



Intellectual property rights in the era of Italian “artificial” public decisions: time to collapse?

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Considering that the Public Administration may not be able to internally develop the technologies necessary for its digital transformation process, having to procure them on the private market, the exclusivity of copyright could affirm an unprecedented dominance of private operators over the entire public decision-making process. On the other hand, claiming the right to reveal the source code of the algorithm constitutes a guarantee of transparency, freedom of information and civic engagement, in line with Open Government policies. Leaving aside the legal debate about the qualification of the source code as an administrative act, which recently took place in Italy, this work aims to investigate the morphology of intellectual property in the era of algorithmic Administration in order to understand whether intellectual property rights should, or not, to succumb whenever it is necessary to choose, acquire and use information technology to carry out administrative activities.

Intellectual property – Copyright – Public decisions – Artificial intelligence – Source code – Algorithmic public administration – Right to disclosure – Algorithm – Right of access – Transparency

SUMMARY: 1. *Public Administration in the era of Artificial Intelligence* – 2. *Towards the “chaotic” state of art. The Italian legal framework* – 3. *The Italian legal framework towards the acquisition of computer programs* – 4. *The importance of negotiating intellectual property rights* – 5. *A renewed lecture of the Italian administrative judgments* – 6. *Towards a new accountability of Public Administration*

1. Public Administration in the era of Artificial Intelligence

Artificial Intelligence is gaining a momentum in the last few years at both European and national stage¹, by becoming more prevalent in daily life². Nowadays, it offers several triggering opportunities to create value in many different areas: among others, artificial intelligence can contribute to improve the quality of public services³, foster citizens’ trust⁴, increase efficiency and effectiveness in service delivery⁵, forecasts that are more accurate and investigate the impact of policy options in such complex systems⁶.

Thus, since 2020 European Union bodies have been depicting the potential of this technology, by seizing opportunities and challenges⁷. Furthermore, European Union policies are increasingly encouraging the development of artificial intelligence and similar emerging technologies in order to establish European digital sovereignty⁸, by providing several policy options to tackle the main technical and legal challenges⁹.

So far, a process of digitalisation has been investing public authorities¹⁰. In recent years, the introduction of the “E-government”¹¹ theory has shaken up the decision-making models¹², by introducing innovative management forms, from transport

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to health and education systems, from public security to welfare policies¹³.

The use of algorithms and big data has affected administrative action from the root. Algorithms promise to correct the distortions and imperfections that typically characterize the cognitive processes and choices made by human beings¹⁴, especially highlighted in recent years by an impressive literature on behavioural economics and cognitive psychology¹⁵. In this scenario, scholars debate that algorithmic decisions assume an aura of neutrality, as the result of aseptic rational calculations based on data¹⁶.

Thus, when approaching to these new modalities of administrative proceedings, we observe an added opacity for the structure of the computer programs, and a growing demand for transparency, in order to avoid any black box scenario¹⁷. As a matter of fact, the loss of transparency of the computer program source code prevents from the effective control against programming errors or biases and adequately justifying the logical process of administrative decisions.

Furthermore, considering that Public Administration (in short “P.A.” or simply “Administration”) may not be able to develop the necessary technologies in house and will have to procure them on the market, several concerns about intellectual property rights consequently rise, especially in the peculiar Italian legal panorama and in light of the recent jurisprudential decisions of the Italian administrative courts. In this regard, some perplexities come from the recent Italian jurisprudential decisions.

In particular, several Italian administrative Courts assessed the right to access source codes of computer programmes purchased by the P.A., to be used in the matter of administrative procedures¹⁸. As a consequence, legal scholars have been debating towards a general duty to disclose the source code, with a limitation of intellectual property rights, even when the software is a proprietary-type¹⁹.

Briefly, many Authors infer a renewed balance between transparency and intellectual property rights from these judicial decisions, whereas the author of the computer program contracts with the Public Administration²⁰. In particular, considering the computer program – and its source code – as an administrative act, they express an underlying duty for the P.A. to disclose it, regardless of any intellectual property right²¹; in assessing the principle of transparency of administrative action, the prerogatives of intellectual property rights seem to diminish or disappear.

The present essay leaves out the legal debate about the qualification of the source code as an administrative act. It aims at contributing to the debate on the related issues of the accessibility to the source code,

in order to comprehend whether intellectual property rights ought to succumb every time technological solutions occur in the administrative activities²².

Despite all, we argue that intellectual property rights do not go under in the balancing of legally relevant interests, including those underlying the principle of transparency.

In this regard, this work presents three arguments against intellectual property. The first moves from the analysis of the legal framework at both national – with a greater attention on the Italian Digital Administration Code – and European ground, which describes the acquisition methods of computer programs. The second observation, instead, is about the role of contractual terms concluded between the Public Administration and the author of the computer program. Finally, the third argument proposes a renewed lecture of the national administrative judgments, to stress the double morphology of P.A. in the algorithmic administrative procedures (as a contractual counterpart and a public entity).

Thus, in approaching the role of intellectual property in administrative algorithmic decision, we suggest to approach complementary to the whole issue, by competing the public sphere – aimed at fostering transparency and good administration – with the private and internal relation (elapsed between the Public Administration and the author of the computer program); then, we conclude that intellectual property rights still remain preserved.

2. Towards the “chaotic” state of art. The Italian legal framework

Among several Member States, artificial intelligence is expected to gain a central role in Italy, as a further step in the digitalization process of the Public Administration²³.

Currently, several indisputable advantages deriving from the automation of the decision-making process of the Administration and the use of algorithms have been particularly evident with reference to serial or standardised procedures. In this case, it can address the elaboration of large quantities of instances, characterized by the acquisition of certain and objectively demonstrable data and by the absence of any discretionary appreciation.

Actually, Italy has a peculiar legal framework aimed at fostering the interplay between technology and Public Administration activities²⁴, which can truly be extended to artificial intelligence technologies. In this regard, we argue that several discussion towards algorithmic Administration can be extended to artificial intelligence.



At a first glance, the Italian Law on Administrative Proceedings – Law no. 241 of 1990 – sets the principle of “technology by default” in Article 3-*bis*. It addresses an obligation for Public Administrations to use technology in their activities²⁵, as well as in their relations with other P.A. or private citizens.

In this regard, technology represents a functional tool to achieve greater public efficiency²⁶. Generally speaking, the usage of technology in administration activities is compliant with the principles of efficiency and cost-effectiveness of administrative action (Art. 1 law 241/90) and the constitutional principle of good administration and impartiality (Article 97 Constitution)²⁷; thus, it requires the Administration to achieve its aims with the least expenditure of resources and through the streamlining and acceleration of the process. Furthermore, it contributes to the reduction of the timing for the conclusion of administrative proceedings, aligned with Article 2 of the Law no. 241.

Moreover, the Italian legislator has dedicated great attention to the digitalization of public administration, by issuing the “Digital Administration Code” (Legislative Decree no. 82 of 7 March 2005, hereinafter “CAD”)²⁸.

It cannot be questioned whether a higher level of digitisation of Public Administration is crucial to improving the quality of services provided to citizens and users. The Digital Administration Code represents a decisive step in this direction: many rule-making processes occurred during the last decades (ended with the Law no. 124 of 2015²⁹), to encompass impulses come from the European Union (see, *inter alia*, the European Commission Communication on the Digital Agenda for Europe³⁰).

In particular, it contains a set of rules, which takes inspiration by Open Government policies³¹, aimed at fostering public decision transparency, accountability and trust. In this regard, it establishes the prioritization of open technical solution.

Furthermore, the Legislative Decree no. 33 of 14 March 2013³² exploited the goal of achieving transparency by introducing the duty for Public Administration to create, on its institutional website, a section called “Transparent Administration”, in which all information related to several issues, such as organization, activities, payments and more over would be made available and which will allow free consultation by citizens. Article 5 recognized the citizens’ right to access documents in order to foster a pervasive control of the Public Administration. In this regard, the Italian legal framework has been devoting to disclose everything dealing with its activity.

However, it offers a narrow scenario, whereas public bodies are not usually able to develop the necessary technologies in house.

In these hypotheses, the awareness of the algorithm in the preliminary investigation phase of the procedure assumes meaningful significance, whereas the Public Administration not only faces the problem of technical opacity but must also legally protect the economic interests deriving from intellectual property rights and industrial secrecy. These obstacles are reflected, in turn, by the rules set up to safeguard the guarantees of participation in the procedure and access to documents.

Therefore, it seems necessary, even hard, to balance public aims with private guarantee every time AI algorithms are involved in administrative decision-making proceedings.

As a matter of fact, a computer program is protected in Italian legal system by Law no. 633 of 1941³³: actually, Article 1 establishes that «computer programs shall further be protected as literary works, pursuant to the Berne Convention for the Protection of Literary and Artistic Works³⁴, which was ratified and enforced by Law no. 399 of 20 June 1978»³⁵.

The Law no. 633 of 1941 dedicates its Section VI to computer programs, by conferring exclusive rights to the author of the program. The creator of the computer program is entitled to both right to the economic exploitation of the work and moral rights. However, whereas the moral right of the author – which is substantiated in the right to recognition of the authorship of the work – is unavailable, the rights to the economic exploitation is marketable by specific contracts whose written form is provided exclusively for evidentiary purposes and which are governed in Article 64-*bis* of the Law no. 633 of 1941³⁶.

Traced the complex legal framework, it shall seem that intellectual property rights would fall under transparency needs and duties for the Public Administration. On the contrary, we firstly argue that the ownership of the computer program and exclusive rights depends by the acquisition method. Indeed, pursuant to Article 12 of Law no. 633 of 1941, the author «shall have the exclusive right to publish his work. He shall, in addition, have the exclusive right to the economic utilization of the work in any form or manner, whether original or derivative, within the limits fixed by this Law, and especially as regards the exercise of the exclusive rights indicated in the following Articles».

Thus, it seems necessary to investigate the acquisition methods of computer programs.



3. The Italian legal framework towards the acquisition of computer programs

As we tried to outline before, the first preliminary aspect to investigate lays down the acquisition methods of computer programs by the Public Administration.

In this regard, the CAD provides details for the acquisition of the most suitable solution among those available on the market in Articles 68-69³⁷.

In details, Article 68 suggests that – with respect for the principles of economy and efficiency, investment protection, reuse and technological neutrality – the Public Administration can acquire either open source or a proprietary type solution, as the result of a technical and economic comparative assessment³⁸. The national rules lay down that the Public Administration shall a) acquire software developed on behalf of the P.A.; b) reuse a solution developed on behalf of the Public Administration; c) obtain a free and open-source license; d) use a cloud computing service; e) obtain a proprietary license of use; f) a combination of the above.

Whereas the technical and economic comparative assessment, in accordance with the criteria referred to in paragraph 1-*bis*³⁹, is due to the impossibility of accessing solutions already available within the Public Administration, or free software or open-source code, the acquisition of proprietary computer programs is allowed through the use of a licence.

The provision draws a double track for the acquisition of computer programs. By encouraging open-source programs, it is aligned with the most recent European statements on reuse and open source⁴⁰. Above all, in its Resolution of 2015 on the mass electronic surveillance of EU citizens⁴¹, the European Parliament reiterated its position on the systematic replacement of proprietary software. The Parliament supported the necessary migration to open-source software solutions, through the introduction of a mandatory criterion of choice of open solutions in favour of proprietary ones in all future procurement procedures for the ICT sector.

Recently, the European Commission too has taken up a Decision on the open-source licensing and reuse of its software⁴². However, pursuant to Article 4 («Exceptions»), open-source licensing and reuse shall not apply to software for which the Commission is not in a position to allow reuse due to the intellectual property rights of third parties. By implication, the European Commission confirms the integrity and safety of intellectual property rights.

The Italian legal framework intercepts this dichotomy too. Thus, after the 2016 reform of CAD, due to reuse needs of the software by other Pub-

lic Administration, the P.A. should obtain – whenever is possible – the ownership of the computer programmes developed for it, unless this is too expensive on a technical-economic perspective (Article 69, paragraph 2, CAD).

Moreover, Article 69, paragraph 1, establishes an obligation for those Public Administrations using software solutions, to make legal and physical persons have the right to reuse computer programs and other solutions, in order to adapt them to their needs. To encourage the reuse of computer programs whereas Public Administrations own them, they have an obligation to make the relevant source code publicly available «alongside the documentation» under a free and open-source license. The requested body can deny access in three scenarios: (i) justified reasons of public order and public security, (ii) national defence and (iii) elections⁴³.

In sum, the Public Administration can alternatively resort to open-source software programmes or proprietary software licenses.

From an historical perspective, the current legal framework has been welcoming open-source solutions, due to the numerous advantages that derive from it, from the absence – or the reduction – of the costs for the license, to the possibility of modification of the source code, from the standardization of the systems to their interoperability⁴⁴. These features seem truly important for Public Administration which, through the choice of open-source codes, ought contribute to guarantee the economy, efficiency and transparency of administrative action. Furthermore, the European and national regulatory provisions of a re-use obligation is a crucial hub to ensure the benefits, in terms of cost savings and efficiency gains of administrative action. An open-source solution can contribute to exploit economies of scale, reducing costs, and prevents the so-called project risks, directing the Public Administration on solutions already tested.

Moreover, in the Italian legal scenario the «Guidelines on the acquisition and reuse of software for the Public Administration» elaborated by the Agency for Digital Italy (hereinafter “the Agency” or “AgID”) and the Team for the digital transformation, adopted with determination no. 115 of 9 May 2019, play a crucial role. They provide that the solutions developed and made reusable by the P.A. are published with an open-source license in a publicly accessible repository and inserted in the National Catalogue of open-source software of the Public Administration.

The catalogue includes the solutions for the reuse by the P.A. pursuant to Art. 69 CAD allows Administrations to easily search between existing software,



thus avoiding the burden of having to design and develop new ones, optimizing resources in terms of time and costs.

Sharing solutions means that multiple Public Administrations, using the same system, can network, supporting themselves for changes or subsequent updates, and can share costs for support services.

At the same time, the attitude towards the development of open-oriented solutions is due to fight against any useless lock-in effects, due to intellectual property rights. Actually, when the source code is secret, the user who might want to improve its functionality or adapt it to their needs, cannot change it as this possibility is only up to the software house. This generates a constraint on customers linked to the manufacturer's will to develop any updates, as well as it increases the risks of monopoly on the market, but with important costs of output.

Therefore, the Public Administration is obliged to disclose the source code only in the first scenario. On the contrary, when it purchases proprietary type software without any contractual terms about ownership – thus only acquiring the right to its use, but leaving to the author the intellectual property rights preserved by both European and national copyright laws⁴⁵ –, the author of the computer program remains the legitimate owner. Thus, he or she also maintains exclusive rights to the source code, such as the right to deny access to third parties in order to protect trade secrets problems.

In this regard, it is useful to consider the provisions of Directive 2009/24/EU⁴⁶: an important legislative act of the European Union which provides for the legal protection of computer programs. One of the key provisions of the directive is the withdrawal of the only exemptions to property rights in the case of interoperability of the software. Prior to the directive, there were limited exceptions to copyright protection for software, specifically for the purpose of interoperability. This meant that software developers could reverse engineer and use portions of proprietary software to make their own products compatible with existing software.

However, the adoption of Directive 2009/24/EU deletes these exemptions, by establishing new rules under Articles 5 and 6⁴⁷. Thus, pursuant to Article 5, par. 1, the lawful acquirer of a computer program may, without authorisation by the rightholder, reproduce, translate, adapt, or modify a computer program in accordance with its intended purpose, including for error correction.

The exemptions to the restricted acts also include the possibility that a person having a right to use the computer program can make a backup copy if this is

necessary for that use (art. 5, par. 2). This copying right may not be prevented by contract.

Furthermore, pursuant to Article 5, par. 3, the person having a right to use a copy of a computer program, has also the right to observe, study or test the functioning of the program in order to determine the ideas and principles which underlie any element of the program if he does so while performing any of the acts of loading, displaying, running, transmitting or storing the program which he is entitled to do.

Finally, Article 6 of Directive 2009/24/EU outlines the conditions under which decompilation of computer programs is allowed without the authorization of the author. Thus, decompilation is allowed if it is necessary to achieve interoperability with other programs, and if the information obtained through decompilation is not used for other purposes, such as creating a substantially similar program or infringing copyright.

Overall, the article provides a clear framework for decompilation of computer programs for interoperability purposes, while also protecting the rights of rightholders.

Although the provision represents an exception, which fails the rightholder prerogatives, it does not imply the disclosure of the source code. As also specified by the Advocate General Szpunar in a recent Opinion, in the decompilation process «the user of a computer program is entitled to translate the object code of that program into source code, in order to learn its content lies precisely at the heart of this case⁴⁸ [...] However, decompilation does not allow the original source code of the computer program in question to be reproduced. During the compilation process, some information contained in the source code that is not essential to the functioning of the computer's processor is lost and it cannot be restored via the decompilation process⁴⁹. Moreover, the same source code may give different results after compilation, depending on the configuration of the compiler. The end result of decompilation is therefore a third version of the program, which is often called the "quasi-source code". A program decompiled in that way can, however, be recompiled once more into a functioning object code»⁵⁰.

By clarifying⁵¹ that decompilation is different from the disclosure of the source code the Opinion of the Advocate General confirms on a legal basis the intangibility of intellectual property rights for the rightholder.

Moreover, in its referred proceedings, the European Court of Justice has recently ruled that article 5(1) of Directive «must be interpreted as meaning that the lawful purchaser of a computer program who



wishes to decompile that program in order to correct errors affecting the operation thereof is not required to satisfy the requirements laid down in Article 6 of that directive. However, that purchaser is entitled to carry out such a decompilation only to the extent necessary to effect that correction and in compliance, where appropriate, with the conditions laid down in the contract with the holder of the copyright in that program»⁵².

Given this judgment, it seems evident that copyright law stays into force and intellectual property rights are safeguarded. Similarly, the Italian legal framework does not give the rise to such opinions, by which the source code can be always disclosed.

In conclusion, given such legal scenario, intellectual property rights maintain the relevance even in the era of artificial intelligence and cannot be compressed without any explicit negotiation. In this opinion, the solution adopted in the jurisprudence fails to consider the concrete prerogatives of the rightholder: her or his intellectual property rights are recognized and protected as a fundamental right by Article 17, paragraph 2, of the Charter of Fundamental Rights of the European Union. Moreover, as provided in Article 52, it can only be diminished *ex lege*, whereas it is compliant with the proportionality principle.

In this regard, it is crucial to investigate to what extent intellectual property rights can be negotiated by parts.

4. The importance of negotiating intellectual property rights

The above-mentioned legal scenario prevents any abuse from the Public Administration, to carry on the disclosure of the source code.

Articles 68 and 69 CAD, combined with article 11, 64-*bis*, 64-*ter* and 64-*quater* of Italian copyright law (Law no. 633 of 1941 and subsequent amendments and supplements) offers a complete scenario about the engagement of Public Administration in the creation or acquisition of computer programmes.

Thus, we created a matrix to observe the effective decree of engagement, as gathered by these cited references.

The matrix can be divided in two main groups, by differentiating the legal status of counterparts involved: in this regard, we firstly observe public engagements to provide (i) in house solution or (ii) public-public partnerships; secondly, we will move towards forms of private engagement, dealing with (iii) public-private partnerships or (iv) public procurement.

In house solutions represent the highest level of public engagement: the public body is able to develop

the computer program on its own, by modelling it on its peculiar needs. On the contrary, public-public partnerships (hereinafter, “PUP”) imply collaboration between two or more public authorities or organizations. This form of partnership entails less autonomy in the creation of such technological solution, but with a considerably resource saving.

In these two scenarios, we observe that the public body acts as the creator, and the owner, of the AI software and/or algorithm. Therefore, as a public entity, the Public Administration – or partnerships of Public Administrations, in case of PUP – has a specific legal obligation to disclose the source code, as well as to give information and explanation to any recipient, in order to achieve efficiency, good administration but also transparency principles.

Despite of PUP and in house options, in public-private negotiations or public procurement, the public body is not the creator – or the co-creator –, but it acts as a buyer. As a consequence, the author of the computer program usually maintains intellectual property rights, unless the Public Administration (i) negotiates to hold the intellectual property rights, or (ii) procures it just as a mere implementation of its own ideas⁵³.

In this regard, the negotiation program becomes crucial. This includes the call for tender, which sculpts the rules of the future relationship between Public Administration and the author of the program. In the call for tender and its consequent act, the Public Administration must address the choice relating to the acquisition methods, as well as counterparts’ obligations, including intellectual property rights.

In this respect, the Public Administration must respect every condition mentioned in the mentioned act and its specification, as well as in the award of the contract. Thus, in accordance with Article 69 of the CAD on re-use, the Public Administration shall hold the software and the ownership of the intellectual property rights everytime the agreement explicit it.

This statement is confirmed by the AgID. In its Guidelines of 2019 towards the computer program’s acquisition and reuse for the Public Administration⁵⁴, the Agency strictly precises public duties to acquire the ownership of the computer program. When negotiating a contract for the development of a software, each Administration has the duty to ensure itself, at the outcome of the performance of the contract, the full and exclusive ownership of all rights on the software being developed, unless this is excessively expensive for proven technical-economic reasons (paragraph 2 of Article 69 of the CAD).

The position of AgID shows that any property right shift must be filled in the contractual agreement.



As a matter of fact, intellectual property rights cannot go under general interests. In this regard, CAD expresses a renewed regime of accountability for Public Administrations: the respect of the contractual terms means that, together with choosing the acquisition method, they have to carefully draw contractual terms, in accordance with the principles of fair collaboration and good faith expressed in Article 1 of the Law no. 241 of 1990. However, the huge variety of Italian judicial decisions, in declaring the necessity to disclose the source code of software used by the Public Administration, omit every consideration related to the acquisition methods⁵⁵. In this light, the well-known Italian Administrative Courts of Lazio and State Council judgments of 2019-2021 constitute an exemplary field to investigate the relationship between public interests and intellectual property.

The cases at stake have been promoted by a number of Italian trade unions against the Ministry of University and Education (hereinafter, “MIUR”) with the purposes of gaining access to the source code of the algorithm used by MIUR to manage the territorial relocation of school professors under mobility procedures. The algorithm was produced by CINECA, a non-profit Interuniversity Consortium composed by 69 Italian Universities, 4 National Research Bodies and the MIUR, and other public entities. Thus, the Consortium is 98% permanently owned by Public Administrations, and only minimally by private legal persons. Its main activity is supporting the research activities of the academic scientific community and provides computing services to universities in Italy.

In this case, we can observe that MIUR and CINECA occurred in a PUP. In particular, CINECA created a software for MIUR specific purposes, and then its source code was acquired by MIUR. In the judiciary, CINECA and MIUR did not want to disclose the source code, by arguing about a prejudice of intellectual property rights.

In the Court’s opinion, the nature of creative work of the algorithm should not interfere with the right to access in the administrative proceedings of interested parties, since the right to access does not prejudice the right to exploitation of intellectual properties.

At a first glance, this judgment seem to weaken intellectual property rights, by prioritizing public interests of information and access. Besides, many scholars concluded that the Copyright protection of algorithms does not prevent the disclosure of their source code in the context of administrative proceedings.

On the contrary, we argue that these administrative proceedings recognize the importance and the burden of intellectual property rights. In this regard, we propose three arguments.

Generally speaking, whereas moral rights cannot be negotiated or transferred, the open-source disclosure can truly be part of an agreement, thus copyright is maintained in force.

Secondly, MIUR asked CINECA to create the software for a specific purpose, yet the management of public procedures. This implies that, pursuant to Italian intellectual property law (more precisely, copyright rules), MIUR had the right to obtain the source code together with the software, as an implied counterpart of the agreement in itself. As a consequence, it can disclose it when occurred.

Finally, in such case, however, the judge found that MIUR acquired the source. Thus, it can be assumed that the software house has transferred to the Public Administration all the economic rights towards the algorithm. Then, in the absence of any indication to the contrary in the agreement between the P.A. and software house, the source code might be disclosed and the Public Administration has the duty to explain citizens the functioning and its main features.

In this regard, arguments hold by legal scholars do not hold. As we tried to discuss before, since the Public Administration has the right to choose the acquisition methods of the software, which is also crystallised in the call for tenders and in the contract with the contractor, even copyrights are negotiable.

In sum, we can conclude that the Italian leading case seems very exemplary, to clarify that in the age of artificial intelligence intellectual property rights cannot going under public interests. However, a case-by-case approach is necessary to investigate the main features of each relationship between the public body and the private operator.

In this regard, it is very crucial to pose attention upon contractual agreements, in order to verify the concrete parties’ wills. As we tried to outline before, the possibility to disclose the source code goes along with the accountability of Public Administration: every time it decides to use new and sophisticated technology, it must collect information about its functioning. Otherwise, it cannot pretend to obtain – for example – the user manual or to put responsibilities on the private provider. Indeed, the provider has not any duties or legal relations with citizens, and it cannot substitute the role of the public body.

Briefly, the agreement plays an important role and it represents the decree of Public Administration accountability.

However, this analysis does not conclude the discussion towards artificial intelligence and intellectual property rights. Actually, further analysis with regards to the asserted strike of balance between the right to access and the protection under copyright



laws of the source code, especially taking into consideration possible future cases where the Public Administration should make use of algorithms (a) not specifically developed for a single administrative proceeding (under the assumption of a complete transfer of intellectual property rights) and/or (b) based on more sophisticated technologies licensed to the P.A. under a proprietary scheme.

In addition, the Public Administration has to require, together with the software, every technical documentation, containing the description of the features of the software used for testing, to verify the compliance with standard word processing software and the file format generated presence, the certification of quality of the program, and more over.

5. A renewed lecture of the Italian administrative judgments

Finally, we offer a third observation on the legal debate towards the balance between intellectual property rights and transparency mainly due to the recent judgments⁵⁶. In details, since these decisions have omitted every detail related to the acquisition methods of the computer program, scholars are getting used to frustrating the intellectual property rights of the software house⁵⁷.

On the contrary, we argue that these judgments do not frustrate intellectual property rights of the rightholder, since they analyse the balance between intellectual property and transparency, by providing some prescriptions to the Public Administration.

The first argument comes from the Administrative Regional Tribunal of Lazio judgment no. 3769 of 2017. In this case, the Public Administration denied the access to algorithm and the source code of the computer program that managed the interprovincial transfers of teaching staff. The access was requested pursuant to Article 24 of Law no. 241 of 1990, but also as a “civic access” under the Legislative Decree no. 33 of 2013⁵⁸.

The Administrative Court declared the impossibility to disclose the algorithm and the source code under the Legislative Decree no. 33 of 2013. The disclosure under its Article 5, indeed, makes every act, data or information public, so everyone could access it; on the contrary, the Administrative Court inhibited such disclosure, in order to avoid any unlawful dissemination and knowledge of the computer program.

The Court established that in this regard, however, it must be noted that generalised access must be kept separate from the rules on access to administrative documents referred to in Articles 22 et seq. of Law no. 241 of 1990, as the purpose of access documentary

according to the Law no. 241/1990 is, in fact, very different from the one underlying the generalized access and is to put the interested parties in a position to best exercise the faculties – participatory and/or oppositive and defensive – which the legal system assigns to them for the protection of the qualified legal positions of which they are holders. More specifically, subjectively, for the purposes of the request for access *ex lege* no. 241/1990, the applicant must demonstrate that she/he is the holder of a «direct, concrete and current interest, corresponding to a situation legally protected and linked to the document to which access is requested». Furthermore Law no. 241/90 excludes, in addition, the use of the right of access regulated therein in order to subject the Administration to a generalized control, the right of generalized access, as well as the “simple”, is recognized precisely «in order to promote widespread forms of control over the pursuit of institutional functions and the use of public resources and to promote participation in public debate».

In this respect, the Administrative Court evaluated the request under Law no. 241 of 1990. However, the balancing test between intellectual property rights and the right to access did not represent any erasure of the formers. Thus, the Court stated that the access does not include the reproduction which allows economic exploitation and, «since access to such reproduction is not detrimental to the exclusive economic use of the work, the display must be permitted in the form requested by the person concerned, that is to say, the viewing and extraction of copies, on the understanding that the information obtained must be used appropriately, that is to say, exclusively a use which is functional to the interest relied on with the request for access, which, on the applicant’s express allegation, is the protection of the rights of its members, as this constitutes not only the function for which access is allowed, but at the same time also the limit of use of the data acquired, resulting in the direct liability of the person entitled to access against the owner of the software»⁵⁹.

In sum, since 2017 the administrative Court has contributed to attribute the well-fit dimension of the balancing test dealing with the right to access the source code by a part of the administrative proceeding.

More precisely, these judgments deal with access request for those administrative proceedings in the field of public competitions to access the school career.

In this scenario, the significance of intellectual property rights is still preserved. Besides, the administrative Court assumed that in the contractual arrangements with the company HPE Ltd. – the cre-



ator and developer of the computer program that supports the algorithm – there is a specific agreement giving the Administration that right or in any case that clearly no right to economic use is granted to the private company.

This assumption demonstrates that whereas a Public Administration decides to purchase technological means on the market, a twofold relationship rises for it.

On the one hand, the Public Administration interacts with the provider, in order to negotiate the terms of the agreement. Thus, it can be considered as an “internal relation”, on a contractual ground.

On the other hand, the public sphere has to interact with other different stakeholders, such as citizens, companies, as well as parties of the administrative proceedings.

In sum, the Public Administration is put at the centre of two different legal relations: a private relation binds it at contractual terms undertaken with the computer programmer; a public relation, which can truly be referred to a general duty of the Public Administration to preserve good administration.

In this respect, the State Council in 2020 argued that «[...] special significance cannot be attached to the invoked confidentiality of the companies producing the computer mechanisms used which, by offering such instruments to the authoritative power, accept its consequences in terms of necessary transparency»⁶⁰.

However, even this ruling must be read taking into due account the already mentioned substantial differences between the right of defensive access (Law no. 241/1990) and generalised access (Art. 5, par. 2, Legislative Decree no. 33/2013 and subsequent amendments and additions), and, therefore, the different interests to which these instruments provide protection. In fact, while generalised access is aimed at satisfying the applicant’s *right to know*, the right of defensive access (the one under Law no. 241/1990) is instead instrumental to satisfying the applicant’s *need to know*. Only the former is functional to generalised knowledge (in fact, it can be activated by anyone), useful to achieve administrative transparency and feed generalised control by citizens. The second, on the other hand, is functional in responding to the specific defensive needs of the appellant, a need to know (because it is instrumental to the defence of one’s specific interest and can therefore be activated only by those who can claim such a specific need) and not a protected cognitive claim as such on the part of anyone (the right to know). Consequently, disclosure, in the two cases, has very different ef-

fects, perimeters and purposes, and cannot be taken into consideration in a unitary and indistinct manner.

In a nutshell, offering a renewed reconstruction of these judgments, intellectual property rights can go under to certain defensive needs of the specific legal situation of the appellant. Instead, compared to the tools inspired by the principle of good administration and aimed at guaranteeing transparency (the generalized right of access, in particular), intellectual property rights do not succumb; on the contrary, they constitute one of the limits of interest explicitly established by law, the prejudice of which constitutes a valid and legitimate reason for refusing access.

To better understand what has just been said, the reference to the principle of good administration must be contextualized within the aforementioned distinction. In fact, this principle (considering the formulation referred to in Article 41 of the Charter of Fundamental Rights of the European Union)⁶¹ includes «the obligation of the Administration to give reasons for its decisions». The duty to justify decisions has always been identified as instrumental to the need for protection and transparency. However, these needs, in the Italian administrative system, can be fully implemented by the applicant (bearer of a «direct, concrete and current» interest) who can resort to defensive access (provided for by Law no. 241/90 and in particular Art. 22, let. b)⁶². In this way, the applicant can also access, for defensive purposes, the source code over which a third-party supplier has an intellectual property right. Otherwise, the Public Administration could deny access, due to the prevalence of the economic interests of the software producer relating to copyright, to any other subject, lacking a «direct, concrete and current» interest, simply curious to know how the software has been used for the exercise of the public function (in this case, it would be a question of a widespread control method on the pursuit of institutional functions and on the use of public resources).

Furthermore, the Italian Administrative Court of Lazio, in judgment no. 3769/2017, states that the discipline established to protect copyright is functional to guarantee the economic interests of the owner of the rights on the intellectual work (i.e., the author or subsequent assignees). Based on this statement, copyright can preclude reproduction that allows economic exploitation and not mere reproduction. Therefore, the display of the software exclusively functional to the protection of access declared by the appellant cannot be considered harmful to copyright and intellectual property. From this point of view, this judgment makes us think a lot, since in order to configure the right of access to the algorithm, it



is attributed to it (more precisely to the software to which it belongs) a function of concretizing the final will of the Public Administration.

Returning now to the contractual relationship which binds the Public Administration to the author of the software, it is thought necessary to make some reflections.

The contract entered between the Public Administration and the programmer who developed the software may contain clauses that limit access to the source code of the software. For example, the contract may include a confidentiality clause or an intellectual property clause that requires the programmer to maintain control over the source code of the software. In this context, if the Public Administration discloses the source code of the software to the requester of access, it may violate the contractual relationship entered with the programmer. If the contract contains a confidentiality clause, the Public Administration may be required to respect that clause and not disclose the source code without the consent of the programmer. Additionally, if the contract includes an intellectual property clause, the programmer may exercise their exclusive right to use, distribute, and protect their work.

Therefore, the Public Administration may violate the contractual relationship with the programmer if it discloses the source code to the applicant for access. If the contract contains a confidentiality or intellectual property clause, the Public Administration may need to respect those clauses and obtain the programmer's consent before disclosing the source code.

However, Italian law (both Law no. 241/90 and Legislative Decree no. 33/2013) provides that access to public information should be guaranteed, except for some exceptions provided for by law, such as the protection of personal data or trade secrets. Therefore, if the Public Administration is required to provide access to the source code of the software used in a public competition, it may be necessary to find a balance between respecting the intellectual property rights of the programmer and the right of access to public information.

Nevertheless, the disclosure of the source code could lead to breach of contract by the Public Administration, and it may be subject to legal action by the programmer who developed the software or the copyright holders. In this case, the programmer or the copyright holders can plead violation of the user license and assert liability for breach of contract by the Public Administration, with all legal consequences, including compensation for damages.

To ascertain the degree of contractual responsibility of the Public Administration, the software

acquisition procedures referred to in Articles 68 and 69 of the Digital Administration Code (CAD) could be taken into consideration.

On the basis of these provisions, the available alternatives (which allow the Public Administration to ensure or not, through contractual clauses, the ownership of the software) could constitute, for the Public Administration, a specific accountability, for not having secured the ownership of the software (at the time of purchase) and, consequently, assigning it (among other things) the burden of bearing the consequences of a disclosure due to the exercise of the right of defensive access by third parties, recipients of the administrative action based on the use of this software.

Based on this approach, the accountability of the P.A. would be modelled on the effective control of the intellectual property rights of the software used for the exercise of public functions. This starting from the power of choice, which the law has reserved for the Public Administration, regarding the possibility of acquiring all rights to the software (including ownership of the source code) or more limited rights.

If this were the case, the Administration could then be charged (in terms of malpractice) with the full and exclusive unavailability of the software, which, despite being placed at the service of the exercise of the public function, is wholly or partly under the control of the supplier.

For a better interpretation, attention should be paid to paragraph 1-*ter* of Article 68 of the CAD. This clause, in fact, highlights how the power of choice of the Public Administration is limited by a technical and economic constraint. The choice of the Public Administration, among the available products, does not always guarantee the Administration total control over the software in use. The purchase of limited rights on the software, in some cases, could be the only viable way, considering, for example, the insufficient economic resources of the moment. In this sense, the choice made could be attributed to the Administration, limited to the ordinary criterion of sound and prudent management applied to the exercise of a power-function not free in the purpose, but characterized in any case by the characteristics of administrative discretion. Hence the doubt arises as to whether it is possible to charge the Administration with responsibility for breach of contract if the disclosure of the source code takes place in response to the applicant's request for defensive access. If the Administration were substantially free to acquire the full rights to the software, without the technical and economic limits mentioned above, then it could be stated that with the more economical choice it would voluntarily assume the risk of incurring contractual li-



ability, in case of disclosure of the source code (and the algorithm). But, as mentioned, the Administration's margin of choice is very limited and often the choice not to acquire the full availability of software rights is a compulsory path. Nonetheless, the disclosure of the source code to the appellant could equally lead to liability for breach of contract by the Public Administration. However, this liability would be severely limited by the combination of two factors: the mandatory choice of the Administration to partially purchase the copyright and the use of the software for a public function, which subjects it to the rules of transparency.

6. Towards a new accountability of Public Administration

The general overview towards the Italian legal scenario offers some circumstances to reflect upon the balance between intellectual property and transparency in the era of algorithms and artificial intelligence⁶³. Artificial intelligence poses several preliminary concerns. For those referred to the balancing test between intellectual property and transparency, it can be generally related to the use of algorithms in automated decision processes.

In this regard, we have offered three arguments to prove that intellectual property is still remaining alive both on a legal and contractual basis. At first, we argue that CAD describes a twofold path, by which the Public Administration can choose proprietary software. In this sense, precisely in order to identify any liability for breach of contract, the technical and economic constraints that limit the choice of the Public Administration must be taken into account, case by case.

On the contrary, we believe that the most recent judicial decisions have just shift the burden of proof to the computer programmer, whose rights are unlawfully compressed.

In this regard, the impact of artificial intelligence in Public Administration requires a renewed accountability in approaching innovative tenders⁶⁴.

The mechanism by which the robotized decision (the algorithm) is made concrete must be disclosable, in accordance with a reinforced version of the transparency principle, which also implies the full knowledge of a rule expressed in a language other than legal. This knowledge of the algorithm must be guaranteed in all aspects: from its authors to the procedure used for its elaboration, the decision-making mechanism, including the priorities assigned in the evaluation and decision-making procedure and the data selected as relevant. This is to be able to verify that the results of the robotized procedure comply

with the requirements and objectives established by the law or by the Administration itself prior to that procedure and so that the procedures and procedures are clear – and consequently can be audited – and rules under which it has been set.

This implies that the Public Administration must carefully plan its acquisition method, by choosing between open and proprietary solutions⁶⁵, within the limits imposed by law on its freedom of choice. Consequently, it shall pay attention to negotiation, to ensure the acquisition of the source code⁶⁶. In other words, the Public Administration must be accountable in the choice of the software acquisition method. Whereas it preferred a proprietary solution, the Public Administration should ask for the acquisition of the ownership of the computer programme, to avoid any breach of contract whereas a request to disclose the source code is required pursuant to Law no. 241 of 1990.

In relation to the parties involved, there is also a problem of managing the relevant data. To date, two different types of automated decision-making processes can be identified in the processing of personal data: those that involve human involvement and those that, on the contrary, entrust the entire process to the algorithm alone⁶⁷.

The most recent relevant European Regulation 2016/679/EU (hereinafter, the “GDPR”)⁶⁸, focusing on such data processing modalities, integrates the discipline already contained in Directive 95/46/EC⁶⁹ with the intent to stem the risk of discriminatory treatment for the individual who find their origin in a blind confidence in the use of algorithms. In an innovative way compared to the past, Articles 13 and 14 of the GDPR provide that in the information addressed to the interested party is given notice of the possible execution of an automated decision-making process, whether the data are collected directly from the data subject or indirectly⁷⁰.

This principle is formulated in a general way and, therefore, applicable both to decisions taken by private parties and by public entities, even if, in the case in which the decision is taken by a P.A., the rule of the GDPR constitutes a direct specific application of Article 42 of the European Charter of Fundamental Rights (*Right to a good administration*), whereas the Public Administration adopts a decision which may have adverse effects on a person, it has the obligation to hear it before acting, to allow access to its archives and documents, and, finally, has the obligation to give reasons for its decision.

Thus, a guarantee of particular importance shall be recognised where the process is fully automated, since it is required, at least in such cases, that the holder must provide significant information on the



logic used, as well as the importance and expected consequences of such processing for the data subject. In this sense, it has been pointed out in legal literature that the European legislator intended to strengthen the principle of transparency which is central to the Regulation⁷¹. However, it is necessary to point out that the respect of transparency principle in the light of the GDPR does not constitute the same of the general transparency of administrative procedures.

This right to be aware of the existence of decisions concerning us taken by algorithms and, correspondingly, as a duty on the part of those who process data in an automated manner, to make the person concerned aware, must be accompanied by mechanisms that can decipher the logic. In this perspective, the principle of knowability is completed with the principle of comprehensibility, that is the possibility, to take the expression of the Regulation, to receive significant information on the logic used.

Notes

¹Information and communication technologies (ICTs) have driven European productivity gains since 1995. During the last three decades, the aims of reaching technological convergence has blurred the boundaries between telecommunications, broadcasting and IT. The Commission delivered the main legislative proposals in 2015, by launching the digital single market in 2015, to boost e-commerce, copyright, ePrivacy, harmonisation of digital rights, harmonised VAT rules and cybersecurity. See Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, COM/2015/0192 final, *A digital single market strategy for Europe*, May 6th 2015. See also Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, COM(2019) 168 final, April 8th 2019, *Building Trust in Human-Centric Artificial Intelligence*, (the last check of all the websites mentioned in this paper took place on March 27th 2023).

²M.U. SCHERER, *Regulating Artificial Intelligence Systems: Risks, Challenges, Competencies, And Strategies*, in "Harvard Journal of Law & Technology", vol. 29, 2016, n. 2, pp. 354-400; M. CRAGLIA (ed.), *Artificial Intelligence: A European Perspective*, European Commission, Joint Research Centre, Publications Office of the European Union, 2019; L. FLORIDI, *The Fourth Revolution: How the Infosphere is Reshaping Human Reality*, Oxford University Press, 2014.

³U. CORTÉS, M. SÁNCHEZ-MARRÉ, L. CECCARONI et al., *Artificial Intelligence and Environmental Decision Support Systems*, in "Applied Intelligence", n. 13, 2000, pp. 77-91.

⁴A.L. STEIN, *Artificial Intelligence and Climate Change*, in "Yale Journal on Regulation", vol. 37, 2020, n. 3, pp. 890-939.

⁵P. GOWDER, *Transformative Legal Technology and the Rule of Law*, in "University of Toronto Law Journal", 2018, n. 68, suppl. 1, pp. 82-105.

⁶W. EGGERS, D. SCHATSKY, P. VIECHNICK, *AI-augmented government: Using cognitive technologies to redesign public sector work*, Deloitte Center for Government Insights, Deloitte University Press, 2017; J.W. FORRESTER, P.M. SENGE, *Tests for building confidence in system dynamics models*, in

"TIMS Studies in the Management Sciences", vol. 14, 2018, pp. 209-228.

⁷J.R. GIL-GARCIA, N. HELBIG, A. OJO, *Being smart: Emerging technologies and innovation in the public sector*, in "Government Information Quarterly", 2014, n. 31(S1), pp. 11-18.

⁸M. ZALNIERIUTE, L.B. MOSES, G. WILLIAMS, *The Rule of Law and Automation of Government Decision-Making*, in "The modern law review", vol. 82, 2019, n. 3, pp. 425-455.

⁹In this regard, several soft law acts occurred. Above all, see the European Parliament resolution of 20 October 2020 on intellectual property rights for the development of artificial intelligence technologies, 2020/2015(INI), until the recent and more binding Proposal for a Regulation of the European Parliament and of the Council, COM/2021/206 final, April 21st 2021, *Laying down harmonised rules on Artificial Intelligence (Artificial Intelligence Act) and amending certain Union legislative acts*.

¹⁰S.J. MIKHAYLOV, M. ESTEVE, A. CAMPION, *Artificial Intelligence for the Public Sector: Opportunities and Challenges of Cross-sector Collaboration*, in "Philosophical Transactions of the Royal Society", 2018, n. 376; R. KENNEDY, *Algorithms and the Rule of Law*, in "Legal Information Management", vol. 17, 2017, n. 3, pp. 170-172; M. PERRY, *iDecide: Administrative Decision-Making in The Digital World*, in "Australian Law Journal", vol. 91, 2017, n. 1, pp. 29-34; F. BANNISTER, R. CONNOLLY, *The future ain't what it used to be: Forecasting the impact of ICT on the public sphere*, in "Government Information Quarterly", vol. 37, 2020, n. 1; K.C. DESOUSA, G.S. DAWSON, D. CHENOK, *Designing, developing, and deploying artificial intelligence systems: Lessons from and for the public sector*, in "Business Horizons", vol. 63, 2020, n. 2, pp. 205-213; G. MISURACA, C. CODAGNONE, P. ROSSEL, *From Practice to Theory and back to Practice: Reflexivity in Measurement and Evaluation for Evidence-based Policy Making in the Information Society*, in "Government Information Quarterly", vol. 30, suppl. 1, 2013, pp. S68-S82.

¹¹The term "E-government" has been coined to represent the process of computerization of the Public Administration that, in order to use the words of the Communication of 26 September 2003 of the European Commission, can be defined like «The use of information and communication technologies in public administrations, combined with organisational changes and the acquisition of new skills in order to improve public services and democratic processes and to strengthen support for public policies». See Communication from the Commission to the Council, the European Parliament, the European Economic and Social Committee and the Committee of the Regions, COM(2003) 567 final, *The Role of eGovernment for Europe's Future Communication*, September 26th 2003; F. BANNISTER, R. CONNOLLY, *ICT, public values and transformative government: A framework and programme for research*, in "Government Information Quarterly", vol. 31, 2014, n. 1, pp. 119-128; A. CORDELLA, F. IANNACCI, *Information systems in the public sector: The e-Government enactment framework*, in "The Journal of Strategic Information Systems", vol. 19, 2010, n. 1, pp. 52-66; H. LARSSON, A. GRÖNLUND, *Future-oriented eGovernance: The sustainability concept in eGov research, and ways forward*, in "Government Information Quarterly", vol. 31, 2014, n. 1, pp. 137-149; K. YUSHIM, Z. JING, *Digital government and wicked problems*, in "Government Information Quarterly", vol. 33, 2016, n. 4, pp. 769-776; C. LEE, K. CHANG, F. STOKES BERRY, *Testing the Development and Diffusion of E-Government and E-Democracy: A Global Perspective*, in "Public Administration Review", vol. 71, 2011, n. 3, pp. 444-454; T. JANOWSKI, *Digital Government Evolution: from Transformation to Contextualization*, in "Government Information Quarterly", vol. 32, 2015, n. 3, pp. 221-236; K.N. ANDERSEN, H.Z. HENRIKSEN, R. MEDAGLIA



et al., *Fads and Facts of E-Government: A Review of Impacts of E-government (2003- 2009)*, in "International Journal of Public Administration", vol. 33, 2010, n. 11, pp. 564-579; L. ANDERSON, P. BISHOP, *E-Government to E-Democracy: Communicative Mechanisms of Governance*, in "Journal of E-Government", vol. 2, 2011, n. 1, pp. 5-26.

¹²E. BARCEVIČIUS, G. CIBAIT, C. CODAGNONE, G. MISURACA et al. (Eds.), *Exploring digital government transformation in the EU: analysis of the state of the art and review of literature*, European Commission, Joint Research Centre, Publications Office of the European Union, 2019; J. TITO, *Government Destination unknown: Exploring the impact of Artificial Intelligence on Government Working Paper*, in "Centre for Public Impact", September 21st 2017; M. OSWALD, *Algorithm-Assisted Decision-Making in the Public Sector: Framing the Issues using Administrative Law Rules Governing Discretionary Power*, in "Philosophical Transactions of the Royal Society", vol. 376, 2018, n. 2128.

¹³European Commission has been investigating the impact of Artificial Intelligence in public services: see G. MISURACA, C. VAN NOORDT, *AI Watch-Artificial Intelligence in public services: Overview of the use and impact of AI in public services in the EU*, Publications Office of the European Union, 2020. See also, F. COSTANTINO, *Rischi e opportunità del ricorso delle amministrazioni alle predizioni dei big data*, in "Diritto pubblico", 2019, n. 1, pp. 43-70; S. SASSI, *Gli algoritmi nelle decisioni pubbliche tra trasparenza e responsabilità*, in "Analisi Giuridica dell'Economia", 2019, n. 1, pp. 109-128.

¹⁴M. BOVENS, S. ZOURIDIS, *From Street-Level to System-Level bureaucracies: how Information and Communication Technology is transforming administrative discretion and constitutional control*, in "Public Administration Review", vol. 62, 2022, n. 2, pp. 174-184.

¹⁵C. COGLIANESE, D. LEHR, *Regulating by Robot: Administrative Decision Making in the Machine-Learning Era*, in "The Georgetown Law Journal Online", vol. 105, 2017, n. 5, pp. 1147-1223.

¹⁶See the European Parliament's Workshop documentation requested by the CONT Committee, *Proceedings of the workshop on Use of big data and AI in fighting corruption and misuse of public funds - good practice, ways forward and how to integrate new technology into contemporary control framework*, March 2021.

¹⁷F. PASQUALE, *The black box society. The Secret Algorithms That Control Money and Information*, Harvard University Press, 2015; S. WACHTER, B. MITTELSTADT, C. RUSSELL, *Counterfactual Explanations without Opening the Black Box: Automated Decisions and the GDPR*, in "Harvard Journal of Law & Technology", vol. 31, 2018, n. 2, pp. 841-887; G. NOTO LA DIEGA, *Against the Dehumanisation of Decision-Making - Algorithmic Decisions at the Crossroads of Intellectual Property, Data Protection, and Freedom of Information*, in "Journal of Intellectual Property, Information Technology and E-Commerce Law", vol. 9, 2018, n. 1, pp. 3-34.

¹⁸Consider, for example, the following judgments: Italian Administrative Regional Court (in short "TAR") Lazio, Roma, section III bis, judgment June 6th 2019, no. 733, later rectified, with deferral, by the Italian State Council (the highest Administrative Court in Italy), section VI, January 2nd 2020, no. 30. In the present case, it was established that in relation to a request for access to the "source code" or the calculation algorithm of the software that has managed the written tests of the competition for the selection of school managers, formulated pursuant to Art. 22 et seq., Law no. 241/1990 and Art. 5, Legislative Decree no. 33/2013, must recognize a position of counter-interest in the head of the subject that could suffer a prejudice in its legal sphere, as holder of personal data or of commercial or technical secrets (enclosed in the relative

document) likely to be revealed. In the same direction, see TAR Lazio, Roma, section III bis, judgments June 22nd, 2020, no. 7526 and February 28th, 2023, no. 3443. See also State Council, judgment February 4th, 2020, no. 881 (on giving tenure to support teachers and on teachers' mobility procedures) and in the same direction, albeit with respect to the obligation of disclosure of only a part of the source code, see TAR Sicilia, Catania, Section IV, judgment January 10th, 2019, no. 22. Previous judgments in this field include: TAR Lazio, Roma, Section III bis, judgment March 21st 2017, no. 3742 (on the right to access the source code of the software used to manage interprovincial transfers of the teaching staff) and TAR Lazio, Roma, section III bis, judgment March 22nd 2017, no. 3769 (in particular, note by I. FORGIONE, *Il caso dell'accesso al software MIUR per l'assegnazione dei docenti*, in "Giornale di diritto amministrativo", 2018, 647). Finally, see D.K. CITRON, F. PASQUALE, *The Scored Society: Due Process for Automated Predictions*, in "Washington Law Review", vol. 89, 2014, n. 1, pp. 1-33.

¹⁹B.D. MITTELSTADT, P. ALLO, M. TADDEO et al., *The ethics of algorithms: Mapping the debate*, in "Big data & Society", vol. 3, 2016, n. 3, pp. 1-21.

²⁰Pursuant to Article 2 («Authorship of computer programs») of the Directive 2009/24/EC of the European Parliament and of the Council of 23 April 2009 on the legal protection of computer programs, the Author of a computer program «shall be the natural person or group of natural persons who has created the program or, where the legislation of the Member State permits, the legal person designated as the rightholder by that legislation».

²¹See, for example, State Council, with judgment no. 881 of February 4th 2020 which, by abandoning a strict implementation of the protection mechanisms of Law 241 of 1990, has concluded that «the fundamental need for protection deriving from the use of the computer instrument defined as algorithmic is transparency in the abovementioned terms referable to the principle of motivation and/or justification of the decision» and then observed, with respect to the transparency of the source code, that «(...) no importance may be attached to the invoked confidentiality of the companies producing the computer mechanisms used which, by offering these instruments to the authoritative power, accept their consequences in terms of necessary transparency».

²²M. MAGGIOLINO, *EU Trade Secrets Law and Algorithmic Transparency*, in "AIDA", vol. 27, 2018, n. 1, pp. 199-217.

²³G. AVANZINI, *Decisioni amministrative e algoritmi informatici. Predeterminazione, analisi predittiva e nuove forme di intelligibilità*, Editoriale Scientifica, 2019; A. CERRILLO, *El impacto de la inteligencia artificial en el Derecho Administrativo ¿Nuevos conceptos para nuevas realidades técnicas?*, in "Revista General de Derecho Administrativo", 2019, n. 50; D.W. DENNO, R. SURUJNATH, *Foreword: Rise of the Machines: Artificial Intelligence, Robotics, and the Reprogramming of Law*, in "Fordham Law Review", vol. 88, 2019, n. 2, pp. 381-404. See also recent special issue S. STERN, *Artificial Intelligence, Technology, and the Law*, in "University of Toronto Law Journal", vol. 68, supp. 1, 2018, pp. 1-11 on legal theory, automation and technology beyond government decision-making; C. GIURDANELLA, E. GUARNACCIA, *Elementi di diritto amministrativo elettronico*, Halley, 2005, pp. 13-14; J. CAZALA, *Administrative Law and Public Administration in the Global Social System*, ADJURIS - International Academic Publisher, 2020.

²⁴S. CIVITARESE MATTEUCCI, L. TORCHIA, *La tecnificazione*, in L. Ferrara, D. Sorace (a cura di), "A 150 anni dall'unificazione amministrativa italiana - Studi", vol. IV, Firenze University Press, 2016; D.-U. GALETTA, J.G. CORVALAN, *Intelligenza artificiale, per una P.A. 4.0? Potenzialità, rischi e sfide della rivoluzione tecnologica in atto*, in "Federalismi.it", 2019, n. 3, pp. 1-23.



²⁵S. ABITEBOUL, G. DOWEK, *The age of algorithms*, Cambridge University Press, 2020.

²⁶C. COGLIANESE, D. LEHR, *Regulating by Robot*, cit.

²⁷S. CIVITARESE MATTEUCCI, *Umano troppo umano. Decisioni amministrative automatizzate e principio di legalità*, in "Diritto pubblico", 2019, n. 1, p. 23.

²⁸F. RUGGIERI, *Comments on the Italian 'Code for the Digital Administration'*, in "Digital Evidence and Electronic Signature Law Review", vol. 5, 2008, pp. 29-40.

²⁹Law no. 124 of August 7th, 2015, on the Matter of Organization of the Public Administration.

³⁰Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, COM(2010)245 final, *A Digital Agenda for Europe*, May 19th 2010.

³¹D. FREEMAN ENGSTROM, D.E. HO, C.M. SHARKEY, M.-F. CUÉLLAR, *Government by Algorithm: Artificial Intelligence in Federal Administrative Agencies*, Report submitted to the administrative conference of the United States, February 2020.

³²Legislative Decree no. 33 of March 14, 2013, amended by Legislative Decree no. 97 of March 25, 2016.

³³Law no. 633 of April 22, 1941, for the Protection of Copyright and Neighbouring Rights (as amended up to Legislative Decree no. 685 of November 16, 1994).

³⁴Berne Convention for the Protection of Literary and Artistic Works, September 9, 1886, S. Treaty Doc. no. 27, 99th Cong., 2nd Sess. (1986), 12 Martens Nouveau Recueil 173 (revised at Paris on July 24, 1971, and amended in 1979).

³⁵Article 2, par. 1, safeguards computer programs «[...] whatever may be the form of their expression, provided they are an original work as resulting from the author's intellectual creation. The protection provided by this law shall not apply to ideas and principles underlying any program component, including those underlying the interfaces thereof».

³⁶Article 64-bis establishes that «Without prejudice to the provisions of articles 64-ter and 64-quater, the exclusive rights conferred by this law regarding computer programs shall include the right to perform or authorize: a) reproduction [...] b) translation, adaptation, transformation and any other modification of the computer program [...] any form of distribution to the public, including lease, either of the original computer program or of copies thereof».

³⁷See A.G. OROFINO, *L'open source e pubblica amministrazione*, in G. Cassano (a cura di), "Diritto delle nuove tecnologie informatiche e dell'Internet", IPSOA, 2002, p. 1317; A.G. OROFINO, *La semplificazione digitale*, in "Il diritto dell'economia", 2019, n. 3, p. 87; F. MARTINI, *Open source, pubblica amministrazione e libero mercato concorrenziale*, in "Il diritto dell'economia", 2009, n. 3-4, pp. 677-707; F. BRAVO, *Software «open source» per la p.a. tra diritto d'autore, appalti pubblici e diritto dei contratti. La licenza pubblica dell'UE per i programmi a codice sorgente aperto*, in "Il diritto dell'informazione e dell'informatica", 2008, n. 6, pp. 865-910; Id., *EUPL e riuso di software open source da parte della pubblica amministrazione. Strategie di diritto contrattuale*, in "Cyberspazio e diritto", 2010, n. 1, pp. 53-73; Id., *Gli appalti pubblici per la fornitura di beni e servizi nel settore ICT e gli appalti pubblici elettronici alla luce del d.lgs. 163/2006 (Codice dei contratti pubblici relativi a lavori, servizi e forniture)*, in "Contratto e impresa", 2007, n. 4-5, pp. 1269-1322; Id., *Software "Open Source" e Pubblica Amministrazione. L'esperienza comunitaria e quella italiana tra diritto d'autore, appalti pubblici e diritto dei contratti*, in S. Bisi, C. Di Cocco (a cura di), "Open source e proprietà intellettuale: fondamenti filosofici, tecnologie informatiche e gestione dei diritti", 2008, Gedit, pp. 61-150.

³⁸Pursuant to Article 68, paragraph 1, «Public Administrations must acquire computer programs or parts thereof as a result of a comparative assessment of technical and economic

aspects among the following solutions available on the market: a) software developed on behalf of the Public Administration; b) reuse a solution developed on behalf of the Public Administration; c) obtain a free and open source license; d) use a cloud computing service; e) obtain a proprietary license of use; f) a combination of the above».

³⁹Before proceeding with the purchase, in accordance with the procedures set out in Legislative Decree no. 50 of 2016, Public Administrations will carry out a comparative assessment of the different solutions available on the basis of the following criteria: a) total cost of the program or solution as cost of purchase, implementation, maintenance and support; b) the level of use of open-ended data formats and interfaces as well as standards to ensure interoperability and application cooperation between the different IT systems of the Public Administration; c) the supplier's guarantees regarding security levels, compliance with the legislation on personal data protection, service levels taking into account the type of software acquired.

⁴⁰K. MOSSBERGER, C.J. TOLBERT, R.S. MCNEAL, *Digital Citizenship: The Internet, Society, and Participation*, The MIT Press, 2007.

⁴¹European Parliament resolution of 29 October 2015 on the follow-up to the European Parliament resolution of 12 March 2014 on the electronic mass surveillance of EU citizens, 2015/2635(RSP). See also European Parliament resolution of 12 March 2014 on the US NSA surveillance programme, surveillance bodies in various Member States and their impact on EU citizens' fundamental rights and on transatlantic cooperation in Justice and Home Affairs, 2013/2188(INI).

⁴²See Commission Decision of 8 December 2021, on the open source licensing and reuse of Commission software, 2021/C 495 I/01.

⁴³L. BENNETT MOSES, L. DE KOKER, *Open Secrets: Balancing Operational Secrecy and Transparency in the Collection and Use of Data for National Security and Law Enforcement Agencies*, in "Melbourne University Law Review", vol. 41, 2017, n. 2, pp. 530-570; M. HILDEBRANDT, *Profiling and the Rule of Law*, in "Identity in the Information Society", 2008, n. 1, pp. 55-70; F. PASQUALE, *Toward a Fourth Law of Robotics: Preserving Attribution, Responsibility, and Explainability in an Algorithmic Society*, in "Ohio State Law Journal", vol. 78, 2017, n. 5, pp. 1243-1255.

⁴⁴EUROPEAN COMMISSION, *Interoperability solutions for Public Administrations, businesses and citizens*.

⁴⁵Council Directive 91/250/EEC of 14 May 1991 on the legal protection of computer programs.

⁴⁶Directive 2009/24/EC of the European Parliament and of the Council of 23 April 2009 on the legal protection of computer programs. This Directive repeals Directive 91/250/EEC of 14 May 1991 on the legal protection of computer programs. To get a complete overview of the issues regarding the legal framework protecting software, see V. ZENCOVICH, R. RISTUCCIA, *Il software nella dottrina, nella giurisprudenza e nel D.Lgs 518/92*, II ed., Cedam, 1993.

⁴⁷See A. LUCAS, *Copyright in the European Community: The Green Paper and the Proposal for a Directive Concerning Legal Protection of Computer Programs*, in "Columbia Journal of transnational law", vol. 29, 1991, pp. 145-167; A.P. MEIJBOOM, *Software Copyright software protection in the EC Protection in "Europe 1992"*, in "Rutgers Computer & Technology Law Journal", 1990, n. 16, pp. 407-422; G.P.V. VANDENBERGHE, *Copyright Protection of Computer Programs: An Unsatisfactory Proposal for a Directive*, in "European Intellectual Property Review", 1989, n. 11, p. 409; J.R. WARNOT, *Software Copyright Protection in the European Community: Existing Law and an Analysis of the Proposed Council Directive*, in "Santa Clara High Technology Law Journal", vol. 6, 1990, n. 2, pp. 355-376; A.K. PALMER, T.C. VINJE, *The EC*

Directive on the Legal Protection of Computer Software: New Law Governing Software Development, in “Duke Journal of Comparative & International Law”, 1992, n. 2, pp. 65-88.

⁴⁸See Opinion of Advocate General Szpunar delivered on 10 March 2021, *Case C13/20, Top System SA v. Belgian State*, Request for a preliminary ruling from the Cour d’Appel de Bruxelles.

⁴⁹K.H. PUN, *The Case for Decompilation: A Response to the Law Reform Commission’s Report on Copyright*, in “Hong Kong Law Journal”, vol. 25, pp. 15-32. The Author clarifies that (at 1) «Also known as ‘disassembly’. The term refers to the process of converting a computer program from machine-readable code to human-readable code».

⁵⁰«Object code is a program expressed as binary numbers comprehensible to the computer, a pattern of ones and zeros that cause the computer to execute a coherent set of operations leading to a useful result», A.L. CLAPES, *Software, Copyright, And Competition*, Quorum, 1989, p. 31.

⁵¹The reverse engineering is «the act of creating a set of functional specifications for a system by someone other than the original designer based on an analysis of an existing system», P. SAMUELSON, *Reverse-Engineering Someone Else’s Software: Is it Legal?*, in “IEEE Software”, vol. 7, 1990, n. 1, p. 91.

⁵²See Judgment of the Court (Fifth Chamber) of 6 October 2021, *Case C-13/20, Top System SA vs. Belgian State*, ECLI:EU:C:2021:811.

⁵³In this case, the software house is a mere executor, pursuant to Article 2, paragraph 3 of the 2009/24/EU Directive. In this scenario, «Where a computer program is created by an employee in the execution of his duties or following the instructions given by his employer, the employer exclusively shall be entitled to exercise all economic rights in the program so created, unless otherwise provided by contract». See the Italian Copyright Law, Article 64-ter.

⁵⁴AGID, *Guidelines on the acquisition and reuse of software for Public Administrations*, May 2019.

⁵⁵See for example State Council, judgment no. 881 of February 4th 2020.

⁵⁶See the judgments listed in footnote 18.

⁵⁷F. BRAVO, *Access to Source Code of Proprietary Software Used by Public Administrations for Automated Decision-Making. What Proportional Balancing of Interests?*, in “European Review of Digital Administration & Law”, vol. 1, 2020, n. 1-2, pp. 157-165.

⁵⁸TAR Lazio, Roma, Section III bis, judgment March 22nd 2017, no. 3769, «The software becomes of key relevance in the matter of the administrative procedure aimed at the adoption of a computer-processed act and its own legal qualification in terms of computer administrative act is important for different for different aims, most importantly that of verifying the admissibility of access referred to in articles 22 and following of Law no. 241 of 1990 to the relative computer program and, ultimately, to what is known as its source language»; according to the TAR Sicilia, Catania, Section IV, judgment January 10th 2019, no. 22, with respect to access to the source code «It is, therefore, the access indicated in Art. 24, par. 7 of Law no. 241/1990, pursuant to which “applicants must nevertheless be guaranteed access to administrative documents whose knowledge is necessary for them to look after and defend their legal interests”».

⁵⁹TAR Lazio, Roma, Section III bis, judgment March 22nd, 2017, no. 3769.

⁶⁰State Council, judgment no. 881 of February 4th 2020.

⁶¹*Charter of Fundamental Rights of the European Union* (2000/C 364/01), Article 41: «Right to good administration. 1. Every person has the right to have his or her affairs handled impartially, fairly and within a reasonable time by the institutions and bodies of the Union. 2. This right includes: [...] the obligation of the Administration to give reasons for its decisions».

⁶²See, TAR Lazio, Roma, section III bis, judgments February 28th, 2023, no. 3443: «[...] As it is known, the Art. 22 of Law no. 241/1990 defines as interested in accessing all private subjects, including those with public or widespread interests, who has a direct, concrete and current interest, corresponding to a legally protected situation and connected to the document to which access is requested. The interest that justifies access to administrative documents can consist of any subjective position, excluding the generic and indistinct interest in the regular performance of the administrative activity, provided that a relationship of instrumentality can be identified between said subjective position and the documentation of which the exhibition is requested [...]».

⁶³T. POYSTI, *Trust on Digital Administration and Platforms*, in “Scandinavian Studies in Law”, vol. 65, 2018, pp. 321-366. State Council, judgment no. 881 of February 4th 2020 has concluded that «the fundamental need for protection deriving from the use of the computer instrument defined as algorithmic is transparency in the abovementioned terms referable to the principle of motivation and/or justification of the decision» and then observed, with respect to the transparency of the source code, that «[...] no importance may be attached to the invoked confidentiality of the companies producing the computer mechanisms used which, by offering these instruments to the authoritative power, accept their consequences in terms of necessary transparency». A. BANFI, G. GALLI, *La digitalizzazione delle pubbliche amministrazioni*, in “Osservatorio CPI”, January 6th 2020.

⁶⁴A. SCHEDLER, *Conceptualizing Accountability*, in A. Schedler, L. Diamond, M.F. Plattner, “The Self-Restraining State: Power and Accountability in New Democracies”, Lynne Rienner Publishers, 1999, pp. 13-28; P. DUNLEAVY, H. MARGGETTS, S. BASTOW, J. TINKLER, *New Public Management Is Dead. Long Live Digital-Era Governance*, in “Journal of Public Administration Research and Theory”, vol. 16, 2006, n. 3, pp. 467-494.

⁶⁵See F. BRAVO, *Appalti pubblici per la fornitura di beni e servizi nel settore ICT e tecniche di redazione contrattuale. Le linee guida del CNIPA*, in “Il diritto dell’informazione e dell’informatica”, 2007, n. 1, pp. 103-132.

⁶⁶J. REICHEL, *Public Access or Data Protection as a Guiding Principle in the EU’s Composite Administration: An Analysis of the ReNEUAL Model Code in the Light of Swedish and European Case Law*, in “Scandinavian Studies in Law”, vol. 65, 2018, pp. 285-308.

⁶⁷J. KLEINBERG, J. LUDWIG, S. MULLAINATHAN, C.R. SUNSTEIN, *Discrimination in the Age of Algorithms*, in “Journal of Legal Analysis”, vol. 10, 2018, pp. 113-174.

⁶⁸Regulation (EU) 2016/679 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 and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation or GDPR).

⁶⁹Directive 95/46/EC of the European Parliament and of the Council of 24 October 1995 on the protection of individuals with regard to the processing of personal data and on the free movement of such data.

⁷⁰With regard to the legal framework of automated decisions in light of GDPR, see critical readings by S. WACHTER, B. MITTELSTADT, L. FLORIDI, *Why a right to explanation of automated decision-making does not exist in the General Data Protection Regulation*, in “International Data Privacy Law”, vol. 7, 2017, n. 2, pp. 76-99.

⁷¹R. MESSINETTI, *La tutela della persona umana versus l’intelligenza artificiale. Potere decisionale dell’apparato tecnologico e diritto alla spiegazione della decisione automatizzata*, in “Contratto e impresa”, 2019, n. 3, pp. 861-894.



La proprietà intellettuale nell'era delle decisioni amministrative “artificiali”: rischi di collisione?

Riassunto: Considerando che la Pubblica Amministrazione potrebbe non essere in grado di sviluppare internamente le tecnologie necessarie al proprio percorso di trasformazione digitale, dovendosele procurare sul mercato privato, l'esclusività del diritto d'autore, potrebbe affermare un predominio, senza precedenti, degli operatori privati sull'intero processo decisionale pubblico. Di contro, la rivendicazione del diritto a rivelare il codice sorgente dell'algoritmo costituisce garanzia di trasparenza, di libertà di informazione e di impegno civico, in coerenza con le politiche di Open Government. Tralasciando, il dibattito giuridico, circa la qualificazione del codice sorgente come atto amministrativo, recentemente avvenuto in Italia, questo lavoro si propone di indagare sulla morfologia della proprietà intellettuale nell'era dell'Amministrazione algoritmica al fine di comprendere se i diritti di proprietà intellettuale debbano, o meno, soccombere ogni volta che per l'espletamento delle attività amministrative sia necessario scegliere, acquisire e impiegare le tecnologie informatiche.

Parole chiave: Proprietà intellettuale – Diritto d'autore – Decisioni pubbliche – Intelligenza artificiale – Codice sorgente – Pubblica amministrazione algoritmica – Diritto alla divulgazione – Algoritmo – Diritto di accesso – Trasparenza