Declaration of 6 October 2017 on eGovernment, which laid the foundations for the digital transformation in the EU and EFTA. This Declaration marked a before and after for the involvement of the different member states in the development of AI, and was, in a way, the European starting signal towards what would become a frenetic research, planning and strategic activity by the European institutions around AI.

With regard to the progress made in the last years, it should be noted that the European Commission's Communication on *Artificial Intelligence for Europe* (2018) already emphasised the need to adapt the public sector to this new technology in daily management, while imposing an obligation on public authorities to ensure that the regulatory frameworks for the development and use of AI technologies were in line with the fundamental values and rights of the Union.<sup>1</sup>

On the same dates, Member States reinforced their commitment to foster this technology by signing the EU Declaration on AI Cooperation (2018),<sup>2</sup> in which the signatories committed to work to create a strategy and a common approach in the field that would promote the development of these technologies for the benefit of society, economic actors and governments.

Subsequently, as a result of these initiatives and the AI Expert Group established in June 2018,<sup>3</sup> the *Coordinated Plan on Artificial Intelligence (2018)* was adopted. It sought to generate a strategic framework for national AI strategies that would create development synergies and urged Member States to develop and adopt a national AI strategy by mid-2019.<sup>4</sup> Afterwards, the need to ensure the necessary standards of quality, transparency and equality was reinforced with the adoption of a series of documents, including the *EU guidelines on ethics in artificial intelligence: Context and implementation (2019)*<sup>5</sup> and the Commission Communication *Building trust in human-centric artificial intelligence (2019)*.<sup>6</sup> In addition, there were some publications approved in parallel, such as *the Policy and investment recommendations for trustworthy AI (2019)*<sup>7</sup> or the *Ethical Guidelines for*

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<sup>1</sup> *Artificial Intelligence for Europe*, April 2018, COM(2018) 237 final; see *EU guidelines on ethics in artificial intelligence: Context and implementation*, September 2019. On the role of ethics in the development of AI policy, see L. Cotino Hueso, *Ethics in design for the development of reliable robotic artificial intelligence and big data and its usefulness from the point of view of law*, in *Revista Catalana de Dret Public*, n. 58, 2019, 30.

<sup>2</sup> Available at: <https://ec.europa.eu>.

<sup>3</sup> See the information available at <https://digital-strategy.ec.europa.eu>.

<sup>4</sup> European Commission, *Coordinated plan on artificial intelligence*. COM(2018) 795 final, 2018.

<sup>5</sup> T. Madiaga, *EU guidelines on ethics in artificial intelligence: Context and implementation*. EPRS | European Parliamentary Research Service, 2019.

<sup>6</sup> European Commission, *Building trust in human-centric AI*. COM/2019/168 final.

<sup>7</sup> High-Level Expert Group on Artificial Intelligence, *Policy and investment recommendations for trustworthy*

trustworthy AI (2019),<sup>8</sup> prepared by the aforementioned Group of Experts. Other similar instruments were also approved, such as *Liability for artificial intelligence and other emerging digital technologies, final report (2019)*,<sup>9</sup> or *The assessment list for trustworthy Artificial Intelligence (ALTAI) for self assessment (2020)*,<sup>10</sup> as well as different sectoral reports, focused on certain areas of impact, such as the labour market,<sup>11</sup> vehicles,<sup>12</sup> aviation,<sup>13</sup> or mobility and transport.<sup>14</sup> Finally, in the same year 2020, the Commission published *the European Data Strategy*,<sup>15</sup> a document that has had an undoubted impact on the implementation and efficient development of AI in the public sector and in procurement, as we will point out hereafter.<sup>16</sup>

However, perhaps the central element of the relentless production of documents experienced in the EU in recent years was the adoption of the *Commission's White Paper on Artificial Intelligence (2020)*, which aims to bring together the main issues of EU policy in the field. In it, the EU is firmly committed to a regulatory and investment-based approach, which has the dual objective of promoting the adoption of artificial intelligence and addressing the risks linked to certain uses of

this new technology.<sup>17</sup> This document, among other issues, makes an express appeal to Public Administrations, urging them to “quickly adopt products and services that rely on artificial intelligence in their activities”.<sup>18</sup>

This incessant development of AI entails that some of the plans, communications and documents approved at the end of the second decade of the century have already undergone renovations and updates. This is the case of the *Coordinated Plan on Artificial Intelligence*, initially approved in 2018 and revised by the Commission in April 2021.<sup>19</sup> In this version, which already takes into account the conclusions of the public consultations of the White Paper,<sup>20</sup> the Commission emphasises some of the pillars already announced in previous documents with four main lines: (1) generating of suitable spaces and environments for the development of AI; (2) boosting investment and private activity in the sector; (3) ensuring the ethic aspects of a human-centred AI; and (4) fostering European leadership in this key sector.

Within this European AI strategy, public procurement plays a central role. Firstly, as a pole of interaction between the private and public sectors for the acquisition and development of new technologies for the Administration. And secondly, as a strategic area of application of AI, especially if we take into account that it is estimated that the weight of public procurement in the GDP of European states goes up to 15% on average. And in this sense, we must highlight the availability of quality data as an essential element for the correct implementation of AI in public procurement.<sup>21</sup> Problems on the availability or quality of relevant data usable by an AI system can lead to algorithm efficiency issues, which can in turn lead to

AI, 2019.

<sup>8</sup> High-Level Expert Group on Artificial Intelligence, *Ethical Guidelines for Trustworthy AI*, 2019.

<sup>9</sup> European Commission, *Liability for artificial intelligence and other emerging digital technologies*, final report (2019).

<sup>10</sup> High-Level Expert Group on Artificial Intelligence, *The assessment list for trustworthy Artificial Intelligence (ALTAI) for self assessment*, 2020.

<sup>11</sup> High-Level Expert Group on the Impact of the Digital Transformation on EU Labour Markets, *Report of the High-Level Expert Group on the Impact of the Digital Transformation on EU Labour Markets*, 2019.

<sup>12</sup> Horizon 2020 Commission Expert Group to advise on specific ethical issues raised by driverless mobility (E03659), *Ethics of Connected and Automated Vehicles: recommendations on road safety, privacy, fairness, explainability and responsibility*, Publication Office of the European Union: Luxembourg, 2020.

<sup>13</sup> European Aviation High Level Group on AI (EAAI HLG), *Fly AI Report - Demystifying and Accelerating AI in Aviation/ATM*, 2020.

<sup>14</sup> European Commission, *Sustainable and Smart Mobility Strategy – putting European transport on track for the future*, 2020 (COM(2020) 789 final).

<sup>15</sup> European Commission, *A European Data Strategy*. COM/2020/66 final, 2020.

<sup>16</sup> European Commission, *Proposal for a Regulation of the European Parliament and of the Council on European Data Governance (Data Governance Act)*, COM(2020) 767 final, 2020.

<sup>17</sup> European Commission, *White Paper on Artificial Intelligence: A European Approach to Excellence and Trust*, COM(2020) 65 final, 1.

<sup>18</sup> European Commission, *White Paper on Artificial Intelligence: A European Approach to Excellence and Trust*, COM(2020) 65 final, 10.

<sup>19</sup> European Commission, *Fostering a European approach to Artificial Intelligence*, COM(2021) 205 final, 2021.

<sup>20</sup> European Commission, *White Paper on Artificial Intelligence: A European Approach to Excellence and Trust*, COM(2020) 65 final, 6.

<sup>21</sup> Different authors have warned about this basic element. In particular, see A. Sánchez-Graells, *Data-driven and digital procurement governance: Revisiting two well-known elephant tales*, in *Communications Law - Journal of Computer, Media and Telecommunications Law*, 2019.

unforeseen errors or biases.

In terms of public procurement, one of the main obstacles that we can find is the format of the available data and the way in which they can be accessed and processed. Currently, a significant part of the relevant contractual information is still contained in documents (specifications, forms, annexes, etc.) in an unstructured manner. Despite the obligation contained in Article 63 of the Spanish Public Sector Contracts Act to publish information in open and reusable formats, the fact that there are no legal consequences in the event of non-compliance has meant widespread lack of fulfilment of this requirement in the public sector.<sup>22</sup> This means that, sometimes, obtaining relevant information, such as names of bidders and economic offers, solvency criteria, valuation criteria, social and environmental clauses, etc., requires advanced information processing tasks, which add costs and can reduce the efficiency of the systems implemented.<sup>23</sup>

In the same vein, the decentralization of the Spanish legal system<sup>24</sup> entails that the sources of information on public procurement are often disseminated, which in practice has generated a certain dispersion of data. When national platforms are linked to the central platform through links that redirect to the original regional source, situations arise in which the data of the specific procedure are not hosted on the state platform, which requires recourse to regional data sources to obtain this information. This problem has already been identified in different reports by Oirescon (the Spanish regulatory and supervisory agency for public procurement), which states that “the information that the regional platforms publish in PLACSP should be unified by aggregation and, where appropriate, the information related to the contracting authority and the tenders should

be increased”<sup>25</sup>

These facts generate, as we said, some basic distortions for the application of AI, which will have to represent one of the focuses of attention of the public-procurement strategy in next years. In this regard, we must highlight the European Data Strategy, which has led to the approval of a large number of regulations in recent years that aim to create the necessary legal framework to achieve quality of data in key sectors at the European level.<sup>26</sup> Particularly noteworthy is the role that has been given to public procurement within this strategy, as shown by the European Commission’s promotion of the Public Procurement Data Space, one of the first common data spaces in the EU, and which is in the process of being developed at the time of finalizing this article.<sup>27</sup> Also at the national level, the central role of data quality has been raised in the Spanish National Public Procurement Strategy (2022), which foresees as one of the central measures the establishment of a Common Strategy for Data in Public Procurement to “have the necessary structured data (qualitatively and quantitatively), related to public procurement in Spain, for all relevant purposes (consultation by economic operators, control, supervision, monitoring and analysis, study); and obtain them efficiently, making the ‘one-time principle’ effective.” The success of these initiatives will therefore be crucial for the proper implementation of AI in public procurement processes, and a *sine quanon* element for the legal framework of guarantees.

## 2. Implementation risks

The use and application of AI technologies has led to the emergence of significant risks that cannot be ignored in this study. Thus, various risks related to decision-making, data protection, discrimination, etc., have been identified by legal scholarship.<sup>28</sup> Among them,

<sup>22</sup> J. Valero Torrijos, *Los Datos Abiertos En La Contratación Pública: Pasado, Presente ¿Y Futuro?*, in *Contratación administrativa práctica: revista de la contratación administrativa y de los contratistas*, n.182, 2022, 76.

<sup>23</sup> D.A. Otero et al., *La Contratación Pública En España: Fuentes De Datos, Normativa Y Aplicaciones Tecnológicas*, in *Revista de la Escuela Jacobea de Posgrado* <http://revista.jacobea.edu.mx>, n.21, 2021, 87.

<sup>24</sup> J. Miranzo Díaz, *El Régimen Jurídico De Las Plataformas De Contratación Pública En España. Especial Referencia a Los Conflictos Competenciales Y a Su Incidencia En El Derecho De La Competencia*, in *Revista catalana de dret públic*, n.64, 2022, 140.

<sup>25</sup> Oirescon, *Annual Supervisory Report 2023. Module V. Supervision of the principle of publicity and transparency in public procurement*, 104.

<sup>26</sup> On this issue, see J. Miranzo Díaz, *Inteligencia Artificial Y Derecho Administrativo*, Tecnos, 2023, 216.

<sup>27</sup> R. Fernández Acevedo, *Hacia Un Espacio Europeo De Datos Sobre Contratación Pública*, in *Observatorio de Contratación Pública*, n. 5, 2023.

<sup>28</sup> It can be seen, among others: A. Soriano Aranz, *Discriminación Algorítmica: Garantías Y Protección Jurídica*, in L. Cotino Hueso, (ed), *Derechos Y Garantías Ante La Inteligencia Artificial Y Las Decisiones Auto-*

there are some that are particularly problematic when we talk about a possible implementation in the decision-making process of the public sector: the motivation of the decisions adopted.<sup>29</sup>

To analyse this risk, we must start from the premise, first of all, that AI algorithms are not infallible. On the contrary, experience has shown that they can often lead to erroneous conclusions, or present biases in their analyses.<sup>30</sup> This risk is further aggravated in the case of AI by the lack of transparency of this type of systems, which makes it extremely difficult to detect an error or deviation in the analysis, or, where appropriate, to explain the reason for a given conclusion. If not programmed with the proper filters, these systems can identify statistical patterns that lead them to develop new evaluation criteria that were not originally included or foreseen by the programmers and that, under an administrative decision carried out by humans, would never have been taken into account – for example, elements such as the ethnicity of the managers, their gender, sexual orientation,

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*matizadas*, Cizur Menor, Aranzadi, 2022, 139; R. Valle Escolano, *Transparencia En La Inteligencia Artificial Y En El Uso De Algoritmos: Una Visión De Género*, in L. Cotino Hueso and J. Castellanos Claramunt (eds.), *Transparencia Y Explicabilidad De La Inteligencia Artificial*, Valencia, Tirant lo Blanch, 2022, 85; J. Ponce Solé, *Acicates (Nudges)*, *Buen Gobierno Y Buena Administración: Aportaciones De Las Ciencias Conductuales, Nudging Y Sector Público Y Privado*, Marcial Pons, 2022.; I. Sobrino-García, *Artificial Intelligence Risks and Challenges in the Spanish Public Administration: An Exploratory Analysis through Expert Judgements*, in *Administrative Sciences*, vol. 11, no. 3, 2021, 102.; C. Rinik, *Data Trusts: More Data Than Trust? The Perspective of the Data Subject in the Face of a Growing Problem*, in *International Review of Law, Computers & Technology*, vol. 34, no. 3, 2020, 342.; M. Kovac, *Autonomous Artificial Intelligence and Uncontemplated Hazards: Towards the Optimal Regulatory Framework*, in *European Journal of Risk Regulation*, vol. 13, no. 1, 2022, 94.

<sup>29</sup> For a more in-depth analysis of this question, see my work J. Miranzo Díaz, *Inteligencia Artificial Y Derecho Administrativo*. See also M. Fink and M. Finck, *Reasoned a(I)Dministration: Explanation Requirements in Eu Law and the Automation of Public Administration*, in *European law review*, n. 3, 2022, 376.

<sup>30</sup> For example, the COMPAS system, already mentioned above, was criticized, in addition to the racist biases initially detected, also for its discriminatory biases towards women, since while the algorithm had a very high success rate in men, it systematically gave a higher risk of recidivism to women. S. Corbett-Davies et al., *Algorithmic Decision Making and the Cost of Fairness*, in *Proceedings of the 23rd ACM SIGKDD International Conference on Knowledge Discovery and Data Mining* (Halifax, NS, Canada: Association for Computing Machinery, 2017).

etc.<sup>31</sup> There is, therefore, a risk of weighting variables that in a human decision-making context would have been either considered irrelevant for decision-making, or legally inappropriate in accordance with the values and principles underlying human rights, discrimination, etc.<sup>32</sup> Underlying this type of tool is the premise that it is the precision and accuracy of the result, and not reasonableness and causality, what it seeks to maximise. With machine-learning outcomes, causal relationships between *inputs* and *outputs* may simply not exist, no matter how intuitive such a relationship may seem. If a machine-learning algorithm tends to predict that older people commit fewer crimes than younger people, or women less than men, for example, even though it cannot be claimed that older age or sex has a causal relationship in the propensity to commit crimes, the algorithm will adopt this as a useful criterion –this is what we call a *proxy variable*.<sup>33</sup>

This risk of using irrelevant or inappropriate criteria is compounded by the fact that users of the AI system, and even programmers, often have difficulty understanding the logic of AI systems due to the so-called “black box” phenomenon.<sup>34</sup> The complexity of the operation and analysis procedure behind an algorithm makes it a changing, multidirectional and unpredictable system that, despite the so-called *backprop* mechanisms and other corrective measures,<sup>35</sup>

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<sup>31</sup> L. Cotino Hueso, *Ética En El Diseño Para El Desarrollo De Una Inteligencia Artificial, Robótica*, in *Revista catalana de dret públic*, n.58, 2019, 29, especially 30-48.

<sup>32</sup> A. Datta et al., *Proxy Non-Discrimination in Data-Driven Systems*, in *Conference paper at 2017 ACM SIGSAC Conference*, 2017.

<sup>33</sup> C. Coglianese and D. Lehr, *Regulating by Robot: Administrative Decision Making in the Machine-Learning Era*, in *Geo. LJ*, vol. 105, no. 5, 2016, 1147.

<sup>34</sup> Y. Bathaee, *The Artificial Intelligence Black Box and the Failure of Intent and Causation*, in *Harvard Journal of Law & Technology*, vol. 31, no. 2, 2018, 890. M. Hildebrandt, *Smart technologies and the end(s) of law*, Cheltenham, Elgar, 2016, 72.

<sup>35</sup> For those cases in which the response is totally or partially unsatisfactory, these systems have an auto-correction mechanism called backprop (back propagation) that updates the weights assigned to each node. To do this, the algorithm needs to know the state of the output layer when the correct answer is given. This algorithm traces the responsibility for the error or success in a given situation from the output layers to the hidden layer, individually identifying the nodes responsible for the error whose weights must be adapted or modified. And in the same way, proportional changes in weight are carried out in the preceding layers until they reach the input layer.

makes it practically impossible to track and understand the process that takes place between *inputs* and *outputs*, as the software mentioned does not respond directly to cognitive and logical reasoning.<sup>36</sup>

This question is absolutely fundamental, on the one hand, in order to justify possible administrative decisions taken in this way, since the ability of those potentially affected to challenge the decisions and to be able to substantiate their claims before the courts depends on it, and on the other hand, to be able to correct and identify flaws in the system.<sup>37</sup> In the Administration, this lack of transparency or motivation acquires particular nuances, since the citizen's understanding of the decisions of the Administration constitutes the basis of the right to good administration and, ultimately, of access to justice through the system of remedies and the right to effective judicial protection. The use of AI can therefore pose significant threats to some of the basic operating principles of administrative law and, by extension, also of public procurement.

### **3. Risk conditioning factors**

The above mentioned risks, however, are posed differently depending on the context and conditions in which the AI system in question is deployed.<sup>38</sup> The level and types of legal guarantees required, as well as the necessary traceability and auditability, must indeed allow for a sufficient safeguard of the rights of good administration and the minimum guarantees of transparency and procedures, but the legal degree of enforceability will vary, depending on factors such as the relevance of the administrative act or final decision and its impact on individual rights.<sup>39</sup> Systems that are used to influence

decisions that affect individual rights, such as the choice of medical treatment, require greater legal rigidity and motivation requirements than those that perform tasks that have a lower impact on individuals. Likewise, acts such as sanctions, awarding contracts, granting licences or authorisations, will require greater guarantees than, for example, organisational issues of mere technical efficiency, such as the optimisation of a city's electric lighting or waste collection service, etc.

Consequently, we can say that here are at least three elements that can mitigate or increase the risk of using such a system: the context of implementation, the stage of the process in which it is deployed, and its impact on the final decision (or the human capacity to review that decision).

#### **3.1. The Context**

As it has been anticipated, systems that are used to make decisions in sectors or contexts that are particularly sensitive to the individual rights of individuals, such as decisions on prison regimes, or the granting of social assistance, require greater legal rigidity and requirements of explainability than systems applied to less sensitive contexts, such as the spatial organization of tables and chairs in an office or the application of intelligent energy-saving tools. The capacity of the current legal system to bear the consequences of a possible error differs markedly from one case to another. This has been, in fact, one of the criteria adopted by the Artificial Intelligence regulation currently in process of approval, which attributes the qualification of high-risk system to those that operate in certain specific environments, such as machinery, toys, protective equipment, medical devices, or those that regulate access to and enjoyment of essential public and private services and their benefits (Article 6.1 and Annex III). Which individual rights are affected and to what extent, as well as whether groups at-risk of exclusion or in disadvantaged conditions are involved in these decisions, is manifested as a determining risk factor when evaluating an algorithm and demanding a sufficient threshold of guarantees.<sup>40</sup>

L. Piñar (ed.), *Digital Society and Law*, Madrid, BOE-Red.es, 2018, 259.

<sup>40</sup> Thus, for example, the Judgment of the District Court of The Hague (Rechtbank Den Haag) in the Netherlands, dated 5 February 2020 (ECLI:NL: RBDHA:

<sup>36</sup> A.E. Prince and D. Schwarcz, *Proxy Discrimination in the Age of Artificial Intelligence and Big Data*, in *Iowa Law Review*, vol. 105, 2019, 1257.

<sup>37</sup> This risk related to legitimacy is what some authors have called algocracy. See J. Danaher, *The Threat of Algocracy: Reality, Resistance and Accommodation*, in *Philos Technol*, vol. 29, 2016, 245.

<sup>38</sup> E. Gamero Casado, *Compliance (O Cumplimiento Normativo) De Desarrollos De Inteligencia Artificial Para La Toma De Decisiones Administrativas*, in *Diario LaLey*, no. 50, 2021.; J. Valero Torrijos, *Las Garantías Jurídicas De La Inteligencia Artificial En La Actividad Administrativa Desde La Perspectiva De La Buena Administración*, in *Revista catalana de dret públic*, no. 58, 2019, 82.

<sup>39</sup> R. Martínez Martínez, *Artificial Intelligence, Law and Fundamental Rights*, in T. De La Quadra-Salcedo and J.

In the case of public procurement, as we will see, decision-making processes in which algorithms are used do not directly affect fundamental rights, in the sense that they do not deprive citizens of their rights. But we must bear in mind that an increasing number of public services are channelled through public procurement and that this has become an increasingly strategic sector of public investment.<sup>41</sup> The impact of public procurement on the very concept of the welfare state,<sup>42</sup> together with the important economic interests at stake among the bidding companies,<sup>43</sup> should make us consider whether we are facing one of the scenarios that would turn an AI system used in this context into a “high-risk system” according to the European Regulation, when it refers to “those that regulate access to and enjoyment of essential public and private services and their benefits”. At least in certain cases where public contracts are concluded for the delivery of basic services directly to individuals, the requirements associated with these high-risk systems should be considered.

On the other hand, also framed within the context in which an AI system is applied as a risk factor, we must take into account the possibility of damage repair in the event of irregular operation, as well as the availability of reasonable less intrusive alternatives.<sup>44</sup> Continuing with the examples we presented above, the use of AI to optimize the spatial

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2020:865), attributes a transcendental specific weight to the fact that the Syri application was used on subjects in situations of special vulnerability. See A. Todolí Signes, *Retos Legais Do Uso Do Big Data Na Seleção De Sujeitos a Investigar Pola Inspección De Trabalho E Da Seguridade Social*, in *REGAP: Revista galega de administración pública*, vol. 1, no. 59, 2020, 79, especially 327.

<sup>41</sup> On this issue, part of the scholarship has been warning for years, see J.M. Gimeno Feliú, *El Nuevo Paquete Legislativo Comunitario Sobre Contratación Pública: De La Burocracia a La Estrategia : (El Contrato Público Como Herramienta Del Liderazgo Institucional De Los Poderes Públicos)*, Cizur Menor, , Aranzadi, 2014. J.A. Moreno Mollna, *Criterios Sociales De Adjudicación En El Marco De La Contratación Pública Estratégica Y Sostenible Post-Covid-19*, in *Revista española de derecho administrativo*, no. 210, 2021, 45.

<sup>42</sup> *Una Nueva Contratación Pública Social, Ambiental, Eficiente, Transparente Y Electrónica*, Bomarzo, 2018.

<sup>43</sup> A. Miño López, *Defensa De La Competencia Y Contratación Pública*, in I. Gallego Córcoles and E. Gamero Casado (eds.), *Tratado De Contratos Del Sector Público*, Valencia, Tirant lo Blanch, 2018, 369.

<sup>44</sup> M. Zalnieriute, L. Bennett Mosesand G. Williams, *The Rule of Law and Automation of Government Decision-Making*, in *The Modern Law Review*, vol. 82, no. 3, 2019, 425.

location of employees within an Administration’s building, the degree of explainability of the decision might not be a critical element in case of error, since it would be relatively simple to respond to complaints or claims and, where appropriate, relocate public employees in other spot, minimizing the damage caused. Conversely, an AI system used to conduct probation assessments<sup>45</sup> requires much greater explainability, as the potential rights violations are greater, and the ability to repair possible malfunctioning decreases.

### 3.2. The procedural moment of the use of the algorithm

Secondly, it will be necessary to take into account the very nature of the act or the moment of the administrative procedure in which the AI application is inserted. Thus, we must distinguish the application of AI systems to regulatory production, from the adoption of resolutive administrative acts and decisions – and in turn, discretionary and non-discretionary– from procedural acts, or from other types of administrative activities prior to the initiation of the procedure. In the case of public procurement, it will therefore be necessary to differentiate between its application to the design and preparation phase of the contract, to the award phase, or to the execution phase. All these situations will require differentiated levels and forms of guarantee.<sup>46</sup> The guarantees required will therefore vary from one favorable administrative act to an unfavorable one, and in the same sense, they will depend on the effects that the measures of recognition or denial of rights may have on third parties. At this point, the essential element of measurement will be whether the use of an AI system at a given procedural moment maintains, increases or decreases the preconditions of explainability and transparency that have been required for entirely human decisions.<sup>47</sup>

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<sup>45</sup> As mentioned above, this problem has already occurred with the COMPAS recidivism risk-assessment system in the US. See: <https://medium.com>.

<sup>46</sup> This is what he has previously defended I. Martín Delgado, *Automazione, Intelligenza Artificiale E Pubblica Amministrazione: Vecchie Categorie Concettuali Per Nuovi Problemi*, in *Istituzioni del federalismo*, no. 3, 2019, 643.

<sup>47</sup> This is how Professor Huergo Lora has analysed it in depth in different works: A.J. Huergo Lora, *Administraciones Públicas E Inteligencia Artificial: ¿Más O Me-*



### 3.3. The Existence of Human Review and Its Effectiveness

Finally, another conditioning factor is the relevance of the judgment made by the AI software with respect to the administrative decision adopted.<sup>48</sup> Currently, the divergences in the regulatory framework applicable to decisions with and without human intervention are remarkable. Thus, the CJEU has established that “the legitimacy for the processing of personal data through an algorithm, without human intervention, would only be admissible after the appropriate regulation which, in addition, must establish adequate guarantees in the light of the mechanisms and principles”.<sup>49</sup> And in the same vein, article 41 of the Spanish Legal Regime of the Public Sector Act (40/2015) includes certain guarantees and requirements of transparency and publicity for automated administrative action,<sup>50</sup> but they would not be applicable in those cases in which the digital activity should be validated, in any sense, either by the head of the body or by personnel at the service of the entity.<sup>51</sup>

Although it has undoubtedly been useful until recent times, this two-way or two-phase classification of AI in its use by Public Administration – automated and non-automated – suffers from being an artificial construction when we talk about AI, which

ignores the fact that the use of algorithms in a phase of previous actions can also be inducing the human decisions, directing and substantially conditioning the final administrative act without there being an effective human review.<sup>52</sup> The classic approach that understands that the concept of automated action as a factor of risk must simply respond to formal criteria would lead us to certain incoherent situations, since there are uses of AI that do not produce legal effects directly and to which no legal value can be attributed from the point of view of a traditional administrative procedure, but which either indirectly direct the final decision, or trigger the initiation of administrative procedures or actions which may have consequences for third parties.

An example of the use of artificial intelligence with a human filter is the use of drones to detect infractions in the use of mobile phones on the road used in Spain by the Directorate General of Traffic (DGT).<sup>53</sup> In this case, in order for the complaint to be processed, the camera detects the license plate and model of the car by recording it from the front. The images, sent to a complaint processing centre, are analysed by a computer program capable of discriminating between images that could likely constitute an infringement and those that could not. Once discrimination has been made, those that can be used as evidence in a complaint are sent to the technicians who evaluate whether the image shows the driver manipulating the mobile phone. If this is the case, the image is sent to the corresponding provincial traffic headquarters to initiate the sanctioning procedure.

However, this verification is not always as obvious or simple as in the example above. When AI is used to develop complex decision-making optimization methods for wildlife conservation planning, for example, or to use historical data to create models of poaching behavior and use them to optimize surveillance strategies, due to the limited

*nos Discrecionalidad?*, in *El Cronista del Estado Social y Democrático de Derecho*, no. 96, 2021, 78.; *Gobernar Con Algoritmos, Gobernar Los Algoritmos*, in *El Cronista del Estado Social y Democrático de Derecho*, no. 100, 2022, 80.

<sup>48</sup> On this issue, see the works of Professor Juli Ponce Solé, and in particular: J. Ponce Solé, *Las Relaciones Entre Inteligencia Artificial, Regulación Y Ética, Con Especial Atención Al Sector Público*, in *Revista General de Derecho Administrativo*, no. 61, 2022, 22. *Inteligencia Artificial, Derecho Administrativo Y Reserva De Humanidad: Algoritmos Y Procedimiento Administrativo Debido Tecnológico*, in *Revista General de Derecho Administrativo*, no. 50, 2019.

<sup>49</sup> J. Valero Torrijos, *Las Garantías Jurídicas De La Inteligencia Artificial En La Actividad Administrativa Desde La Perspectiva De La Buena Administración*, especially 90.

<sup>50</sup> Specifications, programming, maintenance, supervision and quality control and, where appropriate, auditing of the information system and its source code must be published. For further development of the concept of automated administration, see I. Martín Delgado, *Naturaleza, Concepto Y Régimen Jurídico De La Actuación Administrativa Automatizada*, in *Revista de administración pública*, no. 180, 2009, 353; I. Martín Delgado, *Automazione, Intelligenza Artificiale E Pubblica Amministrazione: Vecchie Categorie Concettuali Per Nuovi Problemi*.

<sup>51</sup> J. Valero Torrijos, *Legal guarantees*, 87.

<sup>52</sup> J. Ponce Solé, *Inteligencia Artificial, Derecho Administrativo Y Reserva De Humanidad: Algoritmos Y Procedimiento Administrativo Debido Tecnológico*; or M.L. Gómez Jiménez, *Automatización Procedimental Y Sesgo Electrónico: El Procedimiento Administrativo Electrónico Desde La Inteligencia Artificial*, Cizur Menor, Aranzadi, 2021, 87.

<sup>53</sup> DGT, *Traffic launches the II Special Operation of the summer and will begin to report infractions captured by drones*, 2019. Available in: <http://www.dgt.es>.

ability of humans to identify those factors that have been taken as determinants by the computer system, it is essentially impossible to carry out any genuine verification or review of the suggested decisions.<sup>54</sup> In this type of cases, in practice, the algorithm or AI system will be making the decisions *de facto*, regardless of whether there is an ultimate human intervention of a formal nature, and should be understood as an automated AI system.<sup>55</sup>

#### 4. The application of AI in the different phases of public procurement

Therefore, the problems and guarantees of an AI system applied in public contracts will depend, to a large extent, on the context in which they are being used, the procedural moment of implementation, and the existence or not of human supervision. Let's then proceed to analyze some uses of AI in procurement procedures at a comparative level, as well as their characteristics, potential and possible legal risks.

##### 4.1. AI in contract planning and design

A first way of using AI in public procurement is framed within the activities of planning and contractual strategy. This type of system is aimed at identifying needs, planning future expenses and contracts, and therefore optimizing the resources invested in these contracting processes.

This is the case of PPS, in South Korea, an AI tool that provides an annual forecast of demand for goods and services by government agencies, based on data from its Product Management System, which provides standardized historical data on procurement across public administration. Similarly, the U.S. *Department of Health and Human Sources' (HHS) Buy smarter* project, which uses AI technology to analyze departmental requirements based on spending data from across HHS.<sup>56</sup> This system also identifies possible anomalies by comparing the contract in question with all those previously concluded in a similar way, helping to avoid possible errors or omissions. The tool adds coherence in the public procurement of the 23

agencies that make up HHS, avoiding contradictory criteria and ensuring that purchasing strategies are applied horizontally in the different departments.

In Europe, we can highlight one of the tools used in the ProZorro system, developed in Ukraine. Its creation is based on the realization that goods and services are often classified under the incorrect code of the Common Procurement Vocabulary (CPV), which can result in fewer suppliers identifying the tender, less competition and lower spending efficiency.<sup>57</sup> Well, this tool predicts the correct CPV code for a contract based on the text input, including the description, title, and other contents of the contract documents. The result of the algorithm is a series of different CPV codes, which must be selected by the corresponding public employee.

Other possible implementations in these phases may include assistance in the division into lots (size, configuration, etc.), proposal or recommendation of environmental or social clauses, search for similar contracts or examples, proposal for drafting specifications, proposal or prediction of the award price of contracts, etc.<sup>58</sup>

This type of AI system, applied in these phases, does not in itself make decisions resolving the administrative process, and for the most part, it is not even a question of administrative procedural acts, but rather of planning decisions or previous actions of the contract. Currently, these strategic or planning decisions are not, generally speaking, subject to scrutiny by the courts, nor are administrations required to justify their planning in a particular way. These types of tools, therefore, cannot be assessed as high risk from the outset, even more so if we take into account that their proposals can be corrected by public employees.

Nevertheless, a certain degree of transparency is required in this planning, and a basic due diligence that guarantees efficiency. Therefore, some risks must be taken into

<sup>57</sup> On the importance of the correct use of CPVs, see the full analysis of A. Sánchez García, *La Transformación Electrónica De La Contratación Pública: De La Digitalización a La Automatización*, Tecnos, 2022.

<sup>58</sup> On the latter possibility, see the studies of M.J. García Rodríguez, *Las Licitaciones Públicas: Análisis De Datos Y Sistemas Predictores Utilizando Métodos De Machine Learning*, 2022.; M. J. García Rodríguez et al., *Public Procurement Announcements in Spain: Regulations, Data Analysis, and Award Price Estimator Using Machine Learning*, in *Complexity*, 2019, 2360610.

<sup>54</sup> J. Danaher, *The Threat of Algocracy*.

<sup>55</sup> J. Ponce Solé, *Inteligencia Artificial, Derecho Administrativo Y Reserva De Humanidad: Algoritmos Y Procedimiento Administrativo Debido Tecnológico*.

<sup>56</sup> More information can be found at: <https://nitaac.nih.gov>.



account that must be guaranteed in the processes of implementation and approval of the use of the algorithm, such as in particular the risk of discrimination – imagine a strategy or planning that ignores certain general interests or needs of population groups – or the risks associated with a failure in operation. This last assumption, in fact, has happened in the Korean case, in which the authorities reported that although initially the tool seemed to work properly, its forecast became increasingly inaccurate, which led to unnecessary public expenditures. The same would happen if miscalculations arise in the case of the tool that detects the applicable CPVs, for although this type of decision does not require an exhaustive degree of reasoning, a possible failure of the system could generate significant deficiencies in concurrence and, therefore, efficiency in the public sector. In this type of tools, therefore, the explainability of the algorithm may not be a transcendental element, but special care must be taken to implement quality and efficiency controls that guarantee proper functioning.

#### **4.2. AI in contract award**

In practice, this phase is perhaps where the fewest experiences have been identified. Most of the cases of implementation of new technologies in these phases have to do with the integrity and traceability of information or the streamlining of processes based on blockchain systems.<sup>59</sup> These technologies, however, are not generative instruments nor do they participate in the decision-making process, as AI does, and they exceed the scope of this work.

However, some scientific proposals can be highlighted, such as the “bidder recommender” developed by Manuel García Rodríguez.<sup>60</sup> This tool allows, based on a tender announcement, to predict the winning company, to later generate a sort of catalogue of existing similar companies, to which information about the tender can be sent, consequently increasing the competition in the

tender. However, the implementation of this type of tender raises, in our view, more questions from a legal point of view than previously analysed. Even this system of recommending or identifying potential bidders, in which the system does not take decisions in itself, could pose complications as follows:

- a. In the first place, because the fact that a potential winner is identified could generate a predisposition on the part of the contracting committee to understand that particular bidder as the one that offers the highest quality. There could be a risk of “following the algorithm” that could lead to biased decisions on the award and subsequent increased litigation.
- b. The proposal of other potentially interesting companies might seem less problematic, but this operation could produce a transparency bias in detriment of companies that are not actively contacted by the Administration because they are not identified by the system.

In short, the direct impact that the award phase has on the principles of free competition, non-discrimination and transparency, together with the high level of litigation associated with this phase, and the need for motivation and objectivity in all decisions taken regarding the award, make the implementation of AI systems highly controversial from a legal point of view. A system that participates in decision-making in adjudication in any form –even without automated decision making– should be completely transparent, and its decisions explainable and traceable by a human in the event of conflict.

#### **4.3. Chatbots and virtual assistants**

Another type of AI systems, which in this case are applied in a transversal way, and which have had an important practical development, are chatbots for assistance throughout the procurement process –either to be used by public employees or by tenderers. This is the case of “*The Procurement Answers and Information Guided Experience (PAIGE)*”, a digital assistant to solve queries from San Francisco government agencies related to IT procurement procedures.<sup>61</sup> Currently, PAIGE can answer around 1000

<sup>59</sup> See, for example, the blockchain-implementation experience of the Autonomous Community of Aragon in Spain. J. Tejedor Bielsa, *Transformación Digital, Blockchain, Inteligencia Artificial. Referencias Y Experiencias En Aragón*, in *European review of digital administration & law*, vol. 2, no. 2, 2021, 59.

<sup>60</sup> M.J. García Rodríguez et al., *Bidders Recommender for Public Procurement Auctions Using Machine Learning: Data Analysis, Algorithm, and Case Study with Tenders from Spain*, in *Complexity*, 2020, 8858258.

<sup>61</sup> More information is available at: <https://statescoop.com>.

questions and has around 400 answers that you can implement. The project is based on machine-learning and natural-language processing techniques. In these cases, the possible incidence of the system on the contractual decision-making procedure are, in principle, low, since it acts as an informative or technical support tool for public employees. However, the actions taken by public employees must, in those cases where necessary, be specifically motivated, so that the chatbot's response cannot be used by itself as justification or sole basis for legally essential elements of the contract, such as the establishment of award criteria, selection of contractors, etc. In addition, the basic elements of guarantee, which must apply to all algorithms, must also be present in this type of assistance tools: compliance with data protection, guarantees against possible discriminatory biases, or technical guarantees that allow errors or failures in the system to be identified.<sup>62</sup>

#### 4.4. AI in the supervision and prevention of corruption

However, at present, the main applications of AI systems in public procurement are located in supervision and integrity control activities. In Spain, the Valencian Community was a pioneer in the field by developing a system of algorithms that is capable of analysing large amounts of data and, based on certain pre-established criteria and indicators, indicating the level of risk presented by each contract entered into by the Generalitat. Other systems that can be highlighted are ARACHNE (EU),<sup>63</sup> Red Flags (Hungary),<sup>64</sup> the Datalia system implemented by the

General Intervention of Castilla-La Mancha,<sup>65</sup> the Minerva system applied to the execution of Next Generation EU Funds in Spain,<sup>66</sup> the DoZorro algorithm used in Ukraine before the outbreak of the war,<sup>67</sup> or other systems designed to detect fraud and collusion,<sup>68</sup> which are good examples of early applications of technologies.<sup>69</sup> Most of these systems have not presented, at least so far, any particular problems in terms of the legal guarantees that surround them and their fit within the system of public-procurement law, since they have generally been used in areas of action prior to the eventual procedure of inspection or sanction. However, each of them has some particularities that require individual analysis.

##### 4.4.1. The General Inspectorate of Services of the Generalitat Valenciana

Article 27 of 22/2018 Valencian Act, of November 6, 2018, on the General Inspection of Services and the alert system for the prevention of bad practices in the Administration of the Generalitat and its instrumental public sector, provides that a system of indicators will be developed with the aim of detecting the presence of possible irregularities or bad practices in each of the management areas, and that the results of the research actions will be subject to standardised coding, so that the system has structured information that allows feedback. In other words, it is a system that has predetermined and codified indicators, criteria and their specific weight, and that carries out evaluations based on this information.

This system therefore acts as a data-management and cross-referencing model that, when certain requirements are met, attributes a specific risk to the contract. It is an automated *red flags* program that uses *big*

<sup>62</sup> On the basic guarantees that any AI system used in a public decision-making environment must have, see J. Miranzo Díaz, *Inteligencia Artificial Y Derecho Administrativo*, 172.

<sup>63</sup> ARACHNE, a dedicated data prospecting tool offered by the Commission to identify projects that may be at risk of conflict of interest that can increase the effectiveness of project management and selection controls and help strengthen the identification, prevention and detection of fraud. Developed by the European Commission and OLAF, it can be used by any entity that manages Structural Funds (ESF and ERDF). This *big data* management tool collects, enriches, and makes available to contracting entities data processed on the basis of risk indicators, in such a way that it contributes to the complex task of identifying possible situations of fraud, conflict of interest, contract manipulation, etc.

<sup>64</sup> A. Némethand and T.N. Tátrai, *Red Flags Project: New Warning System for the Identification of Red Flags in Public Procurements*, 2015.

<sup>65</sup> More information is available at: <https://es.nttdata.com>.

<sup>66</sup> Information about Minerva can be found at the following link: <https://sede.agenciatributaria.gob.es>.

<sup>67</sup> See <https://dozorro.org>.

<sup>68</sup> This is the case of the United Kingdom, which since 2017 has been implementing a system to detect collusion in contracts: <https://www.gov.uk>.

<sup>69</sup> There are other transoceanic experiences in this regard, such as the case of the Comptroller General of Brazil, which Valles Bento analyzes in his work *Application of artificial intelligence and big data in the control of public administration and in the fight against corruption: the experience of the Brazilian government*, in *Revista General de Derecho Administrativo (General Journal of Administrative Law)*, vol. 50, 2019.

*data processing* or *data mining*<sup>70</sup> systems, but does not carry out any machine-learning processes. This system operates, for the most part, as a risk-identification tool, which manoeuvres based on defined and static criteria or indicators, which can be replaced or updated externally, but not autonomously by the algorithm.<sup>71</sup> This predetermination of the system makes it easier, on the one hand, to identify any possible errors or dysfunctions in the algorithm, and on the other hand, to repair it by modifying the indicators with which it works so that it acts differently.

The 22/2018 Act, which regulates its operation imposes the obligation for the alert system to be subject to periodic review in order to verify compliance with the security policy, the procedures for the protection of personal data and the security measures defined for the system. In this same range of guarantees, article 29 provides for a periodic evaluation of the system, with an annual report from the General Inspectorate of Services and an audit report from the Agency for the Prevention and Fight against Fraud, in order to correct errors, identify and prevent new risks.

With regard to the possible consequences of the results of implementation, two possibilities for action are envisaged. On the one hand, we find an assistance functionality in relation to a possible initiation of disciplinary proceedings. In these cases, the regulation carried out by the Generalitat guarantees a “reserve of humanity”,<sup>72</sup> so that the investigation procedure will be carried out in the traditional way. Thus, the General Inspectorate of Services may initiate preliminary investigations based, inter alia, on the data obtained through the alert system, but the initiation of a subsequent sanctioning, disciplinary or criminal procedure should be based on the deductions and results derived from the investigative work of the General Inspectorate of Services, and not on the results of the algorithm.

On the other hand, 22/2018 Act provides that the staff of the General Inspectorate of

Services may prepare recommendations and reports for certain types of contracts or services of the Generalitat in which recurrent defects or anomalies are being detected, and in which the adoption of new contracting habits that respond more faithfully to the standards of good contracting practices can be stimulated. In the recommendations and reports, the proposed measures and the rationale for them can be found, to a large extent, based on the results of the algorithm.<sup>73</sup>

Therefore, in this case we are talking of a deterministic, non-autonomous system, which has a legal authorization given by the aforementioned 22/2018 Act, and which, in any case, does not initiate any type of procedure by itself –its “alerts” are framed within previous actions of the procedure.

#### 4.4.2. *Arachne*

The ARACHNE tool, which the EU makes available to entities that execute ERDF funds for the detection of risks in public procurement, uses the *World Compliance database* with more than 35 thousand sources, capable of identifying relationships and conflicts of interest between people and companies from all over the continent.<sup>74</sup>

The regulations that govern the ARACHNE system expressly exclude the possibility of penalties or any administrative action being taken in an automated way based on the conclusions or results of the software, since the tool provides very valuable risk alerts to enrich management verifications, but does not constitute in itself an evidence of irregularity or fraud. It does not establish, as the Valencian Community does, a specific research system or the specific weight that algorithmic information must have in it – this will correspond, in any case, to the procedures provided for in national law – but it sets a clear limit to its use that tries to avoid some of the main risks of the use of AI around the automation of decisions. The ARACHNE system, therefore, in no case will be able to

<sup>70</sup> O. Capdeferro Villagrasa, *Las Herramientas Inteligentes Anticorrupción: Entre La Aventura Tecnológica Y El Orden Jurídico*, in *Revista General de Derecho Administrativo*, no. 50, 2019.

<sup>71</sup> *Ibid.*, en.

<sup>72</sup> Cotino Hueso also calls it human autonomy, in the face of possible interference or artificial autonomy. L. Cotino Hueso, *Ética En El Diseño Para El Desarrollo De Una Inteligencia Artificial, Robótica*.

<sup>73</sup> People in general, and public employees in particular, are, in this sense, conditioned by the results of algorithms in such a way that there is a certain tendency to follow their recommendations, engendering the risk of non-verification of them. M. Oswald, *Algorithm-assisted decision-making in the public sector: framing the issues using administrative law rules governing discretionary power*, in *Philosophical Transactions*, no. 379, 2018.

<sup>74</sup> The above information is accessible on the page. Available in: <https://risk.lexisnexis.com>.

make decisions or being used as the sole criterion for them, and will require, in any case, human intervention to generate any administrative effect.<sup>75</sup>

In the same way, for the use of ARACHNE, the beneficiary entity of the European funds must appoint a person in charge of the tool, who will be in charge of accessing the information, and who must be part of the team in charge of the control or supervision of the contracting authority, which adds legal certainty and assignment of responsibilities to its use. Likewise, ARACHNE develops a system of shared management responsibility between the European Commission – which assumes the greatest burden of responsibility in terms of the quality and reliability of the data – and the executing entities of the funds – which are responsible for sending updated data on their procedures and which assume responsibility for data processing and protection within the framework of their activities.

#### 4.4.3. Dozorro

Dozorro, on the other hand, is an algorithm developed in Ukraine prior to the outbreak of the war. It presented important technological advances with respect to the other algorithms analysed that made it particularly interesting, but at the same time brought with it new challenges and legal risks.<sup>76</sup> The Dozorro system does not have an exhaustive list of indicators, but is a machine-learning neural network system, which was trained since July 2018 through the responses of 20 experts out of 3,500 tenders. They were asked to answer a single question, whether they have any risks or not, and then all the answers were entered into the AI algorithm. It is, therefore, a “deep learning” system, which is “trained” and learns experimentally, developing its own indicators and criteria, making it especially difficult to track or motivate its conclusions. The results, however, were clearly satisfactory, as the system was able to identify 26% more bids with an unjustified selection of the adjudicating entities, 37% more bids with unjustified exclusions, and 298% more cases of collusion and distortion of competition.

<sup>75</sup> This is especially relevant when challenging possible decisions, as stated by M. Zalnieriute, L. Bennett Moses, and G. Williams, *The Rule of Law* 425.

<sup>76</sup> European Commission, *EU guidelines on ethics in artificial intelligence: Context and implementation*, September 2019.

Due to its characteristics, its use can give rise to some legal risks derived from the so-called “black box” problem, which prevents us from being able to ratify what “reasoning” the algorithm has followed to reach a certain conclusion. This type of technology also increases the risks associated with the possible appearance of biases or discriminatory criteria – imagine, for example, that the algorithm develops corruption indicators based on sex, race, or other inappropriate parameters.

AI systems such as Dozorro, in short, have a limited capacity for verification and motivation, and could encounter significant difficulties in complying with this requirement, which has been called the principle of explainability by legal scholars.<sup>77</sup> However, this system of supervision of corruption is framed, like most of those analysed in this work, in a stage of action prior to the initiation of any procedure, and does not adopt any type of administrative act in an automated way.<sup>78</sup> The initiation of the procedure is, in any case, subject to the intervention of a public employee, which has ensured, as noted above, that no high risk has been identified in this type of system. The only influence of this system on the procedure serves as a justification or basis for the initiation of the procedure, something for which, in cases where AI is not used, an exhaustive statement of reasons is required under European law.

However, as previously mentioned, the fact that algorithms are being used to assist or support public decisions, especially in previous or preparatory phases, does not eliminate the risk that these mechanisms entail for the correct compliance with of Administrative Law rules. There must be basic guarantees of robustness, objectivity and efficiency in the use of algorithmic systems at any stage and type of administrative action – formal or informal – which, among other things, make it possible to determine the real degree of human intervention in decision-making.

It is worth bringing up here the judgment

<sup>77</sup> L. Cotino Hueso, *Ética En El Diseño Para El Desarrollo De Una Inteligencia Artificial, Robótica*.

<sup>78</sup> of Article 55 of Law 39/2015, so that these systems have not been assigned, for the time being, decision-making power as an administrative authority. J. Ponce Solé, *La Prevención De Riesgos De Mala Administración Y Corrupción, La Inteligencia Artificial Y El Derecho a Una Buena Administración*, in *Encuentros multidisciplinarios*, vol. 22, no. 65, 2020, especially 15.

of the District Court of The Hague of 5 February 2020, which held that Syri, a system that was applied to detect various forms of fraud in the granting of social assistance, was unlawful. The Court reached this conclusion, to a large extent, by extending certain guarantees required from automated systems to algorithmic systems used in the preliminary or preparatory stages of the procedure. The Netherlands Court gives a broad interpretation of the scope of the enforceable guarantees, on the understanding that, if those preparatory actions affect the sphere of interests of the citizen, then they must be subject to certain basic guarantees at least equivalent to those that would exist in the case of human action. Thus, for example, the preliminary actions aimed at determining which situations are to be inspected by a specific supervisory or inspection body, although they do not require a statement of reasons for the initiation of actions in the strict sense, do respond to prior measures of planning and decision-making, which currently have a certain degree of publicity and institutional control. Thus, if the system were to be used by the Court of Auditors, it would have to comply with the “corresponding audit programme”, as provided for in the Court of Auditors’ Audit Rules.<sup>79</sup> In our view, similar requirements must be proclaimed in the case of other AI systems within the context of anti-corruption supervision as DoZorro.

## **5. Conclusions**

The uses of AI in public procurement can be particularly promising in many respects. Nowadays we can see how public administrations have begun to apply this type of tool, especially in preparatory, contract design or planning stages, in the form of virtual assistants and, especially, as monitoring systems to detect irregularities.

<sup>79</sup> Audit rules of the Court of Auditors, Adopted by the plenary on 23 December 2013, p. 21 et seq. Available in: <https://www.tcu.es> ; In a similar way, we should highlight how Todolí Signes rightly recalls that, in the case of labour inspection, article 20.2 of Law 23/2015 of 21 July 2015, Organising the Labour and Social Security Inspection System, establishes that it is necessary to guarantee the effectiveness of the principles of equal treatment and non-discrimination in the exercise of inspection activity. This is ensured, inter alia, by the publication of the instructions for the organisation of services, the general operational criteria and the binding technical criteria. A. Todolí Signes, *Retos Legais Do Uso Do Big Data Na Selección De Suxeitos a Investigar Pola Inspección De Traballo E Da Seguridade Social*.

Currently, the use of artificial-intelligence mechanisms in public procurement is essentially focused on the preparatory or preliminary phases that often do not formally participate in an administrative procedure, and in any case are still far from carrying out automated actions. These systems have not yet been given decision-making power as part of the administrative authority. This, however, does not necessarily mean that they do not have specific weight in certain administrative acts, especially in relation to internal instructions, recommendations, strategic decisions on procurement needs, design of specifications, etc. The legal problems inherent in algorithms, such as the lack of transparency, do not disappear, although they can be modulated.

Elements such as the ability to motivate the final decision or the necessary certainty of the algorithm’s operability require that the AI technologies used by the administration have certain standards of guarantee for their use. The guarantees required of algorithms will depend on various factors such as the impact of the administrative procedure on individual rights, the relevance of the algorithm in relation to the final decision, the existence or not of a human filter, etc.

