



Questionnaires conference

GOVERNMENT BY ALGORITHMS: A COMPARATIVE ANALYSIS OF HOW NEW TECHNOLOGIES CHANGED AND INFLUENCED THE ADMINISTRATION AND JUDICIARY.

1. Introduction

Technologies such as AI, Big Data analytics, and the Internet of Things (IoT) are changing the world as we know it. Although not an entirely new phenomenon, the characteristics of these new technologies - such as Big Data analytics' ability to capture and analyse massive quantities of real-time data - are revolutionary. The rise of these new technologies therefore has triggered a paradigm-shift within governments across the world. The Weberian "paperwork" driven government, in which public bodies mainly relied upon paper-data or administrative data to make and support administrative decisions, has been replaced by datadriven government. This paradigm-shift has also changed administrative decision-making processes: governments across the globe can collect, process, and analyse large amounts of data and translate them into valuable information about its citizenry,¹ which in turn can be used to improve policymaking and administrative decision-making processes.² In addition, this data can be used by public bodies as a tool to provide public services to citizens (e.g. granting permits, welfare benefits) and data can serve as a basis to create predictive algorithms that can guide the efficient allocation of public services, for example where and how to monitor, and generate predictive algorithms that create profiles which can be used to detect and prevent fraud.³

The increased use of administrative decision-making based on profiling³ or algorithmic decisions-making procedures⁴ by public bodies offers both promises and perils. On the one hand, algorithmically-determined decision-making may herald enormous positive potential for governments around the world. New technologies such as AI enable public bodies to take administrative decisions, such as building permits, social welfare benefits, more rapidly. This not only renders administrative decision-making procedures more efficient, but also improves

¹ Member States of the European Union need to comply with the General Data Protection Regulation. Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, repealing Directive 95/46/EC.

² The Netherlands Scientific Council for Government Policy, *Exploring the Boundaries of Big Data*, (Amsterdam University Press 2016), Centre national de la recherche scientifique, *Le travail de la science et la num rique. Une analyse syst matique de la loi num rique*, (Direction de l'information scientifique et technique 2017), Katrin Nyman Metcalf, 'e-Governance: A New Reality For Legislative Drafting?', (2017) 6 International Journal of Legislative Drafting and Law Reform, Peter Blume, 'The Public Sector and the Forthcoming EU Data Protection Regulation' (2015) 1 European Data Protection Law Review p. 258-264. ³ Cary Coglianese and David Lehr, 'Regulating by Robot: Administrative Decision Making in the Machine-Learning Era'

(2017) 105 Georgetown Law Journal 1147, Janine S. Hiller and Jordan M. Blanke, 'Smart Cities, Big Data, and the Resilience of Privacy' (2017) 68 Hastings Law Journal 30, 311, Sarah Giest, 'Big Data for Policymaking: fad or fast-track?' (2017) 50 Policy Sciences.

³ Administrative decisions based on predictive profiling refers to the broad use of big data analytics and to collect and process data that the public body indirectly uses to decide upon an administrative decision, such as algorithms trained in finding patterns in large data sets that is used to identify high risk-cases of tax- and social-welfare fraud tax- and socialwelfare fraud

⁴ Algorithmic decision-making procedures or algorithmically-determined decision-making refers to the use of technologies such as AI, big data analytics and machine learning, to grant administrative decisions (such as granting building/environment permits, social welfare benefits).



quality standards by grounding these procedures in a data- and evidence-based approach.⁵ Additionally, algorithmically determined decision-making can enhance the fairness of administrative decisions, since this method guards civil servants against biases that may implicitly or explicitly affect human decision-making processes. On the other hand, however, algorithmically determined decision can also produce great risks. First, they pose special risks related to the opaqueness of administrative decision-making processes on two levels: the creation of a profile and the administrative decision that is based on that data. The opacity of this process is problematic since public bodies typically do not disclose the legal standards that govern these processes or the ways in which algorithmic decision-making processes work.⁶ This creates a loss of accountability of decision-making procedures within the administration. Second, algorithmically informed decision-making procedures pose special risks to the privacy of citizens due to heightened surveillance, and may entrench discrimination flowing from the social sorting of citizens into categories and stereotypes.⁷

The administration is not the only branch of government that has changed due to rise of new technologies, the judiciary is also undergoing changes.⁸ Judiciaries across the world (e.g. France,¹⁰ the Netherlands,⁹ Norway,¹² and China¹⁰) are in the midst of reforming and digitizing parts of their traditionally paper-based judicial procedures. . This digitalization of judicial proceedings has profoundly changed the way in which litigating parties interact with courts: litigating parties can file petitions online, communicate electronically with courts, submit procedural documents online, make complaints, and exchange evidence digitally.¹¹

The Dutch legislator, for example, has implemented the ‘Quality and innovation in the Legal System’ program (KEI) nationwide in order to modernize the way in which courts handle cases. Litigating parties can initiate proceedings online and communicate with the court registry and other parties involved in litigation digitally via a web portal called ‘‘Mijn Zaak’’ (My Case),

⁵ Robert Brauneis and Ellen Goodman, ‘Algorithmic Transparency for the Smart City’, (2018) 20 *The Yale Journal of Law and Technology* 103, Johann Höchtl, Peter Parycek, and Ralph Schöllhammer, ‘Big Data in the Policy Cycle: Policy Decision Making in the Digital Era’ (2015) 26(1) *Journal of Organizational Computing and Electronic Commerce* 147.

⁶ Sandra Wachter and Brent Mittelstadt, ‘Why a Right to Explanation of Automated Decision-Making Does Not Exist in the General Data Protection Regulation’ (2017) 7 *International Data Privacy Law* p. 76-99, Cary Coglianese and David Lehr, ‘Regulating by Robot: Administrative Decision Making in the Machine-Learning Era’ (2017) 105 *Georgetown Law Journal* 1147, Jenna Burrell, ‘How the Machine Thinks: Understanding Opacity in Machine Learning Algorithms’ (2016) 3 *Big Data and Society* 1.

⁷ Balasz Bodo et.al., ‘Tackling the Algorithmic Control Crises – the Technical, Legal and Ethical Challenges of Research into Algorithmic Agents’ (2017) 19 *The Yale Journal of Law & Technology* 135, The Netherlands Scientific Council for Governmental Policy, *Exploring the Boundaries of Big Data*, Amsterdam University Press 2016, p. 143.

⁸ Mila Gasco-Hernandez and Carlos Jimenez-Gomez, ‘Achieving Open Justice Through Citizen Participation and Transparency’ (2017) IGI Global, OECD, ‘Open Government. The global context and the way forward’ (2016), p. 235-237. ¹⁰ <http://www.justice.gouv.fr/la-garde-des-sceaux-10016/restitution-des-chantiers-de-la-justice-31181.html>.

⁹ Martijn Kroeze, ‘Programma KEI: het begin van een paradigmawisseling’ (2016) 2 *RM Themis* 53, The Netherlands Scientific Council for Governmental Policy, *Exploring the Boundaries of Big Data*, Amsterdam University Press 2016. ¹² Halvard Haukeland Fredriksen and Magne Strandberg, ‘Is E-Justice Reform of Norwegian Civil Procedure Finally Happening?’ (2016) 2 *Oslo Law Review* 72.

¹⁰ Alison Xu, ‘Chinese judicial justice on the cloud: a future call or a Pandora’s box? An analysis of the ‘intelligent court system’ of China’ (2017) 26 *Information & Communication Technology Law* 59,

¹¹ See for example, China’s e-court model. Alison Xu, ‘Chinese judicial justice on the cloud: a future call or a Pandora’s box? An analysis of the ‘intelligent court system’ of China’ (2017) 26 *Information & Communication Technology Law* 59, Benjamin Liebman et.al., ‘Mass Digitization of Chinese Court Decisions: How to Use Text in the Field of Chinese Law’ (2017) *Columbia Public Law Research Paper* 551.



which is provided by the Dutch judiciary and can send requests and submit procedural documents electronically. This allows parties to track each step within administrative proceedings digitally, enhancing the transparency of administrative procedures in the courts.¹² In the Netherlands, digital litigation is already mandatory in Asylum Law and Detention cases.¹³ Comparable developments are also occurring in China and in the United States. The Chinese government has implemented ‘‘intelligent court system’’ back in 2014, this intelligent court aims ‘‘to make full use of technologies such as internet, cloud computing, big data artificial intelligence and so on, to promote the modernization of trial system and judgment capability, so as to achieve the highly intellectualized operation and management of the people’s court’.¹⁴

The past years, Chinese courts have already uploaded twenty-nine million judicial documents and decisions to a centralized digital database of the Chinese Supreme People’s Court.¹⁵ This digitalisation of judicial proceedings, combined with the rise of Open Governmental Data- and Open Justice Data initiatives across the globe, has also increased the amount of judicial data.¹⁶ Once anonymized, these resources can be used to transform scattered pieces of data into valuable knowledge on judicial service delivery and judicial behaviour.¹⁷ For example, sophisticated algorithms and its machine learning capabilities, have the computational ability to analyse large quantities of judicial data, can predict the outcome, change of success, and failure of judicial proceedings, develop a data-based portrait of judicial review patterns, predict how long it takes for judges to make rulings and how often their rulings are overturned in appeal. Predictive AI-driven techniques are already being used by legal practitioners and data scientists. Artificial Intelligence models, for example, have been able to predict decisions of the European Court of Human Rights with seventy-nine percent accuracy in cases related to possible violations of articles 3, 6, and 8 of the European Convention of Human Rights.¹⁸ In the United

¹² Frans van Dijk, ‘Improved Performance of the Netherlands Judiciary: Assessment of the Gains for Society’ (2014) 6

International Journal for Court Administration p. 1, Alison Xu, ‘Chinese judicial justice on the cloud: a future call or a Pandora’s box? An analysis of the ‘intelligent court system’ of China’ (2017) 26 Information & Communication Technology Law 59.

¹³ In fact, 18.000 cases related to Asylum law have already been brought to the Dutch Council of State. See Bart-Jan van Ettehoven, ‘Behoorlijke bestuursrechtspraak in Big Data Tijdperk’ p. 233, in Barbara Beijen and Anette Bos (eds.), *In het nu. Over toekomstig bestuursrecht*, (Deventer: Kluwer 2018).

¹⁴ Alison Xu, ‘Chinese judicial justice on the cloud: a future call or a Pandora’s box? An analysis of the ‘intelligent court system’ of China’ (2017) 26 Information & Communication Technology Law 59,

¹⁵ Jonathan Lippman, ‘Towards a Unified Court System: A Comparison Between New York State Courts and Chinese Courts’, (2015) 8 Tsinghua China Law Review, Alison Xu, ‘Chinese judicial justice on the cloud: a future call or a Pandora’s box? An analysis of the ‘intelligent court system’ of China’ (2017) 26 Information & Communication Technology Law 59, Benjamin Liebman et.al., ‘Mass Digitization of Chinese Court Decisions: How to Use Text in the Field of Chinese Law’ (2017) Columbia Public Law Research Paper 551.

¹⁶ OECD, ‘Rebooting Public Service Delivery: How Can Open Government Data Help to Drive Innovation?’ (2016) OECD Comparative Study, Carlos Jiménez-Gómez and Mila Gascó-Hernández, ‘Achieving Open Justice Through Citizen Participation and Transparency’ (2017).

¹⁷ Daniel Katz, ‘Quantitative Legal Prediction – Or – How I Learned to Stop Worrying and Start Preparing for the DataDriven Future of the Legal Service Delivery’ (2013) 62 Emory Law Journal, 909, Davide Carneiro et.al., ‘Online Dispute Resolution: An Artificial Intelligence Perspective’, (2014) 41 Artificial Intelligence Review 211, Brian Simpson, ‘Algorithms or Advocacy: Does the Legal profession have a Future in the Digital World?’ (2016) 25 Information & Communication Technology Law 1, Daniel Katz e.a., ‘A general approach for predicting the behavior of the Supreme Court of the United States’, *Public Library of Science* (PLOS, www.plos.org)

¹⁸ Nikolaos Aletras et al, ‘Predicting judicial decisions of the European Court of Human Rights: a Natural Language Processing perspective’(2016) 2 Computer Science 1.



States, machine learning models have successfully predicted the voting behaviour and case outcome of the United States Supreme Court.¹⁹ The French government, for example, has made nearly 350.000 judicial decisions available as part of its open datapolicy. It has also implemented artificial intelligence models that can analyse this data and transform it into valuable information on judicial activities.²⁰

2. Approach

The Société de Législation Comparée (SLC) and Leiden University (LU) will conduct a thorough legal research on current digitalization developments in administrative law in fifteen selected countries. The aim of this research project is to, first, identify developments in digitalization and administrative law and second, to compare the developments and legal frameworks of fifteen selected countries. Our project asks respondents in fifteen countries across the world to fill in a questionnaire of **23 questions**. The questionnaire is divided into four subtopics that represent four chronological phases in which the rise of new technologies influence a process in which an administrative decision is rendered and contested at an administrative court:

- (i) public bodies and the digitalisation of administrative decision-making processes;
- (ii) digitalization of judicial proceedings and administrative proceedings;
- (iii) judicial review of algorithmic and data driven decision-making processes, and
- (iv) treatment of judicial data.

QUESTIONS

i. Subtopic 1: Public bodies and the digitalisation of administrative decision-making processes

Public bodies across the world use computer algorithms to conduct public affairs, develop administrative decision-making frameworks, prioritize regulatory activities, and deploy public resources.²¹ Algorithmically determined decision-making is made possible due to the rise of new information technologies, such as Big Data analytics and AI, which enable the collection, analysis, and exchange of large amounts of data in the public sector. Algorithms, in this sense, can be used as an instrument in administrative decision-making processes. Thus, algorithmically determined profiles can be made for administrative purposes, such as the levying of taxes, granting building permits, and granting social welfare benefits without further

¹⁹ Daniel Katz e.a., 'A general approach for predicting the behavior of the Supreme Court of the United States', *Public Library of Science* (PLOS, www.plos.org). See also Blakeley B McShane et al, 'Predicting Securities Fraud Settlements and Amounts: A Hierarchical Bayesian Model of Federal Securities Class Action Lawsuits' (2012) 9 *Journal of Empirical Legal Studies* 482 which predicts settlement outcomes of securities fraud class action law suits.

²⁰ Supra Legem Recherche analyse et intelligence juridique, www.supralegem.fr and <https://www.data.gouv.fr/fr/reuses/supra-legem/>.

²¹ Robert Brauneis and Ellen Goodman, 'Algorithmic Transparency for the Smart City' (2018) 20 *Yale Journal for Law and Technology* 103,



investigation.²² The following question relates to algorithmically determined administrative decision-making procedures.

1. Do administrative bodies in your country make use of algorithmically determined decision-making processes?²³
 - a. If yes, please elaborate on the specific field in which this algorithmically determined decision-making typically occurs.

Norwegian public administration has applied legal decision-making systems (cf. “algorithmically determined decision-making processes”) since the middle of the 1960ies, starting with central tax administration and social insurance administration. Level of automation has increased during the decades, but first fully automated decision-making system was established as early as 1973. Legal decision-making systems are typically applied in areas of government administration with responsibility for distribution and redistribution of money (benefits, allowances, taxes, etc.), e.g. where calculation is central in the decision-making. Such systems are even applied in other areas of administration, for instance regarding admission to high schools and universities.

- b. If yes, please provide examples derived from administrative practice and/or case law.

This is a too extensive question for me to fully answer. Decisions regarding students’ loans and stipends (university level) is example of highly automated decision-making, where appr. 75% of cases are fully automated (not considered by a person). Tax decisions for individual taxpayers, decisions regarding old age pension, and housing benefit decisions are other examples where individual decisions in the great majority of cases (or all cases) are fully automated (cf. GDPR art. 22). On other administrative areas, decisions are less automated, and in many cases it will be right to classify systems as decision-support systems (which are controlled by algorithms representing legal rules, on some points only). There is a continuum of systems from the almost manual support systems to the fully automated systems, but the degree of automation is rising. In some branches of government, new types of technologies, such as machine learning, is required in order to be able to automate remaining manual case-processing, by for instance replacing discretionary decisions by means of statically based decisions / machine learning.

- c. Please elaborate on what kind of laws, regulations, or (legal) principles govern algorithmic decision-making processes (such as state law, local law, national law, European law, soft law)?

Almost only state law; typically legislation regulating special government powers, services and schemes.

²² Sofia Ranchordás, ‘Cities as Corporations? The Privatization of Cities and the Automation of Law Law’ (2018) Oxford Business Law Blog, <https://www.law.ox.ac.uk/business-law-blog/blog/2018/04/law-and-autonomous-systems-series-citiescorporations-privatization> Accessed at 19th April 2018.

²³ Algorithmic decision-making procedures or algorithmically-determined decision-making refers to the use of technologies such as AI, big data analytics and machine learning, to grant administrative decisions such as granting building/environment permits, social welfare benefits.



The rise of new information technologies has also made predictive profiling possible as a governmental instrument of control and regulation in the public sector. Public bodies can use predictive profiling to, for example, identify and prevent tax and social welfare fraud. A Dutch example is the SyRI (System Risk Indication) instrument. The SyRI system is legitimized by the *Wet structuur uitvoeringsorganisatie werk en inkomen*, and aims to identify and combat fraud and the abuse of public resources. Public bodies in the social domain pool their data resources and screen citizens using risk models. A broad range of data can be used for these risk models, varying from data on taxes, social security, property registers, and debt registers. Public bodies receive a risk notification after the analysis has been made. This data is then stored into an administrative register so that public bodies can take further action on the basis of this data. The following question relates to predictive profiling in the public sector.

2. Do administrative bodies in your country make use of administrative decisions based on predictive profiling in the public sector?²⁴

On this point I have no complete survey of the development. Things are developing very fast, and many agencies are investigating the possibilities.

- a. If yes, please elaborate on the specific field in which the predictive profiling typically occurs.

Examples: The Norwegian Tax Administration has for instance developed a predictive analysis to help you choose which ones tax returns that should be checked to detect mistakes or cheats. The State Educational Loan Fund Administration is experimenting with use of machine learning to determine who should be granted postponed repayment of loans. Probably, many other applications exist or are being developed.

- b. If yes, please provide examples derived from administrative practice and/or case law.

Do not know.

- c. Please elaborate on what kind of laws, regulations, or (legal) principles govern predictive profiling processes (such as state law, local law, national law, European law, soft law)?

Answer: No direct regulation, except the GDPR, but of course the Public Administration Act and legal principles could have effect.

3. Does this subtopic generate public debate in your country apart from legal scholarship discourse? If so, can you provide examples?

Answer: It is probably correct to say that application of AI in general, and within government administration in particular, has mostly received positive attention with only very few critical voices. Typical for the Norwegian public is to have great trust in government.

²⁴ Administrative decisions based on predictive profiling refers to the broad use of big data analytics and to collect and process data that the public body indirectly uses to decide upon an administrative decision, such as algorithmic trained in finding patterns in large data sets that is used to identify high risk-cases of tax- and social-welfare fraud tax- and socialwelfare fraud,



ii. Subtopic 2: Digitalization of judicial and administrative proceedings

Governments across the world are setting up programs and are adopting new legislation with the aim of digitizing, improving, and modernizing judicial procedures. These initiatives entirely/partly replace existing paper-based procedures. The following questions relate to the digitalisation of judicial proceedings.

4. Are digital forms of judicial proceedings used in your country?
 - a. If yes, please provide a general outline of this digital procedure.

Answer: In Norway, we have a project for digitalizing of the courts with 2022 as last year of implementation. By that time all the courts, all participants (lawyers, prosecutors, lay judges, interpreters, expert witness etc) and all types of proceedings should be digital.

In 2018 the project will have established a collaboration portal (Aktørportalen) for sending and receiving digital procedural documents for the most common civil cases. For criminal cases there have been established a different solution (justice hub) for sending petitions between the police, district courts and the prison service. There are established guidelines for digital hearings, both for civil and criminal cases. If the hearings are performed in a digital manner (without paper) depends on whether the court is set up with courtrooms with necessary equipment to present and share documents digital for all parties. The judges have been equipped with adobe standard, so that they are able to take notes before and during the hearings. They are also trained to re-use their digital notes in the writing of the verdict.

In Norway we have a common case management system for all courts, that gives the courts the necessary support to manage the case digital internally from receiving the petition, scheduling cases, producing digital case documents, and to sending out the verdict to the parties, to the press and to providers of access to online legal resources (where some of the legal documents are free).

- b. Are digital proceedings mandatory or optional in your legal system? Do they fully substitute paper-based judicial procedures?
Answer: From the 15th of September 2018 it is regulated by law that all communications with the courts are obliged to be digital, as long as the court offers the collaboration portal (Aktørportalen) for the parties. This collaboration portal is being rolled out to all courts in 2018-2019. All district courts, appeal courts and Supreme court will be able to use the collaboration portal by the end of 2018. The land consolidation courts will start using this portal in 2019. When this regulation takes effect, the courts will use electronic case files without parallel paper file.
 - c. Are digital judicial proceedings possible:



- i. in all court cases (civil law, criminal law, administrative law), or only in certain fields of law?

Answer: Only for the most common cases in civil law. For criminal cases, digital judicial proceedings are possible where both the prosecutors office and the Court agrees that the case should follow the guidelines for a digital hearing.

This is not possible for the land consolidation courts by this time.

- ii. in all stages of the procedure (first instance, appeal, cassation)?

Answer: Civil cases - Yes.

Criminal cases – only for first instance.

Land consolidation cases – No.

5. Is the possibility or obligation to litigate through a digital procedure codified in law? If yes, please elaborate on this.

Answer: From the 15th of September 2018 it is regulated by law that all communications with the courts are obliged to be digital, as long as the court offers the collaboration portal (Aktørportalen) for the parties

- a. What were the reasons for codification?

Answer: Efficiency (faster communication than by mail) and quality (not entering the same information twice). In Norway there are mainly professional parties (Lawyers) that communicate with the courts.

- b. When was it codified?

Answer: 15th of September 2018, but there have been a trial project running since 2016 for some courts (5 district courts and 2 appeal courts).

- c. How is the code structured?

Answer: The Regulation “On Electronic Communication with the Courts” of 26 October 2016 is adopted by the Government by virtue of Parliamentary legislative delegation from the Courts Act section 163a and 197a. The Regulation sets out the objectives, scope. The mandatory use of the collaboration portal is regulated in section 3a, which entered into force on 15 September 2018.

- d. Was there a strong debate about this codification?

Answer: No.

6. How are the identities of litigating parties verified? Please elaborate on the requirements and/or procedures for the authentication of the identification of litigating parties?

Answer: As of today the collaboration portal is only available for the professional parties (lawyers, etc) in civil cases. To get access to the portal you need to be a registered lawyer in Norway. This information is held by an own register, which we verify new users against.



To get access to cases and case documents the parties need to be registered in the case management system and have a role in the case.

- a. If yes, which digital authentication method, such as digital signature method, is used to authenticate the identity of litigating parties?

Answer: We use the Norwegian public sectors own identity service “MinID”, where all citizens of Norway have a digital user. When using this authentication method you get access to public services at a medium-high level of security (Level 3).

As of today, there are no methods of digital signature in this solution.

7. Is the digital submission of procedural documents subject to digital authentication regulated?

Answer: In the regulation of digital communications with Norwegian courts there is a general statement saying that the authentication should be at a level of necessary security for the solution. The Norwegian Courts Administration is then responsible for doing the evaluation of whats necessary, based on the information in the solution and the external threats.

- a. If yes, which digital authentication method, such as digital signature method, is used to authenticate the submission of procedural documents and exchange (them?) amongst litigating parties?

Answer: See answer to question no 6A

8. Is it obligatory or optional to digitally submit procedural documents, such as pleadings or defenses, in judicial proceedings?

Answer: See answer to question no 5 above.

- a. Which parties (e.g. lawyers, representatives, experts) are *obliged* to digitally submit documents in judicial proceedings? Is this codified by law?

Answer: Parties using the Collaboration portal (Aktørportalen) are obliged to digitally submit documents. As of today, the portal is only available for lawyers in civil cases.

- b. Which parties *are not obliged* to digitally submit documents in judicial proceedings? Is this codified by law? Who decides on these exemptions (judge, legislature)?



Answer: In Norway, citizens have the possibility to reserve themselves against digital communication with private companies and the Government.

There are also an opening in the regulation of digital communications with the courts, saying that the judge can allow non-digital communication with the court in special situations. This gives the judge some alternatives, specially for cases which the collaboration portal doesn't have sufficient support for full digital communication.

- c. What are the legal and factual consequences when parties do not submit procedural documents digitally when required? Can they, for example, redress this omission?

Answer: Pursuant to section 3a the use of the portal is mandatory. This means that a non-digital submission of documents will be rejected and such a submission is not deadline- interruptive. However, pursuant to Supreme Court ruling related to interruption of procedural deadlines, a fax or scanned copy attached and sent by email will interrupt procedural deadlines. Although the ruling was passed before the Regulation section 3a entered into force, we believe that e-mails with scanned copies will still be accepted.

9. Regarding classified documents:

- a. How is the access of parties to the digitally submitted classified documents regulated?

Answer: Classified documents relevant for the court proceedings are mainly an issue in criminal cases. Digital submission is not required by law and this document is handled in specific manners.

- b. How is a safe submittal of classified documents guaranteed?

‘Answer: They are pr now not submitted through the ordinary digital case-filing systems. Classified documents and information are beeing handled by staff with special security clearance, on specific computers and in secure locations in the cort building.

- c. Is this codified in law? If yes, please elaborate on this.

Answer: The criminal procedure in cases with classified documents (i.e. communication control as coercive measure) is regulated in the Criminal Procedure Code chapter 16.

10. How does the digital submitting of documents change the role of the judge? For example:

- a. Does the digital submission of procedural documents speed up the duration of the judicial procedure ?

Answer: So far it is our experience that digital submission og procedural document increases both the courts and the parties effectivity and efficiency.



Both by reducing costs (postal, paper, copying etc.) and time used to register the case, information of documents. The preparation of the case is also more efficient when the documents are in a digital form, but only when the judge and staff have suitable software, computers to support a digital way of preparing a case. Even more important is the skills and competence in using new technology and software.

The time used in the court herein is also reduced but mostly in large and long lasting cases.

- b. Does the digital submission of procedural documents increase the possibility of a final settlement of a conflict?

Answer: no

- c. Does the digital submission of procedural documents mean that there is less need for an oral court session?

Answer: No, in Norway there is a strong legal tradition for oral hearing. If there is to be a change in the use of oral hearings there is a need for substantial changes both in tradition and process law.

- d. Does the digital submission of procedural documents also increase the amount of digital evidence, such as emails, websites, digital recordings, videos, and other data?

Answer: We do not have any significant statistics on the topic, but it is obvious that we may see such a development.

11. Does your domestic law make a distinction between administrative proceedings within the administration and judicial proceedings? If yes:

- a. Are the abovementioned questions also applicable on digital forms of administrative proceedings used in your country? If yes, can you elaborate on this?

Answer: As already mentioned we do not have administrative courts in Norway. The Public Administration Act regulates the proceedings within the public administration, whereas the judicial proceedings have their own proper procedural laws. Each sector of public administration does also have its proper regulation, and the level of digitalization fluctuates from sector to sector. It falls outside the scope of our competences within the judiciary to elaborate further on this. However, it should be underlined that with very few exceptions the case management systems within public administration do not so far “talk” with the case management system in the judiciary. The exception relates to the Bankruptcy Register and the prosecution service.

- b. Is this codified in law? If yes, please elaborate on this.

NA



12. Does an administrative body coordinate, supervise, or regulate the use of digital proceedings by public bodies, including courts?

Answer: No, not explicitly.

a. Is this codified in law? If yes, please elaborate on this.

Answer: NAP

13. Does subtopic two generate public debate in your country apart from legal scholarship discourse,? If so, can you provide examples?

Answer: No debate.

iii. Subtopic 3: Judicial review of algorithmic and data driven decision-making processes

Judicial review typically obliges judges to scrutinize whether governmental actions, decisionmaking, or policy-making comply with the law. The datafication of administrative decisionmaking processes has created tremendous problems with regards to the accountability and judicial review of such programs, since judicial review executed by administrative courts was initially developed to scrutinize human rather than digital decision-makers. For their part, data-driven decision making processes are often harder to since the opacity and complexity of AI and data-driven decisions shield them from scrutiny. Hence, meaningful judicial review could be jeopardized²⁵, as was the case in the recent PAS-judgment of the Dutch Council of State.²⁶ The question, therefore, remains whether judges are sufficiently capable to scrutinize decision made by computer software (e.g. big data analytics and algorithms)? Does the judiciary need new methods adapted to new technologies in order to oversee whether automated decisions comply with the rule of law? The following questions relate to the judicial review of algorithmic- and data-driven decision making procedures.

14. What are typically (i) the burden of proof, (ii) rules and norms on the admissibility of evidence, (iii) and evidentiary standards for public bodies and litigating parties in such cases in order to prevail on their claim?

Answer: It falls outside the scope of this questionnaire to carry out a comprehensive outline of the burden of proof in civil and criminal cases: In short - with few exceptions it is the State v/ public prosecutor in criminal cases that has the obligation to meet the evidentiary standards in criminal cases, and it is the plaintiff who has to render probable her/his claim. In administrative cases the burden of proof lies with the plaintiff in cases with beneficial decisions, whereas it is the State that has the burden of proof in cases

²⁵ B. Bodo e.a., 'Tackling the Algorithmic Control Crises – the Technical, Legal, and Ethical Challenges of Research into Algorithmic Agents', *Law Journal for Law and Technology*, vol.19, 2017. See also: J.A. Kroll e.a., 'Accountable Algorithms', *University of Pennsylvania Law Review* 2016, vol 165.

²⁶ ABRvS 17 May 2017, ECLI:NL:RVS:2017:1259. See also: M. Mekki, 'If code is law, then code is justice. Droits et algorithms', *Gazette du Palais* no..24, p. 10 (2017).



where the State intervenes by way of coercive or impactful decisions. We have not so far seen changes related to this due to AI introduction. It must be underlined that the use of AI is still very limited in Norway.

- a. Are (i) the burden of proof, (ii) rules and norms on the admissibility of evidence, and (iii) evidentiary standards different in cases related to the judicial review of algorithmic profiling and algorithmic decision-making processes, or does the general standard of proof apply? If yes, please provide examples derived from case law.

Answer: No, see answer above.

15. How does the (administrative) judge review algorithmic decision-making processes or profiling cases? Answer: AI is still very limited in public administration and judicial review of administrative decisions is relatively limited, depending on which part of public sector.

- a. Does the (administrative) judge review profiling cases or algorithmically determined administrative decisions fully or marginally (e.g. applying the standard of unreasonableness or a manifest of error)? Please elaborate on the scope and intensity of judicial review of profiling cases and algorithmically determined administrative decisions.

Answer: The judicial review always include the factual basis for the decision, the compliance with procedural legislation, the application of law and the subsumption of the facts to the law. The judicial review of the administrative discretion is basically restricted to reviewing whether the discretion is exerted professionally, i.e. without arbitrariness (based upon customary law)

- i. Please provide examples derived from case law if possible.

Answer: NA

- b. What is the role of general principles of good/sound administration in these disputes? Does the (administrative) judge take general principles of good/sound administration such as the right to be heard or principles of reason-giving and transparency into account in algorithmic decision-making processes or profiling cases? How does the (administrative) judge scrutinize (these cases? You need a lijdend voorwerp)?

Answer: See answer above.

- i. Please provide examples derived from case law if possible.

Answer: NA

- c. Has the judicial review of algorithmic decision-making processes or profiling cases led to the development of new legal principles, such as the principle of accountability, the right of explicability, or other rules and principles concerning administrative transparency, and access to (public) data?

Answer: NA



i. If yes, please elaborate on this.

Answer: NA

16. Evidence concerning complex issues of science and technology plays an increasingly important role in scrutinizing algorithmic decision-making processes and profiling cases. Appointing an expert referee is often suggested as a means for judges to deal with such issues. Can judges ask experts or advisory boards questions relating to the usage of data-driven or algorithmic decisions during judicial administrative proceedings?

Answer: The parties may request to summon or appoint witnesses, expert witnesses or experts to partake in judicial proceedings, inter alia related to the usage of AI.

a) If yes, on the basis of which method do courts appoint these expert referees? Can judges, for example, appoint expert referees themselves or are expert referees pre-selected by the court?

Answer: See answer above. The parties may summon witnesses, or the court may appoint experts, either ex officio or after request from the parties.

b) Can you provide examples derived from case law that illustrate how expert referees scrutinize algorithmic decision-making processes and profiling cases?

Answer: We are not familiar with cases that deals with this so far.

17. Are cases on the judicial review of algorithmic decision-making processes or profiling cases a trend or an outlier in case law of your country?

Answer: Cases based upon algorithmic decision-making are exceptional in the judiciary. We have checked with relevant courts in Norway, and we don't have examples so far dealing with this.

a. Please provide examples derived from case law.

Answer: NA

18. Does subtopic three generate public debate in your country apart from legal scholarship discourse,? If so, can you provide examples?

Answer: No.

iv. Subtopic 4: Treatment of (open) judicial data

While in the recent year Open Government Data (OGD) policies have strongly increased, judiciaries have remained relatively reluctant in embracing open data policies, generally due to



the conservative tradition of the legal profession.²⁷ However, this has changed drastically over the past decade. Around the world, several initiatives were launched to adopt open judicial data policies. For example, countries such as France and Spain have already established open data for judicial decisions policies. The benefits attributed to open judicial data are many: open judicial data policies will enhance the integrity and performance of people involved in the administration of the judiciary, improve the accountability of the judiciary, promote citizens' trust in the judiciary, and enhance justice service delivery. The following questions relate to the treatment of (open) judicial data.

19. Are there open judicial data initiatives promoting access to open judicial data in your country? If yes, could you provide a brief overview of these initiatives and what they entail?

Answer: There are no initiatives promoting open judicial data.

- a. Does the judiciary in your legal system have a systematic judicial policy or specific regulation (such as general data protection laws or a general law on access to public information) that governs access to judicial data?

Answer: The policy for the Norwegian Courts is that we use private publishing companies to publish and give the public access to verdicts. These companies need a special license to do this, and they provide the users with some value-added services, like anonymization of the verdicts, extended legal collections, which take charge money for.

20. What kind of data does the judiciary in your legal system publish?

- a. Does the judiciary publish all court rulings from all government bodies (e.g. district courts, courts of appeals, supreme courts)? By court rulings, we refer to judicial decisions of courts that bring cases to an end.

Answer: Yes.

- b. Does the judiciary publish quantitative data that provides an overview of judicial performance, such as caseload, solved caseload, average duration judicial procedure, and the amount of annulments per court/per judge?

Answer: Yes, but not per judge.

²⁷ OECD, 'Rebooting Public Service Delivery: How Can Open Government Data Help to Drive Innovation?' (2016) OECD Comparative Study, Carlos Jiménez-Gómez and Mila Gascó-Hernández, 'Achieving Open Justice Through Citizen Participation and Transparency' (2017).



- c. Does the judiciary publish other type of data that you find relevant to mention?

Answer: No

- d. How do judiciaries deal with this data? Do they analyse this data in order to find, for example, patterns in case law, or how certain judges rule in certain type of cases?

Answer: The judiciary at National level deals with quantitative data at court level, measuring the length of proceedings, with a recent focus on benchmarking (comparing courts with another). The court presidents are responsible for follow-up on judges, but supervision of case law falls outside the work of court presidents.

21. Do the following **governmental institutions** in your country make use of algorithms that can analyze judicial data in order to translate this into information and patterns in case law, how certain judges rule in certain type of cases, or for other purposes? a. The legislator

Answer: No

- i. If yes, please elaborate by providing examples.
- b. The judiciary
 - i. If yes, please elaborate by providing examples.
- c. Administrative legislative advisory bodies
 - i. If yes, please elaborate by providing examples.

22. Do **private parties such as law firms or corporations** analyze legal data in order to translate this into information and patterns in case law, how certain judges rule in certain type of cases, or for other purposes?

Answer: We don't know any examples of this.

- a. If yes, please elaborate on examples.

23. Does subtopic four generate public debate in your country apart from legal scholarship discourse,? If so, can you provide examples?

Answer: No debate



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