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Public Administration in the Era of Database and Information Exchange Networks: Empowering Administrative Power or Just Better Serving the Citizens?

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1. Data collection and Data Management in the Era of ICT: who are the "Masters of Data"?

In computer science, data is an "elementary" piece of information that is coded or codifiable[1]. Thus, generally speaking, information generally includes the processing of more data, i.e. more "elementary information".

Nonetheless, if access to a considerable amount of data leads inevitably to more information, an information overdose - to indicate that phenomenon resulting from the excess of data[2] - certainly leads to less transparency. The output of too much data is namely a kind of "opacity for confusion"[3], with information overload causing just disorientation[4].

Moreover, there is clearly a difference between the receipt or retrieval of information and the generation of knowledge: to ensure that a generation of knowledge takes place (i.e. that the information received/retrieved is really valuable), interpretive keys are needed to discern the data, to reorganize them, to insert them in a systematic context able to decode complexity[5].

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[1] Encyclopedia Treccani, *Dato* (heading), p. 1 ss.

[2] A. Mantelero, *Big data: i rischi della concentrazione del potere informativo digitale e gli strumenti di controllo*, in *Diritto dell'informazione e dell'Informatica*, 2012, *passim*.

[3] See further D.U. Galetta, *the Italian Freedom of Information Act 2016 (why transparency-on-request is a better solution)*, in *Italian Journal of Public Law* (http://www.ijpl.eu/), VOL. 8, Issue 2/2016, p. 268 ss. (287).

[4] M. Fenster, *The Opacity of Transparency*, in *Iowa Law Review*, 2006, p. 921 ss.

[5] See G. Wewer, *Wundermittel Transparenz? Über Informationsfreiheit und Transparenzgesetze*, in *Informationsfreiheit und Informationsrecht. Jahrbuch*, 2014, p. 162 ss.; *Idem*, *Open Government, Staat und Demokratie. Aufsätze zu Transparenz, Partizipation und Kollaboration*, Berlin, 2014, *passim*.

In the event that this last process is not carried out, the result is that of confusion; and the attribution of value to sources of information that are not very reliable[6].

It is precisely in this context that technologies play a decisive role, contributing to information processes (from its generation, to processing and dissemination). And, therefore, there is no doubt that management of information in modern times polarises more and more in favour of subjects (be they public or private) who hold more "technological power": that is, who are able to acquire the most effective digital means to develop in the best way information processes.

If accessibility (knowledge of data) is a necessary but not sufficient condition for gaining information, "The masters of data"[7] are those entities (be they public or private bodies) who are not only able to access, gather or hold (if necessary for carrying out their institutional tasks, as it is in the case of Public Administrations) a considerable amount of data. They are those entities/bodies which are capable of collecting data in databases of considerable size (depending on the organizational capacity of the organization), and to analyse them with IT tools or very advanced calculation tools[8].

This line of reasoning allows also the better understanding of what is meant by "Big Data". Ever more precise interpretative and processing systems have been refined, which, supported by ever cheaper and faster acquisition, storage and processing, have created the "Big Data phenomenon". Among these, the most innovative one is certainly cognitive computing, or the technique that, connecting cognitive sciences and computer science with the aim of simulating human thought processes through computer models, allows the computer to imitate the functioning of the human brain. With data analytics systems this vast amount of information (datasets), coming from multiple sources, opens up the most disparate of possible uses. In other words, when specific computers with high computing capacity, able to exploit self-learning algorithms (machine learning), manage

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[6] G. da Empoli, *Overdose. La società dell'informazione eccessiva*, Venezia, 2002, p. 52.
[7] A. Mantelero, *op. cit.*, p. 135.
[8] See, among others, D.L. Rubinfeld, M.S. Gal, *Access Barriers to Big Data*, in *Arizona Law Review*, 2017, vol. 59, p.339 ss.; M. Falcone, *Big data e pubbliche amministrazioni: nuove prospettive per la funzione conoscitiva pubblica*, in *Riv. Trimestr. Di dir. Pubbl.*, fasc. 3, settembre 2017, p. 601 ss.; F. Di Porto, *La rivoluzione dei big data. Una introduzione*, in Id. (a cura di*), Big data e concorrenza*, numero speciale di *Concorrenza e mercato*, vol. 23, 2016, p. 5 ss.

to process - and process in real time, for multiple purposes - a very large amount of data collected in highly variable data sets, this gives rise to Big Data[9].

In this context, those who hold the most data and are able to process them in the most efficient way, are at the heart of the information phenomenon because they can better exploit of the predictive capacity of the data.

2. Public Administration and digital(ized) Data: what's new?

As it is well acknowledged, information is the very basis of each and any administrative decision. Public Administrations need to gather all information needed to take sound and lawful decisions. Without sufficient information, no decision can be fairly taken[10]. This is exactly the reason why administrative authorities are usually under a legal obligation to collect all information and facts relevant to a decision in a careful and impartial manner.

This is also the very essence of article 41 of the Charter of fundamental rights of the European Union enshrined right to good administration, stating in its first paragraph: "*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*"[11].

For this very reason, Public Administrations hold and manage a very important information asset. This is the data, including naturally, personal data, of which the Public Administrations are holders for the purposes of carrying out specific administrative procedures; but also simply for institutional purposes, even if a procedure in the proper sense is not ongoing. As it is the case, for example, for health data and tax data that Public Administrations collect and hold regardless of the start of a specific administrative procedure such as a grievance or appeal. However, it is the same also for spatial data, which is any type of data directly or indirectly related to a specific location or geographic area and which Public Administrations collect as a result of assessment and monitoring activities. I refer, for example, to the data concerning the percentages of particles

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[9] See M. Lycett, *'Datafication': making sense of (big) data in a complex world*, in *European Journal of Information Systems*, 2013, vol. 22, p. 381 ss.; A. Gandomi, M. Haider, *Beyond the hype: Big data concepts, methods, and analytics,* in *International Journal of Information Management*, 2015, vol. 35, p. 237 ss.

[10] See further D.U. Galetta, H.C.H. Hofmann, J-P. Schneider, *Information Exchange in the European Administrative Union: an Introduction*, in *European Public Law*, 2014/1, p . 65 ss.

[11] See at https://ec.europa.eu/info/aid-development-cooperation-fundamental-rights/your-rights-eu/eu-charter-fundamental-rights_en. On art. 41 of the EU Charter of fundamental rights see D.U. Galetta, B. Grzeszick, *Kommentar zu Art. 41 Grundrechtecharta*, in K. Stern/M. Sachs (Eds.), *Europäische Grundrechtecharta,* Kölner Gemeinschafts-Kommentar, C.H.BECK ISBN 978-3-406-68036-6, Cologne, 2016, 2^ edition, p. 618 ss.

polluting the air of the national territory; or the data related to the areas of hydrogeological instability.

In order to be easily exchanged via on-line networks, Public Administrations' data needs, nonetheless, to become digital data, so that traditional paper-documents need to be dematerialized and transformed into electronic documents[12].

Dematerialization is therefore considered as a fundamental tool to enhance greater efficiency, control of documents and the easy sharing of documents and data among Public Administrations.

3. Data collection and Data exchange at the national (Italian) and supranational (EU) level : the new Network-Systems of Public Administrations

In September 2016 a Digital Transformation Team (DTT), composed of thirty-five people, was set up within the Department of Public Function of the Italian Government[13], with the task of building the "operating system" of Italy and in order to be able to provide "*simpler and more efficient services for the citizens, the Public Administration and businesses, through innovative digital products*"[14].

According to the "Manifesto of Technological and Operating Principles", published on the Website of the Italian Digital Transformation Team (DTT), "We will be relentlessly data driven; we will apply machine learning and artificial intelligence techniques, whenever necessary to solve complex problems"[15].

As for its tasks, The DTT shall first of all help implementing the "Three-Year Plan for ICT in Public Administration"[16], a component of which is the "Data & Analytics Framework" (DAF). DAF aims, inter alia, to develop and simplify the interoperability of public data between Public Administration authorities. The central idea is that the value of the information assets of the Public Administrations can be significantly amplified by using Big Data technologies[17].

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[12] S. Armenia, D. Canini, N. Casalino, *A system dynamics approach to the Paper Dematerialization Process in the Italian Public Administration*, in Alessandro D'Atri et al. (Eds.) *Interdisciplinary Aspects of Information Systems Studies*, Physica-Verlag HD, 2008, p. 399 ss.

[13] See Decree of the President of the Council of Ministers of September 28, 2016, no. 2667, at http://presidenza.governo.it/AmministrazioneTrasparente/DisposizioniGenerali/AttiGenerali/DpcmOrganismiCollegi ali/DPCM_20160916_CommStraord_AgendaDigitale.pdf.

[14] See at https://teamdigitale.governo.it/en/49-content.htm.

[15] See Digital Transformation Team's (DTT) Manifesto, at https://teamdigitale.governo.it/en/.

[16] The strategic document designed to guide the digital transformation of Italy and approved by the Presidency of the Council of Ministers in May 2017. See at https://pianotriennale-ict.italia.it/.

[17] See para. 4.1. of the Three-Year Plan for ICT in Public Administration, at https://pianotriennale-ict.italia.it/.

This same idea is of central importance also in the approach developed by the European Commission with the ISA[1] and ISA[2] Programme (Interoperability solutions for Public Administrations, businesses and citizens)[18].

The new ISA² programme supports the development of digital solutions that shall enable Public Administrations, businesses and citizens in Europe to benefit from interoperable cross-border and cross-sector public services. Among the various tools developed within the ISA² framework, one of the most interesting from this specific perspective is the TESTA (Trans European Services for Telematics between Administrations)[19]. TESTA is a data communication network service, operated by the European Commission which allows the exchange of data between European and national administrations while assuring a high level of security[20].

At present the TESTA framework is extensively used by the EU Commission's DG Migration and Home Affairs, especially for the implementation of the VIS[21] and SIS II[22] networks. It is also used by EUROPOL for the implementation of their own dedicated EUROPOL network[23].

In the same vein, the current version of the Italian Digital Administration Code (IDAC)[24] refers to the "cooperation via computer" (*cooperazione applicativa*)[25] as the way in which Italian Public Administrations shall interact with one another[26]. In fact, the IDAC constitutes an essential part of the above-mentioned Three-Year Plan for ICT in the Public Administration, as it lays the legal groundwork for many of the digital services set out by the Plan[27].

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[18] See at https://ec.europa.eu/isa2/home_en.

[19] See at https://ec.europa.eu/isa2/actions/strengthening-eu%E2%80%99s-telecommunications-backbone_en.

[20] According to a declaration released by Constanze Bürger, Head of the Department of IT and Network Infrastructures in the Public Administration of the German Federal Ministry of the Interior, "*The future needs reliable and secure electronic communication between the Public Administration of the Member States. TESTA is THE solution for Germany*". See at https://ec.europa.eu/isa2/solutions/testa_en.

[21] See at http://www.visnetwork.eu/.

[22] See at https://ec.europa.eu/home-affairs/what-we-do/policies/borders-and-visas/schengen-information-system_en.

[23] See at https://www.europol.europa.eu/activities-services/services-support/information-exchange.

[24] See at https://www.agid.gov.it/en/argomenti/digital-administration-code. The recent IDAC amendment is one of the pillars of Public Administration reform pursued by Marianna Madia, the Minister of Public Administration and Simplification of the Renzi Government.

[25] Its definition is now to be found in Art. 1, para. 1, subpar. ee) according to which "cooperation via computer" (cooperazione applicativa) is the part of the Public System of Connectivity aimed at the interaction between the IT systems of the participants and to ensure the integration of data, information, processes and administrative procedures.

[26] According to Art. 47 of the IDAC transmission of documents between public administrations takes normally place by using e-mail or via "cooperation via computer".

[27] Some of these services are already beingimplemented, like, for example, the Digital Citizenship, the Data & Analytics Framework (DAF), and the citizens' "digital residency".

In this framework, the "cooperation via computer" option certainly revolutionizes the way in which Italian Public Administrations shall interact with one another and entails the direct modality through which an information system learns data directly from another information system.

In Italy the "cooperation via computer" is now based on the use of the "Public Connectivity System" (PCS)[28]. The PCS is a set of technological infrastructures and technical rules that ensures interoperability between the information systems of the various Public Administrations, on the one side, and allows information systems and computer system's coordination of data between central, regional and local Public Administrations, and between these Public Administrations and those at the European Union and other Member States level. The System is also open to accession by public service operators and private entities.

So, to conclude on this point, it is basically in the "cooperation via computer" that the idea of creating better functioning Network-Systems of Public Administrations develops and expresses itself more fully[29].

4. The EU Information-Exchange-Networks: Data collection, Data exchange and the creation of shared Databases

For the implementation of EU law, information management activities are central and have given rise to a growing number of Information-Exchange-Networks involving EU institutions, bodies, offices and agencies on the one hand, and Member States' authorities, on the other.

In fact, EU law is mostly implemented through composite administrative procedures[30]: which are administrative procedures that combine decisions of national and of EU administrative bodies or entities in a unitary outcome. As such, they include one or more intertwined sub-procedures that are functional to the adoption of the final decision[31].

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[28] See Art. 73 of the IDAC cit.

[29] According to A. Masucci, *Erogazione on line dei servizi pubblici e teleprocedure amministrative. Disciplina giuridica e riflessi sull'azione amministrativa*, in *Dir. Pubb.*, 2003, p. 991, the real "revolution in the revolution" is telematics; and the further passage is identifiable when it comes to a world characterized by dynamic and interconnected systems where networks predominate and in which, in fact, only computer documents circulate.

[30] See G. della Cananea (2004), *The European Union's mixed administrative proceedings*, in *Law and Contemporary Problems*, vol. 68 (Winter 2004), pp. 197 ss., available at: https://scholarship.law.duke.edu/lcp/vol68/iss1/10.

[31] C. Eckes, J. Mendes, *The Right to Be Heard in Composite Administrative Procedures: Lost in between Protection?*, in *European Law Review*, 2011, p. 651 ss.

Composite procedures obviously require joint gathering and use of information as the raw material of decentralised decision-making. On the other hand, the setting of structured digital data by (national and EU) Public Administrations leads - almost inevitably - to the creation of so-called databases. Therefore, in many policy areas, EU authorities are establishing shared databases for the collection and exchange of information in those procedures.

The use of such databases can certainly result in an overall improvement of the efficiency of administrative action and enhance greater compliance with EU law. Through the access to one or more databases Public administrations are, in fact, able to acquire new knowledge resulting from the aggregation of increasingly more data[32]. Therefore, in many policy areas, EU authorities have established shared databases for the collection and exchange of information among the different (national and EU) Public Administrations involved in composite administrative procedures[33].

One example for all is the Internal Market Information System (IMI)[34]. IMI was created by the European Commission (and is run by the EU Commission) and envisaged as a tool to assist Member States with the practical implementation of information exchange requirements laid down in EU acts, by providing a centralised communication mechanism which essentially aims at facilitating cross-border exchange of information and mutual assistance. Nevertheless, an authority can store information in a database inside IMI, and such database can be rendered accessible to all IMI users or to a defined group of users.

At first IMI was conceived as a tool to help competent authorities to fulfil their obligations under the Services Directive and the Recognition of Professional

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[32] From the organization of all these data, from the need to manage them in a completely innovative way even a new administrative function is developing itself, according to recent doctrine. So G. Carullo, *Gestione, fruizione e diffusione dei dati dell'amministrazione digitale e funzione amministrativa*, Turin, 2017, p. 36, who expressly refers to the development of a new administrative function for the organization and management of data.

[33] See to this regard the examples in the Introduction to BOOK VI of the ReNEUAL Codification, drafted by Diana-Urania Galetta, Herwig C. H. Hofmann, Micaela Lottini, Nikolaus Marsch, Jens-Peter Schneider, Morgane Tidghi, at http://www.reneual.eu/index.php/projects-and-publications/reneual-1-0. The printed version in English of ReNEUAL Model Rules on EU Administrative Procedure was published in 2017, with Oxford University Press (see at https://global.oup.com/academic/product/reneual-model-rules-on-eu-administrative-procedure-9780198795308?cc=us&lang=en&)

[34] IMI was established pursuant to the Decision of the European Parliament and of the Council, No. 2004/387/EC and and it is now regulated by Regulation No 1024/2012 of 25 October 2012, on *Administrative cooperation through the Internal Market Information System and repealing Commission Decision 2008/49/EC*, OJ L 316/1, of 14 November 2012.

Qualifications Directive[35]. The idea was that the use of IMI in this specific sector simply had to take the place of other means of cross-border exchange and information sharing among public administrations: regular postal mail, fax or electronic mail.

Nevertheless, from the very beginning IMI was designed as a generic solution that could be adapted to support communication among different administrative authorities also in other policy areas.

So, at present, IMI is used in the context of Public Procurement procedures, to check information and documentation provided by companies from other European countries[36]. It is used from Member States Public Authorities to locate and recover Cultural Objects that have been unlawfully removed from their territory[37]. It is also used in the access-to-healthcare-products-and-services-in-other-Member-States' systems, provided for by the so called "patients' rights directive"[38]. It is used in the context of the posting of workers' directive[39] as a tool to help achieving the goal of guarantying "respect for an appropriate level of protection of the rights of posted workers for the cross-border provision of services"[40]. And, from January 2016, it has been implemented also to process applications for the new European Professional Card[41].

In fact, already in the 2011 Communication of the EU Commission "Better governance of the Single Market through greater administrative cooperation"[42], it was

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[35] Directive 2005/36/CE, of 7 September 2005, on the recognition of professional qualifications, OJ L 255/22, of 30 September 2005, as revised by Directive 2013/55/EU, of 20 November 2013, Amending Directive 2005/36/EC on the recognition of professional qualifications and Regulation (EU) No 1024/2012 on administrative cooperation through the Internal Market Information System (the IMI Regulation), OJ L 354/132, of 28 December 2013.

[36] Within the Internal Market Information System, the Commission has established the online service e-CERTIS to identify the administrative documents frequently requested in procurement procedures across the Member States. See at https://ec.europa.eu/isa2/solutions/e-certis_en.

[37] See Directive 2014/60/EU of 15 May 2014, on *The return of cultural objects unlawfully removed from the territory of a member State and amending Regulation No 1024/2012*, OJ L 159/1, of 28 May 2014.

[38] See Directive 2011/24/EU of 9 March 2011, on *The application of patients' rights in cross-border healthcare*, OJ L 88/45, of 4 April 2011.

[39] See Directives 96/71/EC of 16 December 1996, *Concerning the posting of workers in the framework of the provision of services*, OJ L 18/1, of 21 January 1997, and 2014/67/EU of 15 May 2014, on *The enforcement of Directive 96/71/EC concerning the posting of workers in the framework of the provision of services and amending regulation No 1024/2012 on administrative cooperation through the Internal Market Information System ('the IMI Regulation')*, OJ L 159/11, of 28 May 2014. Directive 96/71/EC establishes a set of terms and conditions of employment which are required to be complied with by workers temporarily posted to provide services in another Member State than the one in which they habitually carry out their work. Such terms and conditions aim to ensure the minimum protection of the posted workers concerned.

[40] Art. 1 of Directive 2014/67/EU of 15 May 2014 (s. previous note).

[41] The European Professional Card (EPC) is an electronic certificate introduced with Directive 2005/36/CE on the mutual recognition of professional qualifications cit. See M. Lottini, *The European Professional Card: a new single market governance tool*, in *Rivista Italiana di Diritto Pubblico Comunitario,* 2017/5, p. 1254 ss.

[42] Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, Better governance of the Single Market through greater administrative cooperation: A strategy for expanding and developing the Internal Market Information System ('IMI'), Doc. COM/2011/0075 final, at https://eur-lex.europa.eu/legal-content/en/TXT/?uri=CELEX%3A52011DC0075.

clearly stated that as "Administrative cooperation between Member States is essential to create a truly borderless Single Market ….. Developing IMI is one of the keys to promoting better governance of the Single Market since it facilitates efficient and day-to-day cross-border cooperation between national public authorities at all levels of government". According to this idea, the use of IMI has been progressively extended far beyond the original scope, in order to cover other policy areas and to support not only administrative cooperation and information exchange among Public Administrations at the national level, but also administrative cooperation and information exchange among national and EU Public Administrations. IMI is actually aimed at efficiently assisting Public Administrations at the European and at the national level to cooperate, in order to enhance prompt and lawful decision-making and foster a correct and efficient application of EU law.

5. Data-Management-Networks and Public Administration: the Bright Side, and the Dark Side

All the above mentioned outgrowths of "cooperation via computer", which are developing into complex Data-Management-Networks, are very promising from the point of view of enhancing efficiency of Public Administration's activity and providing better services to the citizens. However, there is also a downside of these developments, a dark side alongside the bright side, that comes from a series of negative aspects related, first of all, to privacy and data protection.

To stay with the case of IMI, theoretically, personal data exchanged via IMI should only be collected, processed and used for purposes in line with those for which they were originally collected and should be subject to all relevant safeguards.

Nevertheless, the design of composite procedures at the EU level is geared predominantly towards achieving efficiency and optimal use of pre-existing resources, but their multi-jurisdictional nature may diminish protection of individual rights and possibilities of effective judicial review[43]. That is the reason why the current legal framework applicable to the exchange and use of information through EU information systems is insufficient and the legal framework concerning the creation of Data-

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[43] See D.U. Galetta, H.C.H. Hofmann, J-P. Schneider, *op. cit.* (*supra*, note n. 10)

Management-Networks often does not ensure sufficient compliance with the general principles of EU constitutional law[44].

And yet, the answer to such problems cannot be to reject the progress that ICT technologies undoubtedly allow even in the context of composite administrative procedures.

6. Public Administration in the Era of Database and Information Exchange Networks: Empowering Administrative Power or Just Better Serving the Citizens? Conclusions

According to Berners-Lee, the inventor himself of the World-Wide-Web, "We must fight against government over-reach in surveillance laws, including through the courts if necessary" and "We need more algorithmic transparency to understand how important decisions that affect our lives are being made, and perhaps a set of common principles to be followed"[45].

This attitude - though quite widespread in recent times even among ICT experts and scientists - makes the author nonetheless think (and state) that it is certainly correct to keep all possible risks of excessive State-control constantly in mind. However, it is not possible to indulge in a kind of masochistic "neoluddism", and to reject the progress (understood as positive change) that these technologies can undoubtedly involve in terms of effectiveness and efficiency of the administrative action.

What needs to be done, in my opinion, is rather to try and adapt administrative law to the needs that the use of these technologies inevitably imply. So, for example, the way of managing and exchanging information within the preliminary phase of an administrative procedure must necessarily take into account the fact that, today, this information will no longer be contained in dusty folders in the possession of the Public Administration next door. This information will much more likely be extracted from databases shared with other Public Administrations that locate themselves very often outside the national jurisdiction.

Having access to all this information, collected also by other Public Administrations very often located outside the national jurisdiction, can certainly allow a

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[44] See the introduction to Book VI of ReNEUAL Model Rules cit. (*supra*, note n. 33).
[45] See the speech by *Sir Tim Berners-Lee* on the *world wide web's 28th birthday* (March 12, 2017), *Three challenges for the web, according to its inventor*, in https://webfoundation.org/2017/03/web-turns-28-letter/

wider, more documented, more correct investigation: and therefore, ultimately, a better administrative decision.

Let us think, to give just one example, about the very sensitive decisions concerning the placing on the market of new medicines. In the context of the European single market - and in the logic of the introduction of these free-circulation medicines within the internal market - decisions to this regard are based on the sharing of information between Member States through the use of ICT technologies. This through-ICT-information-sharing represents obviously an enormous resource. And it is an incredible weapon in the hands of national Public Administrations that - and it is good not to forget it - have the power to adopt administrative decisions authorizing the marketing of a medicinal product to ensure the protection of a fundamental public interest: the protection of health. However, besides being a fundamental public interest - to be protected as such - this is also one of the most fundamental (individual) subjective right of our citizens, at least in the context of the European Union.

Obviously, in addition to the potential, there are also risks: what happens if the decision of the Public Administration is adopted on the basis of data extracted from databases that are not updated? Or if these databases contain incorrect information?

The 2016 General Data Protection Regulation (GDPR)[46] obviously impacts on this. When processing personal data public administrations, too, are bound by the key principles set down in the GDPR, such as: fair and lawful processing, purpose limitation, data minimisation and data retention[47]. Public administrations are also required to implement all technical and organisational measures that are necessary to secure personal data[48].

May be that this is still not enough to ensure that a proper cost-benefits balance is attained; or that, on the contrary, it is even too much constraint[49] on Public Administrations that process personal data on the basis of a legal obligation and in order to perform tasks carried out in the public interest. But this is exactly the role and the

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[46] Regulation (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), OJ L 119, of 4 May 2016, p. 1 ss.
[47] See art. 5 and 6 of the GDPR.
[48] See provisions in Chapter II and IV of the GDPR
[49] Fierce criticism has been addressed to the GDPR by those who believe that focusing on data protection is a completely out of place and outdated attitude. To understand this line of reasoning see for example L. Alexandre, *La guerre des intelligences,* Paris, 2017, *passim* and literature *ivi* cit.

mission of (administrative) lawyers nowadays: to identify possible risks and to develop legal instruments that prove suitable for dealing with them, with the ultimate goal of rendering the administrative authorities of the 21st century better able to serve their citizens thanks to the use of ICT.