## Artificial intelligence on public sector in Portugal: first legal approach<sup>1</sup>

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#### Abstract

This introductory and exploratory study delves into the use of Artificial Intelligence (AI) systems in the public sector in Portugal. Our focus is on the role of public policies in promoting AI use in the public sector and the importance of Public Law in regulating its impact. We highlight specific provisions on regulating the public use of AI, the principle of good administration, and the transparency and justification of administrative activity carried out through AI systems. We also consider the (judicial) control of administrative activity supported by AI systems by the administrative jurisdiction, as well as the measure of the legal admissibility of AI systems' use by the public jurisdiction. Lastly, we analyze the particularities of State liability for damages caused by (public) AI systems, with a focus on the exercise of the administrative function.

**Keywords:** artificial intelligence, public law, transparency, reasoning, state liability, Portuguese context.

JEL Classification: K23, K24

DOI: 10.24818/TBJ/2023/13/2.01

#### 1. Introduction

Currently the use of Artificial Intelligence (AI) systems by the public sector is evolving and has been influenced by several factors, including technological advances, increased public sector demand and regulatory changes. Current trends are towards its increasing adoption, as AI is gaining more and more adopters in the public sector, with growing awareness of the potential benefits that this technology can offer, such as greater efficiency, automation of procedures, more informed decision-making, improvements in governance, the development of innovative solutions and overall improvement in the quality of public services.

In this context, there are already many scientific works in the area of Law (also in Public Law)<sup>3</sup>, as well as European normative documents, and there are also

<sup>1</sup> This paper is a result of a project that is funded (or partially funded) by FCT - Fundação para a Ciência e a Tecnologia, I.P. through national funds under UIDP/04310/2020.

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<sup>&</sup>lt;sup>3</sup> Among others, Nyman Metcalf, Katrin. "How to build e-governance in a digital society: the case of Estonia," *Revista Catalana de Dret Públic* 58 (2019): 1-12. https://doi.org/10.2436/rcdp.i58.2019.3316; Cerrillo i Martínez, Agustí. "How can we open the black box of public administration? Transparency and accountability in the use of algorithms," *Revista Catalana de Dret Públic* 58 (2019): 13-28. https://doi.org/10.2436/rcdp.i58.2019.3277; Cotino Hueso, Lorenzo. "Ética en el diseño para el desarrollo de una inteligencia artificial, robótica y big data confiables y su utilidad desde el derecho," *Revista Catalana de Dret Públic* 58 (2019): 29-48. https://doi.org/10.2436/rcdp.i58.2019.3303; Galindo Caldés, Ramon. "Big data e inteligencia artificial en la gestión

many news about concrete applications of AI with impact in areas that have long been the object of treatment by legal science, namely, for what is of interest here, Public Law.<sup>4</sup>

Briefly, in a broad context, AI has recently been receiving renewed attention (this is not to say that it is a new technique, that it has had a continuous evolution or that it has not had very difficult phases: "winters") as a reflection of a "new" environment (civilian, in particular, academic and industrial, and military) adept at a contemporary AI often based on big data or megadata (data as "fuel" for the "engine" that some assume is AI). By way of example, let us mention some of the main and (more) recent practical applications of AI: search engines in the context of the Internet, the pre-diagnosis of diseases, autonomous driving of vehicles, the treatment of chronic diseases, the reduction of mortality rates in traffic accidents, the fight against climate change or the anticipation of cybersecurity threats. For a more localised reference and according to the European Commission<sup>5</sup>, in Denmark: AI is helping to save lives by enabling emergency services to diagnose cardiac arrests or other conditions based on the sound of a caller's voice; in Austria: AI is helping radiologists detect tumours more accurately by instantly comparing X-rays with a wealth of other medical data; elsewhere in Europe: they are already using AI to monitor the movement, temperature and feeding of their animals (automatically adapting heating and feeding machines to help farmers monitor the welfare of their animals and free them up for other tasks) and AI is still being used to help European manufacturers become more efficient and help factories move back to Europe.

Finally, in the Portuguese context there are also several announced projects based on AI for the provision or assistance in the provision of certain public services/functions, namely, "traffic sensors and data collected from bicycles, car parks, ticketing systems"; "detection of underground breakdowns, before they happen"; "modelling and prediction of traffic accidents"; "development of algorithms and models to better understand the processes of water distribution to the population, and avoid losses and ruptures, and accelerate the interventions of the different pickets"; "detection of online gambling addiction patterns"; "neuroimaging biomarkers for the diagnosis of neuropsychiatric diseases using AI". 6

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de los recursos humanos del sector público," *Revista Catalana de Dret Públic* 58 (2019): 49-63. https://doi.org/10.2436/rcdp.i58.2019.3276; Martínez Martínez, Ricard. "Designing artificial intelligence. Challenges and strategies for achieving regulatory compliance," *Revista Catalana de Dret Públic* 58 (2019): 64-81. https://doi.org/10.2436/rcdp.i58.2019.3317; Valero Torrijos, Julián. "Las garantías jurídicas de la inteligencia artificial en la actividad administrativa desde la perspectiva de la buena administración," *Revista Catalana de Dret Públic* 58 (2019): 82-96. https://doi.org/10.2436/rcdp.i58.2019.3307.

<sup>&</sup>lt;sup>4</sup> Insisting on the need for AI systems mobilised in the exercise of administrative activity to have to comply with the constitutional and administrative principles proper to this activity, see S. Appel and C. Coglianese, "Algorithmic Governance and Administrative Law," in *The Cambridge Handbook of the Law of Algorithms*, ed. W. Barfield (Cambridge: Cambridge University Press, 2020), 167.

<sup>&</sup>lt;sup>5</sup> European Commission (2020) White Paper on Artificial Intelligence - A European approach to excellence and trust, COM/2020/65 final/2.

<sup>&</sup>lt;sup>6</sup> For further developments, see A. Z. Conceição, "Aplicação de inteligência artificial em dados da Administração Pública," *Revista de Direito Administrativo* 5 (2019): 87-89; AMA, "Guia para a

The environment of technological development that we are experiencing at the beginning of the 21st century - with greater or lesser, justified or unjustified, optimism - requires attention, if for no other reason than the fact that the potential impact on current ways of living recommends careful observation in order to "avoid fait accompli situations". It should be borne in mind that some "realism" has already been affirmed by the economic weight that large technological companies have been assuming in recent years, as well as by their capacity to dominate the masses and violate, also en masse, fundamental rights, whether, for example, in relation to the right to privacy, in relation to freedom of information and in relation to (true) information to form conscious judgements in the exercise of rights/duties, such as voting in presidential or other elections<sup>7</sup>. Even without express naming, the reader easily recognises that we are talking about (our) present and everyday life and that it is not alien to the influence (direct or indirect) of AI systems.

## 2. Artificial intelligence: the "big picture"

There is no consensus on a IA definition; however, in approximation mode, it can be understood as "a set of techniques that aim to approximate some aspects of human (or animal) cognition using machines" or, in the institutional language of the European Commission, "AI refers to systems that exhibit intelligent behaviour, analysing their environment and performing actions - with some degree of autonomy - to achieve specific objectives". AI emerges as an "umbrella" concept that provides shelter for different techniques that tend to reproduce intelligence, either by assisting human action or by replacing it (but still, for the time being, not by overcoming human intelligence, that is, still, outside "superintelligence" scenarios penerating, namely, economic value and performing or assisting in the performance of public tasks. 10

Inteligência Artificial na Administração Pública," available at: https://tic.gov.pt/: Guia para a Inteligência Artificial, Ética, Transparente e Responsável. Consulted on 25 May 2022, 12ff.

<sup>&</sup>lt;sup>7</sup> See some applications in C. E. Popa Tache, *Ranking of Treatment Standards in International Investments*, "International Investment Law Journal", Volume 1, Issue 1, February 2021, p. 84.

Opinion of the European Economic and Social Committee on 'Communication from the Commission to the European Parliament, the European Council, the Council, the European Economic and Social Committee and the Committee of the Regions — Coordinated Plan on Artificial Intelligence', COM(2018) 795 final; Regulation of the European Parliament and of the Council laying down harmonised rules on artificial intelligence (Artificial Intelligence Act) and amending certain union legislative acts COM/2021/206 final. On the subject, in the doctrine, among others, see Andreas Z. Hauselmann, "Disciplines of AI: An Overview of Approaches and Techniques," in *Law and Artificial Intelligence*, ed. Bart Custers and Eduard Fosch-Villaronga, Information Technology and Law Series, vol. 35 (The Hague: T.M.C. Asser Press), 43-70.

N. Bostrom, Superintelligence: Paths, Dangers, Strategies (Oxford: Oxford University Press, 2014), 47.
 P. Domingos, The Master Algorithm: How the Quest for the Ultimate Learning Machine Will Remake Our World, (London, United Kingdom: Penguin Books, 2017).

There are many "positions in favour of AI", but there are also many "unfavourable positions". <sup>11</sup> That is to say, on the one hand, there is no lack of AI supporters, completely dazzled by the ability of machines to make translations of various languages, of the machine's dominance over Man in certain games and, on the other hand, those who condemn AI abound identifying the use of secret algorithms for criminal conviction and the use of intelligent war machines; moreover, there is no lack of those who argue that AI will be the "last invention of humanity". <sup>12</sup>

Regardless of what is referred to, the truth is that it seems that AI presents itself as a powerful technology and is, in more recent times, "everywhere", and AI "is really now", pointing out the most recent studies, namely, on the impact of digital in the national economy, that the digital transformation has already started in a massive way. AI is already influencing the way we see, hear, perceive and even think about certain daily topics.

For this reason - and assuming AI systems as a reality with positive impacts and the creation of risks<sup>13</sup> - some institutional documents do not fail to stress that the use of AI systems should take into account "the concepts of accountability, transparency, explainability, justice and ethics. Concepts that contain, by way of example, the problem of bias<sup>14</sup>, very much associated with algorithms with social impact".<sup>15</sup> In short, AI systems should be human-centred.<sup>16</sup>

This reality is also not alien to the domain of public activity. That is, the performance of the forms of public action, administrative, jurisdictional and legislative, is not immune to technological innovation and, in particular, the use of AI system.

#### 3. Artificial intelligence and public policies

In the light of the above, it is important for the public decision-maker to be especially vigilant, since the impact of the multiple applications of AI will not cease to be made in the daily life of the citizen, the State, companies, families, etc., i.e., it will not cease to upset the balance gradually (in some situations, secularly) achieved in the regulation of social, economic, political, financial, family relations, etc<sup>17</sup>.

<sup>16</sup> Regulation of the European Parliament and of the Council laying down harmonised rules on artificial intelligence (Artificial Intelligence Act), 1.

<sup>&</sup>lt;sup>11</sup> R. Calo, "Artificial Intelligence Policy: A Primer and Roadmap", 2 ff. Available at: https://ssrn.com/abstract=3015350, Consulted on 25 May 2022.

<sup>&</sup>lt;sup>12</sup> J-G. Ganascia, *Le mythe de la Singularité* (Seuil: Coll. Science Ouverte, 2017); R. Calo, "Artificial", 1.

<sup>&</sup>lt;sup>13</sup> M. Cantero Gamito, and M. Ebers, "Algorithmic Governance and Governance of Algorithms: An Introduction," in *Algorithmic Governance and Governance of Algorithms, Data Science, Machine Intelligence, and Law*, vol. 1, ed. M. Ebers and M. Cantero Gamito, Data Science, Machine Intelligence, and Law, vol. 1 (Cham: Springer, 2021), 2.

<sup>&</sup>lt;sup>14</sup> M. Tanna and W. Dunning, "Bias and Discrimination," in *Artificial Intelligence: Law and Regulation*, ed. Charles Kerrigan (Cheltenham, UK - Northampton, MA, USA: Edward Elgar, 2022), 422-439.

<sup>&</sup>lt;sup>15</sup> AMA, "Guia para a Inteligência Artificial", 6.

<sup>&</sup>lt;sup>17</sup>B. Andersen, "Public policy and government," in *Artificial Intelligence: Law and Regulation*, ed. Charles Kerrigan (Cheltenham, UK - Northampton, MA, USA: Edward Elgars, 2022), 442ff. See for

Moreover, the mentioned attention has been offered in other geographies, such as the USA (with particular emphasis offered by the Obama White House), Japan, China and the European Union itself, which intends to assert itself as a leader in this field<sup>18</sup>. In this regard, it has been common for each Member State to approve its AI system development strategy.<sup>19</sup>

Even if the person responsible for public policy does not intend to have a proactive and anticipatory posture in regulating the future impacts of AI applications, it is essential that he or she has an attentive posture that allows him or her to consider and respond, if deemed appropriate, in a timely manner, to the new impacts on society, maximising the benefits of the use of AI and reducing the risks (including the impact on fundamental rights).

One cannot fail to mention that this is an area in which, as a rule, there are alternatives, therefore, room for public choice and that goes far beyond what is required and can be offered by the discipline of ethics - therefore, not dispensing strategy, planning and legal pondering.

In this context, there are several topics worthy of attention, with emphasis on the following AI impact areas.<sup>20</sup>

Thus, it starts by highlighting the use of AI systems in the administration of justice. On the one hand, algorithms are being developed or systems are being trained to replicate human values such as fairness, responsibility and transparency; however, there is no lack of examples of concrete AI applications whose results reveal discriminations based on gender, race, etc.<sup>21</sup> On the other hand, it is questionable whether society should not bear the risks of AI, but also its advantages and, finally, there are issues related to technological due process of law, namely its power to promote efficiency, but not always equal in terms of the quality of human judicial decision.

The mobilisation of AI systems can take place in the use of force, which occurs for example with the use of autonomous weapons. Although there is an international consensus that human control over the decision to kill cannot be given

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a consumers view Pelău, C., & Ene, I. (2020). "Interaction Between Consumers and Emerging Forms of Artificial Intelligence: a Discriminant Analysis". *Studia Universitatis Vasile Goldiş Arad, Seria Ştiinţe Economice*, 30(2), 1–12. Retrieved from https://publicatii.uvvg.ro/index.php/studiaeconomia/article/view/642.

<sup>&</sup>lt;sup>18</sup> A. Jobin, M. Ienca, and E. Vayena, "The global landscape of AI ethics guidelines," *Nat Mach Intell* 1 (2019): 389-399; Chaowei XU; Banggui JIN. "Digital currency in China: pilot implementations, legal challenges and prospects", *Juridical Tribune - Tribuna Juridica* 12, 2 (2022): 177-194.

<sup>&</sup>lt;sup>19</sup> On the AI Strategy approved for Portugal ("AI Portugal 2030"), see https://www.incode2030.gov. pt/ai-portugal--2030. Acessed on 15 June 2022. About the AI Strategies of other Members States, see European Comission, Joint Research Centre, M. Manzoni, R. Medaglia, L. Tangi, et al., AI Watch, road to the adoption of artificial intelligence by the public sector: a handbook for policymakers, public administrations and relevant stakeholders (Luxembourg: Publications Office of the European Union, 2022). Available at: https://data.europa.eu/doi/10.2760/288757. Acessed on 15 November 2022.

<sup>&</sup>lt;sup>20</sup> R. Calo, "Artificial", 13ff; European Comission, Joint Research Centre, M. Manzoni, R. Medaglia, L. Tangi, et al., AI Watch.

<sup>&</sup>lt;sup>21</sup> M. Cantero Gamito and M. Ebers, "Algorithmic Governance and Governance of Algorithms", 3.

up, many questions arise about whether monitoring is sufficient, whether those obligations also extend to defensive systems or only to attack weapons, and about who should take responsibility for the choice of these weapons. In summary, the public decision-maker should work out a regulatory framework on responsibility around AI and envisage that this is fair and satisfactory for all stakeholders.

It should also be considered that the use of AI systems may also take place in the field of safety and certification, since some of the specific applications of AI replace human actions that are only allowed for those who have certain qualifications and meet certain standards. In this regard, particularly with regard to autonomous vehicles, they tend to be required to be safer than humans ("safer than humans"); however, this is a criterion that is not very operational and it remains to be identified how and who controls the verification of this standard.

Also relevant is the domain of labour, currently practiced by people. In this field, some argue that the use of AI systems will free people for more creative tasks and others that more information should be provided to understand the impact of AI in the world of labour. In other words, in summary, the intensification of AI in the labour market should be accompanied by training and information policies in order to allow the development of tasks that do not exclude human beings. However, in this topic there are many doubts (e.g. when and where to expect that tasks performed by humans will be performed by autonomous people?, how will AI change the different activity sectors? Will it affect the less skilled and/or the more creative? Faced with these doubts, it is important to be alert, because if the change is as fast as some assume, then it is urgent to inform and train for this change in the labour market.

Also at the level of taxation, the impact of the use of AI systems tends to be revealed. On the one hand, the question whether robots should pay taxes is easily understandable, since the impact AI will have on work will not fail to have repercussions on the distribution of wealth, i.e. AI will tend to generate a large asymmetry in the distribution of wealth: if this happens, the tax system should not be insensitive to this change. On the other hand, it is also important to bear in mind the usefulness of AI systems in tax activity, 22 starting with tax procedures, in order to collect revenue in an automated way (and to investigate tax and customs infringements), as has happened, on an experimental basis, in France. 23

### 4. Artificial intelligence and public law

The proper understanding of the AI will impose interdisciplinarity and it will tend to be a phenomenon that requires a multilevel legal treatment, i.e. at least at

<sup>&</sup>lt;sup>22</sup> M. Cantero Gamito and M. Ebers, "Algorithmic Governance and Governance of Algorithms", 4.

On the position of the French Constitutional Council in relation to this AI system, see Calderón Carrero and Ribeiro, "Limites ao uso da inteligência artificial no controlo fiscal", 3-8; A. Ribes Ribes, "La inteligencia artificial al servicio del "compliance tributario"", Revista Española de Derecho Financiero 188 (2020): 132ff. Note that this system does not operate in a fully automated manner, ibid, 5.

national level (as seen in the different areas of action mentioned above), European (with the European Union in a race)<sup>24</sup> and international level (think currently of the use of "bee-drone" in the context of war).

However, in this study we will only focus on the area of Public Law<sup>25</sup>, *maxime* in the regulation of the impacts that AI may cause in this area of law and how public law can impose new requirements on AI systems. Moreover, not only the design of the concrete application of AI, but also its results should be subject to a fundamental legality test, namely equal treatment and, of course, in compliance with other fundamental rights.<sup>26</sup>

In addition to an adequate level of rule of law that the different AI-based projects and systems cannot/should not jeopardize and even should promote, each project and system will bring its own legal problems, whether those already identified and concerning the legal liability of autonomous entities, or those resulting from the use of AI for the performance of daily legal tasks.

The legislative and even administrative regulation, even if it is surgical, in order to preserve innovation, cannot fail to be important, from the outset, to preserve fundamental values such as the equality of treatment.<sup>27</sup> It should be recalled that, in this respect, it is a common concern that AI tends to promote inequality, and not only "immediate inequality", for example, through "racist treatment" whether in a police context or in the context of job interviews (or offers) conducted or assisted by AI, etc, but also a "mediated inequality" since, despite the insistence of some on studying the computing discipline and, in particular, programming ("Code"), the truth is that, as one can only draw attention to, there will be few people who master AI techniques and everything is heading towards a strong tendency for the AI business to be dominated by the wealthier classes.

Despite the above, the truth is that if the announced advance and development of AI materialises, the inequality of the future may be an inequality resulting from only some benefiting from the positive impacts of AI and the risks being borne by all.

If some of the aforementioned public policies are implemented, they will not be able to maintain their usefulness if they are not received by the evaluative parameters that Law offers and which tend to be positivized in the form of Law. In

<sup>&</sup>lt;sup>24</sup> M. Cantero Gamito and M. Ebers, "Algorithmic Governance and Governance of Algorithms", 9; T. S. Cabral, "Regulamento sobre a Inteligência Artificial na União Europeia: potenciais impactos nas entidades públicas", *Revista de Direito Administrativo* 12 (2021): 89-100.

<sup>&</sup>lt;sup>25</sup> On the impact of the use of AI systems in law, see, among many, H. S. Antunes, *Direito e Inteligência Artificial* (Lisboa: Universidade Católica Editora, 2020); W. Barfield, ed., *The Cambridge Handbook of the Law of Algorithms*, (Cambridge, Cambridge University Press, 2020); R. Tromans, "Legaltech", in *Artificial Intelligence: Law and Regulation*, ed. Charles Kerrigan (Cheltenham, UK - Northampton, MA, USA: Edward Elgar, 2022), 534ff.

<sup>&</sup>lt;sup>26</sup> European Union, Agency for Fundamental Rights, *Getting the Future Right - Artificial Intelligence and Fundamental Rights, Report* (Luxembourg: Publications Office of the European Union, 2020). The guarantee of these rights requires special attention in prior checking. See Regulation of the European Parliament and of the Council laying down harmonised rules on artificial intelligence (Artificial Intelligence Act), 12.

<sup>&</sup>lt;sup>27</sup> European Union Agency for Fundamental Rights, "Getting the Future Right", 68ff.

other words, in general, Law, besides consolidating the options of public policies, can hardly remain oblivious to the social and economic changes that the AI will tend to provoke, and should emerge as a leveller and guarantor of the different variations and developments of the dignity of the human person.

Given the importance of public activity for the life of citizens in general, it is easy to understand that Public Law cannot remain oblivious to the impact of the use of AI systems in this activity. That is, following the option and the public policies developed in the sense that some of the public tasks are performed by AI systems or whose human execution benefits from the support of AI systems, as up to Public Law, from the outset, to regulate the approval of such regimes/systems, as well as the rules of their operation, in line with the legal and administrative guarantees common to the administrative activity.

There is no reason why the holders of legitimate rights and interests should see their procedural guarantees reduced, from the outset, with regard to administrative decisions that may affect their legal sphere: the need to promote innovation cannot be at the expense of citizens' rights. The requirements of the rule of law, of access to the courts, of respect for fundamental rights or principles such as transparency, impartiality and equity impose this. In short, the public activity performed by AI systems cannot be allowed to remain outside the Law.<sup>30</sup>

The administrative activity exercised by AI systems, besides having to be guided by a set of guarantees that are recognised in the principle of good administration, and by other general principles of administrative activity in terms of first-degree administrative procedure, must be endowed with legal instruments that allow the affected individual to have at his disposal the appropriate means of administrative and judicial guarantees - not admitting zones of immunity in intelligent administrative activity.

Moreover, the question that tends to arise is that these guarantees may need to be reinforced depending on the type of AI system used, with automated administrative decisions supported by algorithms<sup>31</sup> - "Public Administration 4.0".<sup>32</sup>

<sup>&</sup>lt;sup>28</sup> Appel, and Coglianese, "Algorithmic Governance and Administrative Law", 162; Cantero Gamito, and Ebers, "Algorithmic Governance and Governance of Algorithms", 2.

<sup>&</sup>lt;sup>29</sup> See, in this regard, the identification of a set of public areas in which AI systems can be used by public entities, e.g. essential public services, police activities. See Regulation of the European Parliament and of the Council laying down harmonised rules on artificial intelligence (Artificial Intelligence Act), 29 and 30; Tiago Cabral, "Regulamento sobre a Inteligência Artificial", 89-100.

<sup>&</sup>lt;sup>30</sup> J. M. Calderón Carrero and J. S. Ribeiro, "Limites ao uso da inteligência artificial no controlo fiscal: a experiência francesa (décision nº 2019-796 DC)", Cadernos de Justiça Tributária 26 (2019): 6.

<sup>&</sup>lt;sup>31</sup> In addition to the question of whether or not all administrative decisions can be automated, see M. D'Angelosante, "La consistenza del modello dell'amministrazione 'invisibile' nell'età della tecnificazione: dalla formazione delle decisioni alla responsabilità per le decisioni", in *La Tecnificazione*, ed. S. Civitarese Matteucci, and L. Torchia (Firenze, 2016), 165; E. M. Gil Cruz, "Función instrumental de la inteligencia artificial en la determinación de los conceptos jurídicos indeterminados". *Revista Aranzadi Doctrinal* 8 (2021): 179.

<sup>&</sup>lt;sup>32</sup> F. P. Griffi, La decisione robotica e il giudice amministrativo. Available at: https://www.giustizia-amministrativa.it. Acessed on 15 November 2022.

#### 4.1 Specific provisions with application to AI systems

#### 4.1.1 Charter of Human Rights in the Digital Age

Although Portugal has not yet dedicated a law to the regulation of AI, there are still regulations that directly concern AI, either because of the approval of standards on human rights in the digital context, such as the Charter of Human Rights in the Digital Age<sup>33</sup>, or because of the General Regulation on Data Protection (GDPR)<sup>34</sup>, which is directly applicable in the Portuguese legal system, or because some of the standards set forth in the Administrative Procedure Code (CPA)<sup>35</sup> for electronic administrative procedures may apply to administrative procedures based on AI.

Regarding the Charter of Human Rights in the Digital Age (Charter), Article 9, which refers to the use of artificial intelligence and robots, stands out. The main guidelines to be gathered from this device are cut from paragraph 1, which provides that the use of AI should be guided by respect for fundamental rights, ensuring a fair balance between the principles of explainability, safety, transparency and accountability that takes into account the circumstances of each concrete case and establishes processes aimed at avoiding any prejudice and forms of discrimination. In other words, the main topics on the use of AI systems in the public sector are stated: explainability, safety, transparency, accountability and bias - which will be dealt with below.

In turn, paragraph 2 provides that decisions with a significant impact on the sphere of recipients that are taken through the use of algorithms must be communicated to the interested parties, being susceptible to appeal and auditable under the terms provided by law. That is, administrative decisions based on digital algorithms that affect the legal sphere of the administrators must be notified, so that they can understand them and, if they so wish, challenge them - this reinforces the idea of the right to appeal.

Furthermore, according to that normative, intelligent administrative decisions must also be auditable, supposedly internally<sup>36</sup> and externally<sup>37</sup>. Despite the scope of this Charter, the truth is that it only presents a *proclamatory value*, since, on the one hand, it does not present sanctions in case of non-compliance and, on the other hand, it refers "to the law". As already mentioned, since Portugal does not have a specific law to regulate AI, the general rules governing AI will have to be applied.

<sup>&</sup>lt;sup>33</sup> Aproved by Law No. 27/2021 of 17 May.

<sup>&</sup>lt;sup>34</sup> Regulation (EU) 2016/679 of the European Parliament and Council of 27 April 2016 on the protection of individuals with regard to the processing of personal data and on the free movement of such data and repealing Directive 95/46/EC (General Data Protection Regulation), OJ L 119.

<sup>&</sup>lt;sup>35</sup> Aproved by Law No. 42/2014 of 11 july.

<sup>&</sup>lt;sup>36</sup> That is, in the context of public administration itself. For some references on internal control and external control, see Ricardo Pedro, "Role of the Portuguese audit court on monitoring the recovery and resilience plan: a piece of a hopefull puzlle?". Revista Catalana de Dret Públic 65 (2022): 1-16.

<sup>&</sup>lt;sup>37</sup> On the external control, by the Portuguese Court of Auditors, on the use of AI systems, see José F. F. Tavares and Paulo Nogueira da Costa, "Inteligência artificial, gestão pública e controlo," in *Inteligência Artificial no Contexto do Direito Público*, ed. Ricardo Pedro and Paulo Caliendo (Lisboa: Almedina, 2023), 57ff.

As we will see below, the main regulations to be taken into account result from the GDPR and the CPA. Finally, it should also be noted that the Charter refers, in Article 19, to digital rights vis-à-vis the Public Administration, guaranteeing, namely, that, vis-à-vis the Public Administration, everyone shall benefit from the transition to digital administrative procedures; obtain digital information regarding administrative procedures and acts and communicate with decision makers; personal assistance in the case of exclusively digital procedures.

#### 4.1.2 General Data Protection Regulation

In concretion of the Charter, given its general reference "to the law", we can find the provisions of Article 22 GDPR<sup>38</sup> concerning automated individual decisions, including profiling. Paragraph 1 of this regulation provides that the data subject has the right not to be subject to any decision taken solely on the basis of automated processing, including profiling, which produces legal effects concerning him or her or similarly significantly affects him or her.

Notwithstanding this general rule, the following paragraph sets out several exceptions, the most relevant of which for the public use of AI systems is found in subparagraph (c) and which provides that that rule may be departed from if authorised by Union or Member State law to which the controller is subject and which also provides for appropriate measures to safeguard the rights and freedoms and legitimate interests of the data subject.

In this case, according to paragraph 3, the controller shall implement suitable measures to safeguard the rights and freedoms and legitimate interests of the data subject, in particular the right to at least obtain human intervention on the part of the controller, to express his or her point of view and to contest the decision.

#### 4.1.3 Code of Administrative Procedure

The administrative decision based on AI is also subject to the provisions of Article 14(3) CPA, which provides that the use of electronic means, within the limits established in the Constitution and the law, is subject to the guarantees provided for in this Code and the general principles of administrative activity (see *infra* 4.2.). Although the letter of the law refers to the use of *electronic means*, it is believed that by analogy they should also apply to administrative procedures based on IA. General guarantees are therefore at stake and the main guarantees to be highlighted, in light of what is stated in the Charter, are the right to administrative appeal of these decisions, either to the author of the act or to a superior.

<sup>&</sup>lt;sup>38</sup> In line with this normative can also be found Article 11 of Directive (EU) 2016/680 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data by competent authorities for the purposes of prevention, investigation, detection or prosecution of criminal offences or the execution of criminal penalties, and the free movement of such data, and repealing Council Framework Decision 2008/977/JHA. OJ L 119, 4.5.2016, p. 89-131. On this issue and with reference to other literature, *inter alia*, Tiago Cabral, "Inteligência artificial e atividade judicial: análise das principais questões a nível de proteção de dados pessoais e do futuro regulamento da união europeia sobre IA," in *Inteligência Artificial no Contexto do Direito Público*, ed. Ricardo Pedro and Paulo Caliendo (Lisboa: Almedina, 2023), 77ff.

Additionally, Article 153(3) CPA, which focuses on the important issue of the duty to provide reasons for administrative decisions, provides that in the resolution of matters of the same nature, any mechanical means that reproduces the grounds of decisions may be used, provided that this does not involve a diminution of the guarantees of the interested parties. Here too, despite the fact that the letter of the law refers to *mechanical means*, the argument of the majority reason should lead to the adoption of administrative decisions based on AI imposing the same level of reasoning - which as we shall see below is one of the main problems of the public use of AI.

# 4.2 Principle of good administration: transparency and reasoning for IA decisions

In addition to the specific regulations immediately mentioned, the application of some of the fundamental principles of administrative activity applicable to public decisions based on IA should be highlighted.

The option for the implementation of AI systems in the exercise of public activity, whether exercised by public entities or by private parties in the exercise of public functions imposes, in our opinion, that Public Law is forced to walk on unsafe ground, not only because of the characteristics of AI (opacity, complexity, data dependence, autonomous behaviour), but also because the use of AI systems by the Public Administration is still in a process of maturation.<sup>39</sup>-<sup>40</sup>

Despite these difficulties, the administrative activity performed through AI systems must, in the absence of a proper regime, 41 - regulation of AI in the public sector - comply with basic standards of public law such as the principle of good administration. 42 In other words, the legality of the governance of AI systems and, in particular, of algorithms cannot but be addressed. 43

<sup>&</sup>lt;sup>39</sup> AMA, Guia para a Inteligência Artificial, 30.

<sup>&</sup>lt;sup>40</sup> As can be read in the Portuguese Strategy on Artificial Intelligence: several projects are being funded to foster AI in public administration (see https://www.incode2030.gov.pt/ai-portugal--2030), so the issues that are addressed in the main text will tend to arise very soon.

<sup>&</sup>lt;sup>41</sup> The regime that is being considered here is a public law regime. In addition to this regime (should it exist), the initiatives of the European institutions (https://digital-strategy.ec.europa.eu/en/policies/european-approach-artificial-intelligence) should be taken into account.

<sup>&</sup>lt;sup>42</sup> A broad notion of the principle of good administration is assumed here, which goes beyond the provisions of Article 5 of the Portuguese Administrative Procedure Code. In other words, if a broad notion of good administration includes, in particular, the guarantees of transparency and justification, from a point of view of the Portuguese positive law these guarantees find autonomous positivation, with emphasis on the duty to justify decisions set out in Articles 152 and 154 and on transparency: a concretisation of this principle can be found in Article 14. On the principle of good administration in Portuguese law, see M. A. Raimundo, "Os princípios no novo CPA e o princípio da boa administração, em particular", in *Comentários ao novo Código do Procedimento Administrativo*, ed. Carla Amado Gomes, Ana Fernanda Neves, Tiago Serrão (Lisboa: AAFDL, 2016), 253-290; C. A. Gomes, "Princípio da boa administração: tendência ou clássico?", *Revista Jurídica* 31, (2019): 5ff. Highlighting the relevance of the principle of good administration in the context under analysis, see European Union Agency for Fundamental Rights, *Getting the Future Right*, 81ff.

<sup>&</sup>lt;sup>43</sup> S. Appel, and C. Coglianese, *Algorithmic Governance and Administrative Law*, 162.

Therefore, the option for the use of an AI system by the public administration should be subject to public scrutiny, i.e. prior to the use of an AI system in the exercise of administrative functions, a public approval of this should take place<sup>44</sup>, which may take place through a "public act", revealing a proper administrative procedure, in particular when algorithms are involved<sup>45</sup>. For, only in this way can the potential risks of these AI systems and their adequacy be taken into account from the outset, by complying with the three tests imposed by the proportionality principle on the manner/risk of the exercise of the administrative activity. This public control should also extend to a monitoring of AI systems throughout their life cycle.

The characteristics of some AI systems, with particular focus on those animated by algorithms - of "opacity" and "non-explanability" of their decisions - invokes the role of the principle of good administration in the dimensions of transparency and justification of administrative decisions.<sup>46</sup>

As far as the guarantee of transparency is concerned, it is imperative to recognise a guarantee that includes not only the result of the application, but also, and above all, the origin of the data and the processing carried out.<sup>47</sup> The need for attention to be paid in order to ensure transparency also results from the fact that most AI systems used by the Public Administration may be created by private entities - avoiding that the latter are held hostage or have to be guided by the performance standards of the latter.<sup>48</sup> As a rule, an obligation of active publicity of the Public Administration should be admitted, starting with the dissemination of the basic rules on which the algorithms are based - which presupposes that transparent AI systems are in question, i.e. that allow the decisions and the use of data by those systems to be explained, inspected and reproduced.<sup>49</sup> In short, the "glass house"<sup>50</sup> that the Public Administration should be gets along badly with "black boxes",<sup>51</sup> that is, with implicit processes or reasoning of AI systems.

The special requirement of the principle of good administration also imposes that the administrative activity supported by AI systems is duly justified, taking into

<sup>&</sup>lt;sup>44</sup> J. Valero Torrijos, Las garantías jurídicas de la inteligencia artificial en la actividad administrativa, 88.

<sup>&</sup>lt;sup>45</sup> It is debatable what the legal nature of the algorithm is and hence the public act for its approval. In any case, the main concern seems to be the provision of an appropriate procedure.

<sup>&</sup>lt;sup>46</sup> S. Appel, and C. Coglianese, Algorithmic Governance and Administrative Law, 166; E. M. Gil Cruz, Función instrumental de la inteligencia artificial, 181.

<sup>&</sup>lt;sup>47</sup> J. Valero Torrijos, Las garantías jurídicas de la inteligencia artificial en la actividad administrativa, 89.

<sup>&</sup>lt;sup>48</sup> In fact, the lack of technicians with knowledge in AI is one of the problems for the correct design of public policies in this area of knowledge.

<sup>&</sup>lt;sup>49</sup> AMA, *Guia para a Inteligência Artificial*, 35. In the European context, see Regulation of the European Parliament and of the Council laying down harmonised rules on artificial intelligence (Artificial Intelligence Act), 33, noting that "high risk AI systems should be accompanied by relevant documentation and instructions for use and include concise and clear information, including information on possible risks to fundamental rights and discrimination where appropriate".

<sup>&</sup>lt;sup>50</sup> P. C. Gonçalves, *Manual de Direito Administrativo*, I (Coimbra: Almedina, 2019), 484.

<sup>&</sup>lt;sup>51</sup> T. Wischmeyer. "Artificial Intelligence and Transparency: Opening the Black Box." In *Regulating Artificial Intelligence*, ed. T. Wischmeyer and T. Rademacher. (Springer, Cham, 2020): 75-101; J. A. Allen. "Agency and Liability," in *Artificial Intelligence: Law and Regulation*, ed. Charles Kerrigan (Cheltenham, UK - Northampton, MA, USA: Edward Elgar, 2022), 148ff.

account the due specificities of the administrative decisions in which such systems are admitted and, above all, that such decisions are understandable to a person who does not have the knowledge to assess the scope of the technology used.<sup>52</sup> Lastly, the aforementioned requirements for reasons must take into account the uniqueness of the AI systems used by the Public Administration;<sup>53</sup> it being assumed that the lack of comprehensibility of the administrative decision may lead to its invalidity.

# 4.3 Control of smart administrative activity by the administrative courts

Once the use of AI systems is admitted in the exercise of the administrative function<sup>54</sup>, the question arises whether the jurisdiction materially competent to settle disputes arising from legal-administrative relations will be technically prepared to judge administrative decisions supported by such systems,<sup>55</sup> in particular when these are based on algorithms.<sup>56</sup>

In addition to the above, problems of technical discretion may arise,<sup>57</sup> since it is sometimes a question of controlling a technically complex decision. This complexity results from computer progress and artificial language - which brings the problem of the possibility and the limits of control by the administrative court of these administrative decisions.<sup>58</sup>

Finally, besides the possibility of resorting to the traditional judicial experts,<sup>59</sup> it becomes urgent to think of a solution that incorporates such technical knowledge, either through the creation of a pool of advisors in these matters, or through the opening of a communication channel that ensures access to such knowledge. Note that what is at stake is the right of access to justice.<sup>60</sup> The reading

<sup>&</sup>lt;sup>52</sup> J. Valero Torrijos, *Las garantías jurídicas de la inteligencia artificial en la actividad administrativa*, 90.

<sup>&</sup>lt;sup>53</sup> The contribution of experts to explain the basic functioning of AI systems is important here. See S. Appel, and C. Coglianese, *Algorithmic Governance and Administrative Law*, 177.

J. Cobbe, "Administrative Law and the Machines of Government: Judicial Review of Automated Public-Sector Decision-Making" (August 6), 2018. Pre-review draft published as Jennifer Cobbe 'Administrative law and the machines of government: judicial review of automated public-sector decision-making, *Legal Studies* 39, (2019). Available at: https://ssrn.com/abstract=3226913. Acessed on 15 November 2022.

<sup>55</sup> Hence, it is required that these AI systems can be controlled by natural persons. See Regulation of the European Parliament and of the Council laying down harmonised rules on artificial intelligence (Artificial Intelligence Act), 33.

<sup>&</sup>lt;sup>56</sup> Susana de la Sierra Morón, "Inteligencia artificial y justicia administrative una aproximación desde la teoría del control de la Administración Pública", Revista General de Derecho Administrativo 53 (2020): 10ff.

<sup>&</sup>lt;sup>57</sup> E. M. Gil Cruz, Función instrumental de la inteligencia artificial, 179ff.

<sup>&</sup>lt;sup>58</sup> A distinct question is whether or not administrative activity under discretionary powers should be standardised, see P. Otero, *Manual de Direito Administrativo* (Coimbra: Almedina, 2013), 485; E. M. Gil Cruz, *Función instrumental de la inteligencia artificial*, 179.

<sup>&</sup>lt;sup>59</sup> On these, in the portuguese context, see Ricardo Pedro, Responsabilidade civil do Estado pelo mau funcionamento da administração da justiça: fundamento, conceito e âmbito (Lisboa: Almedina, 2016), 516ff.

<sup>&</sup>lt;sup>60</sup> European Union Agency for Fundamental Rights, *Getting the Future Right*, 75ff.

of the Portuguese Strategy on Artificial Intelligence reveals that this is a path that has yet to be taken.<sup>61</sup>

#### 4.4 Legal admissibility of AI systems by the administrative courts

The use of AI systems in the exercise of the administration of public justice is not without doubts, especially as it is intended that such systems aim to replace the activity reserved to the (human) judge - an "intelligent jurisdiction". <sup>62</sup> In other words, whenever one goes beyond the already stabilized electronic procedural means <sup>63</sup> and considers the implementation of algorithms and other AI systems in the production of the judicial decision new risks <sup>64</sup> emerge and at the same time new barriers must be taken into account. <sup>65, 66</sup>

Leaving aside, for the moment, the list of legal possibilities for admission of a judge-robot ("reservation of human jurisdiction"?!), it should be taken into account that the administration of public justice presents two axes: the "administration of justice in a broad sense" and the "administration of justice in a narrow sense".<sup>67</sup> If the former is reserved to the judge, the former encompasses activities that go beyond or are below the jurisdictional decision, involving the performance of other actors of the administration of justice than the judge, as happens, for example, with the performance of bailiffs.<sup>68</sup> It is mainly in this axis of the administration of justice that, to date, it seems to us that the use of AI systems can be considered.<sup>69</sup>

<sup>61</sup> See https://www.incode2030.gov.pt/ai-portugal--2030.

<sup>&</sup>lt;sup>62</sup> A. Ribes Ribes, La inteligencia artificial, 159.

<sup>63</sup> On the subject, see Ricardo Pedro, and António Oliveira Mendes, Código de Processo nos Tribunais Administrativos: anotação à Lei n.º 118/2019, de 17 de setembro e às medidas legislativas em matéria de COVID-19 (Lisboa: Almedina, 2022), 70ff. See also H. Chitimira, F. Hamadziripi and K. N. Mopipi, "Reconceptualising the Focus of Corporate Social Responsibility Initiatives to Address the Digital Divide in South Africa During the Covid-19 Pandemic", Perspectives of Law and Public Administration, Volume 11, Issue 2, June 2022: 294, 295.

<sup>&</sup>lt;sup>64</sup> It is, moreover, with regard to risk and, in particular, the different levels of risk that, in the European context, regulations are proposed on whether or not to allow the use of AI systems. In this context, AI systems designed to perform the functions of the administration of justice in the strict sense are, as a general rule, classified as high risk; this is not the case for AI systems designed for the activities of the administration of justice in the broad sense. See Regulation of the European Parliament and of the Council laying down harmonised rules on artificial intelligence (Artificial Intelligence Act), 31.

<sup>&</sup>lt;sup>65</sup> R. Susskind, *Online Courts and the Future of Justice* (Oxford: Oxford University Press, 2019), 277ff; A. L. D. Pereira, "Inteligência artificial na decisão jurisprudencial?", *JURISMAT* 12 (2020): 73-92.

<sup>66</sup> In the context of public law arbitration, see Ricardo Pedro, "Inteligência Artificial e Arbitragem de Direito Público", in *Inteligência Artificial no Contexto Público: Portugal e Brasil*, ed. Ricardo Pedro and Paulo Caliendo (Lisboa: Almedina, 2023), 105ff.

<sup>&</sup>lt;sup>67</sup> For further developments, see Ricardo Pedro, Responsabilidade civil do Estado pelo mau funcionamento da administração da justiça, 203ff.

<sup>&</sup>lt;sup>68</sup> On this figure, among many, see Ricardo Pedro, *Responsabilidade civil do Estado pelo mau funcionamento da administração da justiça*, 443ff.

<sup>&</sup>lt;sup>69</sup> In the same sense, see A. Ribes Ribes, *La inteligencia artificial*, 159; A. L. D. Pereira, *Inteligência artificial*, 73-92.

The (ethical) concerns<sup>70</sup> mentioned above - with the mobilisation of AI systems in the administration of justice - come to find echoes in a document of the European Commission for the Efficiency of Justice (CEPEJ) called "European Ethical Charter on the Use of Arti cial Intelligence in Judicial Systems and their environment Adopted at the 31st plenary meeting of the CEPEJ (Strasbourg, 3-4 D)".<sup>71</sup>

This document draws attention to the fact that the use of such tools and services in the systems of administration of justice seeks to improve the efficiency and quality of justice and should be encouraged. It must, however, be carried out responsibly, with respect for the fundamental rights of individuals, as provided for in (i) the European Convention on Human Rights, (ii) the Convention on the Protection of Personal Data and (iii) in accordance with "other fundamental principles" (primarily the principles mentioned below, which should guide the framework of public justice policies in this field).

In this sequence, five principles are envisaged, on the one hand, the principle of compliance with fundamental rights, i.e. the design and implementation of artificial intelligence must be compatible with fundamental rights; on the other hand, the principle of non-discrimination, whereby the development or intensification of any discrimination between individuals or groups of individuals must be specifically prevented; on the other hand, the principle of quality and security, in particular with regard to the processing of judicial decisions and data, using certified sources and intangible data with multidisciplinary designed models in a secure technological environment, on the other hand, the principle of transparency, impartiality and fairness, with data processing methods being made accessible and understandable and external audits being allowed and, finally, the principle of "under user control", so as to prevent a prescriptive approach and ensure that users are informed actors and control their choices<sup>72</sup>.

In the context of the control of the automated administrative decision by the administrative court, an issue that tends to arise is the need for a system with technical competence to do so, i.e., that the (administrative) decision based on an AI system can (in technical terms) only be subject to control by another AI system, now at the service of the administration of justice.

Besides the aforementioned scenario, and as referred to above, means for the administration of justice in a broad sense should be admitted, i.e., of a non-

<sup>&</sup>lt;sup>70</sup> R. A. Rosário, "Ética e inteligência artificial no Conselho da Europa", *Anatomia do Crime* 12 (2020): 133-167.

<sup>&</sup>lt;sup>71</sup> CEPEJ, "European Ethical Charter on the use of Artificial Intelligence in judicial systems and their environment", 2018. Available at: https://rm.coe.int/ethical-charter-en-for-publication-4-december-2018/16808f699c. Acessed on 15 November 2022.

As it could be seen in the literature there is empirical evidence that factors such as income, Gini Index, financial development, economic growth, urbanization, financial literacy, human development, and others have an impact on the insurance market - see Mureşan, G.M., Dragoş, C.M., Mare, C., Dragoş, S.L. and Pintea, A., 2021. Socio-Economic and MacroFinancial Determinants and Spatial Effects on European Private Health Insurance Markets. "Amfiteatru Economic", 23(56), p. 293.

jurisdictional nature, supported by AI systems, from the outset, in assisting the tasks of public servants of the administration of justice; the aforementioned principles cannot fail to be relevant here.

## 4.5 State liability for damages caused by public AI systems

This brief study cannot end without mentioning the public duty to indemnify resulting from damages caused by the State and other public entities for the use of AI systems.

It is important to clarify that the subject has been addressed mainly by private law,<sup>73</sup> resulting in the evidence of several problems and possible solutions. To these problems are now added some particularities imposed by Public Law.

In a very summarised way, it can already be expressed that to indemnify the damages caused by the Portuguese Public Administration (or private parties in the exercise of administrative functions) three indemnity regimes are foreseen in the Civil Liability Regime of the State and other Public Entities (Regime da Responsabilidade Civil do Estado e Demais Entidades Públicas - RRCEE):<sup>74</sup> administrative civil liability for unlawful acts, administrative civil liability for risk and compensation for sacrifice (although this does not dedicate exclusively to the administrative function).<sup>75</sup>

In the abstract, and since the AI systems tend to be integrated into the exercise of administrative activity, it could be said that any of these modalities of State liability could take place, depending on the specific situation. On the other hand, the invocation of one of those regimes is also dependent on the type of AI system mobilised by the Public Administration and, in particular, the level of automation (human/IA co-action or AI only) and inherent risk.

A first question that remains with regard for the indemnity of the aforementioned damages and that has (already) been revealed within the framework

<sup>&</sup>lt;sup>73</sup> C. C. Danesi, "Daños ocasionados por inteligencia artificial: los vehículos Autónomos", in *Congreso internacional de derecho civil octavo centenario de la Universidad de Salamanca: libro de ponencias*, ed. Eugenio Llamas Pombo (Valencia: Tirant lo Blanch, 2018) 515-526; N. S. Silva, "Inteligência artificial, robots e responsabilidade civil: o que é que é diferente?", *Revista de Direito Civil* 4, n.4, (2019): 691-711; L. L. Machado, "Médico robô: responsabilidade civil por danos praticados por atos autônomos de sistemas informáticos dotados de inteligência artificial", *Lex Medicinae. Revista Portuguesa de Direito da Saúde* 16, no. 31-32 (2019): 101-114; H. S. Antunes, "Inteligência artificial e responsabilidade civil: Enquadramento", *Revista de Direito da Responsabilidade* 1 (2019): 139-154; M. M. Barbosa, "O futuro da responsabilidade civil desafiada pela inteligência artificial: as dificuldades dos modelos tradicionais e caminhos", *Revista de Direito Civil* 5, no. 2 (2020): 261-305. It should be noted that although the Portuguese Strategy on IA states: "*The legal framework will have to be adjusted to determine liability in conflicts with the involvement of AI decision making*", there is no reference to the type of adjustments to be considered and neither are the particularities of public law taken into account. See https://www.incode2030.gov.pt/ai-portugal--2030. Acessed on 15 November 2022.

<sup>&</sup>lt;sup>74</sup> Approved by Law No. 67/2007, of 31 December.

<sup>&</sup>lt;sup>75</sup> On the subject, see Carla Amado Gomes, and Ricardo Pedro, *Direito da Responsabilidade Civil Extracontratual Administrativa: Questões Essenciais* (Lisboa: AAFDL, 2022).

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of the general theory of private civil liability<sup>76</sup> and that must now be pondered within the framework of the theory of State liability, is that on the decisions of AI systems it is not possible to make a (human) ethical-legal judgment.<sup>77</sup> This brings the relevance of the assumption of guilt to the discussion table. It seems to us that the issue is easier to solve in Public Law than in Private Law, since the guilt requirement has already been losing usefulness in the public arena.<sup>78</sup>

In any case, what should already be established is that as the presence of AI in administrative decisions increases, the validity of the indemnifying assumption guilt decreases in the same proportion - that is, as the use of AI in the execution of a certain administrative task intensifies, the more relevant are the regimes of objective administrative civil liability to repair any damage resulting therefrom<sup>79</sup>. Even if it is admitted that the censure should not focus on the conduct, but rather on the result, the problem arises of knowing which result standards should be taken into consideration: still the standards of the diligent (human) official? adaptation of the concept of "bonus pater familias" to AI systems? On the other hand, the usefulness of subjective State liability should not be ruled out whenever certain duties of care are imposed on the State in the approval and operation of AI systems.

Another requirement that deserves attention - as is the case when considering private civil liability<sup>80</sup> - when considering the issue of public compensation for damage caused by (public) AI systems is that relating to the causal link. This is so because in certain situations it may become concretely very difficult to establish the said causal link between the damage and the behaviour of the AI system, in particular when an algorithm developed and modified through self-learning is at stake<sup>81</sup>.

Furthermore, in the process of causation of damage, the intervention of third parties may take place, for example, in obtaining reusable open source data managed by other entities. In these hypotheses, the intervention of third parties may cause an

<sup>&</sup>lt;sup>76</sup> Among many, see S. Heiss, "Towards Optimal Liability for Artificial Intelligence: Lessons from the European Union's Proposals of 2020". HASTINGS SCI. & TECH. L.J. 12 (2022): 186ff; M. M. Barbosa, "Responsabilidade civil do Estado pelo recurso a sistemas de inteligência artificial na tomada de decisão", in O regime de responsabilidade civil extracontratual do Estado e demais entidades públicas: comentários à luz da jurisprudência, ed. Carla Amado Gomes, Ricardo Pedro, Tiago Serrão (Lisboa, AAFDL, 2022), 213-246; C. Kerrigan and O. Vercoe, "Explainable AI and responsible AI," in Artificial Intelligence: Law and Regulation", ed. Charles Kerrigan (Cheltenham, UK - Northampton, MA, USA: Edward Elgar, 2022), 527ff.

<sup>&</sup>lt;sup>77</sup> M. M. Barbosa, Mafalda Miranda, Responsabilidade civil do Estado pelo recurso a sistemas de inteligência artificial na tomada de decisão, 213-246.

<sup>&</sup>lt;sup>78</sup> Among others, see Ricardo Pedro, *Responsabilidade civil do Estado*, 133ff.

<sup>&</sup>lt;sup>79</sup> The Proposal for a Regulation on AI of the European Parliament is also moving in this direction, see Proposal for a Regulation of the European Parliament and of the Council laying down harmonised rules on artificial intelligence (Artificial Intelligence Regulation) and amending certain Union legislative acts COM/2021/206 final.

<sup>80</sup> Among many, see M. M. Barbosa, O futuro da responsabilidade civil desafiada pela inteligência artificial, 261-305.

<sup>81</sup> This concern is particularly evident in the European Commission's Proposal for a Directive on Artificial Intelligence Liability. See Proposal for a Directive of the European Parliament and of the Council on the adaptation of the rules on non-contractual liability to artificial intelligence (AI Liability Directive) 2022/0303 (COD).

interference in the causal relationship, therefore, when the data does not have the required quality. As this is a case of concurrent civil liability, the question that must be asked is whether or not to admit a joint civil liability of the public entity, which has the right of recourse against the third party.

#### 5. Conclusions

Despite the remarkable path taken by the use of AI systems in the development of the most varied tasks of life in society, the truth is that, in the Portuguese context, the use of AI systems in the exercise of public functions and, in particular, the exercise of administrative functions is starting to take its first steps 82. Thus, as such systems become integrated in the exercise of administrative functions, the need to outline public policies regarding the planning of the public use of such systems arises and, as it could not be otherwise, Public Law is called upon to regulate the use of AI systems in the exercise of such functions.

Despite the lack of a legal statute regulating AI, there are some legal norms dedicated to the regulation of AI with relevance to the public sector<sup>83</sup>. Thus, a law on human rights in the digital age stands out, which appears with a merely proclamatory character, referring to a law that regulates such matters. Such law comes to be found in the GDPR, regarding automated decisions, and in the CPA, which imposes certain administrative guarantees regarding the use of AI in administrative procedures.

In the absence of a proper regime, one cannot forget the risks, tensions or weaknesses that may arise for legal certainty, certain fundamental rights and, of course, in the context of the administrative function, for the general principles of administrative activity - requiring guarantees of Public Law in its design and by default. The characteristics of AI systems - autonomy, self-learning, opacity and inexplicability of autonomous decisions - calls, from the outset, for the need for an administrative procedure of approval of public AI systems (Public Law as an element of the source Code) and, also with regard to the operation of AI systems, the principle of good administration, in strengthening the dimensions transparency and justification of administrative decisions, so that transparency, audit and understanding of the reasons of the public decision affecting a person or the collective are guaranteed.

Considering that also the administrative activity developed on the basis of AI systems should be subject to judicial control, in the near future the question of the need for intelligent judicial systems/tools to control intelligent administrative activities (?), in particular those of high technical complexity, should be raised on the one hand, and on the other hand, the question of the possibility/admissibility of the use of such intelligent systems by the materially competent jurisdiction, i.e. the administrative and tax jurisdiction.

<sup>82</sup> Ch. Costa Assis "O paradoxo da esfera pública digital", Cadernos de Dereito Actual, Nº 21. Núm. Ordinario (june 2023), p. 111.

About discussions of AI legal status see Sultonova, L., Vasyukov, V., & Kirillova, E. (2023). "Conceitos De Personalidade Jurídica Da Inteligência Artificial". *Lex Humana* (ISSN 2175-0947), 15(3), 283–295. Recuperado de https://seer.ucp.br/seer/index.php/Lex Humana/article/view/2596.

Lastly, the implementation of AI systems in the execution of public tasks raises the issue of State liability for any resulting damages. At the time of writing, and due to the duty of caution that this delicate matter imposes, the civil liability regime to be considered - in the light of that provided for in the RRCEE - will depend in particular on the type of AI system used in particular, in light of the risk it may represent. Without prejudice to the relevance that State liability of a subjective nature may have, namely when the duties of care of public entities are breached, the admission of automated (administrative) decisions tends to reveal the devaluation of guilt in the syndication of the algorithm's conduct. Moreover, the self-learning characteristic of some AI systems may also reveal some difficulties in the concrete determination of the causal link; adding also that this may be interrupted by the action of a third party, raising the question of the duty of solidarity or not of the public entity.

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