

The Automation of the Decision-making Process of the Public Administration in the Light of the Recent Opinion by the Italian Council of State Regarding the Draft of Regulations Concerning the Modalities of Digitalization in the Public Tender Procedures*

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In public tender procedures, the possibility of entrusting the decision to a system defined as 'telematic', can be considered possible only for the performance of «purely arithmetic tasks» and it always excluded that the "telematic system" can replace the Contracting Authority bodies in the exercise of its technical-discretionary power.

ABSTRACT The Italian Council of State delivered its opinion (Cons. State, Advisory section, 26 November 2020, n. 1940) – requested by the Minister for Public Administration – on the draft of regulations about the modalities of digitalization of the public tender procedures. The present contribution aims to highlight some of the main issues raised by the Advisory section, with particular reference to the statement made by the Council of State about the possibility of using the new “computerized” (automated) systems in case of discretionary activities carried out by the contracting Authority. In the above mentioned opinion, the Council of State has repeatedly stated the inadmissibility of the choice to give any “decision-making autonomy” or “technical-discretionary spaces” to the new electronic decision-makers, functions which must on the contrary be reserved to the contracting Authority. This Council of State stance, however, merges with the guidelines already expressed by the Italian Administrative Judge and creates a particular conflict with one of the Council of State own statements given in one of the most recent and relevant judgments on the matter (Cons. State, sez. VI, 13 December 2019, n. 8472).

1. Introduction

The European Union, with the Communication «*Artificial Intelligence for Europe*», has defined the progress in the use of algorithms¹ and Artificial Intelligence² as

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¹ The algorithm, in general terms, can be defined as a process, a sequence of operations that allow to solve a problem in a finite number of steps, in compliance with two requirements: i) each step of the sequence must already predefine the next step and ii) the result to which the sequence tends to must be concrete, real, useful. In this sense see, G. Avanzini, *Decisioni amministrative e algoritmi informatici. Predeterminazione, analisi predittiva e nuove forme di intellegibilità*, Napoli, Editoriale Scientifica, 2019, especially 5. The algorithm constitutes the ‘key word’ in the use of artificial intelligence, and it is definable as «*the executive scheme of the machine that stores all decision-making options based on*

data that it progressively processes». In this sense, J. Nieva-Fenoll, *Intelligenza artificiale e processo*, Torino, Giappichelli, 2019, especially 8.

² Nowadays there is still no universally agreed definition of what is meant by Artificial Intelligence, however, from what also emerges from the studies carried out in the last years by the European Parliament and the Commission, it could be said that this term describes the possibility that machines, to a certain extent, are able to imitate human thought and its intellectual abilities. In particular, the Commission has stated that Artificial Intelligence can be understood as «*systems that show intelligent behaviour by analysing their environment and taking action, with a certain degree of autonomy, to achieve specific objectives*», in *Understanding algorithmic decision-making: opportunities and challenges*, www.europarl.europa.eu, 5 March 2019. At European level on the definition of IA, see: *A definition of AI: Main capabilities and scientific disciplines*, in www.ec.europa.eu, 2019. See also: A. D’Aloia, *Il diritto*

one of the most strategic technologies of the 21st Century, at the same time underlying the need to ensure a «solid framework» since the way we relate to it will determine the world in which we live³.

In many fields, day after day, these new tools promise to ensure better performances in computing power and efficiency in the processing of large amounts of data, but also neutrality, compared to human decisions characterized, by their nature, by higher margins of fallibility and questionability.

Traditionally, the decisions taken by the algorithm are considered, instead, as ‘neutral’ because they are based solely on the analysis of rational data and logic⁴.

verso ‘il mondo nuovo’. *Le sfide dell’Intelligenza Artificiale*, in *Rivista di BioDiritto*, n. 1, 2019, especially 6, who defines the term ‘IA’ as an ‘umbrella term’, a word ‘container’ that includes, roughly, a variety of computational techniques and associated processes (algorithmic) dedicated to improving the ability of machines to do things that require intelligence.

³ In this sense see, COM (2018) 237, *Artificial Intelligence for Europe*, highlighting that at the level of the European Union the strategy currently in place is of an anthropocentric type. In fact, it was pointed out that to live with these new tools and make the most of them there is an absolute need to ensure their reliability by making their operation transparent and understandable. In this sense see also «*Ethical guidelines for trustworthy AI*» developed by a group of experts appointed by the European Commission in June 2018. The guidelines have developed seven key requirements that AI applications should detain in order to be considered reliable: i) human agency and oversight; ii) technical robustness and safety; iii) privacy and data governance iv) transparency, v) diversity, non-discrimination and fairness, vi) environmental and societal well-being and vii) accountability. The requirement of human oversight helping to ensure that an AI system does not undermine human autonomy or causes other adverse effects is certainly a matter of particular importance. Along this line there is also the requirement of *traceability* of the AI systems, which should be substantiated by the need to record and document the entire decision-making process, including the precise description of the algorithm in use, so as to ensure transparency and accountability of the decision-making and increase the user confidence. On these issues, the Commission adopted three subsequent documents: *Commission Report on safety and liability implications of AI, the Internet of Things and Robotics*, COM/2020/64; *White Paper on artificial intelligence. A European approach to excellence and trust*, COM/2020/65; *Shaping Europe’s digital future*, COM/2020/67.

⁴ Indeed, it has been highlighted that the use of the algorithm itself involves choices that are anything but ‘neutral’ starting from the criteria on the basis of which the data to be used are collected, selected and interpreted. In these terms, see M.C. Cavallaro and G. Smorto, *Decisione pubblica e responsabilità dell’amministrazione nella società dell’algoritmo*, in *Federalismi.it*, n. 16, 2019; C. O’Neil, *Armi di distruzione matematica. Come i big data aumentano la diseguaglianza e minacciano la*

However, if, on the one hand, the algorithm can be described as an objective, rational and scientific tool (and certainly able to guarantee undeniable advantages in the above-mentioned terms), on the other hand, it is necessary to highlight the related criticalities.

First of all, the one inherent their lack of transparency and comprehensibility.

These new ‘decision-makers’, especially those based on *machine learning* systems or even *deep learning*, are often characterized by their lack of transparency that makes it difficult to fully understand their operation and rebuild it afterwards.

This intrinsic darkness meant that they were defined as «black box»⁵ models, a metaphor used, especially in the field of engineering and computer science, to indicate systems whose internal functioning often remains obscure and can be assimilated to a ‘black box’⁶.

Such opacity, even if it is intrinsic and particularly related to only some specific types of algorithms, seems to characterize every type of algorithmic decision maker even if in lesser degree and with different modalities.

In this sense, three types of algorithmic opacity can be distinguished. The so called ‘intentional opacity’ occurs when the functioning of the system is kept hidden to protect other rights, first of all those related to intellectual property. The second kind of opacity is called ‘illiterate opacity’ and it occurs whenever a system is comprehensible only to those who possess the appropriate technical knowledge in terms of reading and writing the system.

democrazia, Milano, Bompiani, 2017. On this subject see also S. Tranquilli, *Rapporto pubblico-privato nell’adozione e nel controllo della decisione amministrativa ‘robotica’*, in *Diritto e Società*, n. 2, 2020, 281. In the context of administrative decisions, the author highlighted that the choice of the administration to use algorithms requires a series of absolutely not ‘neutral’ evaluations such as the predetermination of criteria and the selection of available reference data that must then be ‘poured’ by the programmer into the algorithmic code. Such assessments would be particularly important as the selection of data and the predetermination of the criteria used for the elaboration of the algorithm will have effects on the entire procedure. In similar terms also G. Avanzini, *Decisioni amministrative e algoritmi informatici*, 83, who specifies that such decision is never a ‘neutral’ choice for the affected citizen.

⁵ Term coined by F. Pasquale, *The Black Box Society, the secret algorithms that control money and information*, Cambridge, Harvard University Press, 2015.

⁶ In these terms see P. Guarda, “Ok Google, am I sick?”: *Artificial Intelligence, E-Health, and Data Protection Regulation*, in *Rivista di BioDiritto*, n. 1, 2019.

The third type is the intrinsic opacity that would occur when the details of the decision-making process of the system are difficult to understand for every human being⁷.

Therefore, the lack of transparency would not be linked to the complexity of the individual systems only – a complexity that could prevent, not only those who have no specific knowledge but even every ‘human mind’, from understanding its activity in detail – but it would also derive from the legal response of the single States which are gradually dealing with the use of these systems. An algorithm can become ‘dark’ also because its knowledge is prevented⁸ by legal reasons.

Despite these briefly summarized criticalities, the use of algorithmic tools now appears as a probable ‘appropriate inevitability’ that, as time goes on, will characterize practically every aspect of our society to the point that there are already those who speak of «algorithmic society»⁹.

Nowadays, one of the areas of their application that is particularly debated appears to be the use of such instruments in public decision-making process.

In Italy, the use of *Information and Communication Technologies* (ICTs)¹⁰ within the public administration is nothing new and

has led to significant changes in terms of organization and functioning to the point of not only having become the subject of specific regulatory discipline¹¹ but even of leading to a general belief that it is no longer possible to distinguish digital administration¹² from the analogical one¹³.

One of the topics that is currently at the centre of lively debates (both in doctrine and jurisprudence) is the use of algorithmic tools within the traditional administrative procedure not only as a support for administrative decisions (leaving the final decision to the human person official), but also as a replacement for the decision itself.

In the latter case, the ‘human official’ would decide from a formal point of view only, since the decision would be actually taken by the computer, on the basis of its previously input data¹⁴.

¹¹ Consider, for example, the Digital Administration Code of 2005 (Legislative Decree, 7 March 2005, n. 82). The article n. 3 affirms the right of citizens and businesses, in their relations with public administrations, to use ICT: «citizens and businesses have the right to request and obtain the use of telematic technologies in communications with public administrations». However, according to part of the doctrine, this rule, supplies for something that was not put in practice if not to a limited extent because administrations have not prepared effective instruments to exercise that right. In this sense, see V. Cerulli Irelli, *La Tecnificazione*, in S. Civitarese Matteucci and L. Torchia (eds.), *La Tecnificazione*, 279.

¹² Digital administration (e-Government) is defined as the use of information and communication technologies in public administrations combined with organizational change and new skills in order to improve public services and democratic processes and strengthen support to public policies, see COM (2003) 567. About the e-Government and the use of the AI, see the recent report “Government by Algorithm: Artificial Intelligence in Federal Administrative Agencies”, published by the Stanford Law School and the NYU Law School in collaboration with the Administrative Conference of the United States, that offers an accurate overview of current and potential uses artificial intelligence in the public sector, available at the following link: <https://law.stanford.edu/wp-content/uploads/2020/02/A-CUS-AI-Report.pdf>. For a precise analysis see L. Parona, “Government by algorithm”: un contributo allo studio del ricorso all’intelligenza artificiale nell’esercizio di funzioni amministrative, in *Giornale di diritto amministrativo*, n. 1, 2021, 10.

¹³ See S. Civitarese Matteucci and L. Torchia, *La Tecnificazione dell’amministrazione*, especially 11.

¹⁴ This evolution was also defined as the transition from a street-level bureaucracy to a screen-level bureaucracy. In the latter case, the official decides only formally, whereas in fact the decision is taken by the computer. The official would only retain a role when setting up the machine and then in reading the output. There also would be a further evolution: that of the System-Level Bureaucracy in which the official would not even decide

⁷ J. Cobbe, *Administrative Law and the Machines of Government: Judicial Review of Automated Public-Sector Decision Making*, in *Legal Studies*, Cambridge University, vol. 39, n. 4, 2019, especially 646.

⁸ In these terms also M.C. Cavallaro and G. Smorto, *Decisione pubblica e responsabilità dell’amministrazione nella società dell’algoritmo*, where it is pointed out that the ‘obscure character’ of the algorithms would also derive from a certain tendency, which emerged above all in the jurisdictions of common law, to reject requests for access, aimed at understanding the functioning of the algorithms, for reasons of intellectual property protection of software.

⁹ M.C. Cavallaro and G. Smorto, *Decisione pubblica e responsabilità dell’amministrazione nella società dell’algoritmo*, who recall the term «algorithmic society» coined by J.M. Balkin, *The three Laws of Robotics in the Age of Big Data*, in *Faculty Scholarship Series*, 2017.

¹⁰ See S. Civitarese Matteucci and L. Torchia, *La Tecnificazione dell’amministrazione*, in S. Civitarese Matteucci and L. Torchia (eds.), *La Tecnificazione*, Firenze, University Press, 2016, especially 7. In the same volume, also see I.M. Delgado, *La riforma dell’amministrazione digitale: un’opportunità per ripensare la pubblica amministrazione*, 133; M. D’Angelosante, *La consistenza del modello dell’amministrazione ‘invisibile’ nell’età della tecnificazione: dalla formazione delle decisioni alla responsabilità per le decisioni*, 155; A.G. Orofino, *L’esternazione degli atti amministrativi*, 181.

This differentiation is what has led to the definition of the change in progress as the transition to a Public Administration 4.0¹⁵.

This would no longer be an evolution regarding only the use of new instruments to express the will of the administration as in the case of the electronic administrative act¹⁶, it

the criteria to set the single Screen-Level Bureaucracy and its role would be limited to the design of the system and assistance to users/administrators. In this sense M. D'Angelosante, *La consistenza del modello dell'amministrazione 'invisibile' nell'età della tecnificazione*, 155.

¹⁵ D.U. Galetta and J.G. Corvalàn, *Intelligenza Artificiale per una Pubblica amministrazione 4.0? Potenzialità, rischi e sfide della rivoluzione tecnologica in atto*, in *Federalismi.it*, n. 3, 2019. The Authors point out that during the twentieth century the evolution of information and communication technologies (ICT) have shaped three paradigms of Administration: i) a Public Administration 1.0 that is the nineteenth century model of administration characterized by the use of paper and typewriters; ii) a Public Administration 2.0 who uses tools such as computers, printers and faxes; iii) a Public Administration 3.0 corresponding to the model of a good part of the 21st century characterized by the use of internet, digital portals, social networks. According to the authors, the public administration is currently facing a fourth phase of its evolution.

¹⁶ The change which we are witnessing regarding the way in which public decision-making powers are exercised and externalised could be summed up, more simply, also through the description of the evolution of the so-called electronic administrative act, previously proposed by a far-sighted doctrine. In fact, a distinction can be made between an administrative act developed on an electronic device and an electronic developed administrative act. In the first case, the content of the act is determined by public officials with the difference, in comparison with the 'traditional' administrative act, that the act will come into existence and will be perfected directly on the computer; in the second case, however, it is the computer software that prepares the content of the administrative act (without any human intervention). In this sense A.G. Orofino, *La patologia dell'atto amministrativo elettronico: sindacato giurisdizionale e strumenti di tutela*, in *Foro amministrativo (C.d.s.)*, 2002, 2257; But also F. Saitta, *Le patologie dell'atto amministrativo elettronico e il sindacato del giudice amministrativo*, in *Rivista di diritto amministrativo elettronico*, in www.cesda.it, n. 2, 2003, according to the author there are several figures of electronic administrative act when: a) the content of the act is prepared through a more or less complex computer system, in manual mode, using the computer only as a word processor, and which, in order to be effective in the legal world, must be transposed on paper and subscribed; b) the act is prepared through computer systems and issued with the same tools (administrative act in electronic form); c) the act is obtained through a process of elaboration by computerized systems that leads to the creation of a legal document linking together the data entered in the computer according to the forecasts of the software adopted and without any human contribution (electronic processed administrative act). On the matter see also R. Cavallo Perin and I. Alberti, *Atti e procedimenti amministrativi digitali*, in R. Cavallo Perin and D.U. Galetta

would no longer be a question of identifying new technologies that could speed up citizens participation in administrative decisions (such as the use of digital platforms), nor of using the development of information technology to reform the way data is exchanged between public administrations, it would be instead a more radical change¹⁷.

We would be in front of an administration built and functioning in a new way with the decision-making process entrusted to a software that, based on the previously entered data, reaches the final administrative act¹⁸.

This change is affecting all administrative activity as a whole.

However, in the absence of a specific legislation, the main issues raised by the use of these new decision-makers were addressed only by the Italian Administrative Judge who, through its jurisprudence, has attempted to outline the general lines that should guide the administration in the use of these new instruments.

Without prejudice to the indispensability of the jurisprudence interventions (in the absence of a precise regulation on the point), the guidelines expressed by the Italian Administrative Judge have sometimes been vague and contradictory, even on issues of particular importance.

In the following paragraphs a recent Council of State Opinion (Cons. State, advisory section, 26 November 2020, n. 1940) will be analysed – an opinion requested by the Minister for Public Administration – regarding the draft Regulations on the modalities of digitalization of the procedures for public tenders.

With regard to the particular sector of public contracts - in relation to which it is customary to speak of an e-procurement - it is also useful to distinguish between what concerns the digitalization of tender procedures (for example, through the use of IT

(eds.), *Il diritto dell'amministrazione pubblica digitale*, Torino, Giappichelli, 2020, 119.

¹⁷ See M.C. Cavallaro and G. Smorto, *Decisione pubblica e responsabilità dell'amministrazione nella società dell'algoritmo*, especially 9.

¹⁸ Already at the end of the 70s, the doctrine spoke of the possible and progressive evolution of the use of information technology in the exercise of administrative power noting that Information systems are no longer used by administrations for internal management purposes, but they are used precisely in administering, and they are increasingly projected outwards. See, M.S. Giannini, *Rapporto sui principali problemi della amministrazione dello Stato*, 16 November 1979, par. 3.7.

tools relating in particular to the computerization of communications, but also to the presentation of the application for participation, so-called e-submission), and what concerns the use of automated algorithmic tools in the decision-making process.

While the first issue is already the subject of positive discipline at both European and national level¹⁹, the use of automated instruments within the procedure to identify the best bidder is at the centre of doubts and issues, in line with what is being discussed for the administrative activity as a whole.

In fact, in the Opinion which will be analysed in the following reflections, the Council of State has repeatedly reiterated the inadmissibility of the choice to grant to the new electronic decision makers ‘decisional autonomy’ or ‘technical-discretionary spaces’, which must be reserved to the contracting Authority.

This position, however, must be analysed within the guidelines already expressed by the administrative judge on this point, because it collides with what has been stated by the Council of State in one of its most recent and relevant pronouncements on the matter (Cons. State, sec. VI, 13 December 2019, n. 8472).

2. The main critical issues highlighted by the Advisory section of the Council of State

First of all, in its Opinion the Italian Council of State recalled that the requesting Ministry has drawn attention to the fact that digitalization of public tenders is one of the main guidelines of the European Commission economic policies and that since the end of 2011²⁰, the Commission had proposed to make the phases of electronic publication (e-notification), electronic access to tender documents (e-access) and electronic

submission of tenders (e-submission) mandatory together with another phase of the purchasing process, through the digitalization of the invoicing (e-invoicing), in order to exploit the advantages of the e-tenders and proceed to the modernization of the legal framework for public tenders.

The Opinion also points out that, on the national side, digitalization targets are among the actions of the ‘National Action Plan on Public Tenders’, linked to the Italian Partnership Agreement 2014-2020²¹, “because of the central role played by the public tender sector in the context of the European Structural and Investment Funds in the pursuit of full and effective coordination between internal market policy and territorial cohesion policy”.

In this sense, the Code of public contracts provides, in line with the objectives of simplification and effectiveness of the 2014 package of directives, the introduction of new technologies in the purchasing processes of the Public Administration²².

A particular reference is made to the article 44 of the code where it provides that: “within one year from the date on which this Code comes into force, by decree of the Minister for Simplification and Public Administration, in agreement with the Minister for Infrastructure and Transport and the Minister for the Economy and Finance, having consulted the Agency for Digital Italy (AGID) as well as the Privacy Guarantor Authority for its profiles of competence, the procedures for the digitalisation of the procedures of all public contracts are defined, also through the public administrations data interconnection allowing mutual operability. They are also defined as the best practices concerning organizational and working methodologies, programming and planning methodologies, with a reference to the identification of relevant data, too, and to their collection, management and processing, to IT, telematic and technological support solutions”.

Given the letter of the Code article 44, the draft decree should thus identify the general

¹⁹ In the code of public contracts, in application of the 2014 directives, the regulation of the digitization of procedures and communications is divided into three provisions: art. 40, which lays down the obligation to use electronic means of communication in communications and information; Art. 44, which provides for the digitization of procedures; Art. 52, which lays down the rules on communications.

²⁰ See European Commission, *Proposal for a Directive of the European Parliament and of the Council on public procurement*, COM (2011) 896. This trend was confirmed in the 2013 Directive, *Electronic end-to-end procurement as a means to modernise public administration*, COM (2013) 453.

²¹ Available on the website <https://opencoesione.gov.it>.

²² However, it should be clarified that this agreement it be replaced by the new Italian programme of cohesion policy for the period 2021-2027 (whose preparatory acts can be consulted here https://opencoesione.gov.it/media/uploads/temiunificanti_2021_2027.pdf), being defined according to the new strategic objectives including ‘a more connected Europe’.

principles underlying the digitalization of the PA purchasing processes, carrying out the so called ‘re-engineering’ in a digital key of the purchase and negotiation phases and also identifying the general technical characteristics of those telematic systems.

Having said that, the Section goes on to examine the main issues contained²³ in the draft Regulations submitted to its attention, including the one linked to the use of algorithmic tools within the tender procedures by the contracting Authority.

In particular, after some proposals for formal amendment on the articulation, some criticalities linked to the articles 20 and 21 of the Regulations have been found and reported in the opinion, concerning, respectively, the opening and evaluation of the technical offers, as well as the opening and evaluation of the economic offers. In reference to these articles a complete rewriting has been suggested.

The Council of State, dealing jointly with the two articles (given the homogeneity of the remarks), points out, first of all, that the regulation under examination has a generalized application, as such extended both to tender procedures awarded on the basis of the criterion of the lowest price, and to those awarded with the criterion of the economically most advantageous offer, according to article 95 of the Italian Public Contracts Code.

The issue is then still farther clarified: as everybody knows, in case the award is assigned on the basis of the lowest price criterion, the one and only reference to be made will be to the submitted economic offers and to their related auction reductions, with an

automatic award to the participant who has offered the highest reduction – after a possible phase of investigation and verification on anomalous offers according to the article 97 of the code. On the contrary, in case of an assignment decided by the criterion of the economically most advantageous offer, the selection board will have to proceed, according to the article 77 of the Public Contracts Code, to the evaluation of both the technical and economic offers, according to the criteria provided for by the *lex specialis*, awarding the respective scores to the former and to the latter ones, exercising its own technical-discretionary power in the evaluation of the technical component.

As a consequence, the opinion repeats that the selection board, in the tender procedures awarded on the basis of the criterion of the economically most advantageous offer must remain – according to the above-mentioned article 77 of the Code – the one and only body in charge of the evaluation of the technical and economic offers and of the assignment of the related points. According to the Council of State, the possibility of entrusting the decision to a system defined as ‘telematic’, can be considered possible only for the performance of «*purely arithmetic tasks*», such as, for example, the calculation of the total score assigned to the individual participant and «*provided that it is always excluded that the telematic system can replace the selection board in the exercise of its technical-discretionary power*».

With an unequivocal reference to the tender procedures awarded on the basis of the criterion of the lowest price only, it is specified that they will allow a better exploitation of the potentialities of the “telematic” system, – when both the assessment of the anomaly threshold of the economic offer and the list of the auction reductions can be put in practice in automation, without exercising a discretionary power – with the firm exclusion, however, of the telematic system in the verification of the offers under suspicion of possible anomalies.

What is therefore stated about the rewriting of the Regulations is the real necessity of an express guarantee, in case the use of the telematic system is taken into consideration, *i.e.* the telematic system must be of such a nature not to compromise or put at risk the primary provisions regulating the public evidence procedure. Moreover, it should not

²³ The first criticism is in relation to the opinion by the Minister for the technological innovation and digitalization, not expressly required by the above mentioned article 44, that has instead been given by the head of the legislative sector, whereas, on the basis of the constant jurisprudence of the Section, the opinions and the agreements regarding the drafts of regulations must be given signed by the Minister or by “order” coming from the Minister, - with the consequent invitation to correct the procedure sent to the administration. Another preliminary criticism regards the text of the drafts of regulations, due to the frequent recourse to British words (for example “*Business Impact Analysis - BIA*”, “*patch*”, “*security incident management*”, “*disaster recovery*”), in opposition with what provided for in point number 1.6 of the circular about the wording in the normative texts by the Presidency of the Council of Ministries, that provides for “avoiding foreigner words, unless they are of common use in the Italian language and there are no synonyms of current usage in that same language”. The Ministry is therefore invited to cancel the unnecessary British words.

usurp the technical discretionary spaces recognized to the contracting authority bodies.

As a second choice, in case of an absence of will to take into consideration a complete rewriting of the articles 20 and 21, the amendments to be applied to the articles have however been pointed out, among which, in particular, the provisions related to the possible chance of allowing the “telematic” system to proceed with the evaluation of the technical offers (which is impossible as above mentioned) or the ones aimed at giving some kind of decisional autonomy to the “telematic” system, seeing that there is a firm statement saying that «neither decisional nor discretionary space can be awarded to the “telematic” system».

From this brief examination of the criticalities raised by the Council of State a clear opposition of the Advisory Section to the use of automated instruments in the decision-making process of the contracting Authority can be inferred.

As seen, in fact, such instruments – generically defined by the Section as ‘telematics’ – may only be used in a subordinate and instrumental position with respect to the work of the Selection Board, which must remain the sole responsible for the evaluation of technical and economic offers and the award of the relevant scores and can never be replaced, especially in the exercise of its technical-discretionary power.

The opening to the use of some automation has been recognized only for the performance of «purely arithmetic» tasks because only in these hypotheses the ‘telematic’ tool is devoid of «decision-making spaces».

3. The automation of the decision-making process and the discretionary administrative activity: a comparison with the principles expressed by the jurisprudence of the Council of State

As above mentioned, the position of the Council of State as an advisory body fits into the guidelines already expressed on the point by the Administrative Judge²⁴ and, in

²⁴ For a reconstruction of the different jurisprudential guidelines, see G. Pesce, *Il Consiglio di Stato ed il vizio della opacità dell’algoritmo tra diritto interno e diritto sovranazionale*, in www.giustizia-amministrativa.it, 16 gennaio 2020; A. Di Martino, *Intelligenza artificiale, garanzie dei privati e decisioni amministrative: l’apporto umano è ancora necessario? Riflessioni a margine di Cons. Stato 8 aprile 2019, n. 2270*, in *Rivista*

particular, it is in conflict with what the Council of State itself has stated in one of the most recent rulings on the matter (Cons. State, sec. VI, 13 December 2019, n. 8472).

In fact, with this decision the Council of State has opened to the possibility of using algorithmic tools also in the context of discretionary activity²⁵.

On this point it has been affirmed, in fact, that there would be no reasons of principle for limiting the use of such instruments only to those activities not implying discretionary powers, since both are the expression of the authoritative activity of the public administration, carried out in the pursuit of the public interest²⁶.

The reason for this statement made by the Council of State is that every authoritative activity involves at least a phase of assessment and verification of the choice to be consistent with the purposes assigned by the law.

However, although using algorithms may appear simpler in relation to those activities not implying discretionary powers, there would be no reason to prevent the same aims being pursued through the use of such instruments even in relation to the activity characterized by margins of discretion.

With regard to the latter, it was then clarified that the discretionary activity which could benefit more from the efficiencies and advantages of these instruments would be the technical one.

Before this ruling, doctrine²⁷ and

giuridica europea, 2, 2019, 49; A. Di Martino, *L’amministrazione per algoritmi ed i pericoli del cambiamento in atto*, in *Diritto dell’Economia*, 3, 2020, 599; V. Canalini, *L’algoritmo come ‘atto amministrativo informatico’ e il sindacato del giudice*, in *Giornale di diritto amministrativo*, 6, 2019, 781; please allow a reference to A. Coiante, *Il giudice amministrativo delinea le regole del (nuovo) procedimento algoritmico*, in F. Aperiò Bella, A. Carbone, E. Zampetti (eds.), *Dialoghi di diritto amministrativo*, Roma, RomaTre-Press, 2020.

²⁵ This position was then followed also by Cons. State, sec. VI, 4 February 2020, n. 881, with a note by A.G. Orofino and G. Gallone, *L’intelligenza artificiale al servizio delle funzioni amministrative: profili problematici e spunti di riflessione*, in *Giurisprudenza italiana*, n. 7, 2020, 1738.

²⁶ Par. 11 of the judgment.

²⁷ In this sense see, M. D’Angelosante *La consistenza del modello dell’amministrazione ‘invisibile’ nell’età della tecnificazione*; P.G. Otranto, *Decisione amministrativa e digitalizzazione della p.a.*; I.M. Delgado, *La riforma dell’amministrazione digitale*; D.U. Galetta and J.G. Corvalán, *Intelligenza Artificiale per una Pubblica amministrazione 4.0?*. For a different opinion, E. Picozza, *Politica, diritto amministrativo and Artificial Intelligence*, in *Giurisprudenza italiana*, n. 7, 2019, 1771.

jurisprudence²⁸ agreed that algorithmic automation was only applicable to those activities not implying discretionary powers of the administration and not to the discretionary ones.

In particular, it has been pointed out that the programming of software capable of ‘exercising’ an administrative power requires the conversion of a given legal precept into an algorithmic rule.

This activity (so called algorithmic normalization) requires a syllogistic approach (if A then B) where every logical inference is based on rules characterized by consequentiality and unequivocal understanding²⁹.

In legal terms, and in particular in terms of the automation of administrative decisions, this would inevitably entail the presence of rules attributive to power characterized by such a precise lexicon able to guarantee the syllogistic consequentiality mentioned above.

This possibility would only occur with regard to those activities not implying discretionary powers of the administration where all the elements of the administrative action are predetermined in both an analytical and fully detailed way³⁰.

This scheme would be applicable to algorithmic logic: the predetermined assumptions of the law would correspond to the inputs to be inserted in the software that, with a finite series of steps, would verify the existence of the assumptions in the case under inspection to reach the solution, that is to the final output³¹.

This ‘overlap’ would not be feasible with reference to the discretionary activity, traditionally defined as the power to appreciate, with a margin of choice, the option of possible solutions in relation to the administrative rule to be implemented³².

Choice limits, together with solution and evaluation opportunities, would not be ‘subjected to criteria’ according to the above-mentioned algorithmic logic³³ which (until now)³⁴ would not be able to reproduce any balance of interests (based also on choices influenced by moral and social values) nor to determine the solution for the real case³⁵ under examination.

The concrete situations in which the administration is called to intervene are characterized by an unavoidable degree of contingency and unpredictability such as to require the decision-maker some adaptability spaces about the measure to be always available.³⁶

On the other hand, the algorithm is unable

while the scheme would not be replicable in the discretionary activity, characterised by the ‘rule-power-effect’ scheme which presupposes an appreciation and a comparative assessment.

²⁸ See M. S. Giannini, *Il potere discrezionale della pubblica amministrazione. Concetto e problemi*, Milano, Giuffrè, 1939, 52.

²⁹ However, some have hypothesised this possibility given that, as of today, the breadth of choice and assessment margins is greatly reduced compared to the past and the regulations are increasingly detailed and precise. See F. Costantino, *Autonomia dell’amministrazione e innovazione digitale*, Napoli, Jovene, 2012, 169. Similarly, although without any reference to the differentiation between those activities not implying discretionary powers of the administration and discretionary ones, it has been pointed out that today’s administrative action (at least the precise one) is to a large extent a substantially binding administrative action, which moves through pre-established parameters established by general acts, regulations, directives, regulatory acts and so on, regarding which it is surely possible to hypothesize programs allowing to ensure an automatic way to reach decisions. In this sense V. Cerulli Irelli, *La Tecnificazione*, especially 283.

³⁰ Long-standing doctrine, however, has suggested the delegation of discretionary activities to computer systems, believing that developments in AI will succeed in simulating human decision-making capabilities. See, V. Buscema, *Discrezionalità amministrativa e reti neurali artificiali*, in *Foro amministrativo*, 1993, 620.

³¹ Part of the doctrine has highlighted this problem not only with reference to discretionary activity but also in the case of the ascertainment of complex facts when different technical evaluations can be proposed concerning the definition of the fact to be ascertained. See A. Maccucci, *Vantaggi e rischi dell’automatizzazione algoritmica delle decisioni amministrative*.

³² See M. Clarich, *Manuale di diritto amministrativo*, Bologna, Il Mulino, 2019, 124.

³³ See M. S. Giannini, *Il potere discrezionale della pubblica amministrazione. Concetto e problemi*, Milano, Giuffrè, 1939, 52.

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³⁷ See M. Clarich, *Manuale di diritto amministrativo*, Bologna, Il Mulino, 2019, 124.

²⁸ For all see Cons. State, sec. VI, 8 April 2019, n. 2270.

²⁹ In these terms S. Vaccari, *Note minime in tema di intelligenza artificiale e decisioni amministrative*, in *Giustamm.it*, n.10, 2019.

³⁰ See S. Vaccari, *Note minime in tema di intelligenza artificiale e decisioni amministrative*. Another part of the doctrine pointed out that there would also be a problem in the case of automation of that activity governed by rules containing indeterminate or vague legal concepts which would constitute an obstacle to the standardization of language which is precondition for reducing the normative statement to a chain of commands expressed in an algorithm. In this sense P.G. Otranto, *Decisione amministrativa e digitalizzazione della p.a.*, in *Federalismi.it*, n. 21, 2018.

³¹ See M.C. Cavallaro and G. Smorto, which recalls P. Ferragina and F. Luccio, *Il pensiero computazionale. Dagli algoritmi al coding*, Bologna, Il Mulino, 2017. The Authors consider that such applicability would be possible since the activities not implying discretionary powers of the administration are characterised by the well-known ‘rule-fact-effect’ sequence whereby the unambiguous and incontrovertible identification of the lex assumptions makes the administrative decision certain;

to manage the exceptional, as it aims to apply predetermined rules to concrete situations before becoming aware of them³⁷.

The only margin for the application of the algorithmic instrument to the discretionary activity too, could be assumed where the administration chooses to self-bind to specific rules, in order to put an end to the discretionary spaces of its power, so as to allow its translation into precise instructions for the algorithm.

For example, let's make reference to the procedures for the attribution of economic advantages which, as provided for in the art. 12, l. 241/1990 (the Italian law on the administrative procedure), are subjected to the pre-determination of the criteria and modalities fixed by the proceeding administrations, criteria and modalities the very same administration will then be bound to follow.

In such cases, based on a strict predetermination, it might be possible to imagine the insertion of algorithmic tools that, as said, apply predetermined rules to real situations³⁸.

In case of a so-called self-binding, nevertheless, since the discretionary power would come to an end at the very same moment of the determination of it, what should become object of automation would not be in reality a discretionary activity anymore³⁹.

A partially different reasoning can instead be done with reference to the so-called technical discretionary power whereas it is accepted that the latter does not imply evaluations and careful consideration of the interests involved, nor a choice opportunity related to an action adhering to them⁴⁰.

In fact, whereas the 'technical activity' has a certain and unquestionable outcome, the administration is without fall bound to act in the way that the legal system provides for in the hypothesis that the technical evaluation led to choose.

Outside of these areas and whenever there is a need to balance a plurality of interests for real, the possibility of automating the administrative process, until today, seems difficult to implement.

On this point it is worth appreciating what the Council of State said in one of the above-mentioned rulings, where it was pointed out that the algorithmic rule cannot be structured in such a way to leave discretionary applicative spaces to the electronic processor (of which it would be devoid of anyway) but it must provide for an established solution for all the possible real cases, with a high level of reasonableness⁴¹.

The use of algorithms within the administrative procedure could therefore be limited to the hypotheses in which the administrative activity is clearly predetermined and does not involve any margin of choice between possible solutions that are all possibly valid.

However, this choice is not insignificant and the effects that can (and will) have on the modalities of exercise of the administrative power cannot be ignored and must be faced by the legislator by means of a systematic approach.

4. Final Considerations

The above examined Council of State Opinion is therefore in open conflict with what recently affirmed by the same body in the jurisdictional field.

In this case, not only the purely instrumental and merely auxiliary nature of algorithmic tools is reaffirmed (in line with previous jurisprudential guidelines) but also their use is excluded in the presence of discretionary activities, although technical.

The Administrative Judge, through his most recent rulings⁴², initially stated a

⁴¹ Cons. State, sec. VI, 8 April 2019, n. 2270, par. 8.2.

⁴² Reference is made to the judgments of TAR Lazio, Roma, sec. III *bis*, 10 September 2018, nn. 9224, 9225, 9226, 9227, 9229, and 9230. In the same direction also TAR Lazio, Roma, sec. III *bis*, 12 March 2019, n. 3238; Id., 25 March 2019, n. 3985.

On these occasions, the Regional Administrative Court found that the use of the algorithmic tool not only did not comply with the provisions of Article 97 of the Italian Constitution and the principles underlying it, but was also detrimental to the procedural safeguards provided for by law 241/1990 such as the obligation to state reasons (article 3), the inescapable principle of personal interlocution laid down in article 6 and the principle underlying the establishment of the figure of the person responsible for the proceedings, but also the guarantees

³⁷ A. Masucci, *Advantages and risks of algorithmic automation of administrative decisions*.

³⁸ S. Vaccari, *Note minime in tema di intelligenza artificiale e decisioni amministrative*, evidenced that this model could be applied only with regard to specific administrative procedures such as, for example, to those of competitive and comparative nature.

³⁹ In this sense also G. Avanzini, *Decisioni amministrative e algoritmi informatici*, 92.

⁴⁰ A. M. Sandulli, *Manuale di diritto amministrativo*, IX ed., Napoli, Jovene, 1966, 323.

complete aversion to the use of algorithmic tools in the administrative procedure, then went on to admit its benefits and legitimacy, first only in relation to those activities not implying discretionary powers, and then also in relation to the discretionary activity (mainly technical), and then took a step back (even if made by the Advisory section), reaffirming the serving nature of these new decision-makers and the impossibility of their use where there are discretionary application spaces.

It is true that, in the absence of a specific discipline, the interventions of the administrative judge on this point are not only appreciable but even indispensable; on the other hand, they cannot be considered sufficient in the long run, because the 'goal' of an administration 4.0 cannot be efficiently achieved by leaving the burden of establishing the applicable discipline only to the case law (and to its sometimes-vague evolution).

In line with today's technological development, an increase in the use of algorithms in public decisions can be certainly taken into consideration. The latter, given the possibilities it has to offer in terms of efficiency and cost-effectiveness of administrative action, must not only be encouraged but also made possible.

However, in the long run, it is not possible to imagine that the only source of regulations on this matter might come from case law principles.

If the automated decision is to become the new way of exercising the administrative power, a systematic redefinition and specific

discipline would be desirable, a discipline able to balance the use of the instruments that the technological revolution can offer with the unavoidable need for protection requested by private citizens so as not to be obliged to leave this burden, once again, only to jurisprudence.

protecting participation in the proceedings (articles 7, 8, 10, 10 *bis*). On this basis, emphasis was placed on the principle of instrumentality of computerised procedures, according to which, even if they achieve a higher degree of precision and even perfection, they can never supplant the cognitive, acquisitive and judgemental activity that only a preliminary investigation entrusted to a natural person official is capable of performing. This principle has led to the possibility that such instruments can only hold a servant, instrumental and merely auxiliary position within the administrative procedure and never dominate or replace human activity. These decisions of the Italian Administrative Judge have rejected (perhaps too harshly) the use of the algorithmic tool within the administrative procedure, accepting only its servant position. However, it must be acknowledged that these judgements have highlighted (although not expressly) both that the guarantees provided for the traditional procedure are difficult to apply to these new forms of exercise of administrative power, and that the technological advancement and the involvement of the same in the procedure cannot have as a *quid pro quo* the renunciation of the same guarantees.